**Environmental strategy of the Federation of BiH**

**2022‒ 2032**

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**Table of Contents**

[1. INTRODUCTION 1](#_Toc117445320)

[2. METHODOLOGY OF STRATEGY DEVELOPMENT 3](#_Toc117445321)

[3. STRATEGIC PLATFORM 8](#_Toc117445322)

[3.1. Strategic focusing 8](#_Toc117445323)

[3.1.1. EU context 8](#_Toc117445324)

[3.1.2. Context of the Federation of BiH 8](#_Toc117445325)

[3.2. Vision 9](#_Toc117445326)

[3.3. Strategic Goals 10](#_Toc117445327)

[3.5. Priorities of strategic goals 11](#_Toc117445328)

[4. WATER MANAGEMENT 15](#_Toc117445329)

[4.1. Situation analysis 15](#_Toc117445330)

[4.2. Strategic goal 1 34](#_Toc117445331)

[Priorities for strategic goal 1 35](#_Toc117445332)

[4.2.1. Description of measures 41](#_Toc117445333)

[4.3. Indicative financial framework 44](#_Toc117445334)

[5. WASTE MANAGEMENT 45](#_Toc117445335)

[5.1. Situation analysis 45](#_Toc117445336)

[5.2. Strategic goal 2 51](#_Toc117445337)

[5.2.1. Priorities for strategic goal 2 51](#_Toc117445338)

[5.2.2. Description of measures 53](#_Toc117445339)

[5.3. Indicative Financial Framework 57](#_Toc117445340)

[6. BIODIVERSITY AND NATURE CONSERVATION 58](#_Toc117445341)

[6.1. Situation Analysis 58](#_Toc117445342)

[6.2. Strategic goal 3 67](#_Toc117445343)

[6.2.1. Priorities for strategic goal 3 67](#_Toc117445344)

[6.2.2. Description of Measures 69](#_Toc117445345)

[6.3. Indicative Financial Framework 76](#_Toc117445346)

[7. AIR QUALITY, CLIMATE CHANGE, AND ENERGY 77](#_Toc117445347)

[7.1. Situation Analysis 77](#_Toc117445348)

[7.2. Strategic goal 4 88](#_Toc117445349)

[7.2.1. Priorities for strategic goal 4 88](#_Toc117445350)

[7.2.2. Measures 91](#_Toc117445351)

[7.3. Indicative Financial Framework 98](#_Toc117445352)

[8. CHEMICAL SAFETY AND NOISE 99](#_Toc117445353)

[8.1. Situation Analysis 99](#_Toc117445354)

[8.2. Strategic goal 5 108](#_Toc117445355)

[8.2.1. Priorities for strategic goal 5 108](#_Toc117445356)

[8.2.2. Description of measures 114](#_Toc117445357)

[8.3. Indicative Financial Framework 121](#_Toc117445358)

[9. SUSTAINABLE RESOURCE MANAGEMENT 122](#_Toc117445359)

[9.1. Situation analysis 122](#_Toc117445360)

[9.2. Strategic goal 6 133](#_Toc117445361)

[9.2.1. Priorities for strategic goal 6 133](#_Toc117445362)

[9.2.2. Description of measures 137](#_Toc117445363)

[9.3. Indicative financial framework 144](#_Toc117445364)

[10. ENVIRONMENTAL MANAGEMENT 145](#_Toc117445365)

[10.1. Situation analysis 145](#_Toc117445366)

[10.2. Strategic goal 7 156](#_Toc117445367)

[10.2.1. Priorities for strategic goal 7 156](#_Toc117445368)

[10.2.2. Description of measures 164](#_Toc117445369)

[10.3. Indicative financial framework 174](#_Toc117445370)

[11. ALIGNMENT WITH OTHER DOCUMENTS 175](#_Toc117445371)

[12. FRAMEWORK FOR IMPLEMENTATION, MONITORING, REPORTING AND EVALUATION 185](#_Toc117445372)

[12.1. Monitoring and reporting 185](#_Toc117445373)

[12.2. Evaluation 187](#_Toc117445374)

[13. ANNEXES 188](#_Toc117445375)

[13.1. Annex 1 Detailed overview of measures for Water Management 188](#_Toc117445376)

[13.2. Annex 2 A detailed overview of measures for Waste Management 218](#_Toc117445377)

[13.3. Annex 3 Detailed overview of measures for Biodiversity and Nature Conservation 238](#_Toc117445378)

[13.4. Annex 4: A detailed overview of measures for Air Quality, Climate Change and Energy 268](#_Toc117445379)

[13.5. Annex 5 A detailed overview of measures for Chemical Safety and Noise 293](#_Toc117445380)

[13.6. Annex 6 A detailed overview of measures for Sustainable resource management 320](#_Toc117445381)

[13.7. Annex 7 A detailed overview of measures in Environmental Management 347](#_Toc117445382)

[13.8 Annex 8 Summary of the Strategy 414](#_Toc117445383)

[13.8.1. Water Management 414](#_Toc117445384)

[13.8.2. Waste management 434](#_Toc117445385)

[13.8.3. Biodiversity and nature conservation 444](#_Toc117445386)

[13.8.4. Air quality, climate and energy 454](#_Toc117445387)

[13.8.5. Chemicals safety and noise 467](#_Toc117445388)

[13.8.6. Sustainable resource management 485](#_Toc117445389)

[13.8.7. Environmental management 500](#_Toc117445390)

[13.9. Annex 9 Indicative financial framework 531](#_Toc117445391)

**Abbreviations and Acronyms**

|  |  |
| --- | --- |
| **AFAs** | Area for Further Assessment |
| **APID** | Action Plans for the Implementation of Directive |
| **ASWA** | Adriatic Sea Watershed Agency |
| **BAT** | Best available techniques |
| **BiH** | Bosnia and Herzegovina |
| **Brcko District BiH** | Brcko District of Bosnia and Herzegovina |
| **BREF** | Best available techniques reference documents |
| **CISV** | Central Water Information System of the Federation of BiH |
| **DEI BiH** | Directorate of European Integration of Bosnia and Herzegovina |
| **DSIP** | Directive Specific Implementation Plan |
| **EAS BiH** | Environmental Approximation Strategy for Bosnia and Herzegovina |
| **EE** | Electrical and electronic waste |
| **EF FBiH** | Environmental Protection Fund of the Federation of BiH |
| **EIA** | Environmental Impact Assessment |
| **EIONET** | European Environment Information and Observation Network |
| **EMEP** | European Monitoring and Evaluation Programme |
| **EU** | European Union |
| **EUROSTAT** | Statistical Office of the European Union |
| **FBD** | Framework Budget Document |
| **Federation of BiH** | Federation of Bosnia and Herzegovina |
| **FHMI** | Federation Hydrometeorological Institute |
| **FIDP** | FIDP Institute for Development Programming of the Federation of BiH |
| **FMAWMF** | Federation Ministry of agriculture, forestry and water management |
| **FMEMI** | Federation Ministry of Energy and Mining |
| **FMET** | Federation Ministry of Environment and Tourism |
| **FMH** | Federation Ministry of Health |
| **FMSP** | Federation Ministry of Spatial Planning |
| **FTI** | Forest transport infrastructure |
| **GAP** | Gender Action Plan |
| **GC FBiH** | Gender Centre of the Federation of Bosnia and Herzegovina |
| **GEF** | Global Environment Facility |
| **GFP** | Gender focal point |
| **GHG** | Greenhouse gases |
| **GIZ** | German Development Agency (Deutsche Gesellschaft für Internationale Zusammenarbeit) |
| **GVTPV** | Water bodies group |
| **HMWB** | Heavily modified water bodies |
| **HPP** | Hydro power plant |
| **IED** | Industrial Emissions Directive |
| **IMW** | Infectious medical waste |
| **IPA** | Instrument for Pre-Accession Assistance |
| **IPPC** | Integrated pollution prevention and control |
| **LGUs** | Local government units |
| **LoW FBiH** | Low on Waters of the Federation of Bosnia and Herzegovina |
| **MCPFE** | Ministerial Conference on the Protection of Forests in Europe |
| **MOFTER** | Ministry of Foreign Trade and Economic Relations |
| **MSFD** | Marine Strategy Framework Directive |
| **NBSAP** | National Biodiversity Strategies and Action Plans |
| **NERP** | National Emission Reduction Plan |
| **NGO** | Non-governmental organization |
| **ODS** | Ozone depleting substances |
| **PAH** | Polycyclic Aromatic Hydrocarbons |
| **PCB** | Polychlorinated biphenyls |
| **POPs** | Persistent Organic Pollutants |
| **PRTR** | Pollutant Release and Transfer Register |
| **PWC/PUC** | Public Water / Utility Companies |
| **RBMP** | River Basin Management Plan |
| **RES** | Renewable energy sources |
| **SAA** | Stabilization and Association Agreement |
| **SDG** | Sustainable Development Goals |
| **SEA** | Strategic Impact Assessment |
| **SEI** | Stockholm Environment Institute |
| **SHPP** | Small (mini) hydro power plants |
| **Sida** | Swedish International Development Cooperation Agency |
| **SoER** | European Environment – State and Outlook |
| **SRBA** | Sava River Basin Agency |
| **TPH** | Total Petroleum Hydrocarbon |
| **UN** | United Nations |
| **UNCBD** | United Nations Convention on Biodiversity |
| **UNDP** | United Nations Development Programme |
| **UNECE** | United Nations Economic Commission for Europe |
| **UNEP** | United Nations Environment Programme |
| **UNEP/MAP** | Mediterranean Action Plan |
| **USAID** | United States Agency for International Development |
| **WB** | Water bodies |
| **WFD** | Water Framework Directive |
| **WIS** | Water Information System |
| **WMS** | Water Management Strategy |

**List of Tables**

[*Table 1: Summary of strategic goals by thematic areas 10*](#_Toc117011580)

[*Table 2: Priorities classified by the relevant strategic goals– and/or environmental thematic areas 11*](#_Toc117011581)

[*Table 3: Balance of surface waters for the territory of the Federation of BiH 17*](#_Toc117011582)

[*Table 4: Number and type/character of surface and ground water bodies in the areas of the Sava River and Adriatic Sea 17*](#_Toc117011583)

[*Table 5: Main characteristics of the water services sector in the Federation of BiH 25*](#_Toc117011584)

[*Table 6: Transposition status of EU water directives in legislation of the Federation of BiH 27*](#_Toc117011585)

[*Table 7: Implementation of river basin management plans (I cycle) 29*](#_Toc117011586)

[*Table 8: Impact indicators for Strategic objective 1 36*](#_Toc117011587)

[*Table 9: Priorities with relevant indicators 37*](#_Toc117011588)

[*Table 10: Indicators of the current situation in the waste sector in Federation of BiH: 47*](#_Toc117011589)

[*Table 11: Impact indicators for strategic goal 2 52*](#_Toc117011590)

[*Table 12: Priorities with relevant indicators 53*](#_Toc117011591)

[*Table 13: The ratio of the total number of species of certain groups of organisms and the number of endangered species in the the Federation of BiH 60*](#_Toc117011592)

[*Table 14: Indicators of impacts for the strategic goal 3 68*](#_Toc117011593)

[*Table 15: Priorities with relevant indicators 69*](#_Toc117011594)

[*Table 16: Air quality limit values in the Federation of BiH 79*](#_Toc117011595)

[*Table 17: Emission from household stoves in the Cantons which have the Air Pollution Registers 81*](#_Toc117011596)

[*Table 18: Indicators of impacts for strategic goal 4 89*](#_Toc117011597)

[*Table 19: Priorities with relevant indicators 90*](#_Toc117011598)

[*Table 20: Performance indicators for strategic goal 5. 109*](#_Toc117011599)

[*Table 21: Priorities with relevant indicators 110*](#_Toc117011600)

[*Table 22: Performance indicators for strategic goal 6. 134*](#_Toc117011601)

[*Table 23: Priorities with relevant indicators 135*](#_Toc117011602)

[*Table 24: Responsibilities for environmental data collection in the Federation of BiH 152*](#_Toc117011603)

[*Table 25: Indicators of impacts for strategic goal 7 157*](#_Toc117011604)

[*Table 26: Priorities with relevant indicators 159*](#_Toc117011605)

[*Table 27: Overview of relevant strategic documents of the Federation of BiH 180*](#_Toc117011606)

[*Table 28: Monitoring and Reporting Plan in the Federation of BiH 188*](#_Toc117011607)

**List of Figures**

[*Figure 1: Ecological status of surface WB, according to the monitoring in the Sava River Basin 21*](#_Toc117445043)

[*Figure 2: Chemical status of surface water bodies, according to Sava River Basin monitoring (2011-2018) 21*](#_Toc117445044)

[*Figure 3: Overall assessment of status of surface water bodies, according to the monitoring in the Sava River Basin (2011-2018) 21*](#_Toc117445045)

[*Figure 4: Ecological status of natural surface water bodies according to the Adriatic Sea Basin (2016-2019) (Adriatic Sea Watershed Agency, 2021) 22*](#_Toc117445046)

[*Figure 5: Ecological potential of heavily modified and artificial surface water bodies according to the monitoring in the Adriatic Sea Basin (2016-2019) 22*](#_Toc117445047)

[*Figure 6: Emissions of pollutants from existing large combustion plants in 2014 in the FBiH 81*](#_Toc117445048)

[*Figure 7: Trends in air temperature changes in the FBiH, 1961‒2016 (Sarajevo, Mostar) 82*](#_Toc117445049)

[*Figure 8: Trends in precipitation changes in FBiH, 1961-2016. (Sarajevo, Mostar) FBiH, 82*](#_Toc117445050)

[*Figure 9: Expected air temperature changes in BiH in line with RCP8.5 scenario 83*](#_Toc117445051)

[*Figure 10: Expected air temperature changes in BiH in line with the RCP8.5 scenario 83*](#_Toc117445052)

[*Figure 11: Noise Map for Sarajevo Canton (2009) 104*](#_Toc117445053)

[*Figure 12: Map of traffic intensity on main roads in the FBiH for 2019 106*](#_Toc117445054)

[*Figure 13: Micro locations in FBiH with registered higher values of organic and inorganic polluters in soil 129*](#_Toc117445055)

[*Figure 14: Structure of funding (u %) in FBiH 541*](#_Toc117445056)

1. INTRODUCTION

In 2003, the Council of Europe identified Bosnia and Herzegovina (BiH) as a potential candidate for (EU) membership. Accession negotiations started in November 2005, and several agreements were signed between BiH and EU since that point. The Stabilization and Association Agreement (SAA), which serves as a basis for the accession process, entered into force on 1 June 2015. According to SAA, the accession process was to be completed progressively over the period of six years. In addition, BiH signed several international environmental agreements. The aspiration for EU membership has been the main catalyst of improvements and efforts on finalising the strategic and legal framework for environmental protection in the country.

In early 2019, in order to facilitate the implementation of the environmental policy and regulations in accordance with the EU acquis, and to meet the EU requirements in this sector, governments at all levels in Bosnia and Herzegovina, with the assistance of the Embassy of the Kingdom of Sweden, embarked on the development of an overarching environmental strategy of BiH (BiH ESAP 2030+). The strategy comprises four components for the four levels of government (BiH, the Federation of BiH, Republika Srpska and Brcko District), and an overview of the state of environment and overall strategic goals, as well as priorities and measures which will help achieve these goals in the next ten years. The preparation of the Environmental Strategy, including the Environmental Strategy of the Federation of BiH, was entrusted to the Stockholm Environment Institute (SEI) in cooperation with national experts and representatives of all the relevant institutions.

Article 44 of the Law on Environmental Protection of the Federation of BiH ("Official Gazette of the Federation of BiH“, 15/21) sets out the obligation of the Federation of BiH to formulate an **Environmental Strategy**. Pursuant to the Law, the Strategy shall define environmental goals and priorities in the Federation of BiH, means of achieving them, financial and institutional framework for the implementation, monitoring, evaluation, and reporting.

Article 24 of the Law on Waters of the Federation of BiH ("Official Gazette of the Federation of BiH“, 70/06) requires the Federation to develop a **Water Management Strategy**. Paragraph 9 of this Article also defines that the Water Management Strategy shall be the integral part of the Environmental Strategy of the Federation of BiH. Pursuant to the Law on Waters, the Strategy shall comprise an assessment of the situation in the water management sector, objectives and policies of water protection, protection from harmful effects of water and sustainable use of waters, priorities for the achievement of water management objectives, estimated funds for the implementation of programmes, timelines for the achievement of the objectives, and activities which need to be completed in order to fulfil the obligations arising from the international agreements on water management.

Furthermore, **the present Strategy is the integral part of the Environmental Strategy of BiH 2022-2032.** The document covers the period 2022-2032, and it includes overarching environmental strategic goals and defines specific actions which will contribute to achieving these goals in the Federation of BiH. This document is an essential tool which should help the relevant institutions to create conditions for sustainability, as well as for the improvement of health and welfare of citizens in the next decade. The efforts particularly focus on public policy-making aimed at mitigating and reducing the impact of climate change and climate proofing, better aligning of actions in the Federation of BiH with the EU regulations and relevant international agreements, and at providing for more sustainable public services, but also at improving the environmental protection framework and facilitating the transposition of the EU acquis.

The Environmental Strategy of the Federation of BiH covers a wide range of environmental issues which coincide with the seven thematic areas of the EU acquis and the above set of strategic activities, and these are: **water management; waste management; biodiversity and nature conservation; air quality, climate change and energy; chemicals safety and noise, sustainable use of natural resources** (including agriculture, forestry, fishery, and mining activities); **and environmental management** (as a horizontal policy).

The Environmental Strategy has been worked out in compliance with the principles laid down in the entity’s legislation and environmental documents. The present Strategy also includes a new component which covers interlinkages of environmental issues and gender equality, social equity, and poverty. The Strategy identifies key priority actions, and defines funding needs which may come from both national and international sources for specific measures for improvement of the state of environment, facilitating a harmonised implementation of the European Union environmental acquis, and supporting a more coherent and efficient management of the environmental sector in the Federation of BiH. This strategic document will also be taken into account in the preparation of operational plans of the relevant government authorities, as well as in the preparation of the Framework Budget Document (FBD) and the annual budget of the Federation of BiH.

1. **METHODOLOGY OF STRATEGY DEVELOPMENT**

Given a broad range of topics and issues that need to be addressed, the methodology used in the development of the Environmental Strategy of the Federation of BiH included various activities, stakeholders, information, and data. The preparation of this document relied on a desk review of relevant documents, laws and regulations, as well as multiple activities. A participatory approach was used throughout the development of the Strategy, while individual elements of the Strategy were formulated applying the vertical principle in order to take into account inputs of all the stakeholders involved. The development of the Strategy involved the use of different data collection and processing techniques, and ensured transparency throughout the preparation and endorsement of its key elements. It mainly relied on the Law on Development Planning and Management in the Federation of BiH ("Official Gazette of the Federation of BiH“, 32/21), and the Decree on Development of Strategic Documents in the Federation of BiH ("Official Gazette of the Federation of BiH“, 74/19). Article 20 of this Decree defines the content of the Strategy. This and other chapters will explain the process and activities in more detail.

***Development of the Environmental Strategy of the Federation of BIH***

The Environmental Strategy is a single document with strategic goals and measures for their achievement. In addition to being an essential tool that the competent institutions can use to set priorities and to better target investments from national/international sources, and to being instrumental in the alignment with the EU acquis, it is also expected to enhance the capacity of organisations and institutions and raise the awareness on the environment.

The process included the following activities:

* Overarching strategic goals and key principles to be integrated in the Strategy were defined and harmonised;
* Terms of reference for Working Groups in seven thematic areas tasked with defining measures were outlined;
* Seven Working Groups for the Federation of BiH were formed in order to ensure a participative process;
* A Policy Group for the Federation of BiH was set up;
* A communication strategy was devised and communication channels with the stakeholders and general public identified;
* 5 rounds of meetings of the Working Groups for the Federation of BiH (42 meetings in total) were held;
* 5 rounds of meetings of the Policy Group for the Federation of BiH were held;
* Key challenges and baseline situation were identified, priorities, targets for each thematic area in accordance with their responsibilities, as well as measures with deliverables, and responsible institutions and the timeframes for their implementation defined;
* Integration of gender equality, social equity and poverty in the measures, and efforts on stakeholders’ capacity building and public awareness raising on these issues;
* Activities aimed at stakeholders’ capacity building, focusing on Working Groups members;
* The issue of interlinkages between the thematic areas was addressed;
* Prioritization of measures;
* Financial evaluation of the measures;
* An *ex-ante* evaluation was also performed pursuant to the Decree on the Evaluation of Strategic Documents in the Federation of BiH (“Official Gazette of the Federation of BiH” 74/19) and the Handbook on the Evaluation of Strategic Documents (Institute for Development Programming of the Federation of BiH, 2021);
* Public hearing;
* Preparation of the final version of the Strategy.

*Key principles and strategic goals*

In order to provide further guidance for future environmental decision-making, the Strategy used a set of **key principles**[[1]](#footnote-2). In the Federation of BiH, these are the principles contained in the Law on Environmental Protection of the Federation of BiH, ("Official Gazette of the Federation of BiH“, 15/21), while two additional principles (\*) were proposed to achieve a stronger alignment with the principles of the EU Sustainable Development Strategy and Agenda 2030 (inclusion, no one will be left out). The main principles of the Strategy are:

* Principle of sustainable development;
* Principle of prevention and precaution – prevention and precautionary measures are applied in situations when there is (scientific) evidence of an emerging threat to environment and human health, but it is uncertain and likely to significantly affect the environment ;
* Principle of replacement - every activity which may have adverse effects on the environment should be replaced with another activity which poses a significantly smaller risk;
* Principle of integrated approach –  preventing or minimising environmental damage;
* Principle of cooperation and shared responsibilities - cooperation and joint action of all stakeholders aimed at protecting the environment;
* Principle of public participation and access to information - participation of all interested citizens, every individual and organisation must have adequate access to environmental information;
* Principle ‘polluter pays’ - polluter pays costs of pollution control and prevention;
* Principle of human rights promotion and protection\*‒ through the lens of gender equality, social equity, and poverty;
* Principle of internal and intergenerational equality\*.

In addition to the key principles, the drafters and owners of the document were provided with a set of **strategic goals** which ensured a platform and general policy to lead their efforts. The strategic goals of this Strategy are:

* Protecting water quality and ensuring access to and sustainable management of water resources;
* Reducing waste and increasing the amount of reused of materials;
* Maintaining and enhancing biodiversity and protecting ecosystems;
* Mitigating and adapting to climate change and improving air quality;
* Human health protection and improving well-being and quality of life for all;
* Ensuring sustainable use of natural resources;
* Improving environmental management.

*Participatory process*

The Strategy was formulated by seven Working Groups, one for each individual thematic area in the Federation of BiH, and the process was managed by the Policy Group for the Federation of BiH. In addition, the general public, including civil society organisations, was provided with an opportunity to engage in the process though public hearings, with a full support of the Swedish institutions.

*Policy Group - Federation of BiH (assistant ministers)*

The Policy Group of the Federation of BiH comprised assistant ministers from the line ministries and senior public officials from relevant government bodies and institutions, as well as representatives of the NGO - sector/EKO BiH Network (a network of non-governmental organisations focusing on the environment). This group reviewed inputs of the working groups’ members and decided on activities and results in their competence. They also worked together to reconcile divergent views on issues which remained unresolved in the working groups.

The Policy Group for the Federation of BiH comprised representatives of the following authorities and organisations:

* Federation Ministry of Environment and Tourism (FMET)
* Federation Ministry of Agriculture, Water Management and Forestry (FMAWMF)
* Federation Ministry of Energy and Mining (FMEMI)
* Federation Ministry of Health (FMH)
* Federation Ministry of Spatial Planning (FMSP)
* Federation Institute for Development Programming (FIDP)
* Directorate of European Integration of BiH (DEI BiH)
* Association of Municipalities and Cities of the Federation of BiH
* Sarajevo Canton Ministry of Spatial Planning, Construction and Environmental Protection
* Tuzla Canton Ministry of Spatial Planning, Environment of the Tuzla Canton
* Ministry of Spatial Planning, Construction and Environmental Protection of the West Herzegovina Canton
* Ministry of Spatial Planning, Transport and Communication, and Environmental Protection of the Zenica-Doboj Canton
* Ministry of Construction, Spatial Planning, and Environment of the Una-Sana Canton
* Ministry of Spatial Planning, Construction, Environment, Return, and Housing Affairs of the Central-Bosnian Canton
* Ministry of Transport, Communications, and Environment of the Posavina Canton
* Ministry of Construction, Reconstruction, Spatial Planning and Environment of the Canton 10
* Ministry of Urbanism, Spatial Planning, and Environment of the Bosnian-Podrinje Canton
* Agency of Statistics of BiH
* Gender Centre of the Federation of BiH (GC of the Federation of BiH)
* Eco BiH Network (representatives of the nongovernmental sector).

Out of 27 members of the Policy Group for the Federation of BiH, 18 were women and 9 men.

*Working groups*

Working Groups were divided to cover seven thematic areas:

* WG1: Water Management
* WG2: Waste Management
* WG3: Biodiversity and Nature Conservation
* WG4: Air Quality, Climate and Energy
* WG5: Chemicals Safety and Noise
* WG6: Sustainable Resource Management (SRM)
* WG7: Environmental Management.

The development of the Strategy saw the participation of 436 Working Groups members, including representatives of the institutions, scientific and research institutions and faculties, public and private companies, and the civil sector. Also, in accordance with the principles laid down in the Law on Gender Equality of BiH ("Official Gazette of BiH", 32/10), 191 WG members were men and 245 women. Regular meetings of the Working Groups ensured continued information and data exchange, but they were also an opportunity to discuss the challenges and to address these in collective efforts. The Working Groups drafted and defined the strategic goals, priorities, measures and deliverables.

***Facts taken into account in the development of Strategy***

*Transposition of the environmental EU acquis*

Due to the importance of the EU acquis transposition and the role they play in the development of strategies, in addition to covering seven thematic areas, the Strategy also addresses horizontal issues (such as environmental impact assessment, strategic environmental assessment, accountability, access to information, enforcement, etc.). The Strategy also took into account the recommendations from the Environmental Approximation Strategy of BiH (EAS BiH), and the most recent update of the environmental EU acquis, particularly in the provisions allowing the public to have a greater influence on decisions of the government authorities, transparency, and accountability. While complying with **the existing/previous strategic documents** and **in compliance with the environmental laws**, the Strategy also addresses the issue of its future viability. In addition to this, a full compliance with the **division of responsibilities** in the environmental sector among the institutions across the levels of government in BiH facilitated exchange of views, joint planning of activities, and secured the basis for coordinated implementation of the Strategy at all levels.

*Stakeholders’ capacity building*

Furthermore, simultaneously with the development of the Strategy, vigorous efforts focused on capacity building to support the implementation of the document. These activities were aimed at informing the general public and stakeholders of different modalities to improve performance, of best practices and lessons learned from other countries. The lessons learned in relation to the alignment with and implementation of the EU regulations, benefits of ecological networks, benefits of public participation, and challenges other countries faced, were presented in several capacity building workshops, with the participation of experts in the seven environmental management areas from several countries. The aim of the workshops was to further build the capacity of the Working Groups members, and all other stakeholders, and ultimately enhance the quality of the Strategy.

*Gender equality, social equity and poverty*

Integration of gender equality, social equity and poverty is a response to the UN Agenda 2030, which underlines the importance of taking into account all social groups and enabling equal opportunities to all. These perspectives were integrated in the activities of the Working Groups, and subsequently in the capacity building activities and the strategic document. The integration of these perspectives is a way to gain a better understanding of the situation on the ground and interlinkages with the environment and its problems, as well as means to open a dialogue on potential solutions to these problems.

Thus, the Strategy focused on several most disadvantaged groups of the population affected by the lack of gender equality (a situation in which women and men and girls and boys do not have equal rights, responsibilities and opportunities), poor social equity (which implies unfair outcomes for persons from different subgroups), and the problem of multidimensional poverty (due to the lack of resources, lack of representation in planning and decision-making processes, and human security).

The process of the Strategy development involved the participation of different interest groups and the gender mechanism, the Gender Centre of the Federation of BiH, through routine communication, information sharing, and events such as online workshops (so-called webinars) and round tables.

*COVID-19 pandemic*

In early days, the outbreak of the CoVID-19 pandemic affected the process, and compelled all the participants to adjust to the so-called online mode of work. This meant that the members of the Working Groups and Policy Group had to meet on an online platform. However, the process continued smoothly after the arrangements had been made for this mode of work, with very few exceptions when in person meetings were organised (Policy Group meetings with fewer participants, in compliance with all the applicable epidemiological measures).

1. STRATEGIC PLATFORM
   1. Strategic focusing
      1. EU context

The State of the Environment Report (SoER) is a comprehensive assessment of the health of every aspect of the environment in Europe, particularly in terms of the policy goals set for 2020 and 2030, as well as long term goals set for 2050. The Report states that over the past 20 years Europa made a significant progress in climate change mitigation efforts and reduction of greenhouse gas emission. However, this is not truth for water and air pollution, plastic waste and circular economy.

Nevertheless, the Report states that it is necessary to take further steps to achieve these goals, including better coordination, and actions which will improve the conditions in the areas of food, energy and mobility. It is also necessary to implement and transition to more sustainable technologies, improve production processes and research. Putting an end to the use of public funds to subsidise activities which harm the environment should also be among these actions.

The State of the Environment Report of BiH (UNEP, 2012), adopted in 2014 is an important step on the road to EU membership. The document presents key data on the state of the environment, trends, pressures and their effect on the environment, identifies key issues for protection and improvement of the state of the environment. Among other things, the conclusions of the Report offer an overview of previous efforts aimed at reforming the environment sector; providing for efficacy of the system; and access to data, and reporting procedures. Finally, the Report also provides specific recommendations for a sustainable environmental protection:

* Improve existing legal and institutional framework;
* Strengthening environmental monitoring;
* Strengthening the statistical sector in BiH;
* Strengthening the environmental information management system;
* Environmental indicators set to be developed and adopted;
* Improving the Pollution Release and Transfer Register– PRTR;
* EIONET – Reporting (European Environment Information and Observation Network);
* Forward-Looking Information and Services; and
* Strengthening environmental education.
  + 1. Context of the Federation of BiH

The situation analysis identified the most critical challenges which need to be addressed through future strategic interventions. Addressing these challenges is essential to enable green growth, sustainable development, as well as improved quality of life for citizens of the Federation of BiH.

*Strategic focus 1: Improving the environment, protecting human health and improving the quality of life for all*

One of the major challenges the Federation of BiH needs to address is how to achieve a robust improvement and protect the environment while minimising detrimental anthropogenic impacts on the environment, such as noise, waste, pollution, in accordance with the best practices of the European Union. To this and, it needs to focus on reducing emissions, and on multidisciplinary and integrated approach to addressing air quality issues, as well as on sustainable solutions in the management of waste, water, mitigation measures and climate change adaptation. It is particularly important to boost investments in infrastructure development, and to create conditions for energy transition and development of a circular economy model and green businesses.

*Strategic focus 2: Improving management and use of natural resources*

Addressing the problem of biodiversity and nature conservation is critical for the overall quality of life in the Federation of BiH. The situation analysis showed that the use of natural resources and biodiversity protection needed substantial improvements. To address this problem it is necessary to focus efforts on striking a balance between the use of natural resources for development purposes and their protection, more specifically on their sustainable use. It is particularly important to ensure the protection and improvement of biodiversity, including diversity of species, habitats, ecosystems and landscapes, with a special focus on vulnerable species from the Red List. This should be achieved through enhanced knowledge, improved policy frameworks and increased human and financial resources. Furthermore, efforts should be made to improve the use of land, use of natural resources in agriculture, forestry and fishery, with the view of improving their quality, and of preventing a dramatic degradation which accompanies excessive exploitation.

*Strategic focus 3: Strengthening environmental management*

The system of environmental management is crucial for better outcomes in the above discussed areas. The environmental management aims at improving decision-making and stakeholders’ engagement processes in accordance with the EU regulations and integration requirements. To this end, future actions should focus on the application of the principle of good governance in the environment sector, which will enhance accountability, transparency, and effectiveness of the implementation of the relevant framework, promote the public participation and contribute to integration of gender equality, social equity and poverty in the policies.

* 1. Vision

Vision is a desired long term trend of territorial development, clear and appealing for all the stakeholders, both those in the Federation of BiH and external stakeholders.

*The Federation of Bosnia and Herzegovina is a prosperous living environment, which aims at upgrading the environment and enhancing the quality of life of the population across the federal community, in compliance with the principle of good governance and policy of equal opportunities.*

The vision was designed in accordance with the sustainable development policies for the whole country, and in consideration of the fact that the environment is the integral part of the strategic development orientation of the Federation of BiH.

* 1. Strategic Goals

The EU environmental acquis (policies, directives, and regulations) are the legal framework comprising EU policies and legal procedures for achievement of a good state of environment, particularly focusing on air and water, efficient waste management, nature conservation, and control of industrial pollution, chemicals, noise, and mitigation and adaptation to climate change, as well as horizontal issues such as environmental management and sustainable resource management.

This Strategy identifies seven categories of the EU environmental acquis, which cover the most important components of the framework. These categories (thematic areas) include: 1. Water management; 2. Waste management; 3. Biodiversity and nature conservation; 4. Air quality, climate change and energy; 5. Chemicals safety and noise; 6. Sustainable resource management; 7. Environmental management. For each individual thematic area the Strategy defined a strategic goal for achieving a good state of environment, in compliance with the regulations and effective management in the given thematic area. Each thematic area of the legal framework encompasses a wide range of specific, but interconnected topics.

Table 1: Summary of strategic goals by thematic areas

| Thematic area | Strategic goal |
| --- | --- |
| Water management | Protecting water quality and ensuring access to and sustainable management of water resources |
| Waste Management | Reducing waste and increasing reuse of materials |
| Biodiversity and Nature Conservation | Maintaining and enhancing biodiversity and protecting ecosystems |
| Air quality, climate and energy | Enhancing climate change mitigation and adaptation and improving air quality |
| Chemicals safety and Noise | Human health protection and improving well-being and quality of life for all |
| Sustainable use of resources | Ensuring sustainable use of natural resources |
| Environmental management | Strengthening environmental management |

* 1. Priorities of strategic goals

Priorities are the key areas and policies which contribute to the achievement of the vision and strategic goals, and as such, they have the greatest impact on the development, and/or achievement of strategic indicators. The priorities defined in this Strategy are classified by the strategic goals, and/or environmental thematic areas.

Table 2: Priorities classified by the relevant strategic goals– and/or environmental thematic areas

| **Strategic goals** | **Priorities** |
| --- | --- |
| **Strategic goal 1: Protecting water quality and ensuring access to and sustainable management of water resources** | **Priority 1.1** Prevent deterioration and improve status of water bodies  **Priority 1.2** Provide conditions for achieving sustainable use of water resources  **Priority 1.3** Ensuring sufficient drinking water supplies and access to public water supply system to all citizens  **Priority 1.4** Reducing the risk of extreme hydrological events by establishing a sustainable flood risk management system and adaptation to climate changes  **Priority 1.5** Developing an effective legal and institutional framework for the purpose of alignment with the EU regulations in the water sector, and its enforcement  **Priority 1.6** Ensuring financial sustainability of the water sector |
| **Strategic goal 2: Reducing waste and increasing reuse of materials** | **Priority 2.1** Improving the legal and strategic framework in the waste management according to the EU principles  **Priority 2.2** Improving the waste records and reporting system  **Priority 2.3** Implementing economic and financial instruments and mechanisms to reduce the amount of waste and boost utilisation of all categories of waste  **Priority 2.4** Improving the municipal waste management system  **Priority 2.5** Improving the management of special wastes  **Priority 2.6** Rehabilitate surfaces beneath inadequately disposed waste  **Priority 2.7** Raise awareness about the proper separation, collection and disposal of waste |
| **Strategic goal 3: Maintaining and enhancing biodiversity and protecting ecosystems** | **Priority 3.1** Improving the legal framework of the Federation of BiH for biodiversity and nature conservation through alignment of the legislation with the EU acquis and international agreements  **Priority 3.2** Strengthen the institutions of the Federation of BiH responsible for the implementation of the nature conservation legislation and activities  **Priority 3.3** Initiating coordination, communication and reporting on biodiversity and nature conservation in the Federation of BiH  **Priority 3.4** Initiate monitoring of the state and biodiversity/nature conservation in the federation of BiH in compliance with the standards of the EU acquis  **Priority 3.5** Produce an inventory of biodiversity of the Federation of BiH at the ecosystem, species and genetic level  **Priority 3.6** Integrate the ecologically significant areas into a single network which makes up 17% of the territory of the Federation of BiH  **Priority 3.7** Improve the cross-sectoral cooperation and political support in the Federation of BiH for integration of biodiversity protection into sectoral policies and legislation  **Priority 3.8** Strengthen the science-based decision-making on biodiversity/nature through a dialog between the scientific community and decision makers  **Priority 3.9** Raising ecological awareness on biodiversity, nature conservation and ecosystem services  **Priority 3.10** Mobilise both local and international funds for biodiversity of the Federation of BiH |
| **Strategic goal 4: Enhancing climate change mitigation and adaptation and improving air quality** | **Priority 4.1** Reducing air pollution by reducing pollutants to levels that are safe for human health  **Priority 4.2** Upgrading the air quality management system to support strategic decision-making and public information on the air quality  **Priority 4.3** Reduce the impact of the Federation of BiH on climate changes through reduced GHG emissions and enhanced carbon sinks  **Priority 4.4** Enhancing resilience to climate change  **Priority 4.5** Improving energy efficiency of final consumption in all sectors  **Priority 4.6** Increasing the share of renewable energy along with an incentive scheme reform (focusing on citizens energy)  **Priority 4.7** Reducing light pollution |
| **Strategic goal 5: Human health protection and improving well-being and quality of life for all** | **Priority 5.1** Improved legislation in the field of chemical safety  **Priority 5.2** Establish a sustainable system of chemical management and implementation of EU acquis in the area of chemical safety  **Priority 5.3** Efficient operation of institutions of the Federation of BiH in the field of chemical safety  **Priority 5.4** Reduced incidence of diseases or deaths due to poisoning as a consequence of inadequate handling of chemical products  **Priority 5.5** Establish a legislative framework and clear institutional competences to transpose EU acquis on environmental noise in legislation of the Federation of BiH  **Priority 5.6** Enhance strategic planning and monitoring of environmental noise  **Priority 5.7** Efficient operation of institutions in the area of environmental noise  **Priority 5.8** Reduce the risk to human health from environmental noise |
| **Strategic goal 6: Ensuring sustainable use of natural resources** | **Priority 6.1** Establish an effective legal, strategic and institutional framework for sustainable forest and forest resources management in the Federation of BiH, appropriate valuation of forest resources, and ensure integration of gender and climate change issues  **Priority 6.2** Enhance legal, strategic and institutional frameworks for sustainable management of hunting game  **Priority 6.3** Enhance legal, strategic and institutional frameworks for sustainable management of fish stock  **Priority 6.4** Establish integrated and sustainable management of land resources  **Priority 6.5** Establish a system of sustainable and responsible research, exploitation and management of mineral resources |
| **Strategic goal 7: Strengthening environmental management** | **Priority 7.1** Improving the legal framework and sectoral policies for planning, management and protection of the environment in the Federation of BiH with the view of fully aligning the legislation with the EU environmental acquis and international agreements  **Priority 7.2** Ensuring efficient implementation of the applicable legislation and international commitments  **Priority 7.3** Maximise the capacity of institutions and their coordination  **Priority 7.4** Ensuring strong public awareness on the importance of the environmental protection and their engagement in decision-making processes, focusing on women, youth and socially vulnerable groups  **Priority 7.5** Set up an efficient system for record keeping and transparent reporting of environmental data in the Federation of BiH, in consultation with the Partnership 27  **Priority 7.6** Ensure the highest level possible of cross-sectoral and inter-sectoral synergy action and integration of public environmental policies  **Priority 7.7** Ensuring financial sustainability of the environment sector in the Federation of BiH  **Priority 7.8** Putting in place a system of strategic decision-making, investments and monitoring of effects in environmental education, research and innovation |

1. WATER MANAGEMENT
   1. Situation analysis

The Water Management section, as one of seven thematic areas of the Strategy, provides an overview of the **baseline status and key challenges** addressing: a) legal and institutional framework of the water sector in the Federation of BiH; b) availability and status of water resources in the Federation of BiH; c) hydro-morphological pressures and their impact on the status of water bodies; d) hydrological monitoring of waters; e) monitoring and evaluation of the status of surface water bodies (WB); f) monitoring and evaluation of status of ground water bodies; g) characteristics of water services in the Federation of BiH; h) establishment of a sustainable flood risk management system; i) transposition of EU water legislation into BiH legislation.

*Legal and institutional framework in the water sector in the Federation of BiH*

Water management in the Federation of BiH is based on the Law on Waters (LoW) of the Federation of BiH („Official Gazette of the Federation of BiH“, 70/06) that was adopted and entered force in 2006. Its entry into force established a framework for water management in accordance with the EU requirements, and the principles primarily established in the FWD, as well as other EU regulations. Pursuant to Art. 224 of LoW, implementation of the LoW started on the day when the Agency for Waters started its work (1 January 2008).

Cantons in the Federation of BiH develop their own laws on waters that need to be harmonized with the Federation Law on Waters, as well as secondary legislation. In the Federation of BiH, over 20 pieces of legislation have been developed and are in force (regulations, decisions, rulebooks, etc.) that are serving to transpose the EU water directives (***Table 4***), as well as a significant number of other legislation of relevance for water sector.

The Federation Ministry of Agriculture, Water Management and Forestry (FMAWMF) carries out administrative, technical and other tasks that fall within the competences of the Federation of BiH in the area of agriculture, water management and forestry. Within the Ministry, the tasks related to water management are responsibility of the “Water Sector”. Activities of the Ministry pertain to: water resources, development plans, water balance, use of waters, protection of water, protection against water, and other tasks as stipulated in the Law on Ministries of the Federation of BiH.

According to the Law on Waters, the main unit for water management is river basin (district). Organizationally, for the purpose of implementing tasks of water management, and in accordance with the Law on Water, Agencies have been established for two river basins in the Federation of BiH Sava River Basin Agency (SRBA) and Adriatic Sea Watershed Agency (ASWA), with seats in Sarajevo and Mostar, respectively. The Law provides for establishment of regional offices too to enable more effective performance of tasks and promotion of principle of being closer to water users. The Sava River Basin Agency presently has three regional offices: in Zenica, Jajce and Bihac, while the Adriatic Sea Watershed Agency has two regional offices: in Livno and in Konjic.

Due to the nature of their work and their competences, the following technical institutions are also important for water sector: Federation Hydro-Meteorological Institute; Federation Institute for Statistics; Federation Institute for Public Health, Federation Environment Protection Fund; Federation Administration for Inspection; Federation Administration for Civil Defence; etc.)

In the cantons, the competent cantonal ministries are responsible for water management. The competence for water management typically lies with the cantonal ministries of agriculture, water management and forestry, while in a few cases, it is with ministries of economy. General competences of cantonal ministries for water sector include: (i) protection of waters, protection against waters, and establishing the regime; (ii) protection against floods, erosions and torrents; (iii) water supply to population and use of water for commercial purposes; (iv) draining water from agricultural areas; and (v) planning development of water sector.

In the cantons, there are technical institutions, such as: cantonal institutes for public health; cantonal administrations for inspection; cantonal administrations for civil defence; etc.

The competences for water services sector in the Federation of BiH is with the local government units – LGU (municipalities and cities) and Public Utility (Water) Companies in the LGUs or cantons.

*Availability and status of water resources in the Federation of BiH*

Within BiH, which has the area of 51,209.2 km2, there are two water basins: the Black Sea basin, that covers approximately 38,719 km2,and the Adriatic Sea basin, that covers approximately 12,410 km2(Federation Ministry of Agriculture, Water Management and Forestry, 2012).

Out of total area of the Federation of BiH (26,127 km2), the Black Sea Basin, i.e. the Sava River Basin, covers 17,506 km2 (67%)[[2]](#footnote-3), while the Adriatic Sea River Basin covers 8.621 km2,[[3]](#footnote-4) (33%) („Official Gazette of the Federation of BiH“, 41/07).

The Sava River Basin area in the Federation of BiH includes parts of the basins of the rivers Una, together with the Glina and Korana rivers, the Vrbas River, the Bosna River, and immediate Sava River Basin, while the Adriatic Sea Basin includes parts of the basins of the Neretva River, together with Trebisnjica, of the Cetina River and the Krka River.

Out of 10 cantons of the Federation of BiH, the Sava River Basin spreads over 8, while the Adriatic Sea Basin spreads over 6 of them (Sava River Basin Agency, 2021); (Adriatic Sea Watershed Agency, 2011).

In Bosnia and Herzegovina, average annual precipitation countrywide is 1,250 l/m (Federation Ministry of Agriculture, Water Management and Agriculture, 2012).

Balance of surface waters for the territory of the Federation of BiH is shown in ***Table 3***, total and by water areas (Federation Ministry of Agriculture, Water Management and Agriculture 2012).

Table 3: Balance of surface waters for the territory of the Federation of BiH

| River basin / sub-basin in the Federation | Q av. annual (m3/s) | | |
| --- | --- | --- | --- |
| Total balance | Own waters[[4]](#footnote-5) | Transit waters |
| Sava River Basin | 692,3 | 352,9 | 339,4 |
| Adriatic Sea Basin | 354 | 317 | 37 |
| Total: | 1046 | 670 | 376 |
| Share of total: | 100 | 64 | 36 |

*Source:* (Federation Ministry of Agriculture, Water Management and Agriculture 2012)

The basic information on water bodies (WB) in water basins of the Sava River and Adriatic Sea are shown in the following ***Table 2*.**

Table 4: Number and type/character of surface and ground water bodies in the areas of the Sava River and Adriatic Sea

| River basin | Total number of water bodies (WB) | Number of natural water bodies | Number of cross-border water bodies | Number of heavily modified water bodies  (HMWB) | Number of artificial water bodies | Number of water bodies groups  (GWB) | Number of  inter-entity water bodies / state water bodies |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Sava River Basin | 548 | 548 | 9 (BIH/Federation of BiH/RC)  21 (Federation of BiH/RS)  1 (Federation of BiH /BD) | 49 HMWB  +  37 “candidates for HMWB“ | 0 | 20  (5 integrated medium +  15 fissure-karst medium)\*  *\* total number of determined GWB is 74* | 2 Federation of BiH/RS  13 Federation of BiH/Croatia  1 Federation of BiH/RS/Serbia  1 Federation of BiH/RS/BD/Croatia |
| River Basin of  Adriatic Sea | 217  (212 WB running water,  4 WB standing water bodies,  1 WB coastal waters | 154 natural WB  (152 WB running water,  2 WB standing waters |  | 59 JIVT  (58 HMWB running and standing water) | 3 WB  (2 WB running water,  1 WB standing water) | 44  (37 productive) | Productive:  8 Federation of BiH/RS  2 RS/Federation of BiH/Croatia  10 Federation of BiH/ Croatia  Non-productive:  1 Federation of BiH/RS  2 Federation of BiH/Croatia |

*Source: Proposed Water Management Plans for basins of the Sava River and of the Adriatic Sea in the Federation of BiH (Sava River Basin Agency, 2021); (Adriatic Sea Watershed Agency, 2021)*

According to the proposed Water Management Plans for the Sava and the Adriatic Sea river basins (II cycle), the most significant pressures to the quality status of surface and ground waters that present the risk to achieving environmental goals are:

* Population in agglomerations, connected to the waste water collectors, and population in smaller settlements that are not connected to the waste water collectors (data on share on connection of population to the waste water collectors and waste water treatment plants are shown in ***Table 3***);
* Industrial polluters; in the Sava river basin there are 76 registered “significant” industrial polluters, 34 of which have waste water treatment installed (Sava River Basin Agency, 2021). On the river basin of Neretva with Trebisnjica, there are 51 registered industrial plants, 3 of which discharge their waste water into the sewer system, while the rest discharge their waste water into the surface water bodies and indirectly into the ground. In the Krka and Cetina river basins, there are 15 industrial plants (Adriatic Sea Watershed Agency, 2021);
* In the Sava river basin, identified are 771 unsanitary landfills/dump sites in 44 municipalities/cities (that had sent data for the needs of developing the said study), of which 741 are unsanitary landfills (so called “wild dumps”), 30 local underdeveloped, and one sanitary municipal landfill. In the Adriatic Sea river basin, there are 90 waste sites, 72 of which are unsanitary “wild” dumping sites, while 18 are mostly unsanitary municipal/regional landfills) (Adriatic Sea Watershed Agency, 2021)(Sava River Basin Agency, 2021);
* Use of water potential – non-compliance with provisions regarding releasing the environmental flaw from SHPPs;
* In addition to the above, significant pressures are caused by use of land for agricultural production, fisheries and cattle raising.

According to the Water Management Plans for the Sava River and Adriatic Sea river basins (II cycle), pressures to quantity of ground and surface waters mostly originate from:

* Capturing water for water supply purposes, where one of the biggest problems is the amount of loss in water supply systems (***Table 3***).
* Use of water resources – energy (derivative plants, transferring water from one river basin into another, failure to ensure environmental flaw from HPPs).
* Commercial consumption of water.

*Impact of hydro-morphological pressures on the status of water bodies*

With respect to the Sava River Basin, the estimates/studies of hydro-morphological pressures a hydro-morphological status[[5]](#footnote-6) were made on the basis of field exploration work on 533 water bodies. The conclusion was that the main drivers of hydro-morphological pressures are: (i) regulation; (ii) hydro-technical structures; (iii) protective walls; and (iv) other.

The Study has identified 133 water bodies as “candidates for HMWB” (heavily modified water bodies), while additional monitoring by biological parameters found that another 41 water bodies are to be considered “candidates for HMWB” until the monitoring is completed and their status determined; according to the Sava River Basin Management Plan in the Federation of BiH (SRBMP), 41 HMWB have been identified, while additional 37 WB are “candidates for HMWB”. Significant hydro-morphological pressure and influence on the status of water bodies within the area of competence of SRBA come from the existing hydro-power plants on the Drina River: HPP Visegrad in Republika Srpska, and HPP Piva in Montenegro.

There are 60 small hydro-power plants (SHPP) registered in the Sava River Basin(Sava River Basin Agency, 2021)*.*

Twice so far, while developing the Adriatic Sea River Basin Management Plan (AS RBMP) 2016-2021, and the draft AS RBMP 2022-2027[[6]](#footnote-7), analyses had been made of hydro-morphological status of water bodies in the Adriatic Sea river basin.

Construction of power plants and their work regime in the Adriatic Sea basin are the main reason for declaring the HMWB and artificial water bodies. There are 59 HMWB – 58 HMWB of running water, and 1 HMWB of standing water.

There are 4 hydro power plants on the Neretva River, and 4 more on its tributaries and on the Trebisnjica.

In addition, pressure is made by hydro-power systems built in Republika Srpska (Hydro system Trebisnjica in the Trebisnjica basin) and in Croatia (HPP Dubrovnik in the Trebisnjica basin and HPP Orlovac in the Cetina basin in the Republic of Croatia).

In the Adriatic Sea river basin in the Federation of BiH, there are 11 small hydro power plants (SHPPs), 1 SHPP is under construction, while construction of another 15 SHPPs is in preparation.

*Hydrological monitoring of waters*

Sava River Basin Agency (SRBA), Adriatic Sea Watershed Agency (ASWA) and Federation Hydro-Meteorological Institute (FHMI) are responsible for organizing monitoring of waters in the Federation of BiH.

Hydrological monitoring of surface waters in the Sava river basin includes 83 automatic stations, and 17 precipitation measuring stations. Level of ground water is monitored on 25 stations (of which 4 are used for monitoring the level of leaking waters through the bodies of two dams), and 21 also measure temperature (Sava River Basin Agency). In the Adriatic Sea river basin, hydrological monitoring is carried out at 18 automatic hydrological stations (Adriatic Sea Watershed Agency), 2 hydro-meteorological, and 18 meteorological stations, while 18 meteorological stations are served by observers.

The Agencies ensure online collection and public presentation of data on water levels from automatic hydrological stations on their web-pages, and they issue a hydrological yearbook.

The Federation Hydro-Meteorological Institute sends water level data from their own stations (around 13) to the Sava River Basin Agency through the WIS (Water Information System – WIS), and statistically processes the data from their own stations and stations that belong to the Agencies. FHMI, in cooperation with the river basin agencies, has been producing and publishing Hydrological Yearbooks since 2001. They are made on the basis of data obtained from SRBA, ASWA and FHMI, and made available to the general public on the web—pages of the FHMI and the river basin agencies.

*Monitoring and evaluation of surface water bodies (WB)**[[7]](#footnote-8)*

Programmes of measures from the first cycle of the Management Plans 2016-2021 plan to examine all water bodies on water courses with basin area exceeding 10 km2 to establish their status.

Status of surface waters is determined on the basis of evaluation of ecological and chemical status of surface water bodies.

In the Sava River Basin, until 2018, monitoring included 276 water bodies, i.e. 50% of the water bodies recognized by that time (533 water bodies). The results showed that 41% of water bodies were evaluated as bad. After 2018, the number of water courses with basins exceeding 10 km2, as well as the number of water bodies were updated, and the number of water bodies changed from 533 to 548 water bodies. In 2019 and 2020, monitoring included additional 74 water bodies so the number of water bodies that were covered by monitoring went up to 350 water bodies, or 64% of total number of water bodies (548 water bodies). In accordance with the Monitoring Rulebook, in the areas susceptible to eutrophication and sensitive to nitrates, monitoring was done in 2019 on 2014 water bodies, or 33 measuring sites in the areas that were declared as protected.

Until 2019, in the Adriatic Sea river basin, monitoring included 99 water bodies, or 46% of total number of water bodies (217 water bodies). In 2020, the number of water bodies covered by monitoring went up to 119 water bodies, or 55% of all water bodies. Monitoring of 76 water bodies (35%) cannot be done for the reason of inaccessibility, meaning that until 2022, there are 22 (10%) water bodies left that have not been monitored.(Adriatic Sea Watershed Agency, 2019).

High

Good

Moderate

Poor

Bad

***Figure*** ***1:*** *Ecological status of surface WB, according to the monitoring in the Sava River Basin*

(*Sava River Basin Agency, 2021)*

***Figure*** ***2****: Chemical status of surface water bodies, according to Sava River Basin monitoring (2011-2018)*

***Figure 3:*** *Overall assessment of status of surface water bodies, according to the monitoring in the Sava River Basin (2011-2018)*

***Figure 4****: Ecological status of natural surface water bodies according to the Adriatic Sea Basin   
(2016-2019) (Adriatic Sea Watershed Agency, 2021)*

***Figure 5****: Ecological potential of heavily modified and artificial surface water bodies according to the monitoring in the Adriatic Sea Basin (2016-2019)*

A risk analysis was conducted in the Sava river basin for the purpose of achieving environmental goals for those surface water bodies for which the monitoring results did not exist, based on the analysis of pressures, pollution load and concentration of pollution indicators. There are 272 such water bodies in the Sava river basin.

In the Adriatic Sea river basin, the analysis was done of anthropogenic pressures at water bodies and evaluation of their significance. For 118 water bodies, for which the status evaluation had not been done on the basis of monitoring, overall status assessment was made on the basis of analysis of pressures, status of downstream water bodies, and data from previous planning period. Out of these water bodies, 6 have high status, 71 good, 7 moderate, 28 good ecological potential, and 6 moderate ecological potential.

*Monitoring and evaluation of ground water bodies*

Ground waters are the most important resource for water supply to population in the Federation of BiH as over 80% of the population needs are satisfied from ground water sources/wells. The Federation Institute for Geology is responsible for developing a cadastre of ground waters in the Federation of BiH – potable water sources, and they started doing this in 2012 and expect to complete this activity in 2021. The cadastre provides data on ground water reserves, quality, water intake capacity, pumped quantities, hydro-geological parameters related to determination of protection zones, and current use of ground waters on the territory of the Federation of BiH.

In the Sava river basin, systematic monitoring of level and temperature of ground water begun in 2019 on 12 automatic stations, i.e. three GWBGW (Posavina, Sarajevo-Zenicko Polje, Tuzlansko-Sprecko Polje). By 2020, analysis of physical and chemical parameters of ground waters at the metering stations had not been established.

Pressure on quantitative status of water bodies is determined as significant when it exceeds the limit of 10% of balance reserves values.

Quantitative pressures on GWBGW suggest that in most cases, not more water is being exploited than allowed by balance reserves, while 7 GWBGW are under quantity pressures that are seen as “significant” (26% of the total area of GWBGW).

Calculated concentrations of ground water quality indicators in all GWBGW show that qualitative/chemical status of ground water is not at risk. Concentration of parameters for evaluation of status of ground waters are below the limits, so the pressures at GWBGW, where no monitoring has been completed, are assessed as “likely not significant”.

Results of the monitoring of GWBGW implemented in upper basin of Spreca and Gostelja, Tuzlansko-Sprecko Polje and Posavina suggest that quality of these ground waters is good, meaning that the pressure is “not significant”.

Percentage of GWBGW area that is either not at risk of failing to achieve environmental goals for chemical status, or likely not at risk, exceeds 80% (Sava River Basin Agency, 2021).

Quantitative monitoring in karst area, which includes the greatest part of Adriatic Sea river basin in the Federation of BiH, is conducted by measuring flow on large sources or on directly associated downstream courses. At some of the sources, quantity monitoring is regularly done by reading water level measurement gauges and calculating the quantity using the Q/H curve.

According to the adopted criteria for quantifying pressures, from the perspective of water intake, the pressures are considered significant if the quantity of captured water make 20% of “available reserves” in the minimum, and ten percent of reduction of total “available reserves”.

According to the stated criteria, pressures from ground water intake in the Adriatic Sea river basin are “not significant”, except on the GWB Hutovo, where the pressure is significant due to the intake by hydro-power system of Trebisnjica Hydro Power Plants in the Trebisnjica basin. According to the reliability criteria of status evaluation, Hutovo Blato is the only ground water body where the quantity status is evaluated as “bad”, while the other ground water bodies have good quantity status.

In the Adriatic Sea river basin, chemical status of ground water has been monitored since 2011 at 20-33 measuring sites in 2019. Good status was found in 32, and bad status in one measuring site (Gabela Polje) as a result of presence of chlorides in the closer area during the draught season; however, the overall status of water bodies has been evaluated as good (Adriatic Sea Watershed Agency, 2021).

Monitoring of quality and quantity of ground water is done at location of source of 22 water bodies, and during the validity of Management Plan 2022-2027, the plan is to implement supervisory monitoring twice a year at 35 location/sources in total (altogether 70 analyses) (Adriatic Sea Watershed Agency, 2021).

*Characteristics of water services in the Federation of BiH*

Over the past ten or more years, Federation of BiH gradually invested significant funds into capital projects of municipal infrastructure (WATSAN Project, reconstruction and construction projects of sewer system and waste water treatment plants in Sarajevo, Bihac, Mostar, Cazin and other settlements), which are being implemented through international banks (World Bank, EIB, EBRD, CEB, KfW), with the funds mostly provided from credit and grant schemes, and also from the Federation and cantonal budgets through the Environmental Protection Fund (EPF) of the Federation of BiH, as well as from water fees. Since 2016, the project of Municipal Environmental and Economic Management (MEG) – phase I and phase II, which was started in BiH by the Government of Switzerland and implemented by UNDP BiH has been under implementation. Goal of this project is introduction of sustainable models of good management in local communities through provision of more just, effective and efficient public services to citizens, particularly the water services.

With the aim of reforming the water sector in FBiH, including removal of numerous and long-present gaps in provision of water supply, sewer and waste water treatment services in local government units in the Federation of BiH, the Government of the Federation of BiH adopted in February 2022 a document titled “Water services improvement programme in the Federation of BiH” and adopted the Decision on adoption of the developed “Methodology for setting the lowest basic price of water services in the Federation of BiH.”

The main indicators of quality of water services in the Federation of BiH are provided in ***Table 5*.**

Table 5: Main characteristics of the water services sector in the Federation of BiH

|  | Share of population provided with water supply systems. | Total losses in public water supply systems. | Share of population provided with public sewer system | Number/location/type of WWTP |
| --- | --- | --- | --- | --- |
| Sava river basin | around 70%\* | 66% | Precise data not available – relevant institutions have failed to provide adequate data  47%  (Data from Sava RMP – first cycle) | 2- tertiary treatments (Bihac, Zivinica[[8]](#footnote-9));  7 secondary treatments (Sarajevo, Trnovo, Zepce, Gradacac, Srebrenik, Odzak) |
| Adriatic Sea river basin | 77,79% | 47% | 40% | 3 tertiary treatments (Mostar, Citluk, Konjic) ‒  Mostar in trial run;  3 secondary treatment plants (Jablanica, Grude, Ljubuski) ‒  Jablanica – secondary treatment on several smaller plants that have not yet been turned over,  Grude – needed reconstruction of secondary treatment, primary treatment operational;  Neum (primary treatment);  Currently under construction: Tomislavgrad, Siroki Brijeg, Prozor/Rama; |

*Source: (Sava River Basin Agency, 2021); (Adriatic Sea Watershed Agency, 2021)*

By conclusion of the Federation of BiH Government of 22 September 2016, the Federation river basin agencies and Environment Protection Fund of the Federation of BiH are responsible for starting activities on development of a Central Water Information System for the Federation of BiH (CWIS). The reason for establishing the CWIS is collection and processing financial and performance evaluation parameters – performance indicators for implementation of measures from the Water Management Strategy (WMS). In addition to collecting and processing data, the CWIS should enable monitoring the implementation of plans by specific water directives and monitoring compliance with transposed acquis. In 2019, the Sava RBA organized training for representatives of utility companies and municipalities on how to enter data into the developed WIS Module of the CWIS.

*Sustainable flood risk management system*

A preliminary flood risk assessment has been made for Federation of BiH, as well as the Flood Hazard Maps and Flood Risk Maps, in accordance with the flood risks management directive. A Flood Risk Management Plan in BiH and erosion map in the Federation of BiH are currently being developed.

*Transposition of EU water legislation into legislation of BiH*

Process of transposing EU water legislation in the Federation of BiH is not finished; however, the legislation, as well as the strategic and planning documents, are gradually being aligned with provisions of EU regulations.

Law on Waters of the Federation of BiH (LoW Federation of BiH) („Official Gazette of the Federation of BiH“, 70/06) was developed and adopted in 2006, in accordance with provisions of the Water Framework Directive (Directive 2000/60/EC) (WFD). Article 24 of LoW imposes the obligation of developing Water Management Strategy of the Federation of BiH. The current Water Management Strategy in the Federation of BiH was adopted in 2012 for the period 2010-2022.

The initial Water Management Plans for Sava and Adriatic Sea river basins (first cycle) were made for the period 2016-2021. In line with LoW of the Federation of BiH and WFD, these management plans were updated 6 years later, and Draft Management Plans 2022-2027 were developed and are currently in the process of adoption. These documents identify the pressures on waters that may prevent achieving and preserving minimum good status of water bodies (WB), such as pollutions for point and non-point sources of pollution, hydro-morphological changes, as well as capturing water for use by population, industry and commercial activities.

Within the Programme for approximation/alignment of legislation with the EU acquis in the field of environment in the Federation of BiH (EAS of the Federation of BiH) (MOFTER BiH, 2017), an overview of status of alignment of the Federation of BiH legislation with the EU water directives. Results of this overview are presented in ***Table 6*.**

Currently, under the Environmental Partnership Programme for Accession (EPPA Programme), a BiH Progress Monitoring Report is being developed regarding the implementation and harmonization of BiH legislation with the EU regulations for the period 2016-2021[[9]](#footnote-10). Unofficial results of this project - the level of harmonization between Federation of BiH legislation with EU water directives, are shown in ***Table 6***.

Table 6: Transposition status of EU water directives in legislation of the Federation of BiH

| EU Directive | Transposition status ‒ Federation of BiH  EAS FBiH 2017 | Transposition status ‒ Federation of BiH  EPPA 2021 |
| --- | --- | --- |
| EU Water Framework Directive (WFD) | Mostly transposed; some definitions provided under Article 2 of the Water Framework Directive have not been transposed explicitly; Law on Waters has not transposed provision under Article 7(1) of WFD. | -- |
| Directive 98/83/EC on the quality of water intended for human consumption | Mostly transposed Directive 98/83/EC)  *Note: Applicable BiH legislation is currently being aligned with the amended, new EU directive on the quality of water intended for human consumption from 2020 – Directive 2020/2184 of the European Parliament and the Council on the quality of water intended for human consumption* | -- |
| Directive on urban waste water treatment | Definitions provided in the Directive on urban waste water treatment have been only partially transposed. Requirements of Part A of the Annex I of the Directive on urban waste water treatment have not been transposed yet. | 96,3% |
| Directive on the assessment and management of flood risks | Mostly transposed[[10]](#footnote-11) | 96% |
| Directive concerning the protection of waters against pollution caused by nitrates from agricultural sources | Partially transposed | 60% |
| Directive on laying down technical specifications for chemical analysis and monitoring of water status | Transposed in significant part | 86% |
| Directive on the protection of groundwater against pollution and deterioration | Very early stage of transposition | 28% |
| Directive concerning the quality of bathing water | Transposition ongoing, relevant rulebook prepared | 60,63% |
| Directive establishing a framework for Community action in the field of water policy |  | 95,8% |
| Directive on environmental quality standards in the field of water policy |  | 20,5% |

*Source: (MOFTER BiH, 2017)*

Although the Federation possesses significant water resources, numerous **challenges** to their protection and improvement of the current status have been identified. The current water management challenges may be grouped in the following way: a) implementation of the Sava and Adriatic Basin management plans in the Federation of BiH; b) implementation of protection measures and declaring protected areas in accordance with the Law on Waters of the Federation of BiH, c) improving inter-sectorial (horizontal) cooperation between the water sector with spatial planning sector and other development sectors, and water inspection and concession agencies; d) need for reforms (legal, institutional, operational etc.) in water services sector; e) improving climate change adaptation and reducing risks of extreme hydrological events; f) improving water sector financing; g) speeding up the processes of transposition, implementation and enforcement of EU water legislation into Federation of BiH water legislation; h) strengthening skills of water sector experts; i) improving the process of data collection and transmission and reporting in environment (water sector).

*Implementation of the Sava River and Adriatic Sea Basin management plans in the Federation of BiH*

Implementation of Sava and Adriatic Sea river basin management plans in the Federation of BiH is a responsibility of both Federation and cantonal and municipal level water authorities, but also of the sector of spatial planning and development. Implementation of the Plans requires significant engagement of institutional capacities and funds. Planned funds for implementation of the First Cycle Management Plans (2016-2021) were only partially available. Over the past ten years, regular financing from the budget of the Government of the Federation of BiH has been missing, and amounts from EU pre-accession funds were very limited, although they make the most important source of financing for this purpose. Funds collected from fees in water sector are far from being sufficient for implementation of the management plans. Human capacities and their number in water sector, particularly at lower administrative levels, fall short of the level that is needed for effective implementation of river basin management plans.

Reports on implementation of river basin management plans are made every two years, and so far, for the first cycle of Plans, reports were made for periods 2016-2017 and 2018-2019. Analysis of implementation of management plans for the period 2016-2021 (I cycle), which was one when updating the Plans after four years of implementation, showed that the degree of implementation of the planned measures is not at a satisfactory level, as shown in ***Table 7.***

Table 7: Implementation of management plans (I cycle)

|  | Sava river basin | Adriatic Sea river basin |
| --- | --- | --- |
| Total number of planned measures | 76 | 61 |
| Implemented (number of measures / share of total number of measures) | 18 (24%) | 15 (25%) |
| Partially implemented / under implementation | 21 (27%) | 32 (52%) |
| Not implemented | 37 (49%) | 14 (23%) |

*Source: (Sava River Basin Agency, 2021); (Adriatic Sea Watershed Agency, 2021)*

Analysis and evaluation of degree of implementation of the Plans and reporting to the Government and Parliament of the Federation of BiH has been made difficult because the obligation to deliver data and information on the level of implementation of the Plans by all institutions implementing measures specified in the Plan is not regulated by law. Although point IV of the Decision on Adoption of Management Plan provides that the bodies and institutions listed in the Programme of Measures are charged with annual submission, at request of the river basin agencies, of the data at their disposal that are related to monitoring the implementation of the Programme of Measures, some institutions are not providing data or information. Because of this lack of data, incomplete or inadequate data, reports submitted to the Government of the Federation of BiH and to the Parliament are not at satisfactory level.

Environmental objectives have been identified in I cycle of River Basin Management Plans, in accordance with WFD. These objectives have remained unchanged for the II cycle of the Plans; however, update of the Plans from I cycle have brought about new understandings that resulted with innovation of the time plan for achieving the established environmental objectives for surface and ground waters. Comparison between the timeline for achieving the environmental objectives for surface waters from Management Plans 2016-2021 with results of monitoring from the period 2011-2019, and analysis of pressures identified for the II cycle (2022-2027) showed that the objectives for surface waters had been set too ambitiously and that the dynamics of achieving the environmental objectives was not as planned.

Surface water monitoring had been continuously improved during the implementation of the first cycle of the Plans and the number of surface water bodies covered by monitoring went up. So far, surface water monitoring was done on 50-65% of identified water bodies in the Federation of BiH, although the first planning cycle had included the measure of conducting monitoring of ecological and chemical status of all surface water bodies of this area at least once in the first cycle.

River basin agencies possess in their WIS the data on key/critical polluters of water; however, registry of polluters has not been updated and revised, and this is another significant difficulty when assessing the actual status of surface water bodies.

The situation with ground water monitoring is even more complex because in the Sava river basin there is not enough stations, while the existing stations started doing quality monitoring only in 2020. In the Adriatic Sea river basin the quantity monitoring has not been established on all water sources that are used for water supply to population (Sava River Basin Agency, 2021); (Adriatic Sea Watershed Agency, 2021).

*Implementation of protection measures and declaration of protected areas in accordance with the Law on Waters of the Federation of BiH*

According to the applicable Rulebook (“Official Gazette of the Federation of BiH“, 88/12), Decisions declaring the zones of sanitary protection of sources of potable water, on the basis of which the administrative measures aimed at protection of the source area are defined, are made in accordance with Article 68 of the LoW, and on the basis of the developed and adopted Studies, and include sources and method of financing implementation of the measures. For significant number of sources of potable water in the Federation of BiH the Studies of Water Protection Zones have not been done, or were don in accordance with the earlier rulebooks, and not harmonized with the current Rulebook.

According to the data from the proposed Water Management Plan (II cycle), there are a little over 200 sources in the Sava river basin, and for around 17% the studies have not been done. In addition, most of the studies have not been done in accordance with the current bylaw, so there is a need to innovate the protection zones according to that bylaw. For over 90% of sources the Decisions have not been made, and for around 14% of sources there are no data available at all.

According to the data available in the Adriatic Sea RB for 2019 and presented in the proposed AS RBMP 2022-2027, there are over 70 source areas in the Adriatic Sea river basin in the Federation of BiH, including the rural ones, that are used for public water supply, and around 10 local sources and water supply systems (municipality Konjic). For around 48% no studies have been done, while most of the studies that have been done are not in accordance with the current Rulebook. For around 28% of the source areas data on the studies and Decisions are not available.

Implementation of source area protection measures in the zones of sanitary protection of source area is often not aligned with the Decisions and/or applicable Rulebook due to inadequate inspection oversight.

Problems related to implementation controlled and organized public water supply exist with local rural and group water supply systems for which there is no legally identified legal person who manages them (terminology for this kind of “loosely” organized water supply is uneven and includes all water supply systems that are not under competence of public utility companies). Unofficial estimates suggest that 25% of all population are supplied with drinking water from such water supply system, and they are subject to the obligation of establishing zones of sanitary protection of source area (adoption of appropriate decision on zones of sanitary protection) and supervision of compliance with conditions and limitations in use of land prescribed in the Decision (every use of water that goes beyond the definition of “general use of water” – Art. 46 of LoW, is subject to the obligation of obtaining a water intake permit). Most cantonal laws have legally defined the matter of capturing water from such sources. At the same time, if these obligations are not met, there is no way to deny the right to water.

According to the data from the proposed Adriatic Sea river basin management plan (II cycle), in the Federation of BiH in Livanjsko Polje (Cetina river basin), there are catchment areas of several sources that are used for water supply in Republic of Croatia, as follows: Vukovica Vrela, then sources Prud, Ombla, Silovka, Kosinac and Mala Ruda, and sources Opacac, as well as other wells located closer to the Adriatic coast. Also, there are cases where catchment areas of several sources used for water supply in Una-Sana Canton in the Federation of BiH (Una river basin) are located in Republic of Croatia: Klokot, Ostrovica, Privilica, Toplica – Klisa and Zegar (GEF *et al*., 2012).

The matter of defining their protection zones has not been resolved in the mentioned applicable Rulebook. Definition of water protection zones in cross-border belt is based on the Agreement between the Government of Republic of Croatia and the Government of BiH on regulating water relationships from 1996. On this basis, an international Working Group has been established with the task to come up with proposal of a rulebook on identifying the zones of sanitary protection of the sources in border area between BiH and Croatia. According to available information, the said Rulebook is in its final stages of preparation; however, its implementation cannot start until an international Agreement on Declaring the Protection Zones of Water Sources used for Public Water Supply is signed, as the protection zones extend to the territory of the other country(Adriatic Sea Watershed Agency, 2021)*.*

In addition to protection of the area intended for capturing drinking water, according to the Law on Waters of the Federation of BiH, it is also necessary to identify four more categories of protected areas. So far, the Decision declaring the protected areas susceptible to eutrophication and sensitive to nitrates in the Federation of BiH has been made ("Official Gazette of the Federation of BiH“, 84/18); however, the matter of responsibility for taking measures has not been adequately defined by law (adoption, implementation and financing of Action Plans for such areas), so the measures are partially implemented only through the RBMP. The areas have not been identified nor Decisions were made to declare the remaining three categories of protected areas: areas intended for protection of commercially important aquatic species; surface water bodies intended for recreation, including bathing areas; areas intended for protection of plant or animal species, or aquatic species where the maintenance or improvement of water status is an important condition for their survival or reproduction. To date, proposal of the Rulebook on criteria for identifying areas intended for recreation/bathing and proposal Nature 2000 have been made, but they have not been adopted.

*Cross-sectoral (horizontal) cooperation of the water sector with spatial planning and other developmental sectors, and with water inspection and concession bodies*

Implementation of environmental legislation in terms of developing Strategic Environmental Impact Assessment (SEIA) for plans, programmes and strategies of the sectors that may impact water resources is sporadic and often missing. Law on Waters of the Federation of BiH ("Official Gazette of the Federation of BiH“, 70/06) prescribes the obligation of the sectors that may impact water resources to get the water sector involved from the very early stages of preparation of their strategic and planning documentation, and to take into consideration planning documents of the water sector. In practice, this almost never happens, and the water sector lacks legal and institutional mechanisms to improve horizontal cooperation. This is a significant aggravating circumstance with respect to implementation of objectives of water sector the purpose of which is protection and sustainable use of water resources. This matter is treated as a measure, among the significant issues of the Adriatic Sea river basin management plan 2022-2027, and it reads as follows: “Establish improved and better cross-sectoral cooperation both within the FMAWMF (agriculture and forestry), and with other sectors, such as spatial planning, energy, etc., all with the aim of harmonizing activities and implementing measures in the areas where there are shared interest of various water users “ (Adriatic Sea Watershed Agency, 2021).

Also, in the proposal of the Sava river basin management plan, one of the stipulated measures reads: “Develop and adopt the Rulebook and Protocol on carrying out coordination work and tasks in the area of water resource management at the level of the Federation of BiH, and at the level of each canton“.

Inspection oversight is ineffective and does not produce impact that is necessary to protect water resources. This is also mentioned in the EC Report on BiH for 2021, which says that “legal framework regulating environmental inspection and its enforcement needs to be improved in line with relevant EU acquis (European Commission, 2021).” The inspectorates prepare annual implementation programmes and agree them with the competent administrative bodies from water sector; however, programmes thus developed cannot provide adequate response to the dynamics of activities in the field, and may adversely affect the water status. The water inspectorates, both at the level of Federation and particularly at cantonal levels, are under-capacitated in terms of number of inspectors, technical capacities and equipment.

The concession award procedures for water resources are not clearly and precisely defined by concession regulation in BiH and Federation of BiH, in terms of specifying conditions for awarding concessions for water resources, defining the phase when such concession should be obtained with regards to issuance of other permits needed for construction, supervision and control of compliance with contractual provisions related to operation while using the resources, etc. Lack of public registry of concessions and data base of data on concessions awarded at all levels of authority significantly contributes to insufficient transparency and allows for avoidance of implementation of conditions prescribed in water acts.

In July 2022, a Law amending the Law on Electric Power was adopted in the Federation of BiH, which provides for prohibition of planning and constructing new small hydro power plants in the Federation of BiH, and consequently awarding concessions for construction of new SHPPs. A new paragraph added to Article 78 stipulates that issuing energy permits for small hydro power plants is stopped, except for those on gravitational water supply systems.

*Water services sector in the Federation of BiH*

Sector of water services is faced with a situation that does not provide for its sustainability, and the reasons for this are weak institutional/administrative arrangements and water sector legislative framework, and lack of financing. Cantonal laws on utilities in the Federation of BiH are inadequate for this kind of activity because they do not regulate institutional rights and obligations, and respective roles and responsibilities of different bodies responsible for water services in a local government unit (LGU) and service providers – Public Water Companies (PWC) (*Institutional overview of the water services sector in BiH* “ - Una Consulting, 2017), nor do they establish a regulatory framework for setting the water tariffs that should provide for full cost coverage. PWCs do not earn sufficient revenues to be financially sustainable, and they often have difficulties to finance current maintenance.

Level of population coverage with public water supply systems in the Federation of BiH, in spite of having been improved in recent years, still falls short of the desired/planned level. Population that is not connected to such systems is supplied from local/village or individual captures. Management of local systems is not aligned with applicable regulations, so a significant number of them remain without systemic oversight, and this poses a significant risk for human health. LGUs do not identify in their strategic documents the measures/projects aimed at improving management of local water supply systems and do not plan funds for them. In most cases, the infrastructure is very old, and total losses from the system are high.

Population coverage with waste water collection systems, and particularly the waste water treatment plants, is even lower than the coverage with public water supply (***Table 5***).

Before implementation of water sector reform, it will be necessary to ensure continuous co-financing from various sources, such as local, cantonal and Federation budgets, and grant funds of EU and other bilateral donors, in order to be able to implement extremely high value investments needed for improvement of this sector.

*Climate change adaptation and mitigation of risks of extreme hydrological events*

With respect to water sector, it can be said that the Federation of BiH has not started with implementation of the EU climate changes policy. There is also a lack of integration of climate change adaptation measures in strategic/planning documents in water sector at all levels (UNDP, 2013). Therefore, drawing amounts from international funds for climate change adaptation is not certain.

When it comes to mitigating risks of extreme hydrological events there is a lack of programmes and project documents that plan for implementation of measures of climate change adaptation, and protection measures against flood and drought.

Hydrology forecasting models need to be established and developed, and for the same purpose, the network of hydrological and precipitation measuring stations needs to be improved on a significant number of water courses.

Horizontal cooperation between water sector and other sectors, spatial planning in particular, as well as vertical cooperation with the protection and rescue sectors, is still at a level that does not ensure adequate and efficient management of risks of extreme hydrological events.

Water courses of II category in the Federation of BiH, for which the lower administrative levels (cantons) are responsible, are very poorly equipped and lack hydrological and meteorological monitoring stations, and this is a significant shortcoming, especially in the areas of potentially significant flood risk (AFAS). Cantonal-level technical capacities for managing drought and flood risk management are not at a satisfactory level.

*Water sector funding from national and international sources*

Funds from water fees, and allocations from budget of Government of the Federation of BiH do not come even close to meet the needs of the water sector, particularly in the context of the commitment to implement EU water legislation. Institutional and investment needs of water sector in the Federation of BiH cannot be met from national sources of financing, so conditions must be put in place to gather funds from international sources.

Level of skills of staff in water sector to do economic and financial planning, project preparation and programming of the expenditures (particularly economic and legal experts in water sector) is not satisfactory and poses an obstacle to effective use of EU grants in pre-accession phase (MOFTER BiH, 2017).

*Transposition, implementation and enforcement of EU regulations into water legislation of the Federation of BiH*

Processes and results of transposition of EU water legislation into the legislation of the Federation of BiH are slow, inefficient, and the effects are not satisfactory. Important causes of this can be found in the existing legal framework that prescribes for transposition obligations of Federation and cantonal institutions responsible for water and environment; however, these regulations are not fully harmonized and competence overlaps often occur, as well as gaps in defining the competences. Similar is the situation with transposition of EU regulations to other segments of environment and other sectors, and because of this BiH is currently in breach of the Stabilization and Association Agreement (SAA) since it had stipulated deadline for gradual alignment of legislation with the EU acquis and establishment of institutional framework for implementation of laws aligned with the EU requirements by the end of six-year transition period from the date of the SAA entering force (1 June 2015). Development of the Programme for integrating BiH with EU started as late as in October 2020, and it has not yet finished.

In addition, competences for transposition in the Federation of BiH are extremely fragmented, as there are over 20 bodies and institutions at all levels and from different sectors that are involved.

Coordination that would enable harmonization of transposition activities in the Federation of BiH (horizontally, particularly with FMET and FMSP, and vertically, between the Federation and cantonal levels, as well as with the MOFTER) has not been properly defined. Effective transposition is missing also due to insufficient number of skilled human capacities in water sector institutions at all administrative levels, and due to slow pace of work of the Parliament of the Federation of BiH when adopting new and amending applicable legislation.

Action plans for implementation of water directives (APIDs) have not been adopted for any directive in water sector. Under the EnvIS project – Strengthening environmental institutions in BiH (2011-2014) the APIDs were prepared for three directives: on drinking water, on urban waste waters, and for directive on the flood risk assessment and management, but they have never been adopted. Updating the APID for the Directive on Urban Waste Waters is planned through implementation of the recently started project of Development of Master Plans for Agglomerations in BiH for effective planning and implementation of EU Directive on urban waste waters (EU UWWTD). Draft updated APID for the Directive on assessment and management of flood risk was produced, but it is not adopted.

In the Neum bay, BiH exits to Adriatic (Mediterranean) Sea. Sea border with Republic of Croatia has not yet been determined and ratified. Based on the fact that it has access to the Mediterranean Sea, BiH is a contracting party of the Barcelona convention. Having in mind that the EU is also a contracting party of the Barcelona Convention, and that the provisions of this Convention are included in EU acquis, implementation of the Barcelona Convention provisions enables BiH to align with certain requirements for accession to EU.

So far, BiH has not undertaken any activities to transpose the EU Marine Strategy Framework Directive (MSFD). According to the EAS strategy, BiH should include this area in a separate strategic document, or include it into the first revision of the EAS BiH. Although the Council of Ministers charged the MOFTER in late 2021 to consider possible further activities related to transposition of the MSFD Directive, no concrete work has started as of yet.

*Capacity building of experts*

In the environment sector in the Federation of BiH, which includes the water sector, the number and capacity of experts is insufficient, particularly with for an effective implementation of the EU environmental (water) legislation, but also for other tasks of water management, and this particularly applies to lower levels of government (cantons, LGUs, and utility companies).

*Environmental data collection, sharing and reporting, and statistics (water)*

As is the case with the whole environment sector in the Federation of BiH, the water sector also lacks a standardized system or method for environmental (water) data collection, exchange, reporting, and statistics.

This matter is elaborated in more detail in the section Environmental Management of this Strategy (Chapter 10) and in the appropriate Environment Management Action Plan (Annex 8, Chapter 13.8.7).

* 1. Strategic goal 1

**Strategic goal 1 - Protecting water quality and ensuring access to and sustainable management of water resources**

Strategic objective includes thematic areas such as drinking water, waste water, bathing water, use/consumption of water, water ecosystems, river basin management, drainage, management of nutrients in agriculture, as well as sea water.

Table 8: Impact indicators for Strategic goal 1

|  |  |  |  |
| --- | --- | --- | --- |
| **Strategic objective 1** | **Impact indicators** | **Baseline value** | **Target value**  **(to be determined in initial years of implementation)** |
| *Protect water quality and ensure water resources availability and sustainability* | **Treated water – total, 000 m3** | 48,613  (2020) | ... |
| **Share of treated waste waters in total amount of waste waters (%)** | 55.8  (2020) | ... |

Priorities for strategic goal 1

**Priority 1.1 Prevent deterioration and improve status of water bodies,** to be achieved by implementing the Programme of Measures from the Water Basin Management Plans for the purpose of achieving environmental objectives for water bodies, and implementing inspection oversight of all activities that may adversely impact status of water bodies, and enforcing penalties against polluters if necessary.

**Priority 1.2 Provide conditions for achieving sustainable use of water resources,** to be achieved through effective and efficient cooperation between water sector and other sectors whose activities may adversely impact water resources, improved work of inspections, preparation of technical bases by the water sector as an instrument to inform potential restrictions in use of water resources and interventions in space because of proven negative impact on quantities and status of water bodies, and measures of protection against floods, and transparent concession award process for water resources.

**Priority 1.3 Ensuring sufficient quantities of drinking water and its availability for public water supply systems,** to be achieved through reform of water sector services as follows: operational-technical and legislative-institutional aspects in all LGUs, including, in addition to the central water supply systems, the rural/local water supply systems too.

**Priority 1.4 Reducing the risk of extreme hydrological events by establishing a sustainable flood risk management system and adaptation to climate changes,** to be achieved by implementing the objectives of Flood Risk Management Plan, making quality analyses and reliable assessments for the purpose of adopting decisions in the system of protection against flood, and by programming and implementing climate change adaptation measures in accordance with the developed and adopted planning documents.

**Priority 1.5 Developing an effective legal and institutional framework for the purpose of alignment with the EU regulations in the water sector, and its enforcement** by developing and implementing four-year programmes for integration of EU regulations and adaptation of legislative and institutional framework to the demands of effective approximation, improving capacities and skills of the employees in water sector institutions at all levels, and planning implementation of all EU water directives.

**Priority 1.6 Ensuring financial sustainability of the water sector** by implementing financial and commercial segments of reform in the water services sector in all LGUs, improved system of collection and allocation of special water fees with implementation of appropriate rates of different fees, effective economic and financial planning for the purpose of acquiring funds from EU and other international funds, and cooperation between water sector and MOFTER in preparation of plans and projects for climate change adaptation that impact water resources.

***Table 9:*** *Priorities with relevant indicators*

| **Priorities** | **Indicator of (end) result** | **Baseline value** | **Target value** |
| --- | --- | --- | --- |
| **Priority 1.1**  **Prevent deterioration and improve the status of water bodies** | Achieving the environmental objectives related to the water bodies, as defined in the river basin management plans for the Sava and Adriatic Sea basins (II, and III cycle). | For some of the identified water bodies, achieved environmental objectives set in the I cycle of management plans (2016-2021) for Sava and Adriatic Sea basins. | Achieved environmental objectives for all water bodies according to the plan in II and III cycle of management plans (2021-2027) and (2028-2033). |
| Effectiveness of supervision of compliance with conditions prescribed in water acts for the polluters, and enforcement of penalty provisions in case of non-compliance. | Current approach to supervision is not effective:   * Inspection plans are partly based on Water Management Plans and Water Acts, and information on reports and requests by competent bodies in water sector; * Poor coordination between Federation and cantonal inspectorates when developing plans. | High effectiveness of inspection oversight leads to the following:   * All polluters comply and implement conditions prescribed in water acts * Inspection oversight prevents / minimizes unlawful pollution of water bodies. |
| **Priority 1.2**  **Provide conditions for achieving sustainable use of water resources** | Effective cooperation between the water sector and other sectors whose activities may have adverse impact on water management (spatial planning, energy sector, agriculture, forestry, inspections etc.). | Ineffective cooperation of water sector with other sectors   * Sporadic data sharing on the planned activities in the sector * Poor cross-sectoral coordination when preparing sectorial plans and programmes, and information from water sector plans and studies not integrated in plans of other sectors. | Effective cooperation between water sector and other sectors whose activities may have adverse impact on water management:   * All sectorial plans integrate data from water sector plans and studies. |
| Effectiveness of oversight of compliance with conditions prescribed in water acts for the water users, and enforcement of penalty provisions in case of non-compliance. | Current approach to supervision is not effective or efficient. | High effectiveness of inspection oversight leads to the following:   * All water users comply and implement conditions prescribed in water acts * Inspection oversight prevents / minimizes unlawful intake and use of water. |
| Level of preparedness of technical base documents in water sectors as instrument for potential restriction of use of water resources and intakes in space because of proven adverse impact on quantities or status of water body  (polluters, hydro morphological pressures) and measures of protection against flood. | Water sector developed significant number of plans and study documents.  Following base documents have not been produced:   * on hydro-power potential that includes explanations relate to exceptions under Art. 7/4 WFD and principles / guidelines / criteria of: spatial planning, achieving/maintaining at least good status of water bodies and environment protection, and needs of water supply to population, agriculture, and power sector; * on surface and ground water reserves that may be used for water supply to population. | Base documents produced:   * on hydro-power potential * on surface and ground water reserves that may be used for water supply to population |
| Establish prerequisite for transparent and regular concession awards for water resources. | Prerequisites for transparent and regular award of concessions on water resources are not in place:   * Not updated / missing lists of concessions granted at al administrative levels; * Shortcomings of the legal framework for issuing concessions allow for user's non-compliance with regulations on implementation of monitoring of water and environmental flaw * Procedure for issuing necessary permits, as the basis for concession award, is very complex and has to be carried out by way of numerous and inter- dependant sub-procedures that are carried out before various institutions and in some cases, at various levels of government. | Transparent and regular/defined by law concession award procedure for water resources. |
| **Priority 1.3**  **Ensuring sufficient drinking water supplies and availability for public water supply purposes** | Degree and phase of implementation of technical-operational segment of water services reform in all LGUs | Start of the planning phase for all LGUs   * Completed: * “Overview of water services sector in BiH“ * Regulation on the methodology for determining the lowest basic price of water services in the Federation of BiH * Proposed programme for improving water services in the Federation of BiH by providing financial and technical assistance | Fully implemented technical and operational segments of water services sector reform in all LGUs |
| Degree and phase of implementation of legislative and institutional segments of water services reform in all LGUs | Start of the planning phase for all LGUs   * Completed: * “Overview of sector of water services in BiH“. * Regulation on the methodology for determining the lowest basic price of water services in the Federation of BiH * Proposed programme for improving water services in the Federation of BiH by providing financial and technical assistance | Fully implemented legislative and institutional segments of water services reform in all LGUs |
| **Priority 1.4**  **Reducing the risk of extreme hydrological events by establishing a sustainable flood risk management system and adaptation to climate changes** | Achieving the objectives identified in the Flood Risk Management Plans of the Sava and Adriatic basins (I and II Cycles) and reporting. | Flood Risk Management Plans of the Sava and Adriatic basins (I and II Cycles) in the process of development. | Achieved all objectives of the Flood Risk Management Plan stipulated in the first and second planning cycle (2022-2028) and (2029-2034). |
| Quality of analyses and reliability of assessments for the purpose of decision-making in flood protection system. | Insufficient quality of analyses and reliability of assessments for the purpose of decision-making in flood protection system.   * Insufficiently developed network of hydrological metering stations at all water sources covered by the Federation of BiH AFAS, as well as the precipitation and meteorological metering stations in the Federation of BiH * Insufficient functionality and operation of hydrological and hydraulic forecasting models. | * Ensured quality analyses and reliable assessments for the purpose of decision-making in flood protection system * Established adequate network of hydrological metering stations at all water courses covered with AFAS in the Federation of BiH. * Adequate network of precipitation and meteorological metering stations in the Federation of BiH * Fully operational, functional and regularly maintained hydrological and hydraulic forecasting models. |
| Degree of planning and implementing climate change adaptation measures for the purpose of better prevention and management of flood risks. | Sporadic planning and integration of measures of climate change adaptation in planning documents at all administrative levels in Federation.   * Developed draft Strategy for Climate Changes Adaptation and Low Emission Development of BiH 2020-2030 * Developed draft Climate Change Adaptation Plan of BiH - NAP | Implementation of climate change measures in accordance with plans of all administrative levels for the purpose of achieving better prevention and management of flood risks. |
| **Priority 1.5**  **Developing an effective legal and institutional framework for the purpose of alignment with the EU regulations in the water sector, and its enforcement** | Efficiency and timeliness of programming integration in EU in the field of water management. | Low efficiency and delays in development of the Programme. | Efficient, regular and timely development of four-year integration programmes. |
| Adjusting the legal and institutional framework in FBiH water sector to efficient approximation to EU water legislation and standards. | FBiH legal and institutional framework is not conductive for efficient approximation to EU regulations.   * Laws delegate the competences for approximation to a significant number of institutions at all administrative level, and this requires significant (lacking) capacities for horizontal and vertical coordination. | Legislative and institutional frameworks responsive to requirements of efficient approximation. |
| Capacity and competences of employees in water sector institutions (administration bodies, agencies, institutes, etc.) at all levels of government in the Federation of BiH. | Lack of capacities and insufficient skills of employees in competent institutions in water sectors at all levels in the Federation of BiH for   * harmonization and implementation of EU *acquis* * enforcement of obligations from international agreements * implementation of laws and regulations * implementation of strategic and planning document in water sector | Capacity and competences of employees in institutions of water sector in the Federation of BiH adjusted to the   * requirements of harmonization and implementation of EU acquis and implementation of international agreements in water sector * needs of implementation of laws and regulations, strategic and planning documents in water sector. |
| Status of planning and implementing all EU directives of relevance for development of water sector | Planning in initial phase, conducted by updating the APIDs developed under the ESAP. | Developed all action plans for implementation of all Directives (APIDs), and implemented in accordance with time schedule specified in the APID. |
| **Priority 1.6**  **Ensuring financial sustainability of the water sector** | Degree and phase of implementation of financial and commercial segment of water services reform in all LGUs | Start of the planning phase for all LGUs   * Completed: * Regulation on the methodology for determining the lowest basic price of water services in the Federation of BiH * “Overview of sector of water services in BiH“ * Proposed programme for improving water services in the Federation of BiH by providing financial and technical assistance | Fully implemented financial and commercial segments of water services sector reform in all LGUs. |
| Effects of the established system for collecting and allocating special water fees. | Existing system of collecting and allocating special water fees does not satisfy the financing needs in water sector   * Water fees for water intake and for discharging waste water are not regulated * No adequate mechanism of forced collection of debt for the unpaid water fees has been established. | Established system of collecting and allocating special water fees that satisfies financing needs in water sector that are planned to be financed from this source. |
| Effectiveness of financial and economic planning in water sector for the purpose of obtaining funds for sector development from EU and other international financial institutions. | * Low effectiveness * Insufficient institutional capacities for financial and economic planning in water sector. | Effective financial and economic planning in water sector for the purpose of obtaining funds for sector development from EU and other international financial institutions. |
| Status of implementation of all preconditions for comprehensive and systematic approach to addressing climate change adaptation in the Federation of BiH. | Partially achieved one of the preconditions – cooperation of the Federation of BiH water sector with MoFTER on identification / preparation of priorities and project documents. | High level of cooperation of water sector with MoFTER in preparation of plans and projects for the purpose of providing financing for activities of adaptation to climate changes that affect water resources. |

* + 1. Description of measures

The strategic goal of Protection and Quality of Water and Availability and Sustainability of Water Resources, comprises 6 priorities and 16 measures logically assigned to individual priorities so as to support the implementation of the strategic goal as a whole.

***Priority 1.1 Prevent deterioration and improve status of water bodies***

*Measure 1.1.1. Achieving environmental goals for water bodies as defined in the River* *Basin Management Plans in the Federation of BiH and inspection oversight of water pollution*

This measure aims to achieve at least good status of surface and ground waters, including implementation and assessment of progress in implementation of the River Basin Management Plans, improving legislation and inspection oversight of activities that may have adverse impact on water environment.

***Priority 1.2. Provide conditions for achieving sustainable use of water resources***

*Measure 1.2.1. Intensifying cooperation between water sector and other sectors for the purpose of ensuring protection and sustainable use of water resources*

This measure aims to contribute to integration of the needs and objectives of water sector into planning documents of other sectors (spatial planning, energy sector, agriculture, forestry, water inspection etc.) by implementing activities in the water sector that may influence the restrictions in use of water and interventions in space in the situations when adverse impact on water is proven, and intensifying cross-sectoral cooperation, including water inspections.

*Measure 1.2.2. Ensuring transparent and defined by law procedure for awarding concessions in the area of water use*

This measure aims to contribute to identification of precise conditions for awarding concessions for use of water resources in the Federation of BiH, including; harmonization of legislation on concessions and other relevant legislation with legislative changes adopted at the level of Federation (July 2022), which prohibits planning and construction of new SHPPs of up to 10 MW, implementation of the new Rulebook on environmental flaw in FBiH, and use of a catalogue of criteria for sustainable development in the small hydro power (SHPP) sector when extending or challenging the extension of water acts for the existing SHPPs.

***Priority 1.3 Ensuring sufficient drinking water supplies and availability for public water supply purposes***

*Measure 1.3.1. Development of the water supply systems that offer optimal solutions for LGUs, efficient distribution network and safe drinking water*

This measure aims to develop Plans for improvement and development of technical and operational aspects of water supply services in urban and rural areas of the Federation of BiH.

*Measure 1.3.2. Improve the existing legislative framework in the sector of water services in the Federation of BiH*

This measure aims to ensure consistent implementation of existing legislation and harmonise legislation or adopt new for the purpose of ensuring water services standards in accordance with the Directive on water intended for human use, with special focus on the safe water supply to rural areas / local water supply systems in the Federation of BiH.

***Priority 1.4 Reducing the risk of extreme hydrological events by establishing a sustainable flood risk management system and adaptation to climate changes***

*Measure 1.4.1. Monitoring and assessment of the level of implementation of the Flood Risk Management Plans in river r basins in FBiH*

This measure aims to reduce likeliness of floods and size and number of areas at risk of floods by improving water legislation and by monitoring implementation of measures specified in the flood risk management plans.

*Measure 1.4.2. Establishment and operation of hydrology forecasting systems in the Federation of BiH, including the improvement of the network of hydrological and meteorological metering stations*

This measure aims to plan further development of hydrological and meteorological and precipitation stations in the Federation of BiH as the basis for establishing and operating hydrological and hydraulic forecasting models.

*Measure 1.4.3. Improved planning and implementation of the measures for adaptation to climate changes that affect water resources*

This measure aims to programme the implementation of measures in water sector, monitor their implementation and report on the progress on realization of the measures that are defined in the draft National Action Plan for climate change adaptation (NAP).

***Priority 1.5 Developing an effective legal and institutional framework for the purpose of alignment with the EU regulations in the water sector, and its enforcement***

Measure 1.5.1. *Ensure effective implementation of the Programme of integration with EU in the Water Management sector (on the basis of four-year cycles)*

This measure aims to intensify cooperation with the responsible institutions in BiH (DEI and MoFTER), as well as the activities related to planning priorities and achieving harmonisation with water directives and identifying priority institutional measures in the field of water management, on the basis of four-year cycle.

*Measure 1.5.2. Improve legislation in water sector and administrative organization in the Federation of BiH for the purpose of effective approximation of the Federation of BiH water legislation to the EU regulations*

This measure aims to improve legislation in water sector at all levels in the Federation of BiH and legislation of administrative organization in the Federation of BiH in order to effectively approximate Federation of BiH water legislation to EU water legislation. Proposals and conclusions for legislative improvements will be based on previously completed analysis of laws and regulations in the field of water and regulations of administrative organization in the Federation of BiH that will identify overlapping competences, gaps in specification of competences, and prescribe coordination mechanisms in the process of approximation of EU regulations.

*Measure 1.5.3. Improve existing institutional structure by strengthening capacities in institutions of the Federation of BiH responsible for water, with special focus on long-term and sustainable implementation of EU water legislation*

This measure aims to improve existing Federation institutional structure in institutions competent for water management by conducting a detailed analysis of institutional capacities for implementation of EU water legislation and international water conventions, consistent enforcement of law and effective implementation of strategies and plans. Results and recommendations of the analysis will serve as a basis for planning strengthening of capacities of human resources, development of a strategic approach to new hiring, and measures for retaining skilled persons.

*Measure 1.5.4. Implementation of specified activities from developed and adopted APID documents related to EU Water Directives*

This measure aims to intensify and speed up the implementation and enforcement of EU water directives through developed, adopted and implemented Action Plans for Implementation of Directives (API) on the basis of adopted Directive Specific Implementation Plans (DSIP)

***Priority 1.6 Ensuring financial sustainability of the water sector***

*Measure 1.6.1. Improve financing of water sector by re-defining tariff system and reliably estimating cost-effectiveness of investments(Feasibility Studies)*

This measure aims to plan for ensuring observance of the principle of full coverage of operational and maintenance costs, as well as the investment costs in development of water supply system by adopting and implementing new bylaws/methodology, and implementation of a programme for improving water services sector

*Measure 1.6.2. Improve the system of collecting special water fees*

This measure aims to analyse justification of re-defining the system of special water fees and coming up with proposals to improve the level of collection of special water fees.

*Measure 1.6.3. Establishment and operation of a specialist team(s) in the water sector for economic and financial planning, project preparation and programming spending of funds*

This measure aims to train a team of experts in water sector to do economic and financial planning, project preparation and programming the spending for the purpose of successful use of funds for development of water sector from EU, international financial funds and other international financial institutions for development of water sector.

*Measure 1.6.4. Ensuring financing for preparation of priorities and implementation of project documents aligned with the EU climate legislation and global initiatives for climate change resilience and adaptation*

This measure aims to establish intensive and continuous cooperation of the water sector with MoFTER with the aim of securing financing for measures of adaptation to climate changes that affect water resources.

* 1. Indicative financial framework

Thematic area Water Management makes 37% of funding structure, or 4.3 billion BAM of the total estimated cost of the Strategy, which is 11.9 billion BAM. This thematic area comprises six priorities and 16 measures. In the process of developing the indicative financial framework, all 16 measures of this thematic area have been evaluated. Priority 1.5 (Developing an effective legal and institutional framework for the purpose of alignment with the EU regulations in the water sector, and its enforcement) is 98% or 4.2 billion BAM of the total estimated costs of this thematic group. This priority at the same time ranks first in terms of the size in the Federation Strategy, accounting for 35% of the total estimated costs. All other priorities in this thematic area make 2%, or 89 million BAM, of estimated costs for this thematic area.

A detailed presentation of the data from estimated indicative financial framework for the thematic area, as well as generally for the level of the Federation of BiH can be found in Annex 9, which includes a table and pie chart.

1. WASTE MANAGEMENT
   1. Situation analysis

This chapter provides interchangeably a description of the **baseline situation and key challenges** the Federation of BIH is facing in the waste management with the view of identifying opportunities to improve the current waste management system.

As the environmental protection, more specifically, waste management within the environmental protection, is the responsibility of the two entities and the Brcko District BiH, the Governments of the Entities and Brcko District are responsible for the preparation and adoption of their own legislation, policies and strategy. The process aimed at aligning the legal framework with the EU acquis started back in 2003 with the drafting of the Waste Management Law, which has subsequently been upgraded through amendments and bylaws, ("Official Gazette of the Federation of BiH" 33/03, 72/09, and 92/17), and strategic documents, which transposed the key EU principles and requirements in the area of waste management to the FBiH legislation. However, the full alignment with the EU regulation has not been achieved, with some regulations which were identified as partially transposed , such as the Framework Waste Directive, and those which have not been transposed at all, such as Landfill Directive or Directives which pertain to special wastes, such as single-use disposable plastics. The major challenge BiH and the Federation of BiH are currently facing include an efficient and effective countrywide coordination and consistent approach to alignment of the regulations and strategic planning in the waste sector with the EU acquis across the levels of government, and subsequent operational steps which should contribute to improvement of all the segments of the waste management system, which should facilitate a transition from the linear to a circular economy.

A viable and specific strategic planning process requires integrated and reliable data on waste. All the strategic documents in this sector have been prepared on the basis of an assessment of waste quantity and composition, and as a result decisions made in the process have often been unrealistic and investments unsustainable. Utility companies are currently not obliged to routinely determine amounts and analyse the composition of municipal waste they collect, while this positive practice has been implemented in the region. The Federation of BiH has no laboratories certified for waste analysis, which precludes identification of waste characteristics (hazardous/non-hazardous) and its calorific value for potential consideration of using waste as fuel and building waste treatment infrastructure. Lack of quality and reliable statistics impedes reporting to the Federation and national statistics institutions, as well as producing of reports for different purposes, such as reports to EIONET, EUROSTAT, and reports on cross-border transport of waste to the Secretariat of the Basel Convention and other conventions with similar requirements.

2021 saw a breakthrough in data collection when the Waste Management Information System, managed by the Environmental Protection Fund of the Federation of BiH was commissioned in the Federation of BiH. The Information System was designed to enable monitoring of all the waste streams, and the law now requires waste management operators, entities which produce/are in possession of waste and producers, importers and distributors who produce and/or import products which become a special category of waste after their use in/to BiH, to provide information on, among other things, the types and amounts of waste. An increasing number of registered users as a result of dissemination of information and education, and the regulation of the reporting obligation through renewed waste management licences and environmental permits are currently among the greatest challenges. The increased number of users and various analytical possibilities within the system will enable preparation of accurate and reliable reports on the waste management in the Federation of BiH, after the systems both in Republika Srpska and at the national level become operational. It is therefore very likely that the information system will be continuously upgraded in the future in order to satisfy various reporting requirements and requests of the users. The growth and development of the information system must be accompanied with enhanced human resources in the Environmental Protection Fund of Federation of BiH.

The Federation of BiH has a limited number of financial mechanisms which support the transition towards a circular economy. These mechanisms include charges payable for a failure to meet the recycling and reuse objectives for some special wastes and taxes for light plastic shopping bags. The existing financial mechanisms are not perceived sufficient to contribute to minimising waste generation, recycling, reduced disposal of waste, which is currently the most inexpensive option. The landfill tax is one of the crucial mechanisms which are missing. It has been implemented in the EU countries in order to discourage landfilling as the most common form of waste disposal, and to help the development of the system component aimed at reducing waste generation, and encouraging reuse and recycling. Another important instrument should be the waste disposal charging fee based on the quantity of waste generated. It is therefore necessary to review the existing and implement further economic and financial instruments and mechanisms to reduce amounts of waste and boost utilisation of all categories of waste.

Information available in reports of the Institute for Statistics of the Federation of BiH and reports of the international organisations indicate that the current situation in the municipal waste management sector in the Federation of BiH can be described through indicators listed in the following table***.***

Table 10: Indicators of the current situation in the waste sector in Federation of BiH:

| **Indicator** | **Unit** | **Value** |
| --- | --- | --- |
| Total amount of municipal waste collected (Institute for Statistics of the Federation of BiH 2021a) | tonne | 611854 |
| Population covered with waste collection services (Ionkova et al. 2018b) | % | 70% |
| Waste generation per capita[[11]](#footnote-12) | kg daily | 1.1 |
| Municipal waste collected and landfilled (Institute for Statistics of the Federation of BiH 2021a) | % | 94 |
| Municipal waste collected and disposed in a different manner or treated (Institute for Statistics of the Federation of BiH 2021a) | % | 6 |
| Municipal waste disposed at illegal dumpsites[[12]](#footnote-13) | % | 30% |
| Regional landfills (Ionkova et al. 2018b) | Number: | 4 |
| Non-compliant municipal landfills (Ionkova et al. 2018b) | Number: | 41 |
| Inert waste landfills (Ionkova et al. 2018b) | Number: | 1 |
| Illegal landfills (Federation Ministry of Environment and Tourism 2008) | Number: | 1800 |
| Quantity of waste from manufacturing activities (Institute for Statistics of the Federation of BiH 2019a) | tonne | 9652414 |

The predominant waste is the organic fracture in the range of 25% (cantons average) to 50% (municipal average). (Ionkova *et al.*, 2018b). Dry recyclables (plastic, glass, paper, metal, cans, PET) account for 24‒ 38% of the total waste. Municipal utility companies are in charge of overall activities of municipal waste management in BiH, with an exception of the utility company in the Sarajevo Canton. The companies have poor equipment, with mainly outdated equipment and mostly suffer financial instability. Waste collection relies mainly on 1,100 litre volume containers. Some municipalities use 120/240 litre bins for waste collection applying ‘door to door’ method for individual houses, and industrial 5-8m³ containers mainly for collection of non-hazardous industrial waste. The companies generate income mainly from the fee they charge from households and commercial sector for waste collection, transport and disposal. The fees are subject to VAT. The average annual weighted rate for households amounts to BAM 102/household/year or 113 BAM/tons (including VAT) with assumed size of household of 3.09 members (based on the 2013 Census) and the waste generating rate pf 0.8 kg/individual/day or 0.9 t/household/year. (Ionkova et al., 2018b). Six utility companies have sorting facilities (Mostar, Konjic, Sarajevo, Tuzla, Capljina, and Bihac) most of which are not operational due to the lack of financial sustainability. Other options for (preliminary) treatment of municipal waste are not available. Two cement plants in Bosnia and Herzegovina use RDF/SRF as alternative fuel, while two thermal plants owned by the Public Enterprises “Elektroprivreda BiH” expressed their interest for co-incineration of waste. The first factory for production and treatment of PET packaging and solid plastic “Bosna-Plastic“, Gorazde which purchases PET packaging from both legal and physical persons, has been in operation since 2020.

Landfilling is the main method of disposal of municipal waste and other types of waste. According to the Institute for Statistics of the Federation of BiH, there are 45 landfills in the Federation of BiH.(Institute for Statistics of the Federation of BiH, 2021b). Four regional landfills are currently developed and operational in the Federation of BiH in Sarajevo, Livno, Mostar, and Zenica. They receive waste from 24 municipalities (Livno from 3, Mostar from 4, Sarajevo from 9, and Zenica from 8 municipalities, including the total waste collected from 2 and a portion thereof from 6 municipalities). In addition, other 9 municipalities currently transport their waste to regional landfills in Republika Srpska ((Zivinice to Doboj and Zvornik; Sapna and Kalesija to Zvornik; Srebrenik, Lukavac, Doboj Jug, Doboj Istok, Usora to Doboj; Teocak to Bijeljina). More than 1/3 of the municipalities in the Federation of BiH (which generate more than 50% of the overall municipal solid waste) currently dispose their waste at the regional landfills, while the other municipalities still dispose their waste at wild dumpsites or non-sanitary municipal landfills. Several municipalities still dispose their waste at 41 non-compliant municipal waste landfills. One landfill of inert waste is operating in the territory of the Municipality of Neum, while a plane for disposal of this type of waste is being developed at the Sarajevo landfill in Smiljevici. This plane will also be equipped with a construction waste crusher. According to the former Federation Waste Management Strategy 2012-2017, 1400 illegal dumpsites were reported in the Federation.

The municipal waste management sector requires a reform. There are multiple gaps in the legal, institutional and technical aspect which support the *status quo*. The analysis prepared by the World Bank in 2019 (Ionkova *et al*., 2018b), identified the need to upgrade the municipal Decisions on utilities which will allow the municipalities to better design and organise waste management services. These decisions should define tasks and obligations of the municipalities, waste generators, including a legal basis for payment and implementation of fines. The Decisions should also define general requirements for the waste management planning. Moreover, the regulations may also define the requirements for the engagement of the private sector. The municipal regulations need to be harmonised with the Federation and cantonal laws on waste management and utility activities, particularly when it comes to defining the obligations of waste generators and public obligations of the municipalities for waste management services. At the strategic level, it is necessary to harmonise cantonal and municipal waste management plans and to update them in accordance with the requirements of this Strategy, new Federation Waste Management Plan which need to be prepared immediately upon the adoption of the Strategy. The municipal waste management plans should serve as a basis for the establishment of a regional waste collection/separation system. Guidelines could also be prepared to define the content of such plans based on the EU format. Where regions do not coincide with the boundaries of the cantons for waste collection purposes, there may be a need to develop a Regional Waste Management Plan to better organise the services. Development of such regional waste management plan, which is currently not recognised as a regulated planning document, should be envisaged in the Waste Management Law of Federation of BiH.

In addition to creating legal conditions for a sustainable municipal waste management at the municipal level, it is necessary to significantly improve the current system through strengthening of utility companies. It is assumed that consolidation of waste collection and transport companies at regional level could ensure financial sustainability of their services. The value added tax (VAT) payment obligation has also been identified as a problem, being in contravention with the requirements of the Directive 2006/112/EC on VAT which, among other things, requires withdrawal or lowering of VAT on utility services. Such initiative must be implemented at the national level, and its implementation could significantly strengthen the position of the utility companies.

It is also necessary to revise the currently applicable plan of regional landfills development and create conditions for development of new regional or inter-municipal landfills, and/or development of new or upgrading of the current municipal landfills which due to geography or other obstacles are in no position to join any regional/inter-municipal concept. Such plans should however take into account the need to reduce the amounts of waste disposed at landfills and to increase the reuse of waste. In addition to improved technical capacities of the utility companies through procurement of equipment for (separate) collection, transport and treatment of waste, there is a need to take actions aimed at reducing waste generation and redirecting waste from landfills to other forms of treatment, including thermal treatment and energy to waste treatment.

The principles of a circular economy have not been implemented in the Federation’s Strategic Waste Management Framework. A linear economy model is dominant at both entity and local level. The system of management of special wastes, which is one of the cornerstones for the transition from the linear to a circular economy, requires substantial improvements. The issue of packaging waste and WEEE management was both legally and institutionally regulated in Federation of BiH nearly 10 years ago, as well as placement on the market and use of plastic shopping bags. The management of packaging waste and WEEE was entrusted to the system operators which operate within the extended producer responsibility scheme. An in-depth analysis carried out by the World Bank in 2018 (Ionkova *et al*. 2018) shows that there is a need to improve the extended producer responsibility scheme for packaging waste and WEEE. Formally, recycling and use goals laid down in the legislation have been fulfilled. The achievements recorded over the past several years are mainly the result of optimised collection practices, which existed before the EPR scheme was implemented and the result of the demand for row materials in the recycling industry. Lack of a linkage with the utility sector is the key weakness of the current system. While some cases of cooperation between system operators and municipalities have been recorded, this cooperation is not mandatory under the law. The utility sector therefore lacks the motivation to work on the separate collection, and a substantial portion of this waste has been landfilled and lost. In addition, the recycling targets which have been defined were assessed as low and easily achievable with the engagement of only commercial sector. It has been therefore proposed to significantly increase the targets in order to make the operators cooperate with the utility sector. Since 2021, FMET regulated the issue of the management of end-of-life vehicles, waste tyres, batteries and car batteries and waste oil. The system for these categories has been regulated through the Environmental Protection Fund of the Federation of BiH. Given that this is a new regulation, it is necessary to give it some time in order to see the effects or potential differences compared to the system which relies on the system operators.

The current industrial waste management system in Federation of BiH involves a transfer of responsibility for the waste management from industrial waste generators to companies licenced for the collection and treatment of hazardous and non-hazardous waste. Activities of industrial companies are regulated through the environmental licencing procedure as defined in the Law on Environmental Protection ("Official Gazette of the Federation of BiH“, 15/21) and the Law on Waste Management("Official Gazette of the Federation of BiH", 33/03, 72/09, and 92/17). The industrial waste generators are obliged to prepare and implement a Waste Management Plan and internally nominate a person responsible for the waste management. They are required to manage the waste in an environmental friendly manner using the best available techniques (BAT), perform separate waste collection and storage, promote recycling, and if they do not have a licence to treat their own waste, they are required to confer this responsibility to the extended producer responsibility scheme operators for packaging waste and WEEE or private companies licensed for the management of special wastes such as sludge, batteries, PCB/PCT, refuse oil, contaminated waste, medical waste, etc. While the system is relatively well regulated, many industries, primarily SMEs in reality do not comply with the requirements set forth in the environmental permits. A number of the companies have been trying to meet the requirements only formally, while some other companies are not even fully aware of the legal requirements. Only a few of them fully comply with the requirements from environmental permits. Production systems mainly operate on the principle “generate and dispose” without implementing the techniques aimed at waste reducing, reusing or recycling. Some critical challenges include the lack of interest and motivation among the industries to engage and resource efficient and cleaner production, as well as the lack of understanding of relevant techniques for the management of special wastes. Best available techniques reference documents for the waste management have not been prepared, and EU guidelines have not been used. Industries need awareness raising on the obligations arising from the legislation applicable in the Federation, as well as knowledge and technical support in identification of relevant waste management practices, which could be implemented in the production process, including the techniques for waste storage and (preliminary) treatment.

As for medical waste, a survey among medical institutions undertaken by UNDP in 2020[[13]](#footnote-14), shows that all the institutions in the territory of Federation of BiH: comply with the entity legislation on the management of medical waste, and each institution possesses an internal waste management plan, with the exception of PI Health Centre Livno which has its own internal procedure for collection, separation, storage and treatment of infectious clinical waste (ICW). The University Clinic Sarajevo and the General Hospital “Prim. Dr. Abdulah Nakas” are the two institutions in the Federation of BiH licenced to manage ICW, and they both possess disinfecting and sanitizing equipment. The University Clinic Sarajevo is licenced to treat their own waste, while General Hospital “Prim. Dr. Abdulah Nakas” is licenced to treat their own waste and waste from other institutions for commercial purposes. It is necessary to provide other centres in Federation of BiH with this equipment for safe disposal of infectious clinical waste. These centres could serve as temporary holding zones of infectious waste from associated health centres. The health centres currently have contracts with business companies for the transport and treatment of ICW. Depending on contractual arrangements, some operators also provide their containers for collection of ICW. According to data collected, all the institutions have regular trainings for their employees.

Some industries, due to the nature of their manufacturing processes, generate huge amounts of hazardous and non-hazardous waste which they keep in their own facilities. (for example, *Aluminij* Mostar, *Mittal* Zenica, *Sisecam* Lukavac, TE Kakanj, TE Tuzla). Different studies and analysis undertaken in the past indicate that there could be hundreds of such industrial ecological hotspots. Unfortunately, a comprehensive mapping of these sites has never been made. Some of these sites are the legacy from the time of the Socialist Federal Republic of Yugoslavia and they commonly have not owner, such as HAK Tuzla, KTK Visoko, abandoned mine waste heaps in Vares, etc. In addition to abandoned industrial sites, BiH has a significant number of legacy military sites with underground storage facilities which contain old EE equipment (electric transformers, condensers, ventilation systems, etc.) Mapping of all these sites and identifying funds and technical support for adequate disposal of legacy waste is a key challenge.

Generally, the awareness on waste management is very low. Citizens mainly remain poorly informed and aware where the waste ends up after they dispose it in containers. This is partly the reason why the population are not ready to pay higher fees which should contribute to the improvement of the system. Some also falsely believe that only the procurement of equipment and sophisticated technical solutions can address overwhelming problems in the utility industry and that the engagement of the private sector could bring progress. It is also obvious that there is a lack of understanding of the linkage between poor waste management and ecological and economic damages caused by such management, both at the local and entity, as well as the national level. There is a clear need for a better, more focused communication with the population and business community, particularly those who are required to improve their management of waste through environmental permits or extended producer responsibility schemes. Without the support of the public and business community and keen attitude, improvement of technical and operational capacities alone will not be sufficient for a breakthrough and transition from the linear to a circular economy.

* 1. Strategic goal 2

**Strategic goal 2 - Reducing waste and increasing the reuse of materials**

Strategic goal 2 covers thematic areas such as household waste, biowaste, industrial waste, electronic, and nuclear waste, waste separation, collection, disposal, landfilling, incineration, and circular economy which keeps materials and product in use and recycles them in other products.

Table 11: Impact indicators for strategic goal 2

|  |  |  |  |
| --- | --- | --- | --- |
| **Strategic goal 2** | **Impact indicators** | **Baseline value** | **Target value**  **(To be determined in the initial years of the implementation)** |
| *Reducing waste and increasing reuse of materials* | **Total waste disposed (t)** | 577,685  (2020) | ... |
| **Total number of waste disposal sites recorded** | 45  (2020) | ... |

* + 1. Priorities for strategic goal 2

**Priority 2.1 Improving the legal and strategic framework in the waste management according to the EU principles** through amending the applicable legislation, policies, planning/strategic documents in order to bring them in line with the obligations stemming from the Directives and guidelines of the European Union governing the waste management sector, as well as with the requirements of the Basel Convention on control of transboundary movement of hazardous waste and its disposal.

**Priority 2.2 Improving the waste monitoring and reporting system** through making mandatory waste composition analysis and quantification, establishment of an authorised laboratory for waste analysis and improvement of the waste management information system in order to enable a better and more sustainable strategic planning and investments in the waste management sector.

**Priority 2.3 Implementing economic and financial instruments and mechanisms to reduce the amount of waste and boost utilisation of all categories of waste** through an analysis of options and defining of recommendations for a revision of the current and implementation of further economic and financial instruments and mechanisms, such as legal mechanisms and technical recommendations, which should reduce waste amounts and boost utilisation of all categories of waste; and finally an initiative for adoption of recommendations and implementation of the new instruments in cooperation with other responsible ministries.

**Priority 2.4 Improving the municipal waste management system** through a reform of the municipal waste management system, procurement of equipment and development of infrastructure for municipal waste management; and investments in programmes aimed at reducing the quantity of municipal waste disposed at landfills.

**Priority 2.5 Improving the management of special wastes**, through upgrades of the extended producer responsibility scheme for packaging and WEEE, and providing for adequate collection and disposal of both these two and other special wastes, such as batteries, car batteries, old tyres, refuse oil, end-of-life vehicles, construction waste, sludge, animal waste and medical waste. This priority will also involve efforts aimed at strengthening the market of recyclables, and integration of informal waste collectors in the recycling system.

**Priority 2.6 Rehabilitate surfaces beneath inadequately disposed waste** through a full-scale inventory of the current official municipal waste landfills and abandoned industrial dump sites, and identify funds for their removal and rehabilitation.

**Priority 2.7 Raise awareness about the proper separation, collection and disposal of waste** through the implementation of up-to-date, educational and informative, gender-sensitive, and inclusive awareness raising campaigns across the levels of government (Federation of BiH, cantons, municipalities).

Table 12: Priorities with relevant indicators

| **Priorities** | **Indicator of deliverable** | **Baseline value** | **Target value** |
| --- | --- | --- | --- |
| **Priority 2.1 Improving the legal and strategic framework in the waste management according to the EU principles** | Assessment of the compliance of the waste management legislation and waste management documents with the obligations arising from the EU acquis and international agreements | The waste management legal and strategic framework in Federation of BiH is:   * Partly aligned with 9 Directives; * Not aligned with 2 Directives; * Partly in compliance with the requirements of the Basel Convention   (2021) | The waste management legal and strategic framework in Federation of BiH is fully in compliance with 11 EU Directives and Basel Convention.  (2025) |
| **Priority 2.2 Improving the waste records and reporting system** | Reliability of waste data obtained from the waste records and reporting system | Waste records and reporting system does not provide reliable waste data;   * Waste composition analysis and quantification is not mandatory; * Federation has no own waste analysis laboratory; * The Waste Management Information System has been newly developed.   (2021) | Waste records and reporting system provides reliable waste data.   * The obligation of utility companies to determine waste composition and quantity codified (2023); * A designated waste analysis laboratory established (2024); * Full functionality and efficiency of the Waste Management Information System achieved (by 2027) |
| **Priority 2.3 Implementing economic and financial instruments and mechanisms to reduce the volume and boost utilisation of all categories of waste.** | Number of financial instruments for a sustainable solid waste management supporting the transition to a circular economy | 2  (charges payable for failure to meet the recycling and reuse objectives for some special wastes and taxes on light plastic shopping bags) (2021)  (2021) | Minimum 3  (2032) |
| **Priority 2.4**  **Improving the municipal waste management system** | Financial and operational sustainability of the utility sector | Predominantly low financial and operational sustainability of companies in the utility sector  (2021) | Increased financial and operational sustainability of companies in the utility sector as compared to the baseline situation (2032) |
| Costs of environmental action‒ waste | Amount of investments in waste management -  Investments of the Environmental Protection Fund of Federation of BiH BAM 1.4 million (2021) | Increased investments in waste management as compared to the base year (2032) |
| Municipal waste collected and landfilled | Waste collected: 611,854 t/y (2020)  Waste landfilled: 577,685 t/y (2020)  (94% of the waste collected is landfilled) | Diverting the waste away from landfills towards other forms of treatment, ultimately aiming at reducing the amount of waste landfilled to less than 60% of the total municipal waste generated as compared to the base year  (2032) |
| **Priority 2.5 Improving the management of special wastes** | Amount of waste in R treatments ‒ special wastes | Data available only for the national level, and the amount is 225,993 t/y (2020) | Increasing the amount of municipal waste processed in R treatments by 50% as compared to the base year (2032) |
| **Priority 2.6 Rehabilitate surfaces beneath inadequately disposed waste** | Costs of environmental action– landfills rehabilitation | 0 | Increased each year compared to the base year  (2032) |
| **Priority 2.7 Raise awareness about the proper separation, collection and disposal of waste** | Funds invested in awareness programmes on waste management | No indicator available  (2021) | Increased each year compared to the base year  (2032) |

* + 1. Description of measures

Strategic goal 2 comprises 10 measures logically lined with the priorities.

***Priority 2.1 Improving the legal and strategic framework in the waste management according to the EU principles***

*Measure 2.1.1. Improve waste management legislation, policies and planning documents so as to be in compliance with the obligations arising from the EU acquis and international agreements*

This measure aims at upgrading the applicable legislation, policies, planning and strategic documents of the Federation of BiH so as to be in full compliance with the obligations arising from the Directives and guidelines of the European Union governing the waste management, and with the requirements of the Basel Convention on control of transboundary movement of hazardous waste and its disposal.

General areas of intervention focus on upgrading of the applicable Law on Waste Management, improvement of the applicable and/or development of new bylaws on waste management and improvement of the strategic planning procedure.

***Priority 2.2 Improving the waste records and reporting system***

*Measure 2.2.1. Improving the waste records and reporting system*

This measure aims at improving the waste records and reporting system in order to obtain reliable data, improve strategic planning across the levels, which will contribute to sustainability of future investments in the waste management.

General areas of intervention focus on passing legislation which will require determination of the quantity and composition of waste, establishment of an authorised laboratory for waste analysis and upgrading of the waste information system.

***Priority 2.3 Implementing economic and financial instruments and mechanisms to reduce the amount of waste and boost utilisation of all categories of waste***

*Measure 2.3.1. A revision of the current and implementation of further economic and financial instruments and mechanisms in the waste management sector*

This measure aims at supporting the transition towards a circular economy through financial instruments. General areas of intervention focus on analysing opportunities and defining recommendations for a revision of the current and introduction new economic and financial instruments, and mechanisms which will reduce amounts and increase the degree of utilisation of all categories of waste, for example through introducing a landfill tax, abolishing tax on utility services, and creating mechanisms for reuse of waste from industrial landfills. Appropriate initiatives shall be launched on the basis of the recommendations and further activities undertaken to implement new instruments of support.

***Priority 2.4 Improving the municipal waste management system***

*Measure 2.4.1. Reform of the municipal waste management sector*

This measure aims at creating an environment which will boost the reform of the municipal waste management sector, and improve both the financial and operational sustainability of utility companies, enable further development of the system and improve utility services.

General areas of intervention focus on the establishment of a working body for municipal waste management to define proposals and implement the reform of the municipal waste management sector, prepare guidelines for the reform of this sector, support the implementation of the reform in accordance with the guidelines, and ensure continuous professional capacity building in organisations involved in the waste management sector at the level of cantons, municipalities and utility companies.

*Measure 2.4.2. Procurement of equipment and development of the infrastructure for municipal waste management*

This measure aims at developing new and upgrading the current municipal waste management infrastructure, which will improve waste collection, sorting, treatment and landfilling.

General areas of intervention focus on the procurement of equipment for collection and transport of municipal waste, procurement of equipment for separate collection and sorting, development of capacities for treatment and disposal of waste and construction of new regional/intermunicipal waste management centres.

*Measure 2.4.3. Programme aimed at reducing landfilling of municipal waste*

This measure aims at reducing the volume of municipal waste disposed at landfills through targeted actions.

General areas of intervention focus on reducing waste generation in households, promotion of separate collection of biodegradable waste which is the integral part of the municipal waste and converting waste into energy.

***Priority 2.5 Improving the management of special wastes***

*Measure 2.5.1. Creating conditions for adequate collection and disposal of special wastes*

This measure aims at improving the system of collection and disposal of special wastes through targeted actions.

General areas of intervention are:

1. Improving the extended producer responsibility schemes for packaging, packaging waste and WEEE;
2. Improving the collection system for batteries, car batteries, old tyres, refuse oil and end-of-life vehicles;
3. Improving the system for collection ad reuse of construction waste;
4. Improving the system for collection ad reuse of hazardous waste;
5. Creating conditions for adequate disposal of sludge which cannot be used for other purposes;
6. Creating conditions for adequate disposal of animal waste;
7. Creating conditions for safe treatment of all types of medical waste.

*Measure 2.5.2. Strengthening the recyclables market*

This measure aims at developing the waste market with the view of efficiently using secondary row materials and optimising the waste management through targeted actions.

This measure includes three areas of intervention: Initiating a Waste Exchange, providing financial support to the recycling industry, and integration of informal collectors in the recycling system.

***Priority 2.6 Rehabilitate surfaces beneath inadequately disposed waste***

*Measure 2.6.1. Removing and rehabilitating abandoned dumpsites*

This measure aims at removing inadequately disposed waste and rehabilitating surfaces,, including formal landfills managed by cantons, municipalities, and cities, and utility companies, so-called rehabilitation of “black spots”, e.g. abandoned industrial dumpsites, not so rarely without an owner. The Federation of BiH should take the responsibility for their rehabilitation. This measure involves the following areas of intervention:

a. Updating the list and producing a catalogue of “*hot spots*”, including municipal and industrial waste dumpsites;

b. Preparing a feasibility study for rehabilitation of abandoned sites and their rehabilitation.

This measure does not cover wild dumpsites given that utility companies and cantons, municipalities and cities are required to continuously on removing illegal municipal waste disposal sites and rehabilitation of the sites within their routine activities.

***Priority 2.7 Raise awareness about the proper separation, collection and disposal of waste***

*Measure 2.7.1. Running up-to-date educational and informational, gender sensitive and inclusive awareness campaigns at all levels (Federation of BiH, cantons, municipalities)*

This measure aims at raising the awareness not only among citizens but also among the members of the business community about the proper waste management, focusing primarily on waste prevention and recycling, as well as understanding of the waste collection and disposal system.

This measure anticipates implementation of various training programmes and public awareness campaigns about sustainable production and consumption, ban on plastic single use products, repairs and recycling of different types of products, campaigns for citizens about the ways and importance of the proper waste sorting, importance of waste reduction, reuse and recycling, and composting, etc. programmes for businesses about the proper treatment and management of special wastes and integration of the training on waste management in curricula in primary and secondary schools and universities.

* 1. Indicative Financial Framework

The thematic area Waste Management accounts for 6% of the total estimated cost of BAM 11,9 billion with estimated BAM 659 mil. The thematic area Waste Management comprises seven priorities and ten measures. This thematic area contains fewer measures than any other area in the Strategy of the Federation of BiH. The calculations in the Indicative Financial Framework include estimated costs for all the measures. Priority 2.4 (Improving the municipal waste management system) accounts for 81% or BAM 532 million, followed by the priority 2.5 (Improving the management of special wastes) which accounts for 16% or BAM 102 million, and 2.6. (Rehabilitate surfaces beneath inadequately disposed waste) with 3% or 20 million. The other priorities in this thematic areas account for less than 1% of the total estimated cost.

A detailed overview of the Indicative Financial Framework for the thematic area Waste Management and for the Federation of BiH in general is contained in Annex 9, including a table and pie chart.

1. BIODIVERSITY AND NATURE CONSERVATION
   1. Situation Analysis

The nature of the Federation has an enormous diversity and multiple values. Given that the Federation of BiH covers all the biogeographical areas of BiH, it is assumed the majority of the overall varieties and types of ecosystems in BiH are represented in the territory of the Federation. As previously noted, there is hardly any data specifically focusing on biodiversity of the Federation of BiH. However, the fact that 30% of the endemic flora of the Balkans, and/or about 1,800 endemic species and subspecies live in the territory of BiH, and the overall number of plant taxons exceeds 5,100 show high values of biodiversity According to assessments of the First Report of BiH to the Convention on Biodiversity (Redzić, S., Barudanovic S., Radevic M. (ed) 2009), biodiversity of fauna in BiH comprises 119 fish species, 20 species of amphibians, 38 species of reptiles, 326 bird species, 85 mammal species, and an exceptional variety of invertebrates, particularly among invertebrates of karst wells, mountain streams and canyons. More recent studies on birds in BiH show that 344 bird species have their habitats in BiH (Kotrosan, D. and Topic., 2017), while, 231 fish species were identified in accordance with the new nomenclature, including 76 marine species, 26 diadromous, 111 freshwater species (FAO 2015b). Diversity of fungi in the Federation is currently being researched. Many species of fungi, for which the number of varieties has been estimated, have high commercial potential and values. The ecosystem of the Federation of BiH also has a rich diversity. The reference literature from the previous vegetation research describes over 250 different types of plant communities in BiH, (UNECE 2018), which illustrates the diversity of basic ecological conditions in our country (Redzić S., Barudanovic S., Radevic, M. (ed) 2009). Given geography and biogeography of the Federation of BiH, it is fair to assume that the majority of 250 types of the ecosystem in BiH have their habitats in the territory of the Federation. The scientific community has still no commonly agreed classification of the ecosystems in BiH (Barudanovic et al. 2015) but previous studies provide a good basis for their understanding. It is also safe to say that all the categories of CORINA nomenclature (31) identified in the territory of BiH are represented in the territory of the Federation of BiH.

*Situation in biodiversity and nature conservation*

The size of protected areas in the Federation is minor given exceptionally high values of the nature. While the global goal of the world community in the previous ten-year period required the establishment of the formal protection in 17% of the land and 10% of the aquatic territory of each country, the protected areas in the Federation of BiH account for 3,98%. The protected areas in the Federation of BiH include: one national park(36.629,08 ha) ("Official Gazette of the Federation of BiH" 92/14) four monuments of nature (9,207 ha), two nature parks (43,624.07 ha), and five protected landscapes 14,417.59 ha). This makes 12 protected areas with a total area of 103.875,74 ha (Federation Ministry of Environment and Tourism, 2020). The protected landscape Vjetrenica ‒ Popovo Polje, with an area of 4.712,19 ha is the most recent protected area (Assembly of the Herzegovina-Neretva Canton, 2021).

In order to protect species diversity, many species of flora, fauna and fungi were included in the Entity’s Red List because they are endangered in some respects. The list includes 658 plant species, 27 species of mammals, 40 bird species, 6 species of reptiles, 4 species of amphibians, 36 fish species, and a large number of different groups of invertebrates ("Official Gazette of the Federation of BiH", 7/14)  ***Table 13***. The ratio of the total number of species in certain groups of organisms throughout BiH, under the assumption that most of those species are also widespread in the FBiH, show that almost one fifth of the species is under a certain level of threat and risk. After the Red List of species had been officially published, the Federation of BiH adopted the Rulebook on the Protection Measures for Strictly Protected and Protected Species and Subspecies ("Official Gazette of the Federation of BiH“, 21/20). The implementation of this Rulebook, as well as the establishment of new protected areas represent real challenges for the Federation of BiH, both in terms of funding of the protection measures and in terms of available human and technical capacities.

Table 13: The ratio of the total number of species of certain groups of organisms and the number of endangered species in the FBiH

| **Group of organisms** | **Total number of species in BiH**  *(Redzic S.,Barudanovic S., Radevic M. (ed) 2009)* | **Number of species on the Red List of the Federation of BiH** |
| --- | --- | --- |
| Moss | 565 | 658 |
| Ferns | 61 |
| Spermatophyte | 3256 |
| Fish | 119 | 36 |
| Amphibians | 20 | 4 |
| Reptiles | 38 | 6 |
| Birds | 326 | 40 |
| Mammals | 85 | 27 |

In order to preserve high natural values and original tangible and intangible and regulatory benefits of functional areas of the nature, it is necessary to increase the protected area in the Federation of BiH in accordance with the Law on Nature Conservation.

The implementation of the IPA project "Support to the Implementation of the Directives on Birds and Habitats in Bosnia and Herzegovina (2012-2015)", included an analysis of the distribution of habitat types and species listed in the given directives for the territory of BiH The analysis recorded a total of 70 different habitat types, and 208 species, of which 109 were birds. The project also created a database in standard formats (*United Nations Economic Commission for Europe* - UNECE 2018). A draft plan of the Natura 2000 ecological network in BiH was also prepared The total of 122 areas that make up the ecological network with a total area of 956,776.59 ha (about 20% of the entire BiH territory) were proposed (Milanovic and Golob, 2015).

The implementation of this project is one of many steps aimed at establishing the ecological network in the Federation of BiH. In order to meet the EU standards in nature conservation, the protected areas and other ecologically important areas must be integrated in a single ecological network, as regulated in the Law on Nature Conservation of the Federation of BiH ("Official Gazette of the Federation of BiH", 66/13).

Establishment of the ecological network in the FBiH is a complex procedure, which includes: (a) establishment of previously planned protected areas, (b) field verification of data on the distribution and condition of species and habitats entered into the Natura database, (c) consultation processes in local communities in order to get their agreement for the integration in the ecological network. Obtaining of the agreement of local communities requires intensive promotion of and a campaign explaining the benefits of the ecological network. Aligning of sectoral regulations with the EU acquis must be accompanied with identification of other ecologically important areas (water protection zones, and hunting and fishing areas) and their integration in the ecological network of the Federation of BiH.

***Analysis of the current situation and challenges***

The development of the Strategy included an exhaustive analysis of the reasons which contributed to the current situation in relation to circumstances surrounding nature conservation in thein the Federation. The challenges identifies may be classified in the following groups: (a) state of the current legal framework for sustainable management of biodiversity and nature conservation, (b) state of the institutional framework, (c) state of institutional capacities, (d) state of data on biodiversity, (e) cross-sectoral cooperation in nature conservation, (f) role of scientific knowledge in decision-making , (g) role of environmental awareness in nature conservation action, (h) funding of measures for achievement of the strategic goal in the area of biodiversity, and nature conservation.

*Legal framework for sustainable management of biodiversity and nature conservation*

Given the division of responsibilities, the legal framework for biodiversity and nature conservation of the Federation of BiH comprises a set of environmental laws, and various sectoral laws in the field of forestry, veterinary medicine, hunting, agriculture, water management and others In accordance with the international commitments ("Official Gazette of BiH", 10/08), one of the responsibilities of the Federation of BiH is to align its environmental legislation with the EU acquis, especially with the Habitats Directive (Directive 92/43/EC), Directive on the Protection of Wild Birds (2009/147/EC) (Directive 92/43/EC), Directive on the Protection of Wild Birds (Directive 2009/147/EC), and regulations which govern the matters of the international agreements signed by EU. The Law on Nature Conservation is the main piece of legislation in this area ("Official Gazette of the Federation of BiH", 66/13), which relies on the provisions of ratified international agreements in the area of biodiversity including: The Convention on Biodiversity, Convention on International Trade in Endangered Species of Animals and Plants, Convention on the Conservation of European Wildlife and Natural Habitats, Convention on Migratory Species of Wild Animals, and the provisions of the aforementioned EU Directives. Given the current lack of financial, technical and human capacity in the field of biodiversity preservation and nature conservation, the implementation of the Law represents a significant challenge for the FBiH. Furthermore, a full alignment of the Law on Nature Conservation of the Federation of BiH, and of all other laws with the EU acquis is an extremely demanding process, wherein it is important to distinguish between the horizontal (cross-sectoral) and vertical (coordinated with other administrative levels) alignment. Horizontal alignment of national legislation for nature protection /conservation with the EU acquis is the responsibility of a several institutions at the Federation and Cantonal level, and their cooperation requires legally defined and mutually agreed mechanisms. Vertical alignment with the biodiversity and nature conservation EU acquis in the Federation of BiH requires:

* + - Developed guidelines for harmonization and implementation of international agreements on biodiversity of which BiH is a member;
    - A developed effective legal basis for cooperation in the area of nature protection/ conservation with the Republika Srpska and the Brcko District of BiH;
    - A developed effective legal basis for coordination in the development and implementation of sectoral regulations for nature protection/conservation in the Cantons of the Federation of BiH;

In addition to the complexity of these processes, as the main challenge in establishing the legal framework of good quality, the fact that BiH has not signed the protocols and agreements (Nagoya, AEWA) important for biodiversity management, As a result, the Federation of BiH has not adopted the relevant legislation. In order to overcome these challenges, it is necessary, first of all, to synchronize the development of the legal framework of the Federation of BiH with the legal framework at the level of Bosnia and Herzegovina, Republika Srpska and the Brcko District.

It should be noted that the Federation Ministry of Environment and Tourism is a key focal point for the Convention on Biodiversity for BiH, and to this and it is leading the processes for the preparation of the Strategy for the Protection of Biodiversity in BiH and other strategic documents in the area of biodiversity.

*institutional framework*

The Federation Ministry of Environment and Tourism carries out administrative, technical and other activities in the responsibility of the Federation of BiH pertaining to the nature, development of the environmental strategy and policy, implementation of projects, quality standards and ecological monitoring of nature (DEI, 2018). The Ministry has different sectors with specific divisions. The Division for preservation of biodiversity and landscape diversity and natural values devises and undertakes measures aimed at integrated protection of biodiversity and landscape diversity, preservation of natural assets of special interest and sustainable use of biodiversity. The Division for preservation of natural values and eco-tourism devises and undertakes measures aimed at integrated protection and preservation of natural assets of special interest for the Federation of BiH/BiH, and protected area falling under the competence of the Federation of BiH (categories I and II). The Division for environmental impact assessment addressed, among other issues pertinent to environmental impact assessment, with issues of biodiversity. The Sector for the implementation of projects formed a division, which among other things, is responsible for the management of protected areas (Council of Ministers of BiH, 2018). As the Institute of Nature Conservation, envisaged in the Law, has not been established yet, it is necessary to gradually develop a relevant institution which will carry out technical tasks of nature conservation in the Federation of BiH. Other most relevant institutions of the Federation of BiH which comprise the institutional framework include: (a) Federation Ministry of Agriculture, Water Management and Forestry (responsible for administrative, technical and other tasks falling in the competence of the Federation of BiH, which, among others, include the tasks such as: Protection of waters, improvement of forestry production, and forest growing, regulation and improvement, state of wood stock, exploitation of forests, afforestation of degraded and coppice forests, barren land and karst area, hunting and hunting economy), (b) Environmental Protection Fund of the Federation of BiH (responsible for raising dedicated funds, promotion and funding the preparation, implementation and development of programmes, projects and similar activities on preservation, sustainable use, protection and improvement of the environment, including other professional tasks as assigned to it pending the establishment of the Institute), and (c) Federal Administration for Inspection Affairs (which, in addition to three inspectorates, includes the Federal Inspection for Nature Conservation (Council of Ministers of BiH, 2018). As the Federation and cantons share the responsibilities for environmental policy and use of natural resources, the powers of the Federation and cantons may “be exercised jointly or separately, or by Cantons as coordinated by the Government of the Federation of BiH” (Article III.3.1, the Constitution of the Federation of BiH). (EU Delegation to BiH, 2005). To this end, protection of nature in the territories of cantons falling in their competence is the responsibility of (d) line cantonal ministries, while some cantons have or plan to have professional institutions.

The institutional framework for biodiversity and nature conservation in the Federation of BiH is not sufficiently and consistently developed at relevant administrative levels. In general, in the entire BiH and in the FBiH, responsible institutions have not been identified, i.e. institutions responsible for designation and establishment of areas under special protection, and establishment of a strong system for monitoring the state of biodiversity (MOFTER BiH, 2017). Unlike other components, which are fully or partially managed through the environmental sector (air, land, water, waste, etc.), there is no fully fledged institutional infrastructure for nature. Therefore, the fact that an institution/agency , as prescribed by the Law ("Official Gazette of the Federation of BiH", 66/13) , has not been established yet, is the major challenge for a good institutional framework for biodiversity protection and nature conservation. Professional tasks in nature conservation, the implementation of the EU acquis, and multilateral environmental agreements in the areas, pending the establishment of the Institute of Nature Conservation, have been entrusted to the Environmental Protection Fund of the Federation of BiH. The Cantons of the Federation of BiH apply various models of institutional organisation for nature conservation, which directly affects possible coordination to facilitate the flow of data on biodiversity/nature.

*Institutional capacity*

Institutional capacities for biodiversity protection and nature conservation, including capacities for reporting on the requirements of the EU acquis and international agreements, are not sufficiently developed at the level of the Federation of BiH. According to EAS BiH, (MOFTER BiH, 2017), the capacities of the responsible institutions in BiH have not been ensured to enable them to adequately conduct planning, protection and management of the area, which indicates a lack of institutional capacity for biodiversity in the entire vertical management structure, including the FBiH and the Cantons.

As previously pointed out, due to the lack of a professional institution as a central part of the institutional framework, it is clear that there are no technical capacities and human resources for the protection, monitoring, data gathering and reporting in compliance with the requirements of EU acquis and multilateral environmental agreements related to biodiversity. The coordination of the Federation and Cantonal activities on technical, human and financial capacities for the implementation of nature conservation measures (including monitoring, flow and organization of data for reporting purposes), and the implementation of supervision tasks in the protected areas and beyond is a special challenge.

It should be noted that the line ministry of the Federation have continuously made efforts to enhance the capacity for the protection of biodiversity and nature conservation, and that they have managed to fill this gap through cooperation with other professional and scientific institutions. Due to the lack of an effective system for data and information flow which is required for compulsory reporting, reports do not sufficiently rely on indicators. The currently available capacity is not sufficient for an effective management of protected areas, and the same applies to inspection capacity. Given the lack of capacities for management, monitoring and control, the focus should be on: (a) establishment and capacity building of a professional institution of the Federation for the protection of biodiversity and nature conservation, (b) capacity building for a coordinated cooperation with cantonal institutions, (c) capacity building of the framework for monitoring, (d) capacity building for institutional cooperation with scientific community and non-governmental sector.

*Data on biodiversity*

Although there are results of numerous studies which indicate that(Redzic, S. Barudanovic, S. Radevic, M. (ed), 2009) BiH is among the countries with the highest degree of biological diversity in Europe, the exact data on diversity at the level of species and ecosystem for the Federation of BiH are almost non-existent. The development of the Nature Conservation Information System of the Federation of BiH, which needs to be upgraded, (Environmental Protection Fund of the Federation of BiH, 2018), contributed largely to the development of an efficient data collection system on biodiversity. Pending the establishment of the Institution, the Environmental Protection Fund of the Federation of BiH is responsible for the development of the information system.

A systemic gathering of data on the state of biodiversity in the Federation of BiH has not been initiated, while the currently available data is scattered. Data on flora, fauna, and fungi and species (plants, animals, fungi) and genetical diversity are not systematised, and tend to be unavailable. There are several important points that should be highlighted about the state od data on biodiversity of the Federation:

* There is still no full understanding among scientists of the need to conduct separate scientific studies on biodiversity/nature in the Federation of BiH;
* Targeted funding for scientific research aimed at providing a full inventory of biodiversity, flora, fauna, fungi, ecosystems/habitats and genetical diversity in the Federation of BiH has not been established; While some financial support has been obtained for biodiversity research, it is not proportionate to needs, or systematically organized so as to allow the completion of data for the Federation of BiH;
* Group of species, ecosystems/habitats and parts of genetic diversity that need to be constantly monitored has not been identified (or such request addressed to the scientific community), in order to assess the state of the entire biodiversity of the FBiH;
* There is no institutional framework for biodiversity monitoring, i.e., mechanism for communication of data on the status of groups of species, ecosystems/habitats and parts of genetic diversity obtained in the field for the purposes of preparing official reports on their status;
* Financial, human and technical capacities for biodiversity monitoring are not available.

A habitat map of the Federation of BiH, as a main tool used in the identifying areas under special protection and in the process of designating the ecological network of the Federation of BiH is currently not available. There are also no official documents with lists of areas important for migratory bird species.

Given the fact that the preparation of studies aimed at developing inventories of fauna, flora, and fungi and habitats mapping are extremely important scientific and professional tasks for the Federation of BiH, an efficient plan for their realisation should be prepared and implemented in a near future. The preparation of such efficient plan will require cooperation among the Ministry, Environmental Protection Fund and scientific community, and its implementation should be supported by the Government of the Federation of BiH.

*Cross-sectoral cooperation*

The state of biodiversity and nature in the Federation of BiH is largely determined by other sectors such as forestry, agriculture, water management, energy industry, industry, transport, tourism, and others.(MOFTER, 2019). While nature conservation is often acknowledge in sectoral strategic documents, it is not sufficiently and integrated and balanced in sectoral programmes which govern their operation (MOFTER, 2019). It is therefore necessary to balance its integration in other sectoral policies and regulations (agriculture, forestry, hunting, water management, energy, tourism, etc.) highlighting and respecting in all the activities gender equality. A strong direct pressure of climate change on the state of nature which requires a cross-sectoral cooperation with the view to defining adaptation and mitigation measures, should be particularly stressed. A systemically designed rural development programme aimed at keeping the population in rural communities, and the preservation of traditional practices and knowledge on the use of biodiversity is an important example of cross-sectoral cooperation.

It should be noted that the EU acquis stress the protection of biodiversity through sectoral action, which requires a detailed horizontal harmonisation of the regulations at each level of administrative units and their effective implementation. There are several reasons for the poor integration of biodiversity area, including law environmental awareness, poor understanding of different types of benefits of nature preservation, giving short-term interests priority over long-term interests, lack of information of consequences etc., which again leads to degradation of natural habitats and loss of biodiversity. Preparation of guidance for the integration of biodiversity in a specific sectoral policy can improve the cross-sectoral cooperation.

*Role of scientific knowledge in decision-making*

Scientific knowledge is not sufficiently used by or available to decision-makers, in terms of their easy application in practice (Concept of the State of Nature Analysis (SNA), 2020). In this regard, decisions on use of area and benefits (ecosystem services) from natural, agricultural and urban ecosystems are often not scientifically based, or aligned with trends in biodiversity. There is a need to better use national scientific knowledge across the Federation of BiH.

Similar to the availability of data on biodiversity, knowledge of the benefits of the nature is also fragmented and not easily accessible to the decision makers. Communication between the scientific community and decision makers need to be improved, including use of well-reasoned, and easily understandable scientific information, and assigning of socially relevant tasks to the scientific community. One of desirable forms of continued exchange of information would be annual gathering of the scientific community and the decision makers.

*Role of environmental awareness in nature conservation actions*

Poor environmental awareness in the Federation of BiH is linked with the low quality of the education, poor level of investments in research and promotional activities and scarce application of participatory approach in the decision-making process. Development of environmental awareness of an individual starts in the education system. To this end, it is necessary to continuously improve the quality of education, and integrate up-to-date information on the state of nature in the Federation of BiH. The efforts on building environmental awareness should not rely exclusively on enthusiasm of individuals. It should be systemically supported, through a coordinated and targeted support for professional development of teaching staff. The nongovernmental sector has a great significance and plays a crucial role in the awareness raising. Currently, although their continued action has been challenged with uncertain funding, the nongovernmental sector has increasingly engaged on promotion, protection and monitoring of biodiversity in the Federation of BiH. Networking and planned development of the organisations could enhance activism in the nongovernmental sector.

On the other hand, several qualified experts and scientists currently work in non-governmental organisations in the Federation of BiH. Support for the participation of NGOs in national and international projects has been mainly lacking. Given the lack of institutional capacity, efficient capacity building and use of the potential of the NGO sector in the Federation of BiH has also been a challenge. The next ten year period, the non-governmental organisations should, among other things, be entrusted with the tasks such as: (a) monitoring of specific groups of organisms and habitat types, (b) promotion of the establishment of an ecological network in the Federation of BiH, (c) effective development of a participatory approach to decision- making which affects the state of nature, and (d) cooperation with local communities.

Despite the fact that biodiversity (particularly in the protected areas) has improved the livelihood opportunities and life of rural population, there is still a strong resistance to establishment of new protected areas. This resistance of local communities is mainly the consequence of the lack of awareness of benefits of protected areas and services which can be provided by the ecosystem. Activities of the nongovernmental sector aimed at awareness raising on the need for and benefits of such protection will increase the potential for a major breakthrough in the preservation of biodiversity in the Federation of BiH.

*Funding of measures*

While the Federation of BiH has an environmental financial institution, the available funds are not sufficient for an effective management and increase of protected areas. Biodiversity protection which applies EU acquis and seeks to achieve global goals for biodiversity, requires a strong development and aligning of the legal and institutional framework for development of ecological networks, and strong application of other existing and other tools which my become available in future for nature conservation and sustainable use of all the benefits from nature. Currently, the Federation of BiH has modest resources and capacities for the development of ecological networks, for generation and use of knowledge which could provide for an informed decision-making, and raising the environmental awareness among all the citizens of BiH. Achievement of this strategic goal calls for a robust mobilisation of both domestic and international funds in order to significantly raise their availability. As for the national funds dedicated to research and the entire infrastructure of biodiversity and nature conservation, it is important to note that both the amount available and the manner of their allocation are identified as challenges. The mobilisation of funds requires application of innovative mechanisms, and fiscal policies which will provide for a better response to the needs of nature conservation, and the quality of life in the Federation of BiH in this regard.

The need to allocate more funds into scientific research and knowledge on the state of biodiversity in our country, and to provide for a financial support to operators of the protected areas emerge as a priority in this sector.

International funding is another option to obtain financial support. Many recent nature conservation projects have been funded and implemented through a contribution of the MAVA Foundation, the European Union (EU), Swedish International Development Cooperation Agency (SIDA), Global Environmental Facility (GEF), Federal Ministry of Economic Cooperation (BMZ), the Federation Ministry of Environment, Nature Conservation, and Nuclear Safety of the Federal Republic of Germany, German Development Agency (GIZ), and United Nations Environmental Programme (UNEP). The wider social community is very often unaware of the effects of these projects. And generally, there projects aimed at biodiversity protection are still scarce.

* 1. Strategic goal 3

**Strategic goal 3 - Maintaining and enhancing biodiversity and protecting ecosystems**

Strategic goal 3 covers thematic areas such as development of the network of protected areas, sites of European conservation concern, Natura 2000, preparation of management plans for these areas and plans on management of species protected under the Directive on Birds and Directive on Habitats.

Table 14: Indicators of impacts for strategic goal 3

|  |  |  |  |
| --- | --- | --- | --- |
| **Strategic goal 3** | **Impact indicators** | **Baseline value** | **Target value**  **(To be determined in the initial years of the implementation)** |
| *Maintaining and enhancing biodiversity and protecting ecosystems* | **Number of conservation areas and their categories** | 2020 data:   * National parks: 1 * Natural monuments: 4 * Nature parks: 2 * Protected landscapes: 5 | ... |

* + 1. Priorities for strategic goal 3

**Priority 3.1 Improving the legal framework of the Federation of BiH for biodiversity and nature conservation through alignment of the legislation with the EU acquis and international agreements**, which will be achieved through further alignment of the legislation with the EU acquis and provisions of both ratified and new agreements on biodiversity.

**Priority 3.2 Strengthening the institutions of the Federation of BiH responsible for the implementation of the nature conservation legislation and activities**, which will be achieved through establishment and progressive development of a professional institution for nature conservation in the Federation of BiH, and further strengthening of cantonal professional institutions.

**Priority 3.3 Initiating coordination, communication and reporting on biodiversity and nature conservation in the Federation of BiH**, which will be achieved through defining a path for an institutional flow of data on biodiversity monitoring aimed at data sharing and reporting.

**Priority 3.4 Initiate monitoring of the state and biodiversity/nature conservation in the federation of BiH in compliance with the standards of the EU acquis**, which will be achieved through an assessment of the available and building of new professional and technical capacities for the monitoring and implementation of measures on the ground.

**Priority 3.5** **Produce an inventory of biodiversity of the Federation of BiH at the ecosystem, species and genetic level**, which will be achieved through a preparation and progressive implementation of an enumeration of flora, fauna, fungi, migratory birds and invasive species, and identification and mapping of habitats.

**Priority 3.6 Integrate the ecologically significant areas into a single network which makes up 17% of the territory of the Federation of BiH**, which will be achieved through a promotion, with the agreement of all local communities and interest groups and designation of the ecological network.

**Priority 3.7 Improve the cross-sectoral cooperation and political support in the Federation of BiH for integration of biodiversity protection into sectoral policies and legislation**, which will be achieved through a preparation of clear guidance for the integration and support to sectoral programmes and projects which contribute to nature conservation.

**Priority 3.8 Strengthen the science-based decision-making on biodiversity/nature through a dialog between the scientific community and decision makers**, which will be achieved through the establishment of a platform for continued information sharing and facilitated use of scientific data on biodiversity.

**Priority 3.9 Raising ecological awareness on biodiversity, nature conservation and ecosystem services**, which will be achieved through capacity building of the nongovernmental sector and education.

**Priority 3.10 Mobilise both local and international funds for biodiversity of the Federation of BiH**, which will be achieved through an analysis and revision of the national mechanisms for funding of nature and capacity building aimed at an effective acquisition and use of international funds.

Table 15: Priorities with relevant indicators

| **Priorities** | **Indicator of deliverable** | **Baseline value** | **Target value** |
| --- | --- | --- | --- |
| **Priority 3.1 Improving the legal framework of the Federation of BiH for biodiversity and nature conservation through alignment of the legislation with the EU acquis and international agreements** | Compliance of the legal framework for biodiversity and nature conservation with the EU acquis. | Insufficiently aligned legal framework (2022) | The legal framework significantly aligned (2025) |
| **Priority 3.2 Strengthening the institutions of the Federation of BiH responsible for the implementation of the nature conservation legislation and activities** | Capacity building of professional institutions for nature conservation | There is no professional institution (2022) | The professional institution efficiently engaged in nature conservation activities (2039) |
| **Priority 3.3 Initiating coordination, communication and reporting on biodiversity and nature conservation in the Federation of BiH** | Integrity of information for reporting on biodiversity from all cantons in BiH achieved | No institutional channel for the flow and compilation of data on biodiversity in the Federation available (2022) | An efficient institutional channel for the flaw of information on biodiversity in the Federation of BiH set up (2030) |
| **Priority 3.4 Initiate monitoring of the state and biodiversity/nature conservation in the Federation of BiH in compliance with the standards of the EU acquis** | The system for routine monitoring of the state of species, habitats, and protected areas is up and running | No system for routine monitoring of the state of species, habitats, and protected areas has been put in place. | The system for routine monitoring of the state of species, habitats, and protected areas is up and running (2029) |
| Development of technical and human capacities for professional tasks of monitoring and nature conservation | Minimum technical capacities for monitoring and nature conservation available (2022) | The available technical capacities for monitoring and nature conservation increased to meet the needs (2029) |
| **Priority 3.5 Produce an inventory of biodiversity of the Federation of BiH at the ecosystem, species and genetic level** | Inventory of biodiversity of the Federation of BiH covers the ecosystem, species and genetic level | The inventory of flora, fauna, fungi, migratory birds, and invasive species, ecosystems/habitats and genetical diversity of the Federation has not been completed (2022) | Studies of the inventory of flora, fauna, fungi, migratory birds, and invasive species, ecosystems/habitats and genetical diversity of the Federation completed (2029) |
| **Priority 3.6 Integrate the ecologically significant areas into a single network which makes up 17% of the territory of the Federation of BiH** | Integration of the ecologically important areas | The ecologically important areas are not integrated in the ecological network of the Federation of BiH (2022) | Ecological corridors which link the ecologically important areas of the Federation of BiH established (2030+) |
| **Priority 3.7 Improve the cross-sectoral cooperation and political support in the Federation of BiH for integration of biodiversity protection into sectoral policies and legislation** | Number of sectoral programmes with the component of active nature conservation | The number of sectoral programmes with the component of active nature conservation is unsatisfactory (2022) | Nature conservation outside of the protected areas implemented through sectoral programmes and projects (2030) |
| Level of integration of nature conservation in the sectoral legislation | Nature conservation insufficiently integrated in sectoral legislation (2022) |
| **Priority 3.8 Strengthen the science-based decision-making on biodiversity/nature through a dialog between the scientific community and decision makers** | Use of multidisciplinary analyses and scenario in decision-making | Scientific data are not sufficiently used in decision-making processes (2022) | Scientific data, analyses, and scenario are the basis for decision-making |
| Number of events organised for information sharing between academia and policy makers | Platform for information sharing between academia and policy makers | A continued dialogue between academia and policy makers (2030) |
| **Priority 3.9 Raising ecological awareness on biodiversity, nature conservation and ecosystem services** | Level of awareness among the population in the Federation of BiH | Ecological awareness is poor (2022) | Strong ecological awareness |
| Level of promotion of values and benefits from local biodiversity | The promotion of the of values and benefits from local biodiversity is poor (2022) | The population acknowledges the of values and benefits from local biodiversity (2030) |
| **Priority 3.10 Mobilise both local and international funds for biodiversity of the Federation of BiH** | Amount of secured funds dedicated for biodiversity/nature conservation | The amounts of funds for biodiversity/nature conservation are low (2022) | Funds for biodiversity/nature conservation exponentially increased (2030) |

* + 1. Description of Measures

This strategic goal comprises 10 priorities, and 24 measures logically allocated to associated priorities to facilitate their implementation, and the implementation of the strategic goal as such.

***Priority 3.1: Improving the legal framework of the Federation of BiH for biodiversity and nature conservation through alignment of the legislation with the EU acquis and international agreements***

*Measure 3.1.1. Align and harmonise the legislation on the preservation and sustainable use of biodiversity and nature conservation with the EU acquis and international agreements on biodiversity*

This measure aims at creating an adequate and harmonised legal basis for the application of the EU acquis and ratified international agreements on biodiversity in the relevant government authorities and sectors in the territory of the Federation of BiH. This measure includes activities aimed at:

* Improvement of the legal framework for the preservation of biological and landscape diversity of the Federation of BiH through substantial alignment of the Law on Nature Conservation with the Directive on the conservation of natural habitats and of wild fauna and flora (92/43/EEZ), Directive on the conservation of wild birds (2009/147/EC), Regulation (EC) No 338/97 on the protection of species of wild fauna and flora by regulating trade therein, Convention on the Conservation of Migratory Species of Wild Animals (CSM, and AEWA Agreement, and through development of regulation for the implementation of the Nagoya Protocol in the Federation of BiH and Additional Kuala Lumpur Protocol;
* Improving the process of vertical harmonization of the legal framework for the conservation of biological and landscape diversity of the Federation of BiH through harmonization of the legal framework for nature conservation of the Federation of BiH with the legislation of BiH, Republika Srpska and Brcko District of BiH, on the one hand, and coordination aimed at improving the legal framework for nature conservation in the Cantons, on the other hand;
* Improving the process of horizontal harmonization of the legal framework for the conservation of biological and landscape diversity of the Federation of BiH through the harmonization of the Law on Veterinary Medicine and the Law on Hunting Federation of BiH with the EU acquis;
* Improving the implementation of the regulations on the conservation of biological and landscape diversity of the Federation of BiH through passing the lacking implementation regulations and through ensuring conditions for the implementation of the NBSAP in accordance with the Global Biodiversity Framework.

***Priority 3.2 Strengthening the institutions of the Federation of BiH responsible for the implementation of the nature conservation legislation and activities***

*Measure 3.2.1. Establishment of aa professional institution for nature conservation in accordance with the Law on Nature Conservation of the Federation of BiH*

The aim of this measure is to obtain an agreement on the decision on the establishment of a professional institution, in accordance with the provisions of the Law on Nature conservation of the Federation of BiH. Functions and duties of the professional institution are prescribed by law, and a direct consequence of its non-existence is the fact that it is impossible to implement the regulations

*Measure 3.2.2. Secure initial financial, human and technical capacities for the operation of the Nature Conservation Institute of Federation of BiH and nature conservation institutions of the Cantons*

The aim of this measure is to ensure initial professional, technical and financial capacities for the implementation of biodiversity preservation and nature conservation, as prescribed by the Law on Nature Conservation of the FBiH. This particular measure aims at ensuring practical, formal and time adequate preconditions for the implementation of other measures within different priorities in an early phase of the implementation of the FBiH ESAP.

*Measure 3.2.3. Secure full financial, human and technical capacities for the operation of the Nature Conservation Institute of Federation of BiH and nature conservation institutions of the Cantons*

This measure aims at ensuring initial professional, technical and financial capacities for the implementation of biodiversity preservation and nature conservation, as prescribed by the Law on Nature Conservation of the FBiH. This particular measure aims at enabling further development of all necessary capacities to perform its functions defined by the Law during the implementation of the FBiH ESAP

***Priority 3.3 Initiating coordination, communication and reporting on biodiversity and nature conservation in the Federation of BiH***

*Measure 3.3.1. Form a department for coordination of professional activities on nature conservation and monitoring in the Federation of BiH in the professional institution for nature conservation*

This measure is aimed at providing for a coordinated development of nature conservation measures in all government authorities and professional institutions in the territory of the Federation of FBiH. It is particularly important to coordinate gathering and processing of data based on the monitoring of species and habitats in the territory of all Cantons in the Federation of BiH.

*Measure 3.3.2. Set up a database on results of projects which were implemented, ongoing and future projects focusing on biodiversity in Federation of BiH*

The aim of this measure is to ensure transparency of results of implemented projects for biodiversity preservation and nature conservation in the FBiH The preparation of a publicly available database would allow an assessment of knowledge and information gaps in the area of biodiversity in the Federation of BiH, and a targeted allocation of funds to fill such gaps.

*Measure 3.3.3. In accordance with the INSPIRE Directive, the Nature Conservation Information System of the Federation of BiH provides an insight into information on distribution and monitoring of protected and strictly protected species and areas, and types of habitats of concern for the Community*

The aim of this measure is to ensure a transparent access to information on biodiversity through the Nature Conservation Information System of the Federation of BiH. Public access to information on biodiversity in a specific area is a basis for environmental planning and management.

***Priority 3.4 Initiate monitoring of the state and biodiversity/nature conservation in the Federation of BiH in compliance with the standards of the EU acquis***

*Measure 3.4.1. Establish a monitoring system for the Red List species, species and habitats of Community interest in the FBiH and specific FBiH ecosystems (canyons, mountain, alpine, wetland and karst ecosystems) through activities of professional and scientific institutions*

The aim of this measure is to develop professional and scientific capacities for the system of targeted, standardized and regular monitoring of a set of species, habitats and areas, as well as capacities for the preparation, flow and processing of biological and environmental data and information.

*Measure 3.4.2. Support non-governmental organisations registered for monitoring of biodiversity in the Federation of BiH*

The aim of this measure is to ensure effective employment of scientific and professional capacities, organized through the non-governmental sector, on targeted monitoring of species, habitats and areas referred to in measure 3.4.1.

*Measure 3.4.3. Fully develop technical and human capacities for the implementation of nature conservation measures in the protected and other areas of the ecological network, and increase administrative capacities in nature conservation institutions by 50%*

In accordance with the NBSAP, this measure aims at developing technical and human capacities in the protected and other areas, where efficient measures of protection are implemented, such as hunting grounds, seed stands, fishing areas, etc. as well as capacities in the institutions for nature conservation.

*Measure 3.4.4. Improve the inspection service for the implementation of the Law on Nature Conservation of the Federation of BiH and other laws prescribing biodiversity protection measures*

The aim of this measure is to develop the supervision capacity for the implementation of regulations on nature conservation in the Federation of BiH. Given the current capacities and the need to implement the EU acquis, inspection control of the implementation of relevant regulations is not feasible.

***Priority 3.5 Produce an inventory of biodiversity of the Federation of BiH at the ecosystem, species and genetic level***

*Measure 3.5.1. Complete an inventory of flora, fauna, fungi and genetic diversity of the Federation of BiH*

The aim of this measure is to prepare and implement a plan and financial programme for the preparation of the inventory of flora and fauna, and fungi, including genetic diversity relevant for these groups of organisms in the Federation of BiH.

*Measure 3.5.2. Revise and organize the list of invasive species*

This measure aims at ensuring regular reviews of the first list of invasive species in the Federation of BiH, and implementing plans for their control and prevention of their further spreading.

*Measure 3.5.3. Prepare and publish a habitats map of the Federation of BiH*

The aim of this measure is to prepare the implementation of the first habitat inventory in the Federation of BiH. The list of habitats present in the territory of FBiH should be scientifically harmonized with the types of habitats in Republika Srpska and the Brcko District of BiH The habitat map should be geocoded and presented through the FBiH nature conservation institution of the federation of BiH, as the information necessary for the processes of environmental planning and management.

***Priority 3.6 Integrate the ecologically significant areas into a single network which makes up 17% of the territory of the Federation of BiH***

*Measure 3.6.1. Carry out a public campaign aimed at the promotion of the ecological network (network of the areas of Community interest)*

This measure aims at awareness raising on the benefits from the ecological network of the Federation of BiH. The current level of public awareness on the need to maintain the good state of biodiversity does not promise that the stakeholders could agree on the establishment of the ecological network, and it is necessary to allocate funds for its promotion.

*Measure 3.6.2. Conduct a consultation process with local communities and stakeholders in all areas covered by the Ecological Network Plan of the Federation of BiH*

The aim of this measure is to obtain an agreement of the local communities and stakeholders to include relevant areas in the ecological network of the Federation of BiH. The consultation process should involve all stakeholders in individual areas, and ensure a common understanding, long-term care and implementation of biodiversity protection measures in each area of the ecological network.

*Measure 3.6.3. Establish new protected areas and identify areas under other effective protection measures in the Federation of BiH*

The aim of this measure is to preserve and protect at least 50% of the habitats of species from the Red List of the Federation of BiH, in accordance with the current spatial plan, EU acquis, international agreements and the Global Biodiversity Framework. The measure requires the implementation of procedures for new protected areas and identification of other areas where effective protection measures are implemented, such as hunting and fishing areas, seed stands, water protection zones, etc.

*Measure 3.6.4. Establish the ecological network of the Federation of BiH*

The aim of this measure is to ensure the issuance of an act designating the area of the ecological network of the Federation of BiH, and application of protective measures, as required by the legislation, after validation of the baseline measurements of biodiversity of concern, and integration of each individual area in the network upon the agreement of the local community.

***Priority 3.7 Improve the cross-sectoral cooperation and political support in the Federation of BiH for integration of biodiversity protection into sectoral policies and legislation***

*Measure 3.7.1. Secure a cross-sectoral support for the implementation of the revised NBSAP in the territory of the Federation of BiH*

The aim of this measure is a long-term preservation and sustainable use of biodiversity as a result of sectoral policies. Given that the validity of the last NBSAP expired in 2020, a revised NBSAP will be prepared in an early stage if the implementation period the FBiH ESAP. The Federation of BiH shares the responsibility for the implementation of the revised NBSAP with other authorities and bodies. In line with global biodiversity goals, the revised NBSAP will seek to integrate biodiversity protection into sectoral policies in the best possible way.

*Measure 3.7.2. Integrate the protection and sustainable use of biodiversity into sectoral regulations*

The aim of this measure is to integrate measures of preservation and sustainable use of biodiversity into sectoral regulations. In order to ensure the protection of biodiversity on the long run, it is necessary to prepare, in accordance with the EU acquis, detailed guidelines for the successful integration of biodiversity preservation in individual sectors.

***Priority 3.8 Strengthen science-based decision-making on biodiversity/nature through a dialog between the scientific community and decision makers***

*Measure 3.8.1. Use conclusions, messages, scenarios of multidisciplinary analyses, and the up-to-date scientific data in the decision/making processes which affect the state of biodiversity/ nature of the Federation of BiH*

The aim of this measure is to expand the practice of applying scientific analysis in the decision-making processes which affect the state of biodiversity. In order to establish an evidence-based practice, an assessment of scientific knowledge on the state and management of nature is currently being prepared, which will include an analysis of available scientific results on biodiversity in BiH The analysis will contain easy-to-understand conclusions, messages and scenarios for biodiversity that should serve as the basis for an informed decision-making.

*Measure 3.8.2. In cooperation with the institutions of BiH, Republika Srpska and the Brcko District of BiH, organize an exchange of information between the academic community and creators of the policies which affect the state of biodiversity/nature of BiH*

The aim of this measure is to implement periodical information exchange activities coordinated by MOFTER, for the purpose of information sharing between the scientific community and decision makers.

***Priority 3.9 Raising ecological awareness on biodiversity, nature conservation and ecosystem services***

*Measure 3.9.1. Develop an effective network of non-governmental organizations for monitoring the state of biodiversity/nature, with an active participation in decision-making and promotion of sustainable development*

The aim of this measure is to strengthen the capacity and role of the non-governmental sector as an active component of the biodiversity/nature conservation framework. In addition, the measure envisages activities aimed at developing cooperation between the governmental institutions and the nongovernmental sector.

*Measure 3.9.2. Enhance support for education of teaching staff at all levels of education in the area of biodiversity conservation and sustainable management of benefits of the nature in the Federation of BiH*

The aim of this measure is to strengthen the capacity for the purpose of innovating the content of the educational process through teaching about the values of local biodiversity/nature. The measure also envisages activities on fostering cooperation between the environmental sector and the education sector in the Federation of BiH.

***Priority 3.10 Mobilise both local and international funds for biodiversity of the Federation of BiH***

*Measure 3.10.1. Ensuring funds for: (a) development of the institutional framework capacities in accordance with an upgraded legal framework for biodiversity/nature of the Federation of BiH, (b) preparation of habitats mapping, (c) inventories and monitoring of the state of flora, fauna and genetical resources (d) effective implementation of the global goals for biodiversity, and the implementation of the obligations arising from the international agreements signed by BiH, including development of the ecological network, (e) promotion of a continued dialogue between the science and politics, (f) raising the ecological awareness*

This measure is aimed at capacity building and at ensuring necessary conditions for the implementation of measures, in order to successfully implement the priorities and the general strategic goal for biodiversity and nature conservation.

* 1. Indicative Financial Framework

Costs of the thematic area Biodiversity and Nature Conservation are estimated at BAM 53 million or 0,5% of the total costs, which amount to BAM 11,9 billion. This thematic area comprises ten priorities and 25 measures. This thematic area at the same time has the largest number of priorities in the Strategy of the Federation of BiH. The cost estimate was calculated for all the measures in this thematic area. Three priorities which require most funds are 3.5 (Complete an inventory of biodiversity of the Federation of BiH at the ecosystem, species and genetic level) which accounts for 45% of the total sum, 3.2. (Strengthening the institutions of the Federation of BiH responsible for the implementation of the nature conservation legislation and activities) 18%, and 3.6 (Integrate the ecologically significant areas into a single network which makes up 17% of the territory of the Federation of BiH) with 13% of the total sum. The total financial allocations for these three priorities account for 76% of the total sum, or BAM 40.9 million. The other priorities in this thematic area account for less than 24% of the total estimated cost.

A detailed overview of the Indicative Financial Framework for the thematic area Biodiversity and Nature Conservation and for the Federation of BiH is contained in Annex 9, including a table and pie chart.

1. AIR QUALITY, CLIMATE CHANGE, AND ENERGY
   1. Situation Analysis

Issues of air quality, climate change and energy has been affecting the development of the Federation of BiH for quite some time already In order to adequately address this, it is necessary to obtain a clear understanding of the **baseline situation**. The following chapter offers a description of the baseline situation by topics : a) air quality, b) climate change, c) energy.). The chapter ends with a summary of key challenges in these areas.

*Air quality*

Air pollution in several cities in the Federation of BiH is particularly high in the winter season. The biggest cause behind this is the use of coal and fire wood in household stoves and emissions from transport, and additional cause in the industrial centres are emissions from industrial facilities Most urban areas in the Federation of BiH are faced with high ambient concentration of fine particulate matter with adverse effect on human health. According to the results of air quality measurements, Sarajevo, Tuzla and Zenica are among the most polluted cities in Europe. In addition to anthropogenic influences, air quality is affected by geographic position of cities in valley areas and poor wind circulation in winter seasons.

BiH media report on complaints about the air pollution among the general public, which culminated in civic protests in several cities. In particular, the citizens are dissatisfied because of the lack of access to easily available official information on air quality, impact of air pollution on health, or measures undertaken the official institutions are taking to ensure satisfactory air quality throughout the year. In 2016, three thermal power plants from BiH (Kakanj, Tuzla and Ugljevik) were among the ten largest polluters in Europe (N1, 2020).

According to a World Health Organisation's survey, BiH is ranked 5th, and/or 6th, together with Armenia by deaths rates from air pollution per 100.000 population.(Radio Free Europe, 2016). In BiH, we see 3,300 premature deaths each year due to consequences of exposure to ambient air pollution with PM2.5 Death toll is more than double than mortality related to pollution of ambient air in North Macedonia (1,600 deaths) and more than four times larger than mortality related to pollution of ambient air in Kosovo (760 deaths). This analysis indicates that 9% of total annual mortality in BiH may be attributed to air pollution. (World Bank, 2019).

The Federation of BiH adopted the legislative framework for air quality management. However, the application remains limited, and the principal shortcoming of the air quality management system is the lack of intersectoral approach ***Table*** ***16*** provides an overview of the air quality limit values which are specified in the Rulebook on monitoring air quality and identifying types of pollutants, defining limit values and other standards of air quality ("Official Gazette of the Federation of BiH“, 01/12).

In the Federation of BiH, air quality monitoring is conducted by a number of operators withing the Federation’s network of measuring stations (managed by Hydrometeorological Institute of the Federation - FHMI) and local networks of stations managed by cantons and municipalities In the last few years, the number of measuring sites has increased, so that in 2020 the FHMI was collecting and processing data from a total of 21 measuring sites, while the total number of the stations in 2020 was 24. The measuring sites are unequally distributed across the territory, however, with the development of the network of stations this inequality has slowly disappeared. As expected, a majority of the measuring sites are in the area of Sarajevo, the valley of River Bosna and Tuzla Canton, given the biggest population density in these areas, as well as the most compromised air quality there. 2020 saw the development of a Rulebook on control and quality assurance for air quality measurements, comprising guidelines and procedures operators engaged in monitoring of the air quality.

Table 16: Air quality limit values in the Federation of BiH

| Pollutant | Averaging period | Limit value | Minimum data availability |
| --- | --- | --- | --- |
| SO2 | One hour | 350[[14]](#footnote-15) µg/m3 | 75% |
| SO2 | One day | 125[[15]](#footnote-16) µg/m3 | 90% |
| SO2 | Year | 50 µg/m3 | 90% |
| NO2 | One hour | 200[[16]](#footnote-17) µg/m3 | 75% |
| NO2 | One day | 85 µg/m3 | 90% |
| NO2 | Year | 40 µg/m3 | 90% |
| CO | Eight hours | 10 mg/m3 | 75% |
| CO2 | One day | 5 mg/m3 | 75% |
| CO | Year | 3 mg/m3 | 90% |
| PM10\* | One day | 50[[17]](#footnote-18) µg/m3 | 75% |
| PM10\* | Year | 40 µg/m3 | 90% |
| PM2.5\* | Year | 25 µg/m3 | 90% |
| O3 | Eight hours | 120[[18]](#footnote-19) µg/m3 | 75% |
| Benzene | Year | 5 µg/m3 | 90% |

According to Rulebook on monitoring air quality and identifying types of pollutants, limit values and other air quality standards ("Official Gazette of the Federation of BiH", 01/12), air quality is monitored by measuring concentrations for sulphur dioxide, nitrogen oxides, particulate matter PM10 and PM2.5, lead, benzene, carbon monoxide, arsenic, cadmium, mercury, nickel, benzo-a-pyrene, with automated measuring instruments or by sample analysis. The current conditions in FBiH do not allow for regular monitoring of all given parameters, while certain parameters are either not measured (benzene, benzo-a-pyrene) or are measured only randomly (metals in particulate matter).

In the Federation of BiH, air quality monitoring is conducted by several operators within the Federation’s network of measuring stations (managed by Hydrometeorological Institute of the Federation) and local networks of stations managed by cantons and municipalities. Sulphur dioxide concentration in the air was measured on 20 measuring stations in 2019 According to the results of measurements from 2019, concentration of sulphur dioxide in Zenica and Zivinice were above prescribed limit values at the annual, daily and hourly level. Annual mean concentration of sulphur dioxide at the measuring sites Zenica Centar, Zenica Radakovo, Zenica Tetovo, Zenica Vranduk and Zivinice exceeds the allowed limit value of 50 µg/m3.

Nitrogen dioxide concentration in the air was measured on 17 measuring stations in 2019 Limit value of mean annual concentration of nitrogen dioxide has not been exceeded at any of the measuring sites. Mean annual concentrations at all measuring sites were below limit value of 40 µg/m3. The number of days with exceedances of limit value of NO2 concentrations (>85 µg/m3) is relatively low and mostly takes place in Sarajevo.

Ground level ozone concentration was measured on 18 measuring stations in 2019 in the Federation of BiH. The measurements showed that Zenica Centar, Tetovo, Kakanj Doboj, Sarajevo Bjelave and Jajce had reached the number of allowed exceedances. These the stations are mainly at sites 300 above the sea level, at elevations around the city, more specifically above the emission of ozone precursors.

Ground level ozone concentration was measured on 18 measuring stations in 2019 in the Federation of BiH. Particulate matter PM10 were measured at 14 measuring sites. Particulate matter PM2 were measured at 7 measuring sites At the tree sites, particulate matters of both diameters were measured at the same time.

The limit value of the annual mean concentration of particulate matter PM10 (40 µg/m3) was exceeded on all measuring stations, except for Doboj Kakanj and Jajce. The limit value of the annual mean concentration of particulate matter PM2 5,(25 µg/m3) was exceeded on the measuring stations Tuzla Skver and Lukavac.

Carbon monoxide is measured at 12 sites in the Federation of BiH. Annual mean concentrations are far below the prescribed limit values (>3 mg/m3), while exceeding of the hourly and 8-hourly mean has not been recorded in 2019. Carbon monoxide rarely undermines the air quality in the Federation of BiH and concentrations remain within the values prescribed by the law (Bijedic *et al.*, 2020).

In 2019, an automatic station was commissioned in Visoko. This measuring station, located close to a high school in the downtown area, is also equipped with a device for monitoring of hydrogen sulphide (H2S), due to specific emissions from the nearby leather treatment plant. In addition, it also measures sulphur dioxide and PM10 concentrations. This is the first measuring station in the Federation of BiH that measures the hydrogen sulphide concentrations. Initial measurements showed that limit values, daily and hourly values of this pollutant’s concentrations were consistently exceeded. The daily limit value is 5 µg/m3, and the hourly one is 7 µg/m3. Concentrations above 150 µg/m3 were recorded nine times.

Air quality modelling is underutilised in air quality management system. Categorisation of the air quality with the help of the mathematical model air pollutants dispersion was done only in the Sarajevo Canton.

The existing register of facilities and polluters kept by the FMET does not provide sufficient data, which could enable control of the results obtained by measurements or calculation of emission for the pollutants which are not covered by the system and the measurement of which is not required by the law. Inadequate data is mostly the consequence of an insufficient laboratory capacities, lack of experts in the operators and institutions responsible for provision of data for the register and for inspection controls. The Cantons are required by the law to set up registers of pollutants for their territories. So far, the registers were set up by three cantons: Sarajevo, Tuzla and Zenica-Doboj. The lack of registers in all the Cantons makes it difficult to assess the impact of new sources of pollution to air quality and of emissions from household stoves. Emissions of sulphur dioxide and particular matters from household stoves in the Canton which have the Air Pollutants Registers is provided in the following table.

Table 17: Emission from household stoves in the Cantons which have the Air Pollution Registers

|  |  |  |  |
| --- | --- | --- | --- |
| **Pollutant** | **SO2** | **PM10\*** | **PM2.5\*** |
| Canton | t/a | t/a | t/a |
| Sarajevo Canton | 1,264 | 1,162 | 1,046 |
| Tuzla Canton | 10,682 | 2,145 | 1,910 |
| Zenica-Doboj Canton | 7,542 | 3,837 | 3,692 |
| Total | 19,488 | 7,144 | 6,648 |

*Note: The emission data for the Canton Sarajevo are from 2013, while the data for the other two Cantons are from 2016. PM2.5 emission in the Sarajevo Canton were estimated based on the share of PM2.5 in PM10 in the two other Canton.*

Emissions in the Cantons described in the Table above are estimated to account for over 80% of the total emission from household stoves in the Federation of BiH. Although the sulphur dioxide emissions from household stoves are seven time lower than the emission from large plants, their contribution to air pollution is much bigger, due a lower altitude of emission and the fact that emission occurs in a period of several months. PM emissions from household stoves are three times bigger than the emissions from large plants. Given the level and seasonal character of the emissions from household stoves, their impact on the ambient PM concentrations s much bigger than the impact of large plants.

The register of air polluters was set up in the Environmental Protection Fund of the Federation of BiH (FEPF), pursuant to the Decree on fees for air polluters, which requires annual reporting of emissions into the air (SO2, NO2 and particulate matter), and all big polluters are integrated in the system. The Decree prescribes a special environmental fee on registration of motor vehicles. Funds from this fee are collected by EPF of the Federation of BiH.

The National emission reduction plan (NERP) of the Federation of BiH includes two thermal power plants, with seven blocks and one industrial cogeneration power plant with three large combustion plants with thermal input greater than 50 MW. In 2014, the emission of sulphur dioxide from these plants amounted to 142,550 tons, emission of nitrogen oxides was 14,514 tons, and particulate matter 2,253 tons (USAID, 2015). According to data for 2018, particulate matter and nitrogen oxides emissions were reduced, while emission of sulphur dioxide is much above the NERP value.

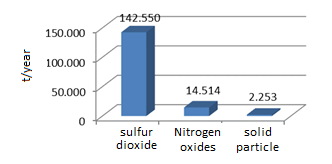


Figure 6: Emissions of pollutants from existing large combustion plants in 2014 in the FBiH

Source: (USAID, 2015)

Particular matters and nitrogen oxides are the most significant pollutants from the road transport sector. In 2’16, direct emissions of PM10 amounted to 839.3 tons, while PM2.5 amounted to 731.2 tons. The same year recorded the emissions of nitrogen oxides of 10,003 tons. The emissions of particulate matters in 2016 were by about 9% lower than in 2014. The same period recorded an increase of nitrogen oxides of 5%. (Hydrometeorological Institute of the Federation, 2018).

*Climate change*

The FHMI’s report covers only one part of the carbon dioxide emissions (Hydrometeorological Institute of the Federation, 2017). There is no GHG emissions inventory for the Federation of BiH (rulebook on inventory procedure is being drafted) Overall GHG emission in FBiH can be assessed based on the total emissions for BiH and in Republika Srpska (since Republika Srpska keeps an inventory), while emissions for the Brcko District of can be assessed based on the population numbers and the fact that there are no large facilities producing electricity in the Brcko District of BiH The GHG emissions assessed for 2016 in the Federation of BiH using this methodology amounted to 19,670 Gg CO2ekv, accounting for 66.3% of the total emissions from BiH. The largest source of GHG emissions is the electricity sector. In 2016, carbon dioxide emissions from the road transport amounted to 2.091 Gg (Hydrometeorological Institute of the Federation, 2018), accounting for 10,5% of the total emissions. This as an increase of nearly 10% compared to the level recorded in 2014. Data on the GHG emissions from other sectors are not available.

The pressure of climate change in BiH has mostly affected agriculture and water resources. However, the impact on the energy sector, tourism, public health, forestry, housing and sensitive plant and animal varieties has increased (Trbic *et al*., 2018); (Cupać *et al*., 2020). There is a glaring need to integrate climate change in strategic and operational documents, which will obviously require certain changes and amendments to existing legislation and regulations.

In the past several decades, BiH recorded much higher temperatures (Trbic *et al*., 2017); (Trbic *et al.*, 2018); (Gnjato *et al.*, 2019). Analyses of trends of mean, maximum and minimum air temperatures indicate warming up of climate across the territory of BiH. Annual temperature trends are positive and statistically significant across the territory of BiH(Trbic *et al.*, 2017). Most of the measuring stations recorded an increase of annual mean temperature in the range of 0.3‒0.4°C per decade. The increasing trends of mean air temperature have been registered throughout BiH in all seasons. In the summer season, the temperature has increased significantly from 0.3°C per decade at Ivan Sedlo to 0.6°C per decade in Bugojno. Significant positive trends were also identified in winter season (0.2‒0.5°C per decade) and spring (0.2‒0.4°C per decade) in most of areas in BiH except in the area of Bjelasnica (and Ivan Sedlo in spring season), where only a minor increase was recorded. In the autumn, the temperature increased slightly throughout BiH, while statistically significant trends have been recorded in only a few areas. In vegetation season, statistically significant positive trends, ranging from 0.2 to 0.5°C per decade, were recorded across the territory.

|  |  |
| --- | --- |
| Chart, line chart, histogram  Description automatically generated | Chart, line chart, histogram  Description automatically generated |

Figure 7: Trends in air temperature changes in the FBiH, 1961‒2016 (Sarajevo, Mostar)

Source: (Hydrometeorological Institute of the Federation of BiH, FHMI)

In the period 1961–2016, the bulk of the territory of the Federation of BiH recorded a slight increase of annual precipitation. Linear trends for multiannual period 1961-2016 indicate stagnant or slightly increasing precipitation levels in the area of entire BiH. Changing amounts of precipitation are more pronounced at a seasonal than at the annual level While no major changes in the amount of precipitation have been recorded, the pluviometric regime, i.e., their annual distribution, has been disrupted to a great extent.

|  |  |
| --- | --- |
|  |  |

Figure 8: Trends in precipitation changes in FBiH, 1961-2016. (Sarajevo, Mostar) FBiH,

1961‒2016 (Sarajevo, Mostar) (Sarajevo, Mostar)

(Source: Hydrometeorological Institute of the Federation of BiH, FHMI)

An increased intensity of precipitation and its growing variability, and increased share of heavy rainfalls raised the risk of floods, in particular in the north-eastern part of BiH, which saw catastrophic floods in May 2014 (Gnjato *et al*., 2019).

In a worst case scenario (RCP8.5), the average temperature in the area of BiH will increase by +0.5 to +1.5 °C by 2035. The most extreme increase is expected by the end of 21 century when annual mean temperatures may increase by 5 oC. Such an increase in expected in case that GHG emissions are not reduced. These changes will raise the risk of extreme weather events, such as floods, draughts, fires, etc. (Trbic *et al*., 2022).

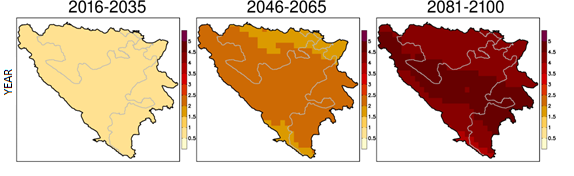


Figure 9: Expected air temperature changes in BiH in line with RCP8.5 scenario

According to RCP8.5 climate change scenario, the distribution of precipitation in BiH may see a major change in the course of the year. A huge precipitation deficit may be expected in late 21st century, in particular in the summer season. However, the changes in precipitation will also come in form of increased intensity of precipitation causing torrential and urban floods (Djurdjević *et al*., 2019).

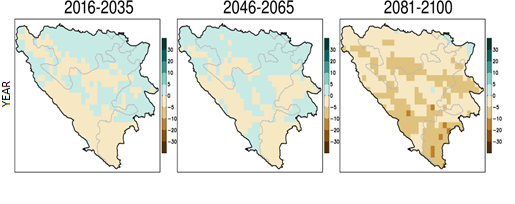


Figure 10: Expected air temperature changes in BiH in line with the RCP8.5 scenario

The anticipated changes will heighten various risks and threats of extreme weather events. There is a glaring need to integrate climate change in strategic and operational documents, which will obviously require certain changes and amendments to existing legislation and regulations.

*Energy*

In 2019, gross electricity production in the FBiH was 9,664 GWh, out of which 5,070 GWh or 52.5% was produced by thermal power plants, 4,060 GWh or 42.0% by hydropower plants, 347 GWh or 3.6% by power plants, 166 GWh or 1.7% was produced by wind power plants, and 21 GWh or 0.2% was produced by solar power plants. In the final electricity consumption, households participate with 41.8%, industrial sector with 33.9% and other consumers including construction, transport and agriculture with 24.3% (Institute for Statistics of the Federation of BiH, 2020a).

In 2019, the total heat production in the district heating systems was 4,054 TJ, out of which 2,042 TJ or 50.4% was produced by district heating plants, 1,430 TJ or 35.3% by coal-fired power plants, and 582 TJ or 14.3% by industrial power plants. In the final heat energy consumption in 2019, households had the largest share with 75.6%, while industry and other consumers had a share of 24.4% (Institute for Statistics of the Federation of BiH 2020a). Share of the district heating systems in the overall heating needs in buildings is 8%.(GIZ, 2018).

The reference value of primary consumption in 2021 amounts to 4,345.97 ktoe. The objective is to reduce the primary energy consumption in 2021 by 3.33%, or 144.79 ktoe. The objective is to reduce the final energy consumption in 2021 by 5.16%, or 146.31 ktoe. In 2018, savings of 8.243 or by 9% were made as compare to the reference consumption (Government of the Federation of BiH, 2020). Most of the savings were made in the residential sector, while the transport sector had smallest contribution. According to the Action Plan on the Use of RES of the Federation of BiH, the RES share in gross final consumption (in 2013) in FBiH amounted to 37%, while in the final electricity consumption the RES share was 39%. The document also lays down the objective of 41% of RES share in the gross final energy production, and 44% share on the energy consumption in 2020. (Federation Ministry of Energy, Mining, and Industry, 2014). No evidence is available on progress on this objective.

Supply with liquid fuels and natural gas relies solely on the import. In 2019, the Federation of BiH imported 1,282,414 t of petroleum products in. In 2019, the transport sector accounted for 88.1% of the total final consumption of 1,102,512 tons. (Institute for Statistics of the Federation of BiH, 2020c). In 2019, the Federation of BiH imported 178,316,000 t of natural gas. Households account for 38.6%, followed by the industry with 37.3%, of the total final consumption of natural gas totalling to 117,140,000 t. (Institute for Statistics of the Federation of BiH, 2020b).

Retrofitting of public institutions buildings is major progress made in improvement of energy efficiency. Establishment of the Energy Efficiency Information System of the Federation of BiH is one of the most significant measures. This System was established and managed by the EPF of the Federation of BiH. The main purpose of this Information System is to collect and process data in order to create a central database with detailed information on energy consumption at the level of both individual facilities and sectors (for example, on energy consumption in educational facilities, or at the level of a canton/municipality, etc), on the state of repair of buildings, accompanying technical systems, and on savings potentials. The information system will enable a compilation of all laws and strategic documents covering this area, data on energy and water consumption in all public buildings, data on savings after the implementation of measures aimed at enhancing energy efficiency, register of issued energy certificates for buildings, register of controls of technical systems (heating or air-conditioning), and at the same it will be used for the verification of savings made, and reporting in accordance with the applicable requirements.

Predefined thematic subareas and the description of the baseline situation in the area of air quality, climate change, and energy, were used to identify **the key challenges**.

The major challenge in activities aimed at improving the air quality in the Federation of BiH is to reduce emissions, particularly from household stoves. The household stoves were identified as an important, and in some communities the key contributor to the poor air quality. Huge need for the heat of buildings (low energy efficiency) and low income of some households are the underlying causes of excessive contribution to the pollution from household stoves. Because of the low income they tend to buy cheapest fuels such as coal and firewood. In addition, the solid fuels market is not regulated in terms of their quality. Only the Sarajevo Canton imposed restrictions on the use of coal, based on the mass content of sulphur. The market of stoves and boilers is also unregulated, and it also offers non-certified stoves and boilers. As a result of all the above described circumstances, PM and sulphur dioxide emissions are excessive. Only households in the Sarajevo Canton and urban area of Visoko have access to natural gas. However, due to energy poverty, many households who are connected to the natural gas supply system still use solid fuels. In order to reduce emissions from household stoves, it is necessary to promote energy efficiency in the construction industry, as well as to regulate the quality of solid fuels, stoves and boilers. The regulation of quality of solid fuels is difficult given that it could result in increased costs of heating (without energy efficiency measures). This particularly affects socially vulnerable households. Controlling the implementation of the such measures is also a big challenge. Increasing the share of district heating in the total heated area is a part of the solution for the issue of air pollution from households. However, in addition to the problem of securing funds for this purpose, this also raises the question of competitiveness of the district heating service with solid fuel heating, as solid fuel may be also obtained at the black market.

From the point of view of reducing emissions, the main challenge in the transport sector is to reduce the average age of vehicles and reduce the use of passenger cars while improving the public transport. Socially vulnerable citizens would be mostly affected by bans or deterrent measures imposed on aging vehicles, as they cannot afford a newer vehicle. Hence, a reform of the taxation system and incentives for procurement of low polluting vehicles have to be implemented in a socially sensitive manner.

Industrial facilities largely affect the air quality, especially in Tuzla and Zenica-Doboj Cantons. They need to be upgraded implementing the best available techniques, without undermining their operation and level of employment. The lack of inspection capacities is obvious, as well as lack of mechanisms for implementation of the measures. A sanctions policy proved insufficient to reduce emissions into the air. The new Law on Environmental Protection of the Federation of BiH created conditions for an improved enforcement of the sanctions policy, and to incentivise polluters to reduce emissions.

While the number of measuring sites increased significantly, the air quality management system is still not sufficiently developed. Some of the main issues include quality assurance of measurements, tools and resources and maintenance of the measuring equipment. The system of providing information to the public on air quality in real and integrated time is underdeveloped. A Draft Law on air protection envisages improvements in both these areas. The system of data collection on emissions is insufficiently developed. In this context, it is necessary to strengthen capacities of the Hydrometeorological Institute of the Federation of BiH and of entities who are required to provide information on emissions. Given the division of responsibilities and available capacities, the establishment of a system for reporting to international institutions on emissions and air quality is a great challenge.

Multidisciplinary and integrated approach to air quality issues is a great challenge in terms of spatial planning, in particular at the local level. The last few years saw a certain progress in this area. Limited capacities are the main problem in the air quality management. In such circumstances, it is particularly important to have a good coordination across the levels of government, but also between the stakeholders at the same level (for instance cantons).

The implementation of the measures for reduction of emissions from the plants covered by NERP is delayed. This particularly applies to the implementation of the measures aimed at reducing emissions of sulphur dioxide. Securing of funds for the implementation of the measures is a key challenge, having in mind a low competitiveness of the coal-fired thermal power plants. These are facilities that were put into operation, on an average, 40 years ago, and their efficiency is poor. On top of additional costs, the measures for reduction of emissions will additionally decrease energy efficiency, and increase the specific emission of carbon dioxide.

The large share of fossil fuels in the production of energy (in particular of the coal for electricity) represents a great potential for reduction of the GHG emission. Replacing coal with cleaner fuels is crucial for reducing greenhouse gas emissions and it brings both opportunities and challenges. Firstly, air quality will improve significantly, which will diminish expenditures for health services associated with air pollution. The shift can also generate new jobs, not only in the OIE sector, but also in the process of cleaning up and rehabilitating and transforming old mining and coal power plant sites. However, moving away from coal also has its challenges. About 10,000 workers in the Federation of BiH are directly dependent on coal exploitation and production of energy from coal. The main challenge will be to implement effective strategies to avoid rising unemployment and poverty in coal regions.

The emissions trading scheme is a mechanism for decarbonisation, and it should be implemented in 2026. By that time, it is necessary to establish a comprehensive system for collection of data relevant for GHG emissions, at the level of facilities operated by members of the emissions trading scheme. For the emissions trading scheme to become operational, a system of reporting from the lower levels to the international institutions needs to be established. The implementation of the emissions trading scheme may jeopardise competitiveness of the coal-fired thermal power plants and result in a significant increase in the price of electricity. Funds collected through the emissions trading scheme must be used so as to offer incentives for renewable emission sources.

In manly local communities, the development of district heating is perceived as a measure for improvement of air quality. The main obstacles to development of the district heating projects include aging infrastructure or a lack of infrastructure, and disruption of heat supply from thermal power plants, mostly wood processing plants (such as Olovo and Kladanj). It is necessary to invest into district heating systems through investments in reconstruction, rehabilitation and modernisation of the existing district heating systems and establishment of new sustainable systems, by using local energy sources and increasing share of RES. However, municipalities and cities are unable to finance such projects due to insufficient and underdeveloped capacities for the preparation and implementation of such projects.

In the area of energy consumption, the biggest challenge is to reduce energy intensity, i.e., consumption of energy per GDP unit. To this end, it is necessary to shift from incentives for energy consumption to incentives for energy efficiency. Inefficient energy consumption is present in many industrial facilities. The issue of the low energy efficiency in residential buildings has already been highlighted.

A reform of the current RES incentives scheme, which relies on incentivised and feed-in tariffs, is a great challenge. The responsible institutions need much greater capacities for the implementation to promote citizens energy projects, with much greater transparency of allocation of incentives. It is necessary to expand incentives so as to cover heating from RES.

In the area of adaptation to climate change, the biggest challenges include establishment of an early warning system for extreme weather events and establishment of sustainable sources of funding for climate change adaptation measures. In order to enable progress in this area it is necessary to integrate the climate change considerations into sectoral policies and build capacities for coordination and preparation of project proposals.

* 1. Strategic goal 4

**Strategic goal 4 - Enhancing climate change mitigation and adaptation and improving air quality**

Strategic goal 4 (Enhancing climate change mitigation and adaptation and improving air quality) includes quality standards of ambient air and mitigation and adaptation to climate change in this regard. The last area, on the other hand, addresses the objective of reducing GHG emissions from various sectors, as well as institutional and legal arrangements required for the implementation of this objectives.

Table 18: Indicators of impacts for strategic goal 4

|  |  |  |  |
| --- | --- | --- | --- |
| **Strategic goal 4** | **Impact indicators** | **Baseline value** | **Target value**  **(To be determined in the initial years of the implementation)** |
| *Enhancing climate change mitigation and adaptation and improving air quality* | **Total greenhouse gas emissions, including sinks (Gg CO2-eq1))** | 19,670  (2016) | 16,228  (2030) |
| **Total greenhouse gas emissions per USD 1 of GDP** | 1,75 kgCO2ekv/1USD GDP\* | ... |
| **Air pollution: Annual mean concentration of PM10 particles (microgram per cubic meter)** | 47 µg/m3 | 40 µg/m3 |

* + 1. Priorities for strategic goal 4

**Priority 4.1 Reduce air pollution by reducing air pollutants to levels that are safe for human health**, through reducing emissions from large combustions, upgrading of industrial facilities so as to comply with the best available techniques, reducing emissions from household stoves and hospitality services, increasing the share of district heating in the total heat supply system, and reducing emissions of pollutants from transport.

**Priority 4.2 Upgrading the air quality management system to support strategic decision-making and public information on air quality and emissions**, through further development of air monitoring stations, upgrading of the current system of air quality public information in real and integrated time , and development of the system of international reporting on emissions and air quality.

**Priority 4.3** **Reduce** **the impact of the Federation of BiH on climate change** through reduced GHG emissions and enhanced carbon sinks.

**Priority 4.4 Enhancing resilience to climate change** through capacity building of the institutions, through upgrading the infrastructure, and the strategic and legislative framework.

**Priority 4.5 Improving energy efficiency of final consumption of all secto**rs, through creating enabling environment for energy efficiency through improved legislative framework, reduction of final energy consumption in residential and non-residential buildings, increased energy efficiency in the industry sector and reduced consumption of primary energy.

**Priority 4.6 Increasing the share of the renewable energy sources along with a reform of the incentives scheme (focusing on citizens energy projects)** through increasing the RES share in energy consumption, energy production and transport.

**Priority 4.7 Reducing light pollution** through enactment of legislation governing light pollution.

Table 19: Priorities with relevant indicators

| **Priorities** | **Indicator of deliverable** | **Baseline value** | **Target value** |
| --- | --- | --- | --- |
| **Priority 4.1 Reduce air pollution by reducing air pollutants to levels that are safe for human health** | Amounts of emissions of pollutants from large plants | In 2014, polluting emissions included: 6,702 tons sulphur dioxide, 4,964 tons nitrogen oxides, 496 tons particulate matters. |  |
| Compliance with BAT. | Poor compliance with BAT. | All the industrial plants compliant with BAT by 2032. |
| Percentage of reduction of polluting emissions from household stoves and service industry. | High emissions and impact on air quality from household stoves and emissions from the service industry | Reducing emissions from household stoves by 50% by 2032 as compared the baseline year |
| Percentage of district heating in total heated area in the building sector | Share of the district heating in the total heated area in the building sector about 8%. | Increasing the share of the district heating in the total heated area in the building sector to 15% by 2030 |
| Percentage of reduction of pollutants emissions from the transport | Underdeveloped public and non-motorised transport, aging vehicles, emission of particulate matters in 2016 was 1,101.8 tons. | Reducing pollutants emissions from transport by 30% by 2030 (including raising dust from roads) as compared to 2016 |
| **Priority 4.2** **Upgrading the air quality management system to support strategic decision-making and public information on air quality and emissions** | Level of information provided to public on air quality and emissions | Underdeveloped public information system on air quality and emissions of pollutants into the air | A system capable of providing public information on air quality and emissions of pollutants into the air in real and integrated time set up by 2032 |
| Performance of the reporting system | There is no integrated system for reporting on pollutants emissions and GHG, and air quality to the international institutions | A system for reporting on emissions and air quality to the international institutions built by 2025 |
| Coverage of the territory of the Federation of BiH by the network of measuring stations. | 22 measuring stations for air quality in 2019, deployed in 10 cities/municipalities, some areas of the Federation are not provided with a measuring station | The territory of the Federation of BiH 2025 fully covered by the network of the stations |
| **Priority 4.3 Reduce the impact of the Federation of BiH on climate changes through reduced GHG emissions and enhanced carbon sinks** | Percentage of reduction of GHG emissions | Emissions estimated at about 18,323 Gg in 2014,  There is no GHG inventory; | GHG emissions reduced by 17.5% by 2030 as compared to 2014 (strategic goal from NDC BiH adopted in March 2021) |
| The percentage of reduction of GHG emissions from the large plants | Emissions from the large plants account for 40% of the total emissions | Emissions from large facilities reduced (equivalent to EU ETS) by 28,7% by 2030 as compared to 2014 |
| Percentage of sink increase | Sinks were estimated at about 3,697 Gg in 2014 | 2.1.1. Increasing GHG sinks by 10% by 2030 as compared to 2014 |
| **Priority 4.4 Enhancing resilience to climate change** | Establishment of a functional and integrated system for keeping records of damages | There is no system for keeping records of damages in place | A system for keeping records of damages in place by 2025 |
| Application of the principle of sustainable use of water in irrigation of agricultural land | 6,862 ha of land irrigated, a significant increase of irrigated area | Application of the principle of sustainable use of water in irrigation of agricultural land |
| Level of capacity development | Poorly developed early detection and firefighting capacities | Highly developed early detection and firefighting capacities |
| Level of capacity development | Poorly developed fire protection capacities | Highly developed fire protection capacities |
| Establishment of a functional coordination of the early warning system | There is no coordination system | The early warning coordination system in place by 2025 |
| A functional coordination and monitoring system for the implementation of climate change adaptation measures set up | There is no system for coordination and monitoring of the implementation of measures | A coordination and monitoring system for the implementation of measures set up by 2025. |
| **Priority 4.5 Improving energy efficiency of final consumption in all sectors** | State of development of an improved legislative framework | The current legislative framework is not adequate to support significant improvements | An enhanced legislative framework developed by 2023 |
| Percentage of reduction of energy consumption | TFEC in residential buildings in 2020 was 1,035 ktoe | Reducing the final energy consumption in residential buildings by 22% by 2030 as compared to 2018. |
| Savings in final energy | Poor efficiency of public buildings, energy consumption in the public sector and service industry 285 ktoe in 2020 | Cumulative savings in final energy by 2030 19.28 ktoe (total rehabilitated buildings stock 18.4%) |
| Percentage of reduction of final energy consumption in industry | TFEC in industry 384 ktoe in 2020 | The final energy consumption in industry reduced by 3.3% by 2030 as compared to 2020. |
| Percentage of reduction of primary energy consumption | Forecasted primary energy consumption 4,294 ktoe in 2020 | The final energy consumption reduced by 11% by 2030 as compared to 2020 |
| **Priority 4.6 Increasing the share of renewable energy along with an incentive scheme reform (focusing on citizens energy)** | Percentage of RES share in TFEC | RES share in 2018 was 49.3% | The share of RES in TFEC is 60% by 2030. |
| Percentage of RES share in electricity production | RES share in electricity production in 2018 was 39%, in 2019 it was 49% | The share of RES in electricity production is 50% by 2030 |
| Percentage of RES share in the transport sector | RES share in 2018 was below 1% | RES share in the transport sector is 9% by 2030. |
| **Priority 4.7 Reducing light pollution** | State of development of an improved legislative framework | Lack of legislation governing light pollution | The legal framework developed |

* + 1. Measures

The strategic goal Mitigating and adapting to climate change and improving air quality comprises 7 priorities, and 13 measures logically allocated to associated priorities to facilitate the implementation of the strategic goal as such.

***Priority 4.1 Reduce air pollution by reducing air pollutants to levels that are safe for human health***

*Measure 4.1.1. Reducing emissions from large combustion plants and achieving compliance of all industrial facilities with best available techniques*

The aim of this measure is to design a funding programme for NERP implementation in order identify sources of funding in line with NERP timeline, and to develop reference documents for best available techniques for all relevant industrial processes. The aim will be achieved through the following areas of intervention

* Designing a funding programme for the implementation of NERP and its implementation;
* Drafting reference documents for best available techniques for all industrial processes;
* Environmental licencing in compliance with best available techniques;
* Implementation of a digitalised and centralised reporting on measures implemented focusing on continued monitoring in real time;
* Capacity building in the institutions responsible for environmental licencing (ministries), and monitoring of the implementation of environmental permits (inspection bodies);
* Amending the Decree on fees for air pollution.

*Measure 4.1.2. Reducing air pollution from local sources*

The aim of this measure is to reduce air pollution from the local sources, i.e. Household stoves, the service and transport industry through regulation of the market for stoves/boilers and energy commodities, by incentivising the procurement of efficient and low-polluting stoves/boilers, expanding district heating, enhancing infrastructure for non-motorised and low-polluting transport and enhancing the legislative framework to boost the development of public transport and low polluting vehicles. The aim will be achieved through the following areas of intervention:

* Banning retail of coal with the total sulphur content of more than 1% in the law, regulating the quality of fire wood offered on the market (moisture content), and pellet (in accordance with the applicable standards), including a ban on sale of non-certified stoves/boilers;
* Designing an incentive scheme to encourage replacement of solid fuel based stoves/boilers with certified heating appliances (using pallet, heat pumps, natural gas based condensation boilers, connection to the district heating system);
* Providing for an inspection control of household stoves and increasing inspection control;
* Implementing a Strategic Environmental Assessment of planning documents;
* Adopting a law on the heat industry in the Federation of BiH (including a requirement to connect to the heating system for new buildings within the areas covered by the network, defining sources and criteria for subsidising district heating on renewable energy sources, etc.);
* Developing (and implementing) a strategy aimed at increasing the share of the district heating in the total heated area;
* Developing infrastructure and incentivising non-motorised transport (especially in urban areas);
* Devising a mechanism and identifying funding sources to increase the share of public transport (electrified and low-emission) in the total travel kilometres;
* Reforming the passenger car taxation system with the view of discouraging the use of old vehicles, and encouraging the purchase of low-emission vehicles (lower consumption, electric and hybrid vehicles, LPG, and CNG);
* Routine cleaning of streets with the view of reducing dust from roads (especially after winter season);
* Designing and implementing a smart city concept in bigger cities (urban settlements with more than 50.000 population) (design by 2025, implementation by 2032);
* Planned procurement of electric and/or hybrid vehicles for the institutions of Federation of BiH.

***Priority 4.2 Upgrading the air quality management system to support strategic decision-making and public information on air quality and emissions***

*Measure 4.2.1. Improvement of the air quality monitoring system*

The aim of this measure is to provide for a full coverage of the territory of the Federation of BiH with a network of measuring stations, including capacity building of Hydrometeorological Institute of the Federation of BiH (FHMI) for the management of the network of stations and reporting of the values measured, so as to enable a better use of data obtained for spatial planning purposes and design of rehabilitation plans. The aim will be achieved through the following areas of intervention:

* Preparation of a study (plan) of the measuring stations network (including the creation of an AQ assessment system, territorial division into AQ management zones), and defining the types of pollutants which should be measured;
* Procurement, installation and maintenance of additional measuring stations, and ensuring reliability of measurements;
* Capacity building of FHMI and cantonal institutes (human and technical).

*Measure 4.2.2. Developing the system for international reporting and coordination of efforts aimed at improving the public information system on air quality*

The aim of this measure is to establish a robust system for international reporting on emissions of pollutants, GHG and air quality (in cooperation with the state level institutions) and improving the system of public communication on air quality, in real and integrated time. The aim will be achieved through the following areas of intervention:

* Devising a public information programme on air quality (harmonised manner and content of information throughout the Federation of BiH);
* Developing and implementing a capacity building programme of organisations in charge of air quality (level of the Federation of BiH and cantons);
* Dividing the territory of the Federation of BiH into zones and agglomerations from the quality point of view (potentially updating based on measurements throughout the Federation of BiH)
* Drawing up air quality rehabilitation plans for all the areas with air category II and III, including integration of the air quality issue in spatial planning processes;
* Creating an air quality information system;
* Designating reference laboratories for measurements of emissions and air quality;
* Improving reporting on emissions through the implementation of a uniform electronic reporting system on measurement of emissions and general data on emission, including the application of sanctions for a failure to provide data;
* Codifying the method and deadlines for providing data on emissions to the information system;
* Strengthening capacities for the verification of results of pollutants emission measurements;
* Codifying the method of calculation of emissions, along with a development of national emission factors;
* Enacting cantonal air quality laws;
* Completing an inventory of pollution and developing a register of operators (cantonal);
* Developing a baseline model for air quality monitoring and for the purpose of spatial planning, and implementing it (at the cantonal level);
* Defining the manner of reporting on emissions and air quality to the national authority.

***Priority 4.3 Reduce the impact of the Federation of BiH on climate change***

*Measure 4.3.1. Reducing the impact of the Federation of BiH to climate change*

The aim of this measure is to reduce GHG emissions and increase carbon sink, which should lead to partial decarbonisation and achievement of climate neutrality on the long run. The aim will be achieved through the following areas of intervention:

* Setting up of a Decarbonisation Committee;
* Developing and adopting a regulation on the development of the GHG inventory;
* Strengthening the capacity of FHMI for the development of inventories;
* Drafting a climate law which should, among other things, introduce decarbonisation mechanisms;
* Adopting a decree on the monitoring and reporting mechanism;
* Participating in the development of the Integrated Energy and Climate Plan (NECP) every five years;
* Developing and implementing SECAP for all the municipalities and cities;
* Drawing up an action plan to phase out coal;
* Drawing up plans for a just transition of mining areas, and identifying mechanisms and funding sources for the transition;
* Drafting a proposal for the implementation of the ЕU ETS Directive;
* Designating an institution which should create the emissions trading scheme;
* Capacity building of the institution designated for the creation of the emissions trading scheme;
* Participating in the development of the national strategy on enhancement of carbon sinks;
* Boost planting of fast growing energy crops on degraded sites.

***Priority 4.4 Enhancing resilience to climate change impact***

*Measure 4.4.1. Developing institutional capacities and knowledge as a basis for enhanced resilience to climate change*

The aim of this measure is to develop capacities for adaptation to climate change through coordination aimed at upgrading the capacities of institutions and developing a strategic and legislative framework. The aim will be achieved through the following areas of intervention:

* Improving the knowledge and developing data bases on risks, measures, damages and losses for the purpose of vulnerability assessment;
* Designating a body responsible for setting up and maintaining the damage record system;
* Improving capacities for forecasting severe meteorological and hydrological events and providing timely warnings to support disaster risk reduction;
* Enhancing and coordinating cooperation among the institutions responsible for the assessment, prevention and response to disasters and major accidents linked with climate change (RHMI, Civil Protection, etc.);
* Quarterly assessments of extreme climate change risk;
* Drawing up and adoption on climate change adaptation action plan based on the national Strategy (and updating it every five years);
* Set up a system of coordination and monitoring of the implementation of adaptation measures among the responsible institutions and continued capacity building;
* Defining a way to raise and use funds for the climate change adaptation measures in accordance with the Strategy on funding NAP which is being developed.

*Measure 4.4.2. Developing infrastructure capacities as to support the enhancement of resilience to climate change*

The aim of this measure is to develop infrastructure capacities for adaptation to climate change in the sectors most vulnerable to climate change. The aim will be achieved through the following areas of intervention:

* Developing a programme to strengthen the irrigation infrastructure;
* Application of the principle of sustainable use of water in irrigation areas and establishment of an advisory office for farmers;
* Compliance with ecological principles in development of multipurpose reservoirs;
* Carrying out a study aimed at identifying the needs for equipment and human resources for early detection of fire and firefighting;
* Procuring equipment and hiring staff for early detection of fire and firefighting;
* Undertaking a study aimed at identifying infrastructure needed for firefighting (such as water reservoirs, fire escape facilities, etc.);
* Strengthen the flood protection capacities.

***Priority 4.5 Improving energy efficiency of final consumption in all sectors***

*Measure 4.5.1. Creating an enabling environment for energy efficiency*

The aim of this measure is to create an enabling environment for energy efficiency through improvement of legislative and strategic framework in this area. The aim will be achieved through the following areas of intervention:

* Establishing an energy counselling office;
* Implementing green procurements‒ amending the Public Procurement Law
* Implementing obligation schemes for electricity, natural gas and heat suppliers;
* Developing a model to increase the public lighting energy efficiency;
* Amending the Law on Energy Efficiency, and adoption of all relevant bylaws (ESCO product labelling, financial policy for EE - tax loans, fiscal policy, defining the consumption threshold for major energy consumers, etc);
* Adopting and implementing a strategy on retrofitting of buildings;
* Further upgrading of the Energy Efficiency Information System.

*Measure 4.5.2. Reduction of primary energy consumption*

The aim of this measure is to reduce the consumption of primary energy through increasing energy efficiency in both residential and non-residential buildings and industry. The aim will be achieved through the following areas of intervention:

* Implementing *Energy Labelling* Standards for household appliances;
* Developing a model aimed at promoting energy efficiency of residential buildings;
* Applying stricter requirements for energy efficiency in new buildings (including both heating and HVAC needs);
* Develop a model of funding rehabilitation of public buildings;
* Development of the ESCO market;
* Implementing the obligation to perform energy audits in industrial facilities with a significant energy consumption, including the implementation of schemes of audits co-financing and favourable funding of measures;
* Creating a network for energy efficiency of industrial companies (*benchmarking*) and its integration in the EU network;
* Appointment of energy managers in facilities which consume more energy than specifically defined.

*Measure 4.5.3. Reduction of primary energy consumption*

The aim of this measure is to reduce consumption of primary energy through strengthening of the legislative and strategic framework focusing on minimising losses in power generation. The aim will be achieved through the following areas of intervention:

* Implementing the *EcoDesign* standards for stoves/boilers;
* Implementing incentives to promote purchasing of efficient heating and cooling appliances;
* Reducing losses in distribution of heat and electricity;
* Introducing subsidies for energy from highly efficient cogeneration.

***Priority 4.6 Increasing the share of renewable energy along with an incentive scheme reform (focusing on citizens energy)***

*Measure 4.6.1. Creating an enabling environment for renewable energy sources*

The aim of this measure is to create an enabling environment for renewable energy sources through improvement of legislative and strategic framework in this area. The aim will be achieved through the following areas of intervention:

* Regularly draw up integrated climate and energy plan (within the National Plan);
* Implementing incentive schemes for the use of RES in heating and cooling;
* Imposing a requirement of proof of origin for energy.

*Measure 4.6.2. Increasing the share of renewable energy sources in the electricity production and transport*

The aim of this measure is to increase the share of the renewable energy sources in the electricity production and transport, through improvement of strategic framework and incentive scheme, and through strengthening of infrastructure for partial decarbonisation of transport. The aim will be achieved through the following areas of intervention:

* Implementing incentive schemes for citizens energy projects and auctions (phase out buy-in tariffs, implement net measurement or net calculation, defining prosumers);
* Adopting and regularly updating the catalogues of environmental criteria for development of all renewable energy sources (within the system of impact assessment);
* Introducing incentives for roof top photovoltaic plants and collectors in new buildings;
* Undertaking a study on construction of required infrastructure for electric and *plug-in* hybrid vehicles.
* Promoting purchase and use of hybrid, electric and *plug-in* passenger vehicles (subsidies for purchase, the right to enter ‘green’ city areas, cheaper / *free* of charge parking , etc.), public transport vehicles;
* Building the infrastructure for hybrid, electric and *plug-in* passenger vehicles (charging points, disposal of used spare parts, etc.)
* Building cycling trails and parking facilities, developing pedestrian walkways.

***Priority 4.7 Reducing light pollution***

*Measure 4.7.1. Enacting legislation governing light pollution*

The aim of this measure is to develop a legislative framework and capacities for the regulation of light pollution. The aim will be achieved through the following areas of intervention:

* Drafting and adopting a regulation on light pollution in the Federation of BiH (illumination zones, allowed values of illumination, methods of managing the lighting systems, inspections, etc.);
* Strengthening the capacities of responsible institutions (for spatial planning, inspections, etc.).
  1. Indicative Financial Framework

The cost estimate for this thematic area is the third largest, after Water Management and Sustainable resource management. The thematic area Air Quality, Climate and Energy accounts for 28%, of the total estimated cost of the Strategy of BAM 11,9 billion, with BAM 3.3 billion. This thematic area contains seven priorities with 13 measures. The cost estimates were calculated for all the measures in the area of Air Quality, Climate Change and Energy. Priority 4.5 is the main priority of this thematic area (Improving energy efficiency in the final consumption in all sectors). It accounts for 62% of the total cost with BAM 2 billion. It is followed by priority 4.4 (Enhancing resilience to climate change ) which accounts for 18% with BAM 597 million, and 4.1. (Reduce air pollution by reducing air pollutants to levels that are safe for human health) which accounts for 10% with BAM 324 million. The total financial allocations for the remaining four priorities account for 11% of the total sum with BAM 355 million.

A detailed overview of the Indicative Financial Framework for the thematic area Air Quality, Climate Change and Energy and for the Federation of BiH is contained in Annex 9, including a table and pie chart.

1. CHEMICAL SAFETY AND NOISE
   1. Situation Analysis

Safe use of chemicals and reduced level of noise are needed to protect people’s health and environment. That is why this chapter analyses the **baseline status** and **key challenges** with the aim to adequately identify future objectives, priorities and measures in the field of chemical safety and noise.

In addition to being used in industry, chemicals, which may be natural or man-made, are part of everybody’s daily lives and people are regularly exposed to them. People are exposed all the time to various dangerous chemicals that are used in household, including vulnerable groups such as children or pregnant women. Various groups of population (women, men or the poor) are exposed to chemicals in different ways due to division of labour, social norms and place where they live. In addition, there are differences in sensitivity to harmful effects of chemicals among, for example, women, men and children. Therefore, the influence of chemical use is different for each of these groups. Improving living standard of marginalized population, resolving the poverty issues and identifying groups most at risk are the key measures that can help limit their exposure to harmful chemicals, and noise (Strambo et al., 2021).

Some chemicals, such as persistent organic pollutants (POPs) and mercury remain in environment for long time and may have long-lasting negative impact on environment and people’s health. Chemical safety implies that any activity involving chemicals is done in a way that is safe for human health and environment, and this imposes the need of defining special institutional solutions and legislation in the area of chemical safety. Chemical safety means that every chemical in use is safe for human health and environment, and this imposes the need to identify specific institutional and legislative solutions in the area of chemical safety.

In BiH, managing chemicals is within competences of Entities and Brcko District of BiH, except with respect to reporting to EU institutions (in accordance with the obligations under the Stabilization and Association Agreement), secretariats of the signed conventions, and customs policy, including control and prevention of entry of prohibited goods and substances in BiH. In the Federation of BiH, the competences are divided between environment and health, as described below.

BiH has ratified the following conventions pertinent to chemical safety:

* Vienna Convention, Montreal Protocol with associated amendments (Copenhagen, Montreal, Beijing and Kigali) on protection of the ozone layer;
* Stockholm convention on persistent organic pollutants;
* Rotterdam Convention on Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade.

Federation Ministry of Environment and Tourism is responsible for overseeing and monitoring consumption of substances that damage the ozone layer, and they send the collected data to the Ozone Unit of BiH that operates within the MOFTER. All importers/exporters of ODS are obliged to submit to competent authorities’ annual reports regarding import/re-export, distribution/sale in the market of Republika Srpska and quantity of ODS and replacement substances in stock on 31 December of previous year. The reports are to be submitted by 31 January of the following year at the latest, in the format prescribed in Decision by the Council of Ministries.

Decision on prohibition or restriction of imports, production, trade and use of certain hazardous industrial chemicals in the Federation of BiH (“Official Gazette of the Federation of BiH“, 52/16, 47/19) obliges the Federation Ministry of Health to work with the BiH Plant Health Administration, as the designated state body at the level of BiH responsible for coordination of implementation of the Rotterdam Convention, in accordance with provisions of the Rotterdam Convention in the part that concerns activities and reporting on the future import of chemicals from Point I of this Decision. This obligation is further affirmed under Article 39 of the Law on Chemicals (“Official Gazette of the Federation of BiH“, 77/20).

In October 2020, the Law on Chemicals was adopted (“Official Gazette of the Federation of BiH“, 77/20 that has, among other things, aligned the legislation of the Federation of BiH with EU regulations in the area of chemicals (Regulation on Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH Regulation (Regulation (EU) 1907/2006), Regulation on classification, labelling and packaging of chemical substances and mixtures (CLP Regulation) (Regulation (EU) 1272/2008), Regulation on Mercury (Regulation (EU) 2017/852), Regulation on detergents (Regulation (EU) 648/2004), Regulation on import and export of hazardous chemicals (Regulation (EU) 649/2012) and Regulations on POPs chemicals (Regulation (EU) 2019/1021), Regulation on implementation of good laboratory practice principles (Directive 2004/10/EC), Stockholm and Rotterdam conventions. The competent body for this Law is the Federation Ministry of Health. Within this Ministry, Sector for Pharmacy and Chemicals has been established, that employs one person for the tasks of managing chemicals and biocides, and that is not enough in the context of implementation of all requirements of the applicable legislation, as well as the legislation that will have to be developed by 2022. FMH has no capacities for development and implementation of legislation that stems from the existing Law on Chemicals, and this has been recognized as one of the key challenges. Oversight of its implementation and implementation of legislation adopted on the basis of this Law lies with the Federation Administration for Inspections through the Federation sanitary inspectors for poison control. With respect to implementation of conventions that address workers’ protection against harmful impact of chemicals the competent body is the Federation Ministry of Labour and Social Policy (MOFTER BiH, 2015). In addition to capacity challenges, all the mentioned institutions also face lack of required skills and competences. In addition, there is a lack of collaboration and synergic approach of the competent institutions in the field of environment and health. With respect to improvement of legislative framework for managing chemicals in accordance with the signed international agreements and the EU acquis in the area of chemical safety, there is an evident lack of technical and human capacities needed for full implementation of legislation in the area of chemical management, and this was confirmed in the most recent assessment of national capacities and readiness for implementation and enforcement of REACH, CLP, BPR, POPs and ePIC in BiH, which was done for the needs of the European Chemicals Agency (ECHA) (European Chemicals Agency, 2022).

Secondary legislation prescribed by the Law on Chemicals has not been adopted, so the transposition of the said EU regulations and conventions is at a very low level, and this has been recognized as a major challenge for Federation of BiH institutions in this area. In accordance with the EU requirements (Regulation (EU) 1272/2008), the Poison Control Centre has been stablished as a public health information service within the Institute for Labour Medicine of the Sarajevo Canton, whose main role is to provide technical assistance in treatment and prevention of acute and chronicle poisoning by 24-hours phone information service. The method of designation of the Centre, its competencies or way of cooperating with the competent bodies for chemical management that are responsible for implementation of the said regulation are not known. It needs to be said that this Centre had been established prior to entry into force of the Law on Chemicals, which stipulates its establishment. So far, the Poison Control Centre has not been officially designated in the Federation of BiH.

In view of this lack of secondary legislation in the field of chemicals management, there is no established system of registration of chemicals or importers of chemicals, and this puts the business community in unequal position compared to the businesses from Republika Srpska, where the management of chemicals and biocides has been well regulated for a while. There is no established inspection oversight in the area of chemical management, and as a result, the number of violations in the field of chemicals management is not available in the Federation of BiH. Training plan and programme for advisors for chemicals is not prescribed, and neither are conditions for their appointment and work. There is no *help-desk* to provide assistance to businesses when reporting chemicals as is required under the REACH regulation. Upon having developed the secondary legislation needed for enforcement of the Law on Chemicals, it will also be necessary to establish information system that will allow for managing inventory of chemicals and list of biocides. The information system should be able to accommodate data sharing and establishment of Integrated Inventory of Chemicals and Biocides at BiH level.

Legislative framework for transposition of the **SEVESO III Directive** (Directive 2012/18/EU) has been established by means of the Law on Environment Protection (“Official Gazette of the Federation of BiH”, 15/21), and with this the Directive has been transposed in a significant extent. However, it is necessary to adopt a regulation that will determine the content and method of maintaining the Registry of Major Accidents. There is no Registry of Major Accidents that is required under the SEVESO III Directive.

There is no legal basis in place for transposition of the **Regulation on the supply and use of biocidal products.** There is no legislative framework regulating mercury and mercury product management. Transposition of the **Regulation on mercury** (Regulation (EU) 2017/852) has not begun. The Minamata convention has not been ratified, and no legal basis has been created for its implementation at the entity level.

There exists the legislation on disposing of asbestos waste. However, there is no legislation that would restrict import and use of products that contain asbestos or other hazardous substances as recommended in Annex 17 of the REACH Directive. Regarding asbestos, this legislation will also reflect on the legislation that prescribes the composition of products used in construction, the implementation of which falls within the competency of Federation Ministry of Spatial Planning. Legislative framework is lacking that would regulate the emissions of asbestos to air and water from the industries producing asbestos cement and asbestos paper, and therefore the level of transposition of Directive on prevention and reduction of environment pollution by asbestos (Directive 87/217/EEC 1987) is low. Taking care of construction waste has already been regulated by the Rulebook on construction waste (“Official Gazette of the Federation of BiH”, no. 93/19).

There is no established registry of service shops and owners of equipment (operators) of cooling and HVAC (heating, ventilation, air conditioning) equipment. There is no established plan for training repairers/maintenance providers, as required by the EU regulations. There are no prescribed criteria for establishing a training centres for the repairers. No training centres have been designated. All of the above is regulated in the current draft of the Law on Air Protection (Federation Ministry of Environment and Tourism), which provides legal basis for transposition of the Regulation on ozone layer depleting substances (Regulation (EU) 1005/2009) and the Regulation on certain fluorinated greenhouse gases (Regulation (EU) 517/14), and therefore the requirements of the Montreal Protocol and the Kigali amendment. Draft Law is currently in the process of adoption.

Difficulties in managing stocks of chemicals, waste produced during the lifecycle of chemical has been identified as a challenge; however, it is in direct relation with thematic area of waste management, and shall be covered in the waste management section of the Strategy and Action Plan.

The Yearbook - publication of the Public Health Institute (PHI) - does not present the frequency of diseases or deaths caused by poisoning that is a consequence of inappropriate handling of chemical products. However, since 2019, the PHI has had available the detailed data on poisoning cases, disaggregated by gender and age, but such data are not made public. The data are grouped under the following codes: Poisoning with drugs and biological substances (T36-T50), Toxic effects of substances that are generally not used for medicinal purposes (T51-T65), Other and unmarked external causes (T33‒T35, T66‒T73, T75-T78). Although the system of data collection and processing exists, the Federation Institute for Public Health has indicated that the procedure of data entry is questionable, i.e. it is not certain whether all public and private health centres diligently report cases of poisoning. The Public Health Institute of the Federation of BiH also has the data on mortality statistics by the said codes, but these data are taken from the Federation Statistical Institute. Public information campaigns in media that provide information about the risks for human health and environment related to use of chemicals are rare and only implemented under special projects, not as a part of regular work of institutions. The Environmental Protection Fund of the Federation of BiH has been regularly issuing public calls for projects to implement the measures from the Environmental Strategy. Since chemical safety has not been among topics covered in the Environmental Strategy in the past, this topic had not been included in the mentioned public calls. It is necessary to foresee the method of financing such calls because no specific fees have been stipulated that would provide for financial preconditions. No activities of NGOs or consumer associations have been observed that are aimed at raising awareness about chemicals. There is no official system of reporting and coordination among inspection services of the entities and Brcko BiH in the area of chemical safety.

*Environmental noise*

Noise is a part of everyday life of people and workers in a whole range of jobs, and it is an inevitable consequence of modern society, development density, and intensity of activity. According to the World Health Organization Report of 2011, noise generated by means of transport is considered the second most important cause of environment-related health problems, immediately after air pollution. In addition to sleep disorders, constant exposure to noise may cause cardio-vascular diseases, harm psycho-physical functions of human body, and lead to change in their social behaviour (World Health Organization, 2011).

Environmental noise, according to Article 3 of the Directive on environmental noise (Directive 2002/49/EC), is defined as unwanted or harmful outdoor sound created by human activities, including noise emitted by means of transport, road traffic, rail traffic, air traffic, and noise from sites of industrial activity. According to Article 2, this Directive does not apply to noise that is caused by the exposed person themselves, noise from domestic activities, noise created by neighbours, noise at work places or noise inside means of transport or due to military activities in military areas. The same concept shall apply in situation and strategic analyses of noise in this thematic unit.

In European countries, the matter of noise management is divided among institutions working in environment protection and health, and consequently, in implementation of action plans, involved are also the institutions managing transport and space. Therefore, transposition and implementation of the directive requires synergic approach of different sectors.

There is only one piece of legislation that regulates environmental noise in Federation of BiH. This is the Law on Protection against Noise (“Official Gazette of the Federation of BiH”, 110/12). The Law does not follow the structure of the **Directive on Environmental Noise** (Directive 2002/49/EC)and does not provide a sound legal framework for transposition of this Directive into legal system of the Federation of BiH. The law specifies limits of noise emitted by external sources, and inside, depending on their purpose, it specifies the allowed level of external noise for planning new structures or sources of noise, and noise in working premises from external sources. In addition, the law identifies the authority and method for measuring and valuating noise in the open air and in closed premises. The Law foresees that noise should be included in the environmental impact assessment of the facilities that may produce a certain level of noise. The Law has not provided the obligation of development and adoption of the Noise Prevention Plans, although that is required by the Directive. In addition, the Law falls short of ensuring public participation in development of instruments for noise limitation or prevention (MoFTER BiH, 2017). Laws on protection against noise was also adopted at the cantonal level in Sarajevo Canton, Tuzla Canton, Zenica-Doboj Canton, Central Bosnia Canton, Bosansko-Podrinje Canton, Una-Sana Canton, and Herzegovina-Neretva Canton.

The Law foresees that the Federation of BiH, cantonal, city and municipal administrative bodies responsible for spatial planning ensure, each within their respective scope of competences, development of noise maps to be used for forecasting, recording and monitoring the levels of noise. The noise map should be a graphic presentation of the existing and planned levels of noise, and make an integral part of spatial plans. Review of spatial plans of the Federation and the cantons has not shown existence of noise maps.

The Law has not stipulated the obligation of development and adoption of the Noise Prevention Plans, although that is required under the Directive. In addition, the Law does not address the need to develop strategic noise maps and action plans that will include the activities of prevention / termination of the sources of noise over a longer period. There are no regulations on the level of noise caused by equipment for use outdoor.

In 2016, a new Law on Protection against Noise of Sarajevo Canton was adopted in Sarajevo Canton (“Official Gazette of the Federation of BiH”, 23/16), which is in line with requirements of the European legislation. The Law stipulates the highest limits for noise and for measuring the noise, and identifies noise protection measures and their duration, and mandates the development of noise maps. In connection with this, the responsibilities of all levels of government, from Federation to municipal bodies, have been established. The new Law defines more precisely the conditions and measures of noise protection that need to be complied with when starting certain activities, and, contrary to the Federation regulation, specifically describe the method of developing noise maps as well as action plans, as prescribed in the Directive that is a condition for accession to the European Union.

Noise Map was made in Sarajevo in 2009 (Figure 11), and a report was produced on the measuring results, containing recommendations for improvements. However, due to the fact that the spatial plans do not include the segment of noise protection, it was not possible to provide for timely and adequate planning of protection and zoning in accordance with the noise protection rules. According to the Directive 2002/49/EC, the noise maps are to be made for all inhabited areas with population over 100.000. According to this criterion, noise maps and noise protection action plans should be made for Sarajevo, Mostar, Zenica and Tuzla.

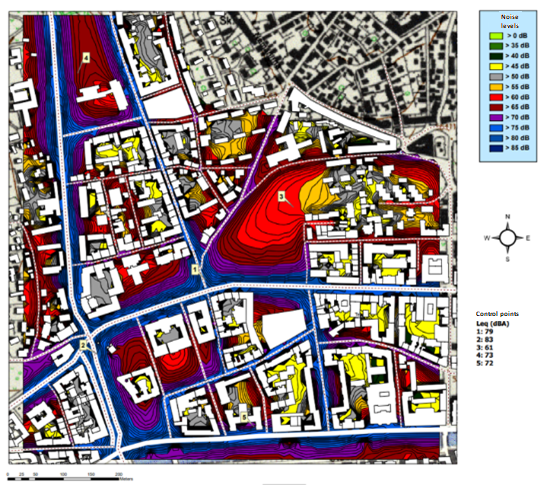


Figure 11: Noise Map for Sarajevo Canton (2009)

Source: (Official web page of the Ministry of Utility Companies, Infrastructure, Spatial Planning, Construction and Environment Protection; Noise Map, 2009)

In addition, according to the Directive, the noise maps need also be made for: railway tracks with 30,000 train passages a year, roads with more than 3 million passages a year, and airports with more than 50,000 operations (landings and lift-offs). In 2019, the four international airports in BiH combined realized 20,900 operations, and this is significantly below the level that requires the development of noise maps and noise protection action plans.

Motorways and highways in the Federation of BiH are managed by Public Company Motorways of the Federation of BiH (JP Autoceste Federacije BiH), and this company has the duty to collect and publish data on traffic, by sections. Unfortunately, the Public Company Motorways of the Federation of BiH does not publish the data on traffic by sections, but according to the available data from studies already done, values of AADT exceed 10 thousand vehicles at all sections of motorway A1 between Lasva and Sarajevo (including the Sarajevo Bypass). Based on the environmental permit for the project Motorway on the corridor Vc, for the sections: LOT 2 – section Doboj South (Karuse) – Sarajevo (south) – Tarcin, the Public Company "Motorways of the Federation of BiH“ commissioned in 2012 development of a document titled "Determining the level of noise, developing noise maps and action plan for mitigating consequences of noise generated by motor vehicles on the Motorway A1 - Section Josanica - Kakanj". The work involved measuring levels of noise, development of noise maps and action plans for sections of the motorway in the Federation of BiH, recognizing not only the local legislation in force at the time, but also the provisions of original Directive 2002/49/EC (Directive 2002/49/EC). In 2014, the same company commissioned development of the document with the same title and content for the motorway section Biljesevo - Kakanj. Noise protection projects make an integral part of the main designs of motorways and highways in the Federation of BiH, and acoustic barriers have been installed along motorway A1, mostly at the so-called Sarajevo bypass. Acoustic barriers have also been installed along certain city roads in Sarajevo Canton (e.g. along the so-called A-transversal). Main roads in the Federation of BiH are managed by Public Company Roads of the Federation of BiH, and this company has the duty to collect and publish data on traffic, by sections.

According to the publication issued by Public Company “Roads of the Federation of BiH" (JP Ceste Federacije BIH, 2021), out of total number of 101 counting locations at the main roads in the Federation of BiH in 2019, on 49.51% locations the average annual daily traffic (AADT) was under 6,000 vehicles / day, on 37.62% of locations the AADT ranged between 6,000 and 15,000 vehicles/day, and on 12.87% there was over 15,000 vehicles / day. In terms of motorways in the Federation of BiH, the noise maps have been produced for all of them as a part of design documentation. Still, when developing strategic noise maps in BiH these data should be revised to take in consideration the current number of vehicles in use and other categories that are included in calculation of noise load. Overview of traffic levels on the observed sections has identified road sections with AADT of over 10,000 vehicles a day, and those are: M 1.8 (Srebrenik - Sicki Brod), M 4 (Teslic (Barici) - Karuse; Doboj - Donja Orahovica; Donja Orahovica - Sicki Brod; Sićki Brod 1 - Simin Han 1; Simin Han 1 - Sićki Brod 1 (V); Simin Han 1 - Donje Caparde), M 5 Border BiH/CRO (Izacic) - Bihac; Turbe - Nevic Polje; Azize Sacirbegovic – Korija; Nevic Polje - Kaonik; Gromiljak – Blazuj), M 6.1 (Gnojnice – Nevesinje), M 16.4 (Bugojno - Nevic Polje), M 17 (Ozimica – Nemila; Stup 3 – Blazuj; Blazuj – Tarcin, Konjic – Jablanica 1; Potoci - Mostar (centre), Gnojnice - Buna), M 18 (Stup 1 - Trnovo 1, Semizovac - Sarajevo (Malta), Sicki Brod 3 - Zivinice 1, Zivinice 1 - Vitalj). Figure 12 shows the traffic map on the main roads of FBiH. All the sections with more than 8,220 vehicles per day (3 million a year) need to be taken into consideration when developing noise maps for main roads in the Federation of BiH.



Figure 12: Map of traffic intensity on main roads in the FBiH for 2019

Source: (PC “Roads of the Federation of BiH“, count of vehicles on main roads in the Federation of BiH in 2019 and 2021)

Railways in the Federation of BiH are managed by Public Company Railways of the Federation of BiH, and this company has the duty to collect and publish data on annual rail traffic. According to available data from recently completed studies, daily number of train passages by sections of railway tracks in the Federation of BiH is, on the average, around 5,000, and there are no sections where this number reaches three million passages per year.

European countries prepare the noise maps every five years, and the next rounds of maps development are scheduled for 2027 and 2032. Nose protection action plans are scheduled to be developed two years after the development of noise maps. For the purposes of harmonisation with the activities implemented by EU countries with respect to noise, the Federation of BiH should align its legislation and strengthen capacities for strategic planning for environmental noise by 2027, what falls within the ESAP 2030+ planning period.

At present, no formal act has designated bodies competent for implementation of the Directive, including the bodies responsible for development, and approval, when needed, of the noise maps and action plans in the Federation of BiH, as required under Article 4 of Directive 2002/49/EC.

There are companies in BiH that possess equipment and knowledge to do this kind of work, but there are no legislative or institutional prerequisites for it. The current Law on Protection Against Noise (“Official Gazette of the Federation of BiH”, 110/12) does not clearly define the competences, and neither do the bylaws.

There is no systematic noise monitoring for the purpose of updating strategic maps and action plans for noise. Federation of BiH does not have information on the exposure to noise by classes of noise, by age and gender groups. There is no system in place to inform general public on the impact and level of their exposure to environmental noise in the areas with increased levels of noise. There are no mechanisms in place to inform the general public on the levels and harmful effects of the environmental noise, except for the documentation related to issuing environmental permits to the commercial entities and impact studies that are in required the process of their issuance. Software solutions that would enable development of strategic noise maps and their simple presentation to public are lacking.

As no strategic noise maps have been developed so far, general public has not had an opportunity to participate in that process. According to Directive 2002/49/EC, strategic noise maps may be presented to the public as: graphic presentation, numerical data in tables, numerical data in electronic form.

There are no regulations on the level of noise caused by equipment for use outdoor, and they need to be developed on the basis of the Directive 2000/14/ECon harmonisation of legislation of member countries with respect to mission of noise caused by equipment for outdoor use.

Currently, there are very modest experiences in noise management, and human and technical capacities of institutions needed for implementation of EU regulations on noise and protection against noise are at low level.

Institutions of the Federation of BiH do not have competences for transposition / implementation of directives in the field of transport, such as the directives that regulate levels of noise for motor vehicles (noise caused by road transport), airplanes (noise caused by air transport) and trains (noise caused by railway transport), which are partly transposed in BiH legislation.

* 1. Strategic goal 5

**Strategic goal 5 - Human health protection and improving well-being and quality of life for all**

Strategic goal 5 includes the list and safe use of chemicals, including chemicals for protection of plants, standards of environmental noise, and exposure of humans and animals to noise in urban and rural environments.

***Table*** ***20:*** *Performance indicators for strategic goal 5*

|  |  |  |  |
| --- | --- | --- | --- |
| **Strategic goal 5** | **Performance indicators** | **Baseline value**  **(to be determined in initial years of implementation)** | **Target value**  **(to be determined in initial years of implementation)** |
| *Human health protection and improving well-being and quality of life for all* | **Incidence of diseases or deaths due to poisoning that are a consequence of inadequate handling of chemical products** | ND | ND |
| **Percentage of people exposed to noise, by classes of noise and age groups** | ND | ND |

* + 1. Priorities for strategic goal 5

**Priority 5.1 Improved legislation in the field of chemical safety,** thereby achieving alignment of BiH legislation with requirements of international agreements, the Minamata Convention, the Stockholm Convention, the Montreal Agreement with the Kigali Amendment, the EU legal acquis that ensures implementation of the said conventions.

**Priority 5.2 Establish a sustainable system of chemical management and implementation of EU acquis in the area of chemical safety,** in the way that all prescribed requirements of the current Law on Chemicals of FBiH (“Official Gazette of the Federation of BiH”, 77/20), Law on Biocides that is yet to be developed, legislation implementing the SEVESO III Directive (Law on Environment Protection, “Official Gazette, 18/2021 and secondary legislation (bylaws) on prevention of major accidents caused by handling hazardous materials), as well as secondary legislation under the Law on Air Protection (currently in the form of draft, in the procedure of adoption by the Government of the Federation of BiH, 2021), in connection with management of ozone depleting substances.

**Priority 5.3 Efficient operation of institutions of the Federation of FBiH in the field of chemical safety** that is achieved by strengthening human and technical capacities of institutions, by improved cooperation, collaboration and synergy among competent institutions in the field of environment protection and health. Institutional strengthening also ensures a higher degree of transposition of EU acquis, international agreements and conventions in the field of chemical safety and chemicals management. Work of the institutions needs to be improved also in terms of adequate monitoring of the number of people who became ill or died due to inadvertent poisoning, disaggregated by sex and age, in order to enable planning of concrete preventative measures in the future.

**Priority 5.4 Reduced incidence of diseases or deaths due to poisoning as a consequence of inadequate handling of chemical products**,to be achieved through continuous reporting and educational activities pointed towards improving knowledge of population on the risks posed by inadequate use of chemicals.

**Priority 5.5 Establish a legislative framework and clear institutional competences to transpose EU acquis on environmental noise in legislation of the Federation of BiH**. The plan is to achieve this priority by updating the existing, and by developing and adopting new legislation that would enable strategic planning and managing environmental noise and development of noise protection action plan. In addition, noise created by outdoor equipment is also part of the EU acquis that needs to be transposed in FBiH legislation and implemented.

**Priority 5.6 Enhance strategic planning and monitoring of environmental noise**, planned to be achieved through development of strategic noise maps and noise protection action plans for settlements, roads and railroads, industrial sources, all in accordance with the methodology described in Directive 2002/49/EC. As the most important part of strategic mapping of noise, the plan is to identify the areas where the population is exposed to extreme noise, disaggregated by gender and age groups, to be used as basis for development of a noise protection action plan.

**Priority 5.7 Efficient operation of institutions in the area of environmental noise**, to be achieved by enhancing capacities of competent institutions, as well as their competencies and knowledge on environmental noise, for the purpose of implementing noise management legislation. In addition to strengthening human capacities, it will be necessary to strengthen technical capacities too so that the information on environmental noise can be presented to general public in a simple way, and also used for reporting to EU institutions as needed.

**Priority 5.8 Reduce the risk to human health from environmental noise,** what is achieved by continuous reporting and educational activities aimed at improving knowledge of population regarding the risks posed by exposure to noise. Raising public awareness is the most important component of the planned activities, considering the extremely low level of knowledge among the population regarding the negative health impacts of noise.

Table 21: Priorities with relevant indicators

| **Priorities** | **(Target) values indicator** | **Baseline value** | **Target value** |
| --- | --- | --- | --- |
| **Priority 5.1 Improved legislation in the field of chemical safety** | Level of transposition of EU acquis and conventions in the field of chemical safety (Regulation (EC) no. 1907/2006 (REACH), Regulation (EC) no. 1272/2008 (CLP Regulation), Regulation (EC) no. 648/2004 on detergents, Regulation (EU) no. 649/2012 on exports and imports of hazardous chemicals, Regulation (EU) 2019/1021 on POPs chemicals, and Directive 2004/10/EC on application of the principles of good laboratory practice, Rotterdam Convention, and Stockholm Convention | Low level of transposition of EU acquis and conventions in the field of chemical safety | Partial transposition of EU acquis and conventions in the field of chemical safety (Regulation (EC) no. 1907/2006 (REACH), Regulation (EC) no. 1272/2008 (CLP Regulation), Regulation (EC) no. 648/2004 on detergents, Regulation (EU) no. 649/2012 on exports and imports of hazardous chemicals, Regulation (EU) 2019/1021 on POPs chemicals, and Directive 2004/10/EC on application of the principles of good laboratory practices, Rotterdam Convention, and Stockholm Convention  (2024) |
| Level of transposition of the SEVESO III Directive in legislation of FBiH | Created is the legal basis for transposition of the Seveso III Directive in the Law Environment Protection; however, a regulation needs to be passed that specifies the content and method of maintaining of Registry of Major Accidents.  The existing Rulebook on the content of the report on safety status, content of information of safety measures and contents of internal and external intervention plans was made in 2005 and needs to be updated to include the new requirements. | Partial transposition of the SEVESO III Directive in legislation of FBiH by (2028) |
| Level of transposition of Regulation (EU) no. 528/2012 on biocidal products | Law on Biocides has not been adopted | Established legislative framework for biocidal product management and high level of transposition of Regulation (EU) no. 528 / 2012 (2025) |
| Level of compliance of the legislative framework with requirements of the Minamata Convention, and level of transposition of Regulation (EU) 2017/852 on mercury | There is no legislative framework for mercury and mercury product management. Transposition of Regulation (EU) 2017/852 on mercury has not started. The Minamata convention has not been ratified, and there is no legal basis for its implementation at the entity level. | Established legislative framework for mercury and mercury product management, and partial transposition of the Regulation (EU) 2017/852 on mercury, and the Minamata Convention by 2024. |
| Level of transposition of EU Directive 87/217/EEC on the prevention and reduction of environmental pollution by asbestos | Lack of legislative framework that would regulate the emissions of asbestos to air and water by the industries producing asbestos cement and asbestos paper, and therefore the level of transposition of EU Directives 87/217/EEC on prevention and reduction of environment pollution by asbestos is low. When transposing the Directive, one should take into consideration the rulebooks prescribing technical characteristics of cement as well as other construction material that may contain asbestos, the implementation of which is under competences of the Federation Ministry of Spatial Planning. | Established legislative framework and partial transposition of the EU Directive 87/217/EEC on prevention and reduction of environment pollution by asbestos by 2024 |
| Level of harmonisation of the legislative framework with requirements of the Montreal Convention, Kigali Amendment and the EU acquis regarding the management of ozone layer depleting substances. | The current draft Law on Air Protection provides legal basis for transposition of the Regulation (EC) no. 1005/2009 on substances that deplete the ozone layer and Regulation (EC) 517/2014 on fluorinated greenhouse gases, and Montreal Protocol and Kigali amendment. Draft Law is currently in the process of adoption. | Harmonise/develop secondary legislation (bylaws) to enable partial transposition of Regulations (EC) no. 1005/2009 on ozone layer depleting substances and Regulation (EC) 517/2014 on fluorinated greenhouse gases, as well as the Kigali amendment by 2023. |
| **Priority 5.2 Establish a sustainable system of chemical management and implementation of EU acquis in the area of chemical safety** | Level of implementation of EU acquis in the area of chemical safety | Secondary legislation (bylaws) in the field of chemical management have not been developed, so the level of implementation of legislation is low. | High Level of implementation of legislation transposing EU acquis and conventions in the area of chemical safety (2026). |
| Level of implementation of the SEVESO III Directive | There is no Registry of Major Accidents that is required under SEVESO III Directive. | High level of implementation of the SEVESO III Directive (2026). |
| Reporting status on the matter of registration of cooling equipment and HVAC equipment services shops in accordance with the EU acquis in the field of ozone depleting substances | There is no established registry of service shops and owners of equipment (operators) of cooling and HVAC equipment.  There is no established plan for training repairers/service providers, as required by the EU acquis  There are no prescribed criteria for establishing training centres for the repairers  No training centres have been appointed for training repairers of HVAC equipment | Established system of reporting on the matter of registration of cooling equipment and HVAC equipment services shops in accordance with the EU acquis in the field of ozone depleting substances (2028). |
| **Priority 5.3 Efficient operation of the Federation of BiH institutions in the field of chemical safety** | Status and adequacy of human and technical capacities of public services in the field of chemical safety. | Capacities of institutions holding responsibility for implementation of legislation regarding chemicals management are extremely low. A legal person has not been formally appointed who would do the poisoning control and who would be competent for implementation of preventative and treatment measures, particularly in emergencies. There is no help-desk to provide assistance to businesses when reporting chemicals as is required under the REACH regulation. | Enhanced human and technical capacities and competences of public services in the area of chemicals safety (2026) |
| Level of cooperation and synergy among the competent institutions in the field of environment and health for the purpose of achieving better implementation of legislation on chemical safety | There is no official system of reporting and coordination among inspection services of the entities and Brcko District of BiH in the area of chemical safety | High level of cooperation and synergy among the competent institutions in the field of environment and health for the purpose of achieving better implementation of legislation on chemical safety (2026) |
| Efficiency and reliability of system for collection of data on poisoning of population due to inadequate handling of chemical and chemical products. | In the yearbooks issued by the Institute for Public Health (PHI) of the Federation of BiH, the incidence of diseases or deaths due to inadequate handling of chemical products is not recorded. However, since 2019, the PHI has had detailed information on poisoning and deaths disaggregated by sex and age group. Although there is a system for collecting and processing data, the procedure for entering data is questionable, i.e. the question is whether all public and private health centres are diligent in reporting the cases of poisoning, since there is no clearly prescribed methodology and instructions for reporting. | Established efficient and reliable methodology for collecting data on people poisoning due to inadequate use of chemicals and chemical products, the outcomes of which will be timely reported in the Health Statistical Yearbook of the Federation of BiH. |
| **Priority 5.4 Reduced incidence of diseases or deaths due to poisoning as a consequence of inadequate handling of chemical products** | Level of information and education of general public and users of chemicals on chemicals management | Educational activities and campaigns on harmful impact of hazardous chemicals are very rare and are not implemented systematically, but separately under individual projects. | High level of information and education of general public and users of chemicals about chemicals management (2030.) |
| **Priority 5.5 Establish a legislative framework and clear institutional competences to transpose EU acquis on environmental noise in legislation of the Federation of BiH** | Level of transposition of EU acquis in the field of environmental noise (Directive 2002/49/EC) | Current Law has not provided for the obligation of development and adoption of the Noise Prevention Plan, although that is required by the Directive. In addition, the Law does not address the need to develop strategic noise maps and action plans that will include the activities of prevention / termination of the sources of noise over a longer period. | Partial transposition of EU acquis in the field of environmental noise (Directive 2002/49/EC (2026) |
| Level of transposition of EU acquis on noise emission by outdoor equipment, in accordance with Directive 2000/14/EC | Transposition has not started | Partial transposition of EU acquis on noise emission by outdoor equipment, in accordance with Directive 2000/14/EC (2031) |
| **Priority 5.6 Enhance strategic planning and monitoring of environmental noise** | Status of development of strategic noise maps for FBiH | Strategic noise maps have not been prepared | Development of strategic noise maps in accordance with EU activities (every 5 years) (2027) |
| Status of development of noise protection action plan for FBiH | Noise protection action plan has not been developed | Development of noise protection action plan (2029) |
| **Priority 5.7 Efficient operation of institutions in the area of environmental noise** | Status and adequacy of human and technical capacities in public services in the field of environmental noise | Poor status of human and technical capacities, considering that the legislation is inadequate and not enforced. | Improved technical and human capacities and competencies in responsible institutions (2028). |
| **Priority 5.8 Reduce the risk to human health from environmental noise** | Level of information of general public on noise and its effects, particularly in the zones of higher levels of noise | There are no mechanisms in place for informing general public on noise and its effects on health; zones exceptionally exposed to noise have not been identified. | High level of information of general public on noise and its effects, particularly in the zones of increased levels of noise (2030) |

* + 1. Description of measures

***Priority 5.1 Improved legislation in the field of chemical safety***

*Measure 5.1.1. Partial transposition of EU regulations and international agreements / conventions in the field of chemical safety*

This measure aims to achieve alignment of FBiH legislation with requirements of international agreements and EU regulations in the field of chemical safety:

* Regulations (EC) no. 1907 / 2006 (REACH),
* (EC) no.1272/2008 (CLP Regulation),
* Regulations (EC) no. 648/2004 on detergents,
* Regulation (EU) no. 649/2012, concerning the export and import of hazardous chemicals and Rotterdam Convention,
* Regulation (EU) 2019/1021 on POPs chemicals and the Stockholm Convention,
* Directive 2004/10/EC relating to the application of the principles of good laboratory practice,
* Regulation (EU) no. 528/2012 concerning the making available on the market and use of biocidal products,
* EU Directive 87/217/EEC on the prevention and reduction of environmental pollution by asbestos,
* Regulation (EU) 2017/852 o mercury, as well as the Minamata Convention.

General areas of intervention:

1. Development and adoption of all secondary legislation (bylaws) as foreseen in the Law on Chemicals. In addition to those stated in Article 58 of the Law on Chemicals, clearly define the conditions for the work of Advisors for chemicals;
2. Formal designation of the Poison Control Centre (PCC) for FBiH or making an agreement on cooperation and reporting with the existing PCC in the region (e.g. VMA - Belgrade, Serbia; Institute for Medical Research and Work Medicine, Zagreb);
3. Develop and adopt the Law on Biocides;
4. Develop and adopt secondary legislation in the area of biocides management
5. Adopt secondary legislation (bylaws) that would ensure prohibition of use of mercury and restrict placement in the market of the products containing mercury or mercury compounds;
6. Adopt secondary legislation (bylaws) that will prohibit production, trade and use of products containing asbestos fibres, and ensure special conditions for labelling the products containing asbestos.

*Measure 5.1.2. Partial transposition of the SEVESO III Directive in legislation of FBiH*

This measure aims to achieve harmonisation of FBiH legislation with requirements of the SEVESO III Directive (2012/18/EU) for the purpose of prevention of major accidents and intervention plans for cases of inadequate handling of chemicals.

General areas of intervention:

1. Development and adoption of regulation that determines the content and method of maintaining the Registry of Major Accidents;
2. Update or development of a new Rulebook on the content of the report on safety status, content of information on safety measures and contents of internal and external intervention plans.

*Measure 5.1.3. Harmonise / develop secondary legislation (bylaws) to enable implementation of the Montreal Protocol, the Kigali Amendment, and EU regulations that facilitates their legal implementation in the EU member countries*

This measure aims to achieve harmonisation of FBiH legislation with requirements of the Montreal Agreement, the Kigali Amendment, and the EU regulations whereby these international agreements are implemented in EU member countries, particularly:

* Regulation (EC) no. 1005/2009 on ozone depleting substances;
* EC 517/2014 on certain fluorinated greenhouse gases.

General areas of intervention:

1. Development and adoption of Rulebook on Ozone Depleting Substances management;
2. Development and adoption of legislation that will allow for training of repair/maintenance providers in accordance with the training programmes aligned with the EU acquis.

***Priority 5.2: Establish a sustainable system of chemical management and implementation of EU acquis in the area of chemical safety***

*Measure 5.2.1. Efficient implementation of legislation partially transposing EU acquis and conventions in the area of chemical safety*

This measure aims to achieve harmonisation of FBiH legislation with requirements of the EU regulations and international agreements as follows:

* Regulations (EC) no. 1907 / 2006 (REACH);
* Regulation (EC) no.1272/2008 (CLP Regulation);
* Regulation (EC) no. 648/2004 on detergents;
* Regulation (EU) no. 649/2012, concerning the export and import of hazardous chemicals and Rotterdam Convention;
* Regulation (EU) 2019/1021 on POPs chemicals and the Stockholm Convention;
* Directive 2004/10/EC relating to the application of the principles of good laboratory practice;
* Regulation (EU) no. 528/2012 concerning the making available on the market and use of biocidal products;
* EU Directive 87/217/EEC on the prevention and reduction of environmental pollution by asbestos;
* Regulation (EU) 2017/852 on mercury, as well as the Minamata Convention.

General areas of intervention:

1. Efficiency in implementation of the Law on Chemicals and regulations based on it (reporting, evaluation, issuing approvals);
2. Efficiency in implementation of the Law on Biocides and regulations based on it (reporting, evaluation, issuing approvals);
3. Establishing the help-desk for helping businesses meet their legal obligation to report the chemicals;
4. Established IT tool for effective maintenance of chemicals inventory and the List of biocides that will allow for statistical processing of data;
5. Establishing inspection oversight in the area of chemical safety.

*Measure 5.2.2. High level of implementation of the SEVESO III Directive*

This measure aims to achieve effective implementation of legislation transposing the Seveso III Directive and better protection of population against major accidents caused by inadequate storing, handling or use of chemicals, as well as protection of human and environment health.

General areas of intervention:

1. Development of the Major Incidents Registry;
2. Reporting hazardous substances, storage conditions, and other information required by legislation that implements the SEVESO III.

*Measure 5.2.3. Established systems of reporting on the matter of registration of cooling equipment and HVAC equipment services shops in accordance with the EU acquis regarding the ozone depleting substances, and training of the HVAC equipment repairers*

This measure aims to achieve high level of reporting on the matter of registration of cooling equipment and HVAC equipment service shops in accordance with the EU acquis regulating the ozone depleting substances.

General areas of intervention:

1. Achieved technical conditions for existence and entry of data into the data base regarding the service shops for cooling and HVAC equipment;
2. Completed registration of at least 30% operators/owners of the HVAC devices and 100% of the service/repair shops;
3. Development of training plan and programme (curriculum) for training repairers of cooling and HVAC equipment.

***Priority 5.3: Efficient operation of the Federation of BiH institutions in the field of chemical safety***

*Measure 5.3.1. Enhance human and technical capacities and competences of public services in the area of chemicals safety*

This measure aims to achieve strengthening of human and technical capacities of institutions competent for effective implementation of legislation in the field of chemical safety.

General areas of intervention:

1. Analysing capacities of public officials in competent institutions once the legislation foreseen in this Plan were adopted;
2. Hiring and training new people in public offices in the field of chemical safety, and procure equipment, in accordance with the requirements of the new regulations and the analysis previously made;
3. Developing plan and programme of annual training of public officials in the area of chemical safety and continuous provision of the training.

Conduct analysis of human and technical capacities and financial needs for establishment of the Poison Control Centre of FBiH, and making decision on selecting / designating legal persons responsible for poison control.

*Measure 5.3.2. Improved coordination, collaboration and synergy among the competent institutions in the field of environment and health*

This measure aims to improve coordination, cooperation and synergy of institutions competent for effective implementation of legislation in the field of chemical safety.

General areas of intervention:

1. Establishing a team/mechanism for cooperation between the Administration for Inspections of the Republika Srpska and the Inspectorate of the Federation of BiH, as well as the Inspectorate of Brcko District in the field of chemical safety;
2. Participation of the Federation Ministry of Health and PCC in a meeting (once a year) organized by the MCA BiH for the purpose of sharing experiences and planning future activities related to prevention, combating, treatment and reporting cases of poisoning to institutions in BiH and to the World Health Organization;
3. Establishing an IT team that will connect and manage data bases that exist with the competent ministries for management of chemicals.

*Measure 5.3.3 Improved system of recording the cases of disease or death from consequences of poisoning due to inadequate handling of chemical products*

This measure aims to improve the method of registration of the people who got ill or died due to inadequate handling of chemicals and chemical products.

General areas of intervention:

1. Established new methodology for collecting routine statistics in the Institute for Public Health of the Federation of BiH, which includes data on morbidity due to poisoning as a consequence of inadequate handling of chemical products, disaggregated by sex and age groups;
2. Established and publicly available statistical yearbook of the Federation Institute for Public Health, which includes data on deaths due to poisoning as a consequence of inadequate handling of chemical products, disaggregated by sex and age groups.

***Priority 5.4 Reduced incidence of diseases or deaths due to poisoning as a consequence of inadequate handling of chemical products***

*Measure 5.4.1. Raising public awareness on the risks posed by use of chemicals*

This measure improves level of information and knowledge of the users on harmful effects of chemicals, and requirements that stem from the adopted legislation in the field of chemical safety.

General areas of intervention:

1. Continuous implementation of promotional and educational activities in the field of chemical management by competent institutions (FHMI, FMET), taking into consideration aspects of gender equality, social equity and poverty, as well as environmental impacts;
2. Recognizing chemical safety in the framework of existing public calls for raising public awareness, research and education in the field of environment, which are issued by the Environmental Protection Fund of the Federation of BiH;
3. Harmonizing continuous training of the advisors for chemicals with the data of the Federation Administration for Inspections in the field of health inspection on most common irregularities in the field and with the data from the FMoH, PCC, and with the issues of gender equality, social equity and poverty in chemical safety;
4. Preparation and implementation of a joint campaign by the competent entity ministries and inspectorate of Brcko District of BiH in the field of health on the risks posed by use of chemicals, for the purpose of protecting human health, and taking into consideration aspects of gender equality, social equity and poverty, and environment;
5. Organization and implementation of training of repairers of HVAC equipment and issuing certificates.

***Priority 5.5: Establish a legislative framework and clear institutional competences to transpose EU acquis on environmental noise in legislation of the Federation of BiH***

*Measure 5.5.1. Established legislative framework and institutional competences on noise evaluation and management, noise emission by outdoor equipment, in accordance with requirements of Directive 2002/49/EC and 2000/14/EC*

This measure aims to achieve partial transposition of EU directives and establishment of institutional framework in the area of managing protection against noise.

General areas of intervention:

1. Updating current Law on Noise Protection, including clear definition of institutional competences;
2. Developing secondary legislation (bylaws) that follow from the Law on Noise, to regulate development of strategic noise maps and noise protection action plans, in accordance with requirements of the Directive 2002/49/EC;
3. Defining by law or bylaws clear institutional competences and obligations regarding noise emission by outdoor equipment.

***Priority 5.6: Enhance strategic planning and monitoring of environmental noise***

*Measure 5.6.1. Developing strategic noise maps an action plan for noise protection*

This measure aims to achieve implementation of legislation in the field of noise management and protection against noise.

General areas of intervention:

1. Analysis of road, railway and airport traffic in the Federation of BiH for the purpose of identifying “major roads”, “major railways” and “major airport” in accordance with recommendations from Directive 2002/49/EC;
2. Development of noise maps for previously defined “inhabited areas”, “major roads”, “main railways”, and “major airports” by using the prescribed models;
3. Estimating number of people exposed to noise, by classes of noise and age groups;
4. Developing noise management action plan for five-year period;
5. Establishing a noise monitoring system, to verify the noise established in the forecasting model at selected places, and to verify the success of implementation of measures from the action plan.

***Priority 5.7: Efficient operation of institutions in the area of environmental noise***

*Measure 5.7.1. Improve capacities and skills of public officials in the area of noise management*

This measure aims to achieve enhanced technical and human capacities of the competent authorities in the field of noise management.

General areas of intervention:

1. Analyse capacities of public servants in competent institutions once the legislation foreseen in this Plan were adopted;
2. Hire and train new people in public services (Federation, Cantonal) in the field of environmental noise, in accordance with the requirements of the new regulations and the analysis previously made;
3. Develop plan and programme of annual training of public officials in the area of environmental noise, and implement the first training by 2024;
4. Implement a pilot project of strategic noise mapping in some of the cities or parts of the cities, as well as along some of the main communications for the purpose of acquiring skills and technical competencies, and determining the baseline parameters;
5. Upgrade the existing information system of the Environmental Protection Fund of the Federation of BiH to enable development and presentation of strategic noise maps in the Federation of BiH
6. Establish inspection oversight in the area of environmental noise.

***Priority 5.8: Reduce the risk to human health from environmental noise***

*Measure 5.8.1. Improve level of information and knowledge of general public regarding negative impact of noise and their role in decision-making process*

This measure aims to achieve improved level of information and knowledge among population on harmful impact of noise on human health, and on the requirements that stem from the adopted legislation in the area of noise protection.

General areas of intervention:

1. Establishment of a single information system that will, in addition to the graphic (GIS based) presentation of noise maps, also include data on the noise exposure of the population, by specific classes and age groups of population;
2. Implementation, by competent institutions, of at least one campaign in five years regarding harmful effect of noise on health of population (taking into consideration aspects of gender equality, social equity and poverty) and environment, and the role of the public in decision-making process;
3. Make general assessment of impact of noise on people’s health (taking into consideration aspects of gender equality, social equity and poverty) in zones exposed to noise;
4. Recognize environmental noise within the scope of public calls for raising public awareness, research and educational activities in the field of environment, which is issued by the Environmental Protection Fund of FBiH;
5. Implementation of continuous promotional and educational activities at the level of health institutions regarding the risks related to the health risks of noise, as well as preventative measures that can be used;
6. Setting up displays along the roads in major cities showing the level of noise in real time.
   1. Indicative Financial Framework

Thematic area Chemical Safety and Noise makes up 0.2% of the funding structure, or 7.6 million BAM, of the total estimated cost of the Strategy, which is 11.9 billion BAM. This thematic area is made of eight priorities and 14 measures. In the process of developing the indicative financial framework, all the measures of this thematic area have been estimated. Three top priorities in this thematic area are 5.3 (Efficient operation of institutions of the Federation of BiH in the field of chemical safety) with 30%; and 5.7 (Efficient operation of institutions in the field of environmental noise) with 18%. Total amount of funds needed to achieve these three priorities is 5.1 million BAM. The five remaining priorities in the thematic area Chemical Safety and Noise make 33% or 2.5 million BAM.

A detailed presentation of the data from estimated indicative financial framework for thematic area Chemical Safety and Nose, as well as generally for the level of the Federation of BiH, can be found in Annex 9, which includes a table and pie chart.

1. SUSTAINABLE RESOURCE MANAGEMENT
   1. Situation analysis

Even though the Federation of BiH is rich in natural resources, unsustainable management may lead to their depletion. Aiming to later identify strategic and thematic objectives, as well as appropriate measures, here we describe the **baseline status** in the field of sustainable resource management in the Federation of BiH.

According to the data from the Information on Forest Management in the Federation of BiH for 2020, forests and forest land cover the area of around 1,510,937.5 ha, of which state owned forests cover the area of 1,233,807.5 ha or 82%, and privately or owned by other legal persons are on around 277,130.0 ha or 18%. In the state owned forests and forest land, there are 493,479.1 ha, or 40% of high forests with natural regeneration, 14,898.8 ha, or 1% of high degraded forests, 60,517.5 ha, or about 5% of forest plantations - cultures, 257,879.6 ha, or 21% of coppice forests, 17,809.3 ha, or 1.4 % of overgrown non-productive area, 159,913.5 ha or 13% of productive barren land suitable for afforestation. Sources of statistical data on forest resources include two central elements: statistical data on the basis of data on users of state owned forests and the Institute for Statistics and National inventory of forests. Forestry statistics analyses and publishes data on the most important developments in forestry. Forestry statistics includes 8 surveys in total, statistical periods are month or year. Data collected on monthly level include the data on production (logging), sale, stocks and value of forest wood products from state owned forests. Data collected on annual level include the data on total logged wood mass for state owned and private forests, on growing and cultivating forests for state-owned and privately owned forests, on damages in state owned and privately owned forests, on fires in state and privately owned forests and data on roads, means of transport and mechanisation for majority state owned forest companies. Reporting units for this survey are the business entities registered in the field of forestry who manage the forests, and competent administrative authorities who manage privately owned forests. The most recent officially published NFI data are from the period 1964‒ 1968. The second national forest inventory has been conducted between 2006 and 2009; however, its official results and data have not been published to date (FAO, 2015a). Activities on the implementation of the forestry information system have commenced in the Federation of BiH (UNEP, 2018).

In addition to production of timber, forests in the Federation of BiH also provide a range of other products (mushrooms, aromatic and medicinal plants, forest fruits, etc.) that had been relatively underused in the past. In spite of their abundance and undeniable social, economic and ecological qualities, these products have not been adequately valued so far, and they have not been managed sustainably. Forestry as a profession should include stronger promotion of the multi-functional character of resources that they are managing, and use all such products in a sustainable way. Commercial use of aromatic, edible or medicinal plants, forest fruits and mushrooms may provide important contribution to financing sustainable forest management. At present time, most of the plants and mushrooms are picked for personal, and only rarely for commercial use. The market should encourage and promote a more intensive and sustainable use of aromatic, edible and medicinal plants, forest fruits and mushrooms because of their potential in terms of development of rural areas. In addition, the use of non-timber forest products and services opens up the opportunity to develop small and medium size entrepreneurship.

Forests of the Federation of BiH are also rich in hunting game, and several of the species that can be found here are on the Red List of the Federation of BiH fauna. The wild goat is considered endangered species; wolf and lynx are considered rare species, and Bosnian brown bear is considered endangered and rare species. With respect to level of protection, hunting of certain species is completely forbidden, while for others there is a period of closure. According to the data from the Fourth Amended and Revised Systematic Review of Birds in BiH (Kotrosan & Drocic, 2012), there are 338 bird species in BiH, of which number 230 have been registered as nesting birds, and around 20 species stopped nesting in BiH in the last hundred years (Kotrosan & Papes, 2007). The Red List of the Federation of BiH (“Official Gazette of the Federation of BiH”, 7/14) contains 198 nesting birds and 62 bird species - migratory, wintering or nesting birds. In the Law on Hunting of the Federation of BiH, the “wild game” category includes 119 species of birds (Article 13). Wood grouse, eagle owl, and short-toed snake eagle are considered species at risk, and it is prohibited to hunt them.

Out of total area of FBiH, 1,335,878 ha is forest land, and 1,183,015 ha is agricultural land (Institute for Statistics of the Federation of BiH, 2019b). In the structure of agricultural land of the Federation of BiH, arable land is 60.00 %, while pastures, fisheries, reeds, and ponds make 40,0%. Around 45% of agricultural land is on hilly terrain (300-700 mamsl). In the Federation of BiH, over 80% of areas have inclination over 130. 35% of agricultural land is located in mountainous areas (above 700 mamsl). Areas of the best categories (I-III) are rare, and make only 14%.

Data on fish stocks presented in the BiH Biodiversity Strategy and Action Plan (2015‒ 2022) show that freshwaters in BiH are inhabited by a total of 113 species and subspecies of fresh-water fish (*Osteicthyes*) and 5 species of *Agnatha* from 70 genera and 27 families. Out of the mentioned number of species, 105 (89%) are autochthonous, while 13 (11%) of them are introduced species, half of which show invasive character. Endemic species play a very important role in the ichthyofauna of BiH, and many of them have a very narrow natural range. So far, 40 endemic species have been registered, of which 35 are common in the Adriatic watershed. As for marine ichthyofauna, BiH also has an abundant biodiversity of species; it is believed that 193 species of fish from 111 genera and 55 families found their home in a part of the Neum‒ Klek bay. About 50 freshwater fish (about 43% of the total freshwater ichthyofauna), both native and introduced, have been identified as commercially important and important for sports, of which a majority are attractive for sport fishing enthusiasts, while only a minor number of these species have commercial importance (about 10). The most important species in terms of commercial fishing are: carp, catfish, zander, pike, bream, ide, pigo and prussian carp. Data on fresh water fish farming show that the farming capacities have continuously declined over the past 10 years; trout farming went down from 20900 t/year in 2010 to 1722 tons in 2019.

According to the data from Strategy for Development of Construction Materials Industry of the Federation of BiH for the period 2016-2025 (FMEMI and Chamber of Commerce of the Federation of BiH, 2018), Federation of BiH has 38 different non-metallic mineral resources, 19 or 50% of which have been registered as occurring, while the remaining 50% were explored and open for exploitation (220 deposit sites). At present time, a total of 16 different industrial mineral resources have been geologically explored (and most are being exploited), and 11 different mineral resources are used as technical and construction stone. According to the data from Environmental Status Report from 2012, Federation of BiH has significant deposits of metallic mineral resources (lead, zinc, barite, manganese, iron), but their exploitation has stopped. Metallic ore mines, most of them destroyed in the war, were not attractive for national or foreign investors, so most of them are currently out of use. Many have not been properly closed; a list or inventory of deserted mines needs to be prepared in order to identify hot zones, threats for environment and risks, as well as the set of priorities for rehabilitation. According to the document "Strategic plan and programme of development of energy sector in the Federation of BiH" from 2009, Federation of BiH has total balance reserves of coal of 1,946.8 million tons, mostly lignite - 1,051.9 million tons. Future of coal exploitation is directly linked to generation of energy and strategy of energy sector (Framework Energy Strategy of the Federation of BiH until 2035) (Federation Ministry of Energy, Mining and Industry, 2018), that includes significant increase of the share of power generated from renewable sources.

Federation of BiH is faced with numerous **challenges** in the field of resources management that may be classified into the following sub-thematic units: a) forests, (b) wild game, (c) medicinal, edible and aromatic plants, and non-timber forest products, (d) land, (c) fish stocks, (f) mineral resources.

*Forests*

Law on Forests (“Official Gazette of the Federation of BiH”, 20/02, 29/03, and 37/04, 2002), had been in force until 27 November 2009, when it was repealed by the Constitutional Court of BiH in their Ruling number U-26/08 of 14 April 2009. Since then until now, this area has remained unregulated. Government of the Federation of BiH, at their 110th session held on 7 July 2017, after having considered the Draft Law on Forests, endorsed and submitted to parliamentary procedure the Proposal of the Law on Forests. This proposal has not been considered by any of the houses of the Parliament of the Federation of BiH. In the meantime, as a consequence of non-adoption of the Federation legislation in the area of forestry, nine cantons adopted their own legislation in this area. Adoption of the cantonal laws on forests deprived the Federation of BiH from their competences enshrined by the Constitution of the Federation of BiH, and it has also resulted with different solutions for managing and using forests, matters of ownership, as well as allocation of funding for use, protection and improvement of forests. At the 111th session that was held on 13 July 2017, Government of the Federation of BiH accepted the General part of the Forestry Programme of the Federation of BiH (which defines the long-term policy and strategy of development of forestry and hunting) and submitted it to the Parliament of the Federation of BiH for adoption. Adoption of the Forestry Programme of the Federation of BiH has been postponed until the adoption of the Law on Forests.

The obligation to manage the forests based on the principles of durability, poly-functionality and cost-effectiveness, and on establishment of forest management areas, is currently not prescribed in law at the level of the Federation of BiH due to the inexistence of the Law on Forests.

The objectives of the management are only declaratively in compliance with up-to-date principles of forest management, but they lack defined indicators and established monitoring regime for their routine monitoring aimed at verifying whether actual management processes are in compliance with the above mentioned principles, and this is not in accordance with the current processes on pan-European level (“*Forest Europe*”).

The Forest Management Plan is the main planning framework for managing forests on the principles of lasting production and income generation, while at the same preserving and improving biodiversity and other generally useful functions of forests. Forest management plans for state-owned forests are adopted for the period of ten years, and they include: introductory part containing reasons for adoption and list of all cadastre parcels by cadastre municipalities that are part of the forest management area; status of forests at the time of development; analysis and evaluation of management practices to date; plans for managing and developing forests in accordance with classification of forests and forest lands for the next management period; quantity and dynamics of cutting by wood species in the overall structure of wood and wood products; scope and kind of forest farming works and works aimed at protection of forests; areas designated for biological reproduction of forests; measures for maintaining and improving biodiversity and other ecological and social functions of forests; investments in construction of forest roads, demining and other investments; us of secondary forest products and economic and financial analysis of forest management in the next managing period. This is prescribed in the Decision on development, content and implementation of forest management plans (“Official Gazette of the Federation of BiH”, 41/2021).

In highly degraded forests, their structure and quality have been undermined, and this reflects on their stability. Adverse anthropogenic effects are manifested in the failure to implement activities identified in forest management plans and result in further development of typically degraded high forests, which are most commonly thinned, overgrown with weeds, without natural regrowth, with trees damaged with pathogens and tree trunks which remain there after tree cutting and which are technically useless. A high share of coppice forests in the total forest stocks of the Federation of BiH demonstrates the importance of implementation of management measures aimed at improving their use, from the aspect of increased productivity and improvement of other generally beneficial functions (Forestry Programme of the Federation of BiH).

The size of the area of forest barren land which is suitable for afforestation is substantial, and this suggests that it is urgent to implement melioration interventions with the view of preparing them for silviculture activities. Afforestation is inadequate, and this is a consequence of unplanned approach to silviculture activities, and excessive dependence on available funds.

According to Forest Status Report from 2020, a lot of damage was made by the pest *Euproctis chrysorrhoea -* brown tail moth*,* which is always present in oak forests. Since this pest has attacked large area of approximately 8,000.00 ha, and that the intensity of the attack is very high, it is expected that impact of this pest will continue in the coming years, and that the area under attack would expand significantly. Another dangerous pest - chestnut gall wasp (*Dryocosmus kuriphilus*) appeared in the forests of the Federation of BiH in 2014, while a broader attack was noticed in spring 2015, as well as in 2016 in chestnut forests in Una-Sana canton. In terms of protection of forests against plant diseases and other pathogens threatening forests and forest complexes, the status has been continuously monitored for the purpose of noticing and identifying appearance of plant diseases and reporting to competent forest companies on the appearance of plant diseases and locations where they appear.

Most of the measures are aimed at protection of coniferous stands against attacks by bark beetle, and these measures are implemented by cantonal forest companies.

According to the data of the Federation Ministry of Agriculture, Water Management and Forestry, in the period 2015 -2019, there were 1,765 fires in the Federation of BiH, and the total fire-affected area was 43,753 ha, or 3.54% of total area of state owned forests in the Federation of BiH. The areas exposed to highest risk of fires in BiH are the areas in Herzegovina-Neretva Canton, and Canton 10. In the same period (2015‒ 2019), estimated direct economic losses amounted to 29,482,151 BAM, or 13,40 BAM per capita in the Federation of BiH. Indirect fire damage to forest ecosystems is far (ten times) greater than the direct one. Forests of the Federation of BiH are not passable enough to allow quick access to the location of fire, forest management companies are not equipped to observe and detect fires early, nor for quick access and extinguishing the fire. Rehabilitation of fire-affected areas is not done in the stipulated time, which was two years according to the former legislation.

Problems of forest ecosystems in karst areas are seen, in particular, as manifesting in continued degradation, reduction of areas under forest and exposure of forest ecosystems to biotic and abiotic factors in the situation of changing climate. The funding system for forestry in karst areas is a special problem. Almost as a rule, income from timber and non-timber products that forestry companies which operate in karst areas earn is not sufficient to cover the minimum management costs.

The current accessibility of forests in the Federation of BiH is far below European standards. Analyses show that mainly high forests have been made accessible and their accessibility is below the minimum requirement (15 m/ha). The accessibility of other categories of forests is far below the minimum and is a primary constraint for the implementation of any meaningful planning measures in forest resources management.

Planning, designing, building and maintenance of the forest transport infrastructure (FTI) are issues regulated by the forestry legislation, and given that the Law on Forests of the Federation of BiH (“Official Gazette of the Federation of BiH“, 20/02, 29/03, and 37/04, 2002) was repealed, there is no legislative framework at the level of the Federation of BiH at present time that would regulate the issues related to the forest transport infrastructure.

While at the international level this matter is regulated by international agreements and resolutions, Federation of BiH does not have any regulations or decisions to define in more detail the cross-sectoral harmonisation between the forest and water sectors, or to stipulate measures aimed at enhancing harmonisation between forest and water management.

The forestry sector does not have structured data on protective forests, such as forests on steep grounds and on land prone to erosion, torrents, landslides, or forests for protection of settlements, commercial and other facilities. This practically means that Federation of BiH has not identified forest areas of special importance for protection against floods and land erosion, and that as a consequence, the forest management plans in the Federation of BiH do not provide for any restrictions in the management of flooded forests or forests that help prevent soil erosion. Forest management plans and water basin management plans are not mutually aligned, although this has been envisaged. Neither the applicable water nor forestry legislation explicitly refer to any fees that users of water in the forestry sector are required to pay in the Federation of BiH.

The competent institutions have responded with a delay and inadequately to their tasks and accepted commitments, as defined in documents of the Ministerial Conference on Protection of Forests in Europe (MCPFE) with reference to active measures that should be taken to combat climate change. This includes: provision of funds for research of various aspects of sustained forest resources management, implementation of extended forest reproduction projects (conversion of the existing low-productive forests into high forests, afforestation of barren land, etc.) as well as use of forest biomass as a renewable energy source. Capacities of scientific and research institutions that do monitoring and assessment of climate change impacts, or generally study the role and importance of forests in the fight against climate change in the Federation of BiH, are rather modest. As a consequence, the institutions and researchers from Federation of BiH are not competitive in the framework of international scientific and research community, and they cannot win projects for these purposes.

*Hunting game*

During the time after 1995, the previously existing borders of hunting grounds in BiH have changed, and the hunting grounds were thus degraded as natural units. In accordance with the administrative and political organisation, hunting is regulated by entity laws. The laws do provide for the possibility of establishing special hunting grounds, but due to the entity and cantonal borders, some special hunting grounds have lost their territorial continuity and natural integrity.

Current status of game population in the Federation of BiH is not satisfactory as a consequence of non-principled and incomplete positioning of the state towards the issue of ownership of the game, unresolved property issues related to the right to manage the hunting game, and the right of ownership of the areas where the hunting game lives, as well as inappropriate definition of hunting as an economic activity and hunting as a way to satisfy specific social functions of the society.

Managing hunting grounds in the Federation of BiH has been entrusted to the forest management companies and hunting associations. The Federation Law on Hunting of 2006 has not been fully implemented, and because of that the legal aspect of managing hunting grounds is questionable.

Lack of political will to start the process of signing international agreements resulted with BiH signing a number of conventions important for development of hunting (Bern and CITES), within which it has failed to make appropriate exceptions for different game species, although it had had the option to do so in the ratification process. Further, harmonization of processes with the EU Directives has not been achieved: Directive on the conservation of natural habitats and of wild fauna and flora (Directive 92/43/EC), Directive on protection of wild fauna and flora species and their trade (Directive 387/97/EC, Directive on protection of wild birds (Directive 79/409/EEC).

Implementation of the Federation Law on Hunting of 2006 was met by a series of mutually inter-dependant problems which have restricted its full implementation. This, first of all, applies to lack of consistency and harmonisation of certain articles of the Law with the bylaws, and non-implementation of categorisation, establishment and legal assignment of the hunting grounds.

Several years long delay in implementation of legal and economic measures necessary for fully operational sector of hunting resulted with the currently inexistent continuity in determining and monitoring of the status of wild game. In addition, there is no adequate planning in hunting, and there is no effective system of legal and physical protection of hunting game and grounds.

There are no Federation or cantonal data bases in this sector. Work of the Federation of BiH and cantonal hunting inspections is limited and ineffective.

Development of hunting tourism has been stalled for years, resulting with inexistence of a unified model of offer and limited investments due to unresolved legal status of users of hunting grounds. Controlled rearing of game has been in significant recession and is done only spontaneously, without long-term planning objectives.

System of education in hunting is inadequate, and provides insufficient practical knowledge from education, insufficient understanding of legislation on hunting, organisation, planning and commercial management, as well as limited use of information technology and insufficient knowledge of foreign languages. There is no established system of professional development and licensing for hunters, in accordance with needs and directions of development of hunting.

*Medicinal, edible and aromatic plants and non-timber forest products*

Relevant strategic legal framework that addresses the issue of other forest and forest land products in the Federation of BiH either does not exist or is inadequate, and thus fails to provide economic benefit for the owner, local community, and the forest users.

Although this area is regulated by bylaws adopted on the basis of cantonal laws on forests, no adequate system of managing, monitoring status and controlling collection and trade with non-timber forest products exists. There is no adequate system for issuing permits and collecting fees for non-timber forest products (licensing). Therefore, there is no transparency in collection or trade with medicinal plants and non-timber forest products, so documentation traceability is not possible. The pickers do not have the required knowledge (inadequate certification system).

In most cases, forest owners or users do not have any commercial benefit from non-timber forest products. Current legislation does not provide commercial benefit to local population. There are no associations of pickers of non-timber forest products nor registry of pickers, resulting with the problems when identifying premiums and other incentives for the pickers. There are no developed centralized and institutionalized marketing activities, with merchants and processors implementing their independent marketing activities. Market for non-timber forest products is not organised, and this has reflections in the form of appearance of “black market” and illegal trade with protected and endangered species. Most of the export is of raw material, while final products are imported. Federation of BiH does not have its own certification scheme, while internationally recognised schemes for certification of non-timber forest products are not in use.

*Land*

Level of land pollution is not systematically monitored in the Federation of BiH. The Federation Institute for Agropedology, Sarajevo, had conducted land monitoring over the period 2008-2011 in the Federation of BiH covering 260 points where each point is at 10 km distance from the other. It was found that of total number of 260 locations, 26 or 10% of examined areas show a content of heavy metals, such as lead (Pb), cadmium (Cd), zinc (Zn), copper (Cu) nickel (Ni), chrome (Cr), cobalt (Co), manganese (Mn) that exceeded the limits and thus may be considered polluted areas. Additional exploration showed that a significant share of his pollution was of lithological origin.

Additional explorations were conducted in 2012 on 26 locations with the aim of determining the causes of soil contamination with heavy metals in parent substrate: lead (Pb), cadmium (Cd), zinc (Zn), copper (Cu) nickel (Ni), chrome (Cr), cobalt (Co), manganese (Mn). In these 26 locations, pedological profiles of soil were opened and samples taken from different horizons or profile layers. Analyses of samples from the parent substrate showed a link between increased values of heavy metals in the land (surface layer of the soil) and their presence in the rocks (main substrate).

The following map shows locations in the Federation of BiH by municipalities where this exploration was done at micro-locations to identify content of organic and inorganic pollutants in agricultural soil according to the Federation Institute for Agropedology (FIfAP).

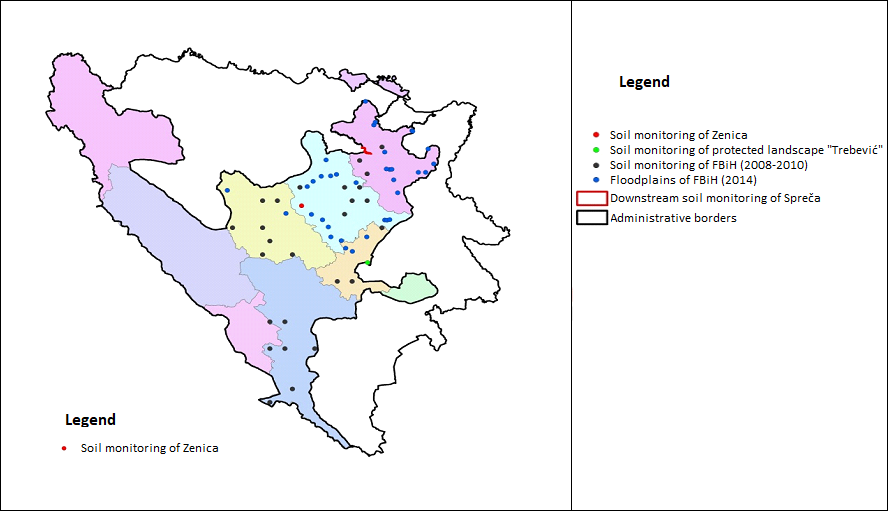


Figure 13: Micro locations in FBiH with registered higher values of organic and inorganic polluters in soil

In municipality Zenica, the Federation Institute for Agropedology (FIfAP) has been conducting monitoring on 12 locations every three years. The results showed above-the-limit values of certain heavy metals at the following locations: Tetovo and Pehare (Pb, Cd, Ni, Mn, Zn); Stranjani (Cd, Ni, Mn); Janjica Vrh (Ni, Fe); Serici (Mg); Orahovica (Cu, Ni, Co, Mn); Gradisce (Pb ,Cd, Zn, Ni); Arnauti (Ni, Cr); Brce (Ni, Mn); Gornji Cajdras (Ni); Novo Selo (Ni, Cr, Mn).

Special explorations at 26 locations were conducted in 2012 with the aim of determining the causes of soil contamination with heavy metals in main substrate: lead (Pb), cadmium (Cd), zinc (Zn), copper (Cu) nickel (Ni), chrome (Cr), cobalt (Co), manganese (Mn). In municipality Srebrenik, settlement Tinja, excessive values of Cd, Ni, Cr and Mn were found. Additional exploration showed that Cd and Ni came from the parent substrate, while Cr and Mn were of anthropogenic origin. In municipality Lukavac, location of Donja Brijesnica, registered were increased values of Cd, Ni, Cr, Co and Mn originating from the parent substrate. In municipality Banovici, settlement Trstenica, excessive values of Cd, Ni, Cr, Co and Mn were found. It was established that Cd, Ni and Cr came from the parent substrate, while Co and Mn were of anthropogenic origin. In municipality Zenica, location of Topcic Polje, excessive values of Cu, Pb, Cd, Zn, Ni and Mn were recorded. Additional exploration established that Pb, Cd, Zn and Mn originated from the parent substrate, while Cu was of anthropogenic origin.

In municipality Zavidovici, location of Kamenica, registered were increased values of Ni, Cr, Co and Mn originating from the parent substrate. In municipality Travnik, settlements Djelilovac and Malin, excessive values of Cu, Pb, Cd, Ni, and Mn were found. It was established that Pb and Cd came from the parent substrate, while Cu, Ni and Mn were of anthropogenic origin. In municipality Olovo, location of Careva Cuprija I and II, registered were increased values of Cd, Ni, Cr, Co and Mn originating from the parent substrate. In Donji Dolovi, excessive values of heavy metals Pb, Cd and Mn of anthropogenic origin were found. In municipality Vares, settlement Dragovici, excessive values of Pb, Cd, Zn and Mn were found. It was established that Pb, Cd, and Zn came from the parent substrate, while Mn was of anthropogenic origin. In municipality Donji Vakuf, location Prusac I, excessive values of Cu, Pb, Cd, Zn and Ni were found. Additional exploration showed that, and Pb, Zn and Ni came from the parent substrate, while Cu was of anthropogenic origin. In municipality Bugojno, location of Potocani, excessive values of Cu, Cd and Ni were found, with Cd and Ni originating from the parent substrate, while Cu being of anthropogenic origin. In municipality Gornji Vakuf-Uskoplje, locations of Bistrica, Uzricje and Prnjavor, registered were increased values of Cu, Cd, Zn and Ni originating from the parent substrate. Except at the location of Uzricje, Ni and Mn were of anthropogenic origin. In municipality Hadzici, location of Dub, registered were increased values of Pb, Cd, Ni and Mn originating from the parent substrate. In municipality Trnovo, settlement Presjenica, excessive values of Pb, Cd, Zn, Ni and Mn were found. It was established that Pb, Cd and Ni came from the parent substrate, while Cr and Mn were of anthropogenic origin. In city of Mostar, locations of Bogodol, Goranci, Kokarine and Selista excessive values of Pb, Cd, Ni, and Mn were found. It was established that Pb and Cd came from the parent substrate while Ni and Mn were of anthropogenic origin. In municipality Citluk, location of Calici, excessive values of Cu, Cd, Zn, Ni and Mn were found. Additional exploration established that Cd, Ni and Mn originated from the parent substrate, while Cu was of anthropogenic origin. In municipality Neum, settlement Donje Hrasno and Neum, excessive values of Cd, Ni, Cr and Mn were found. It was established that Cd and Ni came from the parent substrate, while Cr and Mn were of anthropogenic origin.

Areas in the Federation of BiH affected by 2014 floods. The FIoAP has conducted explorations at all flooded areas along rivers. Significantly increased values of organic and inorganic pollutants were recorded along the rivers of Vrbas, Bosna, Miljacka, Spreca, Usora, and additional research has not yet been don. The FIaAP has been conducting monitoring in the lower course of the Spreca river (Lukavac, Gracanica and Doboj East) since 2014 at eight (8) locations. Soil samples from agricultural soil are taken twice every year. Organic and inorganic pollutants (PAH, Cd, Cr, Hg and Ni) were registered in Dobosnica, Miricina and Orahovica.

In the area of Mt. Trebevic, which is under protection, in municipality Stari Grad, Sarajevo, FIfAP has been doing monitoring every year, and registered increased values of arsenic (As).

A study conducted in 2005 under the EU FP6 research project called *Assessment of the selected POPs in the atmosphere and water ecosystems from the waste materials generated by warfare in area of former Yugoslavia* (*APOPSBAL Project*), included analyses of land and river sediments in former Yugoslav countries. The reason for this study was the suspected pollution with PCB due to large number of transformation and relay stations damaged in war. The tests also showed high concentrations of PCBs in the soil and in the river sediments in the Federation of BiH, with the area of Tuzla being especially affected.

Authors: Markovic MM and Lukac Z. (2009) in their paper titled “*Causes of soil damages in Bosnia and Herzegovina and soil protection measures*” state that land destruction may be a consequence of several factors, including surface exploitation of ores, landfills, construction of settlements and infrastructure, industrial zones, accumulation of water or erosion or landslides. It is estimated that every year, due to surface exploitation, around 900 ha are destroyed, while additional 600 ha are destroyed by construction of settlements. Destruction resulting from other activities is estimated at 300 ha/annum. Around 20,000 ha are covered by various waste materials, creating technogenic deserts. Despite all efforts to complete demining, the problem of land mines at agricultural and forest land is still present. There is a lot of forest cutting that contributes to erosion processes.

All over Federation of BiH, agricultural land has been permanently lost to non-agricultural purposes. Annually, around 3,000 ha of mainly the most productive arable land, is permanently lost.

*Fish stock*

Main pressures on diversity of marine and freshwater resources, which are mostly used for exploitation of fish, according to the Biodiversity Strategy (2015‒ 2022) include:

* Extensive and uncontrolled fishing;
* Illegal fishing (poaching);
* Use of illicit tools (means) for fishing;
* Inadequate restocking;
* Lack of or outdated fishing plans (strategic documents - programmes for improvement of fish stocks);
* Absence of regular monitoring of fish resources;
* Non-implementation of the applicable legal provisions in the area of freshwater fishing.

The Strategy identifies as the most endangered species in freshwater ecosystem the sturgeon and salmonid fish species. Predominant factors that have adverse impact on the first group of fish include:

* Construction of barriers on water courses which prevent fish reproduction (except for sturgeon, other species of fish are anadromous and migrate to freshwater for spawning);
* Huge pressure from fishermen (these are economically highly valuable fishes, both for their meet and spawn);

Federation of BiH has not yet established the information system on fisheries. As a part of the Common Fisheries Policy of EU, member countries are obliged to gather biological, ecological, technical and socio-economic data needed for managing the fishing, manage such data, and make them available to the end user (Article 25, Regulation (EU) No 1380/2013 *of the European Parliament and of the Council of 11 December* 2013). The rules of collecting and using such data at the level of European Union are prescribed under Regulation (EU) No. 2017/1004.

Regarding further development off fisheries, the development strategy will soon expire. The Mid-term Strategy for Development of Agricultural Sector in the Federation of BiH was adopted for the period 2015-2019, and extended by Conclusion of the Federation of BiH Government until the end of 2021.

*Mineral resources*

Federation of BiH does not use a comprehensive approach to mineral resources management. Use of mineral resources is addressed in strategies for different sectors (construction materials, energy). There is no Strategy for managing mineral resources in the Federation of BiH. as such. The existing strategies, for example Strategy for Development of Construction Materials Industry in the Federation of BiH 2016-2025 (FMEMI and Chamber of Commerce of the Federation of BiH, 2018) does not consider the option of providing mineral resources through recovering and recycling resources from finished products that are no longer in use (recycling concrete, bricks or recovery of rare materials from electronic equipment, etc.). In addition to the lack concrete measures, one should mention the lack of standards for construction materials produced from recycled materials, and this restricts the scope for placement of such products. Also, not a single mining company does extraction of secondary mineral resources from tailing piles, slag deposits of thermal power plants and steel-mills, red mud deposits. Implementation of measures proposed in the Environment Status Report of 2012, which relate to: i) identification of all locations generating mining waste, ii) making a list with types and quantities of generated waste in accordance with waste catalogue and codes; iii) assessment the opportunities for reuse of waste and/or recycling has not been done.

According to the Law on Mining of the Federation of BiH, Art. 59, after receiving a permission to stop exploitation of mineral resources, a commercial company must fully rehabilitate and re-cultivate the site and remove all consequences of mining operations, on the basis of rehabilitation and re-cultivation project. However, in reality, there is a significant number of mines in the Federation of BiH that had not rehabilitated the sites upon ceasing the exploitation, and total area of soil that has been degraded by exploitation of ores in surface mining activities is around 15,000 ha. Such damage is visible in specific places (Tuzla, Ugljevik, Kakanj, Gacko), where large area of arable land is not used. In metallic ore mines in Vares area (Veovaca - lead, zinc, barite, iron mine), exploitation has ceased, but the mines are not properly closed. A list or inventory of deserted metallic ore mines will be necessary in order to identify hot zones, threats for environment and risks, as well as the set of priorities for rehabilitation. Another problem is lack of clarity regarding legal successors of the mines’ estate, because the companies that used to operate the mines do not exist anymore.

The Law on Environment Protection of the Federation of BiH imposes on the mining companies the obligation to use best available techniques ‒ BATs to manage the mining waste. Federation of BiH has adopted Technical instruction for implementation of the best available techniques in food industry, but not yet for mining. In accordance with the obligations under the Law on Environment Protection and the obligation to transpose the Directive on Waste from Extractive Industries. Technical instructions for BiH need to be developed in accordance with the European instructions on best available techniques in this field. (*Management of Waste from Extractive Industries in accordance with Directive* 2006/21/EC).

* 1. Strategic goal 6

**Strategic goal 6 - Ensuring sustainable use of natural resources**

Strategic goal 6 (Sustainable Resource Management) covers thematic areas such as: use of land and sustainable use of natural resources in agriculture (soil), forestry and fisheries, as well as extraction of minerals and bio-economy.

***Table 22:*** *Performance indicators for strategic goal 6.*

|  |  |  |  |
| --- | --- | --- | --- |
| **Strategic goal 6** | **Performance indicators** | **Baseline value**  **(N/D, to be determined in initial years of implementation)** | **Target value**  **(N/D, to be determined in initial years of implementation)** |
| *Ensuring sustainable use of natural resources* | **Overview of forest areas, Federation of BiH - total (ha)** | 1,510,938  (2020) | N/D |
| **Area of degraded land (ha)** | N/D  Federation of BiH has not precisely determined the area of degraded land | Zero level of land degradation achieved |

* + 1. Priorities for strategic goal 6

**Priority 6.1 Establish an effective legal, strategic and institutional framework for sustainable forest and forest resources management in the Federation of BiH, appropriate valuation of forest resources, and ensure integration of gender and climate change issues**

This priority means adoption of laws and bylaws at the level of the Federation of BiH that are aligned with EU Directives and international agreements, and creation of legal and institutional framework for full implementation of contemporary principles of forest management, identification of indicators and regular monitoring of status of forests.

**Priority 6.2 Enhance legal, strategic and institutional frameworks for sustainable management of hunting game**

This priority aims to establish regulatory framework to manage population and organize planned rearing of hunting game aligned with EU Directives and international agreements on biodiversity, as well as to develop institutional capacities and establish institutional framework for managing hunting grounds and planned rearing of hunting game.

**Priority 6.3 Improve legal, strategic and institutional frameworks for sustainable management of fish stock**

This priority aims to achieve harmonization of regulatory framework with EU acquis and international conventions, and adoption of a law on commercial marine fishing.

Planned rearing and exploitation of fish require the existence of a fisheries information system, as well as the existence of a strategic framework for sustainable development of fishing sector

**Priority 6.4 Establish integrated and sustainable management of land resources**

This priority aims to develop legislative and strategic framework for comprehensive protection of land, as well as the methods how to do it, designate institutions that will have competence for integrated and sustainable land management, and measures and indicators for sustainable management and protection of land resources. Measures for rehabilitation of degraded areas are also planned under this Priority.

**Priority 6.5: Establish a system of sustainable and responsible research, exploitation and management of mineral resources**

This priority focuses on establishment of strategic framework for sustainable use and exploitation of mineral resources relying on the principles of recycling and circular economy, and to develop programmes and plans for more efficient exploitation of mineral resources.

Table 23: Priorities with relevant indicators

| **Priorities** | **(Target) values indicator** | **Baseline value** | **Target value** |
| --- | --- | --- | --- |
| **Priority 6.1 Establish an effective legal, strategic and institutional framework for sustainable forest and forest resources management in the Federation of BiH, appropriate valuation of forest resources, and ensure integration of gender and climate change issues** | Existence of a law and strategic framework for sustainable forest management | The Federation of BiH has no legal or strategic framework for sustainable management of forests | By 2025, the Federation of BiH will have adopted strategic and legal framework laying out principles and criteria of sustainable forest management, standard methodology for developing forest management plans on the principles of multi-functionality and protection of forest ecosystems’ biodiversity for privately and state-owned forests, coverage and methodology of monitoring health status of forests, monitoring indicators of sustainable use of forests and reporting, method of issuing licenses for pickers of non-timber forest products, management of privately owned forests. |
| Existence of systematic framework for registration and oversight of collection of medicinal, edible and aromatic plants and non-timber forest products. | The Federation of BiH does not have a legal and institutional framework for sustainable management of medicinal, edible and aromatic plants and non-timber forest products. | By the end of 2025, established is a system of oversight for collection medicinal, edible and aromatic plants and non-timber forest products |
| Existence of regular monitoring of forest health status | In the Federation of BiH, there are no adopted methods for harmonized sampling, assessment and monitoring of status of forests, in accordance with previously identified indicators. There is no established network of monitoring points.  Cantonal forestry administrations and users of forests lack capacities to conduct monitoring. | By the end of 2025, regular monitoring of health status of forests is operational and includes monitoring of changes in forest ecosystems in terms of the species diversity status, changed areas, health status, and other biotic and abiotic factors. |
| Existence of capacities and technical requirements for preventing forest fires | Forests of the Federation of BiH are not passable enough to allow quick access to the location of fire, forest users are neither equipped to observe and detect fires early, nor to quickly access and extinguish the fire. | By 2027, forest users are equipped to do early fire detection and prevention |
| Area of productive barren land suitable for afforestation | Area of productive barren land suitable for afforestation is 159,913.5 ha | Afforestation of 15,991 ha of current karst and barren land |
| Areas under coppice forests | Area under coppice forests is 257,879.6 ha | Reduce the area under coppice forests by transitioning 50,000 ha of current coppice forests and thicket into high forests |
| **Priority 6.2 Enhance legal, strategic and institutional frameworks for sustainable management of hunting game** | Existence of regulatory framework for population management and planned rearing of wild game, aligned with EU directives and international agreements on biodiversity | Law on Hunting of the Federation of BiH is not in line with the relevant EU Directives and international agreements | By 2023, align and adopt amended Law on Hunting with the relevant EU directives and international treaties in the area of biodiversity, and pass the set of new bylaws aligned with the new law |
| Existence of institutional framework for managing hunting grounds and planned rearing of game | In the Federation of BiH, full categorization, establishment and assignment of hunting grounds for use has not been completed. The hunting grounds do not have technical services for overseeing and implementing measures prescribed by laws and plans. | By 2025, establish institutional framework for managing hunting grounds and planned rearing of game |
| Existence of planning framework for population management and planned rearing of wild game, aligned with EU directives and international agreements on biodiversity | In the Federation of BiH, the population management plans for the wolf, bear and lynx have not been adopted, neither were the hunting management plans for all hunting grounds, which recognize the principles of protection of species in line with conventions. | By 2027, established planning framework for managing hunting grounds and wild game population |
| Existence of a Wild Game Information System | In the Federation of BiH, there exists no information system on wild game | By 2027, established information system on wild game |
| **Priority 6.3 Improve legal, strategic and institutional frameworks for sustainable management of fish stock** | Existence of a legislative framework aligned with  EU acquis and international conventions. | Law on freshwater fisheries of the Federation of BiH is not fully aligned with the EU acquis and international conventions, and neither is it aligned with the Federation legislation on water. | By 2023, the law is aligned, and secondary legislation (bylaws) on freshwater fisheries adopted |
| Existence of legislation on commercial fishing at sea | The Federation of BiH does not have a law on commercial fishing at sea. | By 2023, adopted law and bylaws on commercial fishing at sea, harmonized with the common fisheries policy, commitments under EU Directives, and international agreements |
| Existence of a Fisheries Information System | The Federation of BiH has not yet established the information system on fisheries. | By 2030, established a Fisheries Information System |
| Existence of a strategic framework for sustainable development of fishing sector | Mid-term fisheries development strategy of the Federation of BiH 2015‒ 2019 was valid until the end of 2021 | By 2022, adopted strategic framework for sustainable development of fishing sector |
| **Priority 6.4 Establish integrated and sustainable management of land resources** | Existence of legal and strategic framework for comprehensive protection of land | In the Federation of BiH, land is protected by various regulations, depending on the type of soil: by the laws in the field of agriculture, forestry, spatial planning and construction. There is no comprehensive legislative framework that would provide for protection of land as a whole | By 2025, adopted is the Law on Protection of Land and relevant secondary legislation (bylaws), as well as the Strategy for Sustainable Use of Land |
| Existence of methods, measures and indicators for sustainable management and protection of land resources | In the Federation of BiH, there is no framework in place for monitoring land management sustainability | By 2025, adopted are the methods, measures and indicators for sustainable management and protection of land resources |
| Existence of land monitoring | The Federation of BiH has partially established monitoring system for agricultural land quality | By 2027, established is the complete framework for land monitoring |
| Area of degraded land (ha) | The Federation of BiH has not had any significant plans or programmes to rehabilitate the degraded land, except for the projects of re-cultivation in mining sector and TPP. For the purposes of this Strategy, the baseline value shall be considered to be 0 ha | Carried out rehabilitation of degraded land area (approximately 3500 ha) |
| Land mines | In 2020, 966m2 of area in the Federation of BiH was found to be polluted by land mines | Complete demining of 100% of land by 2030 |
| **Priority 6.5**  **Establish a system of sustainable and responsible research, exploitation and management of mineral resources** | Existence of a framework for sustainable use and exploitation of mineral resources | The Federation of BiH does not have an integrated framework for managing mineral resources, that would include recovery of resources from products, manufacturing or construction, so the exploitation and import of raw materials is currently the only solution | By 2026, developed is a strategy for cost effective, socially and environmentally acceptable exploitation of ores and minerals that would include recovery of mineral and metallic resources from waste (urban mining, circular economy) |
| Existence of programmes and plans for more efficient exploitation of mineral resources | Current level of technical equipment in the Federation of BiH is not conductive for efficient exploitation of raw materials | By 2029, adopted are programmes and plans for introduction of contemporary technology in mines owned by FBiH for the purpose of providing conditions for improved efficiency of exploitation and use of mineral resources and prevention of generation of waste |

* + 1. Description of measures

***Priority 6.1 Establish an effective legal, strategic and institutional framework for sustainable forest and forest resources management in the Federation of BiH, appropriate valuation of forest resources, and ensure integration of gender and climate change issues***

*Measure 6.1.1. Establishing strategic and legal framework for sustainable management of forest resources*

This measure aims to create strategic and legal framework for sustainable management of forest resources based on the principles of multi-functionality and protection of biodiversity of forest ecosystems, to be applicable to private and state owned forests.

Achieving this goal includes a range of legislative, planning and institutional measures:

* Adopting the Proposal of the Law on Forests - which is in the parliamentary procedure;
* Development and adoption of amendments to the Law on Forests with the aim of further alignment of the Law with international conventions and EU directives;
* Adoption of bylaws specifying the content and method of developing forest management plans for privately and state-owned forests, scope and methodology of monitoring health status of forests, monitoring indicators of sustainable use of forests and reporting, issuing licenses for pickers of non-timber forest products;
* Identification of principles and criteria for sustainable forest management, which will be sensitive to the social inequality issues, in line with the EU Forest Strategy (COM(2021)572), as the European reference framework for development of sector policies that impact forests, and European Green Deal, the Road Map. Criteria and principles need to be harmonized among entities and Brcko BiH;
* Adoption of Forestry Programme of the Federation of BiH and adoption of the Executive Part;
* Defining standard methodology for development of forest management plans, while at the same time recognizing planning for other functions of forests, planning the use of bio-mass and non-timber forest products, as well as the protective role of forests;
* Training the employees on how to use new methodology when developing forest management plans, and when implementing them and monitoring the performance of the forest management activities.
* Demonstrating the use of the new methodology on at least 2 forest areas;
* Successive development of FMP in accordance with standard methodology for all forest areas;
* Development of models for admeasuring and developing private forests, but also for management of private forests;
* Providing training to private forest owners regarding the new methods of forest management;
* Developing management plans for privately owned forests.

*Measure 6.1.2. Establishing a system of control of picking medicinal, edible and aromatic plants and non-timber forest products*

This measure aims to establish a systematic framework for achieving sustainability in collecting medicinal, edible and aromatic non-timber forest products.

The measure implies activities that are focused on introduction of certification system:

* Development of an action plan for introduction of a system of certification in the sector of use of medicinal, edible and aromatic plants and non-timber forest products;
* Establishing a system for certification in the sector of use of medicinal, edible and aromatic plants and non-timber forest products on a fair and inclusive basis.

Introduction of a certification system is a measure planned to be implemented in coordination with the Ministry of Foreign Trade and Economic Relations of BiH, Federation Ministry of Agriculture, Water Management and Forestry and the responsible ministries of Republika Srpska and the Government of Brcko District of BiH. A prerequisite for starting the implementation of this measure is adoption of the Law on Forests and the secondary legislation (bylaw) that will regulate conditions for growing, using and trading with non-timber forest products, as planned under Measure 6.1.1.

*Measure 6.1.3. Establishing regular monitoring of forest health status*

This measure aims to establish regular monitoring of health status of forests, which will encompass monitoring of changes in forest ecosystems in terms of the species diversity status, changed areas, health status, and other biotic and abiotic factors. The measure includes following activities:

* Developing methods for harmonized sampling and assessment and monitoring status of forests, in accordance with previously identified indicators;
* Adoption of a rulebook specifying the method for monitoring health status of forests, method for conducting health protection of forests, and reporting methods;
* Identifying a network of monitoring points;
* Provision of training and developing capacities of forest users to carry out monitoring of forest status in accordance with the identified programme.

*Measure 6.1.4. Enhancing access to forests and train forest users on early detection and prevention of forest fires*

This measure aims to ensure conditions for early detection and prevention of forest fires and includes technical measures, equipment procurement measures and training of the forest management companies’ employees. The measure includes following activities:

* Developing plans for construction of fire-breaks (cuts through the growth);
* Procurement of vehicles and appropriate techniques and tools for cutting trees and making fire-breaks for the needs of forest users;
* Construction of fire-beaks with elements of forest roads;
* Procurement and installation of information panes and warning signs for prevention of fires;
* Procurement of equipment for spatial observation and remote surveillance;
* Training the employees for spatial observation and remote surveillance.

Equipment for spatial observation and remote surveillance includes not only equipment for early detection of fires, but also the equipment for monitoring health status of forests (measure 6.1.3) (optical sensors and cameras, drones, smart devices for registering status and taking photographs with the ability to transfer data to GIS).

*Measure 6.1.5. Afforestation of barren land and transition of coppice forests into high forests*

This measure aims to increase the total area under forest in the Federation of BiH and thus contribute to prevention of climate change. The measure focuses on afforestation of barren land and transition of coppice forests into high forests:

* Adoption of a rulebook that would establish the regions of provenience and prescribe the method, procedure and conditions for evaluating and recognizing the starting material of the forest trees;
* Increasing the land area under high forests by transitioning at least 20% of current land under coppice forests and bushes into higher form, where possible;
* Development of a gender sensitive afforestation plan for the karst and barren land in the Federation of BiH;
* Afforestation of at least 10% of the current karst and barren land.

*Measure 6.1.6. Establishment of a Forest Information System*

This measure aims to establish a forest information system FIS in order to create IT preconditions for sustainable management of forest resources.

FIS should include priority themes for data and information on forests, such as: main information on forests, natural and biological diversity, forest and climate change (impacts, adaptation and mitigation), forest health and resilience (natural disruptions, fires and pests) and (forest) bio-economy.

Part of the information system is already developed, but the work and harmonisation of the structure with the EU’s Forest Information System in Europe (FISE) need to continue.

This activity should be preceded by urgent adoption and publication of the data from the II Forest Inventory.

***Priority 6.2 Enhance legal, strategic and institutional frameworks for sustainable management of hunting game***

*Measure 6.2.1. Establish a harmonized regulatory framework for establishing hunting grounds, population management and planned rearing of game*

This measure aims to harmonise the legislation on hunting with the relevant EU directives and international agreements regarding biodiversity.

This measure involves:

* Adoption of a new, harmonised Law on Hunting;
* Adoption of a set of new bylaws, in accordance with the new law.

*Measure 6.2.2. Enhance the system of planning and managing wild game, and game population management*

Description of the measure with general areas of intervention:

This measure aims to provide preconditions for efficient game management planning, recognizing administrative borders, but in such a way that the borders are not an obstacle. Implementation of this measure requires:

* Categorization, establishment and assigning of the hunting grounds for use, in accordance with provisions of the new Law (Measure 6.2.1);
* Establishment in all hunting grounds of a professional service for overseeing and implementing measures from laws and plans;
* Development and adoption of plans for managing wild game population of wolf, bear and lynx, harmonized with the corresponding plans of Republika Srpska;
* Development of hunting plans for all hunting areas, that recognize the principles of protection of species, in line with the conventions;
* Establishment of a separate module for hunting within the forestry information system.

***Priority 6.3 Improve legal, strategic and institutional frameworks for sustainable management of fish stock***

*Measure 6.3.1. Harmonisation of the regulatory framework for fishing with the EU acquis and international conventions*

This measure aims to align legislation that applies to fisheries with EU acquis and regulate commercial fishing on sea, and align legislation on fisheries with legislation on waters. The following activities are included:

* Adoption of a law and bylaws on commercial fishing at sea, harmonized with the common fisheries policy, commitments under EU Directives, and international agreements;
* Harmonization of the Law on Fresh Water Fishing with the laws in the area of waters and requirements of international conventions and EU directives in the area of fisheries and biodiversity;
* Adoption of Agricultural Sector Development Strategy 2022-2028, aligned with the common EU strategy for fisheries and aquaculture;
* Successive preparation of fisheries management plans in line with the new Law on Fresh Water Fishing.

*Measure 6.3.2. Establishing an information system on fisheries and statistical reporting on fish farming*

This measure aims to establish an information system on fisheries and statistical reporting on fish farming. Particular progress is expected in the field of commercial marine fishing and mariculture.

The measure includes following activities:

* Development of a registry of vessels and permits for commercial marine fishing and mariculture;
* Establishment of a system for issuing permits;
* Establishment of a system for recording and reporting on fishing activities and landing the catch;
* Establishing a model of statistical monitoring of marine and fresh water fish farms in accordance with the adopted methodology for BiH.

***Priority 6.4 Establish integrated and sustainable management of land resources***

*Measure 6.4.1. Provide legal and strategic framework for comprehensive protection of land*

This measure aims to provide framework for integrated protection of all types of land. The measure includes adoption of legislation and strategy on protection of land, and harmonisation of legislation regulating various uses of land (mining, construction, agriculture). For implementation of this measure, the following activities are planned:

* Adoption of a Law on Protection of Land and relevant bylaws;
* Development and adoption of the Strategy of Sustainable Land Management;
* Harmonization of laws: on spatial planning and construction of the Federation of BiH and cantons in the Federation of BiH with the Law on Agricultural Land, i.e. include in the Law on spatial development and construction of the Federation of BiH the obligation of the local administrative units to have the Plan of Protection, Development and Use of Agricultural Land prior to the adoption of their respective spatial plans;
* Amending the Law on Mining of the Federation of BiH with respect to rehabilitation of the mining areas, by expanding options of rehabilitation that would include repurposing, and by defining financial liability and guarantees for rehabilitation of the deserted mining areas.

*Measure 6.4.2. Establishing the land monitoring system*

This measure aims to improve and upgrade the existing quality monitoring by monitoring all types of land. The measure includes following activities:

* Development, harmonization and adoption of measuring methods and indicators for sustainable management and protection of land resources;
* Adoption of a land monitoring plan;
* Establishment of a network of monitoring sites and performance of monitoring.

Collected data are integrated into the Land Information System.

*Measure 6.4.3. Rehabilitation of degraded areas*

This measure aims to reduce the area of degraded land. The measure includes following activities:

* Establishing of a cadastre of degraded land;
* Development of an action plan for rehabilitation of degraded areas that includes procedures and methods for rehabilitating the degraded areas, criteria for prioritization of the sites to be rehabilitated on the basis of environmental and social criteria (number of people at risk, children, the poor...);
* Rehabilitation of degraded land area (approximately 3500 ha) focusing on the following areas: Banovici, Lukavac, Tuzla, Zivinice, Kalesija, Srebrenik, Zenica, Breza, Kakanj, Novi Travnik, Donji Vakuf etc.;
* Rehabilitation of land in especially sensitive and deserted areas, focusing on the Dinara karst and high mountains in: Hercegovina-Neretva Canton, West Herzegovina Canton, high mountains in Central Bosnia.

*Measure 6.4.4. Preventing land degradation by development (construction) without plan*

This measure aims to prevent further land degradation caused by illegal construction. The measure includes following activities:

* Adoption of new laws on legalization that would be aligned with the Vienna Declaration on National and Regional Policies and Programmes regarding Informal Settlements in South Eastern Europe;
* Registration of illegal buildings;
* Development of operational plans for prevention of unplanned construction, and adoption of programmes to demolish illegal buildings;
* Continuous development and adoption of new spatial planning documentation and documentation for controlled development of cities, and prevention of use of good quality categories of land for construction;
* Restricting the use of good quality land (I agricultural zone) for construction of apartments, industrial facilities and other buildings.

*Measure 6.4.5. Removing land mines*

This measure aims to complete demining of 100% of land under mines by 2030. Demining is carried out in line with the annual demining plans.

***Priority 6.5 Establish a system of sustainable and responsible research, exploitation and management of mineral resources***

*Measure 6.5.1. Establishing a framework for sustainable use and exploitation of mineral resources*

This measure aims to provide for a comprehensive approach to securing mineral resources for development of industry in the Federation of BiH, and it includes:

* Development of a strategy for cost effective, socially and environmentally acceptable exploitation of ores and minerals that would include recovery of mineral and metallic resources from waste (urban mining, circular economy);

Development of programmes and plans for introduction of contemporary technologies in mines owned by the Federation of BiH for the purpose of providing conditions for improved efficiency of exploitation and use of mineral resources, and prevention of waste generation.

* 1. Indicative financial framework

With a financial estimate of little over 29% or 3.4 billion BAM, the thematic area Sustainable Resource Management is the second largest area in terms of the costs in the Strategy for the Federation of BiH, the total estimated cost of which is 11.9 billion BAM. The thematic area Sustainable Resource Management includes five priorities and 16 measures. This is the thematic area with smallest number of priorities in the Strategy for the Federation of BiH. Priority 6.4 (Establish integrated and sustainable management of land resources) takes up 96% or 3.3 billion BAM. At the same time, this is the second most expensive priority in the whole Strategy of the Federation of BiH as it accounts for 27% of the total estimated costs. All other priorities in the thematic area Sustainable Resource Management together account for 4% of the total cost of this thematic area with 144 million BAM.

A detailed presentation of data of indicative financial framework for the thematic area Sustainable Resource Management as well as generally for the level of the Federation of BiH is provided in Annex 9, which includes a table and a pie chart.

1. ENVIRONMENTAL MANAGEMENT
   1. Situation analysis

After an analysis of the **baseline situation** and identification of **key challenges** the Federation of BiH faces in environmental management, the issues covered in this area were classified in several subareas: a) strategic planning and alignment of the legislation with the EU environmental acquis and international agreements, (b) implementation of the regulations transposed and international agreements signed, (c) institutional capacities and coordination, (d) public participation, (e) monitoring and reporting, (f) integration of environmental requirements in sectoral policies, (h) education, research and development, (i) integration of gender equality, social equity and poverty principles in the environment sector.

*Strategic planning and alignment of the legislation with the EU environmental acquis and*

The Federation of BIH recorded certain progress in creating a legal framework which governs horizontal issues of the environmental management. However, it is necessary to continue efforts on addressing the challenges identified the in this report. The key challenges associated with strategic planning and legislation in the environment sector include: **lack of or inadequate legislation**, and **the legal framework in the environmental management, which has not been harmonised** (either with the national legislation or with regard to international commitments).

In the Federation of BiH, the approximation of the EU environmental acquis started back in 2003 with the development and adoption of the Law on Environmental Protection. In the following years, this Law was upgraded through amendments to the Law and bylaws and strategic documents which transposed the key EU principles and requirements of environmental management to the legislation of the Federation of BiH. Nevertheless, it has not been fully aligned with the EU regulations. The regulations which were partially transposed and those which were not transposed into the environmental legislation of the Federation of BiH have been identified in the meantime. The new Law on Environmental Protection (“Official Gazette of the Federation of BiH“, 15/21), was adopted on 28.01.2021, and it ensures a high degree of alignment of the Federation’s legislation with:

* Directive on Strategic Environmental Assessment (2001/42/EC);
* Directive on Environmental Impact Assessment (2014/52/EU);
* Directive 2003/4/EC on public access to environmental information;
* Directive 2003/35/EC providing for public participation in respect of the drawing up of certain plans and programmes relating to the environment;
* Directive 2012/18/EU on the control of major-accident hazards;
* Regulation (EC) no. 1221/2009 on the eco-labelling and environmental management systema and independent evaluation. The Industrial Emissions Directive - IED) was partially transposed in the legislation of the Federation of BiH.

The new Law on Environmental Protection transposed the part which covers control and prevention of pollution - *ex* IPPC Directive (incorporated in the new IED).

The adoption of the Law on the Spatial Data Infrastructure of the Federation of BiH (“Official Gazette of the Federation of BiH“, 55/21) was a breakthrough in transposing of the Directive 2007/2/EC on the implementation of a spatial data infrastructure in EU (INSPIRE), while the adoption of the Strategy on setting up and maintenance of the spatial data infrastructure of the Federation of BiH is in compliance with the Directive INSPIRE and EU trends, and is a crucial step in the implementation of the concept of data collection and management.

The transposition of the Directive 2004/35/EC on environmental liability with regard to the prevention and remedying of environmental damage, and Directive 2008/99/EC on the protection of the environment through criminal law has not started yet.

In December 2016, the Federation of BiH adopted the Environmental Approximation Programme of the Federation of BiH, which covers eight subsectors of the EU acquis. horizontal issues, water management, waste management, air quality and climate change, industrial pollution, chemicals, nature conservation and environmental noise. The Approximation Programme is more specific than the Environmental Approximation Strategy of BiH in the section which describes the current situation and amendments in the legislation of the Federation of BiH required for the transposition of the environmental EU acquis. The Programme anticipates the preparation of Actions Plans for the Implementation of Directives (APIDs) and Directive Specific Implementation Plans (DSIPs) for all the horizontal policies in the environmental management sector, which should be adopted by the institutions responsible for the implementation of the respective directives.

**Consequently, it is necessary to work on upgrading the environmental management legal framework in the Federation of BiH, focusing on aligning the legislation with the EU acquis and international agreements, with the view of ensuring a uniform, harmonised, and consistent countrywide approach to strategic planning and the approximation of EU environmental acquis across the levels of government.**

*Implementation of the applicable legislation and international commitments*

**Ineffective implementation of the legislation and the international agreements acceded** to was identified as the second key challenge. BiH has not yet provided for effective institutional mechanisms to supervise and coordinate the implementation of the obligations arising from international environmental agreements. Currently, the arrangements for the implementation of the international agreements are defined on a case by case basis, which enables progress in the implementation of some agreements (ozone, climate change, biodiversity), but fails to ensure an effective overall response. Moreover, BiH has not designated focal points to some environmental agreements to which it is a party (such as: Bern Convention, Convention on Long-Range Transboundary Air Pollution (CLRTAP (UN, 1979)), European Monitoring and Evaluation Programme (EMEP)[[19]](#footnote-20), etc.). While these are primarily the obligations of the BiH, some responsibilities for international cooperation in the environment sector, the role of ‘*focal points*’ for the implementation of certain environmental agreements [[20]](#footnote-21), were also assigned to institutions at the entity level. In the Federation of BiH, the Federation Ministry of Environment and Tourism is the focal point for the UN Convention on Biodiversity (UNCBD) and Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters.

Furthermore, important segments of the implementation of the international standards and obligations concern the application of the Strategic Environmental Assessment (SEA), and efficacy of licencing procedure, and application of best available techniques (BAT). Although the new Law on Environmental Protection, which improved the SEA processes, the application of SEA is still limited in the Federation of BiH. This Law defines the basis of SEA implementation, projects and programmes for which SEA is mandatory (and those which do not require a SEA report), phases in the assessment procedure, including public participation, responsibilities for SEA implementation, and the method of its implementation. However, scoping, content and evaluation of the SEA report is yet to be further regulated in a special bylaw which should be adopted within a year of the entry into force of the Law.

The Federation of BiH has not started issuing integrated permits, as regulated in the EU Directive 2010/75/EU on industrial emission. The applicable legislation governing the permitting procedures include several individual procedures, including the issuance of water acts and environmental permits. Different ministries are responsible for the issuance of these individual permits. The Federation Ministry of Environment and Tourism and cantonal ministries are responsible for environmental permits, while the issuance of water acts is the responsibility of the water basin agencies and cantonal ministries. The Decree which defines plants and facilities which require an environmental permit (“Official Gazette of the Federation of BiH“, 51/21) from June 2021 prescribes a new format of the request for an environmental permit.

The Law on Environmental Protection requires the application of best available techniques; however, the application of this instrument is limited. The technical instructions on the best available techniques (BAT) and reference documents on the best available techniques (BREFs) were not translated into the official languages of BiH. Article 100(5) of the Law on Environmental Protection (“Official Gazette of the Federation of BiH“, 15/21) specifies that the EU best available techniques shall be applied in the absence of best available techniques in the national legislation. In the period from July 2007 to July 2008, within the LIFE Project “Capacity Building in Integrated Pollution Prevention and Control in BiH (IPPC BiH)” the Federation of BiH prepared Technical Instructions on BAT for the following food and agriculture sectors: livestock slaughterhouses, meat processing, fish farming and processing, milk processing and milk products, fruit and vegetable processing and brewing. These instructions were adopted in a decision of the Federation Ministry of Environment and Tourism in 2009. Subsequently, within the Project “Support to implementation of IPPC Directive (EuropAid/126648/C/SER/BA)” the Federation of BiH prepared the technical instructions for the following sectors: stone extraction, large furnaces, surface protection of metals and plastics, and coating with molten metal, and for monitoring. However, these instructions have not yet been adopted. Pursuant to the Law on Environmental Protection and the Regulation on adoption of best available techniques which facilitate compliance with the environmental quality standards (“Official Gazette of the Federation of BiH“, 92/07) the activities which require technical instructions, in order of priority, are: Poultry slaughterhouses and processing, beverage production, wine production, bakery and pastry production, large cattle breeding, poultry breeding, crops growing, preliminary treatment and dyeing of fibres or textiles, tanning of hides and skins, production of cellulose from wood or similar fibrous materials, manufacture of paper and paperboard, production of detergents, production of paints and varnishes, elastomers and peroxides, manufacture of ceramic products by burning, achieving energy efficiency in industry and buildings, and waste incineration.

**Given the above stated, it is necessary to enhance the capacities and improve coordination among the institutions in order to ensure effective implementation of the applicable legislation and international commitments.**

*Institutional capacity and coordination*

**Insufficient capacities in the environmental institutions and the lack of vertical and horizontal coordination** among the institutions in all segments of environmental protection, including the lack of coordination in the area of gender equality were identified as the main reasons for the incomplete implementation of the law. The competent institutions have insufficient human resources, they are poorly staffed, and they lack expertise. Critical institutions[[21]](#footnote-22),such as the Federation Ministry of Environment and Tourism and Environmental Protection Fund of the Federation of BiH are not fully staffed in accordance with internal organisation and staffing plan, [[22]](#footnote-23), while their workload is huge, and the current organisation hinders adequate performance. While the employees have good knowledge of the environmental issues, however, they lack project management competencies. The Federation Ministry of Environment and Tourism and Federation Ministry of Agriculture, Water Management and Forestry have specialised teams for the preparation and implementation of projects, but such teams are not available in all the institutions.

The Federation of BiH lacks vertical coordination and communication among the cantons/municipalities and the Federation, as well as horizontal coordination (inter-entity - among the Federation, Republika Srpska, and Brcko District, as well as the coordination between the individual cantons and municipalities respectively). The Council of Ministers’ Decision on the system of coordination of EU integration processes in BiH (“Official Gazette of BiH“, 72/16 and 35/18 2016) defined both the institutional and operational system and the method of coordination of the institutions in Bosnia and Herzegovina (including the Federation of BiH) in the implementation of activities associated with the EU integration of BiH. As for the inter-entity coordination, in 2006, the Government of the Federation of BiH, the Government of Republika Srpska and Brcko District established the Environmental Inter-entity Body in order to initiate cooperation and coordination of efforts on common goals and in the interest of environmental protection. This Body focuses on environmental issues which require a harmonised approach of the entities, and other issues delegated to the Inter-entity Body, however, their decisions are not legally binding. This body has at least 6 meetings annually (Council of Ministers of BiH, 2018), however their work is inefficient and ineffective.

Inspection authorities, both at the level of the Federation of BiH and the Cantons, are responsible to supervise the application of the environmental legislation of the Federation of BiH. The Administration for Inspection Affairs of the Federation of BiH comprises 11 inspectorates, with 3 inspectorates which supervise the application of the environmental legislation.

* The Environmental Protection Inspection, which is a part of the Urban-ecological Inspectorate of the Federation of BiH, with a total of 5 inspectors of the Federation, as envisaged, who have no special knowledge on individual environmental media (air, land, water, noise, waste) or plants and facilities where there is a risk of major accidents;
* The Water Inspection of the Federation of BiH which is the integral part of the Water Inspectorate of the Federation with a total of 5 inspectors out of 8 envisaged;
* The Nature Conservation Inspection of the Federation of BiH which is the integral part of the Forest Inspectorate of the Federation with a total of 2 inspectors out of 2 envisaged;(Council of Ministers of BiH 2018).

Coordination among the Inspections of the Federation within the Administration for Inspection Affairs of the Federation of BiH is regulated in Article 18 of the Law on Inspections of the Federation of BiH (“Official Gazette of the Federation of BiH“, 73/2014 and 19/2017), while it actually relies on supervision which is planned and implemented by mixed inspection teams (team inspections), on an as needed basis(Council of Ministers of BiH, 2018). However, the responsibilities of the environmental and other inspections (market, health, water inspections) occasionally overlap, and their work need to be coordinated.

The Administration for Inspection Affairs of the Federation of BiH, RS Administration for Inspection Affairs and Inspectorate of the Brcko District have contacts on an as needed basis, however, the cooperation among these institutions is not formalised or instutionalised.

**The challenges described indicate that there is a need to enhance the capacities and mutual coordination of the institutions in the environment sector.**

*Public participation*

**A strong awareness on the importance of environmental protection and the need to protect the environment**, as a principal requirement for an active public participation in environmental decision-making process - **is lacking**. This challenge has been identified both among the professional and general public. Line institutions do not implement educational programmes and campaigns aimed at raising the awareness about the issues of environmental protection. Such activities are most commonly organised within short-term projects.

Past year recorded a blatantly inconsistent preparation, publicity and reporting among the responsible institutions, particularly on the issue of the legal requirement to prepare and publish reports on the state of environment in the Federation of BiH and Herzegovina. On the other hand, there have been insufficient initiatives and engagement of the civil society organizations which focus specific areas (such as women organisations, especially those gathering women from rural areas, youth organisations and those representing socially vulnerable groups).

The Federation Ministry of Environment and Tourism organises transparent consultations on key processes (SEA, EIA, environmental licencing) pursuant to the Law on Environmental Protection and other applicable regulations which require public scrutiny of the work of the institutions and public consultations. However, representatives of CSOs **are not satisfied with the level of public participation** and the quality of public consultations in decision-making processes (especially the processes of environmental impact assessment, environmental permitting, preparation of bylaws and other acts, etc.) Young people do not participate in decision-making processes as required by the Law on Youth of Federation of BiH.

**The above reasons lead to a conclusion that there is a need to raise the public awareness on the importance of environmental protection, and that they need to effectively engage in decision-making processes, which particularly applies to women, youth and socially vulnerable groups.**

*Monitoring and reporting*

The Federation of BiH has not established an efficient system for data collection, communication and validation, and environmental reporting. More specifically, the legal requirement to establish a single environmental information system laid down in the Law on Environmental Protection has not been satisfied. The Federation of BiH has a practice of collecting data in some areas (air waste, water,...) but the data is not integrated into a single system.

Several formal mechanisms for communication of data and information among the environmental institutions in the Federation of BiH have been set up in the past years. The applicable legislation of the Federation of BiH was the basis to establish: the Waste Management Information System - in the Environmental Protection Fund of the Federation of Bosnia and Herzegovina; Water Information System - at the level of water basins (the Sava River Basin Agency manages the system for the Sava River Basin, while the Adriatic Sea Watershed Agency manages the system for the Adriatic Sea Basin).

The Federation of BiH establihed several mechanisms for information and data exchange among the environmental institution. The mechanisms established pursuant to the applicable laws include:

* Waste Management Information System ‒ in the Environmental Protection Fund of the Federation of BiH;
* Water Information System ‒ at the level of the water basins (managed by the Sava River Basin Agency and the Adriatic Sea Watershed Agency respectively).

Under the new Law on Environmental Protection, the development, management and coordination of the single environmental protection information system in the Federation is the responsibility of the Federation Ministry of Environment and Tourism in cooperation with the Environmental Protection Fund of the Federation of BiH. A conclusion of the Government of the Federation of BiH from its 170th session (of 28.01.2019) determined that the development of the environmental protection and nature information system shall be the responsibility of the Environmental Protection Fund of the Federation of BiH, and that the competent institutions of the Federation, which possess specific data and information on environmental components (air, water, land/soil, nature, waste management) are required to routinely provide such date to the Environmental Protection Fund of the Federation of BiH for the purpose of their integration and establishment of a single information system, and the preparation of periodical reports on the state of environment.

***Table 24*:***Responsibilities for environmental data collection in the Federation of BiH*

| **Responsibilities for environmental data collection in the Federation of BiH** | |
| --- | --- |
| **Responsible institution** | **Legal obligations in the domain of data collection** |
| Federation Ministry of Environment and Tourism | Monitoring, analysis and evaluation of the state of environment, collection and compilation of environmental data and information and management of the environmental reporting and information system in the Federation of BiH, keeping the register of polluters and pollution of all the environmental media, maintaining of relevant environmental databases, and registration in the Eco-management and Audit Scheme EMAS, preparing reports on the state of environment (pursuant to the Law on Environmental Protection of the Federation of BiH) |
| Institute for Statistics of the Federation of BiH | Carries out professional and other tasks falling in the competence of the Federation focusing on statistical surveys in the Federation, including the environment (pursuant to the Law on Ministries and Other Bodies of the Administration of the Federation of BiH) |
| Environmental Protection Fund of the Federation of BiH | It is responsible for:   * building, development, management and coordination of a common environmental system in the Federation of BiH (pursuant to the Law on Environmental Protection and Conclusion of the Government of the Federation of BiH of 28.01.2019) * building and development of the nature conservation information system pending the establishment of the Institute for Nature Conservation (pursuant to the Law on Nature Conservation of the Federation of BiH and Conclusion of the Government of the Federation of BiH no. 146/2018 of o1.02.2018) |
| Water Agencies of the Federation of BiH (Adriatic Sea Watershed Agency, Sava River Basin Agency) | Organise hydrological monitoring and water quality monitoring, monitoring of ecological status of surface waters, monitoring of ground water quality. Prepare reports on the status of water quality and recommend measures required for the achievement of objectives pertaining to water protection, water regulation and protection from harmful effects of waters, and use of waters. Management of water information system is also one of their responsibilities (under the Law on Waters of the Federation of BiH) |
| Hydrometeorological Institute of the Federation of BiH | Responsible for development and management of the meteorological, hydrological and seismological activities and environment quality, research of the atmosphere, water resources, environment quality (air, water, soil) and seismological processes; collection, processing and publication of data of interest for the Federation, and other tasks in the area of meteorology, hydrology, environmental quality and seismology (under the Law on the Ministries of the Federation of BiH and Other Bodies of the Administration |
| Institute of Agropedology of the Federation of BiH | This institute carries out professional and other tasks falling in the competence of the Federation of BiH and Herzegovina, which among other things pertain to: Monitoring the level of contamination of agricultural land by pollutants (heavy metals), monitoring and building of the land information system, and record keeping on agricultural land.(the Law on Ministries and Other Bodies of the Administration of the Federation of BiH) |

Also, the Federation of BiH has not defined standardised methodologies for data collection and communication, and statistical reporting in the environment sector. There are some individual (processes separate) systems for environmental data collection and reporting, but these are insufficient for adequate reporting in accordance with the international standards (reporting requirements of EEA, EUROSTAT, SDG, UNECE, and three Rio Conventions, etc.) The Federation of BiH has not adopted the list of indicators for monitoring of the state of environment based on the set of indicators from the Core Set of Indicators used by the European Environment Agency (CSI List) which should be used for official reporting purposes. In 2019, the Council of Ministers of Bosnia and Herzegovina adopted a List of selected environmental indicators in BiH which was prepared on the basis of the indicators used for reporting under the three Rio conventions.[[23]](#footnote-24). The list of selected environmental indicators, which was adopted, contains 59 indicators classified by thematic areas (biodiversity, land degradation, air quality, and climate change). These were assessed as relevant for the environmental performance monitoring in BiH.

While BiH Hercegovina adopted the Framework for the implementation of the sustainable development goals in 2021(Government of Sweden and UNDP, 2020), the Federation of BiH did not develop adequate statistics for monitoring of the sustainable development goals in this entity. Furthermore, neither BiH nor the Federation of BiH have adopted the European Environmental Economic Accounts in accordance with the Decree (EU) no. 691/2011 on the European Environmental Economic Accounts which laid down a common legal framework for collection, preparation, communication and evaluation of the European Environmental Economic Accounts.

Obstacles which impede the collection of environmental data identified in the Federation of BiH are associated with a lack of trained staff and resources for a continued improvement of monitoring and the fact that accredited laboratories[[24]](#footnote-25) do not measure all the required environmental parameters (for example, there is no accredited or testing method for determination of waste composition, etc.).

An analysis of available data from the electronic registers on facilities and pollution (PRTR of the Federation of BiH) in the Federation of BiH revealed that only a minor number of operators provide their data and meet their reporting obligations in relation to PRTR regulated by the law (for example, of all the facilities which obtained the environmental permit, the PRTR of the Federation of BiH for emissions for 2018 contains data provided by 57 facilities, the register for discharge of waste water in surface/ground water contains data obtained for 50 facilities, while the register for waste collection and treatment outside the site of the facility in BiH contains data for 102 facilities). Data collected in PRTR in the Federation of BiH are currently not forwarded to the national institutions as this process is not regulated. The process of reporting these data to the EU institutions has also not been regulated.

**In order to address the identified gaps, it is necessary to set up an efficient system for record keeping and transparent reporting of environmental data in the Federation of BiH.**

*Integration of environmental requirements in sectoral policies*

**Currently, the integration of environmental and climate change requirements adaptation and low-carbon development in the sectoral policies is not highly successful.** Integration of environmental aspects into sectoral policies and legislation in the energy, mining, transport, agriculture, forestry, health, and tourism and education sectors is at an early stage.

Recent years sow an increasing need for a multidisciplinary approach. The Green Agenda for the West Balkans requires cross-sectoral approach to facilitate development of a clear policy for the transition to a circular economy (sustainable production and consumption. Policy makers and authorities across the levels of government in BiH and also in the Federation have failed to engage vigorously to improve this area, and as a result, BiH still has a linear economy. Furthermore, the industry does not cooperate with the environmental sector, and there are no innovations in production aimed at transitioning to a circular economy. A multisectoral-sectoral cooperation lead by the industry and environment sectors is an imperative to enable development of a clear environmental policy focusing on the creation of conditions for the implementation of a circular economy.

The institutional mechanisms for integration of standards and principles of gender equality, social equity and poverty issues are not fully effective, and these principles are not adequately integrated in environmental policies, strategies and programmes.

**Future should see an enhanced inter-sectoral action and synergy among the sectors in order to integrate public policies in all the segments of the environment, including gender equality, social equity, and poverty issues.**

*Economic instruments of environmental protection*

The current funding mechanisms and available funds for financial environmental measures and projects are relatively poorly used.The Federation of BiH collects the following taxes based on different laws: Tax on light plastic shopping bags, tax payable by polluters, special environmental taxes paid with the registration of motor vehicles, tax for packaging and packaging waste management, tax for WEEE management and water taxes (general and special). The Environmental Protection Fund of the Federation of BiH and water agencies in the Federation of BiH[[25]](#footnote-26) collect and distribute funds for environmental protection in the territory of the Federation.

While recent years recorded a progress in terms of the legislation which governs economic instruments for environmental protection, the application of the laws is limited and very often not in compliance with the principles of efficiency and efficacy. For instance, there is blatant lack of policies which ensure the use of potentials of green economy. The key challenge the Federation of BiH is currently facing in the implementation of the economic instruments and implementation of environmental measures is associated with a non-transparent reporting of the institutions on funds raised and non-dedicated spending, ineffective planning of economic instruments, lack of innovative and stimulating economic mechanisms, and inadequate capacities to ensure access to external funds for environmental protection and complementary sectors.

**In conclusion, the fiscal and parafiscal policy in the area of environmental protection in the Federation of BiH is ineffective and incomplete. In order to ensure the financial sustainability of the environment sector in the Federation of BiH, it is necessary to agree on and implement an effective and comprehensive fiscal and parafiscal policy for environmental management.**

*Education, research and development*

The environmental protection issues are integrated to a certain extent in curricula of educational institutions (primarily primary and secondary schools) but this is not sufficient. Teachers and employees of the educational institutions have poor eco competence. Teaching staff is not adequately trained for teaching and preparation of educational content on sustainable development in a digital form. **Investments in environmental education, research, and development are presently rather scarce,** which is a challenge in terms of the need to adjust and innovate the applicable curricula and upgrade them to comply with the up-to-date principles over the next ten years. Furthermore, there is still no intensive institutional cooperation between the education and environment sector on the issues of adult education.

Dedicated budgets for investments in innovation and development, and application of new technologies aimed at reducing the pollution are not sufficient given an increasing need to catch up with international trends. No serious attempts to pool the capacities of institutes, businesses and higher education institutions for the implementation of environmental projects were recorded.

**It is necessary to upgrade the system for strategic decision-making, investments and monitoring of effects on environmental protection across the levels of education and in institutions for scientific research and promotion of innovations.**

*Integration of gender equality, social equity and poverty principles in the environmental sector*

**Integration of standards and principles of gender equality, social equity and poverty in the environmental sector is not satisfactory in the Federation of BiH.** As a result, these standards and principles have not been adequately integrated in environmental policies, strategies and programmes. Needs of particularly vulnerable and poor groups have not been taken into account in environmental impact assessment processes and policy making.

The awareness on the importance of gender mainstreaming in environmental policy making, and of fair decision-making in the environmental management is still rather poor. In addition, the gender equality institutional mechanism is not effective in all the environmental institutions in the Federation of BiH, although the Law on Gender Equality in BiH(“Official Gazette of BiH“, 32/10) requires creation of these institutional mechanisms in all the areas and across the levels of government. Gender equality institutional mechanism, the Gender Centre of the Federation of BiH, was established as a professional service office of the Government of the Federation of BiH with a mission to improve gender equality and equity in the Federation of BiH, and implement the principles contained in the international conventions and agreements for the Government of the Federation, professional bodies of the Government, Prime Minister, Deputy Prime Minister, ministries and other institutes and institutions of the Federation of BiH.

The authorities, bodies and administrative organisations of the Federation of BiH satisfy this requirement through nomination of a GFPs (*Gender Focal Points*), more specifically officers who are in charge of gender equality issues, and who cooperate with the Gender Centre of the Federation of BiH on the implementation of the Law on Gender Equality and Gender Action Plan (GAP) of BiH. These persons who have been nominated in the institutions as GFPs need to improve their understanding on the integration of gender equality in public environmental policies and legislation. It is also necessary to establish a special coordination body for gender and environmental issues and to strengthen its capacity.

There are no regulated institutional mechanisms in charge of the issues of social equity and poverty, and there have been very few efforts aimed at integrating these issues in environmental public policies and legislation.

* 1. Strategic goal 7

**Strategic goal 7 - Strengthening environmental management**

Strategic goal 7 is a horizontal issue. Activities in this area focus on the implementation of the environmental acquis. Environmental management aims at improving decision-making processes and increasing the stakeholders’ participation in the management. Regulations essential for the environmental management in EU include the Directive on Environmental Impact Assessment, Directive on Strategic Impact Assessment, Directive on Access to Information, Public Participation and Access to Justice on Environmental Matters, Environmental Liability, and several legal documents which regulate registration, licencing and inspection supervision of the compliance with the applicable requirements among environmental permit holders and other stakeholders.

***Table 25*:***Indicators of impacts for strategic goal 7*

|  |  |  |  |
| --- | --- | --- | --- |
| **Strategic goal 7** | **Impact indicators** | **Baseline value** | **Target value**  **(To be determined in the initial years of the implementation)** |
| *Improving environmental management* | **Environmental costs** | Total investments: BAM 18,270,103  Total running costs BAM 45,768,781  (2020) | ... |

* + 1. Priorities for strategic goal 7

**Priority 7.1 Improving the legal framework and sectoral policies for planning, management and protection of the environment in the Federation of BiH with the view of fully aligning the legislation with the EU environmental acquis and international agreements** through passing new laws and amending the applicable environmental legislation in the Federation of BiH. A special focus will be placed on the implementation of the priority activities specified in the National Programme of EU integration in accordance with the responsibilities of the Federation of BiH. The focus will also be directed towards drawing up, adoption and implementation of action plans for the implementation of EU environmental directives (APIDs).

**Priority 7.2 Ensuring effective implementation of the applicable legislation and international commitments** through parallel activities aimed at increasing the level of the implementation of international agreement in accordance with responsibilities of the Federation of BiH. The action will focus on a more intensive application of the strategic impact assessment, ensuring conditions for the introduction of integrated environmental permits, and activities on the preparation of technical instructions for Best Available Techniques (BAT) in priority sectors.

**Priority 7.3 Maximise the capacity of institutions and their coordination** through improved horizontal and vertical institutional coordination and capacity building of employees, particularly through formation of teams and upgrading their skills required for the preparation and implementation of environmental projects.  
 In accordance with the responsibilities of the Federation of BiH, options that may be considered to this end include improvement of the efficacy of the Inter-entity environmental body and establishment of the Environmental Agency in the Federation of BiH.

**Priority 7.4 Ensuring strong public awareness on the importance of the environmental protection and their engagement in decision-making processes, focusing on women, youth and socially vulnerable groups** through continued implementation of awareness raising activities on the importance of environment and participation in decision-making processes, through cooperation among the institutions, civil society organizations and media. Routine preparation and publication of reports on the state of environment in the Federation of BiH aimed at providing a broad understanding of these issues among the general public will be an important aspect of these efforts.

**Priority 7.5 Set up an efficient system for record keeping and transparent reporting of environmental data in the Federation of BiH, in consultation with the Partnership 27**, primarily through upgrading the current environmental monitoring system development of the environmental management information system in accordance with the Law on Environmental Protection. The adequacy of data and reports generated through the information system shall provide for regular monitoring of environmental performance, but also for functional reporting in accordance with the requirements of the international bodies, in consultation with the Partnership 27. This Partnership was founded by the civil society organisations in 2019 with the view of monitoring the approximation process and application of policies and regulations in BiH in compliance with EU acquis, focusing on Chapter 27 on environment and climate change. A special attention will be given to establishment of the functional spatial data exchange system in the Federation of BiH pursuant to Annexes I, II and III INSPIRE Directive, and establishment of an effective PRTR. Considerable efforts will also be put in development of environmental statistics– monitoring of sustainable development indicators in the Federation of BiH in the thematic area of Environment, as well as in establishment of the European Environmental Economic Accounts.

**Priority 7.6 Ensuring a strong synergy in cross-sectoral and inter-sectoral action, and integration of public environmental policies** through a more intensive inter-sectoral cooperation aimed at integrating environmental requirements into sectoral policies and legislation. In the context of climate change, a special focus will be placed on integrating the requirements of the Climate Change Adaptation and Low Emission Development Strategy for BiH in the sectoral polices of the Federation of BiH. Another focus will be on the integration of the standards and principles of gender equality, social equality and, poverty issues into the key environmental policies, strategies and programs. These aspects of cross-sectoral cooperation, led by the environmental sector, are important for the preparation of a clear policy for application of a circular economy The development of this document will rely on the *Green Deal for Western Balkans*, which requires action aimed at transitioning to a circular economy (sustainable production and consumption).

**Priority 7.7 Ensuring financial sustainability of the environmental sector in the Federation of BiH** through adequate implementation of the existing economic instruments, introduction of the new– innovative and stimulative economic instruments for environmental funding and a greater use of available EU funds and other international funds intended for environmental protection and complementary sectors. The Federation Ministry of Finance, Ministry of Foreign Trade and Economic Relations of BiH and Herzegovina, will be involved in all the aspect of the fiscal policy on the environmental protection (facilities for the import of specific eco-friendly products, etc), also taking into account a potential for the use of dedicated international funds.

**Priority 7.8 Setting up a system for strategic decision-making, investments and monitoring of results in education**, **research and innovations in the environment sector,** including through activities aimed at continued improvement of integration of environmental issues into curricula of the educational institutions, which should also cover nonformal education, pursuant to the Law on Environmental Protection of the Federation of BiH, strengthening capacity and eco-pedagogical competencies of employees of educational institutions. The second area of intervention will include capacity building for environmental research and development.

***Table 26:*** *Priorities with relevant indicators*

| **Priorities** | **Indicator of deliverable** | **Baseline value** | **Target value** |
| --- | --- | --- | --- |
| **Priority 7.1**  **Improving the legal framework and sectoral policies for planning, management and protection of the environment in the Federation of BiH with the view of fully aligning the legislation with the EU environmental acquis and international agreements** | Compliance of the environmental legislation of the Federation of BiH with the EU acquis. | Partial compliance (2021)  Environmental legislation of the Federation of BiH is:   * Highly aligned with 6 directives and 1 regulation; * Partly aligned with 1 Directives; * Not aligned with 2 Directives | Environmental legislation of the Federation of BiH is aligned with 9 Directives and one Regulation  (2030) |
| Availability of Action Plans for the Implementation of Directives, in accordance with the Environmental Approximation Programme of the Federation of BiH | Action Plans for the Implementation of EU Directives (APIDs) in the environmental management sector were not prepared (2021) | Priority Action Plans for the Implementation of EU Directives (APIDs) in the environmental management sector adopted and progressively implemented (2030) |
| Fining policies in the environment sector defined | There are no provisions on fines in relation to pollution and environmental damages, and remedies for damages inflicted (2021) | The sanctions policy in the environmental protection sector clearly defined (2026)  (2026) |
| Compliance of the legal and strategic framework in the environmental management sector with the international and national gender equality standards | The legal and strategic framework in the environmental management sector fall short of international and national gender equality standards (2021) | Compliance of the legal and strategic framework in the environmental management sector with both the international and national gender equality standards increased significantly (2030) |
| **Priority 7.2**  **Ensuring effective implementation of the applicable legislation and international commitments** | Level of the implementation of international environmental agreements | Insufficient implementation of international environmental agreements (2021) | Effective implementation of the international environmental agreements ensured (2027) |
| Application of the of strategic environmental assessment | Limited application of the strategic environmental assessment instrument (2021) | Strategic environmental assessments of all documents /projects which require SEA consistently undertaken (2024) |
| Integral permitting procedures | The Federation of BiH has not started issuing integrated permits, as regulated in the EU Directive 2010/75/EU on industrial emissions (2021) | Prerequisites for integrated environmental permitting ensured (2026) |
| Stage of development of technical instructions for best available techniques (BATs) for priority sectors | The Law on Environmental Protection requires the application of best available techniques; however, the practical implementation of this requirement is limited. The technical instructions on the best available techniques (BAT) and reference documents on the best available techniques (BREFs) were not translated into the official languages of BiH. In the Federation of BiH, the technical instructions on BAT were developed for the following sectors of food industry and agriculture: livestock slaughterhouses, meat processing, fish farming and processing, milk processing and milk products, fruit and vegetable processing and bear breweries. Subsequently, within the Project “Support to implementation of IPPC Directive (EuropAid/126648/C/SER/BA)” the Federation of BiH prepared the technical instructions for the following sectors: stone extraction, large furnaces, surface protection of metals and plastics, and coating with molten metal, and for monitoring (2021) | Technical instructions for best available techniques (BAT) for activities for which BAT have been defined and prepared (2028). |
| **Priority 7.3**  **Maximise the capacity of institutions and their coordination** | Effectiveness of mechanisms for institutional coordination of work of the environmental institutions | Lack of an effective mechanisms for institutional coordination of work of the environmental institutions (2021)  There is no vertical coordination and communication among the cantons/municipalities and the Federation of BiH, and no horizontal coordination (inter-entity - among FBiH, Republika Srpska and Brcko District, and coordination between the individual cantons and municipalities respectively) | Functional mechanisms for institutional coordination of work of the environmental institutions established (2025) |
| Efficacy of the work of the Environmental Inter-entity Body | The work of the Environmental Inter-entity Body is ineffective and inefficient, while its decisions are not legally binding (2021) | A coordinated and harmonised approach to addressing environmental management issues in both entities and Brcko District BiH ensured through increased efficacy the Environmental Inter-entity Body (2024) |
| Efficacy of institutional structures in the area of coordination and harmonisation of activities in transposition of EU regulations | Partial efficacy of the current institutional structures (2021) | The current institutional structures enhanced in order to provide for better coordination and harmonisation of activities in transposition of EU regulations. Human resources across the levels strengthened so as to enable a long-term and sustainable implementation of the EU regulations (2028) |
| Effectiveness and expertise of employees in the environmental institutions in the area of project preparation and implementation | The institutions responsible for the preparation and implementation of projects have no specialised teams. The Federation Ministry of Environment and Tourism and Federation Ministry of Agriculture, Water Management and Forestry have specialised teams for projects preparation and implementation, but such teams are not available in all the institutions (2021) | Effective teams with expertise for the preparation and implementation of projects formed in the institutions responsible for the preparation and implementation of projects (2028) |
| **Priority 7.4**  **Ensuring strong public awareness on the importance of the environmental protection and their engagement in decision-making processes, focusing on women, youth and socially vulnerable groups** | Public awareness on the importance of environmental protection and their engagement in decision-making processes | Low public awareness about environmental protection;  Lack of long term educational programmes and campaigns aimed at raising the awareness about the issues of environmental protection (2021) | Strong public awareness on the importance of the environmental protection and their engagement in decision-making processes, focusing on the engagement of women, youth and socially vulnerable groups ensured (2030) |
| Public participation in the decision-making processes on environmental issues, especially in the environmental impact assessment and environmental permitting procedures | Poor public participation and poor quality of public consultation in decision-making processes (especially the processes of environmental impact assessment, environmental permitting, preparation of laws, bylaws and other legal acts, etc..) Young people do not participate in decision-making processes as required by the Law on Youth of Federation of BiH (2021) | Access to information and effective public participation in the decision-making processes on environmental issues, especially in the environmental impact assessment and environmental permitting procedures ensured (2025) |
| Regular preparation and publication of reports on the state of environment in the Federation of BiH | Inconsistent preparation, public communication, and reporting processes in relation to reports on the state of the environment (2021) | Reporting on the state of environment in the Federation of BiH consistent, high quality reports publicly available (2026) |
| **Priority 7.5**  **Set up an efficient system for record keeping and transparent reporting of environmental data in the Federation of BiH, in consultation with the Partnership 27** | Effectiveness of the system for monitoring of environmental parameters | The monitoring system exists; however, the current laboratories still have no testing methods for certain environmental components and sectors Also, there are huge gaps in modus operandi of the accredited laboratories (2021) | The current system of environmental parameters monitoring upgraded (2027) |
| Development of an environmental management information system in accordance with the Law on Environmental Protection | The integral information system for environmental management has not been developed (2021) | An effective integral information system for environmental management developed in the Federation of BiH (2028) |
| Effectiveness of environmental data monitoring, collection, validation system aimed at reporting in accordance with the international agreements | No standardised systems or methodologies for data gathering, communication and reporting, and statistics in the area of environment have been created. There are individual systems for environmental data collection and reporting, but this is insufficient for adequate reporting to international bodies. | An effective environmental data monitoring, collection, validation system aimed at reporting in accordance with the international agreements created (2026) |
| Effectiveness of the system for spatial data exchange in the Federation of BiH in accordance with the INSPIRE Directives I II, and III. | No effective system for sharing of spatial data in place | An is effective system for spatial data exchange in the Federation of BiH in accordance with the INSPIRE Directives I II, and III developed (2030) |
| Effectiveness of PRTR in the Federation of BiH | PRTR established in the Federation of BiH, however a few operators do report their data and meet the legal reporting requirements of PRTR reporting There is no data verification system for data entered in the PRTR registers by the operators. Mutual incompatibility of PRTRs in the Federation of BiH and Republika Srpska leads to problems in compiling data at the national level Data collected in PRTR in the Federation of BiH are currently not forwarded to the national institutions as this process is not regulated. The process of reporting these data to the EU institutions is also not regulated (2021) | PRTR in the Federation of BiH is effective and harmonised with the Registers in Republika Srpska and Brcko District Data reporting from PRTR to the institutions of Bosnia and Herzegovina and EU in the Federation of BiH is regulated (2026) |
| Development of statistics for Sustainable Development Goals in the Federation of BiH | While Bosnia and Herzegovina adopted the Framework for the implementation of the sustainable development goals in 2021, the Federation of Bosnia and Herzegovina did not develop adequate statistics for monitoring of the sustainable development goals (2021) | Statistics for the sustainable development goals associated with the environment thematic area and further indicators developed and the reporting is system upgraded (2026) |
| Efficiency in statistical data collection, processing and publication in the Federation of BiH through a standardised and routine information sharing among the institutions across the levels of government | It is necessary to improve the efficiency of the collection, processing and publication of environmental statistical data in the Federation of BiH across the administrative levels | The efficiency of statistical data collection, processing and publication in the Federation of BiH increased through a standardised and routine information sharing among the institutions across the levels of government (2026) |
| Participation of the institutions of the Federation of BiH in the establishment of the European Environmental Economic Accounts which describe the relations between the environment and economy (in accordance with the (EU) Regulation no. 691/2011 on the European Environmental Economic Accounts which laid down a is common legal framework for collection, preparation, communication and evaluation of the European Environmental Economic Accounts) | European Environmental Economic Accounts have not been established in accordance with the Regulation (EU) no. 691/2011 on the European Environmental Economic Accounts | Participation of the institutions of the Federation of BiH in the establishment of the European Environmental Economic Accounts ensured (2026) |
| **Priority 7.6**  **Ensuring a strong synergy in cross-sectoral and inter-sectoral action, and integration of public environmental policies** | Integration of environmental requirements in sectoral policies legislation | Poor integration of the environmental requirements in sectoral policies and legislation (2021) | Substantial integration of the environmental requirements in sectoral policies and legislation through enhanced cross-sectoral cooperation (2030) |
| Integration of the requirements of the Climate Change Adaptation and Low Carbon Development Strategy of BiH | The requirements of the Strategy on climate change adaptation and low-carbon development of BiH are not integrated in sectoral policies (2021) | The requirements of the Strategy on climate change adaptation and low-carbon development of BiH are integrated in sectoral policies (2028) |
| Integration of standards and principles of gender equality, social equality and poverty in the key environmental policies, strategies, and programmes | Poor integration (2021) | Standards and principles of gender equality, social equality and poverty integrated in the key environmental policies, strategies, and programmes (2026).  Tools such as gender analysis, gender impact assessment, gender responsible budgeting, gender index in the environment sector and gender audit applied to planning, implementation, monitoring and evaluation of policies, programmes and projects in the environmental management |
| Effectiveness of the institutional mechanism of coordination in the domain of gender equality | Conditions created for the establishment of a special coordinating gender equality and environment body, but it has not been established (2021) | An efficient coordination gender equality and environment body established (2026) |
| Status of the preparation of a sectoral policy focusing on laying the ground for the implementation of a circular economy | Currently, the Federation of BiH has no waste policy in writing. A multi-sectoral cooperation lead by the industry and environment sectors is required in order to design a clear environmental policy focusing on the creation of conditions for the implementation of a circular economy (2021) | The sectoral policy adopted and conditions created for the transition to a circular economy (2027) |
| **Priority 7.7**  **Ensuring financial sustainability of the environment sector in the Federation of BiH** | Transparency of reporting of the institutions about funds they collect from taxes and the purposes for which they used them | Non-transparent reporting of the institutions about funds they collect from taxes and the purposes for which they used them (2021) | Responsible institutions routinely prepare and transparently publish reports on funds raised and on use funds for intended purposes (2030) |
| Implementation of current economic instruments | Perception of economic instruments is not systemic. Ineffective planning of economic instruments (2021) | Current economic instruments efficiently and robustly implemented (2030) |
| Application (implementation) of taxes and fees defined in the applicable legislation | Lack of taxes or fees in individual areas which have a significant impact on the environment (2021) | All fees stipulated in the Law on the Fund of the Federation of BiH and other laws which regulate individual areas implemented (2030) |
| Implementation/application of new innovative and stimulating economic mechanisms | Lack of innovative and stimulating economic mechanisms (2021) | New innovative and stimulating economic mechanisms implemented (2030) |
| Use of the available EU funds and international funds for environmental protection and complementary sectors | Insufficient use of the available financial mechanisms and international funds for environmental protection and complementary sectors (2021) | Increased use of the financial mechanisms and international funds designated for environmental protection and complementary sectors (2030) |
| **Priority 7.8**  **Establishing the system for strategic decision-making, investments and monitoring of results in education, research and innovations in environment** | Integration of environmental protection issues in curricula of educational institutions and nonformal education | Environmental issues are insufficiently integrated in curricula of educational institutions at all the levels (2021) | Environmental issues integrated in curricula of educational institutions across the levels (2030) |
| Capacity of employees of educational institutions | Eco-pedagogical competencies of the staff of educational institutions need to be improved (2021) | The capacity and eco-pedagogical competence of the staff of educational institutions enhanced (2030) |
| Creating dedicated budgets to support the nonformal environmental education | Insufficient budgets allocated to support the programming in the domain of nonformal environmental education (2021) | Earmarked funds for support to non-formal environmental education created (2030) |
| Availability of earmarked funds for innovation and development in the environment sector. | Dedicated budgets for investments in innovation and development, and application of new technologies aimed at reducing the pollution are not sufficient given an increasing need to catch up with international trends (2021) | Larger budgets allocated for innovation and development, and application of new technologies aimed at reducing the pollution (2028) |
| Strengthening research capacities in the environment sector | Poor capacities for research and development in the environment sector. Scientific research in this area insufficient (2021) | Capacities for environmental research increased by (2030) |

* + 1. Description of measures

Strategic goal 7 comprises 32 measures logically linked with the priorities.

**Priority 7.1 Improving the legal framework and sectoral policies for planning, management and protection of the environment in the Federation of BiH with the view of fully aligning the legislation with the EU environmental acquis and international agreements**

*Measure 7.1.1. Aligning the legislation of the Federation of BiH with the environmental EU acquis and the implementation of the EU directives.*

This measure aims at increasing the level of alignment of the legislation of the Federation of BiH with the EU environmental regulations, in accordance with the BiH EU Integration Programme which is currently being drafted. The Programme should be adopted in 2022, and it covers a four-year period. This document will prioritise EU regulations, timelines for their transposition, etc.

Areas of intervention include aligning of the legislation of the Federation of BiH with the EU regulations as prioritised, and defining the measures to implement the priority recommendations of the European Commission which concern the institutional measures and administrative capacities, within the scope of Chapters 27 and its provisions on the environmental management. This measure also includes consistent updating and implementation of the Programme of legal approximation of the Federation of BiH with the EU environmental acquis, participation of the institutions of the Federation of BiH in the preparation of directive specific implementation plans (DSIPs) in the environment sector, and preparation and adoption of the action plans for the implementation of specific (complex) directives, regulations, more specifically the whole EU environmental acquis (APIDs), based on the priorities for transposition, as defined.

*Measure 7.1.2. Defining environmental sanctions policy*

This measure aims at defining a clear sanctions policy in the environmental protection.

General areas of intervention include amending of relevant laws of the Federation of BiH so as to transpose the Directive 2004/35/CE on environmental liability with regard to the prevention and remedying of environmental damage and Commission Notice-Instructions on agreement on the term ”environmental damage” as defined in Article 2. of the Directive 2004/35/CE of the European Parliament and of the Council on environmental liability with regard to the prevention and remedying of environmental damage.

*Measure 7.1.3. Alignment of environmental management legal and strategic framework with the international and national gender equality standards*

The aim of the measure is to ensure that all legal and strategic documents in the field of environmental management satisfy the international and national gender equality standards. To this end, it is necessary to first identify priority laws, strategies, action plans, programmes and other environmental documents, and initiate gender mainstreaming in this particular area.

***Priority 7.2 Ensuring efficient implementation of the applicable legislation and international commitments***

*Measure 7.2.1. Strengthening capacities for the implementation of international environmental agreements*

The aim of this measure is to significantly increase the level of the implementation of the international agreements ratified by BiH, in accordance with responsibilities of the Federation of BiH.

General areas of intervention include the participation of the institutions of the Federation of BiH in the creation of a document which will formalize the framework for the implementation of the international agreements and other international commitments of BiH in all the areas of environment, ensuring public access to official documents of global, regional and bilateral environmental agreements ratified in BiH, and strengthening of human resources capacity and communication with civil society organizations in order to improve the efficacy of the application of the international agreements.

*Measure 7.2.2. Consistent application of strategic environmental assessment (SEA)*

The aim of this measure is to ensure consistent application of SEA through application of the 2021 Law on Environmental Protection and through cross-sectoral cooperation.

General areas of intervention include drafting and adoption of bylaws based on the Law on Environmental Protection to define in detail the scope, content and evaluation of SEA, consistent updating of bylaws for the implementation of SEA, participation of the institutions of the Federation of BiH in the processes of coordination and harmonization with representatives of the competent institutions of BiH, Republika Srpska and Brcko District while updating and defining protocols and administrative procedures for cross-border notification and consultations in the process of SEA implementation as well as establishment of the necessary systems and procedures aimed at consistent application of SEA.

*Measure 7.2.3. Ensuring conditions for integrated environmental permitting*

The aim of this measure is to ensure conditions for integrated environmental permitting process. The aim is to achieve an ambitious goal - a party submits one application and obtains all the required approvals and the final decision on environmental permit.

General areas of intervention include evaluation of the necessary technical preconditions and personnel in the Federation Ministry of Environment and Tourism for the issuance of the integrated environmental permits, and defining of recommendations for necessary adjustments, implementation of these recommendations, and creation of conditions for digitalization of all the procedures (including adoption of all the regulations the institutions need in order to be able to implement digital procedures).

*Measure 7.2.4. Preparation of technical instructions for best available techniques (BAT)*

Technical instructions for best available techniques for activities for which BAT have been determined by priorities.

General areas of intervention include adoption of technical instructions for the best available techniques which have been prepared, preparation of new technical instructions for the activities for which the BAT have been determined, by priorities, periodical update of already adopted technical instructions, and ensuring access to the background BAT documents using the link of the Federation Ministry of Environment and Tourism referring to original documents (in the English language) or translated into official languages in BiH (once translations are available).

***Priority 7.3 Maximise the capacity of institutions and their coordination***

*Measure 7.3.1. Implementation of effective mechanisms for institutional coordination of the activities of the environmental institutions in the Federation of BiH.*

The aim of this measure is to design effective mechanisms for institutional coordination of the activities of the environmental institutions in the Federation of BiH.

General areas of intervention include improvement of horizontal and vertical institutional coordination and common action of all the relevant entities– ministries and other institutions in the Federation of BiH at all levels aimed at protecting the environment, ensuring continuous communication among line institutions, which should clarify and promote the roles of different environmental protection institutions, in particular in transposition and implementation of EU acquis, ensure better cooperation and coordination among the cantons, and better horizontal linkage among the units of local government in the area of environment. This measure also covers discussions on the establishment of the Environmental Agency of the Federation of BiH.

*Measure 7.3.2. Upgrading the efficiency of the Inter-entity Environmental Body*

The aim of this measure is to ensure coordinated and harmonised approach to addressing environmental management issues applied by both entities and the Brcko District BiH through increased efficacy of the Environmental Inter-entity Body.

General areas of intervention should focus on ensuring an effective contribution and efficient work of the Inter-entity body through more up-to-date and improved functioning of this body, particularly in the domain of harmonisation of the legislation among the entities and BD BiH, and through the use of more up-to-date channels of internal and external communication on the part of Federation of BiH. This measure also includes facilitation of the stakeholders’ participation (representatives of the Partnership 27 of civil society organizations) at meetings and in the work of the Environmental Inter-entity Body, and public access to information and reports of the meetings.

*Measure 7.3.3. Improving the institutional structure and capacity of environmental institutions*

This measure aims at upgrading the current institutional structure in order to improve coordination and harmonization activities in the EU transposition process, and at capacity building (human resources) in the environmental institutions at all levels, with a special focus on a long-term and sustainable implementation of the EU regulations.

General areas of intervention include an in-debt analysis of the institutional capacities in the Federation of BiH for consistent application of laws and effective implementation of environmental protection strategies and plans, and development of measures aimed at keeping the professional staff, adopting a strategic approach to new employments and upgrading human resources in the institutions. The measure also includes development and adoption of documents on coordinated work of inspection bodies aimed at coordinating the work of environmental inspection and other inspections.

*Measure 7.3.4. Establishment of effective teams in the environmental institutions, including teams for the preparation and implementation of environmental projects*

The aim of this measure is to form effective teams in all the environmental institutions, including teams with expertise for the preparation and implementation of projects.

General areas of intervention include evaluation of needs for professional trainings in all the competent institutions, drawing up and implementation of the training plan for professional staff in the institutions in cooperation with professional organizations, and creating environmental protection teams in the key institutions (which do not have such teams).

***Priority 7.4 Ensuring strong public awareness on the importance of the environmental protection and their engagement in decision-making processes, focusing on women, youth and socially vulnerable groups***

*Measure 7.4.1. Education and raising awareness about the need and importance of environmental protection*

This measure aims at ensuring strong public awareness on the importance of the environmental protection and their engagement in decision-making processes, focusing on the engagement of women, youth and socially vulnerable groups.

General areas of intervention include continued public campaigning to raise awareness about the importance of the environmental protection and vulnerability of natural resources, and correlation with climate change, continued cooperation with media aimed at promotional activities, establishment of long-term educational programmes on environmental protection issues, cooperation of partner institutions in order to expand the knowledge and raise awareness about the linkage between the environment and gender dimension. These activities should also involve the participation of civil society organisations. In addition, this measure also includes promotion of the environmental protection system and measures that can improve design of products.

*Measure 7.4.2. Improving public participation in decision-making about environment*

The aim of this measure is to ensure access to information and effective public participation in the environmental decision-making processes, especially environmental impact assessments and environmental permitting processes. This measure includes capacity building activities of women civil society organisation to enhance their participation in decision-making .

General areas of intervention include trainings for representatives of the relevant institutions which should educate them how to design effective mechanisms of public participation, strengthen cooperation with civil society organizations, especially with Partnership 27, formed for monitoring of EU Chapter 27, how to ensure participation of the Gender Centre of the Federation of BiH in preparation of laws, bylaws and other documents, strategies, policies and programmes in order to define measures for gender equality in environmental protection, as well as how to ensure public access to environmental information.

*Measure 7.4.3. Preparation and publication of reports on the state of environment in the Federation of BiH*

The aim of this measure is to devise a system to support routine preparation and publishing of reports on the state of environment in the Federation of BiH.

General areas of intervention include preparations in the line institutions for producing of reports on the state of environment in the Federation of BiH, as well as activities to support producing and promotion of reports on the state of environment in the Federation of BiH

***Priority 7.5 Set up an efficient system for record keeping and transparent reporting of environmental data in the Federation of BiH, in consultation with the Partnership 27***

*Measure 7.5.1. Strengthen the system for monitoring of environmental parameters*

The aim of this measure is to strengthen the existing system for monitoring of environmental parameters.

General areas of intervention include professional capacity building in the reference centres and similar institutions/institutes responsible for individual areas, increased diversification of environmental parameters that are monitored.

*Measure 7.5.2. Build an effective integrated information system for environmental management in the Federation of BiH*

The aim of this measure is to build an effective integrated information system for environmental management in the Federation of BiH.

General areas of intervention include the establishment of single environmental protection information system of the Federation of BiH, development of a methodology and formal procedure for environmental data exchange in the Federation of BiH, strengthening of the institutional systems for environmental data collection, various upgrades of the environmental data monitoring system, strengthening of cooperation with the relevant representatives of NGO sector, and establishment of environmental data validation system

*Measure 7.5.3. Establishment of an effective system for monitoring, collection, validation of environmental data in accordance with the international agreements*

The aim of this measure is to establish an effective, integrated system to support monitoring, collection and reporting of environmental data in order to ensure an efficient and effective reporting in accordance with the international standards and agreements.

General areas of intervention include the engagement of the institutions of the Federation of BiH in a study analysis which should revise the existing and make proposal for an extended set of indicators that have to be monitored in all areas, adoption of the List of indicators of the Federation of BIH for monitoring of the state of environment, participation in activities of a working group, coordinated by the Ministry for Foreign Trade and Economic Relations of BiH and comprised of representatives of institutions from all levels. This group should provide technical proposals and coordinate the implementation of conclusions and proposals of the study analysis. Also, the plan is to participate in the implementation of the Strategy on monitoring the state of the environment, data management and reporting after the Strategy is adopted at BiH level, as well as preparation, adoption and implementation of the Action plan for the implementation of the Regulation on EIONET BiH in the territory of the Federation of BiH, and Directive Specific Action Plan for the Standardized Reporting Directive (SRDSIP) in the territory of the Federation of BiH.

*Measure 7.5.4. Establishment of a system for spatial data exchange in the Federation of BiH in accordance with the INSPIRE Directives I II, and III*

This measure aims at setting up an effective spatial data exchange system in the Federation of BiH and Herzegovina in accordance with Annexes I, II and II of the INSPIRE Directive

General areas of intervention include adoption of methodology for spatial data management in the Federation of BiH, adoption of necessary bylaws to support the establishment of the spatial data infrastructure of the Federation of BiH (IPP FBiH), as well as the management of the spatial data infrastructure the Federation of BiH in accordance with Annexes I, II and III of the INSPIRE Directive

*Measure 7.5.5. Establishment of an effective PRTR*

This measure aims at establishing an effective PRTR in the Federation of BiH, harmonised with the registers in Republika Srpska and the Brcko District BiH. It further aims to regulate the reporting of data from PRTRs to the national institutions.

General areas of intervention include updating of the legislation and institutional arrangements to support the establishment of an efficient PRTR in the Federation of BiH, building of a functional and sustainable PRTR database, ensuring public access to data from the PRTR via web portal, ensuring funds for periodical upgrades of the application and regular maintenance of the PRTR to provide for its smooth functioning.

*Measure 7.5.6. Development of statistics for Sustainable Development Goals in the Federation of BiH*

This measure aims at developing statistics in the Federation of BiH for the environmental Sustainable Development Goals, including development of further indictors, and improvements of the reporting system.

General areas of intervention include upgrading of the system which generates official statistics for the indicators of the environmental sustainable development goals, increasing availability and quality of statistical data, classified by gender (if possible) and strengthening coordination of all the institutions in the Federation of BiH involved in development of indicators of sustainable development goals.

*Measure 7.5.7. Enhancing the efficiency of collecting, processing and publication of environmental statistics in the Federation of BiH*

This measure aims at increasing the efficiency of statistical data collection, processing and releasing in the Federation of BiH through a standardised and routine information sharing among the institutions across the levels of government.

General areas of intervention include strengthening of the statistical system through improved cooperation of all the institutions involved in data collection, processing and dissemination, better compliance with the requirements of the EU statistical system, and enhanced quality of reporting in accordance with the EUROSTAT’S Statistical Requirements Compendium.

*Measure 7.5.8. Development of European Environmental Economic Accounts*

This measure aims at ensuring the participation of the institutions of the Federation of BiH in creating the European Environmental Economic Accounts which describe the relations between the environment and economy (in accordance with the (EU) Regulation no. 691/2011 on the European Environmental Economic Accounts which laid down a common legal framework for the collection, preparation, transmission and evaluation of the European Environmental Economic Accounts).

General areas of intervention include the implementation of the Regulation (EU) No. 691/2011 and expansion of environmental accounts to new areas in accordance with the System of Environmental Economic Accounting as the international statistical standard, to the extent they fall in the competence of the Federation of BiH.

***Priority 7.6 Ensuring a strong synergy in cross-sectoral and inter-sectoral action, and integration of public environmental policies***

*Measure 7.6.1. Integration of environmental requirements in sectoral policies legislation*

This measure aims at integrating the environmental requirements in sectoral policies and legislation through enhanced cross-sectoral cooperation, particularly cooperation with the institutions focusing on gender equality, social equity and poverty issues, This measure should particularly focus on integrating the requirements of the Climate Change Adaptation and Low Emission Development Strategy of BiH in sectoral polices of the Federation of BiH.

General areas of intervention include strengthening of cooperation among the environmental institutions in the Federation of BiH with the institutions from other sectors, participation of environmental institutions in consultations about drafts of other sectors’ legal and the strategic documents and active application of strategic environmental assessment. Integration of adaptation to climate change considerations in sectoral development policies, strategies, programmes and plans, especially in high risk and vulnerable sectors (agriculture, water resources/water management, forestry/forest resources, human health, biodiversity and sensitive eco-systems, tourism) is an important area of intervention.

*Measure 7.6.2. Integration of standards and principles of gender equality, social equality and poverty in key environmental policies, strategies, and programmes*

The aim of this measure is to integrate standards and principles of gender equality, social equity and poverty integrated in the key environmental policies, strategies, and programmes. This measure will focus on instituting an effective gender coordination mechanism, particularly in relation to gender mainstreaming in public policies and legislation, pursuant to the Law on Gender Equality of Bosnia and Herzegovina.

General areas of intervention include defining of procedures and guidelines for the integration of the gender equality, social equality and poverty standards in all phases of environmental management (planning, implementation, monitoring, reporting, evaluations), and enhancing the gender equality institutional mechanism in environmental institutions (including training and professional support to gender equality focal points in the environmental institutions).

*Measure 7.6.3. Transition to a circular economy*

This measure aims at laying the foundations for the transition towards a circular economy.

General areas of intervention include development and adoption of a roadmap and action plan for the transition to a circular economy in the Federation of BiH (harmonized with the road map at the level of BiH), elimination of legal obstacles and initiating stimulative instruments for green business, encouraging application of green public procurement in public institutions and private sector, drafting regulations for eco-design of products and provision of financial support to strengthen voluntary instruments for the initiation of green business.

***Priority 7.7 Ensuring financial sustainability of the environment sector in the Federation of BiH***

*Measure 7.7.1. Efficient and comprehensive implementation of environmental economic instruments*

This measure aims at ensuring a comprehensive implementation of the current environmental economic instruments.

General areas of intervention include the regulation of reporting obligation of all the levels of government on authorized spending of funds for environmental protection projects, reform of all types of fees which partially cover the environmental aspect. The measure also includes collection of the fees regulated by the Law on Fund of the Federation of BiH and other applicable regulations in individual areas.

*Measure 7.7.2. Initiation of new innovative and incentive economic mechanisms for funding environmental protection*

This measure aims at implementing new innovative and stimulating economic mechanisms for funding environmental protection.

General areas of intervention include creation of new economic instruments for environmental protection, taking into consideration marginalized groups and principles of gender-responsible funding of environmental projects, improving the existing and launching new revolving funds, subventions and other mechanisms for environmental protection, and engaging the economy/private sector in fundraising for environmental protection projects.

*Measure 7.7.3. Use of EU funds available for environmental protection and complementary sectors*

This measure aims at ensuring an increased use of EU and other international funds available for environmental protection and complementary sectors.

General areas of intervention include establishment/appointment of an intermediate body in the Federation of BiH for the implementation of the EU environmental projects, and development of information system for project application and partners from the level of BiH, and management of international projects.

***Priority 7.8 Developing a system of strategic decision-making, investments and monitoring of effects in environmental education, research and innovation***

*Measure 7.8.1. Embedding environmental education in curricula of at all the levels of education*

This measure aims at ensuring a stronger integration of environmental issues in curricula of educational institutions at all levels, including a multidisciplinary and holistic approach to education for sustainable development.

General areas of intervention include innovation of curricula and syllabi in primary and secondary education with predefined eco-schools programme to support continued activities in the field of environmental protection, providing for environmental education through activities in protected areas, and legal arrangements to support building of innovative development centres in primary education.

*Measure 7.8.2. Strengthen the capacity and eco-pedagogical competencies of the staff of educational institutions*

This measure aims at strengthening the capacity and eco-pedagogical competencies of the staff of educational institutions.

General areas of intervention include upgrading of eco-pedagogical competencies of employees of educational institutions, through education on environmental protection based on accredited programmes, preparation of handbooks for teachers on integration of environmental issues and sustainable use of resources in curricula for primary and secondary schools and teaching methods, education of employees of the educational institutions about environmental protection based on accredited programmes aimed at digitalization, creation of digital textbooks and contents on environmental protection, and adapting to online learning, and analysis of shortcomings of master university programmes in relation to the level of integration of environmental protection issues and sustainable use of natural resources, as well as making proposals for amendments to the master programme curriculum.

*Measure 7.8.3. Support to nonformal environmental education*

The aim of this measure is to ensure support to the nonformal environmental education, establishing the cooperation among the institutions for the nonformal environmental education and creating dedicated budgets to support the nonformal environmental education.

*Measure 7.8.4. Strengthening research capacities in the environment sector*

This measure aims at enhancing research capacities in the environment sector.

General areas of intervention include creation of dedicated budgets for investments in innovations and development and application of new technologies aimed at reducing pollution, providing information to academia and business entities on available international funds for research, incorporating researches in the area of sustainable use of natural resources and climate change impacts in annual research programmes of the Federation of BiH, supporting organization of professional and scientific conventions/symposiums of international importance and incentivising environmental academia and economy.

* 1. Indicative financial framework

The costs of the thematic area Environmental Management are estimated at BAM 10.3 million or 0,09% of the total costs of the Strategy, which amount to BAM 11,9 billion. This thematic area comprises eight priorities and 32 measures. This thematic area at the same time has the largest number of measures in the Strategy of the Federation of BiH. The financial evaluation covered 31 of 32 measures. Measure 7.8.4 (Strengthening research capacities in the environment sector) has not been evaluated. At the time of the evaluation, it was difficult to provide for a methodologically consistent cost estimate of this measure, primarily because a quantification of its content was methodologically extremely complex, and prevented a detailed cost estimate. The two financially largest priorities are 7.3. (Maximise the capacity and mutual coordination among the institutions) with 25% or BAM 2,5 million, and 7.5 (Set up an efficient system for record keeping and transparent reporting of environmental data in the Federation of BiH in consultation with the Partnership 27 (with 27% or BAM 2,8 million). The total financial allocations for the six remaining priorities account for 48% of the total amount with BAM 4.9 million.

A detailed overview of the Indicative Financial Framework for the thematic area Environmental Management and for the Federation of BiH in general is contained in Annex 9, including a table and pie chart.

1. ALIGNMENT WITH OTHER DOCUMENTS

The Environmental Strategy of the Federation of BiH sets out seven strategic goals (for each thematic area) as stated in Chapter 3.4. Strategic goals.

An analysis of coherence with other relevant strategic documents was carried out by comparing the strategic goals (and priorities) defined in the Strategy with those laid down in other strategic documents resulting from the European integration process, as well as with the internationally recognized Sustainable Development Goals.. Drafting of the Strategy relied on input from the following strategic, planning and developmental documents:

* Development Strategy of the Federation of BiH (2021–2027);
* Water Management Strategy of the Federation of BiH (2010‒ 2022);
* Green Agenda for the Western Balkans;
* Environmental Approximation Strategy for BiH;(EAS BiH)
* Framework for the Sustainable Development Goals Implementation in BiH;
* BiH Economic Reform Programme (ERP BiH 2021‒2023);
* Climate Change Adaptation and Low Emission Development Strategy for BiH (2020 - 2030);
* Nationally Determined Contribution of Bosnia and Herzegovina (BiH NDC 2020 - 2030).

The environmental protection planning process in the Federation of BiH is aligned with the national strategic planning documents, international obligations of BiH, social and developmental programmes, international development programmes and spatial-planning documents.

*Development Strategy of the Federation of BiH (2021‒ 2027)*

The Government of the Federation of BiH adopted the Decision on Drafting the Development Strategy of the Federation of BiH 2021 – 2027. The Strategy (Government of the Federation of BiH, 2020) is a basis for drafting of the Work Programme of the Government of the Federation of BiH, the Public Investments Programme, triennial and annual work plans of the Ministries and institutions, the Budget Framework Documents (BFDs) and annual budgets, as well as sectoral strategies. The Decree defines a methodology of drafting and the content of strategic documents, and also defines four strategic goals - accelerated economic growth; prosperous and inclusive social development; resource efficient and sustainable development; and efficient, transparent and accountable public sector.

*Water Management Strategy of the Federation of BiH (2010‒ 2022)*

Pursuant to the Law on Waters of the Federation of BiH, the Water Management Strategy Federation Ministry of Forest and Water Management, and agriculture, 2012) is recognized as the underlying planning document in the water management sector. It defines clear goals and policies in the field of water management, protection against detrimental effects of water, and sustainable use of water. The Water Management Strategy of the Federation of BiH defines the water management objectives, with accompanying measures, with the view of ensuring required quantities of water of appropriate quality for various purposes as one of important aspects of public interest - preservation and promotion of the population's general health. It describes indicators of health safety of the population in the territory of the Federation of BiH - coverage by public water supply and drainage systems, quality of surface and ground waters, and flood effects, emphasizing at the same time the necessity to increase the level of investment and raise public awareness. The Strategy also sets out the international commitments and agreements BiH signed along with relevant agreements and conventions.

*Green Agenda for the Western Balkans*

The Green Agenda for the Western Balkans (EU, 2020) requires the country to adopt a system of sustainable economy in accordance with the EU Green Deal. To this end, it sets out concrete recommendations for five development areas in which the EU will continue providing support to the countries in the region.

* climate, energy and mobility - achieving climate neutrality by 2050 as the top priority;
* circular economy - introducing circular economy concepts in all production chains and connecting the countries of the region with the EU industrial chains;
* depolluting air, water and soil - alignment with EU standards related to air quality, water and waste water management, modernisation of monitoring, quality management, as well as promotion of water reuse in agriculture;
* sustainable agriculture and food production - through development of sustainable systems, reduced waste, improved compliance with the EU food safety and animal welfare standards, and promotion environmentally friendly and organic farming;
* biodiversity - protecting, developing and implementing the Western Balkans 2030 Biodiversity Action Plan and a Forest Landscape Restoration Plan.

*The Common Regional Market Action Plan for the Western Balkans 2021–2024*

The Common Regional Market Action Plan for the Western Balkans (CRM AP) 2021–2024 which addresses regional cooperation on environmental issues, more specifically circular economy. The objectives of the regional cooperation are:

* Common agreement on green, circular economy value chains on the Western Balkans;
* Regional plan of green and circular economy/green and circular economy mapping in the region.

*Environmental Approximation Strategy for BiH (EAS BiH)*

The countries aspiring to become the EU Member States should adopt realistic and long-term national strategies for gradual alignment of their respective legislation with the EU acquis. One of the key goals is to meet the SAA objectives, which includes approximation of environmental legislation in BiH. The approach to the environmental approximation included the development of four documents (for each level of government in BiH).

EAS BiH (MOFTER BiH, 2017) covers eight sub-sectors of the EU environmental acquis, including:

* horizontal (common) issues;
* water management;
* waste management;
* air quality and climate change;
* industrial pollution;
* chemicals;
* nature conservation;
* ambient noise.

*Framework for the Sustainable Development Goals Implementation in BiH (Agenda 2030)*

In 2015, BiH committed to implementing the Agenda 2030 (Government of Sweden and UNDP, 2020), with the sustainable development goals which may be used as a blueprint to create a better and sustainable future across the world. The Agenda 2030 comprises three Sustainable Development Goals which reflect the level of development and priorities of BiH:

* Good governance and public sector administration;
* Smart growth;
* Society with equal opportunities for all;

Each development policy comprises so-called “accelerators” with clearly defined priorities which should facilitate achievement of objectives of individual development policies. This document guides the strategic planning process at all the levels of government in BiH, including the Federation of BiH.

*BiH Economic Reform Programme (ERP BiH 2021‒2023)*

The Activity Plan for Development the Economic Reform Programme (Council of Ministers of BiH, 2021) is the main document governing the development the Economic Reform Programme and cooperation among different levels of government, the BiH Council of Ministers, the Government of the Federation BiH and the Government of the Republika Srpska and of Brcko District of BiH. The Economic Reform Programme 2019 - 2021 was developed based on contributions submitted by competent institutions according to the Activity Plan which defined the timelines and implementing institutions.

The effect of reform measures will reflect in a growing share of energy from renewable sources, increased energy efficiency and contribution to energy savings (thus reducing adverse effects on the environment).

*Climate Change Adaptation and Low Emission Development Strategy for BiH (2020 - 2030)*

The goal of the Strategy (UNDP, 2013) is to increase resilience to climate variability and change, and in so doing to secure development benefits, as well as to achieve highest values and stop the growth in greenhouse gas emissions by 2025 at a level that is below the EU27 (the current EU Member States) average per capita emissions. Climate change mitigation measures are essential to reduce climate change impacts and ensure climate change management process. Furthermore, the Strategy includes components which reduce risks for socially vulnerable groups, which is in line with the perspectives of gender equality, social equity and poverty, that has been taken into account in the Strategy development process. The Climate Change Adaptation Strategy defines seven priority sectors such as: agriculture, biodiversity and sensitive ecosystems, energy (hydro power), forestry, human health, tourism and water resources/water management. It also identified four sectors that are priority for the Low Emission Development Strategy - electricity generation, energy efficiency in buildings, district heating system and transport/traffic.

*Nationally Determined Contribution of Bosnia and Herzegovina (BiH NDC 2020 - 2030)*

In 2015, the BiH submitted its first Intended Nationally Determined Contribution - INDC and ratified the Paris Agreement pursuant to the Decision on Ratification of Paris Agreement in accordance with UNFCCC. According the Agreement provisions, the countries are required to submit every five years update documents on climate change mitigation activities. To this end, BiH prepared the document entitled Nationally Determined Contribution (NDC) of BiH 2020 - 2030 (UNDP BiH, 2020).

Guidelines on Approximation of Legislation to the EU acquis in BiH were used to facilitate the transposition of the EU environmental acquis. In addition, the EU recommendations from the SAA Sub-committee on Transport, Energy, Environment and Regional Development were also taken into account. Furthermore, coordination was initiated with the Implementation Team for the Development of National Energy and Climate Plan of Bosnia and Herzegovina (2021 - 2030).

Table 27: Overview of relevant strategic documents of the Federation of BiH

*\*Only developmental direction/goal/measure from strategic documents which concern the environment were considered*

| **Developmental direction/goal/measure from strategic document of the Federation of BiH** | **Associated priority from the Environmental Strategy of the Federation of BiH** |
| --- | --- |
| **Development Strategy of the Federation of BiH (2021–2027)** |
| **Strategic goal 1 - Accelerated economic growth** | **Priority 3.9** - Developing environmental awareness about biodiversity, nature conservation and ecosystem services  **Priority 6.5** - Establishing a system of sustainable and responsible research, exploitation and management of mineral raw materials  **Priority 7.2** - Ensuring efficient implementation of the applicable legislation and international commitments  **Priority 7.5** - Set up an efficient system for record keeping and transparent reporting of environmental data in the Federation of BiH, in consultation with the Partnership 27  **Priority 7.8** - Establishing the system for strategic decision-making , investments and monitoring of results in education, research and innovations in environment |
| **Strategic goal 2 - Prosperous and inclusive social development** | **Priority 3.8** - Strengthen the science-based decision-making on biodiversity/nature through a dialog between the scientific community and decision makers  **Priority 4.4** - Enhancing resilience to climate change  **Priority 7.6** - Ensuring a strong synergy in cross-sectoral and inter-sectoral action, and integration of public environmental policies  **Priority 7.8** - Establishing the system for strategic decision-making , investments and monitoring of results in education, research and innovations in environment |
| **Strategic goal 3 - Resource efficient and sustainable development** | **Priority 1.2** - Provide conditions for achieving sustainable use of water resources  **Priority 2.2** - Improving the waste records and reporting system  **Priority 2.3** - Implementing economic and financial instruments and mechanisms to reduce the amount of waste and boost utilisation of all categories of waste  **Priority 2.7** - Raise awareness about the proper separation, collection and disposal of waste  **Priority 3.2** - Strengthening the institutions of the Federation of BiH responsible for the implementation of the nature conservation legislation and activities  **Priority 3.7** - Improve the cross-sectoral cooperation and political support in the Federation of BiH for integration of biodiversity protection into sectoral policies and legislation  **Priority 3.9** - Developing environmental awareness about biodiversity, nature conservation and ecosystem services  **Priority 4.1** - Reduce air pollution by reducing air pollutants to levels that are safe for human health  **Priority 4.3** - Reduce the impact of the Federation of BiH on climate changes through reduced GHG emissions and enhanced carbon sinks  **Priority 4.4** - Enhancing resilience to climate change  **Priority 4.5** - Improving energy efficiency of final consumption in all sectors  **Priority 4.6** - Increasing the share of renewable energy along with an incentive scheme reform (focusing on citizens energy)  **Priority 5.3** - Efficient operation of institutions of the Federation of BiH in the field of chemical safety  **Priority 5.7** - Efficient operation of institutions in the area of environmental noise  **Priority 6.1** - Establish an effective legal, strategic and institutional framework for sustainable forest and forest resources management in the Federation of BiH, appropriate valuation of forest resources, and ensure integration of gender and climate change issues  **Priority 6.2** – Enhance legal, strategic and institutional frameworks for sustainable management of hunting game  **Priority 6.3** - Enhance legal, strategic and institutional frameworks for sustainable management of fish stock  **Priority 6.4** - Establish integrated and sustainable management of land resources  **Priority 6.5** - Establishing a system of sustainable and responsible research, exploitation and management of mineral raw materials  **Priority 7.1** - Improving the legal framework and sectoral policies for planning, management and protection of the environment in the Federation of BiH with the view of fully aligning the legislation with the EU environmental acquis and international agreements  **Priority 7.3** - Maximise the capacity of institutions and their coordination |
| **Strategic goal 4 - Efficient, transparent and accountable public sector** | **Priority 7.3** - Maximise the capacity of institutions and their coordination  **Priority 7.4** - Ensuring strong public awareness on the importance of the environmental protection and their engagement in decision-making processes, focusing on women, youth and socially vulnerable groups  **Priority 7.5** - Set up an efficient system for record keeping and transparent reporting of environmental data in the Federation of BiH, in consultation with the Partnership 27  **Priority 7.7** - Ensuring financial sustainability of the environment sector in the Federation of BiH |
| **Water Management Strategy of the Federation of BiH 2010‒ 2022.** |  |
| **4.1.1.1. Coverage of the population with public waters supply system** | **Priority 1.2** - Provide conditions for achieving sustainable use of water resources |
| **4.1.1.2. Coverage of the population with waste water drainage and treatment systems** | **Priority 1.6** - Ensuring financial sustainability of the water sector |
| **4.1.1.3. Surface water quality** | **Priority 1.1** - Prevent deterioration and improve status of water bodies |
| **4.1.1.4. Ground water quality** | **Priority 1.1** - Prevent deterioration and improve status of water bodies |
| **4.1.1.5. Impact of floods** | **Priority 1.4** - Reducing the risk of extreme hydrological events by establishing a sustainable flood risk management system and adaptation to climate changes |
| **Green Agenda for the Western Balkans** |  |
| Goal:  **Achieving climate neutrality by 2050 (decarbonization as a priority)** | **Priority 4.1** - Reduce air pollution by reducing air pollutants to levels that are safe for human health  **Priority 4.3** - Reduce the impact of the Federation of BiH on climate changes through reduced GHG emissions and enhanced carbon sinks  **Priority 4.5** - Improving energy efficiency of final consumption in all sectors  **Priority 4.6** - Increasing the share of renewable energy along with an incentive scheme reform (focusing on citizens energy) |
| Goal:  **"Introducing circular economy":** | **Priority 2.1** - Improving the legal and strategic framework in the waste management according to the EU principles  **Priority 2.3** - Implementing economic and financial instruments and mechanisms which will reduce amounts and boost utilisation of all categories of waste.  **Priority 2.7** - Raise awareness about the proper separation, collection and disposal of waste |
| Goal:  **"Combating air, water and soil pollution”** | **Priority 1.1** - Prevent deterioration and improve status of water bodies  **Priority 1.5** – Developing an effective legal and institutional framework for the purpose of alignment with the EU regulations in the water sector, and its enforcement  **Priority 7.5** - Set up an efficient system for record keeping and transparent reporting of environmental data in the Federation of BiH, in consultation with the Partnership 27 |
| Goal:  **"Sustainable agriculture and production of food"** | **Priority 6.4** - Establish integrated and sustainable management of land resources |
| Goal:  **Biodiversity: Ecosystem protection and restoration”** | **Priority 3.2** - Strengthening the institutions of the Federation of BiH responsible for the implementation of the nature conservation legislation and activities  **Priority 7.5** - Set up an efficient system for record keeping and transparent reporting of environmental data in the Federation of BiH, in consultation with the Partnership 27 |
| **Environmental Approximation Strategy for BiH (EAS BiH)** |  |
| **3.1. Horizontal issues** | **Priority 7.1** - Improving the legal framework and sectoral policies for planning, management and protection of the environment in the Federation of BiH with the view of fully aligning the legislation with the EU environmental acquis and international agreements  **Priority 7.5** - Set up an efficient system for record keeping and transparent reporting of environmental data in the Federation of BiH, in consultation with the Partnership 27 |
| **3.2. Water management** | **Priority 1.5** - Developing an effective legal and institutional framework for the purpose of alignment with the EU regulations in the water sector, and its enforcement |
| **3.3. Waste management** | **Priority 2.1** - Improving the legal and strategic framework in the waste management according to the EU principles |
| **3.4. Air protection and climate change** | **Priority 4.1** - Reduce air pollution by reducing air pollutants to levels that are safe for human health  **Priority 4.6** - Increasing the share of renewable energy along with an incentive scheme reform (focusing on citizens energy) |
| **3.5. Industrial pollution** | **Priority 7.5** - Set up an efficient system for record keeping and transparent reporting of environmental data in the Federation of BiH, in consultation with the Partnership 27 |
| **3.6. Chemicals** | **Priority 5.1** - Improved legislation in the field of chemical safety |
| **3.7. Nature protection** | **Priority 3.1** - Improving the legal framework of the Federation of BiH for biodiversity and nature conservation through alignment of the legislation with the EU acquis and international agreements  **Priority 3.3** - Initiating coordination, communication and reporting on biodiversity and nature conservation in the Federation of BiH  **Priority 3.5** - Produce an inventory of biodiversity of the Federation of BiH at the ecosystem, species and genetic level |
| **3.8. Ambient noise** | **Priority 5.5** - Establish a legislative framework and clear institutional competences to transpose EU acquis on environmental noise in legislation of the Federation of BiH |
| **Framework for the Sustainable Development Goals Implementation in BiH** |  |
| **7. Developmental direction: Good governance and public sector administration** | **Priority 3.2 -** Strengthen the institutions of the Federation of BiH responsible for the implementation of the nature conservation legislation and activities  **Priority 4.1 -** Reduce air pollution by reducing air pollutants to levels that are safe for human health  **Priority 7.1** - Improving the legal framework and sectoral policies for planning, management and protection of the environment in the Federation of BiH with the view of fully aligning the legislation with the EU environmental acquis and international agreements  **Priority 7.4** - Ensuring strong public awareness on the importance of the environmental protection and their engagement in decision-making processes, focusing on women, youth and socially vulnerable groups  **Priority 7.6** - Ensuring a strong synergy in cross-sectoral and inter-sectoral action, and integration of public environmental policies  **Priority 7.7** - Ensuring financial sustainability of the environment sector in the Federation of BiH  **Priority 7.8** - Establishing the system for strategic decision-making , investments and monitoring of results in education, research and innovations in environment |
| **8. Developmental direction: Smart growth** | **Priority 3.9** - Raising ecological awareness on biodiversity, nature conservation and ecosystem services  **Priority 5.3** - Efficient operation of institutions of the Federation of BiH in the field of chemical safety  **Priority 5.7** - Efficient operation of institutions in the area of environmental noise  **Priority 6.5 -** Establishing a system of sustainable and responsible research, exploitation and management of mineral raw materials  **Priority 7.4** - Ensuring strong public awareness on the importance of the environmental protection and their engagement in decision-making processes, focusing on women, youth and socially vulnerable groups  **Priority 7.7** - Ensuring financial sustainability of the environment sector in the Federation of BiH  **Priority 7.8** - Establishing the system for strategic decision-making , investments and monitoring of results in education, research and innovations in environment |
| **9. Developmental direction: Society of equal opportunities** | **Priority 7.1** - Improving the legal framework and sectoral policies for planning, management and protection of the environment in the Federation of BiH with the view of fully aligning the legislation with the EU environmental acquis and international agreements  **Priority 7.4** - Ensuring strong public awareness on the importance of the environmental protection and their engagement in decision-making processes, focusing on women, youth and socially vulnerable groups |
| **BiH Economic Reform Programme (ERP BiH 2021‒2023)** |  |
| **Measure 5.3.1.1 - Development of energy and gas market** | **Priority 4.5** - Improving energy efficiency of final consumption in all sectors |
| **Measure 5.3.1.2 - Enhancing energy efficiency and use of renewable sources of energy** | **Priority 4.5** - Improving energy efficiency of final consumption in all sectors  **Priority 4.6** - Increasing the share of renewable energy along with an incentive scheme reform (focusing on citizens energy) |
| **Measure 5.3.2.3 - Enhancing integrated management of waste and circular economy system** | **Priority 2.1** - Improving the legal and strategic framework in the waste management according to the EU principles  **Priority 2.2** - Improving the waste records and reporting system  **Priority 2.4** - Improving the municipal waste management system  **Priority 2.5** - Improving the management of special wastes |
| **Measure 5.3.2.4 - Implementing economic instruments in the area of environment and EE** | **Priority 7.3** - Maximise the capacity of institutions and their coordination  **Priority 7.7** - Ensuring financial sustainability of the environment sector in the Federation of BiH |
| **Climate Change Adaptation and Low Emission Development Strategy for BiH (2020 - 2030)** |  |
| **3.1. Generating and disseminating evidence-based knowledge and information** | **Priority 4.3** - Reduce the impact of the Federation of BiH on climate changes through reduced GHG emissions and enhanced carbon sinks  **Priority 4.4** - Enhancing resilience to climate change  **Priority 7.6** - Ensuring a strong synergy in cross-sectoral and inter-sectoral action, and integration of public environmental policies |
| **3.2. Effective institutional and regulatory frameworks** | **Priority 4.1** - Reduce air pollution by reducing air pollutants to levels that are safe for human health  **Priority 4.2** - Upgrading the air quality management system to support strategic decision-making and public information on air quality  **Priority 4.3** - Reduce the impact of the Federation of BiH on climate changes through reduced GHG emissions and enhanced carbon sinks  **Priority 4.5** - Improving energy efficiency of final consumption in all sectors  **Priority 4.6** - Increasing the share of renewable energy along with an incentive scheme reform (focusing on citizens energy) |
| **3.3 Effective climate change adaptation approaches** | **Priority 7.2** - Ensuring efficient implementation of the applicable legislation and international commitments  **Priority 7.3** - Maximise the capacity of institutions and their coordination |
| **Nationally Determined Contribution of Bosnia and Herzegovina (BiH NDC 2020 - 2030)** |  |
| **3 Mitigation of climate change / reduction of greenhouse gas emissions** | **Priority 2.4** - Improving the municipal waste management system  **Priority 4.1** - Reduce air pollution by reducing air pollutants to levels that are safe for human health  **Priority 4.4** - Enhancing resilience to climate change  **Priority 4.5** - Improving energy efficiency of final consumption in all sectors  **Priority 4.6** - Increasing the share of renewable energy along with an incentive scheme reform (focusing on citizens energy)  **Priority 5.2** - Establish a sustainable system of chemical management and implementation of EU acquis in the area of chemical safety  **Priority 6.1** - Establish an effective legal, strategic and institutional framework for sustainable forest and forest resources management in the Federation of BiH, appropriate valuation of forest resources, and ensure integration of gender and climate change issues |
| **4 Climate change adaptation** | **Priority 4.1** - Reduce air pollution by reducing air pollutants to levels that are safe for human health  **Priority 4.4** - Enhancing resilience to climate change |

1. FRAMEWORK FOR IMPLEMENTATION, MONITORING, REPORTING AND EVALUATION

This section describes the implementation, monitoring, reporting, and evaluation framework of the Strategy for the Federation of BiH 2022‒2032 that encompasses tools and processes for monitoring and evaluation of programmes (measures) outlined therein.

The framework for the implementation, monitoring, reporting, and evaluation of the Strategy for the Federation of BiH should incorporate the following principles:

* harmonized approach to planning, monitoring and reporting at all levels of government in FBiH;
* gender equality and equal opportunities for all citizens;
* horizontal and vertical coordination among all levels of government;
* complementarity;
* partnership, cooperation, publicity and transparency;
* accountability, effectiveness and efficiency of institutions at all levels of government in FBiH;

The framework for the implementation, monitoring, reporting and evaluation of the Strategy involves stakeholders at two different levels:

* Implementing institutions, as defined in Annex 1;
* Institutions responsible for coordination of the implementation of the measures, as defined in Annex 1.

In the Federation of BiH, the actual implementation of measures commences only after triennial and annual work plans have been prepared.**The Decree on Triennial and Annual Work Planning, Monitoring and Reporting in the Federation of BiH** (“Official Gazette of the Federation of BiH“, 74/19 and 2/21) regulates the triennial and annual work planning, drafting methods for the implementation documents, principles of planning, monitoring and reporting, structure of the implementing documents, planning, monitoring and reporting processes and other significant matters associated with planning, monitoring, and reporting in the Federation of BiH. As defined in the Rulebook, relevant measures from the strategic documents, along with corresponding indicators, baseline and target values, shall be transposed to the implementation documents (triennial and annual work plans). The triennial work plan and annual work plan should be drawn up in a format defined in the Decree on Triennial and Annual Work Planning, Monitoring, and Reporting in the Federation of BiH. Likewise, overall procedures pertaining to drafting of the triennial and annual work plans in the Federation of BiH are regulated in the above Decree (adoption, submission dates, etc.).

* 1. Monitoring and reporting

Article 16(2) of the Decree on Triennial and Annual Work Planning, Monitoring, and Reporting in the Federation of BiH (“Official Gazette of the Federation of BiH”, 74/19) regulates that a report on the implementation of a sectoral strategy shall be prepared by the administrative authority of the Federation and/or Canton, pursuant to Article 7(g) and Article 9(f) of the Law on Development Planning and Management (“Official Gazette of the Federation of BiH”, 32/17) by the end of year for the previous year.

Therefore, while the Ministries of the Federation of BiH are not required to prepare reports on the development of sectoral strategies, they are required to present reports on the implementation of sectoral strategies, such as the Environmental Strategy of the Federation of BiH.

Article 12 of the Decree on the Evaluation of Strategic Documents in the Federation of BiH (“Official Gazette of the Federation of BiH“, 74/19) mandates an ex-ante (preliminary) evaluation of all strategic documents of the Federation of BiH. Pursuant to Article 12(4) of this Decree, the Ministries of the Federation and/or Cantons shall complete and coordinate the ex-ante evaluation of sectoral strategies. The ex-ante evaluation of the Environmental Strategy of the Federation of BiH 2023 - 2032 was completed in compliance with the provisions of the Decree, also taking into account the Handbook on the evaluation of strategic documents. This Handbook was drafted to help the leaders and practitioners in the public sector to understand the purpose and process of the evaluation, regulatory and methodological requirements, roles and responsibilities of individual actors, key procedural steps, evaluation questions, minimum structure of the evaluation plan content and evaluation report, tools and practical examples of effective evaluations. The evaluation was completed in accordance with the above legal provisions and guidance provided in the Handbook.

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| --- | --- | --- | --- | --- | --- |
| Type of report | Content | Who provides information | Who carries out the evaluation | Frequency | Purpose |
| Annual work plans | Summary and analysis of the implementation programme (of measures) and activities/projects from annual work plans | Implementers, according to Annex 1 | Secretary of the Federation Ministry of Environment and Tourism and Secretary of the Federation Ministry of Agriculture, Water Management and Forestry of the Federation of BiH | Annual | For the purpose of record keeping on activities planned in each period and monitoring of implementation progress |
| Reports on development | Summary of general development trends and evaluation of progress | Implementers, according to Annex 1 | Secretary of the Federation Ministry of Environment and Tourism and Secretary of the Federation Ministry of Agriculture, Water Management and Forestry of the Federation of BiH, and the Institute for Development Programming of the Federation of BiH[[26]](#footnote-27) | Annual | For the purpose of the analysis of the implementation of the strategic document and action plan and understanding funds planned and anticipated. |

Table 28: Monitoring and Reporting Plan in the Federation of BiH

* 1. Evaluation

An evaluation in progress shall be completed in accordance with the applicable legislation in the second last year of the implementation of the Environmental Strategy of the Federation of BiH. An evaluation in progress shall also be completed in the middle of the implementation phase of the Strategy, as required.

1. ANNEXES
   1. Annex 1 Detailed overview of measures for Water Management

|  |  |  |  |
| --- | --- | --- | --- |
| **Link with the strategic goal** | **1. Protect water quality and secure availability of water resources and their sustainability** | | |
| **Priority** | * 1. **Prevent deterioration and improve status of water bodies** | | |
| **Measure name** | **1.1.1 Achieving environmental objectives for water bodies as defined in the water basin management plans in the Federation of BiH** | | |
| **Description of the measure with the general area of intervention** | This measure aims to contribute to the achievement of at least good status of surface and ground waters by implementing and precisely evaluating the implementation of measures foreseen in the basin management plans by improving legislation, providing monitoring of surface and ground water bodies, and conducting inspection oversight of activities with possible adverse environmental impact.  General areas of intervention include two directions:   1. **Implementation of Programme of Measures from the Management Plans, and regular reporting on progress achieved**   a1) Amend and adopt changes to the Law on Organisation of Administration Bodies of Federation of BiH regarding the obligation to report on implementation of strategic and planning documents, as well as projects  a2) Assess progress in implementation of Programme of measures and biannually report on the progress achieved  a3) Carry out monitoring of surface and ground waters and report the monitoring result on annual basis.   1. **Cooperation between water sector and water inspection for the purpose of supporting implementation of Management Plans**   b1) Developed water acts containing information on current status of water bodies into which the waste water is discharged, and identified objectives regarding status of the water bodies in the Basin Management Plan for the respective water body  b2) Provide information / excerpts from the Water Management Plans to the inspections, and timely share information and data on the received complaints and requests of the responsible bodies in water sector  b3) Developed annual programmes of inspection oversight of water polluters | | |
| **Key strategic projects** | / | | |
| **Indicators for monitoring of results of measures** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| a1) Status of adoption of amendments to the Law on Organisation of Administrative Bodies for the purpose of regular and precise reporting on implementation of strategic and planning documents (Basin Management Plans). | The current Law does not include provisions that would precisely define procedures and impose obligation to the institutions / bodies at various levels of government to regularly collect, process and share information / reports on implementation of the River Basin Management Plans. | Developed and adopted amendments to the Law on Organisation of Administrative Bodies  (2024) |
| Status of reporting and publishing the Report on *web* pages of the Sava River Basin Agency and the Adriatic Sea Watershed Agency, including:  a2) Performed analysis and assessment of the level of realisation of the programme of measures - biannual reports on implementation of programme of measures  a3) Completed monitoring of surface and ground water bodies‒ annual reports on status of surface and ground water bodies | Not regular activity:   * submitting data for reports on implementation of the programme of measures * publishing the Reports on *web* pages of the Sava River Basin Agency and the Adriatic Sea Watershed Agency | Published following Reports at the Agencies' web pages, full and precise:   * Biannual report on implementation of the programme of measures * Annual reports on the status of surface and ground waters   (2024-2034) |
| b1) Level of adjusting the processing of the water acts to the needs of water inspectors | Water acts do not contain information on the status of water body into which the commercial entities release waste water, nor on the objectives regarding the status of this water body according to the Management Plan | Water acts include information on current status of water bodies into which the waste water is discharged, as well as of the identified objectives regarding status of the water body  (2023-2034) |
| b2) Level of readiness of the information from water management plans for the needs of inspections, with special emphasis on water bodies that do not have at least "good" status. | The management plans 2022-2027 have not yet been adopted, so preparation of information from the Plans has not yet started. | Prepared and provided information from river management plans for the needs of inspections, with special emphasis on water bodies that do not have at least "good" status.  (2023-2034) |
| b3) Status regarding information of inspections on complaints received | Inspections are informed on the complaints received | Timely provision of information and data to the inspections regarding received complaints and requests of the responsible bodies in water sector  (2023-2034) |
| Status of developing annual programmes of inspection oversight | Annual programmes of inspection oversight are prepared | Annual programmes of inspection oversight developed on the basis of information from management plans, information on complaints received, etc.  (2023-2034) |
| **Developmental impact and contribution of the measure to achieving the priority** | Improvement of strategic water management, increasing transparency and accountability of the government bodies | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 2,797,022  Source: 10% from the government budget, 90% combined ‒ loans, funds from EU and other international donors, and other donations | | |
| **Period of implementation of the measure** | 2023-2034 | | |
| **Institution responsible for coordination and implementation of the measure** | FMAWMF, SRBA , ASWA | | |
| **Implementing institutions for the measure** | (C)(PUC) (Cantonal) (Public Utility Company), LGU, GFBiH and PFBiH, FMAWMF; SRBA; ASWA; Federation Water Inspectorate (FWI); cantonal water inspectorates (CWI); CMW (Cantonal ministries competent for water); FMET; FMSP; FMEMI; CM\_E, SP, EN, A) (Cantonal ministries with competences for environment, spatial planning, energy, agriculture, etc.) | | |
| **Target groups** | All institutions and people in the Federation of BiH | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Link with the strategic goal** | **1. Protect water quality and secure availability of water resources and their sustainability** | | |
| **Priority** | **1.2. Provide conditions for achieving sustainable use of water resources** | | |
| **Name of the measure** | **1.2.1 Intensification of cooperation between water sector and other sectors for the purpose of ensuring protection and sustainable use of water resources** | | |
| **Description of the measure with the general area of intervention** | This measure aims to contribute that the needs and objectives of water sector are integrated into planning documents of other sectors (spatial planning, energy sector, agriculture, forestry, water inspection etc..) by implementation of activities in the water sector that may reflect on restrictions in use of water and spatial interventions in the situations when adverse impact on water is proven, and intensifying cross-sectoral cooperation, including water inspections.  General areas of intervention include three directions:  **a) Cooperation and coordination of activities between water sector and other sectors**  a1) Demonstrate and publish for professional audience (spatial planning, energy, agriculture and forestry) and non-governmental sector, in appropriate format (Excel, GIS, etc.), a set of information on water bodies from the water basin management plans that, together with the detailed analyses from the management plans, must be used by all entities interested in planning interventions in space that may impact protection, development and use of water;  a2) Ensure a functional coordination mechanism‒ coordination meetings held on regular basis, and reports and conclusions from such meetings are published;  a3) Appropriately integrate the data from water management plans into spatial planning documents, as well as other planning or programming documents;  a4) Following Studies developed and published: i) Study for establishment of a system for reserving ground and surface waters for public water supply in the Federation of BiH; ii) Study of electric power potentials in the Federation of BiH.   1. **Cooperation between water sector and water inspection for the purpose of supporting implementation of Management Plans**   b1) Provide to the inspections information from the water management plans that concern the analysis of pressures to the quantity of water bodies, with special emphasis on water bodies that are under significant pressure of human activities, and timely provision of information and data on received reports and requests from responsible bodies in water sector;  b2) Developed annual programmes of inspection oversight for all activities related to water use, in accordance with LoW and secondary legislation.  **c) Preparation of study documents**   * Study on hydro-power potential; * Study on surface and ground water reserves that may be used for water supply to population; | | |
| **Key strategic projects** | / | | |
| **Indicators for monitoring of results of measures** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
|  | a) Level of readiness of excerpt / summary / set of information on water bodies from the river basin management plans intended for professional audience from spatial planning, energy, agriculture and forestry sectors, as well as non-governmental sector | Management plans (II cycle) have not been adopted, so preparation of the excerpt/summary/ set of information on water bodies from the river basin management plans for professional audience and non-governmental sector has not started | Developed and continuously updated excerpt / summary / set of information on water bodies from the river basin management plans that have to be used by all entities interested in planning spatial interventions that may impact protection of water, their development and use  (2024) |
| a2) Status of functioning of cross-sectoral coordination - regular organisation of coordination meetings among representatives of water sector and representatives of spatial planning, energy, agriculture, forestry etc. | Sporadically | Functional coordination mechanism‒ coordination meetings held on regular basis, and reports and conclusions from such meetings published  (2023-2034) |
| a3) Effectiveness of legal provisions (LoW) that impose the obligation   * of integrating information from the water management plans into plans of the sector whose activities may have impact on water protection, and * adequate involvement of water sector institutions at the stage of developing planning and strategic documents, including public discussions | Low effectiveness | Data from the water management plans adequately integrated into adopted spatial planning documents, as well as other planning or programming documents as a result of involvement of water sector at the phase of development of planning and strategic documents  (2023-2034) |
| b1) Level of readiness of information from the water management plans for the needs of inspections | Preparation of information from water management plans has not started | Provide information from water management plans to the inspections, with special emphasis on water bodies that are under pressure of human activities  (2023-2034) |
| b2) Status regarding information of inspections on complaints received | Inspections are informed on the complaints received | Timely provision of information and data to the inspections regarding received complaints and requests of the responsible bodies in water sector  (2023-2034) |
| Level of preparedness of Studies   * on hydro-power potential * on surface and ground water reserves that may be used for water supply to population | Development of studies has not started | Studies completed and published   * on hydro-power potential that include principles / guidelines / criteria for planning, and achieving / maintaining good status of water bodies, or has been aligned with Article 4(7) WFD (2026) * on surface and ground water reserves that may be used for water supply to population (2026) |
| **Developmental impact and contribution of the measure to achieving the priority** | Improving coordination and cooperation among various levels of government and strengthening human and institutional capacities. Coherent systems, strong inter-sectorial connections are of essential importance for efficient water management | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 2,864,382  Source: 10% from the government budget, 90% combined ‒ loans, funds from EU and other international donors, and other donations | | |
| **Period of implementation of the measure** | 2023-2034 | | |
| **Institution responsible for coordination and implementation of the measure** | FMAWMF, SRBA, ASWA | | |
| **Implementing institutions for the measure** | FMWMF; SRBA; ASWA; Federation Water Inspectorate (FWI); cantonal water inspectorates (CWI); CMW (Cantonal ministries competent for water); FMET; CM\_E, SP, EN, A) (Cantonal ministries competent for environment, spatial planning, energy, agriculture, etc.) | | |
| **Target groups** | All institutions and people in the Federation of BiH | | |

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| **Link with the strategic goal** | **1. Protect water quality and secure availability of water resources and their sustainability** | | |
| **Priority** | **1.2. Provide conditions for achieving sustainable use of water resources** | | |
| **Name of the measure** | **1.2.2. Ensuring transparent and defined by law procedure for awarding concessions in the area of use of water resources** | | |
| **Description of the measure with the general area of intervention** | This measure aims to contribute to introduction of precise conditions for granting concessions in the area of use of water resources in the Federation of BiH, including: harmonization of legislation on concessions and other relevant legislation with the legislative changes adopted at the Federation level (July 2022) that foresee prohibition of planning and constructing new SHPP of up to 10 MW, enforcement of the new Rulebook on environmental flaw in the Federation of BiH, and use of catalogue of criteria for sustainable development in the sector of small hydro-power plants (SHPP) or challenging extension of validity of water acts for the existing SHPP.  General areas of intervention:   * Amend and harmonise Federation and cantonal laws/regulations prescribing ways, conditions and agencies responsible for issuing concessions; * Federation and cantonal laws/regulations in the field of concessions to be aligned with provisions of the Law on Amendments to the Law on Electrical Power in the Federation of BiH, which prohibits planning and constructing new SHPPs up to 10 MW in the Federation of BiH. (July 2022*)*; * Adopt new Rulebook on environmental flaw; * Adopt amendments / changes of secondary legislation for level of the Federation of BiH that are relevant for issuing concessions for use of water resources for the Federation of BiH | | |
| **Key strategic projects** | / | | |
| **Indicators for monitoring of results of measures** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| Status of the process of adoption of amended Federation and cantonal laws/regulations | Amendments have not been drafted | * Amended and harmonised the Federation and cantonal laws/regulations prescribing ways, conditions and agencies responsible for issuing concessions (2025) * Federation and cantonal laws/ regulations on concessions and other relevant legislation aligned with provisions of the Law on Amendments to the Law on Electrical Power in the Federation of BiH that prohibit planning and constructing new SHPPs of up to 10 MW in the Federation of BiH. (July 2022). |
| Status of the process of adoption of amended / changed secondary legislation relevant for issuing concessions for use of water resources in the Federation of BiH | The following analyses are made for the Federation of BiH:   * Developed draft of the new Rulebook on environmental flaw * Applicability of the catalogue of sustainable development criteria in the sector of SHPPs, and * on the way of adopting the Decision for applying the catalogue of criteria\* for SHPPs by the Government of the Federation of BiH   *\*Note: In consideration of the adopted Law on Amendments to the Law on Electrical Power in FBiH (July 2022) that prohibits planning and construction of new SHPPs in FBiH, the catalogue of criteria shall not apply to planning and constructing new SHPPs.* | * Adopted new Rulebook on environmental flaw * Article 5 changed by decision of the Government of the Federation of BiH Rules on the procedure for awarding concession * Federation of BiH and cantons recommended to use catalogue of criteria as a tool and assistance for the cantonal bodies. and as guidance and assistance when extending or challenging the extension of water acts for the existing SHPPs. |
| **Developmental impact and contribution of the measure to achieving the priority** | Implementation of the good governance principles increases transparency, efficiency and accountability of institutions in the process of awarding concessions for us of water, while at the same time minimizing adverse environmental impact | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 79,209  Source: 100% government budget | | |
| **Period of implementation of the measure** | 2025 | | |
| **Institution responsible for coordination and implementation of the measure** | FMSP (Federation Ministry of Spatial Planning) | | |
| **Implementing institutions for the measure** | Federation Commission for Concessions, cantonal bodies with competences for concessions, ministries (Federation and cantonal) competent for concessions as provided in law, FMEMI, FMAWMF, SRBA, ASWA | | |
| **Target groups** | All institutions and people in the Federation of BiH | | |

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| **Link with the strategic goal** | **1. Protect water quality and secure availability of water resources and their sustainability** | | |
| **Priority** | **1.3. Ensuring sufficient drinking water supplies and availability for public water supply purposes** | | |
| **Name of the measure** | **1.3.1. Development of the water supply systems that offer optimal solutions for LGUs, efficient distribution networks and safe drinking water** | | |
| **Description of the measure with the general area of intervention** | This measure aims to plan improvement and development of technical and operational aspects of water supply services in urban and rural areas of the Federation of FBiH.  General areas of intervention have been divided into two groups:  **a) Improved management of unbilled water**  a1) Develop plans to reduce and/or control unbilled water, projections of unbilled water for at least three following years (in the business plans, and in accordance with the Regulation on the methodology for determining the lowest basic price of water services in the Federation of BiH), and long-term target values and expected time needed to achieve them;  a2) Completed rehabilitation, replacement and construction of new infrastructure, and improved management of unbilled water.  **b) Optimisation of water supply systems in LGUs**  b1) Develop master plans of water supply to LGUs inclusive of all prior assessments of cost-effectiveness of investments needed to optimise the system;  b2) Merge water supply companies (where justified) in the Federation of BiH or expansion of central system to sub-urban areas, or connection of rural areas to the central water supply systems. | | |
| **Key strategic projects** | / | | |
| **Indicators for monitoring of results of measures** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
|  | a1) Number of public utility companies (PUC) with developed plans for reduction and/or control of the unbilled water, in accordance with the Methodology for determining minimum basic price of water services in the Federation of BiH | * Information on the number of PUCs who develop and implement plans for reduction the rate of unbilled water that is: * in the Sava river basin: 16‒ 88%, average 65%, * in the Adriatic Sea river basin: 23‒ 72%, average 46.11% * The public utility companies (PUCs) have not started developing Plans as part of their business plans, in accordance with the Methodology for setting the minimum basic price of water services in the Federation of BiH) | All public utility companies, (PUCs) have developed plans for reduction and/or control of the unbilled water within their business plans, in accordance with the Methodology for setting the minimum basic price of water services in the Federation of BiH. |
| a2) Level of performed infrastructural works and administrative activities for the purpose of reducing the rate of unbilled water in each PUC | Data not available | In all PUCs in the Federation of BiH achieved the planned level of implementation of the Plans   * Completed rehabilitation, replacement and construction of new infrastructure, and improved management of unbilled water (2023 -2034) |
| b) Number of LGUs who have developed Master Plans | Data not available | Every LGU has developed water supply Master Plan (2023 -2034) |
| b2) Level of construction of water supply systems with optimal solutions for LGUs | Data not available | Water supply companies merged (where justified) in the Federation of BiH, or central systems extended to include sub-urban or rural areas, in all LGUs where so foreseen in their respective master plans (2023 -2034) |
| **Developmental impact and contribution of the measure to achieving the priority** | Improving conditions and quality of life of population, better conditions for economic development | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 82,940,893  Source: 20% from the government budget, 80% from combination - credit funds and funds from EU and other international donors | | |
| **Period of implementation of the measure** | 2023-2034 | | |
| **Institution responsible for coordination and implementation of the measure** | FMAWMF, Cantonal Public Utility Companies (CPUCs), LGUs, Environmental Protection Fund of Federation of BiH (EPF) | | |
| **Implementing institutions for the measure** | CMW (cantonal ministries responsible for water); FMET, FMSP; CM\_E, SP, EN, P (cantonal ministries responsible for environment, spatial planning, energy and agriculture); FBiH and cantonal health institutes, SRBA, ASWA | | |
| **Target groups** | All institutions and people in the Federation of BiH | | |

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| **Link with the strategic goal** | **1. Protect water quality and secure availability of water resources and their sustainability** | | |
| **Priority** | **1.3. Ensuring sufficient drinking water supplies and availability for public water supply purposes** | | |
| **Name of the measure** | **1.3.2. Improve the existing legislative framework in the sector of water services in the Federation of BiH** | | |
| **Description of the measure with the general area of intervention** | This measure aims to ensure consistent implementation of existing legislation and harmonise legislation or adopt new legislation for the purpose of ensuring water services standards in accordance with the Directive on water intended for human use, with special focus on the safe water supply to rural areas / local water supply systems in Federation of BiH.  General areas of intervention:   * Amend and adopt amendments to the cantonal laws on utilities by prescribing conditions that legal entities have to comply with in order to be entrusted with provision of water supply services in rural/local systems; * Develop and adopt the Law on Water Services. | | |
| **Key strategic projects** | / | | |
| **Indicators for monitoring of results of measures** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| Phase and level of implementation of the process of adoption\* of amendments to the Law on Utilities for the purpose of identifying entities who may be entrusted with provision of water supply services in local systems  Drafting amendments to the Law / harmonizing text of amendments between the competent government bodies and institutions etc. - proposal of the Law submitted to the Government, Parliament of the Federation of BiH - adoption by the Parliament of the Federation of BiH) | Drafting of the Law on Utilities has not stated   * In practice, local water supply systems are typically managed by associations of citizens, but also some informal groups of citizens who do that without being formally established * Law on principles of local self-government of the Federation of BiH stipulates the competence of LGUs for providing water supply services on their territories * Cantonal laws are not harmonised regarding the matter of entities who may be entrusted with provision of utility services | Adopted amended cantonal laws on utilities containing conditions that legal entities have to comply with in order to be entrusted with provision of water supply services (2024) |
| Phase in the process of adopting the \*Law on Water Services of the Federation of BiH that will ensure establishment of water services standards aligned with the EU requirements  Drafting amendments to the Law / harmonizing text of amendments between the competent government bodies and institutions etc. - proposal of the Law submitted to the Government, Parliament of the Federation of BiH - adoption by the Parliament of the Federation of BiH) | Drafting of the Law on Water Services of the Federation of BiH has not stated   * The Law would integrate the current and expected legislation that regulates the area of provision of water services, as an integrated response to the existing need to reform this sector | Adopted Law on Water Services by the Government of the Federation of BiH (2027) |
| **Developmental impact and contribution of the measure to achieving the priority** | Improving water management in the Federation of BiH and increased scope of relevant services | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 84,295  Source: 100% government budget | | |
| **Period of implementation of the measure** | 2024-2027 | | |
| **Institution responsible for coordination and implementation of the measure** | FMAWMF, CMW (cantonal ministries responsible for water); Federation and cantonal health institutes, | | |
| **Implementing institutions for the measure** | LGUs, CMW (cantonal ministries responsible for water); | | |
| **Target groups** | All institutions and people in the Federation of BiH | | |

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| **Link with the strategic goal** | **1. Protect water quality and secure availability of water resources and their sustainability** | | |
| **Priority** | **1.4. Reducing the risk of extreme hydrological events by establishing a sustainable flood risk management system and adaptation to climate changes** | | |
| **Name of the measure** | **1.4.1** **Monitoring and evaluating level of implementation of Flood Risk Management Plans in river basins in the Federation of BiH** | | |
| **Description of the measure with the general area of intervention** | This measure aims to reduce probability of floods as well as the size and number of areas exposed to flood risk by improving water legislation and by monitoring. implementation of measures from the Flood Risk Management Plans.  General areas of intervention include:  **a) Amendments to the Law on Waters of the Federation of BiH**  a1) Amend and adopt changes to the LoW and CLoWs to include principles/criteria, in the context of climate change, for defining the restrictions that may impact spatial planning, use of land and construction in the areas at risk of floods.  **b) Implementation of Programme of Measures from the Flood Risk Management Plans, and regular reporting on progress achieved**  b1) Develop and publish biannual reports on achievement of objectives and implementation of measures from the Flood Risk Management Plans; b2) Publish on the web-pages of SRBA and ASWA the areas exposed to flood risk as a map in the scale 1/100, as well as the results of the projects "Flood Risk Management Plan". | | |
| **Key strategic projects** | / | | |
| **Indicators for monitoring of results of measures** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| a1) Phase in the process of adoption of amendments LoW and CLoWs regarding the criteria for defining the restrictions that may impact spatial planning, use of land and construction in the areas at risk of floods | Law on Waters prohibits construction in the area of 100-year waters | Developed and adopted amendments to the LoW and CLoW   * Exclude from the Law provisions "prohibiting" construction in the area of 100-year waters * Define in the laws the provisions regarding criteria for defining the restrictions that may impact spatial planning, use of land and construction in the areas at risk of floods (2024) |
| a2) Reporting status | Reporting has not started yet; plans are being developed | Developed and published on web pages of the Agencies the biannual reports on the level of implementation of measures from the flood risk management plans (2024 -2034) |
| a3) Status of publication at the web-pages of SRBA and ASWA in the form of zone maps (GIS)   * of areas at risk of flooding in scale 1/100 * results of the project "Flood Risk Management Plan" for the Federation of BiH | Published maps (GIS) of areas at risk of flooding in scale 1/100 | Developed and published on web-pages of the water agencies (SRBA and ASWA)   * the maps of areas at risk of flooding in scale 1/100, and * results of the Flood Risk Management Plans in the form of zone mapping (GIS) (2024-2034) |
| **Developmental impact and contribution of the measure to achieving the priority** | Mitigating consequences of climate change, improving hydrology of water courses and risk mitigation and protection against floods and landslides | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 1,547,756  Source: 30% from the government budget, 70% combined ‒ loans, funds from EU and other international donors, and other donations | | |
| **Period of implementation of the measure** | 2023-2034 | | |
| **Institution responsible for coordination and implementation of the measure** | FMAWMF, SRBA, ASWA, FHMI | | |
| **Implementing institutions for the measure** | GFBiH and PFBiH (Government of the Federation of BiH and Parliament of the Federation of BiH); FMAWMF; SRBA; ASWA; FHMI, CMW (cantonal ministries responsible for water); FMET; FMSP; CM\_E, SP, EN, A (Cantonal ministries competent for environment, spatial planning, energy, agriculture, etc.) | | |
| **Target groups** | All institutions and people in the Federation of BiH | | |

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| **Link with the strategic goal** | **1. Protect water quality and secure availability of water resources and their sustainability** | | |
| **Priority** | **1.4. Reducing the risk of extreme hydrological events by establishing a sustainable flood risk management system and adaptation to climate changes** | | |
| **Name of the measure** | **1.4.2. Establishment and operation of hydrology forecasting systems in the Federation of BiH, including the improved network of hydrological and meteorological metering stations** | | |
| **Description of the measure with the general area of intervention** | This measure aims to plan further development of hydrological and meteorological and precipitation stations in the Federation of BiH as the basis for establishing and operation of hydrological and hydraulic forecasting models.  General areas of intervention have been defined in two groups;  **a) Improved network of hydrological and meteorological and precipitation stations in the Federation of BiH**  a1) Developed and made available the Plan for extension of hydrological measuring stations network based on the identified AFAs  a2) Implemented Plan of extension‒ construction of hydrological measuring stations, accompanied by biannual reports on network extension;  a3) Developed and made available the Plan for expansion of network of meteorological and precipitation measuring stations in the Federation of BiH;  a4) Implemented Plan of extension - construction of the network of meteorological and precipitation measuring stations in the Federation of BiH, accompanied by biannual repots on extension of the network of meteorological and precipitation stations in the Federation of BiH.  **b) Establishing and operating the hydrological and hydraulic forecasting models - operational and regularly maintained**  b1) Established and operational hydrology forecasting model for the Adriatic Sea River Basin;  b2) Operational and regularly maintained flood forecasting system for the Sava and Adriatic Sea river basins. | | |
| **Key strategic projects** | / | | |
| **Indicators for monitoring of results of measures** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
|  | a1) Status of development of the Plan for extension of hydrology measuring stations network based on the identified AFAs | The development of the Plan for extension of hydrology measuring stations network based on the identified AFAs has not started | Developed Plans  for extension of hydrology measuring stations network based on the identified AFAs (2024) |
| a) Level of completion  of works on extension of the network of hydrological measuring stations in Federation of BiH, in accordance with the Plan | Works on extension of the network of hydrological measuring stations in the Federation of BiH, in accordance with the Plan, have not started | Completed works on extension of the network of hydrological measuring stations, in accordance with the Plan, accompanied with biannual reporting on the extension of the network of hydrological measuring stations in the Federation of BiH (2025-2034) |
| a3) Status of development of the Plan for expansion of network of meteorological and precipitation measuring stations in the Federation of BiH | Drafting of the Plan for expansion of network of meteorological and precipitation measuring stations in Federation of BiH has not started | Developed Plans  for expansion of network of meteorological and precipitation measuring stations in the Federation of BiH (2024) |
| a4) Level of completion  of works on expansion of network of meteorological and precipitation measuring stations in the Federation of BiH | Works on extension of the network of meteorological measuring stations in the Federation of BiH, in accordance with the Plan, have not started | Completed works on expansion of the network of meteorological and precipitation measuring stations in the Federation of BiH, accompanied by biannual repots on extension of the network of meteorological and precipitation stations in FBiH (2025-2034) |
|  | b1) Status of establishment of hydrology forecasting model for the Adriatic Sea Basin. | Partly | established and operational hydrology forecasting model for the Adriatic Sea Basin (2024) |
|  | b2) Operational status and regular maintenance of flood forecasting system for Sava and Adriatic Sea river basins | Partly | Operational and regularly maintained flood forecasting system for Sava and Adriatic Sea river basins (2024 -2034) |
| **Developmental impact and contribution of the measure to achieving the priority** | Mitigating consequences of climate change, improving hydrology of water courses and risk mitigation and protection against floods and landslides | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 15,695,088  Source: 30% from the government budget, 70% combined ‒ loans, funds from EU and other international donors, and other donations | | |
| **Period of implementation of the measure** | 2024-2034 | | |
| **Institution responsible for coordination and implementation of the measure** | FMAWMF, SRBA, ASWA, FMHI Federation Hydrometeorogical Institute, CMW (cantonal ministries responsible for water) | | |
| **Implementing institutions for the measure** | FMAWMF; SRBA, ACWA, CMWs (cantonal ministries with competence for water) | | |
| **Target groups** | All institutions and people in the Federation of BiH | | |

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| **Link with the strategic goal** | **1. Protect water quality and secure availability of water resources and their sustainability** | | |
| **Priority** | **1.4. Reducing the risk of extreme hydrological events by establishing a sustainable flood risk management system and adaptation to climate changes** | | |
| **Name of the measure** | **1.4.3. Improved planning and implementation of the measures for adaptation to climate changes that affect water resources** | | |
| **Description of the measure with the general area of intervention** | This measure aims to programme implementation of measures in water sector. monitor their implementation and report on the progress in implementation of measures that are defined in the draft National Action Plan for climate change adaptation (NAP).  General areas of intervention include:   * Development of a programme for implementation of measures in water sector that are identified in the National Plan for Climate Change Adaptation (NAP); * Monitoring implementation and biannual reporting on the progress in NAP implementation; | | |
| **Key strategic projects** | / | | |
| **Indicators for monitoring of results of measures** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| Degree of development of a programme for implementation of measures in water sector that are identified in the National Plan for Climate Change Adaptation (NAP) | NAP is in its draft form‒ the development of a programme of implementation of the measures in the water sector that are defined in the draft NAP has not started | Developed programme of implementation of measures in the water sector that are defined in the draft NAP (2024) |
| Status of reporting on implementation of measures in the water sector as defined in the NAP | Reporting has not started, draft NAP made, not adopted | Biannual reports on the degree of implementation of measures from the NAP developed and published on web-pages of FMAMWF, the Agencies, and FHMI (2025-2034) |
| **Developmental impact and contribution of the measure to achieving the priority** | Improvement of strategic planning and mitigation of consequences of climate change | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 22,220  Source: 100% government budget | | |
| **Period of implementation of the measure** | 2023-2034 | | |
| **Institution responsible for coordination and implementation of the measure** | FMAWMF, SRBA, ASWA, FHMI | | |
| **Implementing institutions for the measure** | FMAWMF, SRBA, ACWA, FHMI, CMWs (cantonal ministries responsible for water); | | |
| **Target groups** | All institutions of water management and population of the Federation of BiH | | |

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| **Link with the strategic goal** | **1. Protect water quality and secure availability of water resources and their sustainability** | | |
| **Priority** | **1.5. Developing an effective legal and institutional framework for the purpose of alignment with the EU regulations in the water sector, and its enforcement** | | |
| **Name of the measure** | **1.5.1 Ensure effective implementation of the Programme of integration with EU regarding the Water Management sector (on the basis of four-year cycles)** | | |
| **Description of the measure with the general area of intervention** | This measure aims to intensify cooperation with the responsible institutions in BiH (DEI and MoFTER), as well as the activities related to planning priorities for harmonisation with water directives and identifying priorities for institutional measures in the field of water management, on the basis of four-year cycle.  General areas of intervention:   * Develop and adopt list of priorities for harmonisation with the Water Directives and for institutional measures in the area of water management for four-year periods; * Develop and adopt dynamic plan for approximation to the EU water regulations in FBiH and for implementation of institutional measures in the area of water management (for four-year periods); * Establish an operational structure within the FMAWMF for coordination of the process of accession to the EU/ for coordination when implementing the Programme of integration and development of DSIPs and APIDs for water directives. | | |
| **Key strategic projects** | / | | |
| **Indicators for monitoring of results of measures** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
|  | Status of development and adoption of the list of priorities for harmonisation with the Water Directives and for institutional measures in the area of water management for four-year periods | Draft list of priorities has been developed, but it has not been adopted | The final list prepared and adopted (2023) |
| Level of completion of the Time Plan for approximation to the EU water regulations in FBiH and for institutional measures in the area of water management (for four-year periods) | Time Plan for the four-year period has not been developed | Time Plan for the four-year period developed (2023) |
| Establish an operational structure within the FMAWMF for coordination of the process of accession to the EU/ for coordination when implementing the Programme of integration and development of DSIPs and APIDs for water directives | Official operational coordinating structure has not been established | Coordinating structure in the FMAWMF established and operational (2023) |
| **Developmental impact and contribution of the measure to achieving the priority** | Improvement of water management and progress in the process of European integrations by aligning the national legislation with the EU acquis. | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 20,391  Source: 100% government budget | | |
| **Period of implementation of the measure** | 2023 | | |
| **Institution responsible for coordination and implementation of the measure** | FMAWMF, DEI, MoFTER | | |
| **Implementing institutions for the measure** | SRBA, ASWA, CMW (cantonal ministries responsible for water); LGUs, CPUCs (cantonal public utility companies), PCU | | |
| **Target groups** | Employees in the institutions for waters | | |

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| **Link with the strategic goal** | **1. Protect water quality and secure availability of water resources and their sustainability** | | |
| **Priority** | **1.5. Developing an effective legal and institutional framework for the purpose of alignment with the EU regulations in the water sector, and its enforcement** | | |
| **Name of the measure** | **1.5.2. Improve legislation in water sector and organize administration in the Federation of BiH for the purpose of effective approximation of the Federation of BiH legislation to the EU regulations** | | |
| **Description of the measure with the general area of intervention** | This measure aims to improve water legislation at all levels in the Federation of BiH and legislation on organization of administration in the Federation of BiH for the purpose of effective approximation of legislation of Federation of BiH to the EU regulations. Proposals and conclusions for improving legislation will be based on previously prepared analysis of laws and legislation in water sector, and legislation applicable on administrative organisations in the Federation of BiH that will identify overlapping competences, gaps in defining the competences, and prescribed coordination mechanisms in the process of approximation to EU regulations.  General areas of intervention:   * Develop proposals and conclusions of analysis of water legislation for all levels in the Federation of BiH and legislation applicable on administrative organisations in the Federation of BiH; * Adopt changes and amendments to the legislation in the area of administration organization (Law on Federal Ministries and Law on Cantonal Ministries), as well as water legislation, in accordance with the conclusions of the Analysis. | | |
| **Key strategic projects** | / | | |
| **Indicators for monitoring of results of measures** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| Level of completion of the analysis of legislation for the purpose of identifying the competency overlaps, gaps in definition of competencies, and prescribed coordination mechanisms from the aspect of approximation of FBiH legislation to the EU regulations | The analysis has not started yet  Currently, according to the current legislation, the transposition work in the Federation of BiH is done by at least 23 bodies in the Federation of BiH: at least 3 bodies at the Federation of BiH level and 20 bodies at cantonal levels (10 ministries responsible for water and 10 ministries of environment) | Analysis completed and conclusions and recommendations made regarding the necessary legislative changes and amendments in water legislation and legislation regulating organisation of administration of the Federation of BiH (2024) |
| Level of completion of the process of adoption of the legislative changes and amendments | Process of changing and amending legislation has not started | Adopted amendments to the legislation in the area of water and administrative organization (Law on FBiH Ministries and Law on Cantonal Ministries), in accordance with the conclusions of the analysis.(2025) |
| **Developmental impact and contribution of the measure to achieving the priority** | Improvement of water management by aligning the national legislation with the EU acquis. | | |
| **Indicative financial projection, with indication of sources** | Amount: BAM 48,837  Source: 100% government budget | | |
| **Period of implementation of the measure** | 2024 - 2025 | | |
| **Institution responsible for coordination and implementation of the measure** | FMAWMF | | |
| **Implementing institutions for the measure** | ASWA, SRBA, CMW | | |
|  | Employees in the institutions for waters | | |

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| **Link with the strategic goal** | **1. Protect water quality and secure availability of water resources and their sustainability** | | |
| **Priority** | **1.5. Developing an effective legal and institutional framework for the purpose of alignment with the EU regulations in the water sector, and its enforcement** | | |
| **Name of the measure** | **1.5.3. Improving the existing institutional structure by strengthening capacities in institutions of the Federation of BiH competent for waters, with special focus on long-term and sustainable enforcement of EU water legislation** | | |
| **Description of the measure with the general area of intervention** | This measure aims to improve the current institutional structure in the Federation of BiH - in the institutions competent for water management by conducting a detailed analysis of institutional capacities for implementation of EU water legislation and international water conventions, consistent enforcement of law and effective implementation of strategies and plans. Results and recommendation of the analysis will serve as a basis for defining and strengthening the capacities of human resources, development of a strategic approach to the new employment and measures to retain the skilled persons.  General areas of intervention:   * Develop detailed study analysis / assessment of institutional capacities of competent water institutions in the Federation of BiH, with appropriate recommendations for capacity improvement; * Development of measures based on the analysis of institutional capacities for; * strengthening human resources in water sector institutions; * strategic employment; * retaining skilled persons in institutions. | | |
| **Key strategic projects** | / | | |
| **Indicators for monitoring of results of measures** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
|  | Level of development of the study analysis / assessment of institutional capacities of competent water institutions in the Federation of BiH, with appropriate recommendations for capacity improvement | Analysis / assessment has not started | Implemented comprehensive analysis / assessment of institutional capacities (2024) |
| Number of implemented measures for improvement of capacities in the water sector institutions in the areas of:   * strengthening human resources in water sector institutions * strategic approach to employment * retaining skilled persons in institutions | Analysis / assessment has not started, measures have not been identified or implemented | Identified and implemented all measures for:   * Strengthening human resources in water sector institutions for implementation of EU water sector legislation and international water sector conventions, consistent enforcement of law and effective implementation of strategies and plans * Strategic employment in institutions * Retaining skilled persons in institutions (2026) |
| **Developmental impact and contribution of the measure to achieving the priority** | / | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 250,000  Source: 100% government budget | | |
| **Period of implementation of the measure** | 2024-2026 | | |
| **Institution responsible for coordination and implementation of the measure** | FMAWMF | | |
| **Implementing institutions for the measure** | FMAWMF, SRBA, ACWA, FHMI, CMWs (cantonal ministries responsible for water); LGUs; | | |
| **Target groups** | Employees in institutions competent for water management at all levels in the Federation of BiH | | |

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| **Link with the strategic goal** | **1. Protect water quality and secure availability of water resources and their sustainability** | | |
| **Priority** | **1.5. Developing an effective legal and institutional framework for the purpose of alignment with the EU regulations in the water sector, and its enforcement** | | |
| **Name of the measure** | **1.5.4. Realization of activities from the developed and adopted APID documents related to the EU water directives** | | |
| **Description of the measure with the general area of intervention** | This measure aims to intensify and speed up the implementation and enforcement of EU water directives through developed, adopted and implemented Action Plans for Implementation of Directives (APID) and Directive Specific Implementation Plans (DSIP).  General areas of intervention:   * Develop and adopt 3 APIDs for EU water directives; * Develop and adopt 5 APIDs for EU water directives; * Implement 8 APIDs and provide biannual reporting on the progress of implementation.   *Note: The Programme of EU Integrations is currently lead by the European Integrations (DEI) is being developed, and the Directives for which the APIDs will possibly not be developed have not yet been identified* | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results of measures** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| Level of completion and implementation of the APIDs for Directives on:   * municipal waste water treatment 91/271/EC * water for human consumption 2020/2184 * assessment and management of flood risks 2007/60/EC. * MSFD Directive (Marine Strategy Framework Directive) | * Three draft APIDs (for Directives: 91/271/EC, 98/83/EC and 2007/60/EC) have been developed under EAS (2017), but not adopted * Updated APID (from 2017) for the Directive on the assessment and management of flood risks 2007/60/EC * Activities related to transposition of MSFD directive have not started   In late 2021, the Council of Ministers charged MoFTER to consider possible further activities related to transposition of MSFD Directive | * Updated and adopted 2 APIDs (for Directives: 91/271/EC and 2007/60/EC) (2025) * Developed and adopted APID for the new *Directive 2020/2184 instead of the APID for Directive 98/83/EC (2025)*   Realized cooperation with institutions at BiH level during the transposition of MSFD Directive / development of a strategy on marine environment for BiH |
| * Level of completion of the APIDs for Directives on: * the protection of waters against pollution caused by nitrates from agricultural sources, 91/676/EC. * establishing the framework for operation of the Community in the area of marine environment policy, 2008/56/EC. * managing quality of bathing water 2006/7/EC. * protection of groundwater against pollution and deterioration 2006/118/EC * environmental quality standards in the field of water policy, 2013/39/EC | APIDs have not been developed | Developed and adopted 5 APIDs (-2027), *except if it is found during the process of development of the Programme of EU integrations that the APIDs for some of 5 Directives will not be made* |
| Level of implementation of 8 APIDs | 8 APIDs have not been prepared for implementation | Implementation of 8 APIDs and reporting on the progress of their implementation in accordance with the defined Plan (2034) |
| **Developmental impact and contribution of the measure to achieving the priority** | Improvement of water management and progress in the process of European integrations by aligning the national legislation with the EU acquis. | | |
| **Indicative financial projection, with indication of sources** | Amount: BAM 4,271,360,350  Source: 10% from the government budget, 90% combined ‒ loans, funds from EU and other international donors, and other donations | | |
| **Period of implementation of the measure** | 2025-2034 | | |
| **Institution responsible for coordination and implementation of the measure** | MoFTER, DEI, FMAWMF, SRBA ,ASWA, FHMI | | |
| **Implementing institution** | FMAWMF, SRBA, ACWA, FHMI, CMWs (cantonal ministries responsible for water); CME (cantonal ministries responsible for environment), LGUs | | |
| **Target groups** | Institutions competent for water management in the Federation of BiH and BiH institutions competent for approximation to the EU regulations | | |

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| **Link with the strategic goal** | **1. Protect water quality and secure availability of water resources and their sustainability** | | |
| **Priority** | **1.6. Ensuring financial sustainability of the water sector** | | |
| **Name of the measure** | **1.6.1 Improve financing of water sector by re-defining tariff system and reliably estimating cost-effectiveness of investments (Feasibility Studies)** | | |
| **Description of the measure with the general area of intervention** | This measure aims to plan for ensuring observance of the principle of full coverage of operational and maintenance costs, as well as the investment costs in development of water supply system by adopting and implementing new bylaws/methodology, and by implementing the programme for improving water services sector.  General areas of intervention:   * Implement the methodology for setting the lowest basic price of water services in LGUs and UC/CPUCs; * Develop feasibility studies for new investments in utility infrastructure in LGUs. | | |
| **Key strategic projects** | / | | |
| **Indicators for monitoring of results of measures** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| Number/percentage of LGUs / PUC and CPUC (cantonal public utility companies) that apply the methodology for setting the lowest basic price of water services in the Federation of BiH / establishment of regulatory bodies for water tariffs | * Adopted Methodology for setting the lowest basic price of water services in the Federation of BiH (2022) * Regulatory bodies for water tariffs have not been established | Methodology applied in all LGUs / PUCs and CPUCs (2028) |
| Number of completed feasibility studies for new investments in utility infrastructure in LGUs | No data available on the number of feasibility studies in LGUs | In all LGUs, developed feasibility studies for new investments in utility infrastructure (2023 -2029) |
| **Developmental impact and contribution of the measure to achieving the priority** | Improvement of financial sustainability and competitiveness of utility companies, provision of better services to the citizens and businesses | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 287,791  Source: 100% government budget | | |
| **Period of implementation of the measure** | 2023-2029 | | |
| **Institution responsible for coordination and implementation of the measure** | FMAWMF, Cantonal Public Utility Companies (CPUCs), LGUs | | |
| **Implementing institutions for the measure** | GFBiH and PFBiH (Government of the Federation of BiH and Parliament of FBiH), SRBA  ACWA, CMWs (cantonal ministries responsible for water); | | |
| **Target groups** | Institutions competent for water management at all levels in the Federation of BiH | | |

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| **Link with the strategic goal** | **1. Protect water quality and secure availability of water resources and their sustainability** | | |
| **Priority** | **1.6.** **Ensuring financial sustainability of the water sector** | | |
| **Name of the measure** | **1.6.2. Improve the system of calculation, collection and allocation of special water fees** | | |
| **Description of the measure with the general area of intervention** | This measure aims to analyse justification of re-defining the system of special water fees and come up with proposals to improve the level of collection of special water fees.  General areas of intervention:   * Make an analysis of the current economic status of all segments of water management, for the purpose of determining the need to change the amount of water fees and/or their allocation; * Amend legislation in the segment of water fees in accordance with the results of the analysis; * Harmonise the legislation in financial sector - tax administration with respect to collection of public revenues from special water fees - with the water sector legislation that regulates collection of special water fees; * Adjust the provisions of the VAT Law to recognize the character of revenues from special water fees for the purpose of exempting public utility companies from paying VAT for collected amounts of special water fees, on the basis of amendments to the VAT Law. | | |
| **Key strategic projects** | / | | |
| **Indicators for monitoring of results of measures** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| Level of completion of the analysis of current economic status of all segments of water management | Analysis has not started | Completed analysis the outcomes of which would be used to assess justification of re-defining the system of fee collection (2024) |
| Level of completion of the process of developing and adopting legislation on water fees | Analysis has not been made, and legislation has not been amended | Adopted legislation in the segment of water fees in accordance with the results of the analysis (2024) |
| Harmonisation between solutions offered in legislation regulating operation of the TA (Tax Administration) and functioning of the water sector with respect of collection of special water fees taking into consideration that they are public revenues | Regulations on tax administration regarding collection of public revenues from special water fees are not aligned with the water sector legislation that defines collection of revenues from special water fees | Harmonised legislation between tax administration and water sector for the purpose of increasing the amounts collected for water fees (public revenues)(2024) |
| Status of harmonisation of the provisions of the VAT Law to recognize the character of revenues from special water fees for the purpose of exempting public utility companies from paying VAT for collected amounts of special water fees | Amendments to the law have not been made or adopted | Provisions of the VAT Law adjusted to recognize the character of revenues from special water fees, so the public utility companies are exempted from paying VAT for collected amounts of special water fees.(2024) |
| **Developmental impact and contribution of the measure to achieving the priority** | Improvement of financial sustainability and competitiveness of utility companies, provision of better services to the citizens and businesses. | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 167,047  Source: 100% government budget | | |
| **Period of implementation of the measure** | 2023-2024 | | |
| **Institution responsible for coordination and implementation of the measure** | FMAWMF, Ministry of Finance of BiH; Federation of BiH Ministry of Finance - Tax Administration, LGUs, CPUC, PUC | | |
| **Implementing institutions for the measure** | GFBiH and PFBiH (Government of the Federation of BiH and Parliament of the Federation of BiH), SRBA, ASWA, Ministry of Finances of BiH; Federation of BiH Ministry of Finance - Tax Administration), CMW (cantonal ministries responsible for water) | | |
| **Target groups** | Institutions competent for water management at all levels in the Federation of BiH | | |

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| **Link with the strategic goal** | **1. Protect water quality and secure availability of water resources and their sustainability** | | |
| **Priority** | **1.6. Ensuring financial sustainability of the water sector** | | |
| **Name of the measure** | **1.6.3. Establishment and operation of specialist team(s) in the water sector for economic and financial planning, project preparation and programming spending of funds** | | |
| **Description of the measure with the general area of intervention** | This measure aims to train a team of water sector experts in economic and financial planning, project preparation and programming the spending for the purpose of successful use of funds for development of water sector from EU and other international financial institutions.  General areas of intervention:   * Establish and make operational the body(ies) (experts in water law, financial and economic experts in water) for economic and financial planning, project preparation and programming the spending; * Develop and submit applications to international organisations for projects of specialist training of the body on economic and financial planning, project preparation and programming of the spending; * Develop a Training Programme on economic and financial planning, project preparation, and programming the spending of funds; * Implement the training programme and report on the results of implementation of the training programme. | | |
| **Key strategic projects** | / | | |
| **Indicators for monitoring of results of measures** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| Status of establishment and operation of one or several bodies in water sector (experts in water law, financial and economic experts in water) for economic and financial planning, project preparation and programming the spending | The process of establishing these bodies has not started | One or more operational bodies have been established and made operational in water sector to do financial planning, project preparation and programming the spending (2024) |
| Level of preparation of applications to international organisations for projects of specialist training of the body in water sector on economic and financial planning, project preparation and programming of the spending. | Preparation of the application has not started | Prepared and submitted applications to international organisations for implementation of a project of specialist training to the body in water sector (2025) |
| Level of development of a Training Programme on economic and financial planning, project preparation, and programming of the spending of funds | Development of the Training Programme has not started | Training Programme prepared (2025) |
| Implementation phase of the training programme and making the report on implementation | The Training Programme preparation has not started, nor its implementation | Training programme completed and report on its implementation prepared (2025) |
| **Developmental impact and contribution of the measure to achieving the priority** | Increased amount of available financing for implementation of activities in water sector by strengthening institutional capacities and human resources for coordinated and strategic project management | | |
| **Indicative financial projection, with indication of sources** | Amount: BAM 44,460  Source: 100% government budget | | |
| **Period of implementation of the measure** | 2023-2025 | | |
| **Institution responsible for coordination and implementation of the measure** | FMAWMF, SRBA, ASWA | | |
| **Implementing institutions for the measure** | SRBA, ASWA, CMWs (cantonal ministries responsible for water) | | |
| **Target groups** | Institutions competent for water management at all levels in the Federation of BiH | | |

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| **Link with the strategic goal** | **1. Protect water quality and secure availability of water resources and their sustainability** | | |
| **Priority** | **1.6. Ensuring financial sustainability of the water sector** | | |
| **Name of the measure** | **1.6.4. Ensuring financing for preparation of priorities and implementation of project documents aligned with the EU climate legislation and global initiatives for climate change resilience and adaptation** | | |
| **Description of the measure with the general area of intervention** | This measure aims to achieve intensive and continuous cooperation with the MoFTER for the purpose of securing financing for measures of adaptation to climate changes that affect water resources.  General areas of intervention:   * Identify list of priority projects in climate change adaptation area; * Prepare for financing project documents on climate change adaptation | | |
| **Key strategic projects** | / | | |
| **Indicators for monitoring of results of measures** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| Status of development of list of priority projects | Priority projects list has not been made | The first list of priority projects in BiH prepared and regularly updated (2023) |
| Status of preparation of project documents for financing | Preparation of the project documents has not started | Developed first set of project documents and regularly updated (2024 -2034) |
| **Developmental impact and contribution of the measure to achieving the priorities** | Increased amount of available financing for implementation of activities in water sector by strengthening institutional capacities and human resources for coordinated and strategic project management | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 21,261  Source: 100% government budget | | |
| **Period of implementation of the measure** | 2023-2034 | | |
| **Institution responsible for coordination and implementation of the measure** | MoFTER, FMAWMF | | |
| **Implementing institutions for the measure** | FMAWMF, SRBA, ASWA, CMW, LGUs | | |
| **Target groups** | Institutions competent for water management at all levels in the Federation of BiH | | |

* 1. Annex 2 A detailed overview of measures for Waste Management

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| **Link with the strategic goal** | **2. Reducing waste and increasing reuse of materials** | | |
| **Priority** | **2.1. Improving the legal and strategic framework in the waste management according to the EU principles** | | |
| **Title of the measure** | **2.1.1 Improve waste management legislation, policies and planning documents so as to be in compliance with the obligations arising from the EU acquis and international agreements** | | |
| **Description of the measure with general area of intervention** | This measure aims at fully aligning the applicable legislation, policies, planning and strategic documents in the Federation of BiH with the obligations arising from the Directives and guidelines of the European Union governing the waste management sector, as well as from the requirements of the Basel Convention on control of transboundary movement of hazardous waste and its disposal.  General areas of intervention include two lines of activities:   1. Drawing up and implementing **Action Plans** for the Directive on Waste 2008/98/EC, as amended by the Directive (EU) 2018/851 and Directive 999/31/EC on landfills, as amended by the Directive (EU) 2018/850. 2. **Aligning the Law on Waste Management and accompanying bylaws** with:  * the Directive 94/62/EC on packaging waste, as amended by the Directive (EU) 2018/852; * the Directive 2012/19/EU on waste electric and electronic equipment, as amended by the Directive (EU) 2018/849; * the Directive 2006/66/EC on batteries and accumulators and waste batteries and accumulators as amended by the Directive (EU) 2018/849; * the Directive 2000/53/EC on end-of-life vehicles, as amended by the Directive (EU) 2018/849; * the Directive 96/59/EC on disposal of polychlorinated biphenyls and polychlorinated terphenyls (PCB/ PCT); * the Directive 86/278/EEC on the protection of the environment, and in particular of the soil, when sewage sludge is used in agriculture; * the Directive (EU) 2015/720 of the European Parliament and Council of 29 April 2015 amending the Directive 94/62/EC on reduction of the annual consumption of lightweight plastic carrier bags; * the Directive 2006/21/EC on the management of waste from extractive industries and amending Directive 2004/35/EC. * the Directive (EU) 2019/904 of the European Parliament and the Council of 5 June 2019 on the reduction of the impact of certain plastic products on the environment (SUP Directive); * the Directive 78/176/ECC on waste from the titanium dioxide industry; * Amending the Regulation on transboundary transport of waste (OG FBiH 07/11) pursuant to the Decision on terms and conditions of the transboundary transport of waste amended in accordance with the Convention on Control of Transboundary Transport of Hazardous Waste and its Disposal (OG BiH 86/16) (following the amendment of the Decision at the national level); * The Law on Waste Management should allow for a regional planning of waste management in situations involving formation of inter-municipal waste disposal regions which cover more than one cantons;  1. Enhancing the **waste management planning sector** in compliance with the new Strategy and principles which transpose the EU requirements in the waste management sector through:  * Adoption of guidelines for strategic planning in the waste sector for lower levels of government; * Preparation of the Waste Management Plan of the Federation of BiH; * Preparation of new cantonal and municipal waste management plans (and regional as appropriate);  1. Preparing a reference document for the best available techniques for (i) waste management, and (ii) management of extractive industries waste. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results** | **Indicators**  **(output and deliverable)** | **Baseline value**  **(2021)** | **Target value** |
| 1. Status of the preparation and adoption of Action Plans for the Implementation of the Waste Directive and Landfill Directive | The Action Plans have not been prepared and adopted | 2 The Action Plans prepared and adopted. (2025) |
| 1. Alignment of the Federation legislation with the Directives and guidelines of the European Union governing the waste management sector and requirements of the Basel Convention | The legislation of the Federation is not aligned with the Directives and guidelines of the European Union governing the waste management sector and requirements of the Basel Convention | The legislation of the Federation of BiH fully aligned with the Directives and guidelines of the European Union in the waste management sector and requirements of the Basel Convention.  (2026) |
| 1. Number of prepared waste management plans | The Waste Management Plan (FWMP) of the Federation of BiH has not been prepared while cantonal and municipal waste management plans are not aligned with the objectives from this Strategy and the new FWMP | A new Waste Management Plan of the Federation of BiH prepared and adopted (2024)  10 cantonal and 79 municipal waste management plans prepared and adopted (2029) |
|  | 1. The number of reference documents on the best available techniques in the area of waste management | 0  (2021) | 2  (2029) |
| **Effect on the development and contribution of the measure to the priority** | Improved waste management and progress in the EU integration process though alignment of the national legislation with the EU acquis | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 1,489,703  Source: 20% government budget, 80% EU and other international donors | | |
| **Period of the implementation of the measure** | 2023-2029 | | |
| **Institution responsible for coordination of the implementation of the measure** | Federation Ministry of Environment and Tourism | | |
| **Implementing institutions** | Federation Ministry of Environment and Tourism | | |
| **Target groups** | All players in the waste management system, including the Federation, cantonal/municipal government, utility sector, private sector and citizens | | |

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| **Link with the strategic goal** | **2. Reducing waste and increasing reuse of materials** | | |
| **Priority** | **2.2. Improving the waste records and reporting system** | | |
| **Title of the measure** | **2.2.1 Improving the waste records and reporting system** | | |
| **Description of the measure with general area of intervention** | This measure aims at improving the records and reporting on the waste in order to obtain reliable data, improve strategic planning across the levels, which should contribute to sustainability of future investments in the waste management sector.  General areas of intervention include three lines of activities:   1. Introducing a **bylaw imposing an obligation** on all utility companies in the Federation of BiH **to determine the quantity and composition of waste**, which should also prescribe the sampling methodology standards for waste analysis; 2. Establishing a **waste analysis** laboratory; 3. **Upgrading the waste management information system** through:  * Continued upgrade of the waste management information system and furtherance of its interoperability, data preparation and forms of reports in response to users’ demand; * Identification and registration of all entities obliged to pay the fee: * Human capacity building in the Environmental Protection Fund focusing on skills required to better run the waste management information system; * Implementing annual education programmes for all waste reporting entities. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| a. The status of adoption of the bylaw imposing the obligation to determine the quantity and composition of waste | The bylaw has not been adopted | The bylaw imposing the obligation to determine the quantity and composition of waste published in the Official Gazette of the Federation of BiH (2023) |
| b. Status of establishment of an accredited waste analysis laboratory | No accredited waste analysis laboratory has been established | An accredited waste analysis laboratory established (2024) |
| c.1 Advanced IS modules and analytics  c.2 Number of registered users of IS  c.3 An IS Department formed and appropriately staffed with the Environmental Protection Fund of FBiH  c.4 Number of annual trainings for reporting entities | c.1. Limited analytical capabilities of IS  c.2 1000 users  c.3 No IS Department formed with the Environmental Protection Fund of FBIH  c4. 1 | c1. IS fully capable of responding to all analytical requests of the users (2028)  c.2. 5000 users (2032)  c.3 The IS Department formed with the Environmental Protection Fund of FBiH (2025)  c4. 4 (annually, from 2023 until the end of the planning period) |
| **Effect on the development and contribution of the measure to the priority** | Improved waste management | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 2,208,120  Source: 20% government budget, 80% EU and other international donors | | |
| **Period of the implementation of the measure** | 2023-2032 | | |
| **Institution responsible for coordination of the implementation of the measure** | Federation Ministry of Environment and Tourism in cooperation with the Government of FBIH | | |
| **Implementing institutions** | Federation Ministry of Environment and Tourism and Environmental Protection Fund of the Federation of BiH | | |
| **Target groups** | BiH, Federation, cantonal and city/municipal governments, utility sector and private sector | | |

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| **Link with the strategic goal** | **2. Reducing waste and increasing reuse of materials** | | |
| **Priority** | **2.3.** **Implementing economic and financial instruments and mechanisms to reduce the amount of waste and boost utilisation of all categories of waste** | | |
| **Title of the measure** | **2.3.1 A revision of the current and implementation of further economic and financial instruments and mechanisms in the waste management sector** | | |
| **Description of the measure with general area of intervention** | This measure aims at supporting the transition towards a circular economy through financial instruments. General areas of intervention focus on a reviewing options and defining recommendations of the current and implementation of further economic and financial instruments and mechanisms which should reduce the quantity and boost utilisation of all categories of waste, including but not limited to:   * Revision of the sanctions policy and review of the current fees such as the tax on light plastic carrying bags, tax on motor vehicles registration, etc Introducing tax on disposal of waste on non-compliant municipal landfills; * Introducing a tax waste disposed on non-compliant municipal landfills; * Introducing differential rates for different materials and types of packaging; * Abolish the tax on utility services, etc.; * Creating a legal framework and technical conditions for reuse of waste from industrial landfills (such as slag and ash waste). | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| The status of the proposal for new economic and financial instruments | No proposal has not been offered, and only 2 financial instruments are currently available in the waste management area | The proposal prepared and activities on the implementation of new financial instruments initiated (2026) |
| **Effect on the development and contribution of the measure to the priority** | Ensuring financial sustainability, and better services for citizens and industry | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 58,675  Source: 100% government budget | | |
| **Period of the implementation of the measure** | 2023-2026 | | |
| **Institution responsible for coordination of the implementation of the measure** | Federation Ministry of Environment and Tourism | | |
| **Implementing institutions** | Federation Ministry of Environment and Tourism, Federation Ministry of Finance | | |
| **Target groups** | Environmental Protection Fund of the Federation of BiH, all the players in the waste management sector | | |

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| **Link with the strategic goal** | **2. Reducing waste and increasing reuse of materials** | | |
| **Priority** | **2.4. Improving the municipal waste management system** | | |
| **Title of the measure** | **2.4.1 Reform of the municipal waste management sector** | | |
| **Description of the measure with general area of intervention** | This measure aims at creating an environment which could incentivise a reform of the municipal waste management sector, which again should improve both the financial and operational sustainability of utility companies and enable further development of the system and improve utility services.  General areas of intervention focus on:   1. **Forming a working group for the municipal waste management** to address proposals and the implementation of the reform of the municipal waste management sector. 2. **Preparation of Guidelines for the reform of the municipal waste management sector** based on the study “Analysis of the municipal solid waste management sector” Strategic policy areas and investment planning 2025 (World Bank 2018) including:  * Guidelines for the improvement of cantonal legislation on utility activities in accordance with the policy defined at the level of the Federation of BiH; * Guidelines for improvement of municipal decisions on utility order which regulate municipal waste management in accordance with the policy defined at the level of the Federation of BiH; * Guidelines on changing the staffing plan in municipal departments in order to form a special department for waste management services within the utility services division (Note: Terms of references should include preparation of municipal waste management plans, implementation of awareness raising campaigns, handling complaints, calculation of tariffs, monitoring and inspection, carrying out any other activities aimed at earning additional revenues, etc. ); * Guidelines for restructuring (and regionalisation) of utility companies in all segments in order to provide for sustainability and access to high quality waste management services; * Guidelines for the transfer of billing of household from utility companies to municipalities; * Guidelines for a new tariff model for waste management services which is economically justified and affordable for all categories of the population, including vulnerable groups, and which specifies all required legal and technical modifications and investments to facilitate the implementation of such model in practice; * Guidelines for establishment community support officers/municipal police; * Guidelines for deployment of the utility infrastructure for separate waste collection at the municipal level; * Guidelines for the implementation of staff training in utility companies at operational level (enhancing accounting procedures, tariff calculation, expenditure control, maintenance planning, equipment procurements, data collection and reporting, etc.); * Guidelines for the development and implementation of public communication programmes.  1. **Support to the implementation of the reform** of the sector in accordance with the Guidelines and recommendations of the working group. 2. **Continued capacity building and professional development** in organisations involved in waste management at the level of cantons, municipalities and utility companies**.** | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
|  | a. The status of forming the Working Group for the reform of the municipal waste management sector | The Working Group for the reform of the municipal waste management sector has not been formed | The Working Group for the reform of the municipal waste management sector formed (2025) |
| b. The status of development of Guidelines for the reform of the municipal waste management sector | There are no Guidelines for the reform of the municipal waste management sector | The Guidelines for the reform of the municipal waste management sector completed (2027) |
| ç The effectiveness and efficiency of utility companies | Unsatisfactory effectiveness and efficiency of utility companies | The effectiveness and efficiency of utility companies enhanced as compared to the baseline (2032) |
| d. Number of technical meetings (workshops, conferences, trainings) | 1 (annually) | 4 (annually, from 2023 until the end of the planning period) |
| **Effect on the development and contribution of the measure to the priority** | The reform will increase the accountability, transparency and efficacy of the municipal waste management sector, in compliance with the principle of non-discrimination | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 813,840  Source: 20% government budget, 80% combined funds from EU and other international donors, and other donations | | |
| **Period of the implementation of the measure** | 2023-2032 | | |
| **Institution responsible for coordination of the implementation of the measure** | Federation Ministry of Environment and Tourism | | |
| **Implementing institutions** | Federation Ministry of Environment and Tourism, cantons, municipalities, cities, utility companies | | |
| **Target groups** | Utility sector and citizens | | |

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| **Link with the strategic goal** | **2. Reducing waste and increasing reuse of materials** | | |
| **Priority** | **2.4. Improving the municipal waste management system** | | |
| **Title of the measure** | **2.4.2 Procurement of equipment and development of the municipal waste management infrastructure** | | |
| **Description of the measure with general area of intervention** | This measure aims at developing new and upgrading the current municipal waste management infrastructure, which should improve waste collection, sorting, treatment and landfilling.  General areas of intervention focus on:   1. **Procuring equipment for municipal** **waste collection and transport (containers, tracks and other equipment)** based on the needs identified in the cantonal/municipal waste management plans. 2. **Procuring equipment for separate collection and sorting of waste** through purchase of containers/bins, vehicles and other equipment for separate collection of secondary raw material. 3. Capacity building for waste treatment and disposal, including the following infrastructure:  * **Green islands and recycling yards** based on the needs identified in the cantonal/municipal waste management plans[[27]](#footnote-28); * New r**egional and/or inter-municipal landfills and/or upgrading the current municipal landfills** in accordance with the new concept of waste disposal in the Federation of BiH which requires a revision of the current regional scheme, taking into account the geography and potential for pooling within regional and inter-municipal schemes; * **transfer stations** in accordance with the new concept of regional waste disposal in the Federation of BiH; * Building new **regional/inter-municipal waste management centres** within predefined regional/inter-municipal/municipal landfills in accordance with the new waste disposal concept in the Federation of BiH which involves a revision of the current plan to build regional centres based on realistic indicators on waste quantities and financial sustainability of such centres. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
|  | a.1 Quantity of household waste collected through public waste transport services  a.2 Percentage of the population covered by public waste transport services | a.1 611,854 t/y (2020)  a.2 68% (2018) | a.1 Quantities of household waste collected through public waste transport services increased so as to ensure collection of no less than 95% of municipal waste generated  a.2 The percentage of population covered with organised waste collection increased to 100% in urban areas and to 90% in rural areas |
| b. Waste management - total quantities | The quantity of waste within a year dispatched for treatment/disposal/export - a total = 1% of the waste generated  or  Small quantities of municipal waste by treated in R procedures | The quantity of waste within a year dispatched for treatment/disposal/export - a total = 30% of the waste generated  or  The quantity of municipal waste treated in R treatment procedures increased to 30% of the waste generated as compared to the base year (2032) |
| c.1 Treatment and disposal capacities (buildings) | c. 1.1 number of municipal/city recycling yards for separate collection of different types of municipal waste 7  C.1.2 number of disposal sites - by landfill types 7 regional and 74 municipal landfills  c.1.3 number of regional waste management centres (no.): 1 (Sarajevo) | Number of facilities for treatment and disposal of waste increased as compared to the base year (2032) |
| **Effect on the development and contribution of the measure to the priority** | Minimising adverse effects on the environment and improved services for the citizens and industry | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 527,096,185  Source: 10% government budget, 90% combined ‒ loans and funds from EU and other international donors | | |
| **Period of the implementation of the measure** | 2023-2032 | | |
| **Institution responsible for coordination of the implementation of the measure** | Federation Ministry of Environment and Tourism | | |
| **Implementing institutions** | Federation Ministry of Environment and Tourism, cantons, municipalities, cities, utility companies | | |
| **Target groups** | Utility sector and citizens | | |

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| **Link with the strategic goal** | **2. Reducing waste and increasing reuse of materials** | | |
| **Priority** | **2.4. Improving the municipal waste management system** | | |
| **Title of the measure** | **2.4.3 Programme aimed at reducing the amount of municipal waste disposed at landfills** | | |
| **Description of the measure with general area of intervention** | This measure aims at reducing the total quantity of municipal waste disposed at landfills through targeted actions. This will be achieved through the three following lines of action:   1. **reducing household waste generation** through activities such as:  * Implementing cantonal and municipal programmes /projects focusing on reducing the use of disposable products; * Implementing cantonal and municipal programmes /projects aimed at promotion and furtherance of reuse of materials (e.g., repair service shops); * Implementing cantonal and municipal programmes /projects aimed at prevention of food waste generation; * Implementing cantonal and municipal programmes /projects for promotion and furtherance of household composting  1. **Promoting separate collection of biodegradable waste** typically contained in municipal waste through activities such as:  * Designing a concept to reduce biodegradable waste disposed at landfills within the Waste Management Plan of the Federation of BiH; * Development and preparation of technical and advisory guidelines for municipalities; * Implementing cantonal and municipal programmes/projects aimed at reducing biodegradable waste;  1. **Energy recovery through activities such as:**  * Examining a possibility of energy recovery from waste in the existing cement factories in BiH and creating a roadmap / action plan which should identify what is needed to initiate RDF production in the Federation of BiH; * Preparing a feasibility study for construction of energy plants on waste derived fuel for the major centres in the Federation of BiH (Sarajevo, Tuzla, Mostar,). | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| a. The amount of waste generated annually per capita (kg/dwelling/day) | 1,1 kg/dwelling/day  (2020) | Less than 0.9 kg/dwelling/day  (2032) |
| b. The amount of biodegradable waste landfilled | 100% | Creating preconditions for separate collection of 10% of the total amount of biodegradable waste typically contained in municipal waste (2032) |
| ç Amount of waste treated in R procedures, particularly for municipal waste | 0% | Increase of the amount of municipal waste treated in R procedures as compared to the base year (2032) |
| **Effect on the development and contribution of the measure to the priority** | Reducing amounts of waste, minimising adverse effects on the environment and improved services for citizens and industry | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 4,720,850  Source: 20% government budget, 80% combined ‒ loans and funds from EU and other international donors | | |
| **Period of the implementation of the measure** | 2023-2032 | | |
| **Institution responsible for coordination of the implementation of the measure** | Federation Ministry of Environment and Tourism | | |
| **Implementing institutions** | Federation Ministry of Environment and Tourism, cantons, municipalities, cities, utility companies | | |
| **Target groups** | Cantons, municipalities, and utility companies | | |

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| **Link with the strategic goal** | **2. Reducing waste and increasing reuse of materials** | | |
| **Priority** | **2.5. Improving the management of special wastes** | | |
| **Title of the measure** | **2.5.1 Creating conditions for adequate collection and disposal of special wastes** | | |
| **Description of the measure with general area of intervention** | This measure aims at improving the system of collection and disposal of special wastes through targeted actions. General areas of intervention are:   1. Improving **the extended producers responsibility scheme** through the implementation of the recommendations in BiH for packaging, packaging waste and WEEE (World Bank 2018) which , among other things, requires:  * Undertaking of an analysis of pros and cons of a deposit system implementation; * Defining the responsibilities of municipalities and their mutual relations with the system operators in creation of a required infrastructure for separate waste collection and sorting, including a possibility that utility companies provide waste sorting services to the system operators on a competitive basis; * Providing a proposal of preparation and implementation of standardised agreements aimed at harmonising the relationship between the system operators and local authorities; * Preparing a proposal of revised requirements for support documents and reporting;; * Preparing a proposal to optimise application procedure, issuance and revocation of system operators’ licences * Preparing a proposal of a revised procedure of calculation and payment of taxes for packaging placed on the market; * Preparing a proposal of new (increased) tariffs charged by the system operator and the requirement for the system operator to notify the responsible ministry of any change of the tariffs. No agreements on individual prices/discounts should be allowed for individual clients; * Reviewing the format and scope of annual reports provided by the system operators. The reporting procedure should define how each activity should be proven (for instance, delivery notes, records on weighed quantities. etc.); * Analysing options to implement audits of annual reports of the system operators and to verify quantities reported by individual businesses; * Setting up transparent and fair mechanisms for division of responsibilities among several system operators which operate at the entity level.  1. Improving the collection system for batteries**, car batteries, waste tyres,** **refuse oil and end-of-life vehicles** activities:  * Raising awareness among SMEs about the issue of compliance of business operations with the legislation on waste management and achievement of the objectives defined for this category of waste; * Introducing a coordinated inspection supervision of entities who have the obligation to implement the Regulation on special wastes; * Promoting a revolving fund among business companies engaged in collection and recycling of special wastes to help them improve their operation;  1. Improving the system for collection and reuse of **construction waste through** activities such as:  * Designing and development of recycling yards and landfills for construction waste; * Adopting standards and regulations on construction materials which are not classified as waste in the Regulation on construction waste (OG FBiH 93/19); * Developing guidelines on green/sustainable construction with information on methodologies and techniques of reducing construction waste (recovery, flexibility, exchange of materials and use of least toxic materials);  1. Improving the system for collection ad reuse of **hazardous waste** through an analysis of the currently available and required capacities for disposal of different types of hazardous waste and analysis of use of sanitary landfills for the collection and reuse of treated and low-contaminated materials/waste; 2. Creating conditions for adequate disposal of **waste sludge which cannot be used for other purposes** through an analysis of options for adequate disposal of sludge which cannot be used for other purposes, and preparation of necessary study and project documents and development of a plant for waste sludge treatment;  * Creating conditions for adequate disposal of **animal waste;**;Adopting and implementing the Strategy and Action Plan of animal by-products and waste disposal for BiH (2019-2024), prepared within the EU project “Technical assistance supporting animal by-products and waste management in BiH”; * Developing the central facility of the pound and transfer stations;  1. Creating conditions for safe treatment of all types of **medical waste** through;  * Drawing up a plan on procurement of equipment for treatment of infectious and pathological waste from health centres in the Federation of BiH; * Procuring the equipment for safe disposal of infectious medical waste in large health centres in the Federation of BiH, which would at the same time receive infectious waste from local health centres; * Procuring equipment and/or using the current capacities (incinerators) for disposal of waste at source in major medical institutions; * Revising and effectuation of the Guidebook on medical waste management for healthcare institutions; * Implementation of a mandatory annual training for healthcare institutions to facilitate the implementation of medical waste management plans. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| a.1 Recycling rate of packaging waste (%)  a.2 Recycling rate of WEEE (%) | a.1\*  General goal for recovery and recycling of packaging waste is 35% of the packaging placed on the market  Minimum quantity (5%) which needs to be used or recycled  - Glass 12%  - Metal 10%  - Paper 30%  - Plastic 16%  - Wood 12%  (2016)  a.2 Objectives of collection and handling of waste equipment 35%  (2021) | a.1 Objectives for packaging waste:  - minimum 30 % (per weight of packaging waste) will be treated or incinerated in waste incinerators with energy recovery  - 55 % (per weight of packaging waste) will be recycled  The following objectives need to be reached for recycling of materials contained in packaging waste by 2032:  - 20 % per wight for glass  - 45 % per wight for paper and cardboard  - 20 % per wight for metals  - 19 % per wight for plastic  - 13 % per wight for wood  a.2 Objectives for WEEE:  - collect 55% of the total amount of the equipment placed on the market of FBiH in the current year at the following pace:  In 2022. 40%  In 2023. 40%  In 2024. 42%  In 2025. 43%  In 2026. 45%  In 2027. 47%  In 2028. 49%  In 2029. 51%  In 2030. 53%  In 2031. 55%  - 70-80% (per weight of devise) depending on the category will be treated  - Between 50 and 80 % (per weight of devise) will be recycled (2032) |
|  | b.1 Recycling rate of batteries and car batteries (%)  b.2 Recycling rate of waste tyres(%)  b.3 Recycling rate of refuse oil(%)  b.4 Recycling rate of ELV (%) | Baseline objectives have not been defined  (2021) | Separate collection, reuse and recycling of 45% (per average weight) of batteries and car batteries placed on the market in 2021.  Absolute ban on disposal of waste tyres and recycling or reuse of at least 70% of waste tyres collected (given the possibility of co-incineration in cement plants)  - As of 2025, on an annual level, collect and properly dispose 40% of the total amount of oil sold (mineral and synthetic), which became used oil  - recycle 85% of ELV (per average weight per ELV) |
| ç Amount of construction and demolition waste annually - total (t/y) | 16,844 t/y  (2020) | Minimum 30% increase of the amount of reported construction and demolition waste generated as compared to the base year (2032) |
| d. Amount of hazardous waste generated within a year - total (t/y) | 5,756 t/y  (2020) | Minimum 30% increase of reported amount of hazardous waste generated as compared to the base year (2032) |
| e. Amount of waste sludge generated | Data not available | No target value is defined for this indicator, it is necessary to introduce monitoring |
| d. Amount of animal waste generated within a year - total (t/y) | Data not available | No target value is defined for this indicator, it is necessary to introduce monitoring |
| d. Amount of hazardous waste generated within a year - total (t/y) | Data not available | No target value is defined for this indicator, it is necessary to introduce monitoring |
| **Effect on the development and contribution of the measure to the priority** | Minimising adverse effects on the environment and health | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 102,370,724  Source: 10% government budget, 90% combined loans and funds from EU and other international donors | | |
| **Period of the implementation of the measure** | 2023-2032 | | |
| **Institution responsible for coordination of the implementation of the measure** | Federation Ministry of Environment and Tourism | | |
| **Implementing institutions** | Federation Ministry of Environment and Tourism, Institute of Statistics of the Federation of BiH | | |
| **Target groups** | Cantons, municipalities and cities, operators of the extended producer responsibility scheme, entities obliged to report | | |

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| **Link with the strategic goal** | **2. Reducing waste and increasing reuse of materials** | | |
| **Priority** | **2.5. Improving the management of special wastes** | | |
| **Title of the measure** | **2.5.2 Strengthening the recyclables market** | | |
| **Description of the measure with general area of intervention** | This measure aims at strengthening the waste market with the view of efficiently using secondary row materials and optimising the waste management through targeted actions. This measure involves the following areas of intervention:   1. **Initiating a waste exchange:**  * Creating a multi-stakeholder platform for cooperation which will gather government authorities, associations of businessmen/chambers of commerce, private sector, system operators, funds, donors with the view of strengthening the waste market; * Preparation of technological requirements which must be satisfied by a specific type of waste to be eligible for recycling; * Setting up a waste exchange and creating an IT platform of the system offer and demand.  1. **Providing financial support to recycling industry:**  * Re-initiating the “revolving fund” for recycling industry with the Environmental Protection Fund of the Federation of BiH and securing funds from international donors to support the Fund; * Designing financial programmes to support the development of the recycling industry;  1. **Integration of informal collectors into the waste management system:**  * Integration of informal collectors, including the Roma population, in the multi-stakeholder platform for cooperation with the view of exploring options for legalisation and formalisation of their integration in the waste management system**;** * Developing a roadmap and recommendations for municipalities on the integration of informal collectors into the waste management system**.** | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
|  | a. Status of establishment of the Waste Exchange | The Waste Exchange has not been formed | The Waste Exchange up and running  (2027) |
| b. Investments in recycling industry from the revolving fund | 0 | Continued growth of annual allocations from the revolving fund  (annually, from 2024 until the end of the planning period) |
| ç Status of informal collectors in the recycling system | Informal collectors are not formally recognised as a part of the recycling system | Informal collectors are formally recognised as a part of the recycling system (2026) |
| **Effect on the development and contribution of the measure to the priority** | Reduced amounts of waste, improved environmental protection and growth potential through increased activity of the private sector | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 98,954  Source: 100% government budget | | |
| **Period of the implementation of the measure** | 2024-2030 | | |
| **Institution responsible for coordination of the implementation of the measure** | Federation Ministry of Environment and Tourism | | |
| **Implementing institutions** | Federation Ministry of Environment and Tourism, Environmental Protection Fund of the Federation of BiH, cantonal and municipal authorities, utility companies | | |
| **Target groups** | Recycling industry, informal waste collectors | | |

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| **Link with the strategic goal** | **2. Reducing waste and increasing reuse of materials** | | |
| **Priority** | **2.6. Rehabilitate surfaces beneath inadequately disposed waste** | | |
| **Title of the measure** | **2.6.1 Removing and rehabilitating abandoned landfills** | | |
| **Description of the measure with general area of intervention** | This measure aims at removing inadequately disposed waste and rehabilitating surfaces, including formal landfills in the competence of cantons, municipalities, and cities, and utility companies, so-called “black spots”, and abandoned industrial dump sites which frequently have no owner. The Federation of BiH should take the responsibility for their rehabilitation. This measure involves the following areas of intervention:  **a. Updating the list and producing a catalogue of “hot spots”, including municipal and industrial waste dumpsites.**  **b. Preparing a feasibility study for rehabilitation of abandoned sites and their rehabilitation.** | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| a. Status of development of the catalogue of hotspots | The catalogue of hotspots has not been developed | The catalogue of hotspots has been developed  (2025) |
| b. Number of abandoned landfills removed and rehabilitated | 0 | 5 (2032) |
| **Effect on the development and contribution of the measure to the priority** | Improved quality of the environment, minimum adverse effects and pollution from the abandoned dumpsites | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 20,047,258  Source: 20% government budget, 80% combined loans and funds from EU and other international donors, and other donations | | |
| **Period of the implementation of the measure** | 2023-2030 | | |
| **Institution responsible for coordination of the implementation of the measure** | Federation Ministry of Environment and Tourism | | |
| **Implementing institutions** | Federation Ministry of Environment and Tourism, cantons, municipalities, cities, | | |
| **Target groups** | Citizens | | |

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| **Link with the strategic goal** | **2. Reducing waste and increasing reuse of materials** | | |
| **Priority** | **2.7. Raise awareness about the proper separation, collection and disposal of waste** | | |
| **Title of the measure** | **2.7.1 Running up-to-date educational and informational, gender sensitive and inclusive awareness campaigns at all levels (Federation of BiH, cantonal, municipal)** | | |
| **Description of the measure with general area of intervention** | This measure aims at raising the awareness not only among citizens but also among the members of the business community about the proper waste management, focusing primarily on waste prevention and recycling, but also at providing better understanding how the system of waste collection and disposal works. Various trainings and public awareness raising campaigns are anticipated within this measure, such as:   * Implementing awareness raising programmes on sustainable production and consumption; * Raising public awareness and implement pilot projects aimed at implementing the legislation banning the use of single use plastic products; * Implementing inclusive training programmes on repair and recycling of various types of products (furniture, electronic devises, etc.); * Conducting continuous campaigns and education through media and in direct contacts with citizens about ways and importance of the proper waste separation, importance of waste reduction, reuse and recycling, and composting * Raising public awareness and awareness among business companies about the proper treatment and management of special wastes; * Integrating waste management training in primary and secondary education and higher education curricula; | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| General perception of the status of public awareness | Poor perception of the status of public awareness | Positive general perception of the status of public awareness (2032) |
| **Effect on the development and contribution of the measure to the priority** | Increase public awareness on the proper waste management, including equal opportunities for men and women, especially women from vulnerable groups | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 1,046,762  Source: 10% government budget, 90% funds from EU and other donors | | |
| **Period of the implementation of the measure** | 2023-2030 | | |
| **Institution responsible for coordination of the implementation of the measure** | Federation Ministry of Environment and Tourism | | |
| **Implementing institutions** | Federation Ministry of Environment and Tourism, cantons, municipalities, cities, | | |
| **Target groups** | Citizens and business entities | | |

* 1. Annex 3 Detailed overview of measures for Biodiversity and Nature Conservation

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| **Link with the strategic goal** | **3. Maintaining and improving biodiversity and protecting ecosystems** | | |
| **Priority** | **3.1 Improving the legal framework of the Federation of BiH for biodiversity and nature conservation through alignment of the legislation with the EU acquis and international agreements** | | |
| **Name of the measure** | **3.1.1 Align and harmonise the legislation on the preservation and sustainable use of biodiversity and nature conservation with the EU acquis and international agreements on biodiversity** | | |
| **Description of the measure with the general area of intervention** | The aim of this measure is to create an adequate and harmonized legal basis for the enforcement of the provisions of the EU *acquis* and ratified international agreements on biodiversity, in the respective administrations and in the relevant sectors in the Federation of BiH.  General areas of intervention include:  **a. Improve the legal framework on the conservation of biological and landscape diversity of the Federation of BiH:**  Further align the Law on Nature Conservation with Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and wild fauna and flora;  Further align the Law on Nature Conservation of the Federation of BiH with Directive 2009/147/EC of the European Parliament and the Council, of 30 November 2009, on the conservation of wild birds (codified version of Directive 79/406/EC and its amendments);  Further align the Law on Nature Conservation of the Federation of BiH with the Council Regulation (EC), No. 338/97 of 9 December 1996, on the protection of species of wild fauna and flora by regulating their trade and with the CITES Convention  Harmonize the Law on Nature Conservation of the Federation of BiH with the Convention on the Conservation of Migratory Species of Wild Animals (CMS) and the AEWA Agreement;  Develop a legal basis for the implementation of the Nagoya Protocol and the additional Kuala Lumpur Protocol in the Federation of BiH.  **b.** **Improve the process of vertical harmonization of the legislation on the conservation of biological and landscape diversity** of the Federation of BiH:  Harmonize the legislation on nature conservation with the EU *acquis* and the legislation of BiH, RS and the Brcko District;  Coordinate the improvement of the legal framework and implementation of legislation on nature conservation in the Federation of BiH, cantons in accordance with the EU *acquis.*  **c.** **Improve the process of horizontal harmonization of the legislation on the conservation of biological and landscape diversity of the FBiH:**  Align the Veterinary Law of the Federation of BiH with the Council Directive 1999/22/EC of 29 March 1999, on the keeping of wild animals in zoos, and with the relevant BiH laws (Veterinary Law (“Official Gazette of the Federation of BiH“, 46/00);  Harmonize the Law on Hunting of the Federation of BiH with the Council Regulation (EEC) No. 3254/91 of 4 November 1991, on the prohibition of foot traps, and with the relevant laws of BiH (Law on Hunting (“Official Gazette of the Federation of BiH“, 4/06, 8/10, 81/14));  Align the Veterinary Law of the Federation of BiH with Regulation (EC) No 1007/2009 of the European Parliament and of the Council of 16 September 2009, on trade in seal products.  **d****. Improve the implementation of regulations and bylaws** of the Federation of BiH **on the conservation of biological and landscape diversity:**  Enact the missing implementing regulations of the Law on Nature Conservation of the Federation of BiH;  Ensure conditions under the Decision of the Council of Ministers of BiH on the conditions and manner of implementation of the Convention on International Trade in Endangered Species of Wild Animals and Plants (CITES) in Bosnia and Herzegovina;  Create conditions for the adoption and implementation of the NBSAP, in accordance with the Global Biodiversity Framework. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring the results of the measure** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| 1. Alignment of nature conservation laws with the EU *acquis* and international agreements | The law is not sufficiently aligned with the EU *acquis* and international agreements on biodiversity | The law is partially, to a high degree, aligned with the EU *acquis* and international agreements on biodiversity (2025) |
| 1. Alignment of the legal framework of the Federation of BiH with the legislation of other levels of government | The legal framework of the Federation of BiH is not harmonized with the legislation of other levels of government | The legal framework of the Federation of BiH is harmonized with the legislation of other levels of government (2025) |
| 1. Alignment of sectoral regulations with the EU *acquis* and international agreements | Sectoral regulations are not in line with the EU *acquis* and international agreements | Sectoral regulations aligned with the EU *acquis* and international agreements |
|  | 1. Development of the mechanism for the implementation of the Law on Nature Conservation | Poorly developed | Highly developed (2023) |
| **Development effect and contribution of the measure to the implementation of the priorities** | Improvement of the management and protection of biodiversity, nature conservation, and progress in the EU process through alignment of the national legislation with the EU acquis | | |
| **Indicative funding completion date with funding sources** | Amount: BAM 1,283,675  Source: 10% government budget, 90% funds from EU and other international donors | | |
| **Implementation period of the measure** | 2022 - 2025 | | |
| **Institution responsible for coordinating the implementation of the measure** | FMET | | |
| **Implementing institutions for the measure** | FMET, MOFTER, IEEB, FMAWMF, cantonal ministries | | |
| **Target groups** | Institutions responsible for the conservation of biological and landscape diversity, non-governmental organizations | | |

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| **Link with the strategic goal** | **3. Maintaining and improving biodiversity and protecting ecosystems** | | |
| **Priority** | **3.2. Strengthen the institutions of the Federation of BiH responsible for the implementation of the legislation and activities in the area of nature conservation** | | |
| **Name of the measure** | **3.2.1. Establishment of a professional institution for nature conservation in accordance with the Law on Nature Conservation of the Federation of BiH** | | |
| **Description of the measure with the general area of intervention** | The aim of this measure is to have a societal choice on the establishment of a professional institution in accordance with the provisions of the Law on Nature Conservation of the Federation of BiH. The tasks and duties of a professional institution are prescribed by law, and a direct consequence of its non-existence is the fact that it is impossible to implement the legislation.  General areas of intervention include:   * Reaching agreement and making a decision on the establishment of the professional institution. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring the results of the measure** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| Decision on the establishment of the professional institution | There is no professional institution | Decision made on the establishment of the professional institution (2024) |
| **Development effect and contribution of the measure to the realization of priorities** | Improving the protection and enhancing biodiversity and nature conservation | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 9,876  Source: 100% government budget | | |
| **Period of implementation of the measure** | 2022 - 2024 | | |
| **Institution responsible for coordinating the implementation of the measure** | FMET | | |
| **Implementing institutions for the measure** | FMET, Government of the Federation of BiH | | |
| **Target groups** | Institutions responsible for the conservation of biological and landscape diversity, non-governmental organizations | | |

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| **Link with the strategic goal** | **3. Maintaining and improving biodiversity and protecting ecosystems** | | |
| **Priority** | **3.2 Strengthen the institutions of the Federation of BiH responsible for the implementation of the legislation and activities in the area of nature conservation** | | |
| **Name of the measure** | **3.2.2 Secure initial financial, human and technical capacities for the work of the professional institution for nature conservation of the Federation of BiH and cantonal institutes/ professional institutions for nature conservation** | | |
| **Description of the measure with the general area of intervention** | The aim of this measure is an initial development of professional, technical and financial capacities for the implementation of biodiversity conservation of nature conservation, prescribed by the Law on Nature Conservation of the Federation of BiH. The aim of a special emphasis given to this measure is to fulfil the practical, formal and time-adequate requirement for the implementation of other measures within different priorities in the early phase of the implementation of the FBiH ESAP.  General areas of intervention are:   * Prepare the Work Plan of the professional institution for the nature conservation of the Federation of BiH covering the period until 2030; * Provide initial technical infrastructure and other capacities of the nature conservation professional institution of the Federation of BiH and cantonal professional institutions; * Prepare an expert assessment of full financial, human and technical;   capacity for the work of the professional institution for the nature conservation;   * Prepare an expert assessment of the existing and necessary capacities in the field of nature conservation in the Cantons of the FBiH, and encourage better staffing of the institutions of the system, in line with the outputs. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring the results of the measure** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| Degree of development of initial capacities of the professional institution | There is no professional institution | The professional institution established (2025) |
| **Development effect and contribution of the measure to the realization of priorities** | Systemic improvement of the management and protection of biodiversity and nature conservation through strengthened institutional and human capacities and increased funds | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 1,573,548  Source: 20% government budget, 80% funds from EU and other international donors | | |
| **Period of implementation of the measure** | 2024 - 2025 | | |
| **Institution responsible for coordinating the implementation of the measure** | FMET/cantonal ministries responsible for nature conservation | | |
| **Implementing institutions** | FMET, Government of the Federation of BiH, cantonal governments | | |
| **Target groups** | Institutions responsible for the preservation of biological and landscape diversity, non-governmental organizations | | |

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| **Link with the strategic goal** | **3. Maintaining and improving biodiversity and protecting ecosystems** | | |
| **Priority** | **3.2 Strengthen the institutions of the Federation of BiH responsible for the implementation of the legislation and activities in the area of nature conservation** | | |
| **Name of the measure** | **3.2.3 Secure full financial, human and technical capacities for the work of the professional institution for nature conservation of the Federation of BiH and cantonal institutes/professional institutions for nature conservation** | | |
| **Description of the measure with the general area of intervention** | The aim of this measure is a full development of professional, technical and financial capacities for the implementation of biodiversity conservation activities, prescribed by the Law on Nature conservation of the Federation of BiH. The goal of a special emphasis given to this measure is to further develop the capacities to the point when they are fully developed for performing tasks prescribed by the Law, during the implementation of the Strategy of the Federation of BiH.  General areas of intervention include:  - Implement the Work Plan of the professional institution;  - Development of capacities of cantonal professional institutions. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring the results of the measure** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| Degree of development of the full capacities of the professional institution | There is no professional institution | Efficient professional institution (2030) |
| **Development effect and contribution of the measure to the realization of priorities** | Systemic improvement of the management and protection of biodiversity and nature conservation through strengthened institutional and human capacities and increased funds | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 7,979,048  Source: 10% government budget, 90% funds from EU and other international donors | | |
| **Period of implementation of the measure** | 2025 - 2030 | | |
| **Institution responsible for coordinating the implementation of the measure** | FMET/line ministries of the Cantons | | |
| **Implementing institutions** | FMET, Government of the Federation of BiH, cantonal governments | | |
| **Target groups** | Institutions responsible for the conservation of biological and landscape diversity, non-governmental organizations | | |

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| **Link with the strategic goal** | **3. Maintaining and improving biodiversity and protecting ecosystems** | | |
| **Priority** | **3.3 Initiate coordination, communication and reporting on biodiversity and nature conservation in the Federation of BiH** | | |
| **Name of the measure** | **3.3.1 Within the professional institution for nature conservation, establish a department for coordination of professional activities on nature conservation and monitoring in the Federation of BiH** | | |
| **Description of the measure with the general area of intervention** | The aim of this measure is to provide for a coordinated development of nature conservation measures at all levels and in all professional institutions in the Federation of BiH. A special focus should be on coordination of data collection and processing based on the monitoring of species and habitats in all the Cantons in the Federation of BiH.  General areas of intervention include:  Coordination between line and sectoral institutions at all levels of government in the Federation of BiH;   * Establish regular communication with cantonal ministries responsible for nature conservation; * Establish coordination of activities with cantonal institutes/professional institutions for nature conservation; * Ensure gathering and flow of information on biodiversity of the Federation of BiH for continuous reporting of BiH to the EEA; * Ensure gathering and flow of information on the biodiversity of the Federation of BiH within BiH, according to the requirements of the Convention on Biological Diversity monitoring framework; * Ensure data on the biodiversity of the Federation of BiH is collected and shared, in accordance with the requirements of the Habitats Directive and the Birds Directive. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring the results of the measure** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| The degree of efficiency of the flow of information and data on the state of biodiversity/nature | Poor coordination in information and data gathering | Efficient flow of information and collection of data on the state of biodiversity/nature (2025) |
| **Development effect and contribution of the measure to the implementation of the priorities** | Improving the nature conservation through enhanced institutional and human capacities | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 5,015,735  Source: 30% government budget, 70% combined ‒ funds from EU and other international donors, other donations | | |
| **Period of implementation of the measure** | 2024 - 2030 | | |
| **Institution responsible for coordinating the implementation of the measure** | FMET | | |
| **Implementing institutions** | FMET, sectoral ministries at the Federation level, cantonal ministries responsible for nature conservation, cantonal ministries responsible for agriculture, water management and forestry, cantonal public institutions/companies which manage the nature protected areas in the Federation of BiH | | |
| **Target groups** | Administrative and professional institutions at the Federation and cantonal level | | |

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| **Link with the strategic goal** | **3. Maintaining and improving biodiversity and protecting ecosystems** | | |
| **Priority** | **3.3 Initiate coordination, communication and reporting on biodiversity and nature conservation in the Federation of BiH** | | |
| **Name of the measure** | **3.3.2 Create and ensure access to a database with the results of implemented, ongoing and future projects on biodiversity of the Federation of BiH** | | |
| **Description of the measure with the general area of intervention** | The aim of this measure is to adopt a transparent approach to the results of implemented projects addressing the biodiversity preservation and nature conservation in the Federation of BiH. The preparation of a publicly available database should create a basis for an assessment knowledge and data gaps in the area of the biodiversity in the Federation of BiH, and guid efforts to fill such gaps.  General areas of intervention include:   * In cooperation with the Environmental Protection Fund of the Federation of BiH, prepare a standardized format protocol for entering the results of implemented projects funded from public domestic and international sources; * Complete an expert assessment on data and knowledge gaps in the area of the biodiversity in the Federation of BiH. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring the results of the measure** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| Degree of using the protocol for entering projects outputs | The results of projects implemented are not available | Available standardized results of the implemented projects (2025) |
| Status of the assessment of data gaps on biodiversity in the Federation of BiH | Data gaps not identified | Data gaps identified on biodiversity in the Federation of BiH identified |
| **Development effect and contribution of the measure to the implementation of the priorities** | Improved access to data enables evidence-based and analysis-based decision-making in the future | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 342,270  Source: 20% government budget, 80% funds from EU and other international donors | | |
| **Period of implementation of the measure** | 2022 - 2023 | | |
| **Institution responsible for coordinating the implementation of the measure** | FMET | | |
| **Implementing institutions** | FMET, EPF, scientific institutions, non-governmental organizations | | |
| **Target groups** | Sectoral ministries at the Federation level, cantonal line and sectoral ministries, professional institutions, scientific institutions, non-governmental organizations | | |

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| **Link with the strategic goal** | **3. Maintaining and improving biodiversity and protecting ecosystems** | | |
| **Priority** | **3.3 Initiate coordination, communication and reporting on biodiversity and nature conservation in the Federation of BiH** | | |
| **Name of the measure** | **3.3.3 In accordance with the INSPIRE Directive, through the Information System for the Nature Conservation of the Federation of BiH, provide for access to information on monitoring of protected and strictly protected species and areas, and species and habitats of interest for the Community** | | |
| **Description of the measure with the general area of intervention** | The aim of this measure is to provide access to transparent information on the state of biodiversity through the Information System for Nature Conservation of the Federation of BiH. Publicity of information on the state of biodiversity in specific areas are the basis for environmental planning and management processes.  General areas of intervention include:   * Modules of protected and strictly protected species and areas, as well as species and habitats of interest for the Community should be rely on monitoring outputs and made publicly available. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring the results of the measure** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| Number of data entries on the FBiH FAP on the continuous monitoring of protected species and habitats of interest | Data on monitoring the status of species and habitats are not available | Data on monitoring the status of species and habitats are publicly available at the FBiH FAP |
| **Development effect and contribution of the measure to the implementation of the priorities** | Improved access to data enables evidence-based and analysis-based decision-making in the future | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 296,824  Source: 10% government budget, 90% funds from EU and other international donors | | |
| **Period of implementation of the measure** | 2027 - 2030+ | | |
| **Institution responsible for coordinating the implementation of the measure** | FMET | | |
| **Implementing institutions** | FMET, EPF, monitoring institutions and organizations | | |
| **Target groups** | Line and sectoral ministries, scientific institutions, non-governmental organizations | | |

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| **Link with the strategic goal** | **3. Maintaining and improving biodiversity and protecting ecosystems** | | |
| **Priority** | **3.4 Initiate monitoring of the state and protection of the biodiversity/nature in the Federation of BiH in compliance with the standards of the EU acquis and international agreements** | | |
| **Name of the measure** | **3.4.1 Establish a system for monitoring species from the Red List, species and habitats of interest to the Community in the Federation of BiH and specific FBiH ecosystems (canyons, mountain, high mountain, wetland and karst ecosystems) through activities of professional and scientific institutions** | | |
| **Description of the measure with the general area of intervention** | The aim of this measure is to develop professional and scientific capacities for targeted, standardized and regular monitoring of a variety of species, habitats and areas, as well as capacities for the preparation, flow and processing of biological and environmental information.  General areas of intervention include:   * Prepare an assessment of capacities of scientific institutions, organizations and associations with a capacity for regular monitoring; * In cooperation with the Environmental Protection Fund of the Federation of BiH, prepare a program for the development of regular monitoring systems; * In cooperation with the Environmental Protection Fund, conduct training for standardized reporting on regular monitoring of protected and strictly protected species, species of interest for the Community, habitats referred to in Annex I of the Habitats Directive and specific ecosystems of the Federation of BiH. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring the results of the measure** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| * Number of species and habitats under constant monitoring * Number of areas under constant monitoring | Capacities for targeted monitoring have not been developed and/or are not functional | Efficient system for monitoring the status of species, habitats and areas (2025) |
| **Development effect and contribution of the measure to the implementation of the priorities** | Improvement of the nature conservation | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 1,621,079  Source: 20% government budget, 80% funds from EU and other international donors | | |
| **Period of implementation of the measure** | 2025 – 2029 | | |
| **Institution responsible for coordinating the implementation of the measure** | FMET | | |
| **Implementing institutions** | FMET, EPF, scientific institutions, non-governmental organizations | | |
| **Target groups** | Federation sectoral ministries, cantonal line and sectoral ministries, professional institutions, scientific institutions, non-governmental organizations | | |

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| **Link with the strategic goal** | **3. Maintaining and improving biodiversity and protecting ecosystems** | | |
| **Priority** | **3.4 Initiate monitoring of the state and biodiversity/nature conservation in the Federation of BiH in compliance with the standards of the EU acquis** | | |
| **Name of the measure** | **3.4.2 Provide support to non-governmental organizations registered for monitoring the state of biodiversity in the Federation of BiH** | | |
| **Description of the measure with the general area of intervention** | The aim of this measure is to ensure the work of scientific and professional capacities, organized through the non-governmental sector, on the targeted monitoring of species, habitats and areas referred to in measure 3.4.1.  General areas of intervention include:   * Providing for a continued support to the non-governmental sector to facilitate a targeted monitoring of species and areas in cooperation with the Environmental Protection Fund. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring the results of the measure** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| The amount and continuity of funds allocated to the NGO sector for monitoring purposes | There are no steady allocations to the NGO sector aimed at facilitating the monitoring of species and areas | Steady allocations provided to the NGO sector aimed at facilitating the monitoring of species and areas |
| **Development effect and contribution of the measure to the implementation of the priorities** | Improved application of good governance though a better transparency and public participation. Improved access to data obtained through monitoring in partnership with the civil sector | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 245,010  Source: 20% government budget, 80% funds from EU and other international donors | | |
| **Period of implementation of the measure** | 2022 - 2030 | | |
| **Institution responsible for coordinating the implementation of the measure** | FMET | | |
| **\Implementing institutions** | FMET, EPF | | |
| **Target groups** | Non-government organizations | | |

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| **Link with the strategic goal** | **3. Maintaining and improving biodiversity and protecting ecosystems** | | |
| **Priority** | **3.4** **Initiate monitoring of the state and biodiversity/nature conservation in the Federation of BiH in compliance with the standards of the EU acquis** | | |
| **Name of the measure** | **3.4.3** **Fully develop technical and human capacities for the implementation of nature conservation measures in the protected and other areas of the ecological network, and increase administrative capacities in nature conservation institutions by 50%** | | |
| **Description of the measure with the general area of intervention** | The aim of this measure is to develop technical and human capacities in the protected areas, and other areas that implement effective protection measures, such as hunting areas, seed stands, fishing areas, etc., as well as capacities within nature conservation institutions.  General areas of intervention include:   * Prepare and continuously implement the Programme of strengthening professional capacities for the nature conservation in the protected areas and ecological network areas of the Federation of BiH, including international cooperation in the management of the protected areas and ecological network areas; * Prepare and continuously implement the Nature Conservation Capacity Building Programme in the Federation of FBiH | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring the results of the measure** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| Degree of development of professional capacities for the nature conservation | Poorly developed | Highly developed |
| Degree of strengthening the development of administrative capacities for the nature conservation | Low | High |
| **Development effect and contribution of the measure to the implementation of the priorities** | Strengthening the human and institutional capacities for nature conservation | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 1,029,348 KM  Source: 30% government budget, 70% funds from EU and other international donors | | |
| **Period of implementation of the measure** | 2026 - 2030+ | | |
| **Institution responsible for coordinating the implementation of the measure** | FMET | | |
| **Holders of the measure** | FMET, the Government of the Federation of BiH, professional institution for the nature conservation of the Federation | | |
| **Target groups** | Users of protected areas, population in the area of the ecological network | | |

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| **Link with the strategic goal** | **3. Maintaining and improving biodiversity and protecting ecosystems** | | |
| **Priority** | **3.4 Initiate monitoring of the state and biodiversity/nature conservation in the Federation of BiH in compliance with the standards of the EU acquis and international agreements** | | |
| **Name of the measure** | **3.4.4 Improve the inspection control of the implementation of the Law on Nature Conservation of the Federation of BiH and other laws prescribing biodiversity protection measures** | | |
| **Description of the measure with the general area of intervention** | The aim of this measure is to develop the capacity for supervision of the implementation of regulations on the nature conservation in the Federation of BiH. Given the current capacity, inspections into the implementation of relevant regulations cannot be implemented.  General areas of intervention include:   * Increase capacities for the inspection supervision of the enforcement of the CPA of the Federation, cantonal laws on the nature conservation and relevant sectoral legislation; * Increase the number of targeted inspections. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring the results of the measure** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| * Degree of development   of the monitoring capacity for the  nature conservation   * Number of inspections | Low | High |
| **Development effect and contribution of the measure to the implementation of the priorities** | Human and institutional capacity building in the area of the nature conservation | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 1,489,000  Source: 20% government budget, 80% funds from EU and other international donors | | |
| **Period of implementation of the measure** | 2026 - 2030+ | | |
| **Institution responsible for coordinating the implementation of the measure** | FAIA (Federal Administration for Inspection Affairs) | | |
| **Implementing institutions** | FAIA, the Government of FBiH, cantonal governments, CAIA (Cantonal Administration for Inspection Affairs) , cantonal forestry administrations, hunting associations | | |
| **Target groups** | The public | | |

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| **Link with the strategic goal** | **3. Maintaining and improving biodiversity and protecting ecosystems** | | |
| **Priority** | **3.5 Complete an inventory of the FBiH biodiversity at the ecosystem, species and genetic levels** | | |
| **Name of the measure** | **3.5.1 Complete an inventory of flora, fauna, fungi and genetic diversity of the Federation of BiH** | | |
| **Description of the measure with the general area of intervention** | The aim of this measure is to prepare and implement a plan and financial programme for the inventory of flora and fauna, and fungi, with the associated genetic diversity of these groups of organisms in the FBiH.  General areas of intervention include:   * Prepare and implement a plan for the inventory of flora, fauna, fungi and migratory African-Eurasian bird species in the FBiH; * Prepare a programme for financing the inventory of flora, fauna, fungi and migratory African-Eurasian bird species in the FBiH. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring the results of the measure** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| Degree of completeness of the inventory of plants, animals, fungi and migratory birds in the Federation of BiH | No inventory of plants, animals, fungi, migratory birds in the Federation of BiH has been made | Inventory of plants, animals, fungi and migratory birds in the Federation of BiH completed |
| **Development effect and contribution of the measure to the implementation of the priorities** | Improved protection and enhanced biodiversity at all levels | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 24,084,819  Source: 20% government budget, 80% combined ‒ funds from EU, other donors and other donations | | |
| **Period of implementation of the measure** | 2022 - 2027 | | |
| **Institution responsible for coordinating the implementation of the measure** | FMET | | |
| **Implementing institutions** | FMET, FBiH Government, EPF, scientific institutions, non-governmental organizations | | |
| **Target groups** | Line and sectoral ministries, scientific institutions, non-governmental organizations, the public | | |

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| **Link with the strategic goal** | **3. Maintaining and improving biodiversity and protecting ecosystems** | | |
| **Priority** | **3.5 Complete an inventory of biodiversity in the Federation of BiH at the ecosystem, species and genetic levels** | | |
| **Name of the measure** | **3.5.2 Revise and organise the list of invasive species** | | |
| **Description of the measure with the general area of intervention** | The aim of this measure is to regularly review the first list of invasive species in the Federation of BiH, and to implement plans on combating invasive species and of their spreading.  General areas of intervention include:   * Based on monitoring, update the list of invasive species in the Federation of BiH; * Prepare a black, grey and white list of invasive species of the Federation of BiH; * Prepare and implement action plans for invasive species on the basis of the appropriate lists. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring the results of the measure** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| Degree of harmonization of the black, grey and white lists of invasive species with the current state of invasive species in the territory of the FBiH | Initial list of invasive species in the Federation of BiH | Black, grey white lists harmonized with the current state of invasive species in the Federation of BiH |
| **Development effect and contribution of the measure to the realization of priorities** | Improved protection and enhanced biodiversity, minimum adverse effect of the invasive species in the Federation of BiH | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 92,405  Source: 100% government budget | | |
| **Period of implementation of the measure** | 2028 - 2029 | | |
| **Institution responsible for coordinating the implementation of the measure** | FMET | | |
| **Implementing institutions** | FMET, professional institution for the nature conservation, scientific institutions, non-governmental organizations | | |
| **Target groups** | Line and sectoral ministries, scientific institutions, non-governmental organizations, the public | | |

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| **Link with the strategic goal** | **3. Maintaining and improving biodiversity and protecting ecosystems** | | |
| **Priority** | **3.5 Complete an inventory of biodiversity in the Federation of BiH at the ecosystem, species and genetic levels** | | |
| **Name of the measure** | **3.5.3 Prepare the map of the habitats in the Federation of BiH** | | |
| **Description of the measure with the general area of intervention** | The aim of this measure is to prepare and complete the first habitat inventory in the Federation of BiH. The list of habitats distributed within the territory of the Federation of BiH should be scientifically harmonized with the types of habitats in the RS and the BD BiH. The habitat map should be geocoded and presented through the FBiH PHC, as information essential in the processes of environmental planning and management.  General areas of intervention include:   * Identify existing cartographic data for the FBiH habitat map; * Identify and scientifically harmonize, in cooperation with the RS and the BD BiH, the list of habitats in BiH and the Federation of BiH; * Develop and make publicly available a map of the habitats in the Federation of BiH. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring the results of the measure** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| Degree of completion and availability of the FBiH habitat map | There is no habitat map of Degree of completion | Habitat types identified and presented on a publicly available habitat map of Degree of completion |
| **Development effect and contribution of the measure to the implementation of the priorities** | Improved nature conservation | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 158,876  Source: 20% government budget, 80% funds from EU and other international donors | | |
| **Period of implementation of the measure** | 2026 - 2027 | | |
| **Institution responsible for coordinating the implementation of the measure** | FMET | | |
| **Implementing institutions** | FMET, EPF, FMSP, scientific institutions | | |
| **Target groups** | Line and sectoral ministries, scientific institutions, non-governmental organizations, the public | | |

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| **Link with the strategic goal** | **3. Maintaining and improving biodiversity and protecting ecosystems** | | |
| **Priority** | **3.6 Exponentially expand the protected areas in the Federation of BiH in compliance with the global goals for biodiversity, and spatially connect all ecologically important areas into the ecological network** | | |
| **Name of the measure** | **3.6.1 Conduct a public campaign to promote the ecological network (Network of Areas of Interest for the Community)** | | |
| **Description of the measure with the general area of intervention** | The aim of this measure is to raise public awareness about the benefits of the ecological network of the Federation of BiH. The current state of public awareness on the need to preserve biodiversity in a good state does not guarantee that the stakeholders may agree on the establishment of the ecological network, and it is necessary to invest funds in its promotion.  General areas of intervention include:   * Provide for funds for the promotion campaign of the ecological network of the Federation of BiH; * Undertake a media campaign in accordance with the goals. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring the results of the measure** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| Level of public awareness of the benefits of the ecological network in Federation of BiH | Low | High |
| **Development effect and contribution of the measure to the implementation of the priorities** | Increased public awareness of the importance of ecological networks | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 172,442  Source: 30% government budget, 70% funds from EU and other international donors | | |
| **Period of implementation of the measure** | 2024 - 2025 | | |
| **Institution responsible for coordinating the implementation of the measure** | FMET | | |
| **Implementing institutions** | FMET, EPF, professional institution for nature conservation, media | | |
| **Target groups** | Local communities, line and sectoral ministries, scientific institutions, non-governmental organizations, the public | | |

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| **Link with the strategic goal** | **3. Maintaining and improving biodiversity and protecting ecosystems** | | |
| **Priority** | **3.6 Exponentially expand the protected areas in the Federation of BiH in compliance with the global goals for biodiversity, and spatially connect all ecologically important areas into the ecological network** | | |
| **Name of the measure** | **3.6.2 Complete a consultation process with local self-governing communities and stakeholders in all areas covered by the FBiH Ecological Network Plan in the Federation of BiH** | | |
| **Description of the measure with the general area of intervention** | The aim of this measure is to secure an agreement between local communities and the stakeholders to include the areas into the ecological network of the Federation. The consultation process should involve all the stakeholders in individual areas, and ensure common understanding, long-term care and implementation of biodiversity protection measures in each area of the ecological network.  General areas of intervention include:   * Prepare a plan the public consultation process in the area covered by the FBiH Ecological network Plan; * Provide for professional and financial capacities to complete the consultation process with the stakeholders and local communities; * Complete the consultation process in order to obtain approval for the establishment of the ecological network; * Strengthen communication and cooperation with the local community in protected areas and areas which may be included in the ecological network for the purposes of education and implementation of measures to improve the state of nature and achieve the goals of ecological network conservation, especially their active involvement in the area of nature conservation. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring the results of the measure** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| Degree of agreement of local communities for the inclusion of their respective areas in the ecological network of the Federation of BiH | Low | High |
| **Development effect and contribution of the measure to the implementation of the priorities** | More efficient management though routine participation of the stakeholders and transparency of the process. Increased awareness of the population and their active engagement in nature conservation activities | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 800,985  Source: 30% government budget, 70% funds from EU and other donors | | |
| **Period of implementation of the measure** | 2025 - 2030 | | |
| **Institution responsible for coordinating the implementation of the measure** | FMET | | |
| **Implementing institutions** | FMET, EPF, professional institution for nature conservation, labour associations (hunting, fishing, mountaineering), local producers, accommodation providers, women's associations, youth organizations, educational institutions | | |
| **Target groups** | Local communities, line and sectoral ministries, scientific institutions, non-governmental organizations, the public | | |

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| **Link with the strategic goal** | **3. Maintaining and improving biodiversity and protecting ecosystems** | | |
| **Priority** | **3.6 Integrate ecologically significant areas into a network which should cover 17% of the overall territory of the FBiH** | | |
| **Name of the measure** | **3.6.4. Establish the ecological network of the Federation of BiH** | | |
| **Description of the measure with the general area of intervention** | The aim of this measure is to adopt an act on the FBiH environmental network area and to implement conservation measures, which is a regulation that that should be adopted after a field validation of the zero status of biodiversity of interest for protection and after obtaining agreement from local communities to include relevant areas in the network areas.  General areas of intervention include:   * Secure funds to support the field validation of the zero status of protected and strictly protected species, species of interest for the Community, the state of habitats referred to in Annex I of the Habitats Directive and the state of specific ecosystems; * Carry out the field validation of the zero status of protected and strictly protected species, species of interest for the Community, the state of habitats referred to in Annex I of the Habitats Directive and the state of specific ecosystems (canyons, mountain, mountain, wetland and karst ecosystems); * Harmonize the establishment of the environmental network with other development and spatial planning processes and other jurisdictions within BiH; * Designate the FBiH environmental network; * Develop and implement procedures for eligibility assessment of interventions and programmes in the area of the ecological network; * Promote sustainable tourism in the area of the ecological network of the Federation of BiH through activities of public institutions. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring the results of the measure** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| Status of the FBiH ecological network | The ecological network exists only at the level of the Natura 2000 Plan in BiH | The FBiH Ecological network established and serves the purpose of protecting biodiversity |
| **Development effect and contribution of the measure to the Description of implementation of the priorities** | Better protection and preservation of the biodiversity, regeneration and sustainable use of biodiversity | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 3.545.909  Source: 10% government budget, 90% funds from EU and other international donors | | |
| **Period of implementation of the measure** | 2028 - 2030+ | | |
| **Institution responsible for coordinating the implementation of the measure** | FMET | | |
| **Implementing institutions** | FMET, EPF, professional institution for the nature conservation of the Federation of BiH | | |
| **Target groups** | Local communities, line and sectoral ministries, scientific institutions, non-governmental organizations, the public | | |

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| **Link with the strategic goal** | **3. Maintaining and improving biodiversity and protecting ecosystems** | | |
| **Priority** | **3.7 Improve cross-sectoral cooperation and political support in the Federation of BiH for the integration of the biodiversity protection into sectoral policies and legislation** | | |
| **Name of the measure** | **3.7.1 Ensure cross-sectoral support for the implementation of the revised goals of NBSAP in the Federation of BiH** | | |
| **Description of the measure with the general area of intervention** | The aim of this measure is to provide for a long-term conservation and sustainable use of biodiversity as a result of sectoral policies. Given that the validity of the last NBSAP expired in 2020, a revised version of the NBSAP will be prepared during the early implementation period of the FBiH ESAP. The implementation of the revised NBSAP is, among other things, the responsibility of the Federation of BiH. In line with global biodiversity goals, the revised NBSAP will seek to integrate biodiversity protection into sectoral policies in the best possible way.  General areas of intervention include:   * identify and support projects that ensure the nature conservation and sustainable use of biodiversity through various sectoral policies. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring the results of the measure** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| Number of projects with active biodiversity/nature conservation component | Biodiversity / nature conservation is not sufficiently integrated into sectoral policies | A significant number of sectoral projects with a biodiversity preservation component |
| **Development effect and contribution of the measure to the realization of priorities** | Better management through stronger cross-sectoral cooperation and coordination. Increased general benefits from biodiversity and ecosystem services | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 61,230  Source: 100% government budget | | |
| **Period of implementation of the measure** | 2024 - 2030 | | |
| **Institution responsible for coordinating the implementation of the measure** | FMET | | |
| **Holders of the measure** | FMET, professional institution for the nature conservation of the Federation of BiH, Federation and cantonal sectoral ministries and agencies | | |
| **Target groups** | The public, Federation and cantonal sectoral ministries, local communities, non-governmental organizations | | |

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| **Link with the strategic goal** | **3. Maintaining and improving biodiversity and protecting ecosystems** | | |
| **Priority** | **3.7. Improve cross-sectoral cooperation and political support in the FBiH for the integration of the biodiversity protection into sectoral policies and legislation** | | |
| **Name of the measure** | **3.7.2. Integrate the protection and sustainable use of biodiversity into sectoral regulations** | | |
| **Description of the measure with the general area of intervention** | The aim of this measure is to integrate measures for the conservation and sustainable use of biodiversity into sectoral regulations. In order to ensure the long-term protection of biodiversity. In order to provide for a long-term protection, it is necessary to prepare, in accordance with the EU *acquis*, detailed guidelines for the successful integration of the biodiversity conservation into individual sectors.  General area of intervention include:   * Prepare guidelines for the integration of the preservation of ecosystem services (benefits of nature) through sectoral regulations in the Federation of BiH; * Innovate sectoral regulations. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring the results of the measure** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| Degree of integration of biodiversity/nature conservation into sectoral legislation | The biodiversity / nature conservation is not sufficiently integrated into sectoral legislation | Sectoral laws provide for a long-term conservation of the biodiversity/nature in the Federation of BiH |
| **Development effect and contribution of the measure to the realization of priorities** | Improved strategic management of biodiversity | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 49,972  Source: 100% government budget | | |
| **Period of implementation of the measure** | 2024 - 2030 | | |
| **Institution responsible for coordinating the implementation of the measure** | FMET | | |
| **Implementing institutions** | FMET, professional institution for the nature conservation of the Federation of BiH, Federation and cantonal sectoral ministries and agencies | | |
| **Target groups** | The public, Federation and cantonal sectoral ministries, local communities, non-governmental organizations | | |

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| **Link with the strategic goal** | **3. Maintaining and improving biodiversity and protecting ecosystems** | | |
| **Priority** | **3.8. Enhance science-based decision-making on biodiversity/nature through a dialog of the scientific community and decision makers** | | |
| **Name of the measure** | **3.8.1. Use conclusions, messages, scenarios of multidisciplinary analyses and up-to-date scientific data in making decisions that affect the state of biodiversity/nature of the Federation of BiH** | | |
| **Description of the measure with the general area of intervention** | The aim of this measure is to expand the practice of applying scientific analysis to make decisions that affect the state of biodiversity. In order to establish this practice, an assessment of scientific knowledge on the state and management of nature is currently being prepared, which will include an analysis of available scientific results on biodiversity in BiH. The analysis will contain easy-to-understand conclusions, messages and scenarios on biodiversity that should serve as the basis for an informed decision-making.  General areas of intervention include:   * Make the conclusions, messages and scenarios of multidisciplinary analyses on the state of the nature accessible and understandable for decision makers in the relevant sectors at the Federation and cantonal level, in non-governmental sector, and public and private companies. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring the results of the measure** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| The degree of use of scientific analysis in the decision-making process | Low | High |
| **Development effect and contribution of the measure to the realization of priorities** | Greater transparency of and better access to scientific knowledge on the improvement and protection of the biodiversity, which may be used to improve decision-making processes | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 30,372  Source: 100% government budget | | |
| **Period of implementation of the measure** | 2024 - 2030 | | |
| **Institution responsible for coordinating the implementation of the measure** | FMET | | |
| **Implementing institutions** | FMET, professional institution for the nature conservation of the FBiH, Federation and Cantonal line and sectoral ministries and agencies | | |
| **Target groups** | The public, Federation and cantonal line and sectoral ministries, business companies, local communities, non-governmental organizations | | |

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| **Link with the strategic goal** | **3. Maintaining and improving biodiversity and protecting ecosystems** | | |
| **Priority** | **3.8 Strengthen the science-based decision-making through a dialogue of the science and decision makers** | | |
| **Name of the measure** | **3.8.2 In cooperation with the institutions of BiH, Republika Srpska and the Brcko District BiH, organize the exchange of information between the academic community and policy makers that affect the state of biodiversity/nature of BiH** | | |
| **Description of the measure with the general area of intervention** | The aim of this measure is to provide for periodical meetings, coordinated by MOFTER, for the purpose of exchange of information between the scientific community and decision makers.  The general area of intervention includes:   * Provide for financial support to support annual round tables for the exchange of information on the state and use of the nature in BiH; * In coordination with the institutions of **BiH, Republika Srpska and the Brcko District BiH**, prepare a plan and programme for annual round tables for the exchange of information; * Organize at least three round tables for the exchange of information between the academic community and policy makers that concerns the state of the nature in BiH; * Submit a report to the Inter-Entity Body on each roundtable for the exchange of information that was held between the academic community and policy makers that concerns the state of the nature in BiH; * Send reports to all relevant Federation and cantonal administrations. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring the results of the measure** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| The degree of information exchange between the academic community and policy makers | Low | High |
| **Development effect and contribution of the measure to the realization of priorities** | Increased scientific knowledge on the protection and improvement of biodiversity aimed at improved decision-making | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 181,374  Source: 100% government budget | | |
| **Period of implementation of the measure** | 2023 - 2030 | | |
| **Institution responsible for coordinating the implementation of the measure** | FMET | | |
| **Implementing institutions** | FMET, MOFTER, IEEB (Inter-entity environmental body) | | |
| **Target groups** | The public, Federation and cantonal line and sectoral ministries, academic community, non-governmental organizations | | |

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| **Link with the strategic goal** | **3. Maintaining and improving biodiversity and protecting ecosystems** | | |
| **Priority** | **3.9 Raising environmental awareness about biodiversity, nature conservation and ecosystem services** | | |
| **Name of the measure** | **3.9.1 Develop an effective network of non-governmental organizations for monitoring the state of biodiversity/nature, active participation in decision-making and the promotion of sustainable development** | | |
| **Description of the measure with the general area of intervention** | The aim of this measure is to strengthen the capacity and role of the non-governmental sector as an active component of the framework for biodiversity/nature conservation. In addition, the measure envisages activities for the development of cooperation between governmental institutions and the non-governmental sector.  General areas of intervention include:   * In cooperation with the NGO sector, prepare a communication strategy for the nature conservation, ecosystem services and sustainable management of natural resources in the Federation of BiH; * Undertake targeted campaigns in order to raise public awareness and promote nature conservation, taking into account gender equality and social equality in the area of the conservation of the biological and landscape diversity and identify key interventions; * Promote cooperation within the NGO sector; * Improve cooperation with organizations focusing on the nature conservation, and encourage the implementation of volunteer programmes in this area; * Ensure and encourage a greater public participation in the planning process and nature conservation activities, and in decision-making on plans and legislative activities; * Strengthen cooperation between institutions, NGOs and the media to keep focus on the nature conservation topics; * Identify the institution/organization for monitoring public awareness about the environment/biodiversity and benefits from nature , and ensure its efficacy. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring the results of the measure** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| The level of environmental awareness of the population in the Federation of BiH as a result of the efforts of an efficient network of non-governmental organizations | Low level of environmental awareness | High level of environmental awareness |
| **Development effect and contribution of the measure to the realization of priorities** | Enhanced participation of citizens through a partnership with the civil sector | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 484,295  Source: 20% government budget, 80% combined ‒ funds from EU and other international donors, other donations | | |
| **Period of implementation of the measure** | 2024 - 2030 | | |
| **Institution responsible for coordinating the implementation of the measure** | FMET, NGOs | | |
| **Implementing institutions** | FMET, non-governmental organisations, public institutions/companies responsible for the nature conservation, sustainable use, and promotion of protected areas | | |
| **Target groups** | The public, Federation and cantonal line and sectoral ministries, business companies, local communities, non-governmental organizations | | |

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| **Link with the strategic goal** | **3. Maintaining and improving biodiversity and protecting ecosystems** | | |
| **Priority** | **3.9 Strengthen environmental awareness on the biodiversity, nature conservation and ecosystem services** | | |
| **Name of the measure** | **3.9.2 Strengthening support for the education of teaching staff at all levels of education in the area of biodiversity protection and sustainable management of benefits from the natural in the Federation of BiH** | | |
| **Description of the measure with the general area of intervention** | The aim of this measure is to strengthen the capacity to innovate the content of educational processes through a better understanding of the values of local biodiversity/nature. The measure also envisages activities on development of cooperation between the environmental sector and the education sector in the Federation of BiH.  General areas of intervention include:   * In cooperation with the education sector, identify the needs for support in the education of teaching staff on the values of biodiversity/nature of the Federation of BiH, conservation measures and sustainable management of benefits from nature at all levels of education. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring the results of the measure** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| Integration of the knowledge about the values of the biodiversity/nature of the Federation of BiH into educational processes | Knowledge about the values of the biodiversity/nature of the FBiH plays is underrepresented in educational processes | Knowledge of the values about the biodiversity/nature of the Federation of BiH is well represented in educational processes |
| **Development effect and contribution of the measure to the implementation of the priorities** | Increased knowledge, competencies and awareness of the teaching staff of the protection and improvement of biodiversity | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 14,669  Source: 100% government budget | | |
| **Period of implementation of the measure** | 2024 - 2030 | | |
| **Institution responsible for coordinating the implementation of the measure** | FMET, FMES, cantonal ministries | | |
| **Holders of the measure** | FMET, professional institution for the nature conservation of the Federation of BiH, Federation and cantonal ministries of education, the public | | |
| **Target groups** | The public, non-governmental organisations | | |

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| **Link with the strategic goal** | **3. Maintaining and improving biodiversity and protecting ecosystems** | | |
| **Priority** | **3.10 Mobilize national and international funds for the biodiversity of the Federation of BiH** | | |
| **Name of the measure** | **3.10.1 Provide funds for: (a) capacity building of the institutional framework in line with the improved legal framework for the biodiversity/nature of the Federation of BiH (b) inventory of areas and preparation of habitat maps, (c) inventory and monitoring of flora, fauna, fungi and genetic resources (d) effective implementation of global goals for biodiversity and implementation of obligations arising from international agreements of BiH, including the process of establishing the ecological network (e) development of permanent scientific and political dialogue, (f) environmental awareness raising** | | |
| **Description of the measure with the general area of intervention** | The aim of this measure is to develop capacity and provide necessary conditions for the implementation of measures, in order to achieve the priorities and general strategic goal for the biodiversity and nature conservation of the Federation of BiH.  General areas of intervention include:   1. **Mobilization of funding from national sources:**  * Carry out an analysis and establish a system of keeping a record, monitoring of and reporting on investments in the area of nature conservation; * Improve innovative financing mechanisms for the nature conservation sector, including the establishment of a fund to support co-funding of international projects; * Revise the existing legal funding mechanisms to ensure greater availability of funds;  1. **Mobilization of international funds:**  * In coordination with BiH, and in cooperation with Republika Srpska and the Brcko District of BiH, prepare applications for international financial support for a-f. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring the results of the measure** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| 1. Amount of funds from national sources | Low funding | Satisfactory funding |
| 1. Amount of funds from international sources | Low funding | Satisfactory funding |
| **Development effect and contribution of the measure to the implementation of the priorities** | Improved biodiversity through development of human, institutional and funding capacities | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 667,826  Source: 10% government budget, 90% funds from EU and other international donors | | |
| **Period of implementation of the measure** | 2024 - 2030+ | | |
| **Institution responsible for coordinating the implementation of the measure** | FMET, Government of the Federation of BiH | | |
| **Implementing institutions** | FMET, Government of the Federation of BiH, EPF, MoFTER | | |
| **Target groups** | Federation and cantonal line and sectoral ministries, business companies, scientific institutions, non-governmental organizations, the public | | |

* 1. Annex 4: A detailed overview of measures for Air Quality, Climate Change and Energy

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| **Link with strategic goal** | **4. Climate change mitigation and adaptation and improvement of air quality** | | |
| **Priority** | **4.1 Reduce air pollution by reducing levels of key air pollutants to levels that are safe for human health** | | |
| **Title of the measure** | **4.1.1 Reducing emissions from large combustion plants and achieving compliance of all industrial facilities with best available techniques** | | |
| **Description of the measure with the general areas of intervention** | The aim of this measure is to design a funding programme for NERP implementation, to identify sources of funding in line with NERP timeline, and development of reference documents for best available techniques for all relevant industrial processes.  General areas of intervention are:   1. Drawing up a funding programme for the implementation of NERP and its implementation; 2. Drafting reference documents for best available techniques for all industrial processes; 3. Environmental licencing and permitting procedure in compliance with best available techniques; 4. Introducing digitalised and centralised reporting on measuring, particularly focusing on data obtained from continued monitoring in real time; 5. Strengthening the capacities of the institutions responsible for environmental licencing and permitting (ministries), and monitoring of the implementation of environmental permits (inspection bodies); 6. Amending the Decree on fees charged from air polluters. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results** | **Indicators**  **(outputs and deliverables)** | **Baseline value** | **Target value** |
| a. Status of the development and implementation of a funding programme for the implementation of NERP | Unidentified sources of funding and delays in the implementation of NERP | A funding programme for NERP and its implementation developed and effective |
| 1. b. Number of adopted BREFs for BATs | The Federation of BiH has no BREFs developed or adopted | Reference documents developed and adopted for all significant industrial processes in the Federation of BiH |
| 1. c. Number of environmental permits that require harmonisation of industrial processes with BATs adopted | Unknown number of environmental permits that are in compliance with EU BREFs | Environmental permits issued to all industrial facilities who are required to obtain a permit |
| 1. d. Number of facilities included in the digitalised and centralised system of reporting on emissions measurement | There is no digitalised and centralised system of reporting on emissions measurement in place | Digitalised and centralised system of reporting on emissions measurement established |
| 1. e. Level of the implementation of the capacity development programme | Insufficient capacities to support introducing and overseeing the implementation of the requirements from the environmental permits | Capacity building programme developed and implemented |
| 1. f. Status of adoption of amendments to the Decree | The current Decree does not cover many pollutants and does not envisage electronic and centralised reporting | The Amendments to the Decree on fees for air pollution adopted |
| **Effect on the development and contribution of the measure to the priority** | Reduced pollution and improved air quality in BiH | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 951,751  Source: 20% government budget, 80% funds from EU and international donors | | |
| **Period of the implementation of the measure** | 2022 – 2032 | | |
| **Institution responsible for coordination of the implementation of the measure** | Ministry of Environment and Tourism of the Federation of BiH (FMET) | | |
| **Implementing institutions** | Thermal power plants operators, FMEMI, Environmental Protection Fund, inspection of the Federation of BiH, Hydrometeorological Institute | | |
| **Target groups** | Industrial enterprises, universities, NGO | | |

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| **Link with strategic goal** | **4. Climate change mitigation and adaptation and improvement of air quality** | | | |
| **Priority** | **4.1 Reduce air pollution by reducing levels of key air pollutants to levels that are safe for human health** | | | |
| **Title of the measure** | **4.1.2 Reducing air pollution from local sources** | | | |
| **Description of the measure with the general areas of intervention** | The aim of this measure is to reduce air pollution from the local sources, i.e. household stoves, service industry and transport through regulating the market for stoves/boilers and energy commodities, by designing incentive schemes for procurement of efficient and low polluting stoves/boilers, expanding district heating, enhancing infrastructure for motorised and low-polluting transport and amending the legislation to encourage development of public transport and low polluting vehicles.  General areas of intervention are:   1. Adopt legislation to ban retail of coal with the total sulphur content of more than 1%, regulate the quality of fire wood sold on the market (moisture content) and pellet (in accordance with the applicable standards in BIH), including the ban on sale of non-certified stoves/boilers; 2. Design an incentive scheme to encourage replacement of solid fuel based stoves/boilers with certified heating appliances (using pallet, heat pumps, natural gas based condensation boilers, connection to the district heating system); 3. Define a way to initiate inspections of household stoves and increased inspection control of the fuel market 4. Conduct environmental impact assessment of regulation plans; 5. Pass a law on district heating in Federation of BiH (among other things, define the obligation to connect to the heating system for new buildings in areas covered by the network, sources and criteria for subsidising district heating on renewable energy sources, etc.); 6. Develop (and implement) a strategy on increased share of the district heating in the total heated area; 7. Develop infrastructure and encourage non-motorised transport (especially in urban areas); 8. Adopt a mechanism and identify funding sources to increase the share of public transport (electrified and low-emission) in the total travel kilometres; 9. Reform the passenger car taxation system with the view of discouraging the use of old vehicles, and encouraging the purchase of low-emission vehicles (lower consumption, electric and hybrid vehicles, LPG and CNG); 10. Routine cleaning of streets with the view of reducing dust from roads (especially after the winter season); 11. Developing and implementing smart city concept in bigger cities (urban settlements with more than 50.000 population); 12. Methodically planned procurement of electric and/or hybrid vehicles for Federation of BiH institutions. | | | |
| **Strategic projects** | / | | | |
| **Indicators for monitoring of results** | **Indicators**  **(outputs and deliverables)** | | **Baseline value** | **Target value** |
|  | 1. Status of the law adoption | | Current law does not regulate the quality of solid fuels and stoves and boilers | Law on air protection that specifies the quality of (solid) fuels and bans sale of non-certified stoves and boilers adopted |
| 1. Number of cantons with regulated incentive scheme models | | Some of the cantons have pilot incentive schemes | Development of the model for incentive schemes in each canton, in coordination with the entity |
| 1. Status of amendments to the relevant legislation and level of capacity development in the inspections | | Current legislative framework does not allow for adequate inspections of household stoves, inspections do not have sufficient capacities | Relevant legislation amended and capacities of municipal and cantonal inspections developed (number of inspectors increased and training programmes implemented) |
| 1. Number of completed strategic environmental assessments of planning documents | | Strategic environmental assessment has not been sufficiently used | Strategic environmental assessments consistently completed for every planning document |
| 1. Status of the adoption of the law | | There is no law on heating industry | Law on heating industry adopted |
| 1. Status of the adoption of strategy and number of completed studies | | There is no strategy, studies completed for some urban areas | Strategy developed, studies (for new district heating systems and expansion of the current network) for urban settlements with more than 10,000 residents |
| 1. Number of cantons that have adopted the model | | There are no incentive models for non-motorised transport, infrastructure underdeveloped | Model adopted (cantonal level) and minimum infrastructure developed |
| 1. Number of mechanisms adopted at the level of entity and cantons | | No incentives offered for the development of public transport | Mechanisms adopted (entity and cantonal levels harmonised) |
| 1. Status of amendments to the car taxation system | | Current taxation system discourages procurement and use of low polluting vehicles | The taxation system improved (coordination with BiH level) |
| 1. Status of the adoption of amendments to regulations | | The obligation to clean the streets in certain intervals is not regulated. | Provisions regulating the street cleanliness standards, including control mechanism and sanctions, included in agreements on road maintenance |
| 1. Number of cities which adopted the concept of smart cities | | Only several big cities work on the development of the smart city concept | Smart city concept adopted for settlements of the above size by 2025, and is continuously implemented |
| 1. Status of the adoption of the plan | | Insignificant share of hybrid/electric vehicles in institutions of the Federation of BiH | Plan for procurement of new vehicles adopted and implemented |
| **Effect on the development and contribution of the measure to the priority** | Reduced pollution and improved air quality in the Federation of BiH | | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 323,854,576  Source: 10% government budget, 90% combination – loans, funds from EU and international donors | | | |
| **Period of the implementation of the measure** | 2022 – 2032 |
| **Institution responsible for coordination of the implementation of the measure** | FMET | | | |
| **Implementing institutions** | Ministry of Physical Planning, FMEMI, Ministry of Transport and Communications, responsible cantonal ministries, Environmental Protection Fund, institutions of the Federation of BiH, inspections | | | |
| **Target groups** | Institutions for spatial planning, companies for district heating systems, importers and retail shops of household stoves/boilers, inspections, those who sell and distribute coal and fire wood, importers of new and used vehicles, institutions of the Federation of BiH | | | |

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| **Link with strategic goal** | **4 Climate change mitigation and adaptation and improvement of air quality** | | |
| **Priority** | **4.2 Upgrading the air quality management system to support strategic decision-making and public information on air quality and emissions** | | |
| **Title of the measure** | **4.2.1 Improvement of the air quality monitoring system** | | |
| **Description of the measure with the general areas of intervention** | The aim of this measure is to cover the entire territory of the Federation of BiH with the network of measuring stations, and to strengthen the capacity of the Hydrometeorological Institute of the Federation to better manage the network of stations and report on the values measured so that the obtained results could be used for spatial planning and design of rehabilitation plans to a greater extent.  General areas of intervention are:  a. Preparing a study (plan) of the measuring stations network (including the creation of AQ assessment system, territorial division into AQ management zones), also defining the types of pollutants which should be measured;  b. Procuring, installing and maintaining additional measuring stations, and ensuring reliability of measurements;  c. Strengthening capacities of the Hydrometeorological Institute of the Federation of BiH and cantonal (human and technical). | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results** | **Indicators**  **(outputs and deliverables)** | **Baseline value** | **Target value** |
| 1. Status of the development and adoption of the study | The development of the plan/study in progress | The Study (plan) developed and adopted, with all the elements of measurements defined |
| 1. Number of measuring stations commissioned | 22 measuring stations were operational in 2019, some parts of the Federation of BiH are not covered by a measuring station | Equipment - measuring stations procured and installed |
| 1. Level of the implementation of the programme for strengthening human and technical capacities of the FBiH Hydrometeorological Institute and cantonal organisation for monitoring air quality | Human and material capacities of the FBiH Hydrometeorological Institute and cantonal organisations insufficient | A programme for strengthening human and material capacities implemented |
| **Effect on the development and contribution of the measure to the priority** | The management system improved, better access to information, human and institutional capacities for air quality management enhanced | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 3,340,737  Source: 10% government budget, 90% funds from EU and other international donors | | |
| **Period of the implementation of the measure** | 2022 – 2025 | | |
| **Institution responsible for coordination of the implementation of the measure** | FMET | | |
| **Implementing institutions** | FHMI, cantonal institutions responsible for air quality monitoring, Environmental Protection Fund, universities | | |
| **Target groups** | Citizens, NGOs | | |

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| **Link with strategic goal** | **4. Climate change mitigation and adaptation and improvement of air quality** | | |
| **Priority** | **4.2 Upgrading the air quality management system to support strategic decision-making and public information on the air quality** | | |
| **Title of the measure** | **4.2.2 Developing the system for reporting to international institutions and coordination of improvement of the public information system on air quality** | | |
| **Description of the measure with the general areas of intervention** | The aim of this measure is to establish a comprehensive system for reporting on emissions of pollutants, GHG and air quality to the international institutions (in cooperation with state level institutions) and improving the system of public communication on air quality, in real and integrated time.  General areas of intervention are:   1. Devising a public information programme on air quality (harmonised manner and content of information across the territory of the Federation of BiH); 2. Developing and implementing a capacity building programme for organisations in charge of air quality (the Federation of BiH and cantons); 3. Dividing the territory of the Federation of BiH into zones and agglomerations based on the air quality (possible updating based on measurements across the territory of the Federation of BiH); 4. Drawing up air quality rehabilitation plans for all the areas with air category II and III, including integration of air quality perspectives in the spatial planning; 5. Establishment of air quality information system; 6. Designating reference laboratories for measurement of emissions and air quality; 7. Improving reporting on emissions through introduction of a uniform electronic reporting system on measurements of emissions and general data on emission, including sanctioning of failures to provide data; 8. Regulating the methodology and deadlines for providing data on emissions needed for the information system; 9. Strengthening capacities for verification of results of pollutants emission measurements; 10. Regulating the methodology of calculation of emissions, along with a development of national emission factors; 11. Adopting cantonal air quality laws; 12. Completing an inventory of pollution and developing a register of operators (cantonal); 13. Developing a baseline dispersion model for air quality monitoring and spatial planning, and implement it (at the cantonal level); 14. Define the methodology of reporting on emissions and air quality towards the state level. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results** | **Indicators**  **(outputs and deliverables)** | **Baseline value** | **Target value** |
| 1. Status of the programme development | Insufficiently developed system of informing the public on air quality | Information programme adopted at the level of the Federation of BiH, with clearly defined roles of cantons and municipalities |
| 1. Level of the implementation of the capacity building programme | Insufficient capacities of responsible institutions | The capacity building programme implemented |
| 1. Status of defining zones and agglomerations | Current zones and agglomerations have been defined without measurements in some parts of the Federation of BiH | Zones and agglomerations defined |
| 1. Number of developed and adopted rehabilitation plans | Rehabilitation plans not developed | Rehabilitation plans developed and adopted |
| 1. Status of the establishment of the information system | Information system not established | The air quality Information system established |
| 1. Number of pollutants for which a reference laboratory has been designated | Reference laboratories not designated | Reference laboratories designated |
| 1. Status of the adoption of the regulation | There is no specific regulation that clearly defines the method of reporting data on emissions | Regulation defining the method of reporting data on emissions adopted |
| 1. Number of electronic reports on emissions | There is no electronic reporting on emission measurements | Uniform electronic reporting on emission measurements introduced |
| 1. Level of the implementation of the capacity building programme | Insufficient capacity in responsible institutions | The capacity building programme for verification of results of emission measurements implemented |
| 1. Status of the adoption of national emission coefficients | National emission coefficients not identified | National emission coefficients adopted |
| 1. Number of cantonal laws | Draft of the new law on air quality provides an opportunity for cantons to adopt cantonal laws on air protection | The laws adopted in the cantons |
| 1. Number of cantons with completed inventories | Three cantons have completed inventories of pollution | The inventories of pollution completed |
| 1. Status of development of baseline model | There is no baseline model for the air quality monitoring | The baseline model for the air quality monitoring for the purposes of spatial planning adopted |
| 1. Status of the adoption of the procedure | There is no system for reporting to the state level | The reporting procedure adopted |
| **Effect on the development and contribution of the measure to the priority** | Timely information and increased awareness of the population about the air quality, including increased trust in the competent institutions | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 238,458,352  Source: 10% government budget, 90% combined ‒ funds from EU and other international donors and other donations | | |
| **Period of the implementation of the measure** | 2022 – 2032 | | |
| **Institution responsible for coordination of the implementation of the measure** | Federation Ministry of Environment and Tourism | | |
| **Implementing institutions** | FHMI, Environmental Protection Fund, cantonal ministries and organisations focusing on air quality issues, universities | | |
| **Target groups** | NGOs and citizens | | |

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| **Link with strategic goal** | **4. Climate change mitigation and adaptation and improvement of air quality** | | |
| **Priority** | **4.3 Reduce the impact of the Federation of BiH on climate change** | | |
| **Title of the measure** | **4.3.1 Reduced impact of the Federation of BiH on climate changes** | | |
| **Description of the measure with the general areas of intervention** | The aim of this measure is to reduce GHG emissions and increase carbon sinks, which should lead to a partial decarbonisation and achievement of climate neutrality on the long run.  The general areas of intervention are:   1. Form a Decarbonisation Committee; 2. Developing and adopting a regulation on completion of a GHG inventory; 3. Strengthening the capacity of FHMI for preparation of inventories; 4. Adopting a climate law which, among other things, should introduce decarbonisation mechanisms; 5. Adopting a decree on the monitoring and reporting mechanism; 6. Participating in development of the Integrated energy and climate plan (NECP) every five years; 7. Developing and implementing SECAP for all the municipalities and cities; 8. Drawing up plans for a just transition of mining areas, and identifying mechanisms and sources of funding for the transition 9. Drafting a proposal for the implementation of the ЕU ETS Directive; 10. Designating an institution which should devise the emissions trading scheme; 11. Capacity building of the institution designated to set up the emissions trading scheme; 12. Participating in development of the state level strategy for enhancement of carbon sinks; 13. Boosting the breeding of fast growing energy crops on degraded land. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results** | **Indicators**  **(outputs and deliverables)** | **Baseline value** | **Target value** |
|  | 1. Status of the creation of the Committee | The Federation of BiH has no intersectoral body for planning, implementation and follow-up activities in the carbonisation process | The Decarbonisation Committee formed, it comprises representatives of the business sector, government, unions, non-governmental organisations, etc. |
|  | 1. Status of the development and adoption of the Strategy | Lack of an integrated strategy on climate change | The Rulebook adopted |
| 1. Level of the implementation of the capacity building programme | Insufficient capacity of FHMI | The capacity building programme implemented |
| 1. Status of the law adoption | No climate law | The climate law adopted |
| 1. Status of the adoption of the decree | There is no decree on the monitoring and reporting mechanism | The Decree on the monitoring and reporting mechanism adopted |
| 1. Status of the adoption of NECP | Working version completed, finalisation in progress | NECP adopted every five years |
| 1. Number of SECAPs prepared | A few municipalities and cities have SECAPs | SECAPs prepared and adopted |
| 1. Status of the adoption of the plan | There is no action plan on phasing out coal | The Plans prepared and adopted |
| 1. Number of the plans adopted | Not a single mining region has a plan for a just transition | The plan prepared and adopted |
| 1. Status of the development of the proposal | ETS Directive not transposed | The Proposal developed in cooperation with MOFTER |
| 1. Status of the designation of the institution | No institution has been designated for the establishment and operation of ETS | The Institution of the Federation of BiH appointed |
| 1. Level of the implementation of the capacity building programme | Lack of capacities | The capacity building programme implemented |
| 1. Status of the strategy development and adoption | Lack of a strategy on enhancement of carbon sinks | The Strategy on enhancement of carbon sinks |
| 1. Status of the adoption of the models | Lack of a model for promotion of growing fast growing energy crops | A model for promotion of growing fast growing energy crops on degraded land adopted |
| **Effect on the development and contribution of the measure to the priority** | / | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 8,874,483  Source: 10% government budget , 90% combined ‒ funds from EU and other international donors, and other donations | | |
| **Period of the implementation of the measure** | 2022 – 2032 | | |
| **Institution responsible for coordination of the implementation of the measure** | FMET | | |
| **Implementing institutions** | FMEMI, Environmental Protection Fund, ministries of forestry and agriculture, universities | | |
| **Target groups** | Municipalities, cities, large industrial companies, mines, forestry companies management, farmers | | |

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| **Link with strategic goal** | **4. Climate change mitigation and adaptation and improvement of air quality** | | |
| **Priority** | **4.4. Enhancing resilience to climate change** | | |
| **Title of the measure** | **4.4.1. Develop institutional capacities and knowledge to increase resilience to climate change** | | |
| **Description of the measure with the general areas of intervention** | The aim of this measure is to develop capacities for adaptation to climate change and for building a strategic and legislative framework.  General areas of intervention are:   1. Enhancing knowledge and developing databases on threats, measures, damages and losses for the purpose of vulnerability assessment; 2. Designate a body that will establish and maintain the damage record system; 3. Improving forecasting capacities for hazardous meteorological and hydrological occurrences and providing timely warnings to contribute to reducing the risk of disasters; 4. Enhancing and coordinating cooperation among the institutions responsible for the assessment, prevention and response to disasters and major accidents linked with climate change (FHMI, Civil Protection, etc.); 5. Carrying out quarterly assessments of extreme climate change risk; 6. Developing and adopting an action plan on climate change adaptation based on the national Strategy (and updating it every five years); 7. Establish a system for coordination and monitoring of the implementation of adaptation measures among the competent institutions and continuously work on strengthening its capacities; 8. Identify fundraising methods and how such funds should be used for the climate change adaptation measures in line with NAP funding strategy which is currently being prepared. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results** | **Indicators**  **(outputs and deliverables)** | **Baseline value** | **Target value** |
|  | 1. Status of the implementation of capacity building programmes and improvement of knowledge | Insufficient knowledge and capacities | Knowledge improved and capacities strengthened though the implementation of capacity building programmes |
| 1. Status of the appointment of the body | There is no body which keeps the records of damages caused by climate change | Body for establishment and maintenance of the damage records system |
| 1. Level of the implementation of the capacity building programme | Insufficient forecasting capacities for hazardous meteorological and hydrological occurrences | The capacity building programme implemented |
| 1. Status of the development of the system for coordination | Lack of coordination | The method of coordination defined |
| 1. Status of the drafting and adoption process of risk assessment reports | Lack of quarterly reports | Quarterly reports on risk assessment of extreme climate changes adopted |
| 1. Status of the development and adoption of the action plan | Lack of action plan | The action plan prepared and adopted |
| 1. Status of the development of the system for coordination and monitoring of the implementation of the measures | Lack of a system for coordination and monitoring of the implementation of measures | The system for coordination and monitoring of the implementation of adaptation measures to climate change set up |
| 1. Status of defining a fundraising method | Lack of a system for fundraising and use of funds for the climate change adaptation measures | The method of fundraising and use of funds for the climate change adaptation measures defined |
| **Effect on the development and contribution of the measure to the priority** | Improved management and enhanced human and institutional capacities increased resilience to climate change | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 738,117  Source: 20% government budget , 80% combined ‒ funds from EU and other international donors, and other donations | | |
| **Period of the implementation of the measure** | 2022 – 2032 | | |
| **Institution responsible for coordination of the implementation of the measure** | FMET | | |
| **Implementing institutions** | FMAWMF, FHMI, Civil Protection, Environmental Protection Fund, universities | | |
| **Target groups** | Civil Protection, NGOs, citizens, media | | |

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| **Link with strategic goal** | **4. Climate change mitigation and adaptation and improvement of air quality** | | |
| **Priority** | **4.4 Enhancing resilience to climate change** | | |
| **Title of the measure** | **4.4.2** **Infrastructure capacity building to enhance resilience to climate change** | | |
| **Description of the measure with the general areas of intervention** | The aim of this measure is to develop infrastructure capacities for adaptation to climate change in the sectors that are most vulnerable to climate change.  General areas of intervention are:   1. Developing a programme to strengthen the irrigation infrastructure; 2. Application of sustainability principles in the use of water for irrigation and establishment of a counselling office for farmers; 3. Application of ecological principles in the construction of multipurpose reservoirs; 4. Conducting a study aimed at identifying the needs for equipment and human resources for early detection of fire and firefighting; 5. Procurement of equipment and employing human resources for the system of early fire detection and firefighting 6. Undertaking a study aimed at identifying infrastructure needed for firefighting (such as water reservoirs, fire escape paths, etc.); 7. Developing the flood protection capacity. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results** | **Indicators**  **(outputs and deliverables)** | **Baseline value** | **Target value** |
| 1. Status of the programme development | Lack of a programme | The programme developed and adopted |
| 1. Level of the application of the principles of sustainable use of water for irrigation and number of counselling offices | Insufficient application of the principles of sustainable use of water for irrigation and insufficient number of counselling offices for farmers | Application of the principles of sustainable use of water for irrigation and adequate number of counselling offices for farmers |
| 1. Status of the completion of the study; implementation phase of the multipurpose reservoir construction. | Insufficient application of the ecological principles in the construction of multipurpose reservoirs | Studies carried out; Multipurpose reservoir construction completed |
| 1. Status of the study development | Lack of a study | Study developed and adopted |
| 1. Status of the equipment procurement and number of employees | Insufficient number of employees and inadequate equipment | Equipment procured and required number of staff employed |
| 1. Status of the study completion | Needs assessment not available | Study completed and adopted |
| 1. Level of capacity development | Insufficient capacities | Institutional and infrastructure capacities strengthened |
| **Effect on the development and contribution of the measure to the priority** | Mitigation of climate change impact in BiH | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 596,910,755  Source: 10% government budget , 90% combined ‒ loans, funds from EU and other international donors, and other donations | | |
| **Period of the implementation of the measure** | 2022 – 2032 | | |
| **Institution responsible for coordination of the implementation of the measure** | FMAWMF | | |
| **Implementing institutions** | Civil protection, FMET, Environmental Protection Fund, water agencies, universities | | |
| **Target groups** | Civil Protection, farmers, NGOs, citizens, media | | |

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| **Link with strategic goal** | **4. Climate change mitigation and adaptation and improvement of air quality** | | |
| **Priority** | **4.5 Improving energy efficiency of final consumption in all sectors** | | |
| **Title of the measure** | **4.5.1 Creating an enabling environment for energy efficiency** | | |
| **Description of the measure with the general areas of intervention** | The aim of this measure is to create an enabling environment for energy efficiency through improvement of legislative and strategic framework in this area.  General areas of intervention are:   1. Establishing an energy counselling office; 2. Implement green procurements - amend the Public Procurement Law; 3. Initiating obligation schemes for electricity, natural gas and heat suppliers; 4. Developing a model to increase the public lighting energy efficiency; 5. Amending the Law on Energy Efficiency, and adopting all relevant bylaws (ESCO product labelling, financial policy for EE - tax loans, fiscal policy, determination of the consumption threshold for major energy consumers, etc); 6. Adopting and implementing a strategy on retrofitting of buildings; 7. Further development of the energy efficiency information system. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results** | **Indicators**  **(outputs and deliverables)** | **Baseline value** | **Target value** |
| 1. Level of the implementation of the campaign and number of established counselling offices | Poor awareness on energy efficiency, very small number of counselling offices | Counselling offices established in all municipalities/cities |
| 1. Status of adopting amendments to the Law on Public Procurement | The applicable Law on Public Procurement does not envisage green procurements | The Law on Public Procurement amended |
| 1. Status of the adoption of the regulation | There is no regulation on obligation schemes | The regulation on obligation schemes adopted in the Federation of BiH |
| 1. Status of the development and adoption of the model | There is no systemic model for EE public lighting | The model developed and adopted; revolving fund established |
| 1. Status of the enactment of the improved law and number of adopted rulebooks | The applicable Law on EE failed to define some aspects of EE and some rulebooks are still missing | Amendments to the law adopted; relevant rulebooks adopted |
| 1. Status of the adoption and percentage of strategy implementation | Strategy developed, not adopted | Strategy on retrofitting of buildings adopted and implemented |
|  | 1. The percentage of public buildings registered in the information system | The energy efficiency information system set up | The information system effective |
| **Effect on the development and contribution of the measure to the priority** | Improved competitiveness of industry and improved living and working conditions, including reduced electricity costs | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 1,956,024,103  Source: 10% government budget , 90% combined ‒ loans, funds from EU and other international donors, and other donations | | |
| **Period of the implementation of the measure** | 2022 – 2032 | | |
| **Institution responsible for coordination of the implementation of the measure** | FMEMI | | |
| **Implementing institutions** | Environmental Protection Fund, competent cantonal ministries, Government of the Federation of BiH, BiH Public Procurement Agency | | |
| **Target groups** | Citizens, local communities, energy supply companies, ESCO, industrial enterprises, retail chains, importers of household appliances | | |

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| **Link with strategic goal** | **4. Climate change mitigation and adaptation and improvement of air quality** | | |
| **Priority** | **4.5 Improving energy efficiency of final consumption in all sectors** | | |
| **Title of the measure** | **4.5.2 Reducing the final energy consumption** | | |
| **Description of the measure with the general areas of intervention** | The aim of this measure is to reduce the final energy consumption through increase in energy efficiency in residential and non-residential buildings and industry.  General areas of intervention are:   1. Implementation of the Energy Labelling Standards for household appliances; 2. Developing a model to promote energy efficiency in residential buildings; 3. Applying stricter requirements for energy efficiency to new buildings, and buildings which are reconstructed (including both heating and HVAC needs); 4. Developing a model to fund retrofitting of public buildings; 5. Development of the ESCO market; 6. Implementing the obligation to perform energy audits in industrial facilities with significant energy consumption, including implementation of schemes of co-financing the audits and favourable funding of measures;; 7. Creating a network for energy efficiency of industrial companies (benchmarking) and its integration into the EU network through the national network 8. Appointment of energy managers in facilities which use more energy than defined in the regulation. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results** | **Indicators**  **(outputs and deliverables)** | **Baseline value** | **Target value** |
| 1. Percentage of household appliances on the market with Energy Labelling | There is no official system of labelling energy efficiency on appliances | The energy Labelling Standard for household appliances implemented |
| 1. Status of the development and adoption of the model | There is no comprehensive model in the entire Federation of BiH which specifies criteria | The model developed and adopted |
| 1. Status of the adoption of amendments to the rulebook | The applicable regulation does not take into consideration the need for cooling and DHW, and needs for heating are relatively high | The Rulebook adopted, as amended |
| 1. Status of the development and adoption of the model | Three is no comprehensive model in the entire Federation of BiH which specifies criteria | The model developed and adopted |
| 1. Number of implemented ESCO projects | A small number of ESCO projects implemented, implementation of pilot projects is underway in the public sector | ESCO market developed |
| 1. Percentage of industrial facilities with major energy consumption that have completed energy audit | A small number of industrial facilities have completed energy audits | Energy audits completed in all the facilities |
| 1. Number of industrial companies in the network | There is no EE network | The network established and connected to the national network |
| 1. Percentage of industrial facilities that have appointed energy managers | A small number of industrial companies have appointed energy managers | Energy managers appointed |
| **Effect on the development and contribution of the measure to the priority** | Improved competitiveness of industry and improved living and working conditions, including reduced electricity costs | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 1,245,212  Source: 20% government budget , 80% combined ‒ funds from EU and other international donors, and other donations | | |
| **Period of the implementation of the measure** | 2022 – 2027 | | |
| **Institution responsible for coordination of the implementation of the measure** | FMEMI | | |
| **Implementing institutions** | Environmental Protection Fund, Ministry of Physical Planning, competent cantonal ministries | | |
| **Target groups** | Industrial enterprises, ESCO, ministries (public buildings), retail chains, importers of household appliances | | |

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| **Link with strategic goal** | **4. Climate change mitigation and adaptation and improvement of air quality** | | |
| **Priority** | **4.5 Improving energy efficiency of final consumption in all sectors** | | |
| **Title of the measure** | **4.5.3 Reducing the primary energy consumption** | | |
| **Description of the measure with the general areas of intervention** | The aim of this measure is to reduce the primary energy consumption through strengthening of the legislative and strategic framework focusing on reduction of losses in power generation.  General areas of intervention are:   1. Implementing the Eco-design standard for stoves/boilers; 2. Offering incentives to promote purchase of efficient heating and cooling appliances; 3. Reducing losses in distribution of heat and electricity;. 4. Introducing subsidies for energy from highly efficient cogeneration. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results** | **Indicators**  **(outputs and deliverables)** | **Baseline value** | **Target value** |
| 1. Status of the adoption of the regulation | No regulation requiring compliance with EcoDesign | Rulebook adopted (rulebook accompanying Law on EE) |
| 1. Status of the adoption of the incentive scheme | Three is no comprehensive scheme in the entire Federation of BiH | Incentive scheme introduced |
| 1. Percentage reduction of losses in distribution of heat and electricity | Current losses, in particular in heat distribution are relatively high | Energy losses reduced |
| 1. Status of adopting an improved scheme for subsiding cogeneration | There are no quotas to incentivise cogeneration | The current scheme for subsiding cogeneration improved |
| **Effect on the development and contribution of the measure to the priority** | Improved competitiveness of industry and improved living and working conditions, including reduced electricity costs | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 90 975 955  Source: 10% government budget, 90% combined – loans, funds from EU and other international donors, and other donations | | |
| **Period of the implementation of the measure** | 2022 – 2032 | | |
| **Institution responsible for coordination of the implementation of the measure** | FMEMI | | |
| **Implementing institutions** | Environmental Protection Fund, competent cantonal ministries, electricity and heat suppliers, inspections | | |
| **Target groups** | Retail chains, agents and sellers of stoves and boilers, citizens, enterprises for distribution of electricity and heat | | |

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| **Link with strategic goal** | **4. Climate change mitigation and adaptation and improvement of air quality** | | |
| **Priority** | **4.6 Increasing the share of renewable energy along with an incentive scheme reform (focusing on citizens energy)** | | |
| **Title of the measure** | **4.6.1 Creating an enabling environment for the renewable energy sources** | | |
| **Description of the measure with the general areas of intervention** | The aim of this measure is to create enabling environment for renewable energy sources through improvement of legislative and strategic framework in this area.  General areas of intervention are:   1. Routine preparation of the integrated climate and energy plan (within the national plan): 2. Introducing incentive schemes for the use of RES in heating and cooling; 3. Introducing Guarantee of Origin for energy. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results** | **Indicators**  **(outputs and deliverables)** | **Baseline value** | **Target value** |
| 1. Status of the development and adoption of NECP | Development of NECP in progress | The integrated energy and climate plan developed and adopted |
| 1. Status of the adoption of the amended law | The applicable Law on RES does not offer incentive schemes for the use of RES in heating and cooling | Amended Law on RES offering incentive schemes for the use of RES in heating and cooling |
| 1. Status of the adoption of the regulation | There is no regulation on Guarantee of Origin for energy | The Regulation on Guarantee of Origin for energy adopted |
| **Effect on the development and contribution of the measure to the priority** | Increased share of RES in the total energy production and consumption in the Federation of BiH, including a greater participation of citizens in investments | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 137 104  Source: 20% government budget , 80% funds from EU and other international donors | | |
| **Period of the implementation of the measure** | 2022 – 2032 | | |
| **Institution responsible for coordination of the implementation of the measure** | FMEMI | | |
| **Implementing institutions** | Cantonal ministries of energy, RES operator, FERK, universities | | |
| **Target groups** | Experts, NGO | | |

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| **Link with strategic goal** | **4. Climate change mitigation and adaptation and improvement of air quality** | | |
| **Priority** | **4.6 Increasing the share of renewable energy along with an incentive scheme reform (focusing on citizens energy)** | | |
| **Title of the measure** | **4.6.2 Increase the share of the renewable energy sources in power generation in the transport sector** | | |
| **Description of the measure with the general areas of intervention** | The aim of this measure is to increase the share of the renewable energy sources in power generation and the transport sector, through improvement of strategic framework and incentive scheme and strengthening of infrastructure for partial decarbonisation of the transport.  General areas of intervention are:   1. Implementing incentive schemes for citizens energy projects and auctions (gradually phase out buy-in tariffs, implementing net measurements or net calculation, specify prosumers); 2. Adopting and regularly updating catalogues of environmental criteria for development of all renewable energy sources (within the system of impact assessments); 3. Implementing incentives for rooftop solar photovoltaic power plants on new buildings; 4. Conduct a study on construction of required infrastructure for electric and plug-in hybrid vehicles; 5. Promoting purchase and use of hybrid, electric and plug-in passenger vehicles (subsidies for purchase, the right to enter ‘green’ city areas, cheaper/free of charge parking, etc.), public transport vehicles; 6. Building the infrastructure for hybrid, electric and plug-in passenger vehicles (charging points, disposal of used spare parts, etc.); 7. Building cycling trails and parking facilities, developing pedestrian walkways. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results** | **Indicators**  **(outputs and deliverables)** | **Baseline value** | **Target value** |
| 1. Status of the law adoption | The applicable law does not offer incentives schemes for citizen energy projects | Amendments to the Law on RES adopted |
| 1. Number of adopted catalogues (one catalogue per each type of RES) | There are no catalogues of criteria, they were prepared for small hydropower plants, but not adopted | Catalogues of criteria for all RES adopted |
| 1. Status of the law adoption | The applicable law does not offer incentives schemes for rooftop solar photovoltaic power plants on new buildings | Amendments to the Law on RES adopted |
| 1. Status of the completion and adoption of the study | There is no comprehensive analysis | The Study completed and adopted |
| 1. Status of the adoption of the incentive schemes | There is no incentive scheme for hybrid, electric and plug-in passenger vehicles | A model for incentives scheme adopted |
| 1. Level of the development of infrastructure as defined in the Study | Insufficiently developed infrastructure | Minimum infrastructure developed |
| 1. Number of kilometres of developed cycling tracks and pedestrian walkways | Insufficiently developed infrastructure | Minimum infrastructure developed |
| **Effect on the development and contribution of the measure to the priority** | Increased share of RES in the total electricity production and consumption in the Federation of BiH | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 104,069,339  Source: 10% government budget , 90% combined ‒ loans and funds from EU and other international donors | | |
| **Period of the implementation of the measure** | 2022 – 2032 | | |
| **Institution responsible for coordination of the implementation of the measure** | FMEMI | | |
| **Implementing institutions** | Ministry of Transport and Communications, RES operator, cantonal ministries of transport, institutes for spatial planning, Environmental Protection Fund | | |
| **Target groups** | Citizens, NGO, vehicle importers | | |

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| **Link with strategic goal** | **4. Climate change mitigation and adaptation and improvement of air quality** | | |
| **Priority** | **4.7 Reducing light pollution** | | |
| **Title of the measure** | **4.7.1 Adopting light pollution legislation** | | |
| **Description of the measure with the general areas of intervention** | The aim of this measure is to enact legislation and develop capacities to regulate light pollution.  General areas of intervention are:   1. Developing and adopting a rulebook on light pollution in the Federation of BiH (illumination zones, permitted values of illumination, methods of managing the lighting systems, inspections, etc.); 2. Strengthening capacities of competent institutions (for spatial planning, inspections, etc.). | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results** | **Indicators**  **(outputs and deliverables)** | **Baseline value** | **Target value** |
| 1. Status of the development and adoption of the rulebook | Rulebook envisaged in the law on environment protection | The Rulebook developed and adopted |
| 1. Level of the implementation of capacity building programmes | Insufficient capacities for regulating light pollution | A capacity building programme implemented |
| **Effect on the development and contribution of the measure to the priority** | Better living conditions in communities with high light pollution and better protection of animals sensitive to light | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 120,070 Source: 100% government budget | | |
| **Period of the implementation of the measure** | 2022 – 2025 | | |
| **Institution responsible for coordination of the implementation of the measure** | FMET | | |
| **Implementing institutions** | Ministry of Spatial Planning, cantonal ministries of spatial planning, universities | | |
| **Target groups** | Inspections, municipal departments in charge of urban and building permitting procedures | | |

* 1. Annex 5 A detailed overview of measures for Chemical Safety and Noise

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| **Link with the strategic goal** | **5. Protection of human health and improving well-being and quality of life for all** | | |
| **Priority** | **5.1. Improved legislation in the field of chemical safety** | | |
| **Name of the measure** | **5.1.1 Partial transposition of EU regulations and international agreements / conventions in the field of chemical safety** | | |
| **Description of the measure with the general area of intervention** | This measure aims to achieve alignment of Federation of BiH legislation with requirements of international agreements and EU regulations in the field of chemical safety:  - Regulation (EC) no. 1907 / 2006 (REACH);  - Regulation (EC) no. 1272/2008 (CLP Regulation);  - Regulation (EC) no. 648/2004 on detergents;  - Regulation (EU) no. 649/2012, concerning the export and import of hazardous chemicals and Rotterdam Convention;  - Regulation (EU) 2019/1021 on POPs chemicals and the Stockholm Convention;  - Directive 2004/10/EC relating to the application of the principles of good laboratory practices;  - Regulation (EU) no. 528/2012 concerning the making available in the market and use of biocidal products;  - EU Directive 87/217/EEC on the prevention and reduction of environmental pollution by asbestos;  - Regulation (EU) 2017/852 o mercury, as well as the Minamata convention;  General areas of intervention:   1. Develop and adopt all secondary legislation (bylaws) as foreseen in the Law on Chemicals. In addition to those specified under Art. 58 of the Law on Chemicals, clear specification of the conditions for performance of job of advisors for chemicals; 2. Formal designation of the Poison Control Centre (PCC) for Federation of BiH or making an agreement on cooperation and reporting with the existing PCC in the region (e.g. VMA‒Belgrade; Institute for Medical Research and Work Medicine, Zagreb); 3. Development and adoption of the Law on Biocides; 4. Development and adoption of bylaws in the area of biocide management; 5. Adoption of bylaws that would ensure prohibition of use of mercury and restrict placement in the market of the products containing mercury or mercury compounds; 6. Adoption of bylaws that will prohibit production, trade and use of products containing asbestos fibres, and ensure special conditions for labelling the products containing asbestos. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results of measures** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| 1. Completeness of legal framework for implementation of the Law on Chemicals | There are legal grounds in place for transposition of the EU regulations in the field of chemical safety, and the Rotterdam, Stockholm and Minamata Conventions, no secondary legislation (bylaws) has been adopted that were foreseen under the Law on Chemicals, so transposition of the said EU regulations and conventions is at a low level | 19 secondary legislative acts stated in Article 58 of the Law on Chemicals have been adopted and they clearly define the conditions for the work of Advisors for chemicals (2023) |
| 1. Status of appointment of the Poison Control Centre of the Federation of BiH (PCC) | Poison Control Centre does not exist | Formal designation of the Poison Control Centre (PCC) for Federation of BiH or making an agreement on cooperation and reporting with the existing PCC in the region (e.g. VMA‒Belgrade; Institute for Medical Research and Work Medicine, Zagreb) (2024) |
| 1. Status of legislative framework regarding biocidal product management | Law on Biocides has not been adopted | Adopted Law on Biocides by the Government of the Federation of BiH (2023) |
| 1. Completeness of legal framework for implementation of the Law on Biocides | The Law on Biocides has not been adopted, therefore there is no legal basis for adoption of secondary legislation | Adopted secondary legislation (bylaws) in the area of biocide management (2025) |
| 1. Completeness of legislative framework that ensures prohibition of use of mercury and restricts placement in the market of the products containing mercury or mercury compounds | There is no legislation in force that would ensure prohibition of use of mercury and restrict placement in the market of the products containing mercury or mercury compounds | Adopted secondary legislation that would ensure prohibition of use of mercury and restrict placement in the market of the products containing mercury or mercury compounds (2025) |
| 1. Completeness of legal framework that prohibits production, trade and use of products containing asbestos fibres, and ensures special conditions for labelling the products containing asbestos | There is no legislation in force that would prohibit production, trade and use of products containing asbestos fibres, and ensure special conditions for labelling the products containing asbestos | Adopted secondary legislation (bylaw) that prohibits production, trade and use of products containing asbestos fibres, and ensure special conditions for labelling the products containing asbestos (2025) |
| **Developmental impact and contribution of the measure to achieving the priority** | Improvement of chemicals management and progress in the process of European integrations by aligning the national legislation with the EU acquis | | |
| **Indicative financial projection, with indication of sources** | Amount: BAM 257,548  Source: 70% from the government budget, 30% combined ‒ loans, funds from EU and other international donors, and other donations | | |
| **Period of implementation of the measure** | 2023-2034 | | |
| **Institution responsible for coordination and implementation of the measure** | Federation of BiH Ministry of Health | | |
| **Implementing institution** | Federation of BiH Ministry of Health | | |
| **Target groups** | Commercial sector (imports/exports, transport, use of chemicals and products containing POPs, mercury and dangerous chemicals), representatives of institutions and citizens | | |

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| **Link with the strategic goal** | **5. Human health protection and improving well-being and quality of life for all** | | |
| **Priority** | **5.1. Improved legislation in the field of chemical safety** | | |
| **Name of the measure** | **5.1.2. Partial transposition of the SEVESO III Directive in legislation of the Federation of BiH** | | |
| **Description of the measure with the general area of intervention** | This measure aims to achieve harmonisation of Federation of BiH legislation with requirements of the SEVESO III Directive (2012/18/EU) for the purpose of prevention of major incidents and intervention plans for cases of inadequate handling of chemicals  General areas of intervention:   1. Development and adoption of regulation that determines the content and method of maintaining the Registry of Major Accidents; 2. Updating or making a new Rulebook on the content of the report on safety status, content of information on safety measures and contents of internal and external intervention plans. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results of measures** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| 1. Completeness of legal framework for implementation of the Law on Environmental Protection in terms of transposition of the SEVESO III Directive | Legal basis for transposition of the Seveso III Directive has been created in the Law Environment Protection; however, legislation needs to be passed to specify the content and method of maintaining of Registry of Major Accidents | Develop and adopt legislation defining the content and method of maintaining the Registry of Major Accidents (2023) |
| 1. Status of the Rulebook on the content of the report on safety status, content of information of safety measures and contents of internal and external intervention plans | The existing Rulebook on the content of the report on safety status, content of information of safety measures and contents of internal and external intervention plans was made in 2005 and needs to be updated to include the new requirements | Updating or making a new Rulebook on the content of the report on safety status, content of information on safety measures and contents of internal and external intervention plans (2023) |
| **Developmental impact and contribution of the measure to achieving the priority** | Improvement of chemicals management and progress in the process of European integrations by aligning the national legislation with the EU acquis. | | |
| **Indicative financial projection, with indication of sources** | Amount: BAM 19,558  Source: 100% government budget | | |
| **Period of implementation of the measure** | 2022-2023 | | |
| **Institution responsible for coordination and implementation of the measure** | FMET | | |
| **Implementing institution** | FMET and cantonal ministries responsible for environment | | |
| **Target groups** | Commercial sector (industries where major incidents are more likely) | | |

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| **Link with the strategic goal** | **5. Human health protection and improving well-being and quality of life for all** | | |
| **Priority** | **5.1. Improved legislation in the field of chemical safety** | | |
| **Name of the measure** | **5.1.3. Harmonise / develop secondary legislation (bylaws) to enable implementation of the Montreal Protocol, the Kigali Amendment, and EU regulations that facilitates their legal implementation in the EU member countries** | | |
| **Description of the measure with the general area of intervention** | This measure aims to achieve harmonisation of Federation of BiH legislation with requirements of the Montreal Agreement, the Kigali Amendment, and the EU regulations whereby these international agreements are implemented in EU member countries, particularly:  - Regulation (EC) no. 1005/2009 on substances that deplete the ozone layer;  - EC 517/2014 on fluorinated greenhouse gases.  General areas of intervention:   1. Development and adoption of the Rulebook on Ozone Depleting Substances management; 2. Development and adoption of legislation that will allow for training of repair/maintenance providers in accordance with the training programmes aligned with the EU acquis. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results of measures** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| 1. Completeness of the legal framework for implementation of the Kigali Amendment, Regulation EC 517/2014 on certain fluorinated greenhouse gases in terms of managing ozone layer depleting substances | There is in force a Rulebook on gradual exclusion of ozone layer depleting substances (“Official Gazette of the Federation of BiH”, 39/05) that needs to be aligned with requirements of the Kigali Amendment and the Regulation EC 517/2014 | Adopted Rulebook on Ozone Depleting Substances management (2024) |
| 1. Completeness of legal framework for implementation of the requirements of the Kigali amendments and the Regulation EC 517/2014 in terms of establishing certification and training programme for entities and individuals involved in installation, servicing, maintenance, repairing or disposing of F-gases equipment | There is no Rulebook that would regulate training of the servicemen in accordance with the training programmes aligned with the Regulation EC 517/2014 on establishing certification and training programme for entities and individuals involved in installation, servicing, maintenance, repairing or disposing of F-gases equipment | Adopted legislation that enables training of servicemen in accordance with the training programme aligned with the Regulation EC 517/2014 on establishing certification and training programme for entities and individuals involved in installation, servicing, maintenance, repairing or disposing of F-gases equipment (2024.) |
| **Developmental impact and contribution of the measure to achieving the priority** | Improved chemicals management | | |
| **Indicative financial projection, with indication of sources** | Amount: BAM 124,432  Source: 100% government budget | | |
| **Period of implementation of the measure** | 2022-2024 | | |
| **Institution responsible for coordination and implementation of the measure** | FMET | | |
| **Implementing institution** | FMET, Environmental Protection Fund of Federation of BiH | | |
| **Target groups** | Operators of systems for heating, ventilation and air conditioning (HVAC), repairers/servicing shops for HVAC equipment, centres for training HVAC service workers | | |

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| **Link with the strategic goal** | **5. Human health protection and improving well-being and quality of life for all** | | |
| **Priority** | **5.2. Establish a sustainable system of chemical management and implementation of EU acquis in the area of chemical safety** | | |
| **Name of the Measure** | **5.2.1. Efficient implementation of legislation partially transposing EU acquis and conventions in the area of chemical safety** | | |
| **Description of the measure with the general area of intervention** | This measure aims to implement the legislation of the Federation of BiH that have been harmonized with requirements of U legislation and international agreements, as follows:  - Regulation (EC) no. 1907 / 2006 (REACH);  - Regulation (EC) no. 1272/2008 (CLP Regulation);  - Regulation (EC) no. 648/2004 on detergents;  - Regulation (EU) no. 649/2012, concerning the export and import of hazardous chemicals and Rotterdam Convention;  - Regulation (EU) 2019/1021 on POPs chemicals and the Stockholm Convention;  - Directive 2004/10/EC relating to the application of the principles of good laboratory practice;  - Regulation (EU) no. 528/2012 concerning the making available in the market and use of biocidal products;  - EU Directive 87/217/EEC on the prevention and reduction of environmental pollution by asbestos;  - Regulation (EU) 2017/852 o mercury, as well as the Minamata convention.  General areas of intervention:   1. Efficient implementation of the Law on Chemicals and secondary legislation stemming from it (reporting, evaluation and issuing approval); 2. Efficient implementation of the Law on Biocides and secondary legislation stemming from it (reporting, evaluation and issuing approval); 3. Establishing a *helpdesk* to assist the businesses in meeting their legal obligation to report chemicals; 4. Established IT tool for effective maintenance of chemicals inventory and the list of biocides that will allow for statistical processing of data; 5. Establish inspection oversight in the area of chemical safety. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results of measures** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| 1. Efficiency in implementation of the Law on Chemicals | Chemical safety strategy has not been developed or adopted There is no developed system of inventorying chemicals, and there is no registration of importers of chemicals Secondary legislation (bylaw) that ensures fair trade with chemicals for commercial entities from Federation of BiH in the whole BiH has not yet been adopted  There is no established inspection oversight in the area of chemical management  Training plan and programme for advisors for chemicals is not prescribed. Conditions for performance of tasks of advisors for chemicals have not been specified | - Development and adoption of chemical safety strategy  - Established system of registration of chemicals, evaluation, and issuing approval  - Developed and regularly updated Inventory of Chemicals  - Developed and regularly updated Registry of Producers and Importers of chemicals  - Developed training plan and programme for the advisors for chemical and their continuous education (2024) |
| 1. Efficiency in implementation of the Law on Biocides | Law on Biocides has not been developed It is expected that the content of the Law would be harmonised with the law that is in force in Republika Srpska, and its effective implementation would require an inventory of biocidal products and registry of biocide producers and importers | - Established system of registration of chemicals, evaluation, and issuing approval  - Developed and regularly updated Inventory of Biocides  - Developed and regularly updated Registry of Producers and Importers of biocides  (2026) |
|  | 1. Status of establishing *help desk* or contact person/institution for helping businesses to meet legal basis to report chemicals | The help-desk i.e. contact number and e-mail the business entities may call when they need help to meet legal obligation of reporting the chemical has not been established | Establishing the help-desk for helping businesses meet their legal obligation to report the chemicals (2023) |
| 1. Systematic inventory of chemicals and biocides | There is no adopted information tool that would enable simple entry of new data and regular updating of inventory of chemicals and biocides | Established IT tool for effective maintenance of chemicals inventory and a list of biocides that will allow for statistical processing of data |
| 1. Efficient control of implementation of legislation in the field of chemical safety | Secondary legislation (bylaws) under the Law on Chemicals have not been developed, so there are no conditions in place for inspection oversight Law and secondary legislation in the area of biocides management have not been established, so there are no conditions in place for inspection oversight | Established inspection oversight and a registry of misdemeanour reports in the field of managing chemicals and biocides (2025) |
| **Developmental impact and contribution of the measure to achieving the priority** | Safer use of chemicals and protection of health of humans and environment | | |
| **Indicative financial projection, with indication of sources** | Amount: BAM 1,351,451  Source: 20% from the government budget, 80% combined ‒ loans, funds from EU and other international donors, and other donations | | |
| **Period of implementation of the measure** | 2024-2026 | | |
| **Institution responsible for coordination and implementation of the measure** | FMH | | |
| **Implementing institution** | Federation of BiH Ministry of Health | | |
| **Target groups** | Commercial sector (imports/exports, transport, use of chemicals and products containing POPs, mercury and dangerous chemicals), representatives of institutions and citizens | | |

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| **Link with the strategic goal** | **5. Human health protection and improving well-being and quality of life for all** | | |
| **Priority** | **5.2. Establish a sustainable system of chemical management and implementation of EU acquis in the area of chemical safety** | | |
| **Name of the measure** | **5.2.2. High level of implementation of the SEVESO III Directive** | | |
| **Description of the measure with the general area of intervention** | This measure aims to achieve effective implementation of legislation regulating transposition SEVESO III Directive and provides better protection of population against major accidents caused by inadequate storing, handling or use of chemicals.  General areas of intervention:   1. Development of the Major Accidents Registry; 2. Reporting hazardous substances, warehousing conditions and other information required by legislation related to implementation of the SEVESO III. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results of measures** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| 1. a. Status of establishing the Major Accidents Registry | The Major Accidents Registry has not been developed and made public | Established Major Accidents Registry  (2024) |
| 1. b. Efficiency of reporting hazardous substances, conditions for storing, and other information required by legislation that implements the SEVESO III | There is no reporting of hazardous substances, warehousing conditions and other information required by legislation related to implementation of the SEVESO III | Reported hazardous substances, warehousing conditions and other information required by legislation related to implementation of the SEVESO III (2026) |
| **Developmental impact and contribution of the measure to achieving the priority** | Safer use of chemicals and protection of health of humans and environment | | |
| **Indicative financial projection, with indication of sources** | Amount: BAM 15,925  Source: 100% government budget | | |
| **Period of implementation of the measure** | 2024-2026 | | |
| **Institution responsible for coordination and implementation of the measure** | FMET | | |
| **Implementing institution** | FMET and cantonal ministries responsible for environment | | |
| **Target groups** | Commercial sector (industries where major accidents are more likely) | | |

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| **Link with the strategic goal** | **5. Human health protection and improving well-being and quality of life for all** | | |
| **Priority** | **5.2. Establish a sustainable system of chemical management and implementation of EU acquis in the area of chemical safety** | | |
| **Name of the measure** | **5.2.3. Established systems of reporting on the matter of registration of cooling equipment and HVAC equipment services shops in accordance with the EU acquis in the field of ozone depleting substances, and of training the HVAC equipment repairers** | | |
| **Description of the measure with the general area of intervention** | This measure aims to achieve high level of reporting on the matter of registration of cooling equipment and HVAC equipment service shops in accordance with the EU acquis in the field of ozone depleting substances.  General areas of intervention:   1. Achieved technical conditions for existence and entry of data into the data base regarding the service shops for cooling and HVAC equipment; 2. Completed registration of at least 30% operators/owners of the HVAC devices and 100% of the service/repair shops; 3. Developing a training plan and programme (curriculum) for training repairers of cooling and HVAC equipment. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results of measures** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| 1. a. Status of the information system for registration of HVAC equipment containing ODS and their substitutes | There is no in place an information system that would provide for registration of HVAC equipment and servicing shops for HVAC equipment | Established information system for registration of HVAC equipment containing ODS and their substitutes (2024) |
| 1. b. Efficiency of registration of service shops and owners of equipment (operators) of cooling and HVAC equipment | There is no established registry of service shops and owners of equipment (operators) of cooling and HVAC equipment. According to the preliminary assessment that was done in the framework of the HFC Outlook model for BiH under a project financed by UNIDO, there are around 67062 devices with over 3 kg cooling medium | Completed registration of at least 30% operators/owners of the HVAC devices and 100% of the service/repair shops (2030) |
| 1. c. Status of a training plan and programme (curriculum) for training repairers of cooling and HVAC equipment | The plan for training repairers does not exist | Prepared plan and programme (curriculum) for training repairers of cooling and HVAC equipment (2024) |
| 1. d. Status of designation of training centres for training repairers of cooling and HVAC equipment that meet the prescribed criteria | 1. The Rulebook prescribing criteria the training centres should comply with | Designating training centres for training repairers of cooling and HVAC equipment that meet the prescribed criteria (2023) |
| **Developmental impact and contribution of the measure to achieving the priority** | Improved chemicals management, minimized harmful impacts, protection of health of humans and environment | | |
| **Indicative financial projection, with indication of sources** | Amount: BAM 78,478  Source: 100% government budget | | |
| **Period of implementation of the measure** | 2024-2030 | | |
| **Institution responsible for coordination and implementation of the measure** | FMET | | |
| **Implementing institution** | FMET, Environmental Protection Fund of Federation of BiH | | |
| **Target groups** | Operators of systems for heating, ventilation and air conditioning (HVAC), repairers/servicing shops for HVAC equipment, centres for training HVAC service workers | | |

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| **Link with the strategic goal** | **5. Human health protection and improving well-being and quality of life for all** | | |
| **Priority** | **5.3. Efficient operation of the Federation of BiH institutions in the field of chemical safety** | | |
| **Name of the measure** | **5.3. 1 Enhance human and technical capacities and competences of public services in the area of chemicals safety** | | |
| **Description of the measure with the general area of intervention** | This measure aims to strengthen human and technical capacities of institutions responsible for effective implementation of legislation in the field of chemical safety.  General areas of intervention:   1. Analyse human and technical capacities in competent institutions once the legislation foreseen in this Plan were adopted; 2. Hire and train new people in public services in the field of chemical safety, and procure equipment, in accordance with the requirements of the new regulations and the analysis previously made; 3. Developed plan and programme of annual training of civil servants in the area of chemical safety continuous provision of the training; 4. Analysis of human and technical capacities and financial needs for establishment of the Poison Control Centre of Federation of BiH, and making decision on selecting / designating legal persons responsible for poison control. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results of measures** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| 1. a. Analysis of capacities of competent institutions in Federation of BiH in the field of chemical safety after the adoption of legislation | There is no relevant analysis of capacities of competent institutions in the Federation of BiH in the field of chemical safety It needs to be made, and possibly updated once the proposed legislation is drafted | Completed Report on Analysis of capacities of responsible institutions in Federation of BiH in the field of chemical safety after the adoption of the legislation (2024) |
| 1. b. Implementation status of the identified shortcomings of the analysis of capacities of responsible institutions after the adoption of legislation | There is no relevant analysis of capacities of responsible institutions It needs to be made, and possibly updated once the proposed legislation is developed. | Hire and train new people in institutions in the field of chemical safety, in accordance with the requirements of the new legislation and the analysis previously made (2025) |
| 1. c. Implementation status of the plan and programme of annual training of civil servants on the topic of chemical safety | There is no plan and programme of annual training of civil servants on the topic of chemical safety | Developed plan and programme of annual training of civil servants in the area of chemical safety, and first training implemented (2026) |
| 1. d. Analysis of human and technical capacities and financial needs for establishment of the Poison Control Centre of the Federation of BiH, and making decision on selecting / designating legal persons responsible for poison control | At present time, no legal persons responsible for poison control have been appointed Obligations of the appointed legal persons stem from Art. 45. of the Law on Chemicals (Official Gazette of Federation of BiH, 77/20) | Completed analysis of human and technical capacities and financial needs for establishment of the Poison Control Centre of the Federation of BiH, and making decision on selecting / designating legal persons responsible for poison control (2023) |
| **Developmental impact and contribution of the measure to achieving the priority** | Improved chemicals management, minimized harmful impacts, protection of health of humans and environment | | |
| **Indicative financial projection, with indication of sources** | Amount: BAM 2,287,141  Source: 10% from the government budget, 90% combined ‒ loans, funds from EU and other international donors, and other donations | | |
| **Period of implementation of the measure** | 2022-2026 | | |
| **Institution responsible for coordination and implementation of the measure** | FMH | | |
| **Implementing institution** | FMH, FMET, FBiH Administration for Inspection | | |
| **Target groups** | FBiH institutions operating in the field of health and environment | | |

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| **Link with the strategic goal** | **5. Human health protection and improving well-being and quality of life for all** | | |
| **Priority** | **5.3. Efficient operation of institutions of the Federation of BiH in the field of chemical safety** | | |
| **Name of the measure** | **5.3.2. Improved coordination, collaboration and synergic approach of the competent institutions in the field of environment and health** | | |
| **Description of the measure with the general area of intervention** | This measure aims to improve coordination, cooperation and synergy of institutions responsible for effective implementation of legislation in the field of chemical safety.  General areas of intervention:   1. Establishment of a team/mechanism for cooperation between the Administration for Inspections of the Republika Srpska and the Inspectorate of the Federation of BiH, as well as the Inspectorate of Brcko District in the field of chemical safety; 2. Participation of the Federation Ministry of Health and PCC in a meeting (once a year) organized by the MCA BiH for the purpose of sharing experiences and planning future activities related to prevention, combating, treatment and reporting on poisoning to institutions in BiH and to the World Health Organization; 3. Establishment of an IT team that will link and manage data bases that exist with the ministries that have competence for chemical management; | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results of measures** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| 1. Effectiveness in sharing data and experiences of the entity and Brcko district BiH's inspection bodies in the field of chemical safety | There is no official system of reporting and coordination among inspection services of the entities and Brcko District of BiH in the area of chemical safety | Establish a team/mechanism for cooperation among the Administration for Inspections of the Republika Srpska and the Inspectorate of the Federation of BiH, as well as the Inspectorate of Brcko District in the field of chemical safety (2023) |
| 1. Efficiency of sharing data and experiences among entity / Brcko district BiH ministries in the field of health regarding the results of poison control | Poison control centres in BiH have not been appointed, so there has been no reporting on this issue to this date | Participation of the Federation Ministry of Health and PCC in a meeting (once a year) organized by the MCA BiH for the purpose of sharing experiences and planning future activities related to prevention, combating, treatment and reporting on poisoning to institutions in BiH and to the World Health Organization (2025) |
| 1. Simplicity and efficiency of data sharing in the field of chemical safety between state level, entity and Brcko District of BiH institutions in the field of chemical safety | The data on chemical safety are not systematically allocated to institutions in the fields of health and environment | Establish an IT team that will link and manage data bases that exist with the competent ministries to manage chemicals (2026) |
| **Developmental impact and contribution of the measure to achieving the priority** | Improved coordination among various levels of government, creation of a coherent system, strong inter-sectorial connections and good coordination, which are of essential importance for efficient management of chemicals | | |
| **Indicative financial projection, with indication of sources** | Amount: BAM 33,948  Source: 100% government budget | | |
| **Period of implementation of the measure** | 2022-2026 | | |
| **Institution responsible for coordination and implementation of the measure** | FMH | | |
| **Implementing institution** | FMH, FMET, FBiH Administration for Inspection | | |
| **Target groups** | FMH, FMET, Federation Administration for Inspection, MoFTER, MCA, MHSP RS, MSPCE, Brcko District of BiH, Department for Spatial Planning and Property Affairs of Brcko District of BiH, Department for Health and Other services | | |

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| **Link with the strategic goal** | **5. Human health protection and improving well-being and quality of life for all** | | |
| **Priority** | **5.3. Efficient work of institutions of the Federation of BiH in the field of chemical safety** | | |
| **Name of the measure** | **5.3.3. Improved system of registration of people who became ill or died from poisoning resulting from inadequate handling of chemical products** | | |
| **Description of the measure with the general area of intervention** | This measure aims to improve the method of registration of people who have become ill or died from poisoning resulting from inadequate handling of chemical products.  General areas of intervention:   1. Established new methodology for collecting routine statistics in the Public Health Institute of the Federation of BiH, that includes data on morbidity due to poisoning caused by inadequate handling with chemical products, disaggregated by gender and age groups; 2. Established and publicly available the statistical yearbook of the Federation Public Health Institute, which includes data on deaths caused by poisoning as a result of inappropriate handling of chemical products, disaggregated by gender and age groups. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results of measures** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| 1. Methodology for collecting data for the needs of developing statistical yearbook of the Public Health Institute of the Federation of BiH, which would include data on deaths caused by poisoning as a result of inappropriate handling of chemical products, disaggregated by gender and age groups | The Annual publication of the Public Health Institute (PHI) of the Federation of BiH do not register the frequency of diseases or deaths caused by poisoning that is a consequence of inadequate handling of chemical products. However, since 2019, the PHI has had detailed data on poisonings, disaggregated by gender and age groups. Although the system of data collection and processing exists, what is questionable is the procedure of data entry, i.e. whether all public and private health centres diligently report cases of poisoning as there is no clearly prescribed methodology or instructions for reporting | A legal act regulates the methodology for collecting data for the needs of developing statistical yearbook of the Public Health Institute of the Federation of BiH, which includes the data on deaths caused by poisoning as a result of inappropriate handling of chemical products, disaggregated by gender and age groups (2025) |
| 1. Publicly available data on lethality from non-deliberate poisoning, disaggregated by gender and age groups | The Yearbook - publication of the Public Health Institute (PHI) - does not record the frequency of diseases or deaths caused by poisoning that is a consequence of inappropriate handling of chemical products | Health Statistics Yearbook of the Federation of BiH (published by the Public Health Institute of the Federation of BiH) includes data on morbidity due to poisoning caused by inadequate handling with chemical products, disaggregated by gender and age groups (2025) |
| **Developmental impact and contribution of the measure to achieving the priority** | Enabled efficient and reliable collection of data on the diseased and deceased due to poisoning as a result of inadequate handling of chemicals, which is of essential importance for achieving SDG indicators and strategic goal indicators in the area of chemical safety | | |
| **Indicative financial projection, with indication of sources** | Amount: BAM 4,977  Source: 100% government budget | | |
| **Period of implementation of the measure** | 2022-2025 | | |
| **Institution responsible for coordination and implementation of the measure** | FMH | | |
| **Implementing institution** | Public Health Institute of Federation of BiH | | |
| **Target groups** | FMH, PHI of Federation of BiH, health institutions at the level of cantons, municipalities and cities that register the diseased, general public | | |

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| **Link with the strategic goal** | **5. Human health protection and improving well-being and quality of life for all** | | |
| **Priority** | **5.4. Reduced incidence of diseases or deaths due to poisoning as a consequence of inadequate handling of chemical products** | | |
| **Name of the measure** | **5.4.1 Raising public awareness on the risks posed by use of chemicals** | | |
| **Description of the measure with the general area of intervention** | This measure aims to enhance level of information and knowledge of harmful impact of chemicals, and on requirements that stem from the adopted legislation in the area of chemical safety.  General areas of intervention:   1. Continuous implementation of promotional and educational activities in the field of chemical management, taking into consideration aspects of gender equality, social equity and poverty, as well as the environmental impact (FMH, FMET); 2. Recognizing the field of chemical safety in the scope of public calls for raising public awareness, research and educational activities in the field of environment that is issued the Environment Protection Fund; 3. Harmonizing ongoing training of advisors for chemicals to be aligned with the data of the Federation Administration for Inspection in the field of health inspection with respect to the most common irregularities identified in the field, and with the information from FMH, PCC, and recognizing gender equality, social equity and poverty in chemical safety; 4. Preparation and implementation of joint campaign of the competent entity ministries and inspectorate of the Brcko District BiH in the field of health regarding the risks related to use of chemicals, for the purpose of protection of human health, and taking into consideration the aspects of gender equality, social equity and poverty, and environment; 5. Organisation and implementation of training of repairers of HVAC equipment and provision of certificates. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results of measures** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| a. Continuously implemented promotional and educational activities in the field of chemical management, taking into consideration other aspects of gender equality, social equality and poverty, as well as the environmental impact | Public information campaigns in media that provide information about the risks for human health and environment related to use of chemicals are rare and only implemented under special projects, not as a part of regular work of institutions | * Periodically developed educational guides/brochures/leaflets available in health institutions of the Federation of BiH (2030) * Addressing the general public through the media on the risks of use of chemicals implemented on annual level on appropriate dates when such risks are especially emphasized at international level (e.g. lead poisoning, use of pesticides, mercury poisoning, etc.) or as a part of specific project activities (2030) |
| 1. Public call for the civil society organizations, research and education centres on the topic of raising awareness on chemical safety among the population issued on annual basis | The Environment Protection Fund of has been regularly issuing public calls for projects to implement the measures from the Environmental Strategy Chemical safety has not been included in the public calls so far | Recognize chemical safety in the scope of public calls for raising public awareness, research and educational activities in the field of environment that is issued the Environmental Protection Fund of Federation of BiH (2030) |
| 1. Frequency and appropriateness of education of advisors for chemicals and users of chemicals, as well as provision of better information to legal entities in the chain of chemical safety | The system for periodic training of advisors for chemicals has not been established | Continuous training of advisors for chemicals aligned with the data of the Federation Administration for Inspection in the field of health inspection on the most common irregularities identified in the field, and with the information from FMH, PCC, and recognizing gender equality, social equity and poverty in chemical safety (2030) |
| 1. Frequency and appropriateness of educational activities targeting general public on the risks that stem from use of chemicals. | Competent institutions in the field of health and chemicals management do not inform general public on the risks posed by use of chemicals, particularly on the most common cases of poisoning and harm | Periodical educational activities targeting general public jointly implemented by the competent entity ministries and the Inspectorate of the Brcko district BiH in the field of health regarding the risks related to use of chemicals, for the purpose of protection of human health, and taking into consideration the aspects of gender equality, social equity and poverty, and environment (2030) |
| e. Periodic organisation and implementation of training of repairers of HVAC equipment and provision of certificates | Piece of legislation that regulates the training of repairers of HVAC equipment has not yet been adopted | The HVAC equipment repairers trained and given the certificates of passed exam in accordance with applicable legislation in the field of managing ozone depleting substances (2024) |
| **Developmental impact and contribution of the measure to achieving the priority** | Higher awareness of population and users of chemicals on adequate handling and negative effects of chemicals on environment and human health | | |
| **Indicative financial projection, with indication of sources** | Amount: BAM 501,659  Source: 10% from the government budget, 90% combined ‒ loans, funds from EU and other international donors, and other donations | | |
| **Period of implementation of the measure** | 2024‒2030 | | |
| **Institution responsible for coordination and implementation of the measure** | FMH | | |
| **Implementing institution** | FMH, FMET Federation of BiH Administration for Inspection, Public Health Institute of Federation of BiH | | |
| **Target groups** | FMH, FMET, Federation of BiH Administration for Inspection, MoFTER, MCA, MHSP RS, MSPCE, Brcko District of BiH - Department for Spatial Planning and Property Affairs, Brcko District of BiH - Department for Health and Other services, scientific and research centres, non-governmental organizations and general public | | |

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| **Link with the strategic goal** | **5. Human health protection and improving well-being and quality of life for all** | | |
| **Priority** | **5.5. Establish a legislative framework and clear institutional competences to transpose EU acquis on environmental noise in legislation of the Federation of BiH** | | |
| **Name of the measure** | **5.5.1 Established legislative framework and institutional competences on noise evaluation and management, noise emission by outdoor equipment, in accordance with requirements of Directive 2002/49/EC and 2000/14/EC** | | |
| **Description of the measure with the general area of intervention** | This measure aims to achieve partial transposition of EU directives and establishment of institutional framework in the area of managing protection against noise.  General areas of intervention:   1. Updating current Law on Noise Protection to clearly define institutional competences; 2. Development of secondary legislation (bylaws) that follow from the Law on Noise, which regulate development of strategic noise maps and noise protection action plans, in accordance with requirements of the Directive 2002/49/EC; 3. Law or secondary legislation (bylaws) to prescribe clear institutional competences and obligations regarding noise emission by outdoor equipment. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results of measures** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| 1. Status of transposition of EU regulations on environmental noise | Low level of transposition of the Directive 2002/49/EC on environmental noise and | Updated current Law on Noise Protection, including clear description of institutional competences (2025) |
| 1. Status of secondary legislation (bylaws) that follow from the Law on Noise, which regulate development of strategic noise maps and noise protection action plans, in accordance with requirements of the Directive 2002/49/EC | Low level of transposition of the Directive 2002/49/EC on environmental noise. Upon harmonisation of the Law on Noise Protection, it will be necessary to adopt secondary legislation (bylaws) to closely define the area of development of strategic noise maps and noise protection action plans | Developed and adopted secondary legislation (bylaws) that follow from the Law on Noise, which regulate development of strategic noise maps and noise protection action plans, in accordance with requirements of the Directive 2002/49/EC  (2026) |
| 1. Status of transposition of EU regulations on environmental noise emission by outdoor equipment | There is no legal basis for transposition of the Directive 2000/14/EC regarding harmonisation of legislation of member countries regulating the environmental noise emission by outdoor equipment | Law or secondary legislation (bylaws) to prescribe obligations and establish clear institutional competences and obligations regarding noise emission by outdoor equipment (2031) |
| **Developmental impact and contribution of the measure to achieving the priority** | Improvement of noise management and progress in the process of European integrations by aligning the national legislation with the EU acquis | | |
| **Indicative financial projection, with indication of sources** | Amount: BAM 115,345  Source: 100% government budget | | |
| **Period of implementation of the measure** | 2025-2031 | | |
| **Institution responsible for coordination and implementation of the measure** | FMET | | |
| **Implementing institution** | FMET, FMH, FMET, in cooperation with other line ministries responsible for planning, transport and health | | |
| **Target groups** | Federation of BiH, cantonal and city administrative bodies, administrative organisations and public companies competent for noise management, citizens of the Federation of BiH | | |

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| **Link with the strategic goal** | **5. Human health protection and improving well-being and quality of life for all** | | |
| **Priority** | **5.6. Enhance strategic planning and monitoring of environmental noise** | | |
| **Name of the measure** | **5.6.1 Development of noise maps and action plan** | | |
| **Description of the measure with the general area of intervention** | This measure aims to implement legislation on noise management and protection against noise.  General areas of intervention:   1. Analysis of road, railway and airport transport in the Federation of BiH for the purpose of identifying the "major roads", "major railways" and "major airports" in line with recommendations from Directive 2002/49/EC; 2. Development of noise maps for previously identified "inhabited areas", "major roads", "major railways", and "major airports" by use of the prescribed models; 3. Estimating number of people exposed to noise, by classes of noise and age groups; 4. Development of noise management action plans for five-year period, which will be based on entry data and results of strategic noise maps; 5. Establishment of a noise monitoring system, which would check the noise levels at selected locations that are determined in the forecasting model, and verification of successfulness of implementation of measures from the action plan. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results of measures** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| 1. Status of identification of priority sections of road and railway transport and airports (major roads, major railways and major airports) for which the strategic noise maps are to be made in accordance with recommendations of Directive 2002/49/EC | Priority sections of roads or railways, airports or administrative centres for which the strategic noise maps will be done have not been identified | Identified "major roads", "major airports", and "major railways" in accordance with recommendations of Directive 2002/49/EC |
| 1. Status of strategic noise maps for inhabited areas, identified major roads, airports and railways in accordance with previously established priorities in the Federation of BiH | Noise maps for inhabited areas, roads, airports and railways in the Federation of BiH have not been developed | Developed strategic noise maps for inhabited areas, identified major roads, airports and railways in accordance with previously established priorities in the Federation of BiH (2027) |
| 1. Status of the estimation of number of people exposed to noise, by classes of noise and age groups | There is no estimate of number of people exposed to noise in Federation of BiH | Estimated number of people exposed to noise, by classes of noise and age groups (2027) |
| 1. Status of development of noise protection action plan in the Federation of BiH | There are no developed noise protection action plans for Federation of BiH | Action plans for five-year period, based on entry data and results of strategic noise maps developed (2029) |
| 1. Sustainable noise monitoring system | A noise monitoring system, that measures the noise levels at selected locations determined in the forecasting model, and verifies effectiveness of implementation of measures from the action plan, has not been established | Established noise monitoring system to measure the noise levels at selected locations that are determined in the forecasting model, and verify effectiveness of measures from the action plan developed after the noise maps (2031) |
| **Developmental impact and contribution of the measure to achieving the priority** | Reduced level of noise the population is exposed to | | |
| **Indicative financial projection, with indication of sources** | Amount: BAM 905,774  Source: 10% from the government budget, 90% combined ‒ loans, funds from EU and other international donors, and other donations | | |
| **Period of implementation of the measure** | 2025‒2031 | | |
| **Institution responsible for coordination and implementation of the measure** | FMET | | |
| **Implementing institution** | FMH, FMET, Zenica-Doboj Canton, Herzegovina-Neretva Canton, Tuzla Canton and Canton Sarajevo, cities of Mostar, Sarajevo, Tuzla and Zenica, Ministry of Transport and Communication of the Federation of BiH | | |
| **Target groups** | Federation of BiH, cantonal and city administrative bodies, administrative organisations and public companies competent for noise management, citizens of the Federation of BiH | | |

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| **Link with the strategic goal** | **5. Human health protection and improving well-being and quality of life for all** | | |
| **Priority** | **5.7. Efficient operation of institutions in the area of environmental noise** | | |
| **Name of the measure** | **5.7.1 Improve capacities and competences of civil servants in the area of noise management** | | |
| **Description of the measure with the general area of intervention** | This measure aims to strengthen technical and human capacities of the competent authorities for the purpose of implementing legislation in the field of noise management.  General areas of intervention:   1. Analyse capacities of civil servants in competent institutions once the legislation foreseen in this Plan were adopted; 2. Hire and train new people in public services (Federation, cantonal) in the field of environmental noise, in accordance with the requirements of the new legislation and the analysis previously made; 3. Developed plan and curriculum for annual training of civil servants in the area of environmental noise, and first training implemented by 2024; 4. Implement a pilot project of strategic noise mapping in some of the cities or parts of the cities, as well as along some of the main communications for the purpose of acquiring skills and technical competencies, and determining the baseline parameters; 5. Upgrading of the existing information system of the Environmental Protection Fund of Federation of BiH that will enable development and presentation of strategic noise maps in Federation of BiH; 6. Establishment of inspection oversight in the area of environmental noise. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results of measures** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| 1. Status of analysis of capacities of public servants in competent institutions once the legislation foreseen in this Plan were adopted | No analysis of capacities of civil servants in competent institutions has been done | Analysis of capacities of public servants in competent institutions once the legislation foreseen in this Plan were adopted is completed (2024) |
| 1. Status of realization of shortcomings identified through the analysis of capacities of responsible institutions after the adoption of legislation on environmental noise | There is no relevant analysis of capacities of responsible institutions It needs to be made, and possibly updated once the proposed legislation is drafted | Hire and train new people in institutions in the field of chemical safety, in accordance with the requirements of the new legislation and the analysis previously made (2025) |
| 1. Implementation status of the plan and programme of annual training of civil servants on the topic of environmental noise | There is no plan and programme of annual training of civil servants on the topic of environmental noise | Developed plan and programme of annual training of civil servants in the area of environmental noise, and first training implemented (2026) |
| 1. Enhancing expert and technical competences for development of strategic noise maps and determining baseline parameters | Lacking human and technical capacities for improving skills and technical competences for development of strategic noise maps and determining baseline parameters | Enhanced human and technical capacities for improving skills and technical competences for development of strategic noise maps and determining baseline parameters (2026) |
| 1. Status of development of a pilot project of strategic noise mapping in some of the cities or parts of the cities, as well as along some of the main communications for the purpose of acquiring skills and technical competencies, and determining the baseline parameters | Insufficient experiences and competencies of representatives of public institutions with respect to development of strategic noise maps | Implement a pilot project of strategic noise mapping in some of the cities or parts of the cities, as well as along some of the main communications for the purpose of acquiring skills and technical competencies, and determining the baseline parameters (2026) |
| 1. Status of information system of the Environmental Protection Fund of Federation of BiH for publication of strategic noise maps | There is no information system in Federation of BiH for presentation of strategic noise maps | Information system of the Environmental Protection Fund of Federation of BiH adapted to allow for presentation of strategic noise maps in the Federation of BiH (2028) |
|  | 1. Status of inspection oversight in the area of environmental noise | Inspection oversight of protection against noise has not been established | Established inspection oversight in the area of environmental noise (2026) |
| **Developmental impact and contribution of the measure to achieving the priority** | Improved strategic approach to noise management | | |
| **Indicative financial projection, with indication of sources** | Amount: BAM 1,368,644  Source: 20% from the government budget, 80% combined ‒ loans, funds from EU and other international donors, and other donations | | |
| **Period of implementation of the measure** | 2024‒2028 | | |
| **Institution responsible for coordination and implementation of the measure** | FMET | | |
| **Implementing institution** | FMH, FMET, Zenica-Doboj Canton, Herzegovina-Neretva Canton, Tuzla Canton and Canton Sarajevo, cities of Mostar, Sarajevo, Tuzla and Zenica, Ministry of Transport and Communication of the Federation of BiH | | |
| **Target groups** | Federation of BiH, cantonal and city administrative bodies, administrative organisations and public companies competent for noise management, citizens of the Federation of BiH | | |

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| **Link with the strategic goal** | **5. Human health protection and improving well-being and quality of life for all** | | |
| **Priority** | **5.8. Reduce the risk to human health from environmental noise** | | |
| **Name of the measure** | **5.8.1 Improve level of information and knowledge of general public on negative impact of noise and their role in decision-making process** | | |
| **Description of the measure with the general area of intervention** | This measure enhances level of information and knowledge of harmful impact of noise on human health, and of requirements that stem from the adopted legislation in the area of protection against noise.  General areas of intervention:   1. Competent institutions should implement at least one campaign in five years regarding harmful effect of noise on health of population (taking into consideration gender equality, social equity and poverty) and environment, and the role of the public in decision-making process; 2. Make general assessment of impact of noise on people’s health (taking into consideration aspects of gender equality, social equity and poverty) in zones exposed to noise; 3. Recognizing the field of environmental noise in the scope of public calls for raising public awareness, research and educational activities in the field of environment that is issued the Environmental Protection Fund of the Federation of BiH; 4. Implementation of continuous promotional and educational activities at the level of health institutions regarding the risks related to the impact of noise on health, as well as preventative measures that can be used; 5. Setting up displays along the roads in major cities showing the level of noise as measured at that moment. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results of measures** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| 1. Informing population on harmful effects of noise on human health | There are no campaigns related to protection of environment and health of population | Implemented at least one campaign in five years by competent institutions regarding harmful effect of noise on health of population (taking into consideration gender equality, social equity and poverty) and environment, and the role of the public in decision-making process (2025) |
| 1. Level of impact of noise on people’s health in zones of higher exposure to noise | Effects of noise on general health of population, or most frequent disorders appearing in the areas with increased level of noise, are not known. | Developed population scientific research by health institution on the most common illnesses appearing in the high-noise zones (taking into consideration gender equality, social equity and poverty) (2029) |
| 1. Public call for the civil society organizations, research and education centres on the topic of raising awareness on environmental noise and its effect on health issued on annual basis | The Environmental Protection Fund of has been regularly issuing public calls for projects to implement the measures from the Environmental Strategy So far, topic of environmental noise and impact of noise on human health has not been included in public call | Recognize environmental noise and impact of noise on human health within the scope of public calls for raising public awareness, research and educational activities in the field of environment that is issued the Environment Protection Fund of Federation of BiH (2030) |
| 1. Representation of institutions of primary health care (health centres) in promotional and educational activities the purpose of which is to inform general public on the risks of harmful impact of noise on health of population | Health institutions of primary health care are the closest to general public and can contribute to prevention of risks for health of population by means of educational posters, brochures, etc. So far, noise has not been presented as a health risk in educational campaigns | Implementation of continuous promotional and educational activities at the level of health institutions regarding the risks related to the impact of noise on health, as well as preventative measures that can be used (2028) |
| 1. Continually draw attention of population to increased noise in their near environment | Population is not aware of increased levels of noise along main roads, which they may also contribute to or are exposed to | Installed displays along the roads in major cities showing the level of noise in real time (2026) |
| **Developmental impact and contribution of the measure to achieving the priority** | Citizens' awareness on harmful impact of noise is at a higher level | | |
| **Indicative financial projection, with indication of sources** | Amount: BAM 576,133  Source: 100% funds from EU and other international donors | | |
| **Period of implementation of the measure** | 2025‒2030 | | |
| **Institution responsible for coordination and implementation of the measure** | FMET in cooperation with FMH | | |
| **Implementing institution** | FMET in cooperation with FMH | | |
| **Target groups** | General public | | |

* 1. Annex 6 A detailed overview of measures for Sustainable resource management

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| **Link with the strategic goal** | **6. Sustainable resource management** | | |
| **Priority** | **6.1. Establish an effective legal, strategic and institutional framework for sustainable forest and forest resources management in the Federation of BiH, appropriate valuation of forest resources, and ensure integration of gender and climate change issues** | | |
| **Name of the Measure** | **6.1.1 Establishing strategic and legal framework for sustainable management of forest resources** | | |
| **Description of the measure with the general area of intervention** | This measure aims to create strategic and legal framework for sustainable management of forest resources based on the principles of multi-functionality and protection of biodiversity of forest ecosystems, to be applicable to private and state owned forests.  Achieving this goal includes a range of legislative, planning and institutional measures:   * Adopting the Proposal of the Law on Forests - which is in the parliamentary procedure; * Development and adoption of amendments to the Law on Forests with the aim of further alignment of the Law with international conventions and EU directives; * Adoption of bylaws specifying the content and method of developing forest management plans for privately and state-owned forests, scope and methodology of monitoring health status of forests, monitoring indicators of sustainable use of forests and reporting, issuing licenses for pickers of non-timber forest products; * Identification of principles and criteria for sustainable forest management, which will be sensitive to the social inequality issues, in line with the EU Forest Strategy (COM(2021)572), as the European reference framework for development of sector policies that impact forests, and European Green Deal, the Road Map. Criteria and principles need to be harmonized among entities and Brcko district of BiH; * Adoption of Forestry Programme of Federation of BiH and adoption of the Executive Part of the Forestry Programme of Federation of BiH (strategic documents); * Definition of standard methodology for development of forest management plans, while at the same time recognizing planning for other functions of forests, planning the use of bio-mass and non-timber forest products, as well as the protective role of forests; * Training the employees to use new methodology when developing forest management plans, and when implementing them and monitoring the performance of the forest management activities; * Demonstrating the use of the new methodology in at least 2 pilot forest areas; * Successive development of FMP in accordance with standard methodology for all forest areas; * Development of models for admeasuring and developing private forests, but also for management of private forests; * Training of private forest owners on the new methods of forest management; * Development of management plans for privately owned forests. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results of measures** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| Existence of Law on Forests | Federation of BiH does not have a law on forests | By 2022, Federation of BiH adopted the Law on Forests  By 2023, Federation of BiH adopted amendments to the law on forests |
| Existence of secondary legislation (bylaws) | Federation of BiH does not have in place the bylaws specifying the content and method of developing forest management plans for privately and state-owned forests based on principles of multi-functionality and protection of biodiversity, scope and methodology of monitoring health status of forests, monitoring indicators of sustainable use of forests and reporting, issuing licenses for pickers of non-timber forest products | By the end of 2023, secondary legislation adopted |
| Existence of principles and criteria of sustainable forest management | Federation of BiH has not established principles and criteria of sustainable management, sensitive to social inequality issues, in line with the EU Forest Strategy, European Green Plan and Road Map | By the end of 2023, adopted principles and criteria of sustainable forest management |
| Existence of Forestry Programme of the Federation of BiH and Executive Part of the Forestry Programme (documents defining long-term policy and strategy of development of forestry and hunting) | Federation of BiH has not adopted the Forestry programme and action plan | By the end of 2022, adopt Forestry Programme of the Federation of BiH; the Executive Part of Forestry Programme adopted by the end of 2024 |
| Existence of standard methodology in development of forest management plans (FMP) | The existing methodology of developing FMPs does not recognize in full the planning of other forest functions, planning use of the biomass | By the end of 2025, adopted standard methodology for developing FMP |
| Share of staff trained in use of the new methodologies for development of FMP, and FMP implementation and monitoring | Staff in working on development of FMPs do not possess satisfactory level of knowledge and skills for planning for other functions of forests, planning the use of bio-mass and non-timber forest products, and the protective role of forests 0%, | By the end of 2025, 100% of staff completed the training programme in use of new methodology for FMP development, FMP implementation and monitoring |
| Number of areas where the new FMP methodology is used. | 0 | 2 pilot areas by the end of 2025 |
| Number of FMPs developed in accordance with the new standard methodology | 0 | Successively develop FMPs for all forest areas (100%) |
| Percentage of private forest owners trained in the new methods of forest management | 0%, | By 2028, complete training of private forest owners on the new ways of forest management |
| **Developmental impact and contribution of the measure to achieving the priorities** | Strengthening the system of strategic planning of natural resources Improving coordination among various levels of government by creating a coherent system, with strong inter-sectorial connections and good coordination, which is of essential importance for efficient management of natural resources | | |
| **Indicative financial projection, with indication of sources** | Amount: BAM 165,984  Source: 10% from the government budget, 90% from EU and other international donors | | |
| **Period of implementation of the measure** | 2022‒2030 | | |
| **Institution responsible for coordination and implementation of the measure** | Federation of BiH Ministry of Agriculture, Forestry and Water Management | | |
| **Implementing institution** | Parliament of the Federation of BiH, Government of the Federation of BiH, Federation Ministry of Agriculture, Water Management and Forestry and competent cantonal ministries | | |
| **Target groups** | Competent Federation of BiH and cantonal ministries, cantonal forest management companies, forest users, private forest owners | | |

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| **Link with the strategic goal** | **6. Sustainable resource management** | | |
| **Priority** | **6.1. Establish an effective legal, strategic and institutional framework for sustainable forest and forest resources management in the Federation of BiH, appropriate valuation of forest resources, and ensure integration of gender and climate change issues** | | |
| **Name of the measure** | **6.1.2. Establishing a system of control of picking medicinal, edible and aromatic plants and non-timber forest products** | | |
| **Description of the measure with the general area of intervention** | This measure aims to establish a systematic framework for achieving sustainability in collecting medicinal, edible and aromatic plants and other non-timber forest products.  The measure implies activities focusing on introduction of certification system:   * Development of an action plan for introduction of a system of certification in the sector of use of medicinal, edible and aromatic plants and other non-timber forest products; * Establishment of a system for certification in the sector of use of medicinal, edible and aromatic plants and other non-timber forest products on a fair and inclusive basis;   Introduction of certification system is a measure planned to be implemented in coordination with the Ministry of Foreign Trade and Economic Relations of BiH and the competent ministries of the Federation of BiH, Republika Srpska and the Government of Brcko district of BiH.  A prerequisite for starting the implementation of this measure is adoption of the Law on Forests and the secondary legislation (bylaw) that will regulate conditions for growing, using and trading with non-timber forest products, as planned under Measure 6.1.1. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results of measures** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| Existence of an action plan for introduction of a system of certification in the sector of use of medicinal, edible and aromatic plants and other non-timber forest products | In the Federation of BiH, there is no system of certification in the sector of use of medicinal, edible and aromatic plants and other non-timber forest products. | By the end of 2025, the Action Plan adopted |
| Existence of a system for certification in the sector of use of medicinal, edible and aromatic plants and other non-timber forest products on a fair and inclusive basis | In the Federation of BiH, there is no system of certification in the sector of use of medicinal, edible and aromatic plants and other non-timber forest products | By the end of 2027, establish the certification system |
| **Developmental impact and contribution of the measure to achieving the priority** | Sustainable use of medicinal, edible and aromatic plants and non-timber forest products as potential for diversification of economic activities, particularly in rural areas | | |
| **Indicative financial projection, with indication of sources** | Amount: BAM 313,281  Source: 20% from the government budget, 80% from EU and other international donors | | |
| **Period of implementation of the measure** | 2025‒2027 | | |
| **Institution responsible for coordination and implementation of the measure** | Ministry of Foreign Trade and Economic Relations of BiH | | |
| **Implementing institution** | Ministry of Foreign Trade and Economic Relations of BiH  Federation of BiH Ministry of Agriculture, Water Management and Forestry  Competent cantonal ministries | | |
| **Target groups** | Competent Federation of BiH and cantonal ministries, forest users, private forest owners, pickers | | |

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| **Link with the strategic goal** | **6. Sustainable resource management** | | |
| **Priority** | **6.1. Establish an effective legal, strategic and institutional framework for sustainable forest and forest resources management in the Federation of BiH, appropriate valuation of forest resources, and ensure integration of gender and climate change issues** | | |
| **Name of the measure** | **6.1.3. Establishing regular monitoring of forest health status** | | |
| **Description of the measure with the general area of intervention** | This measure aims to establish regular monitoring of health status of forests that will include monitoring of changes in forest ecosystems in terms of the species diversity status, changed areas, health status, and other biotic and abiotic factors. The measure includes following activities:   * Development of a method for harmonized sampling and assessment and monitoring of the status of forests in accordance with previously identified indicators; * Adoption of a rulebook specifying the method of monitoring health status of forests, method of conducting health protection of forests, and reporting methods; * Identifying a network of monitoring points; * Provision of training and developing capacities of forest users to carry out monitoring of forest status in accordance with the identified programme. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results of measures** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| Existence of the method for harmonized sampling, assessment and monitoring status of forests, in accordance with previously identified indicators | In the Federation of BiH, there is no identified standard method for sampling, assessment and monitoring status of forests | By the end of 2023, adopted the standardized method |
| Existence of a rulebook specifying the method of monitoring health status of forests, method of conducting health protection of forests, and reporting methods | In the Federation of BiH, existence of standardised sampling, assessment and monitoring of status of forests is not regulated by law | By the end of 2024, adopt the Rulebook |
| Existence of a network of monitoring points | In Federation of BiH, the network of monitoring points has not been identified | By the end of 2025, identify and set up a network of monitoring points |
| % of forest users and cantonal forest management companies trained to carry out monitoring of forest status in accordance with the new method | Forest users and cantonal forest management companies have not had training programmes regarding sampling, assessment and monitoring the status of forests | By the end of 2026, all forest users and cantonal forest management companies have received training (100%) |
| **Developmental impact and contribution of the measure to achieving the priorities** | Improvement of forest management | | |
| **Indicative financial projection, with indication of sources** | Amount: BAM 100,778  Source: 100% government budget | | |
| **Period of implementation of the measure** | 2022‒2026 | | |
| **Institution responsible for coordination and implementation of the measure** | Federation of BiH Ministry of Agriculture, Forestry and Water Management | | |
| **Implementing institution** | Federation of BiH Ministry of Agriculture, Forestry and Water Management  Competent cantonal ministries | | |
| **Target groups** | Competent ministries  Cantonal forest management companies  Forest users | | |

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| **Link with the strategic goal** | **6. Sustainable resource management** | | |
| **Priority** | **6.1. Establish an effective legal, strategic and institutional framework for sustainable forest and forest resources management in the Federation of BiH, appropriate valuation of forest resources, and ensure integration of gender and climate change issues** | | |
| **Name of the measure** | **6.1.4. Enhancing access to forests and training forest users in early detection and prevention of forest fires** | | |
| **Description of the measure with the general area of intervention** | This measure aims to ensure conditions for early detection and prevention of forest fires and includes technical, equipment procurement measures and training of the forest users’ employees. The measure includes following activities:   * Developing plans for construction of fire-breaks (cuts through the growth); * Procurement of vehicles and appropriate techniques and tools for cutting trees and making fire-breaks for the needs of forest management companies; * Construction of fire-beaks with elements of forest roads; * Procurement and installation of informative boards and signs warning of fire danger on the territories of all forest users * Procurement of equipment for spatial observation and remote surveillance; * Training the employees for spatial observation and remote surveillance;   Equipment for spatial observation and remote surveillance includes not only equipment for early detection of fires, but also the equipment for monitoring health status of forests (measure 6.1.3) (optical sensors and cameras, drones, smart devices for registering status and taking photographs with the ability to transfer data to GIS). | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results of measures** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| Existence of plans for construction of fire-breaks (cuts through the growth) | Forest management areas in the Federation of BiH are not fully covered by plans for construction of fire-breaks | By 2023, developed plans for construction of firebreaks |
| Existence of vehicles and technical equipment for construction of fire-breaks (cuts through the growth) | Forest users are not adequately equipped with vehicles, technical equipment and tools for cutting trees and making the firebreaks | By 2025, procured equipment for all forest users |
| Existence of fire-beaks with elements of forest roads | Construction of fire-beaks with elements of forest roads | By the end of 2027, completed construction of fire-breaks on the territories of all forest management areas |
| Existence of informational boards and warning signs for prevention of fires | Procurement and installation of informative boards and signs warning of fire danger on the territories of all forest users | By the end of 2025, all forest users will have installed the warning signs |
| Existence of equipment for spatial observation and remote surveillance | Forest users do not have equipment for observation and remote surveillance | By 2026, observation and remote surveillance equipment procured |
| % of forest users trained in spatial observation and remote surveillance | Forest users do not have sufficient capacities for observation and remote surveillance | By 2027, completed training of employees of all forest users in observation and surveillance |
| **Developmental impact and contribution of the measure to achieving the priorities** | Improved fire safety | | |
| **Indicative financial projection, with indication of sources** | Amount: BAM 8,996,818  Source: 10% from the government budget, 90% from EU and other international donors | | |
| **Period of implementation of the measure** | 2022‒2027 | | |
| **Institution responsible for coordination and implementation of the measure** | Federation of BiH Ministry of Agriculture, Forestry and Water Management | | |
| **Implementing institution** | Forest users  Competent cantonal ministries, cantonal forest management companies | | |
| **Target groups** | Competent cantonal ministries, cantonal forestry management companies  Forest users | | |

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| **Link with the strategic goal** | **6. Sustainable resource management** | | |
| **Priority** | **6.1. Establish an effective legal, strategic and institutional framework for sustainable forest and forest resources management in the Federation of BiH, appropriate valuation of forest resources, and ensure integration of gender and climate change issues** | | |
| **Name of the measure** | **6.1.5. Afforestation of barren land and transition of coppice forests into high forests** | | |
| **Description of the measure with the general area of intervention** | This measure aims to increase the total area under forest in Federation of BiH and thus contribute to prevention of climate change. The measure focuses on afforestation of barren land and transition of coppice forests into high forests:   * Adoption of the Law on Reproduction Material of Forest and Decorative Trees and Bushes on the basis of which the Rulebook on provenience of forest trees will be defined; * Adoption of a rulebook that would establish the regions of provenience and prescribe the method, procedure and conditions for evaluating and recognizing the starting material of the forest trees; * Increasing the land area under high forests by transitioning at least 20% of current land under coppice forests and bushes transitioned into higher form, where possible; * Development of a gender sensitive afforestation plan for the karst and barren land in Federation of BiH * Afforestation of at least 10 % of the current karst and barren land. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results of measures** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| Existence of legislation that would establish the regions of provenience and prescribe the method, procedure and conditions for evaluating and recognizing the starting material of the forest trees | Regions of provenience, method, procedure and conditions for evaluation and recognition of forest trees starting material in Federation of BiH have not been prescribed | By the end of 2023, adopt the Law on Reproduction Material of Forest and Decorative Trees and Bushes on the basis of which the Rulebook on provenience of forest trees will be defined |
| Areas under coppice forests | Area under coppice forests is 257,879.6 ha | By 2026, reduced area under coppice forests and bushes by 50,000 ha and transitioned into the higher form |
| Area of productive barren land suitable for afforestation | Area of productive barren land suitable for afforestation is 159,913.5 ha | By 2031, 16,000 ha of current territory of karst and barren land afforested |
| **Developmental impact and contribution of the measure to achieving the priorities** | Improvement of the forest management forests and increased resilience to climate change in the Federation of BiH | | |
| **Indicative financial projection, with indication of sources** | Amount: BAM 132,163,137  Source: 10% from the government budget, 90% combined ‒ loans, funds from EU and other international donors, and other donations | | |
| **Period of implementation of the measure** | 2023‒2031 | | |
| **Institution responsible for coordination and implementation of the measure** | Federation of BiH Ministry of Agriculture, Forestry and Water Management | | |
| **Implementing institution** | Federation of BiH Ministry of Agriculture, Forestry and Water Management  Competent cantonal ministries, forest users | | |
| **Target groups** | Competent ministries  Cantonal forest management companies, forest users | | |

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| **Link with the strategic goal** | **6. Sustainable resource management** | | |
| **Priority** | **6.1. Establish an effective legal, strategic and institutional framework for sustainable forest and forest resources management in the Federation of BiH, appropriate valuation of forest resources, and ensure integration of gender and climate change issues** | | |
| **Name of the measure** | **6.1.6. Establishment of a Forest Information System** | | |
| **Description of the measure with the general area of intervention** | This measure aims to establish a forest information system FIS is to create IT preconditions for sustainable management of forest resources.  FIS should include priority themes for data and information on forests, such as main information on forests, natural and biological diversity, forest and climate change (impacts, adaptation and mitigation), forest health and resilience (natural disruptions, fires and pests) and (forest) bio-economy.  Part of the information system is already developed, but the work and harmonisation of the structure with the EU’s Forest Information System in Europe (FISE) needs to continue.  This activity should be preceded by urgent adoption and publication of the data from the II Forest Inventory. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results of measures** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| Existence of a FIS aligned with the EU’s Forest Information System for Europe (FISE) | Part of the information system is already developed, but the work and harmonisation of the structure with the EU’s Forest Information System in Europe (FISE) needs to continue | By the end of 2025, established harmonised FIS |
| **Developmental impact and contribution of the measure to achieving the priority** | Improving the forest management system | | |
| **Indicative financial projection, with indication of sources** | Amount: BAM 136,908  Source: 30% from the government budget, 70% funds from EU and other international donors | | |
| **Period of implementation of the measure** | 2023‒2025 | | |
| **Institution responsible for coordination and implementation of the measure** | Federation of BiH Ministry of Agriculture, Forestry and Water Management | | |
| **Implementing institution** | Federation of BiH Ministry of Agriculture, Forestry and Water Management  Competent cantonal ministries, cantonal forest management companies | | |
| **Target groups** | Competent cantonal ministries  Cantonal forest management companies, forest users | | |

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| **Link with the strategic goal** | **6. Sustainable resource management** | | |
| **Priority** | **6.2. Enhance legal, strategic and institutional frameworks for sustainable management of hunting game** | | |
| **Name of the measure** | **6.2.1 Establish a harmonized regulatory framework for establishing hunting grounds, managing the population and planned rearing of wild game** | | |
| **Description of the measure with the general area of intervention** | This measure aims to harmonise the legislation on hunting with the relevant EU directives and international agreements regarding biodiversity.  This measure involves:   * Adoption of a new, harmonised Law on Hunting; * Adoption of a set of new bylaws, in accordance with the new law. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results of measures** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| Existence of legislation on hunting aligned with EU directives and international agreements related to biodiversity | Law on hunting of the Federation of BiH is not fully aligned with EU directives and international agreements on biodiversity | By the end of 2024, adopted harmonised Law on Hunting and set of bylaws, in accordance with the new law |
| **Developmental impact and contribution of the measure to achieving the priority** | Improved management of hunting game | | |
| **Indicative financial projection, with indication of sources** | Amount: BAM 1,643  Source: 100% government budget | | |
| **Period of implementation of the measure** | 2022‒2024 | | |
| **Institution responsible for coordination and implementation of the measure** | Federation of BiH Ministry of Agriculture, Forestry and Water Management  Competent cantonal ministries | | |
| **Implementing institution** | Parliament of the Federation of BiH, Government of the Federation of BiH, Federation Ministry of Agriculture, Water Management and Forestry  Competent cantonal ministries, users of hunting grounds | | |
| **Target groups** | Federation Ministry of Agriculture, Forestry and Water Management  Competent cantonal ministries, users of hunting grounds (hunting associations, forest management companies) | | |

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| **Link with the strategic goal** | **6. Sustainable resource management** | | |
| **Priority** | **6.2. Enhance strategic, legal and institutional frameworks for sustainable management of hunting grounds and game** | | |
| **Name of the measure** | **6.2.2. Improve the system of planning and managing hunting grounds and game** | | |
| **Description of the measure with the general area of intervention** | This measure aims to provide preconditions for efficient game management planning, recognizing administrative borders, but in such a way that the borders are not an obstacle. Implementation of this measure requires:   * Conduct categorization, establishment and assigning of the hunting grounds for use, in accordance with provisions of the new Law (Measure 6.2.1); * Establish in all hunting grounds of a technical service for overseeing and implementing measures from laws and plans * Develop and adopt plans for managing wild game population of wolf, bear and lynx, harmonized with the corresponding plans of Republika Srpska; * Develop hunting management plans for all hunting grounds in accordance with applicable legislation in the Federation of BiH and international legislation in this area; * Establish a separate module for hunting within the forestry information system. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results of measures** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| Existence of categorization, establishment and assigning the hunting grounds for use | Categorization, establishment and assignment of the hunting grounds in Federation of BiH are not fully completed | By the end of 2024, completed categorization, establishment and assigning the hunting grounds for use |
| Existence of a technical service for oversight and implementation of measures foreseen in laws and plans | Technical service for oversight and implementation of measures from laws and plans has not been established in all hunting grounds in the Federation of BiH | By the end of 2024, established in all hunting grounds the technical services for supervision and implementation of measures from laws and plans |
| Existence of plans for managing wild population of wolf, bear, and lynx | In the Federation of BiH, planned approach to managing wild population of wolf, bear, and lynx is not established | By the end of 2025, adopted plans for managing wild population of wolf, bear, and lynx, harmonized with the corresponding plans of Republika Srpska |
| Existence of hunting grounds management plans that recognize principles of protection of species, in accordance with conventions and EU directives | In the Federation of BiH, hunting grounds management plans for a limited number of hunting grounds have not been developed in a way that recognizes principle of protection of species, in accordance with conventions and EU directives regarding biodiversity | By the end of 2024, developed management plans for all hunting grounds, which recognize principles of protection of species, in accordance with conventions and EU directives |
| Existence of functional module in IT system for hunting | Forestry information system in the Federation of BiH is under development, the module for hunting is not yet functional | By the end of 2025, hunting module functional |
| **Developmental impact and contribution of the measure to achieving the priority** | Improved management of hunting game | | |
| **Indicative financial projection, with indication of sources** | Amount: BAM 1,761,233  Source: 10% from the government budget, 90% from EU and other international donors | | |
| **Period of implementation of the measure** | 2023‒2025 | | |
| **Institution responsible for coordination and implementation of the measure** | Federation of BiH Ministry of Agriculture, Forestry and Water Management  Competent cantonal ministries | | |
| **Implementing institution** | Competent cantonal ministries  hunting ground users | | |
| **Target groups** | Federation of BiH Ministry of Agriculture, Forestry and Water Management  Competent cantonal ministries, users of hunting grounds | | |

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| **Link with the strategic goal** | **6. Sustainable resource management** | | |
| **Priority** | **6.3. Improve legal, strategic and institutional frameworks for sustainable management of fish stock** | | |
| **Name of the measure** | **6.3.1 Harmonisation of the regulatory framework for fishing with the EU acquis and international conventions** | | |
| **Description of the measure with the general area of intervention** | This measure aims to align legislation that applies on fisheries with EU acquis and regulate commercial fishing on sea, and align legislation on fisheries with legislation on waters. The following activities are included:   * Adoption of a law and bylaws on commercial fishing at sea, harmonized with the common fisheries policy, commitments under EU Directives, and international agreements; * Harmonization of the Law on Fresh Water Fishing with the laws in the area of waters and requirements of international conventions and EU directives in the area of fisheries and biodiversity; * Adoption of Agricultural Sector Development Strategy 2022-2028, aligned with the common EU strategy for fisheries and aquaculture; * Successive preparation of fisheries management plans in line with the new Law on Fresh Water Fishing. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results of measures** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| Existence of legal framework on commercial fishing at sea, harmonized with the common fisheries policy, commitments under EU Directives, and international agreements | Federation of BiH does not have legislation on commercial fishing at sea | By the end of 2023, adopted Law on commercial fishing at sea, harmonized with the common fishing policy, commitments under EU Directives, and international agreements |
| Existence of the Law on Fresh Water Fishing with the laws in the area of waters and requirements of international conventions and EU directives in the area of fisheries and biodiversity | The current Law on Fresh Water Fishing is not aligned with the laws in the area of waters, and requirements of international conventions and EU directives in the area of fisheries and biodiversity | By the end of 2023, completed harmonization of the Law on Fresh Water Fishing |
| Existence of a strategic framework for sustainable development of fishing sector | Mid-term fisheries development strategy of Federation of BiH 2015‒ 2019 was valid until the end of 2021 | By the end of 2023, adopted Agricultural Sector Development Strategy for the period aligned with the common strategy for fisheries and aquaculture of EU |
| Existence of fisheries plans aligned with the Strategy for Fisheries and Aquaculture of EU, 0% | Successive preparation of fisheries management plans in line with the new Law on Fresh Water Fishing; | By 2031, 100% of fisheries management plans aligned with the Strategy for Fisheries and Aquaculture of EU |
| **Developmental impact and contribution of the measure to achieving the priority** | Improvement of fishery management plans and progress in the process of European integrations by aligning the national legislation with the EU acquis | | |
| **Indicative financial projection, with indication of sources** | Amount: BAM 58,675  Source: 100% government budget | | |
| **Period of implementation of the measure** | 2022‒2031 | | |
| **Institution responsible for coordination and implementation of the measure** | Federation of BiH Ministry of Agriculture, Forestry and Water Management | | |
| **Implementing institution** | Federation of BiH Ministry of Agriculture, Forestry and Water Management  Competent cantonal ministries | | |
| **Target groups** | Fishing associations  Commercial entities operating in the field of fisheries | | |

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| **Link with the strategic goal** | **6. Sustainable resource management** | | |
| **Priority** | **6.3. Improve legal, strategic and institutional frameworks for sustainable management of fish stock** | | |
| **Name of the measure** | **6.3.2. Establishing an information system on fisheries and statistical reporting on fish farming** | | |
| **Description of the measure with the general area of intervention** | This measure aims to establish an information system on fisheries and statistical reporting on fish farming. Particular progress is expected in the field of commercial marine fishing and Mari culture.  The measure includes following activities:   * Development of a registry of vessels and permits for commercial marine fishing and Mari culture; * Establishment of a system for issuing permits; * Establishment of a system for recording and reporting on fishing activities and landing the catch; * Establishment of a model of statistical monitoring of marine and fresh water fish farms in accordance with the adopted methodology for BiH. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results of measures** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| Existence of a registry of vessels and permits for commercial marine fishing and Mari culture | Federation of BiH does not have an established registry of vessels and permits for marine commercial fishing and Mari culture | By 2025, developed registry of vessels and permits for marine commercial fishing and Mari culture |
| Existence of a system for issuing permits | Federation of BiH has not established a system for issuing the permits for commercial marine fishing | By 2025, established system for issuing the permits |
| Existence of a system for recording and reporting on fishing activities and landing the catch | Federation of BiH has not stablished a system for recording and reporting on fishing activities and landing the catch | By 2025, established system for registering and reporting on fishing activities and landing the catch |
| Existence of a model of statistical monitoring of marine and fresh water fish farms in accordance with the adopted methodology for BiH | Federation of BiH has not established a model of statistical reporting on marine and fresh water fish farms | By 2025, established model of statistical reporting on marine and fresh water fish farms |
| **Developmental impact and contribution of the measure to achieving the priority** | Improving management and more rational use and protection of fish stock | | |
| **Indicative financial projection, with indication of sources** | Amount: BAM 586,749  Source: 30% from the government budget, 70% from EU and other international donors | | |
| **Period of implementation of the measure** | 2024‒2025 | | |
| **Institution responsible for coordination and implementation of the measure** | Federation of BiH Ministry of Agriculture, Forestry and Water Management | | |
| **Implementing institution** | Federation of BiH Ministry of Agriculture, Forestry and Water Management | | |
| **Target groups** | Commercial entities operating in the sector of fisheries | | |

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| **Link with the strategic goal** | **6. Sustainable resource management** | | |
| **Priority** | **6.4. Establish integrated and sustainable management of land resources** | | |
| **Name of the measure** | **6.4.1 Provide legal and strategic framework for comprehensive protection of land** | | |
| **Description of the measure with the general area of intervention** | This measure aims to provide framework for integrated protection of all types of land. The measure includes adoption of legislation and strategy on protection of land, and harmonisation of legislation regulating various uses of land (mining, construction, agriculture). For implementation of this measure, the following activities are planned:   * Adoption of a Law on Protection of Land and relevant bylaws; * Development and adoption of the Strategy of Sustainable Land Management; * Harmonization of laws: on spatial planning and construction of Federation of BiH and cantons in Federation of BiH with the Law on Agricultural Land, i.e. include in the Law on spatial development and construction of the Federation of BiH the obligation of the local government units to have the Plan of Protection, Development and Use of Agricultural Land prior to the adoption of their respective spatial plans; * Amendment of the Law on Mining of Federation of BiH regarding rehabilitation of the mining areas, by expanding options of rehabilitation that would include repurposing, and with respect to financial liability and guarantees for rehabilitation of the deserted mining areas. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results of measures** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| Existence of legal and strategic framework for comprehensive protection of land | In the Federation of BiH, land is protected by various legislation, depending on the type of land: laws on agriculture, forestry, spatial planning and construction. There is no comprehensive legislative framework that would provide for protection of land as a whole | By 2025, adopted Law on Protection of Land and relevant secondary legislation (bylaws), as well as the Strategy for Sustainable Use of Land |
| Existence of a Strategy of Sustainable Land Management | Federation of BiH does not have a strategic approach to comprehensive land management and protection | By 2027, Adopted Strategy of Sustainable Land Management |
| Harmonize laws on spatial planning of Federation of BiH and cantons in Federation of BiH with the Law on Agricultural Land of Federation of BiH | Laws on spatial planning of Federation of BiH and cantons in Federation of BiH ae not aligned with the Law on Agricultural Land of Federation of BiH, i.e. Federation of BiH Law on Spatial Planning and Construction does not prescribe the obligation of the local government units to develop the Plans for Protection, Development and Use of Agricultural Land prior to the adoption of Spatial Plan | By 2027, harmonized Federation of BiH Law on Spatial Planning and Construction and cantonal laws with the Law on Agricultural Land of Federation of BiH |
| Existence of financial liability and guarantees for rehabilitation of deserted mines and possibility to repurpose the deserted mines | Law on Mining of the Federation of BiH does not include provisions stipulating financial liability and obligation of providing guarantees for rehabilitation of deserted mines, nor does it specify conditions for repurposing the deserted mines | By 2027, amended Law on Mining of the Federation of BiH regarding rehabilitation of the mining areas, by expanding options of rehabilitation that include repurposing, and with respect to financial liability and guarantees for rehabilitation of the deserted mining areas |
| **Developmental impact and contribution of the measure to achieving the priority** | Improved land management with better coordination and communication among various institutions and sectors | | |
| **Indicative financial projection, with indication of sources** | Amount: BAM 398,360  Source: 100% government budget | | |
| **Period of implementation of the measure** | 2024‒2027 | | |
| **Institution responsible for coordination and implementation of the measure** | Federation of BiH Ministry of Environment and Tourism | | |
| **Implementing institution** | Federation of BiH Ministry of Spatial Planning and Construction  Federation of BiH Ministry of Energy, Mining and Industry  Competent cantonal ministries | | |
| **Target groups** | Mining companies | | |

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| **Link with the strategic goal** | **6. Sustainable resource management** | | |
| **Priority** | **6.4. Establish integrated and sustainable management of land resources** | | |
| **Name of the measure** | **6.4.2. Establishing the land monitoring system** | | |
| **Description of the measure with the general area of intervention** | This measure aims to improve and upgrade the existing quality of monitoring by monitoring all types of land. The measure includes following activities:   * Development, harmonization and adoption of measuring methods and indicators for sustainable management and protection of land resources; * Adoption of a land monitoring plan; * Establishment of a network of monitoring sites and performance of monitoring.   Collected data are integrated into the Land Information System. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results of measures** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| Existence of methods, measures and indicators for sustainable management and protection of land resources | In Federation of BiH, there is no framework in place for monitoring land management sustainability | By 2025, adopted methods, measures and indicators for sustainable management and protection of land resources |
| Existence of a land monitoring plan | In Federation of BiH, there is no land monitoring plan | By 2026, adopted land monitoring plan |
| Existence of a network of monitoring sites and performance of monitoring | Federation of BiH has partially established a standardized network of monitoring sites, and the monitoring is done occasionally | By 2027, established a network of monitoring sites; monitoring implemented in accordance with previously adopted plan |
| **Developmental impact and contribution of the measure to achieving the priority** | Improved management, more rational use and protection of land | | |
| **Indicative financial projection, with indication of sources** | Amount: BAM 1,291,471  Source: 10% from the government budget, 90% from EU and other international donors | | |
| **Period of implementation of the measure** | 2025‒2027 | | |
| **Institution responsible for coordination and implementation of the measure** | Federation of BiH Ministry of Environment and Tourism | | |
| **Implementing institution** | Federation of BiH Institute for Agropedology  Federation of BiH Ministry of Spatial Planning and Construction  Federation of BiH Ministry of Energy, Mining and Industry  Federation of BiH Ministry of Agriculture, Forestry and Water Management  Competent cantonal ministries | | |
| **Target groups** | Land owners | | |

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| **Link with the strategic goal** | **6. Sustainable resource management** | | |
| **Priority** | **6.4. Establish integrated and sustainable management of land resources** | | |
| **Name of the measure** | **6.4.3. Rehabilitation of degraded areas** | | |
| **Description of the measure with the general area of intervention** | This measure aims to reduce the area of degraded land. The measure includes following activities:   * Establishment of a cadastre of degraded land; * Development of an action plan for rehabilitation of degraded areas that includes procedures and methods for rehabilitating the degraded areas, criteria for prioritization of the sites to be rehabilitated on the basis of environmental and social criteria (number of endangered people, women and children, the poor...); * Rehabilitating degraded land area (approximately 3500 ha) focusing on the following areas: Banovici, Lukavac, Tuzla, Zivinice, Kalesija, Srebrenik, Zenica, Breza, Kakanj, Novi Travnik, Donji Vakuf, etc.; * Rehabilitate land in especially sensitive and deserted areas, focusing on the Dinara karst and high mountains in: Hercegovina-Neretva Canton, West Herzegovina Canton, high mountains in Central Bosnia. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results of measures** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| Existence of a cadastre of degraded land | Federation of BiH has not established a cadastre of degraded land | By 2024, established cadastre of degraded land areas and integrated into the Land Information System |
| Existence of a programme for rehabilitation of degraded areas | Federation of BiH does not have a programme for rehabilitation of degraded areas, which includes procedures and methods for rehabilitation of degraded areas, criteria for prioritizing selection of the sites to be rehabilitated on the basis of environmental and social considerations (number of endangered people, women and children, the poor...) | By 2026, adopted programme for rehabilitation of degraded areas |
| Area of degraded land (ha) | Federation of BiH has not had any significant plans or programmes to rehabilitate the degraded land, except for the projects of re-cultivation in mining sector and TPP. For the purposes of this Strategy, the baseline value shall be considered to be 0 ha. | Carried out rehabilitation of degraded land area (approximately 3500 ha) |
| Area of revitalized land | Federation of BiH has not precisely determined the area of land suitable for rehabilitation | By 2031, completed rehabilitation of land in especially sensitive and deserted areas, focusing on the Dinara karst and high mountains in: Hercegovina-Neretva Canton, West Herzegovina Canton, high mountains in Central Bosnia |
| **Developmental impact and contribution of the measure to achieving the priority** | More rational use and protection of land, and raised awareness of the whole community of the need to preserve and protect land as a resource | | |
| **Indicative financial projection, with indication of sources** | Amount: BAM 3,102,742,802  Source: 10% from the government budget, 90% combined ‒ loans, funds from EU and other international donors, and other donations | | |
| **Period of implementation of the measure** | 2023-2031 | | |
| **Institution responsible for coordination and implementation of the measure** | Federation of BiH Ministry of Environment and Tourism | | |
| **Implementing institution** | Federation of BiH Institute for Agropedology  Federation of BiH Ministry of Spatial Planning and Construction  Federation of BiH Ministry of Energy, Mining and Industry  Federation of BiH Ministry of Agriculture, Forestry and Water Management  Competent cantonal ministries | | |
| **Target groups** | Mining companies  Land owners | | |

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| **Link with the strategic goal** | **6. Sustainable resource management** | | |
| **Priority** | **6.4. Establish integrated and sustainable management of land resources** | | |
| **Name of the measure** | **6.4.4. Preventing land degradation by construction without plan** | | |
| **Description of the measure with the general area of intervention** | This measure aims to prevent further land degradation caused by illegal construction. The measure includes following activities:   * Adoption of new laws on legalization that would be aligned with the Vienna Declaration on National and Regional Policies and Programmes regarding Informal Settlements in South Eastern Europe * Registering illegal buildings * Development of operational plans for prevention of unplanned construction, and adoption of programmes to demolish illegal buildings * Continuous development and adoption of new spatial planning documentation and documentation for controlled development of cities, and prevention of use of quality categories of land for construction * Restricting use of good quality land (I agricultural zone) for construction of apartments, industrial facilities and other buildings | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results of measures** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| Existence of a law on legalization that would be aligned with the Vienna Declaration on National and Regional Policy Programs regarding Informal Settlements in South Eastern Europe | Federation of BiH does not have a law on legalization. Current laws on legalization in Federation of BiH are adopted at cantonal level and do not comply with the Vienna Declaration on National and Regional Policy Programs regarding Informal Settlements in South Eastern Europe | By 2025, adopted new cantonal laws on legalization in line with the Vienna Declaration on National and Regional Policy Programs regarding Informal Settlements in South Eastern Europe |
| Existence of the Registry of illegal buildings | Not all illegal buildings in Federation of BiH are registered | By 2026, all illegal buildings registered and data integrated in the spatial data information system |
| Existence of operational plans for prevention of unplanned construction and adoption of programmes to demolish illegal buildings | Federation of BiH does not have operational plans for prevention of unplanned construction. Illegal buildings are rarely demolished, and there is no particular planned approach | By 2027, developed cantonal operational plans for prevention of unplanned development (construction) and adopted programmes to demolish the illegal buildings |
| Existence of decisions to limit the use of good quality land (agricultural zone I) for construction of apartments, industrial facilities and other buildings | Law on agricultural land of Federation of BiH prohibits the use of best quality land of classes I-IV for any purpose other than agriculture. Repurposing is possible if it involves capital structures of public interest. There are no special decisions restricting the use of land (agricultural zone I) and criteria for possible approval of repurposing of land | By 2023, adopted cantonal decisions on restricting the use of good quality land for any other purpose except for agriculture |
|  | Spatial planning documentation is based on controlled development of cities | Expansion of urban areas in Federation of BiH is often done at the expense of good quality agricultural land. Purpose of land is determined in spatial planning documentation. Federation of BiH has not adopted spatial plan | By 2023, spatial plan for Federation of BiH adopted  By 2031, spatial planning documentation at other levels developed on the basis of controlled development of cities, avoiding repurposing of the good quality agricultural land |
| **Developmental impact and contribution of the measure to achieving the priority** | More rational use and protection of land, and raised awareness of the whole community of the need to preserve and protect land as a resource | | |
| **Indicative financial projection, with indication of sources** | Amount: BAM 353,107  Source: 100% government budget | | |
| **Period of implementation of the measure** | 2022-2031 | | |
| **Institution responsible for coordination and implementation of the measure** | Federation of BiH Ministry of Spatial Planning and Construction | | |
| **Implementing institution** | Federation of BiH Ministry of Spatial Planning and Construction  Federation of BiH Ministry of Agriculture, Water Management and Forestry  Competent cantonal ministries | | |
| **Target groups** | Land owners, municipalities, cantons, farms | | |

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| **Link with the strategic goal** | **6. Sustainable resource management** | | |
| **Priority** | **6.4.** **Establish integrated and sustainable management of land resources** | | |
| **Name of the measure** | **6.4.5. Removing land mines** | | |
| **Description of the measure with the general area of intervention** | This measure aims to complete demining of 100% of land under mines by 2030.  Demining is carried out in line with the annual demining plans. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results of measures** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| Land mines | In 2020, 966m2 of area in Federation of BiH was found to be polluted by land mines | Complete demining of 100% of land by 2030 |
| **Developmental impact and contribution of the measure to achieving the priority** | Contribution to security, reduction of poverty in rural areas, and lifting obstacles to development of tourism and use of potentials of wood industry and hydro power | | |
| **Indicative financial projection, with indication of sources** | Amount: BAM 230,280,772  Source: 10% from the government budget, 90% combined ‒ loans, funds from EU and other international donors, and other donations | | |
| **Period of implementation of the measure** | 2022‒2031 | | |
| **Institution responsible for coordination and implementation of the measure** | BiH MAC | | |
| **Implementing institution** | BiH MAC | | |
| **Target groups** | Forest management companies, farmers, municipalities, hunting associations, mountaineering associations | | |

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| **Link with the strategic goal** | **6. Sustainable resource management** | | |
| **Priority** | **6.5. Establish a system of sustainable and responsible research, exploitation and management of mineral resources** | | |
| **Name of the measure** | **6.5.1 Establishing a framework for sustainable use and exploitation of mineral resources** | | |
| **Description of the measure with the general area of intervention** | This measure aims to provide for a comprehensive approach to securing mineral resources for development of industry in Federation of BiH, and it includes:   * Development of a strategy for cost effective, socially and environmentally acceptable exploitation of ores and minerals that would include recovery of mineral and metallic resources from waste (urban mining, circular economy); * Development of programmes and plans for introduction of contemporary technologies in mines owned by Federation of BiH for the purpose of providing conditions for improved efficiency of exploitation and use of mineral resources, and prevention of waste generation. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results of measures** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| Existence of a framework for sustainable use and exploitation of mineral resources | Federation of BiH does not have an integrated framework for managing mineral resources, that would include recovery of resources from products, manufacturing or construction, so the exploitation and import of raw materials is currently the only solution | By 2026, developed is a strategy for cost effective, socially and environmentally acceptable exploitation of ores and minerals that includes recovery of mineral and metallic resources from waste (urban mining, circular economy) |
| Existence of programmes and plans for more efficient exploitation of mineral resources. | Current level of technical equipment in Federation of BiH is not conductive for efficient exploitation of raw materials | By 2029, adopted are programmes and plans for introduction of contemporary technology in mines owned by Federation of BiH for the purpose of providing conditions for improved efficiency of exploitation and use of mineral resources and prevention of generation of waste |
| **Developmental impact and contribution of the measure to achieving the priority** | Improved efficiency of exploitation and use of mineral resources and mitigation of negative environmental impact of mining | | |
| **Indicative financial projection, with indication of sources** | Amount: BAM 160,243  Source: 30% from the government budget, 70% from EU and other international donors | | |
| **Period of implementation of the measure** | 2025‒2029 | | |
| **Institution responsible for coordination and implementation of the measure** | Federation of BiH Ministry of Energy, Mining and Industry  Federation of BiH Ministry of Environment and Tourism | | |
| **Implementing institution** | Federation of BiH Ministry of Energy, Mining and Industry  Federation of BiH Ministry of Environment and Tourism | | |
| **Target groups** | Mining companies  Commercial companies  System operators for managing various kinds of waste (metal, construction waste, etc.) | | |

13.7. Annex 7 A detailed overview of measures in Environmental Management

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| **Link with strategic goal** | **7. Strengthening environmental management** | | |
| **Priority** | **7.1 Improving the legal framework and sector policies for planning, management and protection of environment in the Federation of BiH with the view of fully aligning the legislation with the EU environmental acquis and international agreements** | | |
| **Measure** | **7.1.1 Alignment of the legislation of the Federation of BiH with the EU environmental acquis and implementation of EU Directives** | | |
| **Description of the measure with the general area of intervention** | According to the Environmental Approximation Programme of the Federation of BiH to the EU acquis, the Federation of BiH is required to adopt strategic planning instruments and policies aimed at adjusting its legislation to EU acquis.  The aim of this measure is to:   1. Increase the level of alignment of the legislation in the Federation of Bosnia and Herzegovina with the EU environmental acquis, according to the EU Integration Programme, which is being prepared; 2. ensure development, adoption and implementation of action plans for the implementation EU Directives (APIDs).   Within the context of horizontal policy, the following EU Directives are relevant for environmental management:   * Directive 2001/42/EC on the assessment of the effects of certain plans and programs on the environment (Directive on Strategic Environment Assessment); * Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment amended by the Directive 2014/52 / EU (Directive on Environmental Impact Assessment); * Directive 2003/4/EC on public access to environmental information and repealing Council Directive 90/313/EEC * Directive 2003/35/EC providing for public participation in respect of the drawing up of certain plans and programs relating to the environment and amending Council Directives 85/337/EEC and 96/61/EC with regard to public participation and justice; * Directive 2004/35/EC on environmental liability with regard to the prevention and remedying of environmental damage; * Directive 2007/2/EC establishing an Infrastructure for Spatial Information in the European Community (INSPIRE Directive); * Directive 2008/99/EC on the protection of the environment through criminal law; * Directive 2010/75/EU on industrial emissions; * Directive 2012/18/EU on the control of major-accident hazards; * Regulation (EC) No 1221/2009 on the system of organic products labelling, co- management and audit scheme.   General areas of intervention are:   1. Implementation and monitoring of the Environmental Approximation Programme of the Federation of BiH; 2. Adoption and implementation of the Plan for the implementation and monitoring the Environmental Approximation Programme of the Federation of BiH to the EU acquis; 3. Analysis of the applicable legislation and identification of regulations through which the Federation of Bosnia and Herzegovina should transpose priorities defined in the EU regulations; 4. Development of the action plan for the alignment of legislation in the Federation of Bosnia and Herzegovina with the EU environmental acquis (four-year period) as a part of the National EU Integration Programme, according to the harmonized list of priorities; 5. Harmonization of the priorities of environmental management institutional measures, according to the recommendations of the European Commission (EC) (four-year period); 6. Development of the action plan for the implementation of environmental institutional measures and review of administrative capacitates according to the recommendations of the European Commission (EC) (four-year period), as a part of the National EU Integration Programme, according to the harmonized list of priorities; 7. Participation in the preparation of the National EU Integration Programme for the environmental management, on behalf of the Federation of Bosnia and Herzegovina; 8. Implementation of the National EU Integration Programme in the domain of environmental management, in the Federation of Bosnia and Herzegovina, that is: - action plan for the alignment of the legislation in the Federation of Bosnia and Herzegovina with the EU environmental acquis, - action plan for the implementation of the institutional measures; 9. Development of a systemic monitoring of alignment, based on the tables of alignment in the area of environmental protection, in cooperation with the BiH Ministry for Foreign Trade and Economic Relations and responsible institutions in Republika Srpska and Brcko District; 10. Annual monitoring of the process of alignment of legislation in the Federation of Bosnia and Herzegovina with the EU environmental acquis; 11. Participation in the process of development of directive specific implementation plans (DSIPs) which represent framework for necessary actions and development of future associated action plans (APIDs) for the implementation of EU directives in the Federation of Bosnia and Herzegovina; 12. According to the Environmental Approximation Programme of the Federation of Bosnia and Herzegovina and according to the dynamics of the National EU Integration Programme for environmental management and priorities defined, develop and adopt:   - Implementation plan for Directive 2001/42/EC on the assessment of the effects of certain plans and programs on the environment (Directive on Strategic Environment Impact Assessment);  - Implementation plan for Directive 2004/35/EC on environmental liability with regard to the prevention and remedying of environmental damage;  - Implementation plan for Directive 2007/2/EC establishing an Infrastructure for Spatial Information in the European Community (INSPIRE Directive);  - Implementation plan for Directive 2008/99/EC on the protection of the environment through criminal law  - Implementation plan Directive 2010/75/EU on industrial emissions;   1. Implementation of the action plans for the implementation directives (APIDs); 2. Identification of “points of conflict“ which are slowing down the parliamentary legislative procedure and targeted addressing of such points to speed up the procedure (the competent ministry should ensure a smooth procedure through a special environmental committee, identification of contentious points, consultation with experts, including potential negotiations among political parties). | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **2021** | **Target value** |
| 1),2) Efficacy of the implementation of the Environmental Approximation Programme Federation of Bosnia and Herzegovina | Slow implementation of the Environmental Approximation Programme | Successful implementation of the Environmental Approximation Programme (2030) |
| 3),4) The Action Plan on alignment of legislation in the Federation of Bosnia and Herzegovina with the EU environmental acquis (four-year periods) | There is no action plan. | The Action Plan for alignment of legislation in the Federation of Bosnia and Herzegovina with the EU environmental acquis (four-year periods) prepared (2023) |
| 5),6) Action plans for the implementation of environmental institutional measures and review of e administrative capacitates according to the recommendations of the European Commission (EC) (four-year periods) | There is no action plan | Action plans for the implementation of environmental institutional measures and review of administrative capacitates according to the recommendations of the European Commission (EC) (four-year periods) developed (2023) |
| 7) Participation in the preparation of the National EU Integration Programme for environmental management | Ongoing preparations of the integration program | The programme was considered and Federation of BiH institutions provided their opinion (2023 and 2027) |
| 8) Level of the implementation of the National EU Integration Programme in the domain of environmental management | Ongoing preparations of the integration program | Advanced stage of the implementation (2030) |
| 9) Systemic monitoring of the alignment process | Not developed | Developed (2023) |
| 10) Efficient and regular monitoring of updates of the environmental legislation (alignment with the EU acquis) | Legislation partially updated and aligned | Legislation update and aligned with the EU acquis (2030) |
| 11) Quality of contribution of the institutions of the Federation of Bosnia and Herzegovina in the preparation of DSIPs |  | Significant contribution provided (2025) |
| 12) Adoption of priority APIDs | - | Priority APIDs adopted (2030) |
| 13) Level of the implementation of APIDs | - | Advanced stage of the implementation of APIDs (2030+) |
| 14) Efficiency of parliamentary procedures | Low | High (2030) |
| **Effect on the development and contribution of the measure to the priority** | Improved environmental management and progress in the EU integration process though alignment of the national legislation with the EU acquis | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 1,334,680  Source: 10% government budget, 90% funds from EU and other international donors | | |
| **Period of the implementation of the measure** | 2022 – 2030+ | | |
| **Institution responsible for coordination of the implementation of the measure** | Federation Ministry of Environment and Tourism | | |
| **Implementing institutions** | Federation Ministry of Environment and Tourism, in cooperation with the other competent federal and cantonal institutions in the Federation of Bosnia and Herzegovina, in coordination with the Ministry for Foreign Trade and Economic Relations of Bosnia and Herzegovina (for the areas of intervention 4-7) and in cooperation with Partnership 27 created to monitor the process of Chapter 27 (for the areas of intervention 10-12) | | |
| **Target groups** | Institutions responsible for implementation of environmental EU Directives, citizens | | |

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| **Link with strategic goal** | **7. Strengthening environmental management** | | |
| **Priority** | **7.1 Improving the legal framework and sector policies for planning, management and protection of environment in the Federation of BiH with the view of fully aligning the legislation with the EU environmental acquis and international agreements** | | |
| **Measure** | **7.1.2 Defining of environmental sanctions policy** | | |
| **Description of the measure with the general area of intervention** | The aim of this measure is to clearly define the environmental sanctions policy.  General areas of intervention include:   1. Review of sanctions prescribed for minor environmental offences in the Law on Environmental Protection, including identification of necessary amendments in order to harmonise the law with the criminal code; 2. Amend the Law on Environmental Protection to include a requirement for adoption of a bylaw which should transpose Directive 2004/35/EC on environmental liability with regard to the prevention and remedying of environmental damage, and Commission Notice-Guidelines on agreement on the term ”environmental damage” as defined in Article 2 of the Directive 2004/35/EC of the European Parliament and of the Council on environmental liability with regard to the prevention and remedying of environmental damage (2021/C 118/01); 3. Define the remedies in the Criminal Code of the Federation of BiH for environmental damage. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **2021.** | **Target value** |
| 1. Analysis of alignment of the Law on Environmental Protection and Criminal Code of the Federation of BiH with the EU Directives | - | Gaps in the Law on Environmental Protection and amendments required to harmonise the law with Criminal Code are defined (2023) |
| 1. Status of amendments to the Law on Environmental Protection | - | Amendments adopted (2025) |
| 1. Status of amendments to the Criminal Code of the Federation of BiH | - | Amendments adopted (2027) |
| **Effect on the development and contribution of the measure to the priority** | Improved environmental management and prevention of environmental damage, and increased public awareness | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 94,111  Source: 100% government budget | | |
| **Period of the implementation of the measure** | 2022 - 2027 | | |
| **Institution responsible for coordination of the implementation of the measure** | Federation Ministry of Environment and Tourism | | |
| **Implementing institutions** | Federation Ministry of Environment and Tourism in cooperation with Federation Ministry of Justice and other responsible institutions in the Federation of Bosnia and Herzegovina | | |
| **Target groups** | Institutions responsible for environmental EU Directives, judicial institutions, business entities, general public | | |

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| **Link with strategic goal** | 7. **Strengthening environmental management** | | |
| **Priority** | **7.1 Improving the legal framework and sector policies for planning, management and protection of environment in the Federation of Bosnia and Herzegovina aimed at full harmonization with the EU acquis and international environmental agreements** | | |
| **Measure** | **7.1.3** **Alignment of environmental management legal and strategic framework with the international and national gender equality standards** | | |
| **Description of the measure with the general area of intervention** | The aim of the measure is to ensure alignment of all environmental management legal and strategic documents with the international and national gender equality standards.  Specifically, this measure implies:   1. Identifying priority laws, strategies, action plans, programmes and other environmental documents in order to introduce and apply the gender equality international and national standards in these documents. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **2021.** | **Target value** |
| 1. Level of alignment of the environmental management legal and strategic framework with the international and national gender equality standards | Low level of alignment of the environmental management legal and strategic framework with the international and national gender equality standards | Significantly increased level of alignment of the environmental management legal and strategic framework with the international and national gender equality standards (2030) |
| **Effect on the development and contribution of the measure to the priority** | Ensure that all men and women, particularly those from poor and vulnerable groups equally participate in decision-making on the environment | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 63,782  Source: 100% government budget | | |
| **Period of the implementation of the measure** | 2025 – 2029 | | |
| **Institution responsible for coordination of the implementation of the measure** | Federation Ministry of Environment and Tourism | | |
| **Implementing institutions** | Gender Centre of the Federation of Bosnia and Herzegovina in cooperation with the Federation Ministry of Environment and Tourism and other environmental institutions | | |
| **Target groups** | Citizens, vulnerable groups of the population | | |

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| **Link with strategic goal** | **7. Strengthening environmental management** | | |
| **Priority** | **7.2 Ensuring efficient implementation of the applicable legislation and international commitments** | | |
| **Measure** | **7.2.1 Capacity building for efficient implementation of the international environmental agreements** | | |
| **Description of the measure with the general area of intervention** | The aim of this measure is to significantly increase Level of the implementation of the international agreements ratified by BiH in accordance with responsibilities of the Federation of Bosnia and Herzegovina.  General areas of intervention:  1) Participation in the preparation of national level documents on the implementation of the international agreements/conventions aimed at formalizing the framework for the implementation of the international environmental agreements and other international commitments of BiH;  2) Ensuring public access, through websites of the Federation Ministry of Environment and Tourism and other competent institutions, to official documents of global, regional and bilateral environmental agreements ratified by BiH (including their translations into official languages), and to information on status of BiH as a party to these agreements and their implementation (after they receive the information from the institutions of BiH);  3) Organization of trainings for the employees in the institutions about the adequate application of the international agreements;  4) Regulating the cooperation with and establishing communication channels with civil society organizations from the territory of the Federation of BiH which express interest in participating in the preparation of reports on the implementation of multi-lateral environmental agreements, in particular the agreements for which the ministries of Federation of BiH are the national focal points (NFP). | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **2021** | **Target value** |
| 1. Participation of the institutions of the Federation of BiH in the preparation of the documents intended to formalize the framework for the implementation of environmental international commitments of BiH | Ongoing | Participation of the institutions of the Federation of BiH in preparation of the documents ensured (2023) |
| 1. Access to texts of the international agreements and information on status of their implementation | Access to texts and information partially ensured | Official international agreements and information on status of their implementation published on the website of the Federation Ministry of Environment and Tourism (2024) |
| 1. Efficiency of the implementation of trainings for the employees about the adequate application of the international agreements | Trainings have not been implemented methodically | The trainings for the employees completed according to the plan (2026) |
| 1. Communication and cooperation with civil society organizations in the preparation of reports on the implementation of the international environmental agreements | Communication and cooperation with civil society organizations in the preparation of reports on the implementation of international environmental agreements are not organised | Communication and cooperation with civil society organizations ensured (2027) |
| **Effect on the development and contribution of the measure to the priority** | Human and institutional capacity building in environmental management | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 62,890  Source: 100% funds from EU and other international donors | | |
| **Period of the implementation of the measure** | 2023 – 2027 | | |
| **Institution responsible for coordination of the implementation of the measure** | Federation Ministry of Environment and Tourism | | |
| **Implementing institutions** | Federation Ministry of Environment and Tourism and other institutions responsible for environment, in cooperation with training institutions | | |
| **Target groups** | Institutions responsible for the implementation of activities in accordance with the international agreements, citizens | | |

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| **Link with strategic goal** | **7. Strengthening environmental management** | | |
| **Priority** | **7.2 Ensuring efficient implementation of the applicable legislation and international commitments** | | |
| **Measure** | **7.2**.**2 Consistent application of strategic environmental assessment (SEA)** | | |
| **Description of the measure with the general area of intervention** | The aim of this measure is to ensure consistent application of SEA through the implementation of the 2021 Law on Environmental Protection and cross-sectoral cooperation.  General areas of intervention:   1. Drafting and enacting bylaws for the Law on Environmental Protection which define in detail the scope, content and evaluation of the strategic study< 2. Regular update of the bylaws for implementation of SEA as required by new developments, and as a result of efforts of harmonizing them with the legislation applicable in Republika Srpska and Brcko District with representatives of relevant institutions of these two entities< 3. Participation in coordination and harmonization processes aimed at updating and defining protocols and administrative procedures for cross-border notification and consultations in SEA implementation, with representatives of the competent institutions of BiH, Republika Srpska and Brcko District< 4. Establishment of necessary systems and procedures which should ensure consistent application of SEA to all documents /projects where it is required, where local government units (municipalities /cities) play a particularly important role; 5. Activities aimed at raising the awareness among all institutional partners (sectoral institutions) and non-institutional partners (civil society) about the importance of SEA and, if required, ensuring their training to this end. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **2021** | **Target value** |
| 1. Status of adoption of bylaws defining in detail the scope, content of SEA report | Inter-departmental working group, which will work on drafting of the Decree on strategic impact assessment, plans and programmes is currently in being formed | The bylaws defining in detail the scope, content and evaluation of scope, content of SEA report adopted (2023) |
| 1. Status of update and adoption of the bylaws on SEA | / | All relevant bylaws on SEA adopted (2027) |
| 1. Status of update and adoption of the procedures for cross-border notification and consultation in SEA implementation | Procedures are not complete | All the necessary procedures are update and adopted (2025) |
| 1. Set up a system and procedures in all the institutions for effective SEA implementation | Procedures are not complete | All required systems and procedures for effective SEA implementation established in the institutions (2027) |
| 1. Level of understanding among the relevant players about the importance of SEA | Partial understanding | Full understanding among all the relevant players of importance of SEA achieved (2030) |
| **Effect on the development and contribution of the measure to the priority** | Improved environmental management, reduced pollution and minimum adverse effect to the environment, as well as increased awareness among the stakeholders on the importance of SEA | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 158,620  Source: 30% government budget , 70% funds from EU and other international donors | | |
| **Period of the implementation of the measure** | 2022 – 2030 | | |
| **Institution responsible for coordination of the implementation of the measure** | Federation Ministry of Environment and Tourism | | |
| **Implementing institutions** | Federation Ministry of Environment and Tourism in cooperation with other responsible institutions | | |
| **Target groups** | Entities in charge of implementing the plans which require SEA, citizens | | |

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| **Link with strategic goal** | **7. Strengthening environmental management** | | |
| **Priority** | **7.2 Ensuring efficient implementation of the applicable legislation and international commitments** | | |
| **Measure** | **7.2.3 Ensuring conditions for integrated environmental permitting** | | |
| **Description of the measure with the general area of intervention** | The aim of this measure is to provide for conditions for the initiation of integrated environmental permitting. The ultimate goal is ambitious - a single application to obtain the final decision on environmental permit.  General areas of intervention:   1. Assessment of technical requirements (e.g., creation and maintenance of databases) and staff capacities (job classification) in the Federation Ministry of Environment and Tourism and cantonal line ministries for integrated environmental permitting and define recommendations for adjustments< 2. Implementation of the recommendations for adjustments of the Federation Ministry of Environment and Tourism for integrated environmental permitting (through the implementation of the Decree on plants and facilities which require environmental permits *(Official Gazette the Federation of BiH, 51/21), templates of new administrative decisions are prepared)*< 3. Creating conditions for digitalization of all the procedures (including adoption of all necessary regulations for the institutions to be able to implement digital procedures). This implies digitalization of the environmental permitting procedure in the Federation Ministry of Environment and Tourism, so as to enable the process of applying for environmental permits, announcing of public consultations, monitoring of the issuance, and access to decisions through the system, and monitoring of polluters through the system (with all the other permits that can be supporting documents). It is a centralized data repository, which can be used for the purpose of public hearings, and inspections for control of the implementation of measures. This will not require amendments to the general legislation of the Federation of BiH (e-signatures and etc.) but it will require amendments to regulations governing environmental permitting which concern submission of documentation and publishing etc. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **2021** | **Target value** |
| 1. Analysis of technical conditions and human capacities in the Federation Ministry of Environment and Tourism | Analysis has not been done | Analysis of technical condition and human capacities completed and recommendations for adjustments defined (2024) |
| 1. Status of the implementation of the recommendations for adjustments of the Federation Ministry of Environment and Tourism regarding integrated environmental permits. | / | The recommendations for adjustments of the Federation Ministry of Environment and Tourism for integrated environmental permitting successfully implemented (2027) |
| 1. Status of the process aimed at creating conditions for digitalization of all the procedures | There are no conditions for digitalization of procedures | The conditions for digitalization of procedures through a digital transformation of the environmental permitting procedure in the Federation Ministry of Environment and Tourism (2027) |
| **Effect on the development and contribution of the measure to the priority** | Enhanced environmental management and reduced pollution, minimized adverse effects on the environment | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 727,881  Source: 20% government budget , 80% funds from EU and other international donors | | |
| **Period of the implementation of the measure** | 2022 – 2027 | | |
| **Institution responsible for coordination of the implementation of the measure** | Federation Ministry of Environment and Tourism | | |
| **Implementing institutions** | Federation Ministry of Environment and Tourism in cooperation with other competent institutions, cantonal line ministries | | |
| **Target groups** | Entities applying for environmental permits | | |

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| **Link with strategic goal** | **7. Strengthening environmental management** | | |
| **Priority** | **7.2 Ensuring efficient implementation of the applicable legislation and international commitments** | | |
| **Measure** | **7.2.4 Preparation of technical instructions for the best available techniques (BAT)** | | |
| **Description of the measure with the general area of intervention** | The aim of this measure is to prepare technical instructions for the best available techniques (BAT) for the activities for which BAT are defined, according to priorities.  General areas of intervention:  1) Adoption of prepared technical instructions for the best available techniques for the following sectors: stone extraction, large combustion plants: surface protection of metal and plastic, melted metal coating and monitoring;  2) Pursuant to the Law on Environmental Protection and Rulebook on adoption of the best available techniques which contribute to compliance with standards of environmental quality, the preparation of technical instructions for the activities for which BAT are defined, by priorities: poultry slaughterhouses and processing, production of beverage, vine production, baked goods and confectionery products, cattle breeding, poultry farming, growing crops, pre-processing or dyeing of fibres or textile, tanning of leather of large and small cattle, production of cellulose from wood or similar fibrous materials, paper and cardboard production, plants for cellulose processing, wood processing and production of finished wood product, production of detergents, paint and varnishes production, production of elastomers and peroxide, production of ceramic products by baking, achieving energy efficiency in industry and building, waste incineration;  3) Periodical update of already adopted technical instructions for the following sectors: fruit and vegetables, beer production, milk production and dairy products, fish farming and processing, livestock slaughterhouses, meat processing.  4) Ensuring access to the reference BAT documents via link of the Federation Ministry of Environment and Tourism with links to the original documents (in English language) or translations into official languages in Bosnia and Herzegovina (once translations are available); | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **2021** | **Target value** |
| 1) Number of adopted technical instructions | 7 technical instructions adopted (by the Decision in 2009) | 4 new technical instructions adopted (sectors: stone extraction, large combustion plants, surface protection of metal and plastic, melted metal coating and monitoring) (2023) |
| 2) Number of new technical instructions for BAT, by priorities | / | Technical instructions for all priority activities for which BAT are defined prepared (2026) |
| 3) Number of updated technical instructions | / | Technical instructions on BAT updated (2029) |
| 1. Public access to the reference BAT documents on the website of the Federation Ministry of Environment and Tourism | Activity was initiated | Access to the reference BAT documents on the website of the Federation Ministry of Environment and Tourism ensured (2028) |
| **Effect on the development and contribution of the measure to the priority** | Enhanced environmental management and reduced pollution, minimized adverse effects on the environment | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 136,058  Source: 20% government budget , 80% funds from EU and other international donors | | |
| **Period of the implementation of the measure** | 2022 – 2029 | | |
| **Institution responsible for coordination of the implementation of the measure** | Federation Ministry of Environment and Tourism | | |
| **Implementing institutions** | Federation Ministry of Environment and Tourism / working group appointed by the Minister of the Federation Ministry of Environment and Tourism | | |
| **Target groups** | Entities which are required to apply BATs, general public | | |

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| **Link with strategic goal** | **7. Strengthening environmental management** | | |
| **Priority** | **7.3 Maximise the capacity of institutions and their coordination** | | |
| **Measure** | **7.3.1** **Establishment of effective mechanisms for coordination of activities of the environmental institutions in the Federation of Bosnia and Herzegovina** | | |
| **Description of the measure with the general area of intervention** | The aim of this measure is establishment of effective mechanisms for the environmental institutional coordination in the Federation of BiH.  General areas of intervention:  1) Upgrading and improving coordination and common action of all the relevant – ministries and other institutions in the Federation of BiH aimed at protecting the environment, within the competencies and responsibilities of the stakeholders, in the domain of environmentally sustainable development, pursuant to Article 9(1) of the Law on Environmental Protection. Two proposals were offered for the improvement of horizontal coordination:   * 1. Establishment of the Sectoral Council, comprising ministers and assistant ministers at federal and cantonal level and environmental experts and, if required, experts from other associated fields (stipulated in the Law on Development Planning and Management in the Federation of BiH (Official Gazette of the Federation of BiH, 32/17));   2. Using the capacity of the Environmental Advisory Committee of the Federation of Bosnia and Herzegovina (regulated in Article 25 of the Law on Environmental Protection (Official Gazette of the Federation of BiH, 15/21);   2) Establishment of effective mechanisms of coordination and cooperation between relevant entities – institutions at the Federation, cantonal and local level aimed at protecting the environment, within the competencies and responsibilities of the institutions, in the domain of sustainable development, according to Article 9( 1) of the Law on Environmental Protection;  3) Planning activities of continued communication among the line institutions aimed at explaining and promoting the role of different institutions in environmental protection across the levels, in particular in transposition and implementation of the EU acquis. It is possible to enhance vertical coordination based on the following principles:   * 1. regular bi-annual meetings of ministers responsible for environment, waters, spatial planning and energy, mining and industry, the Ministry of Foreign Trade and Economic of BiH and Entities;   2. quarterly meetings of assistant ministers responsible for environment, waters, spatial planning and energy, mining and industry, the Ministry for Foreign Trade and Economic of BiH and Entities;   3. regular quarterly meetings with the representatives of cantonal line ministries.   4) Ensuring better inter-cantonal cooperation and coordination in the field of environmental protection through an active engagement of the Environmental Advisory Committee;  5) Ensuring better horizontal cooperation among the local government units (municipalities /cities) in the field of environmental protection through an active engagement of the Association of Municipalities and Cities of the Federation of BiH;  6) Establishment of the Environmental Protection Agency of the Federation of Bosnia and Herzegovina (*the Agency should be responsible for overall management of the environment and link all environmental policies, define the structure of required staff and harmonize it with legislation governing this area (create legal conditions). The aim of the Agency is to provide professional support to the line ministries in all the segments of environmental management.*). | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **2021** | **Target value** |
| 1. Quality of horizontal institutional coordination | There is some coordination among the institutions, but it is necessary to upgrade and improve the coordination and common action of all the institutions within their responsibilities. | Horizontal institutional coordination upgraded and improved (2025) |
| 1. Quality of communication among the environmental institutions at all levels | There are certain communication mechanisms but they are not effective | Effective communication mechanisms among institutions at all levels (2025) |
| 1. Quality of vertical institutional coordination | Vertical coordination exists – but there is a scope for improvement | Vertical institutional coordination upgraded and improved (2030) |
| 1. Quality of inter-cantonal cooperation and coordination | There is certain coordination – but there is a scope for improvement | Environmental inter-cantonal cooperation and coordination improved (2030) |
| 1. Quality of horizontal connection among local government units in respect to environment | There is certain coordination – but there is a scope for improvement | Cooperation and coordination in the field of environment among local government units improved (2030) |
| 1. Conditions for the establishment of the Environmental Protection Agency of the Federation of BiH | There are no conditions – the Agency is not formed | Formally established, effective Environmental Protection Agency of the Federation of BiH (articles of association adopted, tasks and duties of the Agency defined, budget allocated and adopted (2030+) |
| **Effect on the development and contribution of the measure to the priority** | Contribution to creating a coherent management with strong inter-sectoral links and good coordination, which are essential for efficient environmental management | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 2,164,905 KM  Source: 10% government budget , 90% funds from EU and other international donors | | |
| **Period of the implementation of the measure** | 2022 – 2030 | | |
| **Institution responsible for coordination of the implementation of the measure** | Federation Ministry of Environment and Tourism | | |
| **Implementing institutions** | Federation Ministry of Environment and Tourism, in cooperation with the institutions responsible for overall environmental management in the Federation of BiH and institutions responsible for other associated fields, nominated members of the Environmental Advisory Committee and Association of Municipalities and Cities of the Federation of BiH | | |
| **Target groups** | All the institutions participating in coordination of environmental activities and projects | | |

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| **Link with strategic goal** | **7. Strengthening environmental management** | | |
| **Priority** | **7.3. Maximise the capacity and mutual coordination among the institutions** | | |
| **Measure** | **7.3.2.** **Upgrading the efficiency of the Inter-entity Environmental Body** | | |
| **Description of the measure with the general area of intervention** | The aim of this measure is to ensure a coordinated and harmonized approach to addressing environmental management issues among both Entities and Brcko District by increased efficiency of the inter-entity environmental body.  General areas of intervention:  1) Ensuring active contribution to more efficient and effective work of the inter-entity environmental body, through modernization and improved functioning of this body, in particular in the domain of harmonization of the legislation among the Entities and Brcko District, modernization of internal and external communication channels, within the competence of the Federation of BiH. This may include:   1. Defining of the mission and vision of the Inter-entity Environmental Body; 2. Preparation of the policy documents for the Inter-entity Environmental Body with a clear division of roles and responsibilities; 3. Forming the Secretariat of the Inter-entity Environmental Body; 4. Creating working groups within the Inter-entity Environmental Body; 5. Producing semi-annual and annual work plans in all the fields; 6. Creating website and social media account (providing transparency of their work, decisions and conclusions).   2) Through elaboration of the Strategy on the public participation and publicity of information on the work of Inter-entity Environmental Body, enable the participation of the interested parties (representatives of the Partnership 27 and civil society organizations) in meetings and activities of the Inter-entity Environmental Body and public access to information about their meetings and reports of the meetings. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **2021** | **Target value** |
| 1. Efficiency and effectiveness of the work of the Inter-entity Environmental Body | The inter-entity body is active but its work is ineffective and inefficient | Efficient an effective work of the Inter-entity Environmental Body (2030) |
| 1. Transparency of work of the inter-entity body | Reports on meetings are not publicly available | Public and transparent work of the inter-entity body (2030) |
| **Effect on the development and contribution of the measure to the priority** | Contribution to creating a coherent management with strong inter-sectoral links and good coordination, which are essential for efficient and transparent environmental management | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 105,335  Source: 20% government budget , 80% funds from EU and other international donors | | |
| **Period of the implementation of the measure** | 2022 – 2030 | | |
| **Institution responsible for coordination of the implementation of the measure** | Federation Ministry of Environment and Tourism | | |
| **Implementing institutions** | Federation Ministry of Environment and Tourism (nominated members of the environmental inter-entity body) | | |
| **Target groups** | All the institutions which participate in coordination of activities and projects in the area of environment, civil society organizations | | |

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| **Link with strategic goal** | **7. Strengthening environmental management** | | |
| **Priority** | **7.3 Maximise the capacity and mutual coordination among the institutions** | | |
| **Measure** | **7.3.3** **Improving the institutional structure and capacity of environmental institutions** | | |
| **Description of the measure with the general area of intervention** | The aim of this measure is to upgrade the existing institutional structure aimed at improving coordination and harmonization of activities in the process of transposition of the EU acquis (regarding human resources) in the environmental institutions at all levels, with a special focus on long-term and sustainable implementation of the EU regulations.  General areas of intervention:  1) A detailed study of the institutional capacity in the Federation of BiH for consistent application of laws and effective implementation of environmental protection strategies and plans (focusing on the capacity of the Federation and cantonal inspection administration) and units of local government (through local plans). The study should cover the institutions responsible for all the segments of environmental management (including chemical safety) and offer appropriate recommendations for improvement of the capacities;  2) Developing measures to keep professionals in the institutions based on the analysis of the institutional capacity;  3) Based on the analysis of the institutional capacities, identify priority measures, focusing on strategic approach to employment and strengthening of human resources in the institutions. In particular: creating an organizational unit in charge of continued institutional capacity building and development of new job classifications for the institutions;  4) Preparation and adoption of a document on coordinated work of inspection bodies and other inspection bodies, in order to better coordinate the work of environmental and other inspections. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **2021** | **Target value** |
| 1. Evaluation of the institutional capacity for consistent application of laws and effective implementation of environmental plans and strategies | No evaluation has been undertaken | A comprehensive evaluation of the institutional capacity completed (2024) |
| 2), 3) Introducing measures for the improvement in accordance with the completed evaluation | No evaluation has been undertaken | Measures defined with the view of:   * Keeping the professionals in the institutions * Strengthening the capacities with a focus on human resources   The organizational unit in charge of capacity building and new job classifications designated (2026) |
| 4) Status of drafting and adoption of the documents coordinating the work of inspection bodies, which should contribute to coordination of the work of environmental and other inspections. | The document has not been prepared | The document coordinating the work of the inspection bodies prepared and adopted (2024) |
| **Effect on the development and contribution of the measure to the priority** | Contribution to creating a coherent management with strong inter-sectoral links and good coordination, which are essential for efficient environmental management | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 124,596  Source: 20% government budget , 80% funds from EU and other international donors | | |
| **Period of the implementation of the measure** | 2022 – 2030 | | |
| **Institution responsible for coordination of the implementation of the measure** | Federation Ministry of Environment and Tourism | | |
| **Implementing institutions** | Federation Ministry of Environment and Tourism in cooperation with other institutions responsible for all the segments of environmental management (including chemical safety ) in the Federation of BiH, Administration for Inspection Issues of the Federation of BiH | | |
| **Target groups** | All the institutions responsible for the environment | | |

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| **Link with strategic goal** | **7. Strengthening environmental management** | | |
| **Priority** | **7.3 Maximise the capacity and mutual coordination among institutions** | | |
| **Measure** | **7.3.4** **Creation of effective teams in the environmental institutions, including teams for the preparation and implementation of environmental projects** | | |
| **Description of the measure with the general area of intervention** | The aim of this measure is to create functional teams in all the environmental institutions including teams with expertise in the preparation and implementation of projects.  General areas of intervention:  1) A detailed assessment of needs for professional trainings in all the institutions, especially focusing on the needs for expertise in the preparation and implementation of environmental projects, and harmonization with the existing spatial plans and strategic documents;  2) Based on the assessment of the needs for professional trainings, prepare and implement of a training plan on the professional capacity building in the institutions in cooperation with professional institutions (Civil Service Agency of the Federation of BiH). The training plan should include:   1. thematic trainings and workshops aimed at informing employees of the line ministries about new provisions of the legislative framework aligned with EU Directives; 2. training of staff who will be involved in drafting of new laws and regulations ahead of the adoption of new regulations in order to inform them about the provisions which have to be transposed into the legislation of institutions of the Federation of BiH; 3. trainings for the competent institutions including inspectorates, on detection of environmental offences through regular monitoring and control, as well as effective cooperation with third parties; 4. training and education of staff for strategic environmental assessment; 5. trainings for the institutions responsible for control and implementation of regulations on legal liability for environmental offences, about determination of corrective measures which are necessary in accordance with the criteria defined in Directive 2004/35/EC; 6. training of judges and prosecutors about the importance and elements of crimes against the environment, which should be organised by the Centre for Judicial and Prosecutorial Training of the Federation of Bosnia and Herzegovina 7. trainings for the relevant institutions aimed at building their capacity to organize efficient public participation; 8. trainings on the preparation of technical instructions for BAT; 9. education of public sector experts on climate change and adaptation to climate change within their scope of activities, especially focusing on public sector departments directly involved in the implementation of action plans; 10. current multidisciplinary topics from the domain of gender equality and waste management such as green procurement, circular economy (sustainable production and consumption), EU policy and EU policy for the Western Balkans, etc.;   3) Based on the assessment of the needs for professional training, form teams for the preparation and implementation of environmental projects in the key institutions (where no such teams exist). | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **2021** | **Target value** |
| 1. Assessment of the needs for professional training | Assessment of needs has not been done. | Assessment of the needs for professional training completed (2024) |
| 1. Conducting trainings in accordance with the Professional Capacities Training Plan | Some trainings have been implemented, but there is a scope for improvement and more systemic approach | All trainings conducted as planned (2030) |
| 1. Number of institutions which formed teams for the preparation and implementation of environmental projects | 2 institutions (Federation Ministry of Environment and Tourism and Federation Ministry of Agriculture, Water Management and Forestry) | All the key institutions created teams for the preparation and implementation of projects (2026) |
| **Effect on the development and contribution of the measure to the priority** |  | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 149,299  Source: 20% government budget , 80% funds from EU and other international donors | | |
| **Period of the implementation of the measure** | 2022 – 2030 | | |
| **Institution responsible for coordination of the implementation of the measure** | All the environmental institutions in the Federation of BiH, within their competencies | | |
| **Implementing institutions** | All the environmental institutions, in cooperation with the Civil Service Agency of the Federation of BiH and in cooperation with other institutions responsible for trainings (e.g. Centre for Judicial and Prosecutorial Training of the Federation of BiH, Association of Municipalities and Cities of the Federation of BiH, etc.) | | |
| **Target groups** | All the environmental institutions | | |

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| **Link with strategic goal** | **7. Strengthening environmental management** | | |
| **Priority** | **7.4 Ensuring strong public awareness on the importance of the environmental protection and their engagement in decision-making processes, focusing on women, youth and socially vulnerable groups** | | |
| **Measure** | **7.4.1 Education and raising awareness about the need and importance of environmental protection** | | |
| **Description of the measure with the general area of intervention** | The aim of this measure is to ensure greater public awareness about the importance of environment protection and engagement in decision-making, especially focusing on women, young people and socially vulnerable groups. This requires continued awareness raising activities about the need importance of environmental protection, as well as continued education programmes. Civil society organisations will also be included in these activities. Besides, this measure also includes promotion of measures that can influence design of products as well as environmental protection systems (EMAS and ISO 14001).  General areas of intervention:  1) Continuous cooperation with media to implement promotional activities, information and awareness raising campaigns on the importance of environmental protection with specifically designed messages for selected interested members of public (young people etc.);  2) Continuous awareness raising campaigns on the importance of environmental protection, importance and vulnerability of natural resources, and the link with climate change which will include specifically designed activities focusing on children, young people, adults (women and men), population in urban and rural areas, representatives of industry and, marginalized groups etc. This also includes presentation of gender sensible innovative approaches to environmental protection and natural resources management (workshops, media campaigns, social networks campaigns);  3) Initiating long-term education programmes on environmental issues;  4) Improving cooperation with partner institutions on expanding the knowledge and skills and raising awareness about linkages between environment and gender dimension;  5) Promotion of the environmental protection system (EMAS and ISO 14001) and measures that can influence the design of products and encouraging business entities to certification, which, among other things, results in a competitive advantage. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **2021** | **Target value** |
| 1. Continuity of cooperation with media aimed at implementation of promotional activities | There is no cooperation with media | Continuous and intensive promotion of environmental protection in media ensured (continuously 2030+) |
| 2) 3) Regularity and continuity in the implementation of education programmes and awareness raising campaigns about the importance of environmental protection, significance and threat status of natural resources and correlation with climate change | Regular education programmes and campaigns | Regular and continuous educational programmes and raising awareness campaigns about the importance of environmental protection, and vulnerability of natural resources and their correlation with climate change (continuously 2030+) |
| 4) Level of cooperation among the partner institutions on expanding the knowledge and skills and raising awareness about the links between the environment and gender dimension | Cooperation with partner institutions implemented and intensified through the development of the Strategy of the Federation of BiH | Enhanced and continued cooperation with partner institutions on expanding the knowledge and skills and raising awareness about the links between the environment and gender dimension secured (continuously 2030+) |
| 4) Status of promotion of measures which might influence the design of products and environmental protection systems | Inadequate promotion of measures which might influence the design of products and environmental protection systems | Continuous promotion of measures which might influence the design of products and environmental protection systems secured (until 2026 and onwards) |
| **Effect on the development and contribution of the measure to the priority** | Increased public awareness on the importance of the environment | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 388,618  Source: 30% government budget , 70% combined ‒ funds from EU and other international donors, and other donations | | |
| **Period of the implementation of the measure** | 2022 – 2030 | | |
| **Institution responsible for coordination of the implementation of the measure** | All the environmental institutions including local government units | | |
| **Implementing institutions** | All the environmental institutions including local government units (municipalities/cities), in cooperation with media, educational institutions, civil society organizations and Gender Centre of the Federation of BiH | | |
| **Effect on the development and contribution of the measure to the priority** | Professional community, general public, business entities | | |

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| **Link with strategic goal** | **7. Strengthening environmental management** | | |
| **Priority** | **7.4 Ensuring strong public awareness on the importance of the environmental protection and their engagement in decision-making processes, focusing on women, youth and socially vulnerable groups** | | |
| **Measure** | **7.4.2 Improving public participation in decision-making about environment** | | |
| **Description of the measure with the general area of intervention** | The aim of this measure is to ensure access to information and efficient public participation in the process of environmental decision-making, especially in the environmental permitting processes. This measure includes capacity building of civil society women associations to participate in decision-making.  General areas of intervention:  1) According to the identified needs, trainings of the representatives of the relevant institutions aimed at strengthening the capacity to organise efficient public participation;  2) Mapping of relevant civil society organizations and updating the existing list and improving cooperation with civil society organizations through their engagement in preparation of laws, bylaws and other enactments, strategies, policies and analysis, as well as in development of spatial plans and programmes, decision on concessions, water decisions, environmental impact assessments (both stages), environmental permitting and o licencing procedures of special plants;  In particular:   1. Implementation of mandatory consultations with local population directly exposed to project impacts by using specially designed approaches, especially for vulnerable categories of population; 2. establishment of cooperation with women non-governmental organizations in the Federation of BiH to involve them in decision-making on environmental management (this especially applies to women associations, which gather women living in the country and whose members are women from rural areas, and also to all the other NGOs focusing on women’s human rights; 3. creating incentive measures for active inclusion of youth organizations in environmental decision-making; 4. establishment and strengthening of cooperation with the umbrella organization of young people in the Federation of BiH (Youth Council of the Federation of BiH);   3) Providing for the participation of the Gender Centre of the Federation of BIH, in preparation of laws, bylaws and other acts, strategies, policies and programmes focusing on gender equality in the area of environmental protection;  4) Ensuring that the notification on public consultations is forwarded from the higher levels of authorities to local government units (municipalities/cities);  5) Functional cooperation with the Partnership 27 formed to monitor the process of EU Chapter 27 by civil society, in the preparation of legislation and its alignment with the EU acquis;  6) Continuous education of employees in the line institutions at all levels of government about the application of provisions of the Freedom of Access to Information Act;  7) Facilitating public access to all relevant environmental information on websites of the competent institutions at all the levels, including:   1. PRTR data; 2. Information from the register of environmental permits and related prior environmental impact assessments (approved Studies), decisions on approved reports on the safety situation (SEVESO plant storing dangerous substances); 3. Updated lists of legislation within the competence of individual institutions/bodies; 4. Other relevant environmental information;   8) Ensure formal communication of the public with the competent authorities at all levels via e-mail. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **2021.** | **Target value** |
| 1. Capacity of the institutions to provide for effective public participation mechanisms | Certain level of capacity to provide for public participation have been built, but there is a room for improvement | The capacity of the institutions to provide for effective public participation mechanisms strengthened (2030) |
| 1. Level of cooperation between the Federation Ministry of Environment and Tourism and other institutions | There is no institutional cooperation between the Federation Ministry of Environment and Tourism and other institutions in the sector of environment with civil society organizations | Strengthened institutional cooperation between the Federation Ministry of Environment and Tourism and other institutions in the sector of environment with civil society organizations |
| 1. Level of cooperation between the Federation Ministry of Environment and Gender Centre of the Federation of BiH | A two-way communication initiated between the Federation Ministry of Environment and Tourism and Gender Centre of the Federation of BiH | Excellent cooperation between the Federation Ministry of Environment and Gender Centre of the Federation of BiH (continuously -2030) |
| 1. Transmission of notification on public consultations from higher level authorities to local government units | Oftentimes, notifications on public consultations are not transmitted from the higher level authorities to local government units | Improved transmission of notifications on public consultations from the higher level authorities to local government units (continuously -2030) |
| 1. Effectiveness of cooperation with the Partnership 27 | There is no institutional cooperation with the Partnership 27 | Effective cooperation with the Partnership (continuously - 2030) |
| 1. Implementation of education on the Freedom of Access to Information Act (FAIA) | Trainings implemented occasionally | Trainings on FAIA implemented as planned (continuously - 2030) |
| 1. Public access to environmental information on websites of the competent institutions at all levels | Partly – all information is not available on websites, that is, it is not updated regularly | Public has access to all the relevant environmental information, primarily on official websites of the institutions (continuously -2030) |
| 1. Effectiveness of electronic/online communication between the responsible institutions and public | Communication channels via electronic mail provided–there is a room for improvement | Effective communication via electronic mail implemented (2026 and onwards continuously) |
| **Effect on the development and contribution of the measure to the priority** | Enhanced application of the good governance principle through a greater transparency and new mechanisms of public participation, focusing on members of vulnerable groups | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 281,794  Source: 10% government budget , 90% combined ‒ funds from EU and other international donors, and other donations | | |
| **Period of the implementation of the measure** | 2022 – 2030 | | |
| **Institution responsible for coordination of the implementation of the measure** | Federation Ministry of Environment and Tourism | | |
| **Implementing institutions** | Federation Ministry of Environment and Tourism and competent cantonal ministries, all the environmental institutions in the Federation of BiH | | |
| **Target groups** | Professional community, general public | | |

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| **Link with strategic goal** | **7. Strengthening environmental management** | | |
| **Priority** | **7.4 Ensuring strong public awareness on the importance of the environmental protection and their engagement in decision-making processes, focusing on women, youth and socially vulnerable groups** | | |
| **Measure** | **7.4.3 Preparation and publication of reports on the state of environment in the Federation of BiH** | | |
| **Description of the measure with the general area of intervention** | The aim of this measure is to establish the system for the preparation and publishing of regular reports on the state of environment in the Federation of BiH.  General areas of intervention:  1) Making necessary preparations in the line institutions the preparation and publishing of regular reports on the state of environment in the Federation of BiH– creating databases, communication channels for data exchange and ensuring analytical resources;  2) Preparation of periodical reports on the state of environment in the Federation of BiH pursuant to the Law on Environmental Protection;  3) Publishing reports on the state of environment in the Federation of BiH on webpage of Federation Ministry of Environment and Tourism and Environmental Protection Fund of the Federation of BiH. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **2021** | **Target value** |
| 1. Institutional capacity for preparation of regular reports on the state of environment | Low capacity. | Increased capacity – all conditions preparation of regular reports on the state of environment are fulfilled (2026) |
| 1. 3) Intensity of promotion of the conclusions and recommendations of reports on the state of environment in the Federation of BiH | No reports on the state of environment. | Periodical reports on the state of environment in the Federation of BiH regularly prepared and their conclusions and recommendations regularly promoted (continuously-2030+) |
| **Effect on the development and contribution of the measure to the priority** | Enhanced transparency and access to information, and strengthened cross-sectoral cooperation and coordination on environmental issues | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 151,611  Source: 100% government budget | | |
| **Period of the implementation of the measure** | 2022 – 2030 | | |
| **Institution responsible for coordination of the implementation of the measure** | Federation Ministry of Environment and Tourism | | |
| **Implementing institutions** | Federation Ministry of Environment and Tourism, in cooperation with the Environmental Protection Fund of the Federation of BiH and other environmental institutions | | |
| **Target groups** | Professional community, general public | | |

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| **Link to strategic goal** | **7. Strengthening environmental management** | | |
| **Priority** | **7.5 Set up an efficient system for record keeping and transparent reporting of environmental data in the Federation of BiH, in consultation with the Partnership 27** | | |
| **Title of measure** | **7.5.1. Strengthen the system for monitoring of environmental parameters** | | |
| **Description of the measure with the general area of intervention** | The aim of this measure is to strengthen the existing the system for monitoring of environmental parameters.  General areas of intervention:  1) Strengthening professional capacity of reference centres and similar institutions/institutes, based on identified specific shortcomings and needs;  2) In order to provide to a greater diversification of environmental parameters which are being monitored, adopt/update the rulebooks regulating mandatory parameters and environmental quality measurements in accordance with the international standards and clearly define the powers of the competent institutions. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **2021** | **Target value** |
| 1. Capacity of reference centres and professional institutions/institutes for monitoring | Capacity available, but there is a room for improvement | Increased professional capacity of reference centres and professional institutions/institutes for monitoring (2027) |
| 2) Status of adoption of rulebooks regulating mandatory parameters and environmental quality measurements in accordance with the international standards | Rulebooks are not update or they do not exist | All the rulebooks regulating mandatory parameters and environmental quality measurements aimed at greater diversification of environmental parameters which are monitored prepared/updated and adopted (2027) |
| **Effect on the development and contribution of the measure to the priority** | Improved environmental management through better access to data which facilitates evidence-based and analysis-based policy making in the future | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 229,101  Source: 20% government budget , 80% funds from EU and other international donors | | |
| **Period of the implementation of the measure** | 2022 – 2027 | | |
| **Institution responsible for coordination of the implementation of the measure** | Federation Ministry of Environment and Tourism | | |
| **Implementing institutions** | Federation Ministry of Environment and Tourism and other competent ministries | | |
| **Target groups** | Institutions which monitor environmental parameters | | |

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| **Link with strategic goal** | **7. Strengthening environmental management** | | |
| **Priority** | **7.5 Set up an efficient system for record keeping and transparent reporting of environmental data in the Federation of BiH, in consultation with the Partnership 27** | | |
| **Measure** | **7.5.2 Build an effective integrated information system for environmental management in the Federation of BiH** | | |
| **Description of the measure with the general area of intervention** | The aim of this measure is to establish an effective, integrated system for monitoring, collection and reporting of environmental data in order to ensure efficient and effective reporting in accordance with the international standards and agreements.  General areas of intervention:  1) Establishment of a single environmental information system pursuant to the Law on Environmental Protection  2) According to the obligations of BiH to report to international organizations, and in cooperation with the Ministry for Foreign Trade and Economic Relations of Bosnia and Herzegovina, design and adopt an environmental data exchange methodology in the Federation of BiH, which is harmonized with reporting obligations of Bosnia and Herzegovina and regulations on the establishment of environmental information systems in the Federation of BiH (spatial planning, biodiversity, water quality, waste etc.). Drafting of the methodology includes:   1. selection of sets of environmental parameters harmonized with the international methodologies for which data have to be collected; 2. method of data exchange among the institutions; 3. modality to ensure open access to data;   3) formalizing environmental data exchange procedures in the Federation of BiH based on the adopted methodology;  4) strengthening institutional systems for environmental data collection (which are classified by: geographic locations, type of settlement (urban-rural), gender, marginalized groups, income, education and other categories applicable to some types of data).  5) upgrading environmental data monitoring system on different levels (SDG, EEA, UNECE and etc. ), with creation of additional indicators and classifications of data which define classification by geographic locations, type of settlement (urban-rural), gender, marginalized groups, income, education and other categories applicable to some types of data);  6) strengthening cooperation with the relevant representatives of environmental NGOs aimed at improving options of environmental data collection;  7) development of a validation system of environmental data which should be used for verification of all collected environmental data and information as well as methodology of data collection. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **2021** | **Target value** |
| 1. Establishment of a single environmental information system | There is no single environmental information system | The single environmental information system up and running (2027) |
| 1. Status of adoption of environmental data exchange methodology for all the segments of environment among the institutions at all the levels in the Federation of BiH | The methodology is not adopted | The environmental data exchange methodology for all the segments of environment among the institutions at all the levels in the Federation of BiH defined and adopted. (2026) |
| 1. The environmental data exchange procedure in the Federation of BiH based on the adopted methodology | The procedure is not defined | The data exchange procedure in the Federation of BiH based on the adopted methodology defined (2027) |
| 1. Functioning of the institutional systems for environmental data collection | Partly functional institutional systems for environmental data collection | Well-functioning institutional systems for environmental data collection (2028) |
| 1. Effectiveness of the environmental data monitoring | There is a system of environmental data monitoring, but there is a need for improvement | Environmental data monitoring system improved (2028) |
| 1. Effectiveness of cooperation with the representatives of environmental NGOs aimed at improving options of environmental data collection | Partial cooperation | Effective cooperation with representatives environmental NGOs (2029) |
| 1. Stage of establishment of the environmental data validation system | There is no environmental data validation system | The environmental data validation system up and running (2026) |
| **Effect on the development and contribution of the measure to the priority** | Improved environmental management through better access to data which facilitates evidence-based and analysis-based policy making in the future | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 760,136  Source: 10% government budget , 90% funds from EU and other international donors | | |
| **Period of the implementation of the measure** | 2022 – 2029 | | |
| **Institution responsible for coordination of the implementation of the measure** | Federation Ministry of Environment and Tourism | | |
| **Implementing institutions** | Federation Ministry of Environment and Tourism, in cooperation with the Environmental Protection Fund of the Federation of BiH and other environmental institutions, NGO sector | | |
| **Target groups** | All institutions, business entities and organizations addressing environmental issues, professional community, general public | | |

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| **Link with strategic goal** | **7. Strengthening environmental management** | | |
| **Priority** | **7.5 Set up an efficient system for record keeping and transparent reporting of environmental data in the Federation of BiH, in consultation with the Partnership 27** | | |
| **Measure** | **7.5.3 Establishment of an effective system for monitoring, collection, validation of environmental data in accordance with the international agreements** | | |
| **Description of the measure with the general area of intervention** | The aim of this measure is to establish an effective, integrated system for monitoring, collection and reporting of environmental data in order to ensure efficient and effective reporting in accordance with the international standards and agreements  General areas of intervention:  1) In coordination with the Ministry for Foreign Trade and Economic Relations of BiH, participate in completing studies which should revise the existing and make proposal for expanded set of indicators that have to be monitored in all areas. The analysis will make proposals on methods of data collection clearly defining the roles of the institutions of the Federation of BiH in providing data, and assessing needs for staff training (upgrading the report for the project *“Strengthening the institutions for environmental protection in BiH and preparation for pre-accession funds (EnvIS)”*). At the same time, it is necessary to include the reporting requirements of EEA, EUROSTAT, EIONET, DG ENV, SDG, 3RIO, UNECE, and also including LUCAS research conducted by the Eurostat, in three-year dynamics (use of land and soil cover) etc.;  2) Based on the study, prepare and adopt the Federation of BiH list of indicators for monitoring of the state of environment (which is part of the national list of indicators). The List of indicators of the Federation should include the indicators from the core set of indicators used by the European Environment Agency;  3) Participation in activities of the Working Group coordinated by the Ministry for Foreign Trade and Economic Relations of BiH which will comprise representatives of the institutions from all the levels and which will make expert proposals and coordinate the implementation of conclusions and proposals of the study;  4) Based on results of the study, prepare a Training and Education Programme of all the agencies and institutions from the Federation of BiH on data collection, processing and reporting;  5) Continuous implementation of the Training and Education Programme in all the agencies and institutions included in data collection, processing and reporting;  6) Participation in the implementation of the strategy monitoring the state of environment, data management and reporting following its adoption at the level of Bosnia and Herzegovina (*proposal of the text of the Strategy on monitoring the state of environment, data management and reporting to the EEA is provided in the report “on monitoring the state of environment, data management and reporting" made within the project “Strengthening of the environmental institutions in BiH and preparation for access to Pre-Accession Funds Support (EnvIS)”*);  7) Preparation, adoption and implementation of the action plan for the implementation of the Regulation on EIONET BiH in the territory of the Federation of BiH (pursuant to the plan of implementation of the EIONET Regulation in Bosnia and Herzegovina, and according to the Environmental Approximation Programme of the Federation of BiH to the EU environmental acquis);  8) Prepare and adopt the Directive Specific Plan for the Implementation of the Standardized Reporting Directive (SRDSIP) in the territory of the Federation of BiH according to the Environmental Approximation Programme of the Federation of BiH to the EU u environmental acquis. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results** |  |  |  |
| 1. Complete the study to revise the existing and make proposal for extended set of indicators that have to be monitored in all areas | There is no study | The study completed, and it offers a proposal for extended set of indicators that have to be monitored in all areas (2024) |
| 1. The List of indicators of the state of environment of the Federation | It is not adopted. | The List of indicators of the state of environment of the Federation adopted (2024) |
| 1. Effectiveness of cooperation within Working Group, that will provide expert proposals and coordinate the implementation of conclusions and proposals defined in the study | Working group has not been formed | Effective cooperation within Working Group (2025) |
| 1. The Training and Education Programme for all the agencies and institutions in the Federation of BiH involved in reporting | There is no Training and Education Programme | The Training and Education Programme prepared (2025) |
| 1. Level of the implementation of the Training and Education Programme for all the agencies and institutions in the Federation of BiH involved in reporting | There is no Training and Education Programme | Training and Education Programme for all the agencies and institutions from the Federation of BiH involved in reporting implemented (continuously – 2030+) |
| 1. Level of the implementation of the Strategy on monitoring the state of environment, data management and reporting | The Strategy on monitoring the state of environment, data management and reporting has not been adopted at the level of BiH | Advanced stage of the implementation of Strategy on monitoring the state of environment, data management and reporting (continuously from 2026 and onwards (2030+)) |
| 1. Level of the implementation of the Action Plan for the Implementation of the Regulation EIONET BiH in the territory of the Federation of BiH | The Action Plan is not adopted | The Action Plan for the Implementation of the Regulation EIONET BiH in the territory of the Federation of BiH implemented (continuously from 2026) |
| 1. Level of the implementation of the Action Plan for Implementation of the Standardized Reporting Directive in the territory of the Federation of BiH | The Action Plan is not adopted | The Action Plan for the Implementation of the Standardized Reporting Directive in the territory of the Federation of BiH implemented (continuously from 2025) |
| **Effect on the development and contribution of the measure to the priority** | Improved environmental management through better access to data which facilitates evidence-based and analysis-based policy making in the future | | |
| **Indicative financial projection, with specification of sources** | Amount: 481 892 KM  Source: 10% government budget , 90% funds from EU and other international donors | | |
| **Period of the implementation of the measure** | 2022 – 2030 | | |
| **Institution responsible for coordination of the implementation of the measure** | Federation Ministry of Environment and Tourism | | |
| **Implementing institutions** | Federation Ministry of Environment and Tourism, in cooperation with the environmental institutions, other institutions involved in environmental data monitoring and reporting | | |
| **Target groups** | All the institutions, business entities and organizations addressing environmental issues, professional community, general public | | |

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| **Link with the strategic goal** | **7. Strengthening environmental management** | | |
| **Priority** | **7.5 Set up an efficient system for record keeping and transparent reporting of environmental data in the Federation of BiH, in consultation with the Partnership 27** | | |
| **Title of the measure** | **7.5.4 Establishment of a system for spatial data exchange in the Federation of BiH in accordance with the INSPIRE Directives I II, and III** | | |
| **Description of the measure with general area of intervention** | This measure aims at setting up an effective spatial data exchange system in the Federation of BiH in accordance with Annexes I, II and II of the INSPIRE Directive.  General areas of intervention are:  1) Devising and adopting a methodology for spatial data management in the Federation of BiH, which should be harmonised with the Law on Spatial Planning and Land Use of the Federation of BiH (Official Gazette of the Federation of BiH, 2/06, 07/10, 13/10, and 45/10), Chapter II, DOCUMENTATION, Section 1 Single Information System, Articles 31 through to 33 of the Law and Decree which regulate the content and operators of the single information system, methodology of data collection and processing, and a uniform format of recordkeeping (Official Gazette of the Federation of BiH, 33/07) aimed at securing adequate mechanisms and criteria for sharing of spatial data within the meaning of the INSPIRE Directive. The methodology includes:   1. Organisational basis and data sharing procedures; 2. Selection of sets of environmental (spatial) data in accordance with Annexes II and III of the INSPIRE Directive; 3. Method of providing for open access to data;   2) Pursuant to the Law on Spatial Data Infrastructure (SDI) of the Federation of BiH, (Official Gazette of the Federation of BiH, 55/21), adopt required bylaws aimed at effective development of the Spatial Data Infrastructure in the Federation of BiH;  3) In compliance with the Strategy on deployment and maintenance of the Spatial Data Infrastructure of the Federation of BiH, the deployment and management of the Spatial Data Infrastructure in the Federation of Bosnia and Herzegovina in accordance with Annexes I, II, and III of the INSPIRE Directive and services among the institutions. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| 1. Status of adopting a methodology for spatial data management in the Federation of BiH | The methodology is not adopted | The methodology for spatial data management in the Federation of BiH defined and adopted (2025) |
| 1. Status of adopting required bylaws for an effective establishment of SDI in the Federation of BiH | The bylaws not adopted | The bylaws required for an effective establishment of SDI in the Federation of BiH adopted (2024) |
| 1. Status of setting up SDI in the Federation of BiH | SDI is in place | SDI in the Federation of BiH in place and operational (2030+) |
| **Effect on the development and contribution of the measure to the priority** | Improved environmental management through better access to data which facilitates evidence-based and analysis-based policy making in the future | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 536,571  Source: 10% government budget , 90% funds from EU and other international donors | | |
| **Period of the implementation of the measure** | 2022– 2030 | | |
| **Institution responsible for coordination of the implementation of the measure** | Federation Ministry of Spatial Planning | | |
| **Implementing institutions** | Federation Ministry of Spatial Planning, Federal Administration of Geodetic and Proprietary Affairs in cooperation with the Federation Ministry of Environment and Tourism and other environmental institutions | | |
| **Target groups** | All the institutions, business entities, and organisations focusing on environmental issues, professional and general public | | |

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| **Priority** | **7.5 Set up an efficient system for record keeping and transparent reporting of environmental data in the Federation of BiH, in consultation with the Partnership 27** | | |
| **Title of the measure** | **7.5.5 Establishment of an effective PRTR** | | |
| **Description of the measure with general area of intervention** | This measure aims at establishing an effective PRTR in the Federation of BiH, harmonised with the registers in Republika Srpska and the Brcko District. It further aims at regulating the reporting of data from PRTRs to the national institutions.  General areas of intervention are:  1) In accordance with the responsibilities of the Federation of BiH, upgrading the legal framework and institutional arrangements to set up an effective PRTR in Federation of BiH, which should define the channels of communication and reporting lines, and procedures for data publication (implementation of the Regulation (EC) no. 166/2006 in relation to the establishment of the European Pollutant Release and Transfer Registry and amendments to the Council’s Directives 91/689/EEC and 96/61/EC):  2) Creating an effective and sustainable PRTR database in the Federation of BiH, applying the methodology agreed with RS and BD (data is provided in accordance with the international obligations, which implies the use of common forms, types and number of pollutants, same measurement units, etc.);  3) Public access to data from the PRTRs ensured through web portals;  4) Securing funds for a progressive upgrade of the application (as appropriate) through maintenance agreements with an IT company from the Federation of BiH, and regular maintenance of the PRTR to ensure its smooth operation (through a direct link for a better data flow), and hardware equipment, provided it is owned by the Federation Ministry of Environment and Tourism. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| 1. Status of the legal framework and institutional arrangements for PRTR in Federation of BiH | The legal framework is not update and there are no effective institutional arrangements for PRTR in Federation of BiH | The legal framework updated and effective institutional arrangements for PRTR in Federation of BiH secured (2025) |
| 1. Effectiveness of PRTR database ensured through the application of a methodology harmonised with the methodologies applied in Republika Srpska and the Brcko District | PRTR not operational | An effective and viable PRTR database set up, and harmonised with the methodologies applied in Republika Srpska and the Brcko District |
| 1. Public access to data in PRTR | Partial access to data collected in the past | Public access to data from the PRTRs ensured through the web portal (2026) |
| 1. A viable PRTR | / | Viability of PRTR ensured through provision of funds for its maintenance and upgrade (2030+) |
| **Effect on the development and contribution of the measure to the priority** | Improved decision-making across the levels of government and enhanced access to information which are essential in reducing of environmental pollution | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 124,922  Source: 100% government budget | | |
| **Period of the implementation of the measure** | 2022– 2030 | | |
| **Institution responsible for coordination of the implementation of the measure** | Federation Ministry of Environment and Tourism | | |
| **Implementing institutions** | Federation Ministry of Environment and Tourism with other environmental institutions | | |
| **Target groups** | All the institutions, business entities, and organisations focusing on environmental issues, professional and general public. | | |

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| **Link with the strategic goal** | **7. Strengthening environmental management** | | |
| **Priority** | **7.5 Set up an efficient system for record keeping and transparent reporting of environmental data in the Federation of BiH, in consultation with the Partnership 27** | | |
| **Title of the measure** | **7.5.6 Development of statistics for Sustainable Development Goals in the Federation of BiH** | | |
| **Description of the measure with general area of intervention** | This measure aims at developing statistics for environmental Sustainable Development Goals in the Federation of BiH, including development of further indictors, and improvements of the reporting system.  General areas of intervention are:   1. The improvement of the production of official statistics in the Federation of BiH for the indicators of the environmental Sustainable Development Goals based on needs and requests; 2. Augmenting availability and quality of statistics in the Federation of BiH, disaggregated by sex (where appropriate) and enhancing the affirmation of official statistics as the main source of reliable data; 3. Strengthening cooperation among the institutions in the Federation of Bosnia and Herzegovina in collecting indicators of the environmental Sustainable Development Goals. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| 1. 2) Effectiveness of the system of producing official statistics of the Federation of BiH for indicators of the Sustainable Development Goals for the environment | Partially effective system | The system of production of official statistics of the Federation of BiH for indicators of the environmental Sustainable Development Goals effective (2026) |
| 3) The level of cooperation among all the institutions in the Federation of BiH engaged in collecting indicators of the environmental Sustainable Development Goals. | Partially effective cooperation and coordination among the relevant institutions | Effective cooperation among all the institutions in the Federation of BiH engaged in collecting indicators of the environmental Sustainable Development Goals (2030+) |
| **Effect on the development and contribution of the measure to the priority** | Development of the statistical system which facilitates evidence-based and analysis-based policy making in the future | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 404,902  Source: 30% government budget , 70% funds from EU and other international donors | | |
| **Period of the implementation of the measure** | 2022– 2030 | | |
| **Institution responsible for coordination of the implementation of the measure** | Institute for Statistics of the Federation of BiH | | |
| **Implementing institutions** | Institute for Statistics of the Federation of BiH in cooperation with the Agency of Statistics of BiH and other competent institutions | | |
| **Target groups** | All the environmental institutions, professional and general public | | |

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| **Link with the strategic goal** | **7. Strengthening environmental management** | | |
| **Priority** | **7.5 Set up an efficient system for record keeping and transparent reporting of environmental data in the Federation of BiH, in consultation with the Partnership 27** | | |
| **Title of the measure** | **7.5.7 Enhancing the efficiency of collecting, processing and publication of environmental statistics** | | |
| **Description of the measure with general area of intervention** | This measure aims at increasing the efficiency of statistical data collection, processing and publication in the Federation of BiH through a standardised and routine information sharing among the institutions across the levels of government.  General areas of intervention are:  1) Strengthening the national statistics system through improved cooperation of all the institutions involved in data collection, processing and dissemination in the Federation of BiH;  2) Improving compliance with the requirements of the EU statistics system in terms of the number of statistical indicators, deadlines for their release and methodologies applied;  3) Improving the reporting system pursuant to the provision of the Statistical Requirements Compendium, published by Eurostat through:   1. Harmonisation of the Environmental Statistic and Environmental Accounts (both physical and monetary) with the methodology and standards of EUROSTAT, with the view of enhancing the data quality at the national level and enhancing the compatibility of data at the international level; 2. Active use of GIS (Geographic Information System) in order to develop maps, charts and time series, and for forecasting purposes, where appropriate. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| 1. Quality of cooperation of all the institutions involved in data collection, processing and dissemination | Partially effective cooperation | Effective cooperation of all the institutions involved in environmental data collection, processing and dissemination ensured (2026) |
| 1. Compliance with the requirements of the EU statistic system | Partial compliance | Compliance with the requirements of the EU statistic system achieved (2026) |
| 1. Quality of cooperation pursuant to the provisions of the Statistical Requirements Compendium, published by Eurostat | The reporting system in the phase of development | Improved quality of reporting pursuant to the provisions of the Statistical Requirements Compendium, published by Eurostat (2026) |
| **Effect on the development and contribution of the measure to the priority** | Development of the statistical system which facilitates evidence-based and analysis-based policy making in the future | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 135,863  Source: 100% funds from EU and other international donors | | |
| **Period of the implementation of the measure** | 2022– 2030 | | |
| **Institution responsible for coordination of the implementation of the measure** | Institute for Statistics of the Federation of BiH | | |
| **Implementing institutions** | Institute for Statistics of the Federation of BiH in cooperation with the Agency of Statistics of Bosnia and Herzegovina and other competent institutions | | |
| **Target groups** | All the environmental institutions, professional and general public | | |

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| **Link with the strategic goal** | **7. Strengthening environmental management** | | |
| **Priority** | **7.5 Set up an efficient system for record keeping and transparent reporting of environmental data in the Federation of BiH, in consultation with the Partnership 27** | | |
| **Title of the measure** | **7.5.8 Development of European Environmental Economic Accounts** | | |
| **Description of the measure with general area of intervention** | This measure aims at ensuring the participation of the institutions of the Federation of BiH in development of the European Environmental Economic Accounts which describe the relations between the environment and economy (in accordance with the (EU) Regulation no. 691/2011 on the European Environmental Economic Accounts which laid down a common legal framework for collection, preparation, communication and evaluation of the European Environmental Economic Accounts)  General areas of intervention are:  1) Implementing the Regulation EU 691/2011 of the European Parliament and Council on European Environment Economic Accounts (environment economic accounts are an important source of data for monitoring and evaluation of environmental policies, such as the Eighth Environment Action Programme, and the progress made in fulfilment of United Nations Sustainable Development Goals);  2) In accordance with the responsibilities of the Federation of BiH, expand the environmental accounts so as to cover new areas in accordance with the System of Environmental Economic Accounting as an international statistical standard. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| 1. The level of the implementation of the Regulation (EU) no. 691/2011 on the priority European Environmental Economic Accounts | Partly implemented | The Regulation (EU) no. 691/2011on the priority European Environmental Economic Accounts implemented (2026) |
| 1. Status of expansion of the environmental accounts to new areas in accordance with the System Environmental Economic Accounting | The Environmental Accounts partly developed | Water Accounts, Forest Accounts, Accounts of Resources Management Expenditures, Ecosystem Accounts developed (2026) |
| **Effect on the development and contribution of the measure to the priority** | Development of the European Environmental Economic Accounts enables comparisons, validation and valid decision-making on measures required to improve environmental management and achieve the United Nations' Sustainable Development Goals | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 128,634  Source: 100% funds from EU and other international donors | | |
| **Period of the implementation of the measure** | 2022– 2026 | | |
| **Institution responsible for coordination of the implementation of the measure** | Institute for Statistics of the Federation of BiH | | |
| **Implementing institutions** | Institute for Statistics of the Federation of BiH in cooperation with the Agency of Statistics of BiH and other competent institutions | | |
| **Target groups** | All the environmental institutions, professional and general public | | |

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| **Link with the strategic goal** | **7. Strengthening environmental management** | | |
| **Priority** | **7.6 Ensuring a strong synergy in cross-sectoral and inter-sectoral action, and integration of public environmental policies** | | |
| **Title of the measure** | **7.6.1 Integration of environmental requirements in sectoral policies and legislation** | | |
| **Description of the measure with general area of intervention** | This measure aims at integrating the environmental requirements in sectoral policies and legislation through enhanced cross-sectoral cooperation, particularly cooperation with the institutions focusing on gender equality, social equity and poverty issues,  Special focus of this measure is on the integration of the requirements of the Strategy on climate change adaptation and low carbon development of BiH in sectoral policies of the Federation of BiH, in compliance with the deadlines and obligations which will be laid down in this Strategy and in accordance with the 2020 Western Balkans Green Agenda with five pillars: I Climate, energy, mobility; II Circular economy; III Waste management; IV Elimination of Pollution: V Biodiversity.  General areas of intervention are:   1. Improving institutional forms of cooperation among the environmental institutions in the Federation of Bosnia and Herzegovina with institutions from other sectors (such as energy, spatial planning, transport, mining, agriculture, forestry, health sector, tourism, education sector, gender equality, social welfare); 2. Proactive participation in consultations on drafts of sectoral legal and policy document; 3. Robust application of the instruments of strategic environmental assessment; 4. Regulating mandatory assessment of ecosystem services in preparation of reports on strategic environmental assessments; 5. Requirement for compliance of environmental plans and programmes and projects with the applicable spatial plans 6. Integration of climate change adaptation in sectoral development strategies, programmes and plans in sectors exposed to a high risk and vulnerable to climate impacts (agriculture, water resources/water management, forestry/forest resources, human health, biodiversity, and vulnerable ecosystems, tourism ). | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| 1. Institutionalisation of some forms of cooperation between the environment sector and other sectors | Poorly institutionalised | Institutionalised cooperation between the environmental and other sectors (2030) |
| 1. 3)4) Contribution of the environmental institutions to the integration of environmental requirements in sectoral policies | Poor contribution of the environmental institutions to the integration of environmental requirements in sectoral policies | The environmental institutions play an active role in integration of environmental requirements in sectoral policies (continuously- 2030) |
| 5) Compliance of environmental plans and programmes and projects with the applicable spatial plans | Partially in compliance | Compliance of environmental plans, programmes, and projects with the applicable spatial plans secured (continuously 2030+) |
| 6) Contribution of the environmental institutions to the preparation of documents addressing topics other than environment aimed at the integration of climate change adaptation | Relatively minor contribution | The environmental institutions play an active role in the preparation of documents addressing topics other than environment aimed at the integration of climate change adaptation provided (2027) |
| **Effect on the development and contribution of the measure to the priority** | Contribution to creating a coherent system with strong intersectoral links and good coordination which are essential for efficient environmental management | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 125,884  Source: 30% government budget , 70% funds from EU and other international donors | | |
| **Period of the implementation of the measure** | 2022 - 2030 | | |
| **Institution responsible for coordination of the implementation of the measure** | Federation Ministry of Environment and Tourism | | |
| **Implementing institutions** | Federation Ministry of Environment and Tourism in cooperation with institutions from other sectors (water management, forestry, human health, biodiversity) | | |
| **Target groups** | Institutions which apply public policies and legislation with integrated environmental issues, professional and general public | | |

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| **Link with the strategic goal** | **7. Strengthening environmental management** | | |
| **Priority** | **7.6 Ensuring a strong synergy in cross-sectoral and inter-sectoral action, and integration of public environmental policies** | | |
| **Title of the measure** | **7.6.2 Integration of standards and principles of gender equality, social equality and poverty in key environmental policies, strategies, and programmes** | | |
| **Description of the measure with general area of intervention** | Standards and principles of gender equality, social equity and poverty integrated in the key environmental policies, strategies, and programmes. Tools such as gender analysis, gender impact assessment, gender responsible budgeting, gender index in the environment sector and gender audit applied to planning, implementation, monitoring and evaluation of policies, programmes and projects in the environmental management sector. Special provisional gender equality measures will be designed adopted and implemented in the environmental management.  These measures will focus on establishing an effective institutional coordination mechanism in the area of gender equality, particularly to facilitate gender mainstreaming in public policies and legislation, pursuant to the Law on Gender Equality of Bosnia and Herzegovina.  General areas of intervention are:   1. The preparation of Guidelines for the integration of standards and principles of gender equality, social equity, and poverty in all the phases of environmental management (planning, implementation, monitoring, reporting, evaluation) --- Environmental Advisory Committee; 2. Ensuring efficient operation of the institutional mechanism for gender equality in the environmental institutions - creation of the mechanism in institutions where such mechanism is not in place, through appointment of persons and teams who will address gender equality issues in the environment sector; 3. Enhancing the knowledge and awareness on interlinkages between the environment and gender equality through cooperation of the responsible institutions and strengthened role of GFP (Gender Focal Point) in all the institutions; 4. Ensuring institutional communication among the environment sector institutions and the Gender Centre of Federation of BiH, so as to ensure that the institutions consistently seek to obtain an opinion from the Gender Centre on the compliance of laws, bylaws and the legal documents, strategies, plans and programmes with the Gender Equality Law of BiH; 5. Promoting gender sensitive approach in all segments of environmental management and environmental protection; 6. Organising education and providing instructions and professional support to institutions in applying tools such as gender analysis, gender impact assessment, gender responsible budgeting, gender index in environmental planning, support to application, monitoring and evaluation of policies, programmes and projects in the environment sector in accordance with the Law on Gender Equality, with the Gender Centre of the Federation of BiH being in charge of organising this support. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| 1. Preparation of guidelines for the integration of gender equality, social equity and poverty principles in all the phases of the environmental management | No guidelines available | The Guidelines for the integration of gender equality, social equity and poverty standards in all the phases of the environmental management prepared (2024) |
| 1. 3) Knowledge and awareness of focal points nominated for gender equality in the institutions on interlinkages of the environment and gender dimension | Relatively poor | Persons appointed as gender equality officers possess knowledge and awareness on the interlinkage between the environment and gender equality (2026) |
| 4) Institutional communication among the institutions in the environment sector and Gender Centre of Federation of BiH | Very poor communication | Effective institutional communication among the institutions in the environment sector and Gender Centre of the Federation of BiH instituted (2026) |
| 5) Promotion of gender sensitive approach in all the segments of environmental management | Poor promotion | Gender sensitive approach applied in all the segments of the environmental management (2030) |
| 6) Capacities of the environmental institutions responsible for the application of gender mainstreaming tools | Poor capacity | The environmental institutions possess capacities for the application of gender mainstreaming tools (2029) |
| **Effect on the development and contribution of the measure to the priority** | Ensure that all men and women, particularly those from poor and vulnerable groups effectively participate in environmental decision-making | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 275,247 BAM  Source: 10% government budget , 90% combined ‒ funds from EU and other international donors, and other donations | | |
| **Period of the implementation of the measure** | 2022– 2030 | | |
| **Institution responsible for coordination of the implementation of the measure** | The Federation Ministry of Environment and Tourism and Gender Centre in the Federation of Bosnia and Herzegovina | | |
| **Implementing institutions** | Federation Ministry of Environment and Tourism, Gender Centre of Federation of BiH in cooperation with relevant institutions addressing the issues of gender equality, social equity, and poverty | | |
| **Target groups** | Citizens, vulnerable groups | | |

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| **Link with the strategic goal** | **7. Strengthening environmental management** | | |
| **Priority** | **7.6 Ensuring a strong synergy in cross-sectoral and inter-sectoral action, and integration of public environmental policies** | | |
| **Title of the measure** | **7.6.3 Transition to a circular economy** | | |
| **Description of the measure with general area of intervention** | This measure aims at laying the foundations for the transition towards a circular economy  General areas of intervention are:   1. Draft and adopt a Roadmap and Action Plan for the implementation of the circular economy in the Federation of BiH (harmonised with the national Roadmap); 2. Eliminate legal barriers and introduce enabling instruments for green business (green economy) such as: regulatory instruments and evidence-based instruments, financial incentives and green public procurement; 3. Promoting the application of green procurements in public institutions; 4. Preparation of an Action Plan for small and medium enterprises and ensuring support to addressing the barriers which prevent the transition to green business; 5. Drafting legislation for eco-design products; 6. Ensure financial support to promotion of voluntary instruments for the implementation of green business (eco-labels, EMAS, green procurements, voluntary industrial agreements, etc). | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| 1. Status of adopting the Roadmap and Action Plan on the implementation of the circular economy in the Federation of Bosnia and Herzegovina | The Roadmap and Action Plan are not adopted | The Roadmap and Action Plan on the transition to a circular economy adopted (2024) |
| 1. Initiation of enabling instruments for green business | Enabling instruments not implemented | Enabling instruments implemented (2025) |
| 1. The application of green procurements in public institutions and private sector | Poor application of green procurement (it is not possible to determine the total amount of funds spent through the application of green procurement criteria) | Extensive application of green procurements in public institutions and private sector (2030) |
| 1. Status of the preparation of Action Plan for small and medium enterprises | The action plan not prepared | The Action Plan prepared (2026) |
| 1. Status of passing the legislation on eco-design products | The legislation is not adopted | The legislation on eco-design products adopted (2026) |
| 1. Financial support to strengthen voluntary instruments for the implementation of green business | The financial support is not provided | Financial support to strengthen voluntary instruments for the implementation of green business provided (continuously– 2030) |
| **Effect on the development and contribution of the measure to the priority** | Economic and ecological benefits obtained through a more effective use of material resources and increased efficiency of management, innovation and cooperation between the private sector and scientific research | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 219,442  Source: 100% combined ‒ funds from EU and other international donors, and other donations | | |
| **Period of the implementation of the measure** | 2022–2030 | | |
| **Institution responsible for coordination of the implementation of the measure** | Federation Ministry of Environment and Tourism | | |
| **Implementing institutions** | Federation Ministry of Environment and Tourism in cooperation with institutions in the environment sector, Federation Ministry of Economy, Federation Ministry of Development, Entrepreneurship and Crafts, Federation Ministry of Energy and Mining, and Industry, Federation Ministry of Trade, public institutions, private sector | | |
| **Target groups** | Institutions and business sector are responsible for drawing up and implementing AP/Roadmap, citizens | | |

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| **Link with the strategic goal** | **7. Strengthening environmental management** | | |
| **Priority** | **7.7. Ensuring financial sustainability of the environment sector in the Federation of BiH** | | |
| **Title of the measure** | **7.7.1 Efficient and comprehensive implementation of environmental economic instruments** | | |
| **Description of the measure with general area of intervention** | This measure aims at ensuring a comprehensive implementation of available environmental economic instruments. To this end, the responsible institutions routinely prepare and transparently publish reports on funds raised and on the use of dedicated funds,. The Federation Ministry of Finance, Ministry of Foreign Trade and Economic Relations of BiH, will be involved in all the aspect of the fiscal policy on the environmental protection (facilities for the import of specific eco-friendly products, etc). The measure also involves the application of all the taxes set out in the Law on the Fund of the Federation of BiH and other applicable legislation which governs individual areas.  General areas of intervention are:   1. Regulate the reporting requirement of all the levels of government (including the cantons and local governments (municipalities/cities) on dedicated spending of funds for environmental projects through the websites of the Fund, through amendments to the Law on the Fund of the Federation of BiH; 2. An in-depth analysis on the types of taxes which are not classified as environmental taxes, but partly cover environmental aspects (such as concessions, taxes for use of forests, fuel excise taxes, etc.); 3. Reform of all types of taxes which partly cover environmental issues (based on the analysis, through amendments of the applicable legislation); 4. Regulating fees for users of environmental assets, energy efficiency, waste landfilling, etc. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| 1. Status of amending the Law on the Fund of the Federation of BiH | Amendments have not been adopted | Amendments to the Law on the Fund of Federation of BiH, which require cantons and municipalities to report on the use of dedicated funds for environmental projects adopted (2024) |
| 1. Stage of completion of an in-depth analysis on the types of taxes which are not classified as environmental fees, but partly cover environmental aspects . | The analysis has not been performed. | A centralised and multi-sectoral analysis completed and all the types of taxes which are not classified as environmental fees, but partly cover environmental issues identified (2023) |
| 1. Status of the reform of taxes which partly cover environmental issues | The reform has not been undertaken | The reform of taxes carried out through amendments to the applicable regulations (2028) |
| 1. Status of efforts on regulating taxes for users of environmental assets, energy efficiency, waste landfilling, etc. | The taxes for users of environmental assets, energy efficiency, waste landfilling are not regulated | The taxes for users of environmental assets, energy efficiency, waste disposal, etc. regulated (2030.+) |
| **Effect on the development and contribution of the measure to the priority** | Increased accountability of all levels of government in the environment sector, and better financial sustainability of the sector | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 92,717  Source: 100% government budget | | |
| **Period of the implementation of the measure** | 2022– 2030 | | |
| **Institution responsible for coordination of the implementation of the measure** | Federation Ministry of Environment and Tourism | | |
| **Implementing institutions** | Federation Ministry of Environment and Tourism in cooperation with the Federation Ministry of Finance, Ministry of Foreign Trade and Economic Relations of Bosnia and Herzegovina, expert team nominated by the Government of Federation of Bosnia and Herzegovina, ministries responsible for energy efficiency | | |
| **Target groups** | Institutions, business entities and citizens who are required to pay taxes and other fees, and who benefit from projects funded from funds so raised | | |

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| **Link with the strategic goal** | **7. Strengthening environmental management** | | |
| **Priority** | **7.7 Ensuring financial sustainability of the environment sector in the Federation of BiH** | | |
| **Title of the measure** | **7.7.2 Initiation of new innovative and incentive economic mechanisms for funding environmental protection** | | |
| **Description of the measure with general area of intervention** | This measure aims at implementing new innovative and stimulating economic mechanisms for funding of environmental protection.  General areas of intervention are:   1. Creating new economic instruments for environmental protection, taking into account marginalised groups and principles of gender responsible funding of environmental projects. This includes initiation of financial allocations for specifically targeted interventions aimed at improving social equity and gender equality, at economic empowerment of vulnerable social groups, particularly women in the area of so-called green entrepreneurship; 2. Enhancing the existing and introducing new revolving funds, subsidies and other mechanisms for the environment sector, where appropriate; 3. Engaging business/private sector in fund raising efforts for environmental projects, particularly focusing on the preservation of biodiversity and protected areas; | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| 1. 2) Level of improvement of the current and initiation of new economic instruments for environmental protection which are stimulative for Target groups | Inadequacy of mechanisms stimulative for the Target groups | The existing economic instruments of environmental protection enhanced and new ones initiated (2030) |
| 3) Involvement of business entities in fund raising efforts for environmental projects | Business entities are not actively involved | Business entities play an active role in fund raising efforts and participate in the implementation of environmental projects; |
| **Effect on the development and contribution of the measure to the priority** | Improved strategic management and more efficient funding of environmental protection | | |
| **Indicative financial projection, with specification of sources** | Amount: 201 036 KM  Source: 10% government budget , 90% combined ‒ funds from EU and other international donors, and other donations | | |
| **Period of the implementation of the measure** | 2022– 2030 | | |
| **Institution responsible for coordination of the implementation of the measure** | Environmental Protection Fund of the Federation of BiH | | |
| **Implementing institutions** | Environmental Protection Fund of the Federation of BiH, Federation Ministry of Environment and Tourism, responsible ministries at all levels, local communities, Development Bank of the Federation of Bosnia and Herzegovina | | |
| **Target groups** | Institutions, business entities and citizens who are obliged to pay the taxes and other fees, which benefit from projects funded from funds collected | | |

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| **Link with the strategic goal** | **7. Strengthening environmental management** | | |
| **Priority** | **7.7. Ensuring financial sustainability of the environment sector in the Federation of BiH** | | |
| **Title of the measure** | **7.7.1 Efficient and comprehensive implementation of currently available environmental economic instruments** | | |
| **Description of the measure with general area of intervention** | This measure aims at ensuring a comprehensive implementation of available environmental economic instruments. To this end, the responsible institutions routinely prepare and transparently publish reports on funds raised and on the use of dedicated funds,. The Federation Ministry of Finance, Ministry of Foreign Trade and Economic Relations of BiH, will be involved in all the aspect of the fiscal policy on the environmental protection (facilities for the import of specific eco-friendly products, etc). The measure also involves the application of all the taxes set out in the Law on the Fund of the Federation of BiH and other applicable legislation which governs individual areas.  General areas of intervention are:   1. Regulate the reporting requirement of all the levels of government (including the cantons and local governments (municipalities/cities) on dedicated spending of funds for environmental projects through the websites of the Fund, through amendments to the Law on the Fund of the Federation of BiH; 2. An in-depth analysis on the types of taxes which are not classified as environmental taxes, but partly cover environmental aspects (such as concessions, taxes for use of forests, fuel excise taxes, etc.); 3. Reform of all types of taxes which partly cover environmental issues (based on the analysis, through amendments of the applicable legislation); 4. Regulating fees for users of environmental assets, energy efficiency, waste landfilling, etc. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| 1. Status of amending the Law on the Fund of the Federation of BiH | Amendments have not been adopted | Amendments to the Law on the Fund of Federation of BiH, which require cantons and municipalities to report on the use of dedicated funds for environmental projects adopted (2024) |
| 1. Stage of completion of an in-depth analysis on the types of taxes which are not classified as environmental fees, but partly cover environmental aspects | The analysis has not been performed. | A centralised and multi-sectoral analysis completed and all the types of taxes which are not classified as environmental fees, but partly cover environmental issues identified (2023) |
| 1. Status of the reform of taxes which partly cover environmental issues | The reform has not been undertaken | The reform of taxes carried out through amendments to the applicable regulations (2028) |
| 1. Status of efforts aimed at regulating taxes for users of environmental assets, energy efficiency, waste landfilling, etc. | The taxes for users of environmental assets, energy efficiency, waste landfilling are not regulated | The taxes for users of environmental assets, energy efficiency, waste disposal, etc. regulated (2030.+) |
| **Effect on the development and contribution of the measure to the priority** | Increased accountability of all levels of government in the environment sector, and better financial sustainability of the sector | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 92,717  Source: 100% government budget | | |
| **Period of the implementation of the measure** | 2022– 2030 | | |
| **Institution responsible for coordination of the implementation of the measure** | Federation Ministry of Environment and Tourism | | |
| **Implementing institutions** | Federation Ministry of Environment and Tourism in cooperation with the Federation Ministry of Finance, Ministry of Foreign Trade and Economic Relations of Bosnia and Herzegovina, expert team nominated by the Government of Federation of Bosnia and Herzegovina, ministries responsible for energy efficiency | | |
| **Target groups** | Institutions, business entities and citizens who are required to pay taxes and other fees, and who benefit from projects funded from funds so raised | | |

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| **Link with the strategic goal** | **7. Strengthening environmental management** | | |
| **Priority** | **7.7 Ensuring financial sustainability of the environment sector in the Federation of BiH** | | |
| **Title of the measure** | **7.7.2 Initiation of new innovative and incentive economic mechanisms for funding environmental protection** | | |
| **Description of the measure with general area of intervention** | This measure aims at implementing new innovative and stimulating economic mechanisms for funding of environmental protection  General areas of intervention are:   1. Creating new economic instruments for environmental protection, taking into account marginalised groups and principles of gender responsible funding of environmental projects. This includes initiation of financial allocations for specifically targeted interventions aimed at improving social equity and gender equality, at economic empowerment of vulnerable social groups, particularly women in the area of so-called green entrepreneurship; 2. Enhancing the existing and introducing new revolving funds, subsidies and other mechanisms for the environment sector, where appropriate; 3. Engaging business/private sector in fund raising efforts for environmental projects, particularly focusing on the preservation of biodiversity and protected areas. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| 1. 2) Level of improvement of the current and initiation of new economic instruments for environmental protection which are stimulative for Target groups | Inadequacy of mechanisms stimulative for the Target groups | The existing economic instruments of environmental protection enhanced and new ones initiated (2030) |
| 3) Involvement of business entities in fund raising efforts for environmental projects | Business entities are not actively involved | Business entities play an active role in fund raising efforts and participate in the implementation of environmental projects |
| **Effect on the development and contribution of the measure to the priority** | Improved strategic management and more efficient funding of environmental protection | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 201,036  Source: 10% government budget, 90% combined - funds from EU and other international donors and other donations | | |
| **Period of the implementation of the measure** | 2022– 2030 | | |
| **Institution responsible for coordination of the implementation of the measure** | Environmental Protection Fund of the Federation of BiH | | |
| **Implementing institutions** | Environmental Protection Fund of the Federation of BiH, Federation Ministry of Environment and Tourism, responsible ministries at all levels, local communities, Development Bank of the Federation of BiH. | | |
| **Target groups** | Institutions, business entities and citizens who are obliged to pay the taxes and other fees, which benefit from projects funded from funds collected. | | |

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| **Link with the strategic goal** | **7. Strengthening environmental management** | | |
| **Priority** | **7.7 Ensuring financial sustainability of the environment sector in the Federation of BiH** | | |
| **Title of the measure** | **7.7.3 Use of EU and other international funds designated for environmental protection and complementary sectors** | | |
| **Description of the measure with general area of intervention** | This measure aims at ensuring increased use of EU and other international funds dedicated for environmental protection and complementary sectors  General areas of intervention are:   1. Setting up an intermediary body at the level of Federation of Bosnia and Herzegovina for the implementation of EU supported environmental projects. The establishment of this body is important for building efficient and adequate capacity for absorption of the currently available funds and those which will be available in future, as well as EU structural funds, and it is critical for decision makers in the country to help them recognise in a timely manner that strengthening of institutional and administrative capacities for management of EU funds should be prioritised in their policies; 2. Setting up an information system for project application and partners from Bosnia and Herzegovina, and management of international projects. This involves deployment of an online system (e-service )in the Environmental Protection Fund of the Federation of BiH for identification of projects, review of applications, monitoring and reporting on the implementation of projects, with the view of upgrading services and efficiencies of inter-institutional coordination in order to enhance absorption capacities for applying for and management of EU and other international projects. Approved projects are publicly available through the website In this way, the Fund, users of the system and responsible institutions have an accurate and update records about environmental and energy efficiency projects (potential, nominated, in the implementation phase). Furthermore, the information system also includes employment of a well-defined selection procedure for projects (and benchmarks for evaluation of project designs/proposals) and partners which facilitates the application to EU and other international financial schemes. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| 1. Status of setting up an intermediary body at the level of Federation of BiH for the implementation of EU supported environmental projects | Not formed | The intermediary body at the level of the Federation of BiH formed using the capacities of the current institutions, such as: Environmental Protection Fund of the Federation of BiH which is engaged in the implementation and monitoring of environmental projects, with the view of implementing EU projects in the territory of the Federation of BiH (2028) |
| 1. Setting up an information system for project application and partners from the level of Bosnia and Herzegovina and management of international projects | Not established | An online system (e-service) for identification of projects, review of applications, and monitoring and reporting on the implementation of projects set up in the Environmental Protection Fund of the Federation of BiH (2029) |
| **Effect on the development and contribution of the measure to the priority** | Increased access to funds for environmental management through institutional and human capacity building aimed at coordinated and strategic management of projects. | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 81,677  Source: 100% government budget | | |
| **Period of the implementation of the measure** | 2024– 2029 | | |
| **Institution responsible for coordination of the implementation of the measure** | Ministry of Environment and Tourism, Environmental Protection Fund of the Federation of Bosnia and Herzegovina | | |
| **Implementing institutions** | Federation Ministry of Environment and Tourism, Environmental Protection Fund of the Federation of Bosnia and Herzegovina, Directorate of European Integration of Bosnia and Herzegovina, Federation Ministry of Finance, Federation Ministry of Agriculture, Water Management and Forestry, Federation Ministry of Energy and Mining, and Industry, Federation Ministry of Spatial Planning and line ministries at the national level. | | |
| **Target groups** | Environmental Institutions, institutions, business entities and organisations which benefit from projects funded by funds raised | | |

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| **Link with the strategic goal** | **7. Strengthening environmental management** | | |
| **Priority** | **7.8 Developing a system of strategic decision-making, investments and monitoring of effects in environmental education, research and innovation** | | |
| **Title of the measure** | **7.8.1 Embedding environmental education in curricula of at all the levels of education** | | |
| **Description of the measure with general area of intervention** | This measure aims at ensuring a stronger integration of environmental education in curricula at all levels of education, including a multidisciplinary and holistic approach to education for sustainable development.  General areas of intervention are:  1) Assessment of the quality of curricular contents important for imparting of knowledge about sustainable development and presence of such contents in authorised textbooks;  2) Based on the analysis, innovate environmental protection programmes integrated in teaching curricula and extra-curricular activities (pursuant to Art. 32 of the Law on Environmental Protection) and expand the scope of the activities so as to include all the teaching subjects. The new learning culture should be integrated in curricula within a multidisciplinary subject. *(Contents on environmental protection are currently significantly more represented in science than in social studies. It is necessary to study environmental protection within all teaching subjects. It is necessary to revise curricula and integrate ecological considerations, taking into account correlations among the subjects, introduce a specific topic in all teaching subjects.)*;  3) Encourage schools to seek to obtain the status of an Eco-school (international certification);  4) Legislation should provide for opening of innovation centres for development in primary education (these centres should develop so as to expand their activities to secondary and higher education.);  5) Providing for environmental education through activities in protected areas:   1. Development and upgrading of educational capacities in protected areas (staff, infrastructure, programmes and activities) and teaching on environment through experience; 2. Work on initiating a long-term cooperation and encouraging schools in nature through the implementation of joint projects between schools and protected areas; 3. Professional development programmes for teaching staff and continued professional development of the teaching staff on the environment and outdoor education processes, focusing on practical work with children; 4. Creating incentives for experienced-based learning in nature among teaching staff; 5. Creating programmes for recruitment of educators in protected areas, (for example, hire unemployed biology teachers, senior students, fresh biology graduates as interns, etc.);   6) Improving cooperation of educational institutions with farms and agricultural holdings in local community and beyond (allocating resources to schools, such as land for use, etc. in order to provide conditions for students to learn more about flora and fauna in their surroundings). | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| 1. Analysis of the quality of the curricular content | No overarching analysis has been performed | An overarching analysis of the quality of the curricular content performed (2023) |
| 1. Measure aimed at innovating educational programmes which will be integrated in curricular and extra-curricular programmes | There is a room for improvement | Innovated educational programmes on environmental protection which will be integrated in curricular and extra-curricular programmes, contribute to the development of environment-friendly culture in students, and their acceptance of environmental values and focus on the values (periodically 2030) |
| 1. Number of schools which obtained the status of an Eco-school | / | Increased number of schools which have the status of an Eco-school (continuously - 2030) |
| 1. Legal provisions which facilitate opening of innovation centres for development in primary education | The legislation does not include such provisions | The legal provisions which enable opening of innovation centres for development in primary education adopted (2025) |
| 1. Development of educational programmes to be implemented in protected areas created | The programmes have not been developed | Educational programmes in protected areas prepared (2029) |
| 1. Number of educational institutions which cooperate with farms and agricultural holdings | / | The number of educational institutions which cooperate with farms and agricultural holdings increased (continuously – 2030) |
| **Effect on the development and contribution of the measure to the priority** | Improved educational process and enhanced competencies of all stakeholders for the integration of environment, sustainable use at all levels of education | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 278,764  Source: 30% government budget, 70% combined - funds from EU and other international donors and other donations | | |
| **Period of the implementation of the measure** | 2022– 2030 | | |
| **Institution responsible for coordination of the implementation of the measure** | Cantonal ministries of education in cooperation with the Federation Ministry of Education and Science (coordination) | | |
| **Implementing institutions** | Cantonal ministries of education in cooperation with the Federation Ministry of Education and Science (coordination), pedagogical institutes, in cooperation with the environmental institutions and civil society organizations with expertise in this area, educational institutions | | |
| **Target groups** | Educational institutions, civil society organisations, protected area operators, students, general public | | |

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| **Link with the strategic goal** | **7. Strengthening environmental management** | | |
| **Priority** | **7.8 Developing a system of strategic decision-making, investments and monitoring of effects in environmental education, research and innovation** | | |
| **Title of the measure** | **7.8.2 Strengthen the capacity and eco-pedagogical competencies of the staff of educational institutions** | | |
| **Description of the measure with general area of intervention** | This measure aims at strengthening the capacity and eco-pedagogical competencies of the staff of educational institutions  General areas of intervention are;   1. Enhance eco-pedagogical competencies of the staff in educational institutions through environmental education within accredited programmes (programmes verified by a specific authorised institution). Continued professional development of the teaching staff on the environment and outdoor education processes, focusing on practical work with children. 2. Preparation of teaching manuals on the integration of environmental protection and sustainable use or resources in curricula and syllabi for primary and secondary schools and teaching methodologies, including curricular and extra-curricular activities (summer schools, school in nature, multidisciplinary projects, workshops, competitions, etc). It is necessary to provide trainings for teachers of junior and senior students. UNESCO Roadmap: Education for Sustainable Development should lead the efforts by 2030; 3. Preparing the teaching staff for sustainable development education in an entirely different digital manner. Educating the staff of educational institutions on environmental protection within accredited programmes (programmes verified by authorised institutions) with the view of digitalising education processes; 4. Creating digital textbooks and environmental contents and adapt teaching processes to online environment to a greater extent than earlier. (*Due to the lack of digital contents, te*a*chers faced multiple problems in teaching during the COVID pandemic, as well as learning difficulties among students. Offer to students and teachers prepared digital contents on environmental protection. Such approach should ensure that teaching processes are better adapted to online environment, and they should reduce the burden of preparation for online teaching);* 5. An analysis of gaps in master studies programmes at universities in view of the integration of environmental protection and sustainable use of natural resources, and preparation of a proposal for an intervention in master programmes curricula. At least two universities should pilot this programme. Cover all the research areas (science, technology, social studies) UNESCO Roadmap: Education for Sustainable Development should lead the efforts by 2030. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| 1. Level of improvement of eco-pedagogical competencies of the staff of educational institutions through environmental education in accredited programmes | There is a need to improve eco-pedagogical competencies of the staff of educational institutions | Teachers have competencies for the transfer of knowledge, possess eco-pedagogical competencies for the implementation of environmental contents (2029) |
| 1. Status of the preparation of teaching manuals on the integration of environmental protection and sustainable use of resources in curricula and syllabi for primary and secondary schools and teaching methodologies | Manuals have not been prepared | The teaching manuals on the integration of environmental protection and sustainable use of resources in curricula and syllabi for primary and secondary schools and teaching methodologies (2026) |
| 1. Level of education of the staff of educational institutions on environmental protection in accredited programmes for the purpose of digitalisation | No such educations have been provided | Teachers have competencies for the transfer of knowledge, competencies for teaching contents on environmental protection and use predefined thematic digital contents (continuously– 2030) |
| 1. Status of the preparation of digital textbooks and contents on environmental protection | Digital textbooks were not prepared | Learning with the use of digital textbooks enabled (2026) |
| 1. Status of development of conducting a gap analysis of the current curricula for master programmes | No analysis has not been conducted | The gap analysis of the current curricula for master programmes completed and recommendations provided to incorporate the topic of sustainable use of natural resources in master programmes (2028) |
| **Effect on the development and contribution of the measure to the priority** | Improved educational process and increased competencies of all stakeholders for the integration of environment, sustainable use at all levels of education | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 283,452  Source: 30% government budget, 70% combined - funds from EU and other international donors and other donations | | |
| **Period of the implementation of the measure** | 2022– 2030 | | |
| **Institution responsible for coordination of the implementation of the measure** | Federation Ministry of Education and Science (umbrella institution), cantonal ministries of education | | |
| **Implementing institutions** | Cantonal ministries of education in cooperation with the Federation Ministry of Education and Science (coordination), educational institutions, universities and faculties, environmental institutions | | |
| **Target groups** | Educational institutions, universities and faculties, students, general public | | |

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| **Link with the strategic goal** | **7. Strengthening environmental management** | | |
| **Priority** | **7.8 Developing a system of strategic decision-making, investments and monitoring of effects in environmental education, research and innovation** | | |
| **Title of the measure** | **7.8.3 Support to nonformal environmental education** | | |
| **Description of the measure with general area of intervention** | This measure aims at ensuring support to the nonformal environmental education  General areas of intervention:   1. Establishing cooperation among the institutions engaged in nonformal environmental education; 2. Allocating dedicated funds to support the nonformal environmental education. | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| 1. The level of cooperation among the institutions engaged in the nonformal environmental education | Partial cooperation | Effective cooperation established among the institutions engaged in the nonformal environmental education (2026) |
| 1. Allocation of dedicated funds to support the nonformal environmental education | Budgets of the Federation Ministry of Education and Science and cantonal ministries of education allocated certain amounts of dedicated funds to support the nonformal environmental education, but this is not sufficient | Funds secured for the nonformal education (based on needs of the target group) of different interest groups (employees of educational institutions, students, professors, parents) |
| **Effect on the development and contribution of the measure to the priority** | Increased public awareness and knowledge about the main problems in environmental management | | |
| **Indicative financial projection, with specification of sources** | Amount: BAM 24,883  Source: 100% government budget | | |
| **Period of the implementation of the measure** | 2022– 2026 | | |
| **Institution responsible for coordination of the implementation of the measure** | Federation Ministry of Education and Science (umbrella institution), cantonal ministries of education | | |
| **Implementing institutions** | Federation Ministry of Education and Science I(umbrella institution), cantonal ministries of education, educational institutions, (international) non-governmental organizations | | |
| **Target groups** | Employees of educational institutions, students, professors, students’ parents | | |

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| **Link with the strategic goal** | **7. Strengthening environmental management** | | |
| **Priority** | **7.8 Developing a system of strategic decision-making, investments and monitoring of effects in environmental education, research and innovation** | | |
| **Title of the measure** | **7.8.4 Strengthening research capacities in the environment sector** | | |
| **Description of the measure with general area of intervention** | This measure aims at enhancing research capacities in the environment sector.  General areas of intervention are:   1. Providing information to academia and industry about available international funds for research and capacity building in the environment sector which may be obtained through international projects; 2. Allocating dedicated funds for innovation and development, and application of new technologies aimed at reducing pollution; 3. Integration research on sustainable use of natural resources and managements of climate change impacts on natural resources in the annual research programme of the Federation of BiH, supported by the Fund for Science. It is necessary to envisage allocations for incentives amounting to 30% of the overall fund; 4. Supporting organisation of professional and scientific conferences/symposia with international relevance, every two years; 5. Improving (expanding concept and activities of) cooperation of academia and industry in the environment sector, and involving the industry in funding of research in the area of environment through cooperation of researchers and innovators, and businesses; | | |
| **Strategic projects** | / | | |
| **Indicators for monitoring of results** | **Indicators**  **(outputs and deliverables)** | **Baseline value**  **(2021)** | **Target value** |
| 1. Awareness of representatives of academia and industry about available funds for which they may routinely apply | Partial knowledge on access to funds | Representatives of academia and industry informed of available funds and apply on a regular basis for international projects (continuously - 2030) |
| 1. Regular patterns of budget allocations for investments into innovations and development in the Federation Ministry of Education and Science and cantonal ministries of education | Certain funds have been allocated, but this is not sufficient | Regular planning of budget allocations in the Federation Ministry of Education and Science and cantonal ministries of education for investments in innovation and development (2028) |
| 1. Number of projects relevant for sustainable natural resources management annually funded by the Federal Fund for Science | / | The Federal Fund for Science funds at least 3 projects relevant for sustainable natural resources management (continued - 2030) |
| 1. Number of conferences co-funded by the Federal Fund for Science | / | The Federal Fund for Science funds at least 1 professional-scientific conference every two years |
| 1. Quality of contacts and forms of cooperation between academia and industry | Partial cooperation | New contacts and forms of cooperation between academia and economy developed |
| **Effect on the development and contribution of the measure to the priority** | Efficient and effective support to research and innovation which ensure that innovative ideas are transformed into products and services which address environmental problems and create jobs and boost growth. Increased scientific knowledge improves strategic evidence-based decision-making | | |
| **Indicative financial projection, with specification of sources** | Amount: 0 | | |
| **Period of the implementation of the measure** | 2022– 2030 | | |
| **Institution responsible for coordination of the implementation of the measure** | Federation Ministry of Education and Science (umbrella institution), cantonal ministries of education | | |
| **Implementing institutions** | Federation Ministry of Education and Science, cantonal ministries of education in cooperation with the Federation Ministry of Environment and Tourism, Federal Fund for Science, faculties, educational institutions, international non-governmental organisations | | |
| **Target groups** | Scientific-research institutions, business entities, academia Students, professional and general public | | |

* 1. Annex 8 Summary of the Strategy

13.8.1. Water Management

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| **No. and mark** | **TITLE** | **INDICATORS AND FINANCIAL SOURCES** | | |
| **1 Strategic goal** | **Protect water quality and secure availability of water resources and their sustainability** | **Indicators for the strategic goal** | **Indicator baseline values** | **Indicator target values** |
| Treated water - total, 000m3 | 48,613  (2020) |  |
| Share of treated waste water in total quantity of waste water (%) | 55.8  (2020) |  |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 450,2 | 3927,7 | 4378 |

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| **1.1. Priority** | **Prevent deterioration and improve the status of water bodies** | **Indicators of the priority** | **Indicator baseline values** | **Indicator target values** |
| Achieving the objectives for water bodies, as defined in the river basin management plans for the Sava and Adriatic Sea river basins (II, and III cycle) | For some of the identified water bodies, achieved environmental objectives set in the I cycle of management plans (2016‒ 2021) for Sava and Adriatic Sea river basins | Achieved environmental objectives for all water bodies according to the plan in II and III cycle of management plans (2022‒ 2027) and (2028‒ 2033) |
| Effectiveness of compliance oversight with respect to conditions prescribed in water acts for the polluters, and enforcement of provisions on sanctions in case of non-compliance | Current approach to supervision is not effective:   * Inspection plans are partly based on Water Management Plans and Water Acts, and on information regarding received complaints and requests by competent bodies in water sector * Poor coordination between the Federation and cantonal inspectorates when developing plans | High effectiveness and level of efficiency of inspection oversight led to the following:   * All polluters comply and implement conditions prescribed in water acts * Inspection oversight prevents / minimizes unlawful pollution of water bodies |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 0,279 | 2,5 | 2,7 |

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| **1.1.1. Measure** | Achieving environmental objectives for water bodies as defined in the water basin management plans in the Federation of BiH | **Indicator of the measure** | **Indicator baseline values** | **Indicator target values** |
| a1) Status of adoption of amendments to the Law on Organisation of Administrative Bodies for the purpose of regular and precise reporting on implementation of strategic and planning documents (Basin Management Plans) | The current Law does not include provisions that would precisely define procedures and impose obligation to the institutions / bodies at various levels of government to regularly collect, process and share information / reports on implementation of the River Basin Management Plans | Developed and adopted amendments to the Law on Organisation of Administrative Bodies |
| Status of reporting and publishing the Report on *web* pages of the Sava River Basin Agency and the Adriatic Sea Watershed Agency, including:  a2) Performed analysis and assessment of the level of realisation of the programme of measures - biannual reports on implementation of programme of measures  a3) Completed monitoring of surface and ground water bodies‒ annual reports on status of surface and ground water bodies | Not regular activity:   * submitting data for reports on implementation of the programme of measures * publishing the Reports on *web* pages of the Sava River Basin Agency and the Adriatic Sea Watershed Agency | The following Reports published at the Agencies' web pages, full and precise:   * Biannual report on implementation of the programme of measures * Annual reports on the status of surface and ground waters |
| b1) Level of adjusting the processing of the water acts to the needs of water inspectors | Water acts do not contain information on the status of water body into which the commercial entities release waste water, nor on the objectives regarding the status of this water body according to the Management Plan | Water acts include information on current status of water bodies into which the waste water is discharged, and the identified objectives regarding status of the water body |
| b2) Level of readiness of the information from water management plans for the needs of inspections, with special emphasis on water bodies that do not have at least "good" status | The management plans 2022-2027 have not yet been adopted, so preparation of information from the Plans has not yet started | Prepared and provided information from river management plans for the needs of inspections, with special emphasis on water bodies that do not have at least "good" status. |
| b3) Status regarding information of inspections on complaints received | Inspections are informed on the complaints received | Timely provision of information and data to the inspections regarding received complaints and requests of the responsible bodies in water sector |
| Status of developing annual programmes of inspection oversight | Annual programmes of inspection oversight are prepared | Annual programmes of inspection oversight developed on the basis of information from management plans, information on complaints received, etc. |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 0,279 | 2,5 | 2,7 |

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| **1.2. Priority** | **Provide conditions for achieving sustainable use of water resources** | **Indicators of the priority** | **Indicator baseline values** | **Indicator target values** |
| Effectiveness of cooperation between the water sector and other sectors whose activities may have adverse impact on water management (spatial planning, energy sector, agriculture, forestry, inspections etc.) | Ineffective cooperation of water sector with other sectors   * Sporadic data sharing on the planned activities in the sector   Poor cross-sectoral coordination when preparing sectorial plans and programmes, and information from water sector plans and studies not integrated in plans of other sectors | Effective cooperation between water sector and other sectors whose activities may have adverse impact on water management:  All sectorial plans integrate data from water sector plans |
| Effectiveness of oversight of compliance with conditions prescribed in water acts for the polluters, and enforcement of provisions on sanctions in case of non-compliance | Current approach to supervision is not effective or efficient | High effectiveness and level of efficiency of inspection oversight led to the following:   * All water users comply and implement conditions prescribed in water acts * Inspection oversight prevents / minimizes unlawful intake and use of water |
| Level of readiness of technical bases in water sectors as an instrument for potential restriction of use of water resources and interventions in space because of proven adverse impact on quantities or status of water bodies  (polluters, hydro-morphological pressures), and measures of protection against floods | Water sector developed significant number of plans and study documents.  Bases have not been made:   * on hydro-power potential that includes explanation of links for exceptions under Art. 7/5 of WFD, and principles / guidelines / criteria of: spatial planning, achieving/maintaining at least good status of water bodies and environment protection, and needs of water supply to population, agriculture, and power sector * on surface and ground water reserves that may be used for water supply to population | Base documents produced:   * on hydro-power potential * on surface and ground water reserves that may be used for water supply to population |
| Establishment of prerequisites for transparent and regular concession awards for water resources, including for large and small HPPs | Prerequisites for transparent and regular award of concessions on water resources are not in place   * Not updated / inexistent lists of awarded concessions at all administrative levels * Shortcomings of the legal framework for issuing concessions allow for user's non-compliance with regulations on implementation of monitoring of water and environmental flaw * Procedure for issuing necessary permits, as the basis for concession award, is very complex and has to be carried out in the form of numerous and internationally dependant sub-procedures that are carried out before various institutions and in some cases, at various levels of authority | Transparent and adequately defined by law concession award procedure for water resources, including for large and small HPPs |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 0,365 | 2,5 | 2,9 |

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| **1.2.1. Measure** | Intensification of cooperation between water sector and other sectors for the purpose of ensuring protection and sustainable use of water resources | **Indicators of the measure** | **Indicator baseline values** | **Indicator target values** |
| a) Level of readiness of excerpt / summary / set of information on water bodies from the river basin management plans intended for professional audience from spatial planning, energy, agriculture and forestry sectors, as well as non-governmental sector | Management plans (II cycle) have not been adopted, so preparation of the excerpt/summary/ set of information on water bodies from the river basin management plans for professional audience and non-governmental sector has not started | Developed and continuously updated excerpt / summary / set of information on water bodies from the river basin management plans that have to be used by all entities interested in planning spatial interventions that may impact protection of water, their development and use (2024) |
| a2) Status of functioning of cross-sectoral coordination - regular organisation of coordination meetings among representatives of water sector and representatives of spatial planning, energy, agriculture, forestry etc. | Sporadically | Functional coordination mechanism‒ coordination meetings held on regular basis, and reports and conclusions from such meetings published (2023-2034) |
| a3) Effectiveness of legal provisions (LoW) that impose the obligation   * of integrating information from the water management plans into plans of the sector whose activities may have impact on water protection, and * adequate engagement of water sector institutions at the stage of developing planning and strategic documents, including public discussions | Low effectiveness | Data from the water management plans adequately integrated into adopted spatial planning documents, as well as other planning or programming documents as a result of water sector being engaged at the phase of development of planning and strategic documents (2023-2034) |
| b1) Level of readiness of information from the water management plans for the needs of inspections | Preparation of information / excerpts from water management plans has not started | Provide information from water management plans to the inspections, with special emphasis on water bodies that are under pressure of human activities (2023-2034) |
| b2) Status regarding information of inspections on complaints received | Inspections are informed on the complaints received | Timely provision of information and data to the inspections regarding received complaints and requests of the responsible bodies in water sector (2023-2034) |
| Level of preparedness of Studies   * on hydro-power potential * on surface and ground water reserves that may be used for water supply to population | Development of studies has not started | Studies completed and published:   * on hydro-power potential that include principles / guidelines / criteria for planning, and achieving / maintaining good status of water bodies, or has been aligned with Article 4(7) WFD (2026) * on surface and ground water reserves that may be used for water supply to population (2026) |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 0,286 | 2,5 | 2,8 |
| **1.2.2. Measure** | Ensuring transparent and defined by law procedure for awarding concessions in the area of use of water resources | **Indicators of the measure** | **Indicator baseline values** | **Indicator target values** |
| Status of the process of adoption of amended Federation and cantonal laws/regulations | Amendments have not been drafted | Amended and harmonised the Federation and cantonal laws/regulations prescribing ways, conditions and agencies responsible for issuing concessions (2025) |
| Status of the process of adoption of amended / changed secondary legislation relevant for issuing concessions for use of water resources in the Federation of BiH | The following analyses are made for the Federation of BiH:   * Applicability of the catalogue of sustainable development criteria in the sector of SHPPs, and   on the way of adopting the Decision for applying the catalogue for SHPPs by the Government of the Federation of BiH | Decision of the Government of the Federation of BiH:   * Prescribed use of catalogue of criteria for the Federation of BiH * Changed Article 5 Rules on the procedure for awarding concession (study of economic justification must include elements from the catalogue of criteria)   Cantons are recommended to use catalogue of criteria as a tool and assistance for cantonal bodies that issue administrative acts required for construction (2024) |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 0,079 | 0 | 0,079 |

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| **1.3. Priority** | **Ensuring sufficient drinking water supplies and availability for public water supply purposes** | **Indicators of the priority** | **Indicator baseline values** | **Indicator target values** |
| Degree and phase of implementation of technical-operational segment of water services reform in all LGUs | Start of the planning phase for all LGUs   * Completed: * “Overview of sector of water services in BiH“ * Regulation on the methodology for determining the lowest basic price of water services in the Federation of BiH   Proposed programme for improving water services in the Federation of BiH by providing financial and technical support | Fully implemented technical and operational segments of water services sector reform in all LGUs |
| Degree and phase of implementation of legislative and institutional segments of water services reform in all LGUs | Start of the planning phase for all LGUs   * Completed: * “Overview of sector of water services in BiH“ * Regulation on the methodology for determining the lowest basic price of water services in the Federation of BiH   Proposed programme for improving water services in the Federation of BiH by providing financial and technical support | Fully implemented legislative and institutional segments of water services reform in all LGUs |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 16,6 | 66,3 | 83 |

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| **1.3.1. Measure** | Development of the water supply systems that offer optimal solutions for LGUs, efficient distribution networks and safe drinking water | **Indicators of the measure** | **Indicator baseline values** | **Indicator target values** |
| a1) Number of public utility companies (PUCs) with developed plans for reduction and/or control of the unbilled water, in accordance with the Methodology for determining minimum basic price of water services in the Federation of BiH | * Information on the number of PUCs who develop and implement plans for reduction the rate of unbilled water that is: * in the Sava river basin: 16‒ 88%, average 65%, * in the Adriatic Sea river basin: 23‒ 72%, average 46.11%   The public utility companies (PUCs) have not started developing Plans as part of their business plans, in accordance with the Methodology for setting the minimum basic price of water services in the Federation of BiH) | All public utility companies, (PUCs) have developed plans for reduction and/or control of the unbilled water within their business plans, in accordance with the Regulation on the Methodology for setting the minimum basic price of water services in the Federation of BiH |
| a2) Level of performed infrastructural works and administrative activities for the purpose of reducing the rate of unbilled water in each PUC | Data not available | In all PUCs in the Federation of BiH achieved the planned level of implementation of the Plans  Completed rehabilitation, replacement and construction of new infrastructure, and improved management of unbilled water (2023 -2034) |
| b) Number of LGUs who have developed Master Plans | Data not available | Every LGU has developed water supply Master Plan (2023 -2034) |
| b2) Level of construction of water supply systems with optimal solutions for LGUs | Data not available | Water supply companies merged (where justified) in the Federation of BiH, or central systems extended to include sub-urban or rural areas, in all LGUs where so foreseen in their respective master plans (2023 -2034) |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 16,5 | 66,3 | 82,9 |
| **1.3.2. Measure** | Improve the existing legislative framework in the sector of water services in the Federation of BiH | **Indicators of the measure** | **Indicator baseline values** | **Indicator target values** |
| Phase and level of implementation of the process of adoption\* of amendments to the Law on Utilities for the purpose of identifying entities who may be entrusted with provision of water supply services in local systems  Drafting amendments to the Law / harmonizing text of amendments between the competent government bodies and institutions etc. - proposal of the Law submitted to the Government, Parliament of the Federation of BiH - adoption by the Parliament of the Federation of BiH | Drafting of the Law on Utilities has not stated   * In practice, local water supply systems are typically managed by associations of citizens, but there are also some informal groups of citizens who do that without being formally established * Law on principles of local self-government of the Federation of BiH stipulates the competence of LGUs for providing water supply services on their territories   Cantonal laws are not harmonised regarding the matter of entities who may be entrusted with provision of utility services | Adopted amended cantonal laws on utilities containing conditions that legal entities have to comply with in order to be entrusted with provision of water supply services (2024) |
| Phase in the process of adopting the \*Law on Water Services of the Federation of BiH that will ensure establishment of water services standards aligned with the EU requirements  Drafting amendments to the Law / harmonizing text of amendments between the competent government bodies and institutions etc. - proposal of the Law submitted to the Government, Parliament of the Federation of BiH - adoption by the Parliament of the Federation of BiH | Drafting of the Law on Water Services of the Federation of BiH has not stated  The Law would integrate the current and expected legislation that regulates the area of provision of water services, as an integrated response to the existing need to reform this sector | Adopted Law on Water Services by the Government of the Federation of BiH (2027) |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 0,084 | 0 | 0,084 |

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| **1.4. Priority** | **Reducing the risk of extreme hydrological events by establishing a sustainable flood risk management system and adaptation to climate changes** | **Indicators of the priority** | **Indicator baseline values** | **Indicator target values** |
| Achieving the objectives identified in the Flood Risk Management Plans of the Sava and Adriatic basins (I and II cycles) and reporting | Flood Risk Management Plans of the Sava and Adriatic basins (I and II Cycles) are in the process of development | Achieved all objectives of the Flood Risk Management Plan stipulated in the first and second planning cycle (2024-2029) and (2030-2035) |
| Quality of analyses and reliability of assessments for the purpose of decision-making in flood protection system | Insufficient quality of analyses and reliability of assessments for the purpose of decision-making in flood protection system   * Insufficiently developed network of hydrological metering stations at all water sources covered by the Federation of BiH - AFAS, as well as the precipitation and meteorological metering stations in the Federation of BiH * Insufficient functionality and operation of hydrological and hydraulic forecasting models | * Ensured quality analyses and reliable assessments for the purpose of decision-making in flood protection system * Adequate network of hydrological metering stations at all water courses covered with AFAs in the Federation of BiH * Adequate network of precipitation and meteorological metering stations in the Federation of BiH * Fully operational, functional and regularly maintained hydrological and hydraulic forecasting |
| Level of planning and implementing the climate change adaptation measures for the purpose of achieving better prevention and management of flood risks | Sporadic planning and integration of measures of climate change adaptation into planning documents at all administrative levels in the Federation of BiH   * Developed draft Strategy of Climate Change Adaptation and Low Emission Development of BiH for the period 2020-2030   Developed draft Plan of climate change adaptation of BiH - NAP | Implementation of climate change adaptation measures in accordance with plans of all administrative levels in the Federation of BiH for the purpose of better prevention and management of flood risks. |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 5,1 | 12,06 | 17,2 |

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| **1.4.1. Measure** | Develop and implement flood risk management plans in river basins in the Federation of BiH | **Indicators of the measure** | **Indicator baseline values** | **Indicator target values** |
| a1) Phase in the process of adoption of amendments to LoW and CLoWs regarding the criteria for defining the restrictions that may impact spatial planning, use of land and construction in the areas at risk of floods | Law on Waters prohibits construction in the area of 100-year waters | Developed and adopted amendments to the LoW and CLoW   * Exclude from the Law provisions "prohibiting" construction in the area of 100-year waters * Define in the laws the provisions regarding criteria for defining the restrictions that may impact spatial planning, use of land and construction in the areas at risk of floods (2024) |
| a2) Reporting status | Reporting has not started yet; plans are being developed | Developed and published on web pages of the Agencies the biannual reports on the level of implementation of measures from the flood risk management plans (2024 -2034) |
| a3) Status of publication on the web-pages of SRBA and ASWA in the form of zone maps (GIS)   * of areas at risk of flooding 1/100   results of the project "Flood Risk Management Plan" for the Federation of BiH | Published maps (GIS) of areas at risk of flooding 1/100 | Developed and published on web-pages of the water agencies (SRBA and ASWA)   * maps of areas at risk of floods 1/100 and results of the flood risk management plans in the form of zone mapping (GIS)(2024 -2034) |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 0,464 | 1,08 | 1,5 |
| **1.4.2. Measure** | Establishment and operation of hydrology forecasting systems in the Federation of BiH, including the improved network of hydrological and meteorological metering stations | **Indicators of the measure** | **Indicator baseline values** | **Indicator target values** |
| a1) Status of development of the Plan for extension of hydrology measuring stations network based on the identified AFAs | The development of the Plan for extension of hydrology measuring stations network based on the identified AFAs has not started | Developed Plans  for extension of hydrology measuring stations network based on the identified AFAs  (2024) |
| a) Level of completion of works on extension of the network of hydrological measuring stations in Federation of BiH, in accordance with the Plan | Works on extension of the network of hydrological measuring stations in the Federation of BiH, in accordance with the Plan, have not started | Completed works on extension of the network of hydrological measuring stations, in accordance with the Plan, accompanied with biannual reporting on the extension of the network of hydrological measuring stations in the Federation of BiH (2025-2034) |
| a3) Status of development of the Plan for expansion of network of meteorological and precipitation measuring stations in the Federation of BiH | Drafting of the Plan for expansion of network of meteorological and precipitation measuring stations in Federation of BiH has not started | Developed Plans for expansion of network of meteorological and precipitation measuring stations in the Federation of BiH (2024) |
| a4) Level of completion  of works on expansion of network of meteorological and precipitation measuring stations in the Federation of BiH | Works on extension of the network of meteorological measuring stations in the Federation of BiH, in accordance with the Plan, have not started | Completed works on expansion of the network of meteorological and precipitation measuring stations in the Federation of BiH, accompanied by biannual repots on extension of the network of meteorological and precipitation stations in the Federation of BiH (2025-2034) |
| b1) Status of establishment of hydrology forecasting model for the Adriatic Sea Basin | Partly | established and operational hydrology forecasting model for the Adriatic Sea Basin (2024) |
| b2) Operational status and regular maintenance of flood forecasting system for Sava and Adriatic Sea river basins | Partly | Operational and regularly maintained flood forecasting system for Sava and Adriatic Sea river basins (2024 -2034) |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 4,7 | 10,9 | 15,6 |
| **1.4.3. Measure** | Improved planning and implementation of the measures for adaptation to climate changes that affect water resources | **Indicators of the measure** | **Indicator baseline values** | **Indicator target values** |
| Degree of development of a programme for implementation of measures in water sector that are identified in the National Plan for Climate Change Adaptation (NAP) | NAP is in its draft form‒ the development of a programme of implementation of the measures in the water sector that are defined in the draft NAP has not started | Developed programme of implementation of measures in the water sector that are defined in the draft NAP (2024) |
| Status of reporting on implementation of measures in the water sector as defined in the NAP | Reporting has not started, draft NAP made, not adopted | Biannual reports on the degree of implementation of measures from the NAP developed and published on web-pages of FMAMWF, the Agencies, and FHMI (2025-2034) |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 0,022 | 0 | 0,022 |

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| **1.5. Priority** | **Developing an effective legal and institutional framework for the purpose of alignment with the EU regulations in the water sector, and its enforcement** | **Indicators of the priority** | **Indicator baseline values** | **Indicator target values** |
| Efficiency and timeliness of programming integration in EU in the field of water management | Low efficiency and delays in development of the Programme | Efficient, regular and timely development of four-year integration programmes |
| Adjusting the legal and institutional framework in the Federation of BiH water sector to efficient approximation to EU water legislation and standards | Legal and institutional framework in Federation of BiH is not conductive for efficient approximation to EU regulations  Laws delegate the competences for approximation to a number of institutions at all administrative levels, and this requires significant (inexistent) capacities for horizontal and vertical coordination | Legislative and institutional frameworks accommodating for the requirements of efficient approximation |
| Capacities and skills of the employees in water sector institutions (administrative bodies, agencies, institutes, etc.) at all levels of government in the Federation of BiH | Lack of capacities and insufficient training of the employees in competent institutions in water sector at all levels in the Federation of BiH   * harmonization and implementation of the EU acquis * implementation of commitment under international agreements * implementation of law and legislation   implementation of strategic and planning documents in water sector | Capacities and skills of the employees in the water sector institutions in the Federation of BiH in line   * with requirements of harmonization and implementation of the EU acquis and commitments under international agreements on water and the needs to implement water sector laws and legislation, strategic planning documents in water sector |
| Status of planning and implementing all EU directives of relevance in water sector | Planning is in initial phase, and is done by updating the APIDs developed under the Strategy | Developed implementation plans for all Directives (APIDs), and implemented in accordance with time schedule specified in the APID |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 25,6 | 486,1 | 511,8 |

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| **1.5.1. Measure** | Ensure effective implementation of the Programme of integration with EU regarding the Water Management sector (on the basis of four-year cycles) | **Indicator of the measure** | **Indicator baseline values** | **Indicator target values** |
| Status of development and adoption of the list of priorities for harmonisation with the Water Directives and for institutional measures in the area of water management for four-year periods | Draft list of priorities has been developed, but it has not been adopted | The final list prepared and adopted (2023) |
| Level of completion of the Time Plan for approximation to the EU water regulations in the Federation of BiH and for institutional measures in the area of water management (for four-year periods) | Time Plan for the four-year period has not been developed | Time Plan for the four-year period developed (2023) |
| Establish an operational structure within the FMAWMF for coordination of the process of accession to the EU/ for coordination when implementing the Programme of integration and development of DSIPs and APIDs for water directives | Official operational coordinating structure has not been established | Coordinating structure in the FMAWMF established and operational (2023) |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 0,020 | 0 | 0,020 |
| **1.5.2. Measure** | Improve legislation in the field of water for the purpose of effective approximation of Federation of BiH water legislation to the EU regulations | **Indicators of the measure** | **Indicator baseline values** | **Indicator target values** |
| Level of completion of the analysis of legislation for the purpose of identifying the competency overlaps, gaps in definition of competencies, and prescribed coordination mechanisms from the aspect of approximation of the Federation of BiH legislation to the EU regulations | The analysis has not started yet  Currently, according to the current legislation, the transposition work in the Federation of BiH is done by at least 23 bodies in the Federation of BiH: at least 3 bodies at the Federation of BiH level and 20 bodies at cantonal levels (10 ministries responsible for water and 10 ministries of environment) | Analysis completed and conclusions and recommendations made regarding the necessary legislative changes and amendments in water legislation and legislation regulating organisation of administration of the Federation of BiH (2024) |
| Level of completion of the process of adoption of the legislative changes and amendments | Process of changing and amending legislation has not started | Adopted amendments to the legislation in the area of water and administrative organization (Law on the Ministries of the Federation of BiH and Law on Cantonal Ministries), in accordance with the conclusions of the analysis(2025) |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 0,048 | 0 | 0,048 |
| **1.5.3. Measure** | Improving existing institutional structure by strengthening capacities in institutions of the Federation of BiH that are competent for waters, with special focus on long-term and sustainable enforcement of EU water legislation | **Indicators of the measure** | **Indicator baseline values** | **Indicator target values** |
| Level of development of the study analysis / assessment of institutional capacities of competent water institutions in the Federation of BiH, with appropriate recommendations for capacity improvement | Analysis / assessment has not started | Implemented comprehensive analysis / assessment of institutional capacities (2024) |
| Number of implemented measures for improvement of capacities in the water sector institutions in the areas of:   * strengthening human resources in water sector institutions * strategic approach to employment   retaining skilled persons in institutions | Analysis / assessment has not started, measures have not been defined or implemented | Identified and implemented all measures for:   * Strengthening capacities of human resources in water sector institutions for implementation of EU water sector legislation and international water sector conventions, consistent enforcement of law and effective implementation of strategies and plans * Strategic employment in institutions   Retaining skilled persons in institutions (2026) |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 0,250 | 0 | 0,250 |
| **1.5.4. Measure** | Realization of activities from the developed and adopted APID documents related to the EU water directives | **Indicators of the measure** | **Indicator baseline values** | **Indicator target values** |
| Level of completion and implementation of the APIDs for Directives on:   * municipal waste water treatment 91/271/EC * water for human consumption 2020/2184 * assessment and management of flood risks 2007/60/EC. * MSFD Directive (Marine Strategy Framework Directive) | All three draft APIDS have been prepared as part of the EAS (2017); however, they have not been updated or completed | 3 APIDS developed and adopted (2025) |
| Level of completion of the APIDs for Directives on:   * the protection of waters against pollution caused by nitrates from agricultural sources, 91/676/EC * establishing the framework for operation of the Community in the area of marine environment policy, 2008/56/EC * managing quality of bathing water 2006/7/EC * protection of groundwater against pollution and deterioration 2006/118/ECC * environmental quality standards in the field of water policy, 2013/39/EC | APIDs have not been developed | 5 APIDS developed and adopted (-2027) |
| Level of implementation of 8 APIDs | 8 APIDs have not been prepared for implementation | Implementation of 8 APIDs and reporting on the progress of their implementation in accordance with the defined Plan (2034) |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 427,1 | 3844,2 | 4271 |

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| **1.6. Priority** | **Ensuring financial sustainability of the water sector** | **Indicators of the priority** | **Indicator baseline values** | **Indicator target values** |
| Degree and phase of implementation of financial and commercial segment of water services reform in all LGUs | Start of the planning phase for all LGUs   * Completed: * Regulation on the methodology for determining the lowest basic price of water services in the Federation of BiH * “Overview of sector of water services in BiH“ * Proposed programme for improving water services in the Federation of BiH by providing financial and technical support | Fully implemented financial and economic segments of water services sector reform in all LGUs |
| Effects of the established system of calculation, collection and allocation of special water fees in terms of satisfaction of needs of financing water sector | The existing system of calculation, collection and allocation of special water fees does not satisfy the financing needs in water sector   * Water fees for water intake and for discharging waste water are not regulated * No adequate mechanism of enforced collection of debt for the unpaid water fees has been established | Established system for calculating, collecting and allocating water fees that satisfies financing needs in water sector that are planned to be financed from this source |
| Effectiveness of financial and economic planning in water sector for the purpose of obtaining funds for sector development from EU and other international financial institutions | * Low effectiveness   Insufficient institutional capacities for financial and economic planning in water sector | Effective financial and economic planning in water sector for the purpose of obtaining funds for sector development from EU and other international financial institutions |
| Status of implementation of all preconditions for comprehensive and systematic approach to addressing climate change adaptation in Federation of BiH. | Partially achieved one of the preconditions - work of the Federation of BiH water sector with MoFTER on identification / preparation of priorities and project documents | High level of cooperation between water sector and MoFTER in preparation of plans and projects for the purpose of providing financing for activities of adaptation to climate changes that affect water resources |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 0,520 | 0 | 0,520 |

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| **1.6.1. Measure** | Improve financing of water sector by re-defining tariff system and reliably estimating cost-effectiveness of investments (Feasibility Studies) | **Indicators of the measure** | **Indicator baseline values** | **Indicator target values** |
| Number/percentage of LGUs / PUC and CPUC (cantonal public utility companies) that apply the methodology for setting the lowest basic price of water services in the Federation of BiH / establishment of regulatory bodies for water tariffs | * Adopted Methodology for setting the lowest basic price of water services in the Federation of BiH (2022)   Regulatory bodies for water tariffs have not been established | Methodology applied in all LGUs / PUCs and CPUCs (2028) |
| Number of completed feasibility studies for new investments in utility infrastructure in LGUs | No data available on the number of feasibility studies in LGUs | In all LGUs, developed feasibility studies for new investments in utility infrastructure (2023 -2029) |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 0,287 | 0 | 0,287 |
| **1.6.2. Measure** | Improve the system of calculation, collection and allocation of special water fees | **Indicators of the measure** | **Indicator baseline values** | **Indicator target values** |
| Level of completion of the analysis of current economic status of all segments of water management | Analysis has not started | Completed analysis the outcomes of which would be used to assess justification of re-defining the system of fee collection (2024) |
| Level of completion of the process of developing and adopting legislation on water fees | Analysis has not been made, and legislation has not been amended | Adopted legislation in the segment of water fees in accordance with the results of the analysis (2024) |
| Harmonisation between solutions offered in legislation regulating operation of the TA (Tax Administration) and functioning of the water sector with respect of collection of special water fees taking into consideration that they are public revenues | Regulations on tax administration regarding collection of public revenues from special water fees are not aligned with the water sector legislation that defines collection of revenues from special water fees | Harmonised legislation between tax administration and water sector for the purpose of increasing the amounts collected for water fees (public revenues)(2024) |
| Status of harmonisation of the provisions of the VAT Law to recognize the character of revenues from special water fees for the purpose of exempting public utility companies from paying VAT for collected amounts of special water fees | Amendments to the law have not been made or adopted | Provisions of the VAT Law adjusted to recognize the character of revenues from special water fees, so the public utility companies are exempted from paying VAT for collected amounts of special water fees (2024) |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 0,167 | 0 | 0,167 |
| **1.6.3. Measure** | Establishment and operation of specialist team(s) in the water sector for economic and financial planning, project preparation and programming spending of funds | **Indicator of the measure** | **Indicator baseline values** | **Indicator target values** |
| Status of establishment and operation of one or several bodies in water sector (experts in water law, financial and economic experts in water) for economic and financial planning, project preparation and programming the spending | The process of establishing these bodies has not started | One or more operational bodies have been established and made operational in water sector to do financial planning, project preparation and programming the spending (2024) |
| Level of preparation of applications to international organisations for projects of specialist training of the body in water sector on economic and financial planning, project preparation and programming of the spending | Preparation of the application has not started | Prepared and submitted applications to international organisations for implementation of a project of specialist training to the body in water sector (2025) |
| Level of development of a Training Programme on economic and financial planning, project preparation, and programming of the spending of funds | Development of the Training Programme has not started | Training Programme prepared (2025) |
| Implementation phase of the training programme and making the report on implementation | The Training Programme preparation has not started, and neither has its implementation | Training programme completed and report on its implementation prepared (2025) |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 0,044 | 0 | 0,044 |
| **1.6.4. Measure** | Ensuring financing for preparation of priorities and implementation of project documents aligned with the EU climate legislation and global initiatives for climate change resilience and adaptation | **Indicators of the measure** | **Indicator baseline values** | **Indicator target values** |
| Status of development of list of priority projects | Priority projects list has not been made | The first list of priority projects in BiH prepared and regularly updated (2023) |
| Status of preparation of project documents for financing | Preparation of the project documents has not started | Developed first set of project documents and regularly updated (2024 -2034) |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 0,021 | 0 | 0,021 |

13.8.2. Waste management

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| **2. Strategic goal** | **Reducing waste and increasing reuse of materials** | **Strategic goal indicators** | **Indicator baseline values** | **Indicator target values** |
| Total waste disposed (t) | 577,685  (2020) | ... |
| Total number of waste disposal sites recorded | 45  (2020) | ... |
| **Budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 69 | 590.9 | 659.9 |

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| **2.1. Priority** | **Improving the legal and strategic framework in the waste management according to the EU principles** | **Priority indicators** | **Indicator baseline values** | **Indicator target values** |
| Assessment of the compliance of the waste management legislation and waste management documents with the obligations arising from the European Union’s acquis and international agreements | The waste management legal and strategic framework in Federation of BiH is:   * Partly aligned with 9 Directives * Not aligned with 2 Directives * Partly in compliance with the requirements of the Basel Convention (2021) | The waste management legal and strategic framework in Federation of BiH is fully in compliance with 11 EU Directives and Basel Convention  (2025) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.297 | 1.1 | 1.4 |

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| **2.1.1. Measure** | Improve waste management legislation, policies and planning documents so as to be in compliance with the obligations arising from the EU acquis and international agreements | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| Status of the preparation and adoption of Action Plans for the Implementation of the Waste Directive and Landfill Directive | The Action Plans have not been prepared and adopted. | 2 Action Plans prepared and adopted (2025) |
| Compliance of the Federation legislation with the Directives and guidelines of the European Union in the waste management sector and requirements of the Basel Convention | The legislation of the Federation of BiH is not aligned with the Directives and guidelines of the European union in the waste management sector and requirements of the Basel Convention | Full compliance of the Federation legislation with the Directives and guidelines of the European Union in the waste management sectors and requirements of the Basel Convention achieved (2026) |
| Number of prepared waste management plans | The Waste management Plan (FWMP) of the Federation of BiH has not been prepared while cantonal and municipal waste management plans are not aligned with the objectives from this Strategy and the new FWMP | A new Waste Management Plan of the Federation of BiH prepared and adopted (2024)  10 cantonal and 79 municipal waste management plans prepared and adopted (2029) |
| The number of reference documents on the best available techniques in the area of waste management | 0  (2021) | 2  (2029) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.297 | 1.1 | 1.4 |

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| **2.2. Priority** | **Improving the waste records and reporting system** | **Priority indicators** | **Indicator baseline values** | **Indicator target values** |
| Reliability of waste data obtained from the waste records and reporting system | Waste records and reporting system does not provide for reliable waste data   * Determination of waste amounts and composition is not mandatory * Federation has no own waste analysis laboratory * The Waste Management Information System has been newly developed (2021) | Waste records and reporting system provides for reliable waste data   * The obligation of utility enterprises to determine the quantity and composition of waste codified (2023) * An accredited waste analysis laboratory established (2024)   The Waste Management Information System fully operational and effective (by 2027) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.441 | 1.7 | 2.2. |

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| **2.2.1. Measure** | Improving the waste records and reporting system | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| a. The status of adoption of the bylaw imposing the obligation to determine the quantity and composition of waste | The bylaw has not been adopted | The bylaw imposing the obligation to determine the quantity and composition of waste published in the Official Gazette of the Federation of BiH (2023) |
| b. Status of the establishment of an accredited waste analysis laboratory | No accredited waste analysis laboratory has been established | An accredited waste analysis laboratory established (2024) |
| c.1 Advanced IS modules and analytics  c.2 Number of registered users of IS  C.3 An IS Department formed and appropriately staffed with the Environmental Protection Fund Federation of BiH  c.4 Number of annual trainings for reporting entities | c.1. Limited analytical capabilities of IS  c.2 1000 users  c.3 No IS Department formed with the Environmental Protection Fund Federation of BiH  c4. 1. | c1. IS fully capable of responding to all analytical requests of the users (2028)  c.2. 5000 users (2032)  c.3 The IS Department formed with the Environmental Protection Fund of the Federation of BiH (2025)  c4. 4 (annually, from 2023 until the end of the planning period) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.441 | 1.7 | 2.2. |

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| **2.3. Priority** | **Implementing economic and financial instruments and mechanisms to reduce the amount of waste and boost utilisation of all categories of waste** | **Priority indicators** | **Indicator baseline values** | **Indicator target values** |
| Number of financial instruments for sustainable solid waste management supporting the transition to a circular economy | 2 (charges payable for failure to meet the recycling and reuse objectives for some special wastes and taxes on light plastic shopping bags) (2021) | Minimum 5  (2032) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.058 | 0 | 0.058 |

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| **2.3.1 Measure** | A revision of the current and implementation of further economic and financial instruments and mechanisms in the waste management sector | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| The status of the proposal for new economic and financial instruments | No proposal offered, and there are currently only 2 financial instruments in the waste management area | The proposal prepared and activities on the implementation of new financial instruments initiated (2026) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.058 | 0 | 0.058 |

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| **2.4. Priority** | **Improving the municipal waste management system** | **Priority indicators** | **Indicator baseline values** | **Indicator target values** |
| Financial and operational sustainability of the utility sector | Predominantly low financial and operational sustainability of companies in the utility sector (2021) | Increased financial and operational sustainability of companies in the utility sector as compared to the baseline situation (2032) |
| Costs of environmental action‒ waste | Amounts of investment in waste management -  Investments of the Environmental Protection Fund of Federation of BiH: BAM 1.4 million (2021) | Increased investments in waste management as compared to the base year (2032) |
| Municipal waste collected and landfilled | Waste collected: 611,854 t/y (2020)  Waste landfilled: 577,685 t/y (2020)  (94% of waste collected is landfilled) | Diverting the waste away from landfills towards other forms of treatment ultimately aiming at landfilling of less than 60% of the total amounts of municipal waste generated as compared to the base year (2032) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 53.8 | 478.8 | 532.6 |

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| **2.4.1 Measure** | Reform the municipal waste management sector | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| The status of forming a Working Group for the reform of the municipal waste management sector | Working Group for the reform of the municipal waste management sector has not been formed | The Working Group for the reform of the municipal waste management sector formed (2025) |
| The status of development of Guidelines for the reform of the municipal waste management sector | There are no Guidelines for the reform of the municipal waste management sector | The Guidelines for the reform of the municipal waste management sector completed (2027) |
| The effectiveness and efficiency utility enterprises performance | Unsatisfactory effectiveness and efficiency of utility enterprises performance | The effectiveness and efficiency of utility enterprises as compared to the baseline  (2032) |
| Number of expert meetings (workshops, conferences, trainings) | 1 (annually) | 4 (annually, from 2023 until the end of the planning period) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.162 | 0.651 | 0.813 |
| **2.4.2 Measure** | Procurement of equipment and development of the infrastructure for municipal waste management | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| a.1 The amount of household waste collected through public waste transport services  a.2 Percentage of the population covered by public waste transport services | a.1 611,854 t/y (2020)  a.2 68% (2018) | a.1 Amounts of household waste collected through public waste transport services increased so as to ensure collection of no less than 95% of municipal waste generated  a.2 The percentage of the population covered with organised waste collection increased to 100% in urban areas and to 90% in rural areas |
| b. Waste management - total amounts | Annual amounts of waste dispatched for treatment/disposal/export‒ a total = 1% of the waste generated  or  Small quantities of municipal waste processed in R treatment procedures | Annual amounts of waste dispatched for treatment/disposal/export‒ a total = 30% of the waste generated  or  Amounts of municipal waste processed in R treatment procedures increased to 30% of the waste generated as compared to the base year (2032) |
| c.1 Treatment and disposal capacities (buildings) | c. 1.1 number of municipal/city recycling yards for separate collection of different types of municipal waste 7  C.1.2 number of disposal sites - by types of disposal site 7 regional and 74 municipal landfills  c.1.3 Number of regional waste management centres (no.): 1 (Sarajevo) | Number of facilities for treatment and disposal of waste increased as compare to the base year (2023) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 52.7 | 474.3 | 527.09 |
| **2.4.3 Measure** | Programme aimed at reducing the quantity of municipal waste disposed at landfills | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| a. The quantity of waste generated annually per capita (kg/dwelling/day) | 1,1 kg/dwelling/day  (2020) | Less than 0.9 kg/dwelling/day (2032) |
| b. The quantity of biodegradable waste landfilled | 100% | Creating conditions for separate collection of 10% of the total amount of biodegradable waste typically contained in municipal waste (2032) |
| ç The amount of waste processed in R treatment procedures, particularly for municipal waste | 0% | Increase of the quantity of municipal waste treated in R treatment procedures as compared to the base year (2032) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.944 | 3.7 | 4.7 |

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| **2.5. Priority** | **Improving the management of special wastes** | **Priority indicators** | **Indicator baseline values** | **Indicator target values** |
| Amount of waste in R treatments ‒ special wastes | Data available only for the national level, and the amount is 225,993 t/y (2020) | Increased amount of municipal waste processed in R treatments by 50% as compared to the base year (2032) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 10.3 | 92.1 | 102.4 |

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| **2.5.1 Measure** | Creating conditions for adequate collection and disposal of special wastes | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| a.1 Recycling rate of packaging waste (%)  a.2 Recycling rate of WEEE (%) | a.1  Overall goal for recovery and recycling of packaging waste is 35% of the packaging placed on the market  Minimum amount (%) which needs to be reused or recycled:  - Glass 12%  - Metal 10%  - Paper 30%  - Plastic 16%  - Wood 12%  (2016)  a.2 Objectives of collection and takeover of waste equipment 35%  (2021) | a.1 Objectives for packaging waste:  - minimum 30 % (per weight of packaging waste) will be treated or incinerated in waste incinerators with energy recovery;  - 55 % (per weight of packaging waste) will be recycled  The following objectives need to be achieved for recycling of materials contained in packaging waste by 2032:  - 20 % per wight for glass  - 45 % per wight for paper and cardboard  - 20 % per wight for metals  - 19 % per wight for plastic  - 13 % per wight for wood  a.2 Objectives for WEEE:  - collect 55% of the total quantity of the equipment placed on the market of Federation of BiH in the current year at the following pace:  In 2022. 40%  In 2023. 40%  In 2024. 42%  In 2025. 43%  In 2026. 45%  In 2027. 47%  In 2028. 49%  In 2029. 51%  In 2030. 53%  In 2031. 55%  - 70-80% (per weight of devise) depending on the category will be treated  ‒ Between 50 and 80 % (per weight of devise) will be recycled (2032) |
| b.1 Recycling rate of batteries and car batteries (%)  b.2 Recycling rate of waste tyres (%)  b.3 Recycling rate of refuse oil (%)  b.4 Recycling rate of ELV (%) | Baseline objectives have not been defined  (2021) | - separate collection, reuse and recycling of 45% (per average weight) of batteries and car batteries in relation to the amounts placed on the market in 2021  - absolute ban on disposal of waste tyres and recycling or reuse of at least 70% of waste tyres collected (given a possibility of their co-incineration in cement plants)  - as of 2025, on an annual level, collect and properly dispose 40% of the total amount of oil sold (mineral and synthetic), which became used oil  - recycle 85% of ELV (per average weight per ELV) |
| ç The amount of construction and demolition waste generated annually - total (t/y) | 16,844 t/y  (2020) | Minimum 30% increase of amounts of registered construction and demolition waste as compared to the base year  (2032) |
| d. Quantity of hazardous waste generated within a year - total (t/y) | 5756 t/y  (2020) | Minimum 30% increase of amounts of registered hazardous waste as compared to the base year (2032) |
| e. Amount of waste sludge generated | Data not available | No target value is defined for this indicator, it is necessary to initiate monitoring |
| f. Amount of animal waste generated annually - total (t/y) | Data not available | No target value is defined for this indicator, it is necessary to initiate monitoring |
| d. Amount of hazardous waste generated annually - total (t/y) | Data not available | No target value is defined for this indicator, it is necessary to initiate monitoring |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 10.2 | 92.1 | 102.3 |
| **2.5.2 Measure** | Strengthening the recyclables market | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| a. Status of establishment of the Waste Exchange | The Waste Exchange has not been formed | The Waste Exchange established and operational (2027) |
| b. Investments in recycling industry from the revolving fund | 0 | Continued growth of annual funds placed from the revolving fund  (annually, from 2024 until the end of the planning period) |
| ç Status of informal collectors in the recycling system | Informal collectors are not formally recognised as a part of the recycling system | Informal collectors are formally recognised as a part of the recycling system (2026) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.098 | 0 | 0.098 |

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| **2.6. Priority** | **Rehabilitate surfaces beneath inadequately disposed waste** | **Priority indicators** | **Indicator baseline values** | **Indicator target values** |
| Costs of environmental action– landfill | 0 | Increased each year compared to the base year (2032) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 4 | 16 | 20 |

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| **2.6.1 Measure** | Removing and rehabilitating abandoned landfills | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| a. Status of development of a catalogue of hotspots | The catalogue of hotspots has not been developed | The catalogue of hotspots has been developed (2025) |
| b. Number of abandoned landfills removed and rehabilitated | 0 | 5 (2032) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 4 | 16 | 20 |

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| **2.7 Priority** | **Raise awareness about the proper separation, collection and disposal of waste** | **Priority indicators** | **Indicator baseline values** | **Indicator target values** |
| Funds invested in awareness programmes on waste management | No indicator available  (2021) | Increased each year compared to the base year (2032) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.104 | 0.942 | 1.04 |

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| **2.7.1 Measure** | Running up-to-date educational and informational, gender sensitive and inclusive awareness campaigns at all levels (Federation of BiH, cantonal, municipal level) | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| General perception about the status of public awareness | Poor perception of the status of public awareness | High general perception of the status of public awareness (2032) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.104 | 0.942 | 1.04 |

13.8.3. Biodiversity and nature conservation

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| **No. and code** | **TITLE** | **INDICATORS AND SOURCES OF FUNDING** | | |
| **3. Strategic goal** | **Maintaining and enhancing biodiversity and protecting ecosystems** | **Strategic goal indicators** | **Indicator baseline values** | **Indicator target values** |
| Number of conservation areas and their categories | 2020 data:   * National parks: 1. * Natural monuments: 4 * Nature parks: 2   -Protected landscapes: 5 | ... |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 10.1 | 43.6 | 53.8 |

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| **3.1 Priority** | **Improving the legal framework of the Federation of BiH for biodiversity and nature conservation through alignment of the legislation with the EU acquis and international agreements** | **Priority indicators** | **Indicator baseline values** | **Indicator target values** |
| Compliance of the legal framework for biodiversity and nature conservation with the EU acquis | Insufficiently aligned legal framework (2022) | The legal framework significantly aligned (2025) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.128 | 1.1 | 1.2 |

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| **3.1.1 Measure** | Align and harmonise the legislation on the preservation and sustainable use of biodiversity and nature conservation with the EU acquis and international agreements on biodiversity | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| Alignment of nature conservation laws with the EU acquis and international agreements | The law is not sufficiently aligned with the EU acquis and international agreements on biodiversity | The law is partially, highly, aligned with the EU acquis and international agreements on biodiversity (2025) |
| Level of harmonisation of the legislation of the Federation of BiH with the legislation of other levels of government | The legislation of the Federation of BiH is not harmonized with the legislation of other levels of government | The legislation of the Federation of BiH is harmonized with the legislation of other levels of government (2025) |
| Alignment of sectoral regulations with the EU acquis and international agreements | Sectoral regulations are not in line with the EU acquis and international agreements | Sectoral regulations aligned with the EU acquis and international agreements |
| Development of the mechanism of the Law on Nature Conservation | Poorly developed | Highly developed (2023) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.128 | 1.1 | 1.2 |

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| **3.2 Priority** | **Strengthen the institutions of the Federation of BiH responsible for the implementation of the legislation and activities in the area of nature conservation** | **Priority indicators** | **Indicator baseline values** | **Indicator target values** |
| Capacity building of professional institutions for nature conservation | There is no professional institution (2022) | The professional institution efficiently engaged in nature conservation activities (2030) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 1.1 | 8.4 | 9.5 |

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| **3.2.1 Measure** | Establishment of a professional institution for nature conservation in accordance with the Law on Nature Conservation of the Federation of BiH | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| Decision on the establishment of the professional institution | There is no professional institution | A Decision on the establishment of the professional institution (2024) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.009 | 0 | 0.009 |
| **3.2.2 Measure** | Secure initial financial, human and technical capacities for the operation of the Nature Conservation Institute of Federation of BiH and nature conservation institutions of the Cantons | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| Degree of development of initial capacities of the professional institution | There is no professional institution | The professional institution established (2025) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.314 | 1.2 | 1.5 |
| **3.2.3 Measure** | Secure full financial, human and technical capacities for the work of the professional institution for nature conservation of the Federation of BiH and cantonal institutes/professional institutions for nature conservation | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| Degree of development of initial capacities of the professional institution | There is no professional institution | An efficient institution established (2030) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.797 | 7.1 | 7.9 |

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| **3.3 Priority** | **Initiate coordination, communication and reporting on biodiversity and nature conservation in the Federation of BiH** | **Priority indicators** | **Indicator baseline values** | **Indicator target values** |
| Integrity of information for reporting on biodiversity from all cantons in BiH achieved | No institutional channel for the flow and compilation of data on biodiversity in the Federation of BiH available (2022) | An efficient institutional channel for the flaw of information on biodiversity in the Federation of BiH set up (2030) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 1.6 | 4 | 5.6 |

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| **3.3.1 Measure** | Creating a department for coordination of professional activities on nature conservation and monitoring in the Federation of BiH in the professional institution for nature conservation | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| The level of efficiency of the flow of information and data on the state of biodiversity/nature | Poor coordination in information and data gathering | Efficient flow of information and gathering of data on the state of biodiversity/nature (2025) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 1.5 | 3.5 | 5 |
| **3.3.2 Measure** | Set up a database on results of projects which were implemented, ongoing and future projects focusing on biodiversity in Federation of BiH | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| Degree of using the protocol for entering projects outputs | The results of projects implemented are not available | Standardized results of the implemented projects available (2025) |
| Status of the assessment of data gaps on biodiversity in the Federation of BiH | Data gaps on biodiversity in the Federation of BiH not identified | Data gaps on biodiversity in the Federation of BiH identified |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.068 | 0.273 | 0.342 |
| **3.3.3 Measure** | In accordance with the INSPIRE Directive, through the Information System for the Nature Conservation of the Federation of BiH, provide for access to information on monitoring of protected and strictly protected species and areas, and species and habitats of interest for the Community | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| Number of data entries on the FBiH FAP on the continuous monitoring of protected species and habitats of interest | Data on monitoring the status of species and habitats are not available | Data on monitoring the status of species and habitats are publicly available at the FBiH FAP |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.029 | 0.267 | 0.296 |

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| **3.4 Priority** | **Initiate monitoring of the state and biodiversity/nature conservation in the Federation of BiH in compliance with the standards of the EU acquis** | **Priority indicators** | **Indicator baseline values** | **Indicator target values** |
| Effectiveness of system for routine monitoring of the state of species, habitats, and protected areas | No system for routine monitoring of the state of species, habitats, and protected areas has been established. | The system for routine monitoring of the state of species, habitats, and protected areas is up and running (2029) |
| Development of technical and human capacities for professional tasks of monitoring and nature conservation | Minimum technical capacities for monitoring and nature conservation available (2022) | The available technical capacities for monitoring and nature conservation increased and satisfy the needs (2029) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.979 | 3.4 | 4.3 |

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| **3.4.1 Measure** | Establish a system for monitoring species from the Red List, species and habitats of interest to the Community in the Federation of BiH and its specific ecosystems (canyons, mountain, high mountain, wetland and karst ecosystems) through activities of professional and scientific institutions | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| * Number of species and habitats under constant monitoring * Number of areas under constant monitoring | Capacities for targeted monitoring have not been developed and/or are not functional | Efficient system for monitoring the status of species, habitats and areas (2025) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.324 | 1.2 | 1.6 |
| **3.4.2 Measure** | Support non-governmental organisations registered for monitoring of biodiversity in the Federation of BiH | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| The amount and continuity of funds allocated to the NGO sector for monitoring purposes | There are no steady allocations to the NGO sector aimed at facilitating the monitoring of species and areas | Steady allocations provided to the NGO sector aimed at facilitating the monitoring of species and areas |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.049 | 0.196 | 0.245 |
| **3.4.3 Measure** | Fully develop technical and human capacities for the implementation of nature conservation measures in the protected and other areas of the ecological network, and increase administrative capacities in nature conservation institutions by 50% | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| Level of development of professional capacities for the nature conservation | Low | High |
| Level of administrative capacity building for the nature conservation | Low | High |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.308 | 0.720 | 1.02 |
| **3.4.4 Measure** | Improve the inspection control of the implementation of the Law on Nature Conservation of the Federation of BiH and other laws prescribing biodiversity protection measures | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| * Level of development of the monitoring capacity for the nature conservation * Number of inspection controls | Low | High |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.297 | 1.1 | 1.4 |

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| **3.5 Priority** | **Complete an inventory of the biodiversity in the Federation of BiH at the ecosystem, species and genetic levels** | **Priority indicators** | **Indicator baseline values** | **Indicator target values** |
| Inventory of biodiversity of the Federation of BiH covers the ecosystem, species and genetic level | The inventory of flora, fauna, fungi, migratory birds, and invasive species, ecosystems/habitats and genetical diversity of the Federation has not been completed (2022) | Studies of the inventory of flora, fauna, fungi, migratory birds, and invasive species, ecosystems/habitats and genetical diversity of the Federation completed (2029) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 4.9 | 19.3 | 24.3 |

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| **3.5.1 Measure** | Complete an inventory of flora, fauna, fungi and genetic diversity of the Federation of BiH | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| Degree of completeness of the Federation inventory of plants, animals, fungi and migratory birds | No inventory of plants, animals, fungi, migratory birds in the Federation of BiH has been made | Inventory of plants, animals, fungi and migratory birds in the Federation of BiH completed |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 4.8 | 19.2 | 24.08 |
| **3.5.2 Measure** | Revise and organize the list of invasive species | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| Degree of harmonization of the black, grey and white lists of invasive species with the current state of invasive species in the territory of the Federation of BiH | Initial list of invasive species in the Federation of BiH | Black, grey white lists harmonized with the current state of invasive species in the Federation of BiH |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.092 | 0 | 0.092 |
| **3.5.3 Measure** | Prepare and publish a habitats map of the Federation of BiH | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| Degree of completion and availability of habitat map of the Federation of BiH | There is no habitat map of the Federation of BiH | Habitat types identified and presented on a publicly available habitat map of the Federation of BiH |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.031 | 0.127 | 0.158 |

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| **3.6 Priority** | **Integrate ecologically significant areas into a network which should cover 17% of the overall territory of the Federation of BiH** | **Priority indicators** | **Indicator baseline values** | **Indicator target values** |
| Integration of the ecologically important areas | The ecologically important areas are not integrated in the ecological network of the Federation of BiH (2022) | Ecological corridors which link the ecologically important areas of the Federation of BiH established (2030+) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.904 | 6.1 | 7.09 |

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| **3.6.1 Measure** | Conduct a public campaign to promote the ecological network (Network of Areas of Interest for the Community) | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| Level of public awareness of the benefits of the ecological network in Federation of BiH | Low | High |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.051 | 0.120 | 0.172 |
| **3.6.2 Measure** | Complete a consultation process with local communities and stakeholders in all areas covered by the Ecological Network Plan in the Federation of BiH | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| Degree of agreement of local communities for the inclusion of their respective areas in the ecological network of the Federation of BiH | Low | High |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.240 | 0.560 | 0.800 |

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| **3.6.3 Measure** | **Establish new protected areas and identify areas under other effective protection measures in the Federation of BiH** | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| % habitats from the Red of the Federation of BiH in protected areas or other areas under effective conservation measures | Specific biodiversity in the Federation of BiH insufficiently protected (2022) | Protected areas or other areas under effective conservation measures efficiently protect the biodiversity of the Federation of BiH (2030) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.257 | 2.3 | 2.5 |

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| **3.6.4 Measure** | Establish the ecological network of the Federation of BiH | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| Status of the ecological network of the Federation of BiH | The ecological network exists only at the level of the Natura 2000 Plan in BiH | The ecological network of the Federation of BiH established and serves the purpose of protecting biodiversity |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.354 | 3.1 | 3.5 |

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| **3.7 Priority** | Improve cross-sectoral cooperation and political support in the Federation of BiH for the integration of the biodiversity protection into sectoral policies and legislation | **Priority indicators** | **Indicator baseline values** | **Indicator target values** |
| Number of sectoral programmes with the component of active nature conservation | Biodiversity / nature conservation is not sufficiently integrated into sectoral policies | A significant number of sectoral projects with a biodiversity preservation component |
| Level of integration of nature conservation in the sectoral legislation | Nature conservation insufficiently integrated in sectoral legislation (2022) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.111 | 0 | 0.111 |

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| **3.7.1 Measure** | Ensure cross-sectoral support for the implementation of the revised goals of NBSAP in the Federation of BiH | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| Number of projects focusing on nature conservation | Small number of projects focusing on nature conservation | High number of sectoral projects focusing on nature conservation |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.061 | 0 | 0.061 |
| **3.7.2 Measure** | Integrate the protection and sustainable use of biodiversity into sectoral regulations | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| Degree of integration of biodiversity/nature conservation into sectoral legislation | The biodiversity / nature conservation is not sufficiently integrated into sectoral legislation | Sectoral laws provide for a long-term conservation of the biodiversity/nature in the Federation of BiH |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.049 | 0 | 0.049 |

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| **3.8 Priority** | **Enhance science-based decision-making on biodiversity/nature through a dialog of the scientific community and decision makers** | **Priority indicators** | **Indicator baseline values** | **Indicator target values** |
| Use of multidisciplinary analyses and scenarios in decision-making | Scientific data are not sufficiently used in decision-making processes (2022) | Scientific data, analyses, and scenarios are the basis for decision-making |
| Number of events organised for information sharing between academia and policy makers | Platform for information sharing between academia and policy makers | A continued dialogue between academia and policy makers (2030) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.211 | 0 | 0.211 |

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| **3.8.1 Measure** | Use conclusions, messages, scenarios of multidisciplinary analyses and up-to-date scientific data in making decisions that affect the state of biodiversity/nature of the Federation of BiH | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| The degree of use of scientific analysis in the decision-making process | Low | High |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.030 | 0 | 0.030 |

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| **3.8.2 Measure** | In cooperation with the institutions of BiH, Republika Srpska and the Brcko District BiH, organize the exchange of information between the academic community and policy makers that affect the state of biodiversity/nature of BiH | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| Degree of information exchange between the academic community and policy makers | Low | High |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.181 | 0 | 0.181 |

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| **3.9 Priority** | **Raising ecological awareness on biodiversity, nature conservation and ecosystem services** | **Priority indicators** | **Indicator baseline values** | **Indicator target values** |
| Level of awareness among the population in the Federation of BiH | Low level of environmental awareness | High level of environmental awareness |
| Level of promotion of values and benefits from local biodiversity | The promotion of the of values and benefits from local biodiversity is poor (2022) | The population acknowledges the of values and benefits from local biodiversity (2030) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.111 | 0.387 | 0.498 |

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| **3.9.1 Measure** | Develop an effective network of non-governmental organizations for monitoring the state of biodiversity/nature, active participation in decision-making and the promotion of sustainable development | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| The level of environmental awareness of the population in the Federation of BiH as a result of the efforts of an efficient network of non-governmental organizations | Low level of environmental awareness | High level of environmental awareness |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.096 | 0.387 | 0.484 |
| **3.9.2 Measure** | Strengthening support for the education of teaching staff at all levels of education in the area of biodiversity protection and sustainable management of benefits from the natural in the Federation of BiH | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| Integration of the knowledge about the values of the biodiversity/nature of the Federation of BiH into educational processes | Knowledge about the values of the biodiversity/nature of the Federation of BiH plays is underrepresented in educational processes | Knowledge of the values about the biodiversity/nature of the Federation of BiH is well represented in educational processes |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.014 | 0 | 0.014 |

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| **3.10 Priority** | **Mobilise both local and international funds for biodiversity of the Federation of BiH** | **Priority indicators** | **Indicator baseline values** | **Indicator target values** |
| Amount of secured funds dedicated for biodiversity/nature conservation | The amounts of funds for biodiversity/nature conservation are low (2022) | Funds for biodiversity/nature conservation exponentially increased (2030) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.066 | 0.601 | 0.667 |

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| **3.10.1 Measure** | Provide funds for: (a) capacity building of the institutional framework in line with the improved legal framework for the biodiversity/nature of the Federation of BiH (b) inventory of areas and preparation of habitat maps, (c) inventory and monitoring of flora, fauna, fungi and genetic resources (d) effective implementation of global goals for biodiversity and implementation of obligations arising from international agreements of BiH, including the process of establishing the ecological network (e) development of permanent scientific and political dialogue, (f) environmental awareness raising | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| Amount of funds from national sources | Low funding | Satisfactory funding |
| Amount of international funds | Low funding | Low funding |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.066 | 0.601 | 0.667 |

13.8.4. Air quality, climate and energy

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| **No. and code** | **TITLE** | **INDICATORS AND SOURCES OF FUNDING** | | |
| **4. Strategic goal** | **Climate change mitigation and adaptation and improvement of air quality** | **Strategic goal indicators** | **Indicator baseline values** | **Indicator target values** |
| Total greenhouse gas emissions, including sinks(Gg CO2-eq1)) | 19,670  (2016) | 16228  (2030) |
| Total greenhouse gas emissions per USD 1 of GDP | 1,75 kgCO2ekv/1USD GDP\* | ... |
| Air pollution: Annual mean concentration of PM10 particles (microgram per cubic meter) | 47 µg/m3 | 40 µg/m3 |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 332.9 | 2992.7 | 3325 |

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| **4.1 Priority** | **Reduce air pollution by reducing levels of key air pollutants to levels that are safe for human health** | **Priority indicators** | **Indicator baseline values** | **Indicator target values** |
| Amounts of emissions of pollutants from large plants | In 2014 the values were: 142,550 tons SO2, 14,514 tons NOx, 2.253 tons particulate matters | By 1. 1. 2028 reduced to: 6,702 tons sulphur dioxide, 4,964 tons nitrogen oxides, 496 tons particulate matters |
| Level of compliance of plants with BAT | Low level of compliance of plants with BAT | Harmonisation of all industrial plants with best available techniques by 2032 |
| Percentage of reduction of pollutants emissions from household stoves and service industry | High emissions and impact on air quality from household stoves and emissions from the service industry | Reducing emissions from household stoves by 50% by 2032 as compared the baseline year |
| Percentage of district heating in total heated area in the building sector | Share of the district heating in the total heated area in the building sector about 8%. | Increasing the share of the district heating in the total heated area in the building sector to 15% by 2030 |
| Percentage of reduction of pollutants emissions from the transport | Underdeveloped public and non-motorised transport, high share of aging vehicles  emissions of particulate matters in 2016 amount to 1,101.8 tons | Reducing pollutants emissions from transport by 30% by 2030 (including raising dust from roads) as compared to 2016 |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 32.5 | 292.2 | 324.8 |

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| **4.1.1 Measure** | Reducing emissions from large combustion plants and achieving compliance of all industrial facilities with best available techniques | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| Status of the development and implementation of a funding programme for the implementation of NERP | Unidentified sources of funding and delays in the implementation of NERP | A funding programme for NERP and its implementation developed and implemented |
| Number of adopted BREFs for BATs | The Federation of BiH has no BREFs developed or adopted | Reference documents developed and adopted for all significant industrial processes in the Federation of BiH |
| Number of environmental permits that require harmonisation of industrial processes with BATs adopted | Unknown number of environmental permits that are in compliance with EU BREFs | Environmental permits issued to all industrial facilities required to obtain a permit |
| Number of facilities included in the digitalised and centralised system of reporting on emissions measurement | There is no digitalised and centralised system of reporting on emissions measurement in place | Digitalised and centralised system of reporting on emissions measurement established |
| Level of the implementation of the capacity development programme | Insufficient capacities to support introducing and overseeing the implementation of the requirements from the environmental permits | The capacity building programme designed and implemented |
| Status of adoption of amendments to the Decree | The applicable Decree does not cover many pollutants and does not envisage digitalised and centralised reporting | The Amendments to the Decree on fees for air pollution adopted |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.190 | 0.761 | 0.951 |
| **4.1.2 Measure** | Reducing air pollution from local sources | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| Status of the law adoption | The applicable law does not regulate the quality of solid fuels and stoves and boilers | The Law on air protection that specifies the quality of (solid) fuels and bans sale of non-certified stoves and boilers adopted |
| Number of cantons with regulated incentive scheme models | Some of the cantons have pilot incentive schemes | Development of the model for incentive schemes in each canton, in coordination with the entity |
| Status of amendments to the relevant legislation and level of capacity development in the inspections | The current legal framework does not allow for adequate inspections of household stoves, inspections do not have sufficient capacities | Relevant legislation amended and capacities of municipal and cantonal inspections developed (number of inspectors increased and training programmes implemented |
| Number of completed strategic environmental assessments of planning documents | Strategic environmental assessment has not been sufficiently used | Strategic environmental assessments consistently completed for every planning document |
| Status of the adoption of the law and number of assessments completed | The applicable law does not require completion of environmental impact assessment of regulation plans | Amending the Law on Spatial Planning so as to require completion of environmental impact assessment of regulation plans |
| Status of adoption of the law | There is no law on heating industry | The Law on Heating Industry adopted |
| Status of the adoption of strategy and number of completed studies | There is no strategy, studies completed for some urban areas | The Strategy, studies (for new district heating systems and expansion of the existing ones) for urban areas with more than 10.000 population |
| Number of cantons that have adopted the model | There are no incentive models for non-motorised transport, infrastructure underdeveloped | Models adopted (cantonal level) and minimum infrastructure developed |
| Number of mechanisms adopted at the level of entity and cantons | No incentives offered for the development of public transport | The mechanisms adopted (the entity and cantonal level harmonised) |
| Status of amendments to the car taxation system | The current taxation system discourages procurement and use of low polluting vehicles | The taxation system improved (coordination with BiH level) |
| Status of the adoption of amendments to regulations | The obligation to clean the streets in certain intervals is not regulated is not clearly defined | Provisions regulating the street cleanliness standards, including control mechanism and sanctions, included in agreements on road maintenance |
| Number of cities which adopted the concept of smart cities | Only several big cities work on the development of the smart city concept | The concept of smart cities adopted for the cities of the above size by 2025 and continuously implemented |
| Status of the adoption of the plan | Insignificant share of hybrid/electric vehicles in institutions of the Federation of BiH | Plan on procurement of new vehicles adopted and implemented |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 32.3 | 291.4 | 323.8 |

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| **4.2 Priority** | **Upgrading the air quality management system to support strategic decision-making and public information on air quality and emissions** | **Priority indicators** | **Indicator baseline values** | **Indicator target values** |
| Level of information provided to the public on air quality and emissions | Insufficiently developed public information system on air quality and emissions of pollutants into the air | A system capable of providing public information on air quality and emissions of pollutants into air in real and integrated time available as of 2023 |
| Performance of the reporting system | There is no integrated system for reporting on pollutants and GHG emissions, and air quality to the international institutions | A system for reporting on emissions and air quality international institutions built by 2025 |
| Coverage of the territory of the Federation of BiH by the network of measuring stations | 22 measuring stations for air quality in 2019, deployed in 10 cities/municipalities, some areas of the Federation of BiH are not provided with a measuring station | The territory of the Federation of BiH fully covered by the network of the stations by 2025 |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 24.1 | 217.6 | 241.7 |

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| **4.2.1 Measure** | Improvement of the air quality monitoring system | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| Status of the development and adoption of the study | Development of the plan/study in progress | The Study (plan) developed and adopted, with all the elements of measurements defined |
| Number of measuring stations commissioned | 22 measuring stations were operational in 2019, some parts of the Federation of BiH are not covered by a measuring station | Equipment - measuring stations procured and installed |
| Level of the implementation of the programme for strengthening human and technical capacities of the Federation of BiH Hydrometeorological Institute and cantonal organisation for monitoring air quality | Human and technical capacities of the Federation of BiH Hydrometeorological Institute and cantonal organisations insufficient | A technical and human capacity building programme completed |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.334 | 3 | 3.3 |
| **4.2.2 Measure** | Developing the system for reporting to international institutions and coordination of improvement of the public information system on air quality | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| Status of the programme development | Insufficiently developed system of informing the public on air quality | Information programme adopted at the level of the Federation of BiH, with clearly defined roles of cantons and municipalities |
| Level of the implementation of the capacity building programme | Insufficient capacities of responsible institutions | The capacity building programme implemented |
| Status of defining zones and agglomerations | Current zones and agglomerations have been defined without measurements in some parts of the Federation of BiH | Zones and agglomerations defined |
| Number of developed and adopted rehabilitation plans | Rehabilitation plans not developed | Rehabilitation plans developed and adopted |
| Status of the establishment of the information system | Information system not established | The air quality Information system established |
| Number of pollutants for which a reference laboratory has been designated | Reference laboratories not designated | Reference laboratories designated |
| Status of the adoption of regulations | There is no specific regulation that clearly defines the method of reporting data on emissions | Regulation defining the method of reporting data on emissions adopted |
| Number of electronic reports on emissions | There is no electronic reporting on emission measurements | Uniform electronic reporting on emission measurements introduced |
| Level of the implementation of the capacity building programme | Insufficient capacity in responsible institutions | The capacity building programme for verification of results of emission measurements implemented |
| Status of the adoption of national emission coefficients | National emission coefficients not identified | National emission coefficients adopted |
| Number of cantonal laws | Draft new law on air quality provides an opportunity for cantons to adopt cantonal laws on air protection | The laws adopted in the cantons |
| Number of cantons with completed inventories | Three cantons have completed inventories of pollution | The inventories of pollution completed |
| Status of development of baseline model | There is no baseline model for the air quality monitoring | The baseline model for air quality monitoring intended for spatial planning prepared |
| Status of the adoption of the procedure | There is no system for reporting to the state level | The reporting procedure adopted |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 23.8 | 214.6 | 238.4 |

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| **4.3 Priority** | **Reduce the impact of the Federation of BiH on climate changes through reduced GHG emissions and enhanced carbon sinks** | **Priority indicators** | **Indicator baseline values** | **Indicator target values** |
| Percentage of reduction of GHG emissions | In 2014, emissions estimated at about 18,323 Gg  There is no GHG inventory | Reduce GHG emissions by 17.5% by 2030 as compared to 2014 (strategic goal from BiH NDC adopted in March 2021) |
| The percentage of reduction of GHG emissions from the large plants | Emissions from the large plants account for 40% of the total emissions | Emissions from large facilities reduced (equivalent to EU ETS) by 28,7% by 2030 as compared to 2014 |
| Percentage of sinks increase | Sinks estimated at about 3,697 Gg in 2014 | Increasing GHG sinks by 10% by 2030 as compared to 2014 |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.887 | 7.9 | 8.8 |

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| **4.3.1. Measure** | Reducing the impact of the Federation of BiH to climate change | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| Status of the creation of the Committee | The Federation of BiH has no intersectoral body for planning, implementation and follow-up activities in the carbonisation process | The Decarbonisation Committee formed, it comprises representatives of the business sector, government, unions, non-governmental organisations, etc. |
| Status of the development and adoption of the Strategy | Lack of an integrated strategy on climate change | The Rulebook adopted |
| Level of the implementation of the capacity building programme | Insufficient capacity of FHMI | The capacity building programme implemented |
| Status of the law adoption | No climate law | The Climate Law adopted |
| Status of the adoption of the decree | There is no decree on the monitoring and reporting mechanism | The Decree on the monitoring and reporting mechanism adopted |
| Status of the adoption of NECP | Working version completed, finalisation in progress | NECP adopted every five years |
| Number of SECAPs prepared | A few municipalities and cities have SECAPs | SECAPs developed and adopted |
| Status of the adoption of the plan | There is no action plan on phasing out coal | The Plan prepared and adopted |
| Number of the plans adopted | Not a single mining region has a plan for a just transition | The plans for a just transition of mining areas completed and adopted |
| Status of the development of the proposal | ETS Directive not transposed | The Proposal developed in cooperation with MOFTER |
| Status of the designation of the institution | No institution has been designated for the establishment and operation of ETS | The Institution of the Federation of BiH appointed |
| Level of the implementation of the capacity building programme | Lack of capacities | The capacity building programme implemented |
| Status of the strategy development and adoption | Lack a strategy for enhancement of coal sinks | The Strategy on enhancement of carbon sinks |
| Status of the adoption of the model | Lack of a model for promotion of growing fast growing energy crops | The model for boosting of breeding of fast growing energy crops on degraded sites adopted |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.887 | 7.9 | 8.8 |

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| **4.4 Priority** | **Enhancing resilience to climate change** | **Priority indicators** | **Indicator baseline values** | **Indicator target values** |
| Establishment of a functional and integrated damage record system | There is no damage record system in place | A damage record system in place by 2025 |
| Level of the application of the principle of sustainable use of water in irrigation of agricultural land | 6,862 ha of land irrigated, a significant increase of irrigated area | Application of the principle of sustainable use of water in irrigation of agricultural land |
| Level of capacity development | Poor capacities for early detection of fire and firefighting | Highly developed early detection and firefighting capacities |
| Level of capacity development | Poorly developed fire protection capacities | Highly developed fire protection capacities |
| Establishment of a functional coordination of the early warning system | There is no coordination system | The early warning coordination system in place by 2025 |
| Level of the establishment of an effective coordination and monitoring system for the implementation of climate change adaptation measures | There is no system for coordination and monitoring of the implementation of measures | A coordination and monitoring system for the implementation of measures in place by 2025 |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 59.8 | 537.8 | 597.6 |

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| **4.4.1 Measure** | Develop institutional capacity and knowledge to increase resilience to climate change | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| Status of the implementation of capacity building programmes and improvement of knowledge | Insufficient knowledge and capacity | Knowledge improved and capacity strengthened though the implementation of capacity building programmes |
| Status of the appointment of the body | There is no body which keeps the records of damages caused by climate change | The body which will establish and maintain the damages records system formed |
| Status of the implementation of the capacity building programme | Insufficient forecasting capacities for hazardous meteorological and hydrological occurrences | The capacity building programme implemented |
| Status of the development of the coordination system | Lack of coordination | The method of coordination defined |
| Status of the preparation and adoption of risk assessment reports | Lack of quarterly reports | Quarterly reports on risk assessment of extreme climate changes adopted |
| Status of the development and adoption of the action plan | Lack of an action plan | The action plan prepared and adopted |
| Status of the development of the system for coordination and monitoring of the implementation of measures | Lack of a coordination and monitoring system for the implementation of measures | The coordination and monitoring system of the implementation of adaptation and mitigation measures set up |
| Status of defining a fundraising method | Lack of a system for fundraising and use of funds for the climate change adaptation measures | The method of fundraising and use of funds for the climate change adaptation measures defined |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.147 | 0.590 | 0.738 |
| **4.4.2 Measure** | Infrastructure capacity building to enhance resilience to climate change | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| Status of the programme development | Lack of a programme | The programme developed and adopted |
| Level of the application of the principles of sustainable use of water for irrigation and number of counselling offices | Insufficient application of the principle of sustainable use of water in irrigation areas and establishment of an advisory office for farmers | Application of the principle of sustainable use of water in irrigation areas and establishment of an advisory office for farmers |
| Status of the completion of the study; implementation phase - level of the application of ecological principles | Insufficient application of the ecological principles in the construction of multipurpose reservoirs | Studies completed; Extensive application of the ecological principles |
| Status of the study development | Lack of a study | The Study completed and adopted |
| Status of the equipment procurement and number of employees | Insufficient number of employees and inadequate equipment | Equipment procured and required number of staff employed |
| Status of the study development | Needs assessment not available | The Study completed and adopted |
| Level of capacity development | Insufficient capacities | Institutional and infrastructure capacities strengthened |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 59.6 | 537.2 | 596.9 |

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| **4.5 Priority** | **Improving energy efficiency of final consumption in all sectors** | **Priority indicators** | **Indicator baseline values** | **Indicator target values** |
| State of the adoption of an improved legislative framework | The current legislative framework is not adequate to support significant improvements | An enhanced legislative framework developed by 2023 |
| Percentage of reduction of energy consumption | TFEC in residential buildings in 2020 amounted to 1.035 ktoe | Reducing the final energy consumption in residential buildings by 22% by 2030 as compared to 2018 |
| Savings in final energy | Poor efficiency of public buildings, energy consumption in the public sector and service industry 285 ktoe in 2020 | Cumulative savings in final energy by 2030 19.28 ktoe (total rehabilitated building stock 18.4%) |
| Percentage of reduction of final energy consumption in industry | TFEC in a consumption 384 ktoe in 2020 | Reducing the final energy consumption in industry by 3.3% by 2030 as compared to 2020 |
| Percentage of reduction of primary energy consumption | Forecasted primary energy consumption 4,294 ktoe in 2020 | Reducing the final energy consumption by 11% by 2030 as compared to 2020 |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 204.9 | 1843.2 | 2048 |

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| **4.5.1 Measure** | Create an enabling environment for energy efficiency | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| Level of the implementation of the campaign and number of established counselling offices | Poor awareness on energy efficiency, very small number of counselling offices | Energy counselling offices formed in all municipalities/cities |
| Status of adopting amendments to the Law on Public Procurement | The applicable Law on Public Procurement does not envisage green procurements | The Law on Public Procurement amended |
| Status of the adoption of the regulation | There is no regulation on obligation schemes | The regulation on obligation schemes adopted in the Federation of BiH |
| Status of the development and adoption of the model | There is no systemic model for EE public lighting | The model developed and adopted; the revolving fund created |
| Status of the enactment of the improved law and number of adopted rulebooks | The applicable Law on EE failed to define some aspects of EE and some rulebooks are still missing | The amendments to the Law adopted, the missing regulations adopted |
| Status of the adoption and percentage of strategy implementation | The Strategy developed, not adopted | The Strategy on retrofitting of buildings adopted and implemented |
| The percentage of public buildings registered in the information system | The energy efficiency information system set up | The information system effective |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 195.6 | 1760.4 | 1956 |
| **4.5.2 Measure** | Reduction of primary energy consumption | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| Percentage of household appliances on the market with Energy Labelling | There is no official system of labelling energy efficiency on appliances | *Energy Labelling* Standard implemented for household appliances |
| Status of the development and adoption of the model | There is no comprehensive model in the entire Federation of BiH which specifies criteria | The model developed and adopted |
| Status of the adoption of amendments to the rulebook | The applicable regulation does not take into consideration the need for cooling and DHW, and needs for heating are relatively high | The Rulebook adopted, as amended |
| Status of the development and adoption of the model | Three is no comprehensive model in the entire Federation of BiH which specifies criteria | The model developed and adopted |
| Number of implemented ESCO projects | A small number of ESCO projects implemented, implementation of pilot projects is underway in the public sector | ESCO market developed |
| Percentage of industrial facilities with major energy consumption that have completed energy audit | A small number of industrial facilities have completed energy audits | Energy audits completed in all the facilities |
| Number of industrial companies in the network | There is no EE network | The network established and connected to the national network |
| Percentage of industrial facilities that have appointed energy managers | A small number of industrial companies have appointed energy managers | The energy managers appointed |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.249 | 0.996 | 1.2 |
| **4.5.3 Measure** | Reduction of primary energy consumption | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| Status of the adoption of the regulation | No regulation requiring compliance with EcoDesign | The regulation adopted (Regulation on the Energy Efficiency Law) |
| Status of the adoption of the incentive scheme | Three is no comprehensive scheme in the entire Federation of BiH | The incentive scheme implemented |
| Percentage reduction of losses in distribution of heat and electricity | Current losses, in particular in heat distribution are relatively high | Energy losses reduced |
| Status of adopting an improved scheme for subsiding cogeneration | There are no quotas to incentivise cogeneration | The current subsidy system for cogeneration improved |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 9.09 | 81.8 | 90.9 |

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| **4.6 Priority** | **Increasing the share of renewable energy along with an incentive scheme reform (focusing on citizens energy)** | **Priority indicators** | **Indicator baseline values** | **Indicator target values** |
| Percentage of RES share in TFEC | The share of RES in 2018 was 49,3% | The share of RES in TFEC 60% by 2030. |
| Percentage of RES share in electricity production | RES share in electricity production in 2018 was 39%, in 2019 49% | The share of RES in electricity production 50% by 2030 |
| Percentage of RES share in the transport sector | RES share in 2018 below 1% | RES share in the transport sector 9% by 2030 |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 10.4 | 93.7 | 104.2 |

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| **4.6.1 Measure** | Create an enabling environment for renewable energy sources | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| Status of the adoption of NECP | Development of NECP in progress | The integrated climate and energy plan adopted. |
| Status of the adoption of the amended law | The applicable Law on RES does not offer incentive schemes for the use of RES in heating and cooling | Amended Law on RES offering incentive schemes for the use of RES in heating and cooling |
| Status of the adoption of the regulation | There is no regulation on Guarantee of Origin for energy | The Regulation on Guarantee of Origin for energy adopted |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.027 | 0.109 | 0.137 |
| **4.6.2 Measure** | Increasing the share of renewable energy sources in the electricity production and transport | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| Status of the law adoption | The applicable law does not offer incentives schemes for citizen energy projects | Amendments to the Law on RES adopted |
| Number of adopted catalogues (one catalogue per each type of RES | There are no catalogues of criteria, they were prepared for small hydropower plants, but not adopted | Catalogues of criteria for all RES adopted |
| Status of the law adoption | The applicable law does not offer incentives schemes for rooftop solar photovoltaic power plants on new buildings | Amendments to the Law on RES adopted |
| Status of the development and adoption of the study | There is no comprehensive analysis | The Study completed and adopted |
| Status of the adoption of the incentive scheme | There is no incentive scheme for hybrid, electric and plug-in passenger vehicles | The incentive model adopted |
| Level of the development of infrastructure as defined in the Study | Insufficiently developed infrastructure | A minimum infrastructure developed |
| Number of kilometres of developed cycling tracks and pedestrian walkways | Insufficiently developed infrastructure | A minimum infrastructure developed |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 10.4 | 93.6 | 104.06 |

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| **4.7 Priority** | **Reducing light pollution** | **Priority indicators** | **Indicator baseline values** | **Indicator target values** |
| Status of the development of improved legislation | Lack of legislation governing light pollution | The legislation adopted |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.120 | 0 | 0.120 |

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| **4.7.1 Measure** | Enacting legislation governing light pollution | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| Status of the development and adoption of the regulation | A regulation envisaged in the law on environment protection | The regulation prepared and adopted |
| Level of the implementation of capacity building programmes | Insufficient capacities for regulating light pollution | The capacity building programme implemented |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.120 | 0 | 0.120 |

13.8.5. Chemicals safety and noise

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| **5. Strategic goal** | **Human health protection and improving well-being and quality of life for all** | **Indicator for the strategic goal** | **Indicator baseline values** | **Indicator target values** |
| Incidence of diseases or deaths due to poisoning that are a consequence of inadequate handling of chemical products | N/D | N/D |
| Percentage of people exposed to noise, by classes of noise and age groups | N/D | N/D |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 1,4 | 6,1 | 7,6 |

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| **5.1. Priority** | **Improved legislation in the field of chemical safety** | **Indicators of the priority** | **Indicator baseline values** | **Indicator target values** |
| Level of transposition of EU acquis and conventions in the field of chemical safety (Regulation (EC) no. 1907/2006 (REACH), Regulation (EC) no. 1272/2008 (CLDP Regulation), Regulation (EC) no. 648/2004 on detergents, Regulation (EU) no. 649/2012 on exports and imports of hazardous chemicals, Regulation (EU) 2019/1021 on POPs chemicals, and Directive 2004/10/EC on application of the principles of good laboratory practice, Rotterdam Convention, and Stockholm Convention | Low level of transposition of EU acquis and conventions in the field of chemical safety | Partial transposition of EU acquis and conventions in the field of chemical safety (Regulation (EC) no. 1907/2006 (REACH), Regulation (EC) no. 1272/2008 (CLP Regulation), Regulation (EC) no. 648/2004 on detergents, Regulation (EU) no. 649/2012 on exports and imports of hazardous chemicals, Regulation (EU) 2019/1021 on POPs chemicals, and Directive 2004/10/EC on application of the principles of good laboratory practice, Rotterdam Convention, and Stockholm Convention  (2024) |
| Level of transposition of the SEVESO III Directive in legislation of the Federation of BiH | Legal basis for transposition of the Seveso III Directive has been created in the Law on Environment Protection; however, legislation needs to be passed to specify the content and method of maintaining of Registry of Major Accidents  The existing Rulebook on the content of the report on safety status, content of information of safety measures and contents of internal and external intervention plans was made in 2005 and needs to be updated to include new requirements | Partial transposition of the SEVESO III Directive in legislation of the Federation of BiH (2028) |
| Level of transposition of Regulation (EC) no. 528/2012 on biocidal products management | Law on Biocides has not been adopted | Established legislative framework for biocidal product management and partial transposition of Regulation (EU) no. 528/2012 (2025) |
| Level of compliance of the legislative framework with requirements of the Minamata Convention, and level of transposition of Regulation (EU) 2017/852 on mercury. | There is no legislative framework for mercury and mercury product management. Transposition of Regulation (EU) 2017/852 on mercury has not started. The Minamata convention has not been ratified, and there is no legal basis for its implementation at the entity level | By 2024, established legislative framework for mercury and mercury product management, and partial transposition of the Regulation (EU) 2017/852 on mercury, and the Minamata Convention |
| Level of transposition of EU Directive 87/217/EEC on the prevention and reduction of environmental pollution by asbestos | Lack of legislative framework that regulates the emissions of asbestos to air and water by the industries producing asbestos cement and asbestos paper, and therefore the level of transposition of EU Directive 87/217/EEC on prevention and reduction of environment pollution by asbestos is very low. When transposing the Directive, one should take into consideration the rulebooks prescribing technical characteristics of cement as well as other construction material that may contain asbestos, the implementation of which is under competences of Ministry of Spatial Planning of the Federation of BiH | Established legislative framework and partial transposition of the EU Directive 87/217/EEC on prevention and reduction of environment pollution by asbestos by 2024 |
| Level of harmonisation of the legislative framework with requirements of the Montreal Convention, Kigali Amendment and the EU acquis regarding the management of ozone layer depleting substances | The current draft Law on Air Protection provides legal basis for transposition of the Regulation (EC) no. 1005/2009 on substances that deplete the ozone layer and Regulation (EC) 517/2014 on specific fluorinated greenhouse gases, and Montreal Protocol and Kigali amendment. Draft law is currently in the procedure of adoption | Harmonise/develop secondary legislation (bylaws) to enable partial transposition of Regulation (EC) no. 1005/2009 on substances that deplete the ozone layer and Regulation (EC) 517/2014 on specific fluorinated greenhouse gases, as well as the Kigali amendment by 2023 |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 0,324 | 0,077 | 0,401 |

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| **5.1.1. Measure** | Partial transposition of EU regulations and international agreements / conventions in the field of chemical safety | **Indicators of the measure** | **Indicator baseline values** | **Indicator target values** |
| Completeness of legal framework for implementation of the Law on Chemicals | There is a legal basis for transposition of EU regulations in the field of chemical safety, and the Rotterdam, Stockholm and Minamata conventions. However, secondary legislation prescribed by the Law on Chemicals has not been adopted, so the transposition of the said EU regulations and conventions is at a very low level | 19 secondary legislative acts stated in Article 58 of the Law on Chemicals have been adopted and they clearly define the conditions for the work of Advisors for chemicals (2023) |
| Status of appointment of the Poison Control Centre of the Federation of BiH (PCC) | Poison Control Centre does not exist | Formal designation of the Poison Control Centre (PCC) for Federation of BiH or making an agreement on cooperation and reporting with the existing PCC in the region (e.g. VMA‒Belgrade, Serbia; Institute for Medical Research and Work Medicine, Zagreb) (2024) |
| Status of legislative framework regarding biocidal product management | Law on Biocides has not been adopted | Adopted Law on Biocides by the Government of the Federation of BiH (2023) |
| Completeness of legal framework for implementation of the Law on Biocides | The Law on Biocides has not been adopted, therefore there is no legal basis for adoption of secondary legislation | Adopted secondary legislation (bylaws) in the area of biocidal product management (2025) |
| Completeness of legislative framework that ensures prohibition of use of mercury and restricts placement in the market of the products containing mercury or mercury compounds | There is no legislation in force that would ensure prohibition of use of mercury and restrict placement in the market of the products containing mercury or mercury compounds | Adopted secondary legislation that prohibits use of mercury and restrict placement in the market of the products containing mercury or mercury compounds (2025) |
| Completeness of legal framework that prohibits production, trade and use of products containing asbestos fibres, and ensures special conditions for labelling the products containing asbestos | There is no legislation in force that would prohibit production, trade and use of products containing asbestos fibres, and ensure special conditions for labelling the products containing asbestos | Adopted secondary legislation (bylaw) that prohibits production, trade and use of products containing asbestos fibres, and ensure special conditions for labelling the products containing asbestos (2025) |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 0,180 | 0,077 | 0,257 |
| **5.1.2. Measure** | Partial transposition of the SEVESO III Directive in legislation of the Federation of BiH | **Indicators of the measure** | **Indicator baseline values** | **Indicator target values** |
| Completeness of legal framework for implementation of the Law on Environmental Protection in terms of transposition of the SEVESO III Directive | Legal basis for transposition of the SEVESO III Directive has been created in the Law on Environment Protection; however, secondary legislation needs to be passed to specify the content and method of maintaining of Registry of Major Accidents | Develop and adopt legislation defining the content and method of maintaining the Registry of Major Accidents (2023) |
| Status of the Rulebook on the content of the report on safety status, content of information of safety measures and contents of internal and external intervention plans | The existing Rulebook on the content of the report on safety status, content of information of safety measures and contents of internal and external intervention plans was made in 2005 and needs to be updated to include new requirements | Updating or making a new Rulebook on the content of the report on safety status, content of information on safety measures and contents of internal and external intervention plans (2023) |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 0,019 | 0 | 0,019 |
| **5.1.3. Measure** | Harmonise / develop secondary legislation (bylaws) to enable implementation of the Montreal Protocol, the Kigali Amendment, and EU regulations that facilitates their legal implementation in the EU member countries | **Indicators of the measure** | **Indicator baseline values** | **Indicator target values** |
| Completeness of the legal framework for implementation of the Kigali Amendment, Regulation EC 517/2014 on specific fluorinated greenhouse gases in terms of managing ozone layer depleting substances | There is in force a Rulebook on gradual exclusion of ozone layer depleting substances („Official Gazette of the Federation of BiH“, 39/05) that needs to be aligned with requirements of the Kigali Amendment and the Regulation EC 517/2014 | Adopted Rulebook on Ozone Depleting Substances management (2024) |
| Completeness of legal framework for implementation of the requirements of the Kigali amendments and the Regulation EC 517/2014 in terms of establishing certification and training programme for entities and individuals involved in installation, servicing, maintenance, repairing or disposing of F-gases equipment | There is no Rulebook that would regulate training of the servicemen in accordance with the training programmes aligned with the Regulation EC 517/2014 on establishing certification and training programme for entities and individuals involved in installation, servicing, maintenance, repairing or disposing of F-gases equipment | Adopted legislation that enables training of servicemen in accordance with the training programme aligned with the Regulation EC 517/2014 on establishing certification and training programme for entities and individuals involved in installation, servicing, maintenance, repairing or disposing of F-gases equipment (2024) |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 0,124 | 0 | 0,124 |

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| **5.2. Priority** | **Establish a sustainable system of chemical management and implementation of EU acquis in the area of chemical safety** | **Indicators of the priority** | **Indicator baseline values** | **Indicator target values** |
| Level of implementation of transposed EU acquis and conventions in the area of chemical safety | Secondary legislation (bylaws) in the field of chemical management have not been developed, so the level of implementation of legislation is low | High level of implementation of legislation transposing EU acquis and conventions in the area of chemical safety (2026) |
| Level of implementation of the SEVESO III Directive | There is no Registry of Major Accidents that is required under SEVESO III Directive | High level of implementation of the SEVESO III Directive (2026) |
| Reporting status on the matter of registration of cooling equipment and HVAC equipment services shops in accordance with the EU acquis applicable on the ozone depleting substances | There is no established registry of service shops and owners of equipment (operators) of cooling and HVAC equipment.  There is no established plan for training repairers/maintenance providers, as required by the EU acquis.  There are no prescribed criteria for establishing a training centres for the repairers.  No training centres have been appointed for training repairers of HVAC equipment | Established reporting system on the matter of registration of cooling equipment and HVAC equipment services shops in accordance with the EU acquis applicable on the ozone depleting substances (2028) |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 0,364 | 1,08 | 1,4 |

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| **5.2.1. Measure** | Efficient implementation of legislation partially transposing EU acquis and conventions in the area of chemical safety | **Indicators of the measure** | **Indicator baseline values** | **Indicator target values** |
| Efficiency in implementation of the Law on Chemicals | Chemical safety strategy has not been developed or adopted . There is no developed system of inventorying chemicals, and there is no registration of importers of chemicals. Secondary legislation (bylaw) that ensures fair trade with chemicals for commercial entities from the Federation of BiH in the whole BiH has not yet been adopted  There is no established inspection oversight in the area of chemical management  Training plan and programme for advisors for chemicals is not prescribed. Conditions for performance of job of advisors for chemicals have not been specified | * Development and adoption of chemical safety strategy * Established system of registration of chemicals, evaluation, and issuing approvals * Developed and regularly updated Inventory of Chemicals * Developed and regularly updated Registry of Producers and Importers of chemicals * Developed training plan and programme for the advisors for chemical and their continuous education (2024) |
| Efficiency in implementation of the Law on Biocides | Law on Biocides has not been developed .It is expected that the content of the Law would be harmonised with the law that is in force in Republika Srpska, and its effective implementation would require an inventory of biocidal products and registry of biocide producers and importers | * Established system of registration of biocidal products, evaluation of applications and issuing approvals * Developed and regularly updated Inventory of Biocides * Developed and regularly updated Registry of Producers and Importers of biocides (2026) |
| Status of establishing *help desk* or contact person/institution for helping businesses to meet legal basis to report chemicals | The help-desk i.e. contact number and e-mail the business entities may call when they need help to meet legal obligation of reporting the chemical has not been established | Establishing the help-desk for helping businesses meet their legal obligation to report chemicals (2023) |
| Systematic inventory of chemicals and biocides | There is no adopted information tool that would enable simple entry of new data and regular updating of inventory of chemicals and biocides | Established IT tool for effective maintenance of chemicals inventory and the list of biocides that will allow for statistical processing of data |
| Efficient control of implementation of legislation in the field of chemical safety | Secondary legislation (bylaws) under the Law on Chemicals have not been developed, so there are no conditions in place for inspection oversight. Law and secondary legislation in the area of biocides management have not been established, so there are no conditions in place for inspection oversight | Established inspection oversight and a registry of infringement notices in the field of managing chemicals and biocides (2025) |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 0,270 | 1,08 | 1,3 |
| **5.2.2. Measure** | High level of implementation of the SAVESO III Directive | **Indicators of the measure** | **Indicator baseline values** | **Indicator target values** |
| Status of establishing the Major Accidents Registry | The Major Accidents Registry has not been developed and made public | Established Major Accidents Registry  (2024) |
| Efficiency of reporting hazardous substances, conditions for storing, and other information required by legislation that implements the SEVESO III Directive | There is no reporting of hazardous substances, warehousing conditions and other information required by legislation related to implementation of the SEVESO III Directive | Reported hazardous substances, warehousing conditions and other information required by legislation related to implementation of the SEVESO III Directive (2026) |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 0,015 | 0 | 0,015 |
| **5.2.3. Measure** | Established systems of reporting on the matter of registration of cooling equipment and HVAC equipment services shops in accordance with the EU acquis in the field of ozone depleting substances, and of training the HVAC equipment repairers | **Indicators of the measure** | **Indicator baseline values** | **Indicator target values** |
| Status of the information system for registration of HVAC equipment containing ODS and their substitutes | There is no information system that would provide for registration of HVAC equipment and servicing shops for HVAC equipment | Established information system for registration of HVAC equipment containing ODS and their substitutes (2024) |
| Efficiency of registration of service shops and owners of equipment (operators) of cooling and HVAC equipment | There is no established registry of service shops and owners of equipment (operators) of cooling and HVAC equipment. According to the preliminary assessment that was done in the framework of the HFC Outlook model for BiH under a project financed by UNIDO, there are around 67062 devices with over 3 kg cooling medium | Completed registration of at least 30% operators/owners of the HVAC devices and 100% of the service/repair shops (2030) |
| Status of a training plan and programme (curriculum) for training repairers of cooling and HVAC equipment | The plan for training repairers does not exist | Prepared plan and programme (curriculum) for training repairers of cooling and HVAC equipment (2024) |
| Status of designation of training centres for training repairers of cooling and HVAC equipment that meet the prescribed criteria | Rulebook prescribing criteria the training centres should comply with | Designating training centres for training repairers of cooling and HVAC equipment that meet the prescribed criteria (2023) |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 0,078 | 0,0 | 0,078 |

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| **5.3. Priority** | **Efficient work of institutions of the Federation of BiH in the field of chemical safety** | **Indicators of the priority** | **Indicator baseline values** | **Indicator target values** |
| Status and adequacy of human and technical capacities of public services in the field of chemical safety | Capacities of institutions having competences for implementation of legislation regarding chemicals management are extremely low. A legal person has not been appointed who would do the poisoning control and who would be competent for implementation of preventative and treatment measures, particularly in emergencies. There is no help-desk to provide assistance to businesses when reporting chemicals as is required under the REACH regulation | Enhanced human and technical capacities and competences of public services in the area of chemicals safety (2026) |
| Level of cooperation and synergic approach of the competent institutions in the field of environment and health for the purpose of achieving better implementation of legislation on chemical safety | There is no official system of reporting and coordination among inspection services of the entities and the Brcko District of BiH in the area of chemical safety | High level of cooperation and synergic approach of the competent institutions in the field of environment and health for the purpose of achieving better implementation of legislation on chemical safety (2026) |
| Efficiency and reliability of the system for collecting data on poisoning of people due to inadequate us of chemicals and chemical products | The Yearbook published by the Public Health Institute (PHI) of the Federation of BiH does not register the frequency of diseases or deaths caused by poisoning that is a consequence of inadequate handling of chemical products. However, since 2019, the PHI has had detailed data on poisonings, disaggregated by gender and age groups. Although the system of data collection and processing exists, what is questionable is the procedure of data entry, i.e. question is whether all public and private health centres diligently report cases of poisoning as there is no clearly prescribed methodology or instructions for reporting | Established effective and reliable method for collecting data on poisoning due to inadequate use of chemicals and chemical products, the results of which will be timely reported in the Health Statistical Yearbook of the Federation of Bosnia and Herzegovina |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 0,267 | 2,05 | 2,3 |

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| **5.3.1. Measure** | Enhance human and technical capacities and competences of public services in the area of chemicals safety | **Indicators of the measure** | **Indicator baseline values** | **Indicator target values** |
| Analysis of capacities of competent institutions in Federation of BiH in the field of chemical safety after the adoption of legislation | There is no relevant analysis of capacities of competent institutions in the Federation of BiH in the field of chemical safety It needs to be made, and possibly updated once the proposed legislation is drafted | Completed Report on Analysis of capacities of responsible institutions in Federation of BiH in the field of chemical safety after the adoption of the legislation (2024) |
| Implementation status of the identified shortcomings of the analysis of capacities of responsible institutions after the adoption of legislation | There is no relevant analysis of capacities of responsible institutions It needs to be made, and possibly updated once the proposed legislation is drafted | Hire and train new people in institutions in the field of chemical safety, in accordance with the requirements of the new legislation and the analysis previously made (2025) |
| Implementation status of the plan and programme of annual training of civil servants on the topic of chemical safety | There is no plan and programme of annual training of civil servants on the topic of chemical safety | Developed plan and programme of annual training of civil servants in the area of chemical safety, and first training implemented (2026) |
| Analysis of human and technical capacities and financial needs for establishment of the Poison Control Centre of the Federation of BiH, and making decision on selecting / designating legal persons responsible for poison control | At present time, no legal persons responsible for poison control have been appointed Obligations of the appointed legal persons stem from Art. 45. of the Law on Chemicals (“Official Gazette of Federation of BiH”, 77/20) | Completed analysis of human and technical capacities and financial needs for establishment of the Poison Control Centre of the Federation of BiH, and making decision on selecting / designating legal persons responsible for poison control (2023) |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 0,228 | 2,05 | 2,2 |
| **5.3.2. Measure** | Improved coordination, collaboration and synergic approach of the competent institutions in the field of environment and health | **Indicators of the measure** | **Indicator baseline values** | **Indicator target values** |
| Effectiveness in sharing data and experiences of the entity and Brcko district of BiH's inspection bodies in the field of chemical safety | There is no official system of reporting and coordination among inspection services of the entities and the Brcko District of BiH in the area of chemical safety | Establish a team/mechanism for cooperation among the Administration for Inspections of the Republika Srpska and the Inspectorate of the Federation of BiH and the Inspectorate of Brcko District in the field of chemical safety (2023) |
| Efficiency of sharing data and experiences among entity / Brcko district BiH ministries in the field of health regarding the results of poison control | Poison control centres in BIH have not been appointed, so there has been no reporting on this issue to this date | Participation of the Federation of BiH Ministry of Health and PCC in a meeting (once a year) organized by the MCA BiH for the purpose of sharing experiences and planning future activities related to prevention, combating, treatment and reporting on poisoning to institutions in BiH and to the World Health Organization (2025) |
| Simplicity and efficiency of data sharing in the field of chemical safety between state level, entity and institutions of Brcko District of BiH in the field of chemical safety | The data on chemical safety are not systematically allocated to institutions in the fields of health and environment | Establish an IT team that will link and manage data bases that exist with the competent ministries to manage chemicals (2026) |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 0,033 | 0 | 0,033 |
| **5.3.3. Measure** | **Improved system of registration of people who became ill or died from poisoning resulting from inadequate handling of chemical products** | **Indicators of the measure** | **Indicator baseline values** | **Indicator target values** |
| Methodology for collecting data for the needs of developing statistical yearbook of the Public Health Institute of the Federation of BiH, which would include data on deaths caused by poisoning as a result of inappropriate handling of chemical products, disaggregated by gender and age groups | The Yearbook published by the Public Health Institute (PHI) of the Federation of BiH does not register the frequency of diseases or deaths caused by poisoning that is a consequence of inadequate handling of chemical products. However, since 2019, the PHI has had detailed data on poisonings, disaggregated by gender and age groups. Although the system of data collection and processing exists, what is questionable is the procedure of data entry, i.e. whether all public and private health centres diligently report cases of poisoning as there is no clearly prescribed methodology or instructions for reporting | A legal act regulates the methodology for collecting data for the needs of developing statistical yearbook of the Public Health Institute of the Federation of BiH, which includes the data on deaths caused by poisoning as a result of inappropriate handling of chemical products, disaggregated by gender and age groups (2025) |
| Publicly available data on mortality from non-deliberate poisoning, disaggregated by gender and age groups | The Yearbook published by the Public Health Institute (PHI) does not register the frequency of diseases or deaths caused by poisoning that is a consequence of inadequate handling of chemical products | Health Statistics Yearbook of the Federation of Bosnia and Herzegovina (published by the Public Health Institute of the Federation of BiH) includes data on morbidity due to poisoning caused by inadequate handling with chemical products, disaggregated by gender and age groups (2025) |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 0,004 | 0 | 0,004 |

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| **5.4. Priority** | **Reduced incidence of diseases or deaths due to poisoning as a consequence of inadequate handling of chemical products** | **Indicators of the priority** | **Indicator baseline values** | **Indicator target values** |
| Level of information and education of general public and users of chemicals on chemicals management | Educational activities and campaigns on harmful impact of dangerous chemicals are very rare and implemented in a non-systematic level, through different projects | High level of information and education of general public and users of chemicals on chemicals management (2030) |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 0,050 | 0,451 | 0,501 |

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| **5.4.1. Measure** | Enhance the level of knowledge of users of chemicals and public awareness concerning chemicals management | **Indicators of the measure** | **Indicator baseline values** | **Indicator target values** |
| Continuously implemented promotional and educational activities in the field of chemical management, taking into consideration other aspects of gender equality, social equality and poverty, as well as the environmental impact | Public information campaigns in media that provide information about the risks for human health and environment related to use of chemicals are rare and only implemented under special projects, not as a part of regular work of institutions | Periodically developed educational guides/brochures/leaflets available in health institutions of the Federation of BiH (2030)  Addressing the general public through the media on the risks of use of chemicals implemented on annual level on appropriate dates when such risks are especially emphasized at international level (e.g. lead poisoning, use of pesticides, mercury poisoning, etc.) or as a part of specific project activities |
| Public call for the civil society organizations, research and education centres on the topic of raising awareness on chemical safety among the population issued on annual basis | The Environmental Protection Fund has been regularly issuing public calls for projects to implement the measures from the Environmental Strategy Chemical safety has not been included in the public calls so far | Recognize chemical safety in the scope of public calls for raising public awareness, research and educational activities in the field of environment that is issued the Environmental Protection Fund of the Federation of BiH (2030) |
| Frequency and appropriateness of education of advisors for chemicals and users of chemicals as well as provision of better information to legal entities in the chain of chemical safety | The system for periodic training of advisors for chemicals has not been established | Continuous training of advisors for chemicals aligned with the data of the Federation Administration for Inspection in the field of health inspection on the most common irregularities identified in the field, and with the information from FMH, PCC, and recognizing gender equality, social equity and poverty in chemical safety (2030) |
| Frequency and appropriateness of educational activities targeting general public on the risks that posed by the use of chemicals | Competent institutions in the field of health and chemicals management do not inform general public on the risks posed by use of chemicals, particularly on the most common cases of poisoning and harm | Periodical educational activities targeting general public jointly implemented by the competent entity ministries and the Inspectorate of the Brcko district of BiH in the field of health regarding the risks related to use of chemicals, for the purpose of protection of human health, and taking into consideration the aspects of gender equality, social equity and poverty, and environment (2030) |
| Periodic organisation and implementation of training of repairers of HVAC equipment and provision of certificates | Piece of legislation that regulates the training of repairers of HVAC equipment has not yet been adopted | The HVAC equipment repairers trained and given the certificates of passed exam in accordance with applicable legislation in the field of managing ozone depleting substances (2024) |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 0,050 | 0,451 | 0,501 |

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| **5.5. Priority** | **Establish a legislative framework and clear institutional competences to transpose EU acquis on environmental noise in legislation of the Federation of BiH** | **Indicators of the priority** | **Indicator baseline values** | **Indicator target values** |
| Level of transposition of EU acquis in the field of environmental noise (Directive 2002/49/EC) | Current law has not provided the obligation of development and adoption of the Noise Prevention Plans, although that is required by the Directive. In addition, the Law does not address the need to develop strategic noise maps and action plans that will include the activities of prevention / termination of the sources of noise over a longer period | Partial transposition of EU acquis in the field of environmental noise (Directive 2002/49/EC)(2026) |
| Level of transposition of EU acquis on noise emission by outdoor equipment, in accordance with Directive 2000/14/EC | Transposition has not started | Partial transposition of EU acquis on noise emission by outdoor equipment, in accordance with Directive 2000/14/EC (2031) |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 0,115 | 0 | 0,115 |

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| **5.5.1. Measure** | Established legislative framework and institutional competences on noise evaluation and management, noise emission by outdoor equipment, in accordance with requirements of Directives 2002/49/EC and 2000/14/EC | **Indicators of the measure** | **Indicator baseline values** | **Indicator target values** |
| Status of transposition of EU regulations on environmental noise | Low level of transposition of the Directive 2002/49/EC on environmental noise | Updated current Law on Noise Protection, including clear description of institutional competences (2025) |
| Status of secondary legislation (bylaws) that follow from the Law on Noise, which regulate development of strategic noise maps and noise protection action plans, in accordance with requirements of the Directive 2002/49/EC | Low level of transposition of the Directive 2002/49/EC on environmental noise. Upon harmonisation of the Law on Noise Protection, it will be necessary to adopt secondary legislation (bylaws) to precisely define the area of development of strategic noise maps and noise protection action plans | Developed and adopted secondary legislation (bylaws) that follow from the Law on Noise, which regulate development of strategic noise maps and noise protection action plans, in accordance with requirements of the Directive 2002/49/EC  (2026) |
| Status of transposition of EU regulations on environmental noise emission by outdoor equipment | There is no legal basis for transposition of the Directive 2000/14/EC regarding harmonisation of legislation of member countries regulating the environmental noise emission by outdoor equipment | Law or secondary legislation (bylaws) to prescribe obligations and establish clear institutional competences and obligations regarding noise emission by outdoor equipment (2031) |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 0,115 | 0 | 0,115 |

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| **5.6. Priority** | **Enhance strategic planning and monitoring of environmental noise** | **Indicators of the priority** | **Indicator baseline values** | **Indicator target values** |
| Status of development of strategic noise maps for the Federation of BiH | Strategic noise maps have not been prepared | Development of strategic noise maps in accordance with EU activities (every 5 years) (2027) |
| Status of development of noise protection action plan in the Federation of BiH | Noise protection action plan has not been developed | Development of noise protection action plan (2029) |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 0,090 | 0,815 | 0,905 |

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| **5.6.1. Measure** | Development of noise maps and action plan | **Indicators of the measure** | **Indicator baseline values** | **Indicator target values** |
| Status of identification of priority sections of road and railway transport and airports (major roads, major railways and major airports) for which the strategic noise maps are to be made in accordance with recommendations of Directive 2002/49/EC | Priority sections of road or railway transport, airports or administrative centres for which the strategic noise maps will be made have not been identified. | Identified "major roads", "major airports", and "major railways" in accordance with recommendations of Directive 2002/49/EC, and set priorities (2025) |
| Status of strategic noise maps for inhabited areas, identified major roads, airports and railways in accordance with previously established priorities in the Federation of BiH | Noise maps for inhabited areas, roads, airports and railways in the Federation of BiH have not been developed | Developed strategic noise maps for inhabited areas, identified major roads, airports and railways in accordance with previously established priorities in the Federation of BiH (2027) |
| Status of the estimation of number of people exposed to noise, by classes of noise and age groups | There is no estimate of number of people exposed to noise in Federation of BiH | Estimated number of people exposed to noise, by classes of noise and age groups (2027) |
| Status of development of noise protection action plan in the Federation of BiH | There are no developed noise protection action plans for Federation of BiH | Action plans for five-year period, based on entry data and results of strategic noise maps developed (2029) |
| Sustainable noise monitoring system | A noise monitoring system, that measures the noise levels at selected locations determined in the forecasting model, and verifies effectiveness of implementation of measures from the action plan, has not been established. | Established noise monitoring system to measure the noise levels at selected locations that are determined in the forecasting model, and verify effectiveness of measures from the action plan developed after the noise maps (2031) |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 0,090 | 0,815 | 0,905 |

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| **5.7. Priority** | **Efficient operation of institutions in the area of environmental noise** | **Indicators of the priority** | **Indicator baseline values** | **Indicator target values** |
| Status and adequacy of human and technical capacities of public services in the field of environmental noise | Poor status of human and technical capacities, considering that the legislation is inadequate and not implemented. | Improved technical and human capacities and competencies in competent institutions (2028) |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 0,273 | 1,09 | 1,3 |

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| **5.7.1. Measure** | Improve capacities and competencies of civil servants in the area of noise management | **Indicators of the measure** | **Indicator baseline values** | **Indicator target values** |
| Status of analysis of capacities of civil servants in competent institutions once the legislation foreseen in this Plan were adopted | No analysis of capacities of civil servants in competent institutions has been done. | Analysis of capacities of civil servants in competent institutions once the legislation foreseen in this Plan were adopted is completed (2024) |
| Status of realization of shortcomings identified through the analysis of capacities of responsible institutions after the adoption of legislation on environmental noise | There is no relevant analysis of capacities of responsible institutions. It needs to be made, and possibly updated once the proposed legislation is drafted | Hire and train new people in institutions in the field of environmental noise, in accordance with the requirements of the new legislation and the analysis previously made (2025) |
| Implementation status of the plan and programme of annual training of civil servants on the topic of environmental noise | There is no plan and programme of annual training of civil servants on the topic of environmental noise | Developed plan and programme of annual training of civil servants in the area of environmental noise, and first training implemented (2026) |
| Enhancing expert and technical competences for development of strategic noise maps and determining baseline parameters | Lacking human and technical capacities for improving expert and technical competences for development of strategic noise maps and determining baseline parameters | Enhanced human and technical capacities for improving skills and technical competences for development of strategic noise maps and determining baseline parameters (2026) |
| Status of development of a pilot project of strategic noise mapping in some of the cities or parts of the cities, as well as along some of the main communications for the purpose of acquiring skills and technical competencies, and determining the baseline parameters | Insufficient experiences and competencies of representatives of public institutions with respect to development of strategic noise maps | Implement a pilot project of strategic noise mapping in some of the cities or parts of the cities, as well as along some of the main communications for the purpose of acquiring skills and technical competencies, and determining the baseline parameters (2026) |
| Status of information system of the Environmental Protection Fund of Federation of BiH for publication of strategic noise maps | There is no information system in Federation of BiH for presentation of strategic noise maps | Information system of the Environmental Protection Fund of the Federation of BiH adapted to allow for presentation of strategic noise maps in the Federation of BiH (2028) |
| Status of inspection oversight in the area of environmental noise | Inspection oversight of protection against noise has not been established | Established inspection oversight in the area of environmental noise (2026) |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 0,273 | 1,09 | 1,3 |

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| **5.8. Priority** | **Reduce the risk to human health from environmental noise** | **Indicators of the priority** | **Indicator baseline values** | **Indicator target values** |
| Level of information of general public on noise and its effects, particularly in the zones of higher levels of noise | There are no mechanisms in place for informing general public on noise and its effects on health; zones exceptionally exposed to noise have not been identified | High level of information of general public on noise and its effects, particularly in the zones of increased levels of noise (2030) |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 0 | 0,576 | 0,576 |

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| **5.8.1. Measure** | Improve level of information and knowledge of general public on negative impact of noise and their role in decision-making process | **Indicators of the measure** | **Indicator baseline values** | **Indicator target values** |
| Informing population on harmful health impact of noise | There are no campaigns related to protection of environment and health of population. | Implemented at least one campaign in five years by competent institutions regarding harmful effect of noise on health of population (taking into consideration gender equality, social equity and poverty) and environment, and the role of the public in decision-making process (2025) |
| Level of impact of noise on people’s health in zones of higher exposure to noise | Effects of noise on general health of population, or most frequent disorders appearing in the areas with increased level of noise, are not known. | Developed population scientific research by health institution on the most common illnesses appearing in the high-noise zones (taking into consideration gender equality, social equity and poverty) (2029) |
| Public call for the civil society organizations, research and education centres on the topic of raising awareness on environmental noise and its effect on health issued on annual basis | The Environmental Protection Fund of has been regularly issuing public calls for projects to implement the measures from the Environmental Strategy So far, topic of environmental noise and impact of noise on human health has not been included in public call | Recognize environmental noise and impact of noise on human health within the scope of public calls for raising public awareness, research and educational activities in the field of environment that is issued the Environment Protection Fund of Federation of BiH (2030) |
| Representation of institutions of primary health care (health centres) in promotional and educational activities the purpose of which is to inform general public on the risks of harmful impact of noise on health of population | Health institutions of primary health care are the closest to general public and can contribute to prevention of risks for health of population by means of educational posters, brochures, etc. So far, noise has not been presented as a health risk in educational campaigns . | Implementation of continuous promotional and educational activities at the level of health institutions regarding the risks related to the impact of noise on health, as well as preventative measures that can be used (2028) |
| Continually draw attention of population to increased noise in their near environment | Population is not aware of increased levels of noise along main roads, which they may also contribute to or are exposed to noise | Installed displays along the roads in major cities showing the level of noise in real time (2026) |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 0 | 0,576 | 0,576 |

13.8.6. Sustainable resource management

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| **No. and mark** | **TITLE** | **INDICATORS AND FINANCIAL SOURCES** | | |
| **6. Strategic goal** | **Sustainable Resource Management** | **Indicator for the strategic goal** | **Indicator baseline values** | **Indicator target values** |
| Overview of forest areas, Federation of BiH - total (ha) | 1,510,938  (2020) | N/D |
| Area of degraded land (ha) | N/D  Federation of BiH has not precisely determined the area of degraded land | Zero level of land degradation achieved |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 348,9 | 3130,5 | 3479 |

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| **6.1. Priority** | **Establish an effective legal, strategic and institutional framework for sustainable forest and forest resources management in the Federation of BiH, appropriate valuation of forest resources, and ensure integration of gender and climate change issues** | **Indicators of the priority** | **Indicator baseline values** | **Indicator target values** |
| Existence of a law and strategic framework for sustainable forest management | Federation of BiH has no legal or strategic framework for sustainable management of forests | By 2025, Federation of BiH will have adopted strategic and legal framework laying out principles and criteria of sustainable forest management, standard methodology for developing forest management plans on the principles of multi-functionality and protection of forest ecosystems’ biodiversity for privately and state-owned forests, coverage and methodology of monitoring health status of forests, monitoring indicators of sustainable use of forests and reporting, method of issuing licenses for pickers of non-timber forest products, management of privately owned forests |
| Existence of systematic framework for registration and oversight of collection of medicinal, edible and aromatic plants and non-timber forest products | Federation of BiH does not have a legal and institutional framework for sustainable management of medicinal, edible and aromatic plants and non-timber forest products | By the end of 2025, established is a system of oversight for collection medicinal, edible and aromatic plants and non-timber forest products |
| Existence of regular monitoring of forest health status | In Federation of BiH, there are no adopted methods for harmonized sampling, assessment and monitoring of status of forests, in accordance with previously identified indicators. There is no established network of monitoring points. Forest management companies lack capacities to conduct monitoring | By the end of 2025, regular monitoring of health status of forests is operational and includes monitoring of changes in forest ecosystems in terms of the species diversity status, changed areas, health status, and other biotic and abiotic factors |
| Existence of capacities and technical requirements for preventing forest fires | Forests of Federation of BiH are not passable enough to allow quick access to the location of fire, forest management companies are not equipped to observe and detect fires early, nor for quick access and extinguishing of the fire | By 2027, forest management companies equipped for early fire detection and prevention |
| Area of productive barren land suitable for afforestation | Area of productive barren land suitable for afforestation is 159,913.5 ha | Afforestation of 15,991 ha of current karst and barren land |
| Areas under coppice forests | Area under coppice forests is 257,879.6 ha | Reduce the area under coppice forests by transitioning 50,000 ha of current coppice forests and thicket into high forests |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 14,3 | 127,5 | 141,8 |

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| **6.1.1. Measure** | Establishing strategic and legal framework for sustainable management of forest resources | **Indicators of the measure** | **Indicator baseline values** | **Indicator target values** |
| Existence of Law on Forests | Federation of BiH does not have a law on forests | By 2022, Federation of BiH will have adopted the Law on Forests  By 2023, Federation of BiH adopted amendments to the law on forests |
| Existence of secondary legislation (bylaws) | The Federation of BiH does not have in place the secondary legislation (bylaws) specifying the content and method of developing forest management plans for privately and state-owned forests based on principles of multi-functionality and protection of biodiversity, scope and methodology of monitoring health status of forests, monitoring indicators of sustainable use of forests and reporting, issuing licenses for pickers of non-timber forest products | By the end of 2023, secondary legislation adopted |
| Existence of principles and criteria of sustainable forest management | Federation of BiH has not established principles and criteria of sustainable management, sensitive to social inequality issues, in line with the EU Forest Strategy, European Green Plan and Road Map | By the end of 2023, adopted principles and criteria of sustainable forest management |
| Existence of Forestry Programme of the Federation of BiH and Executive Part of the Forestry Programme (documents defining long-term policy and strategy of development of forestry and hunting) | Federation of BiH has not adopted the Forestry Programme and Executive part | By the end of 2022, adopt Forestry Programme of the Federation of BiH; the Executive Part of Forestry Programme adopted by the end of 2024 |
| Existence of standard methodology in development of forest management plans (FMP) | The existing methodology of developing FMPs does not recognize in full the planning for other forest functions, planning use of the biomass | By the end of 2025, adopted standard methodology for developing FMP |
| Share of staff trained in use of the new methodologies for development of FMP, and FMP implementation and monitoring | Staff working on development of FMPs do not possess satisfactory level of knowledge and skills for planning for other functions of forests, planning the use of bio-mass and non-timber forest products, and the protective role of forests 0% | By the end of 2025, 100% of staff completed the training programme in use of new methodology for FMP development, FMP implementation and monitoring |
| Number of areas where the new FMP methodology is used | 0 | 2 pilot areas by the end of 2025 |
| Number of FMPs developed in accordance with the new standard methodology | 0 | Successively develop FMPs for all forest areas (100%) |
| Percentage of private forest owners trained in the new methods of forest management | 0%, | By 2028, complete training of private forest owners on the new ways of forest management |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 0,016 | 0,149 | 0,165 |
| **6.1.2. Measure** | Establishing a system of control of picking medicinal, edible and aromatic plants and non-timber forest products | **Indicators of the measure** | **Indicator baseline values** | **Indicator target values** |
| Existence of an action plan for introduction of a system of certification in the sector of use of medicinal, edible and aromatic plants and other non-timber forest products | In the Federation of BiH, there is no system of certification in the sector of use of medicinal, edible and aromatic plants and other non-timber forest products | By the end of 2025, the Action Plan adopted |
| Existence of a system for certification in the sector of use of medicinal, edible and aromatic plants and other non-timber forest products on a fair and inclusive basis | In the Federation of BiH, there is no system of certification in the sector of use of medicinal, edible and aromatic plants and other non-timber forest products | By the end of 2027, establish the certification system |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 0,062 | 0,250 | 0,313 |
| **6.1.3. Measure** | Establishing regular monitoring of forest health status | **Indicators of the measure** | **Indicator baseline values** | **Indicator target values** |
| Existence of the method for harmonized sampling, assessment and monitoring status of forests, in accordance with previously identified indicators | In the Federation of BiH, there is no identified standard method for sampling, assessment and monitoring status of forests | By the end of 2023, adopted the standardized method |
| Existence of a rulebook specifying the method of monitoring health status of forests, method of conducting health protection of forests, and reporting methods | In the Federation of BiH, existence of standardised sampling, assessment and monitoring of status of forests is not regulated by law | By the end of 2024, adopt the Rulebook |
| Existence of a network of monitoring points | In Federation of BiH, the network of monitoring points has not been identified | By the end of 2025, identify and set up a network of monitoring points |
| Percentage of forest users and cantonal forest management companies trained to carry out monitoring of forest status in accordance with the new method | Forest users and cantonal forest management companies have not had training programmes regarding sampling, assessment and monitoring the status of forests | By the end of 2026, all forest users and cantonal forest management companies have received training (100%) |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 0,100 | 0 | 0,100 |
| **6.1.4. Measure** | Enhancing access to forests and training forest users in early detection and prevention of forest fires | **Indicators of the measure** | **Indicator baseline values** | **Indicator target values** |
| Existence of plans for construction of fire-breaks (cuts through the growth) | Forest management areas in the Federation of BiH are not fully covered by plans for construction of fire-breaks | By 2023, developed plans for construction of firebreaks |
| Existence of vehicles and technical equipment for construction of fire-breaks (cuts through the growth) | Forest users are not adequately equipped with vehicles, technical equipment and tools for cutting trees and making the firebreaks | By 2025, procured equipment for all forest users |
| Existence of fire-beaks with elements of forest roads | Construction of fire-beaks with elements of forest roads | By the end of 2027, completed construction of fire-breaks on the territories of all forest management areas |
| Existence of informational boards and warning signs for prevention of fires | Procurement and installation of informative boards and signs warning of fire danger on the territories of all forest users | By the end of 2025, all forest users will have installed the warning signs |
| Existence of equipment for spatial observation and remote surveillance | Forest users do not have equipment for observation and remote surveillance | By 2026, observation and remote surveillance equipment procured |
| Percentage of forest users trained in spatial observation and remote surveillance | Forest users do not have sufficient capacities for observation and remote surveillance | By 2027, completed training of employees of all forest users in observation and surveillance |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 0,899 | 8,09 | 8,9 |
| **6.1.5. Measure** | Afforestation of barren land and transition of coppice forests into high forests | **Indicators of the measure** | **Indicator baseline values** | **Indicator target values** |
| Existence of legislation that establishes the regions of provenience and prescribe the method procedure and conditions for evaluating and recognizing the starting material of the forest trees | Regions of provenience, method, procedure and conditions for evaluation and recognition of forest trees starting material in the Federation of BiH have not been prescribed | By the end of 2023, adopt the Law on Reproduction Material of Forest and Decorative Trees and Buses on the basis of which the Rulebook on provenience of forest trees will be defined |
| Areas under coppice forests | Area under coppice forests is 257,879.6 ha | By 2026, reduced area under coppice forests and bushes by 50,000 ha and transitioned into the higher form |
| Area of productive barren land suitable for afforestation | Area of productive barren land suitable for afforestation is 159,913.5 ha | By 2031, 16,000 ha of current territory of karst and barren land afforested |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 13,2 | 118,9 | 132,1 |
| **6.1.6. Measure** | Establishment of a Forest Information System | **Indicators of the measure** | **Indicator baseline values** | **Indicator target values** |
| Existence FIS of aligned with the EU’s Forest Information System for Europe (FISE) | Part of the information system is already developed, but the work and harmonisation of the structure with the EU’s Forest Information System in Europe (FISE) needs to continue | By the end of 2025, established harmonised FIS |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 0,041 | 0,095 | 0,136 |

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| **6.2. Priority** | **Enhance legal, strategic and institutional frameworks for sustainable management of hunting game** | **Indicators of the priority** | **Indicator baseline values** | **Indicator target values** |
| Existence of regulatory framework for population management and planned rearing of wild game, aligned with EU directives and international agreements on biodiversity | Law on Hunting of Federation of BiH is not in line with the relevant EU Directives and international agreements | By 2023, align and adopt amended Law on Hunting with the relevant EU directives and international agreements in the area of biodiversity, and pass the set of new bylaws aligned with the new law |
| Existence of institutional framework for managing hunting grounds and planned rearing of game | In Federation of BiH, full categorization, establishment and assignment of hunting grounds for use has not been completed. The hunting grounds do not have a professional service for overseeing and implementing measures prescribed by laws and plans | By 2025, establish institutional framework for managing hunting grounds and planned rearing of game |
| Existence of planning framework for population management and planned rearing of wild game, aligned with EU directives and international agreements on biodiversity | In Federation of BiH, the population management plans for the wolf, bear and lynx have not been adopted, and neither have the plans for all hunting grounds, recognizing the principles of protection of species in line with conventions | By 2027, established planning framework for managing hunting grounds and wild game population |
| Existence of a Wild Game Information System | In Federation of BiH, there exists no information system on wild game. | By 2027, established information system on wild game |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 0,177 | 1,5 | 1,7 |

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| **6.2.1. Measure** | Establish a harmonized regulatory framework for establishing hunting grounds, managing population and planned rearing of wild game | **Indicators of the measure** | **Indicator baseline values** | **Indicator target values** |
| Existence of legislation on hunting aligned with EU directives and international agreements related to biodiversity | Law on hunting of Federation of BiH is not fully aligned with EU directives and international agreements on biodiversity | By the end of 2024, adopted harmonised Law on Hunting and set of bylaws, in accordance with the new law |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 0,001 | 0 | 0,001 |
| **6.2.2. Measure** | **Enhance strategic, legal and institutional frameworks for sustainable management of hunting grounds and game** | **Indicators of the measure** | **Indicator baseline values** | **Indicator target values** |
| Existence of categorization, establishment and assigning the hunting grounds for use | Categorization, establishment and assignment of the hunting grounds in the Federation of BiH are not completed. | By the end of 2024, completed categorization, establishment and assigning the hunting grounds for use |
| Existence of a technical service for oversight and implementation of measures foreseen in laws and plans | Technical service for oversight and implementation of measures from laws and plans has not been established in all hunting grounds in the Federation of BiH | By the end of 2024, established in all hunting grounds the technical services for supervision and implementation of measures from laws and plans |
| Existence of plans for managing wild population of wolf, bear, and lynx | In the Federation of BiH, planned approach to managing wild population of wolf, bear, and lynx is not established. | By the end of 2025, adopted plans for managing wild population of wolf, bear, and lynx, harmonized with the corresponding plans of Republika Srpska |
| Existence of hunting grounds management plans that recognize principles of protection of species, in accordance with conventions and EU directives | In the Federation of BiH, hunting grounds management plans for a limited number of hunting grounds have not been developed in a way that recognizes principle of protection of species, in accordance with conventions and EU directives on biodiversity | By the end of 2024, developed management plans for all hunting grounds, which recognize principles of protection of species, in accordance with conventions and EU directives |
| Existence of functional module in IT system for hunting | Forestry information system in the Federation of BiH is under development, the module for hunting is not yet functional | By the end of 2025, hunting module functional |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 0,176 | 1,5 | 1,7 |

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| **6.3. Priority** | **Improve legal, strategic and institutional frameworks for sustainable management of fish stock** | **Indicators of the priority** | **Indicator baseline values** | **Indicator target values** |
| Existence of a regulatory framework aligned with the EU acquis and international conventions | Law on freshwater fisheries of Federation of BiH is not fully aligned with the EU acquis and international conventions, and neither is it aligned with the Federation of BiH legislation on water | By 2023, the law aligned and secondary legislation (bylaws) on freshwater fisheries developed |
| Existence of legislation on commercial fishing at sea | Federation of BiH does not have a law on commercial fishing at sea | By 2023, adopted law and bylaws on commercial fishing at sea, harmonized with the common fisheries policy, commitments under EU Directives, and international agreements |
| Existence of a Fisheries Information System | Federation of BiH has not yet established the information system on fisheries | By 2030, established a Fishery Information System |
| Existence of a strategic framework for sustainable development of fishing sector | Mid-term agriculture sector development strategy of Federation of BiH 2015‒ 2019 was valid until the end of 2021 | By 2022, adopt strategic framework for sustainable development of fishing sector |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 0,234 | 0,410 | 0,645 |

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| **6.3.1. Measure** | Harmonisation of the regulatory framework for fishing with the EU acquis and international conventions | **Indicators of the measure** | **Indicator baseline values** | **Indicator target values** |
| Existence of legal framework on commercial fishing at sea, harmonized with the common fisheries policy, commitments under EU Directives, and international agreements | Federation of BiH does not have legislation on commercial fishing at sea | By the end of 2023, adopted Law on commercial fishing at sea, harmonized with the common fishing policy, commitments under EU Directives, and international agreements |
| Existence of the Law on Fresh Water Fishing with the laws in the area of waters and requirements of international conventions and EU directives in the area of fisheries and biodiversity | The current Law on Fresh Water Fishing is not aligned with the laws in the area of waters and requirements of international conventions and EU directives in the area of fisheries and biodiversity | By the end of 2023, completed harmonization of the Law on Fresh Water Fishing |
| Existence of a strategic framework for sustainable development of fishing sector | Mid-term agriculture sector development strategy of Federation of BiH 2015‒ 2019 was valid until the end of 2021 | By the end of 2023, adopted Agricultural Sector Development Strategy for the period aligned with the common strategy for fisheries and aquaculture of EU |
| Existence of fisheries plans aligned with the Strategy for Fisheries and Aquaculture of EU, 0% | Successive preparation of fisheries management plans in line with the new Law on Fresh Water Fishing | By 2031, 100% of fisheries management plans aligned with the Strategy for Fisheries and Aquaculture of EU |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 0,058 | 0 | 0,058 |
| **6.3.2. Measure** | Establishing an information system on fisheries and statistical reporting on fish farming | **Indicators of the measure** | **Indicator baseline values** | **Indicator target values** |
| Existence of a registry of vessels and permits for commercial marine fishing and mariculture | Federation of BiH does not have an established registry of vessels and permits for marine commercial fishing and mariculture | By 2025, developed registry of vessels and permits for marine commercial fishing and mariculture |
| Existence of a system for issuing permits. | Federation of BiH has not established a system for issuing the permits for commercial marine fishing. | By 2025, established system for issuing the permits |
| Existence of a system for recording and reporting on fishing activities and landing the catch | Federation of BiH has not stablished a system for recording and reporting on fishing activities and landing the catch | By 2025, established system for registering and reporting on fishing activities and landing the catch |
| Existence of a model of statistical monitoring of marine and fresh water fish farms in accordance with the adopted methodology for BiH | Federation of BiH has not established a model of statistical reporting on marine and fresh water fish farms | By 2025, established model of statistical reporting on marine and fresh water fish farms |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 0,176 | 0,410 | 0,586 |

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| **6.4. Priority** | **Establish integrated and sustainable management of land resources** | **Indicators of the priority** | **Indicator baseline values** | **Indicator target values** |
| Existence of legal and strategic framework for comprehensive protection of land | In the Federation of BiH, land is protected by various legislation, depending on the type of land: laws on agriculture, forestry, spatial planning and construction. There is no comprehensive legislative framework that would provide for protection of land as a whole | By 2025, adopted Law on Protection of Land and relevant secondary legislation (bylaws), as well as the Strategy for Sustainable Use of Land |
| Existence of methods, measures and indicators for sustainable management and protection of land resources | In Federation of BiH, there is no framework in place for monitoring land management sustainability | By 2025, adopted methods, measures and indicators for sustainable management and protection of land resources |
| Existence of land monitoring | Federation of BiH has partially established monitoring system for agricultural land quality | By 2027, established complete framework for land monitoring |
| Area of rehabilitated degraded land (ha) | Federation of BiH has not had any significant plans or programmes to rehabilitate the degraded land, except for the projects of re-cultivation in mining sector and TPP. For the purposes of this Strategy, the baseline value shall be considered to be 0 ha | Carried out rehabilitation of degraded land area (approximately 3500 ha) |
| Land mines | In 2020, 966m2 of area in Federation of BiH was found to be polluted by land mines | Complete demining of 100% of land by 2030 |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 334,1 | 3000,8 | 3335 |

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| **6.4.1. Measure** | Provide legal and strategic framework for comprehensive protection of land | **Indicators of the measure** | **Indicator baseline values** | **Indicator target values** |
| Existence of legal and strategic framework for comprehensive protection of land | In the Federation of BiH, land is protected by various legislation, depending on the type of land: laws on agriculture, forestry, spatial planning and construction. There is no comprehensive legislative framework that would provide for protection of land as a whole | By 2025, adopted Law on Protection of Land and relevant secondary legislation (bylaws), as well as the Strategy for Sustainable Land Management |
| Existence of a Strategy of Sustainable Land Management | Federation of BiH does not have a strategic approach to comprehensive land management and protection | By 2027, Adopted Strategy of Sustainable Land Management |
| Harmonize laws on spatial planning of Federation of BiH and cantons in Federation of BiH and Cantons with the Law on Agricultural Land of Federation of BiH | Laws on spatial planning of Federation of BiH and cantons in Federation of BiH ae not aligned with the Law on Agricultural Land of Federation of BiH, i.e. Federation of BiH Law on Spatial Planning and Construction does not prescribe the obligation of the local government units to develop the Plans for Protection, Development and Use of Agricultural Land prior to the adoption of Spatial Plan | By 2027, harmonized Federation of BiH and cantonal laws on spatial planning and construction with the Law on Agricultural Land of Federation of BiH |
| Existence of financial liability and guarantees for rehabilitation of deserted mines and possibility to repurpose the deserted mines | Law on Mining of the Federation of BiH does not include provisions stipulating financial liability and obligation of providing guarantees for rehabilitation of deserted mines, nor does it specify conditions for repurposing the deserted mines | By 2027, amended Law on Mining of the Federation of BiH regarding rehabilitation of the mining areas, by expanding options of rehabilitation that include repurposing, and with respect to financial liability and guarantees for rehabilitation of the deserted mining areas |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 0,398 | 0 | 0,398 |
| **6.4.2. Measure** | **Establishing the land monitoring system** | **Indicators of the measure** | **Indicator baseline values** | **Indicator target values** |
| Existence of methods, measures and indicators for sustainable management and protection of land resources | In Federation of BiH, there is no framework in place for monitoring land management sustainability | By 2025, adopted methods, measures and indicators for sustainable management and protection of land resources |
| Existence of a land monitoring plan | In Federation of BiH, there is no land monitoring plan. | By 2026, adopted land monitoring plan |
| Existence of a network of monitoring sites and performance of monitoring | Federation of BiH has partially established a standardized network of monitoring sites, and the monitoring is done occasionally | By 2027, established a network of monitoring sites; monitoring implemented in accordance with previously adopted plan |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 0,129 | 1,1 | 1,2 |
| **6.4.3. Measure** | Rehabilitation of degraded areas | **Indicators of the measure** | **Indicator baseline values** | **Indicator target values** |
| Existence of a cadastre of degraded land | Federation of BiH has not established a cadastre of degraded land | By 2024, established cadastre of degraded land areas and integrated into the Land Information System |
| Existence of a programme for rehabilitation of degraded areas | Federation of BiH does not have a programme for rehabilitation of degraded areas, which includes procedures and methods for rehabilitation of degraded areas, criteria for prioritizing selection of the sites to be rehabilitated on the basis of environmental and social considerations (number of endangered people, women and children, the poor...) | By 2026, adopted programme for rehabilitation of degraded areas |
| Area of rehabilitated degraded land (ha) | Federation of BiH has not had any significant plans or programmes to rehabilitate the degraded land, except for the projects of re-cultivation in mining sector and TPP. For the purposes of this Strategy, the baseline value shall be considered to be 0 ha | Carried out rehabilitation of degraded land area (approximately 3500 ha) |
| Area of revitalized land | Federation of BiH has not precisely determined the area of land suitable for rehabilitation | By 2031, completed rehabilitation of land in especially sensitive and deserted areas, focusing on the Dinara karst and high mountains in: Hercegovina-Neretva Canton, West Herzegovina Canton, high mountains in Central Bosnia |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 310,2 | 2792,4 | 3102 |
| **6.4.4. Measure** | Preventing land degradation through development (construction) without plan | **Indicators of the measure** | **Indicator baseline values** | **Indicator target values** |
| Existence of a law on legalization that would be aligned with the Vienna Declaration on National and Regional Policy Programmes regarding Informal Settlements in South Eastern Europe | Federation of BiH does not have a law on legalization. Current laws on legalization in Federation of BiH are adopted at cantonal level and do not comply with the Vienna Declaration on National and Regional Policy Programmes regarding Informal Settlements in South Eastern Europe | By 2025, adopted new cantonal laws on legalization in line with the Vienna Declaration on National and Regional Policy Programmes regarding Informal Settlements in South Eastern Europe |
| Existence of the Registry of illegal buildings | Not all illegal buildings in Federation of BiH are registered | By 2026, all illegal buildings registered and data integrated in the spatial data information system |
| Existence of operational plans for prevention of unplanned construction and adoption of programmes to demolish illegal buildings | Federation of BiH does not have operational plans for prevention of unplanned construction. Illegal buildings are rarely demolished, and there is no particular planned approach | By 2027, developed cantonal operational plans for prevention of unplanned development (construction) and adopted programmes to demolish the illegal buildings |
| Existence of decisions to limit the use of good quality land (agricultural zone I) for construction of apartments, industrial facilities and other buildings | Law on agricultural land of Federation of BiH prohibits the use of best quality land of classes I-IV for any purpose other than agriculture. Repurposing is possible if it involves capital structures of public interest. There are no special decisions restricting the use of land (agricultural zone I) and criteria for possible approval of repurposing of land | By 2023, adopted cantonal decisions on restricting the use of good quality land for any other purpose except for agriculture |
| Spatial planning documentation is based on controlled development of cities | Expansion of urban areas in Federation of BiH is often done at the expense of good quality agricultural land. Purpose of land is determined in spatial planning documentation. Federation of BiH has not adopted spatial plan | By 2023, spatial plan for Federation of BiH adopted  By 2031, spatial planning documentation at other levels developed on the basis of controlled development of cities, avoiding repurposing of the good quality agricultural land |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 0,353 | 0 | 0,353 |
| **6.4.5. Measure** | Removing land mines | **Indicators of the measure** | **Indicator baseline values** | **Indicator target values** |
| Land mines | In 2020, 966m2 of area in Federation of BiH was found to be polluted by land mines | Complete demining of 100% of land by 2030 |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 23,02 | 207,2 | 230,2 |

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| **6.5. Priority** | **Establish a system of sustainable and responsible research, exploitation and management of mineral resources** | **Indicators of the priority** | **Indicator baseline values** | **Indicator target values** |
| Existence of a framework for sustainable use and exploitation of mineral resources | Federation of BiH does not have an integrated framework for managing mineral resources, that would include recovery of resources from products, manufacturing or construction, so the exploitation and import of raw materials is currently the only solution | By 2026, developed is a strategy for cost effective, socially and environmentally acceptable exploitation of ores and minerals that includes recovery of mineral and metallic resources from waste (urban mining, circular economy) |
| Existence of programmes and plans for more efficient exploitation of mineral resources | Current level of technical equipment in Federation of BiH is not conductive for efficient exploitation of raw materials | By 2029, adopted are programmes and plans for introduction of contemporary technology in ore mines owned by the Federation of BiH for the purpose of providing conditions for improved efficiency of exploitation and use of mineral resources and prevention of generation of waste |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |
| 0,048 | 0,112 | 0,160 |

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| **6.5.1. Measure** | Establishing a framework for sustainable use and exploitation of mineral resources | **Indicators of the measure** | **Indicator baseline values** | **Indicator target values** |
| Existence of a framework for sustainable use and exploitation of mineral resources | Federation of BiH does not have an integrated framework for managing mineral resources, that would include recovery of resources from products, manufacturing or construction, so the exploitation and import of raw materials is currently the only solution | By 2026, developed is a strategy for cost effective, socially and environmentally acceptable exploitation of ores and minerals that includes recovery of mineral and metallic resources from waste (urban mining, circular economy) |
| Existence of programmes and plans for more efficient exploitation of mineral resources | Current level of technical equipment in Federation of BiH is not conductive for efficient exploitation of raw materials | By 2029, adopted are programmes and plans for introduction of contemporary technology in mines owned by Federation of BiH for the purpose of providing conditions for improved efficiency of exploitation and use of mineral resources and prevention of generation of waste |
| **Government budget (million BAM)** | **Other sources (million BAM)** | **Total (million BAM)** |

13.8.7. Environmental management

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| **No. and code** | **TITLE** | **INDICATORS AND SOURCES OF FUNDING** | | |
| **7. Strategic goal** | **Strengthening environmental management** | **Strategic goal indicators** | **Indicator baseline values** | **Indicator target values** |
| Environmental costs | Total investments: BAM 18,270,103  Total running costs BAM 45,768,781  (2020) | ... |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 2.02 | 8.3 | 10.3 |

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| **7.1 Priority** | **Improving the legal framework and sectoral policies for planning, management and protection of the environment in the Federation of BiH with the view of fully aligning the legislation with the EU environmental acquis and international agreements** | **Priority indicators** | **Indicator baseline values** | **Indicator target values** |
| Compliance of the environmental legislation of the Federation of BiH with the EU acquis. | Partial compliance (2021)  Environmental legislation of the Federation of Bosnia and Herzegovina:   * Highly aligned with 6 directives and 1 regulation * Partly aligned with 1 Directives   Not aligned with 2 Directives | Environmental legislation of the Federation of BiH is aligned with 9 Directives and one Regulation  (2030) |
| Availability of Action Plans for the Implementation of Directives, in accordance with the Environmental Approximation Programme of the Federation of BiH | Action Plans for the Implementation of EU Directives (APIDs) in the environmental management sector were not prepared (2021) | Priority Action Plans for the Implementation of EU Directives (APIDs) in the environmental management sector adopted and progressively implemented (2030) |
| Sanctioning policies in the environment sector defined | There are no provisions regulating criminal offences related to pollution and environmental degradation, and remedies for damages (2021) | Sanctions policy in the environmental protection sector clearly defined (2026)  (2026) |
| Compliance of the legal and strategic framework in the environmental management sector with the international and national gender equality standards | The legal and strategic framework in the environmental management sector fall short of international and national gender equality standards (2021) | Compliance of the legal and strategic framework in the environmental management sector with both the international and national gender equality standards increased significantly (2030) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.291 | 1.2 | 1.4 |

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| **7.1.1 Measure** | Alignment of the legislation of the Federation of BiH with the EU environmental acquis and implementation of EU Directives | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| 1), 2) Efficacy of the implementation of the Environmental Approximation Programme of Federation of BiH | Slow implementation of the Environmental Approximation Programme | Successful implementation of the Environmental Approximation Programme (2030) |
| 3), 4) The Action Plan on alignment of the legislation in the Federation of Bosnia and Herzegovina with the EU environmental acquis (four-year periods) | There is no action plan | The Action Plan for alignment of the legislation in the Federation of Bosnia and Herzegovina with the EU environmental acquis (four-year periods) prepared (2023) |
| 5), 6) Action plans for the implementation of environmental institutional measures and review of e administrative capacitates according to the recommendations of the European Commission (EC) (four-year periods) | There is no action plan | The Action Plan for the implementation of environmental institutional measures and review of administrative capacitates according to the recommendations of the European Commission (EC) (four-year periods) developed (2023) |
| 7) Participation of the institutions of the Federation of BiH in the preparation of the National EU Integration Programme for environmental management | Ongoing preparations of the integration programme | The programme was considered and institutions of the Federation of BiH provided their opinion (2023 and 2027) |
| 8) Level of the implementation of the National EU Integration Programme in the domain of environmental management | Preparation of the Integration Programme in progress | Advanced stage of the implementation (2030) |
| 9) Systemic monitoring of the approximation | Not developed | Developed (2023) |
| 10) Efficient and regular monitoring of updates of the environmental legislation (alignment with the EU acquis) | Legislation partially updated and aligned | Legislation update and aligned with the EU acquis (2030) |
| 11) Quality of contribution of the institutions of the Federation of Bosnia and Herzegovina in the preparation of DSIPs | - | Substantial contribution secured (2025) |
| 12) Adoption of the priority APIDs | - | The priority APIDs adopted (2030) |
| 13) Level of the implementation of APIDs | - | Advanced stage of the implementation of APIDs (2030+) |
| 14) Effectiveness of parliamentary procedures | Low | High (2030) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.133 | 1.2 | 1.3 |
| **7.1.2 Measure** | Defining penal policies in the environment sector | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| Analysis of compliance of the Law on Environmental Protection of the Federation of BiH with the EU directives | - | Gaps identified in the Law on Environmental Protection and its compatibility with Criminal Code (2023) |
| Status of amendments to the Law on Environmental protection | - | The amendments adopted (2025) |
| Status of amendments to the Criminal Code of Federation of BiH: | - | The amendments adopted (2027) |
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| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.094 | 0 | 0.094 |
| **7.1.3 Measure** | Upgrading the legal and strategic framework in the environmental management sector so as to meet the international and national gender equality standards | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| Level of alignment of the environmental management legal and strategic framework with the international and national gender equality standards | Low level of alignment of the environmental management legal and strategic framework with the international and national gender equality standards | Significantly increased level of alignment of the environmental management legal and strategic framework with the international and national gender equality standards(2030) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.063 | 0 | 0.063 |

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| **7.2 Priority** | **Ensuring efficient implementation of the applicable legislation and international commitments** | **Priority indicators** | **Indicator baseline values** | **Indicator target values** |
| Level of the implementation of international environmental agreements | Insufficient implementation of international environmental agreements (2021) | Efficient implementation of the international environmental agreements secured (2027) |
| Application of the of strategic environmental assessment | Limited application of the strategic environmental assessment instrument (2021) | Strategic environmental assessments of all documents /projects which require SEA consistently undertaken (2024) |
| Level of the implementation of integrated permitting procedures | The Federation of BiH has not started issuing integrated permits, as regulated in the EU Directive 2010/75/EU on industrial emissions (2021) | Conditions for integrated environmental permitting secured (2026) |
| Stage of development of technical instructions for best available techniques (BATs) for priority sectors | The Law on Environmental Protection requires the application of best available techniques; however, the practical implementation of this instrument is limited. Technical guidelines on the best available techniques (BAT) and reference documents on the best available techniques (BREFs) were not translated into the official languages of BiH. The technical instructions for BATs developed in the Federation of BiH include the following sectors of agri-food industry: livestock slaughterhouses, meat processing, fish farming and processing, milk processing and milk products, fruit and vegetable processing and bear breweries. Subsequently, within the Project “Support to implementation of IPPC Directive (EuropAid/126648/C/SER/BA)” the Federation of BiH prepared the technical instructions for the following sectors: stone extraction, large furnaces, surface protection of metals and plastics, and coating with molten metal, and for monitoring (2021) | Technical instructions for best available techniques (BAT) for activities for which BAT have been defined and prepared (2028) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.220 | 0.865 | 1.08 |

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| **7.2.1 Measure** | Capacity building for efficient implementation of the international environmental agreements | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| Participation of the institutions of the Federation of BiH in the preparation of the documents intended to formalize the framework for the implementation of environmental international commitments of BiH | Ongoing | Participation of the institutions of the Federation of BiH in the preparation of the documents ensured (2023) |
| Access to international agreements and information on the status of their implementation | Access to agreements and information partially ensured | Official international agreements and information on status of their implementation published on the website of the Federation Ministry of Environment and Tourism (2024) |
| Efficiency of the implementation of trainings for the employees about the adequate application of the international agreements | Trainings have not been provided consistently | The trainings for the employees completed according to the plan (2026) |
| Communication and cooperation with civil society organizations in the preparation of reports on the implementation of the international environmental agreements | Communication and cooperation with civil society organizations in the preparation of reports on the implementation of international environmental agreements are not organised | Communication and cooperation with civil society organizations ensured (2027) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0 | 0.062 | 0.062 |
| **7.2.2 Measure** | Consistent application of the of strategic environmental assessments (SEA) | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| Status of the adoption of bylaws defining in detail the scope, content of SEA report | A multi-disciplinary working group, which will work on drafting of the Decree on strategic impact assessment, plans and programmes is currently in being formed | The bylaws defining in detail the scope, content and evaluation of scope, content of SEA report adopted (2023) |
| Status of update and adoption of the bylaws on SEA | / | All relevant bylaws on SEA adopted (2027) |
| Status of update and adoption of the procedures for cross-border notification and consultation in SEA implementation | Procedures are not complete | All the necessary procedures are update and adopted (2025) |
| Setting up of a system and procedures in all the institutions for effective SEA implementation | Procedures are not complete | All required systems and procedures for effective SEA implementation established in the institutions (2027) |
| Level of understanding among the relevant players about the importance of SEA | Partial understanding | Full understanding among all the relevant players of importance of SEA achieved (2030) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.047 | 0.111 | 0.158 |
| **7.2.3 Measure** | Ensuring conditions for integrated environmental permitting | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| Analysis of technical requirements and professional capacities in the Federation Ministry of Environment and Tourism | The analysis has not been performed | Analysis of technical condition and human capacities completed and recommendations for adjustments defined (2024) |
| Status of the implementation of the recommendations for adjustments of the Federation Ministry of Environment and Tourism regarding integrated environmental permits | / | The recommendations for adjustments of the Federation Ministry of Environment and Tourism for integrated environmental permitting successfully implemented (2027) |
| Status of the process aimed at creating conditions for digitalization of all the procedures | Conditions have not been created for digitalization of procedures | Conditions created for digitalization of procedures through a digital transformation of the environmental permitting procedure in the Federation Ministry of Environment and Tourism (2027) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.145 | 0.528 | 0.727 |
| **7.2.4 Measure** | Preparation of technical instructions for best available techniques (BAT) | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| Number of technical instructions adopted | 7 technical instructions adopted (Decision from 2009) | 4 new technical instructions adopted (in the sectors: stone extraction, large furnaces, surface protection of metals and plastics, and coating with molten metal, and monitoring)(2023) |
| Number of new technical instructions for BATs by priorities | / | Technical instructions for all priority activities for which BAT are defined prepared (2026) |
| Number of update technical instructions | / | Technical instructions on BAT updated (2029) |
| Public access to the reference BAT documents on the website of the Federation Ministry of Environment and Tourism | Activity commenced | Access to the reference BAT documents on the website of the Federation Ministry of Environment and Tourism ensured (2028) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.027 | 0.108 | 0.136 |

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| **7.3 Priority** | **Maximise the capacity of institutions and their coordination** | **Priority indicators** | **Indicator baseline values** | **Indicator target values** |
| Effectiveness of mechanisms for institutional coordination of activities of the environmental institutions | Lack of an effective mechanisms for institutional coordination of activities of the environmental institutions (2021)  There is no vertical coordination and communication among the cantons/municipalities and the Federation of BiH, and no horizontal coordination (inter-entity - among the Federation of BIH, Republika Srpska and Brcko District, and coordination between the individual cantons and municipalities respectively) | Effective mechanisms for institutional coordination of activities of the environmental institutions in place (2025) |
| Efficiency and effectiveness of the work of the Inter-entity Environmental Body | The inter-entity body is ineffective and inefficient, and its decisions are not legally binding (2021) | A coordinated and harmonised approach to addressing environmental management issues applied by both entities and Brcko District BiH ensured through increased efficacy of the Environmental Inter-entity Body (2024) |
| Efficacy of institutional structures in the area of coordination and harmonisation of activities in transposition of EU regulations | Partial efficacy of the current institutional structures (2021) | The current institutional structures in the area of coordination and harmonisation of activities in the process of EU regulation transposition enhanced Human resources across the levels strengthened so as to enable a long-term and sustainable implementation of the EU regulations (2028) |
| Effectiveness and expertise of employees in the environmental institutions in the area of project preparation and implementation | The institutions responsible for the preparation and implementation of projects have no specialised teams. The Federation Ministry of Environment and Tourism and Federation Ministry of Agriculture, Water Management and Forestry have specialised teams for projects preparation and implementation, but such teams are not available in all the institutions (2021) | Effective teams with expertise in projects preparation and implementation formed in the environmental institutions(2028) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.292 | 2.2. | 2.5 |

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| **7.3.1 Measure** | Establishment of effective mechanisms for coordination of activities of the environmental institutions in the Federation of Bosnia and Herzegovina | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| Quality of horizontal institutional coordination | Horizontal coordination among the institutions is present to a certain extent, however it needs to be improved and enhanced, and there is a need for joint actions of the institutions within their respective competencies | The horizontal institutional coordination improved and enhanced (2025) |
| Quality of communication among the environmental institutions at all the levels | Certain mechanisms of communication are available; however they are not effective | Effective mechanisms of communication among the institutions at all the levels (2025) |
| Quality of vertical institutional coordination | Vertical coordination is present - however there is a room for improvement | The vertical institutional coordination improved and enhanced (2030) |
| Quality of coordination and cooperation among the cantons | Certain level of coordination is present - however there is a room for improvement | Inter-cantonal cooperation and coordination in the environmental sector improved (2030) |
| Quality of horizontal connectivity among local government unit on environmental issues | Certain level of coordination is present - however there is a room for improvement | Cooperation and coordination in the area of environmental protection among local government units (municipalities/towns) improved(2030) |
| Conditions for the establishment of the Environmental Agency of the Federation of Bosnia and Herzegovina | Conditions have not been secured - the Agency has not been established | Formal and legal requirements fulfilled, the Environmental Agency of the Federation of Bosnia and Herzegovina established and effective (a statute adopted, terms of reference of the Agency defined, allocations made and Government budget adopted (2030+) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.216 | 1.9 | 2.1 |
| **7.3.2 Measure** | Upgrading the efficiency of the Inter-entity Environmental Body | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| The effectiveness and efficiency of the work of the Inter-entity body | The Environmental Inter-entity Body is active, but its performance ineffective and inefficient | The Inter-entity body performs effectively and efficiently.(2030.) |
| Publicity of the work of the Inter-entity body | Public has no access to reports from meetings of this body | The work of the Inter-entity body is public and transparent.(2030) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.021 | 0.084 | 0.105 |
| **7.3.3 Measure** | Improving the institutional structure and capacity of environmental institutions | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| 1) Evaluation of the institutional capacity for consistent application of laws and effective implementation of environmental plans and strategies | No assessment has been undertaken | A comprehensive assessment of the institutional capacities completed (2024) |
| 2) 3) Introducing measures for the improvement in accordance with the assessment completed | No assessment has been undertaken | Definirane mjere za:   * Keep professionals in the institutions * Capacity building focusing on human resources strengthening * An organisational unit notminated for capacity building and development of ne staffing plans (2026.) |
| 4) Status of the preparation and adoption of the documents coordinating the work of inspection bodies, which should contribute to coordination of the work of environmental and other inspections | The document has not been prepared | The document on coordinated action of inspection authorities prepared and adopted (2024) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.024 | 0.099 | 0.124 |
| **7.3.4 Measure** | Creation of effective teams in the environmental institutions, including teams for the preparation and implementation of environmental projects | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| Assessment of the needs for professional development | The assessment has not been performed. | The assessment of the needs for professional development completed (2024) |
| Conducting trainings in accordance with the Professional Training Plan | Some trainings have been provided, but there is a room for improvement and the need for a more systemic approach | All trainings conducted as planned (2030) |
| Number of institutions which formed teams for the preparation and implementation of environmental projects | 2 institutions (Federation Ministry of Environment and Tourism and Federation Ministry of Agriculture, Water Management and Forestry) | All the key institutions created teams for the preparation and implementation of projects (2026) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.029 | 0.119 | 0.149 |

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| **7.4 Priority** | **Ensuring strong public awareness on the importance of the environmental protection and their engagement in decision-making processes, focusing on women, youth and socially vulnerable groups** | **Priority indicators** | **Indicator baseline values** | **Indicator target values** |
| Public awareness on the importance of environmental protection and their participation in decision-making processes | Low public awareness about environmental protection;  Lack of long term educational programmes and campaigns aimed at raising the awareness about the issues of environmental protection (2021) | Strong public awareness on the importance of the environmental protection and their participation in decision-making processes, focusing on the engagement of women, youth and socially vulnerable groups secured (2030) |
| Public participation in environmental decision-making , especially in environmental impact assessments and environmental permitting procedures | Poor public participation and poor quality of public consultations in decision-making processes (especially the processes of environmental impact assessment, environmental permitting, preparation of laws, bylaws and other legal acts, etc..) Young people do not participate in decision-making processes, as required by the Law on Youth of the Federation of Bosnia and Herzegovina (2021) | Access to information and effective public participation in environmental decision-making , especially in environmental impact assessments and environmental permitting procedures secured (2025) |
| Consistency of the preparation and publication of environmental performance reports in the Federation of Bosnia and Herzegovina | Inconsistent preparation, public communication, and reporting on the state of the environment in the Federation of Bosnia and Herzegovina (2021) | Reporting on the state of environment in the Federation of BiH consistent, high quality reports publicly available (2026) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.296 | 0.525 | 0.822 |

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| **7.4.1 Measure** | Education and raising awareness about the need and importance of environmental protection | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| Continuity of cooperation with media aimed at implementation of promotional activities | Lack of continuity of cooperation with media | Continuous and intensive promotion of environmental protection in media ensured (continuously 2030+) |
| Consistency and continuity in the implementation of education programmes and awareness raising campaigns about the importance of environmental protection, significance and threat status of natural resources and correlation with climate change | Educational programmes and campaigns have not been conducted regularly | Regular and continuous educational programmes and raising awareness campaigns about the importance of environmental protection, and vulnerability of natural resources and their correlation with climate change (continuously 2030+) |
| Poor cooperation among the partner institutions on expanding the knowledge and skills and raising awareness about the links between the environment and gender dimension | Cooperation with partner institutions secured and intensified through the development of the Strategy of the Federation of BiH | Enhanced and continued cooperation with partner institutions on expanding the knowledge and skills and raising awareness about the links between the environment and gender dimension secured (continuously 2030+) |
| Status of promotion of measures which might influence the design of products and environmental protection systems | Inadequate promotion of measures which might influence the design of products and environmental protection systems | Continuous promotion of measures which might influence the design of products and environmental protection systems secured (until 2026 and onwards continuously) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.104 | 0.244 | 0.349 |
| **7.4.2 Measure** | Improving public participation in decision-making about environment | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| Capacity of the institutions to provide for effective public participation mechanisms | Certain level of capacity to ensure public participation has been built, but there is a room for improvement | The capacity of the institutions required to ensure effective public participation mechanisms strengthened (2030) |
| Level of cooperation between the Federation Ministry of Environment and Tourism and other institutions | There is no institutional cooperation between the Federation Ministry of Environment and Tourism and other institutions in the sector of environment with civil society organizations | Strengthened institutional cooperation between the Federation Ministry of Environment and Tourism and other institutions in the sector of environment with civil society organizations |
| Level of cooperation between the Federation Ministry of Environment and Gender Centre of the Federation of BiH | A two-way communication initiated between the Federation Ministry of Environment and Tourism and Gender Centre of the Federation of BiH | Excellent cooperation between the Federation Ministry of Environment and Gender Centre of the Federation of BiH (continuously -2030) |
| Consistency of communication of notifications on public consultations from higher level authorities to local government units | Oftentimes, the higher level authorities fail to send notifications on public consultations to local government units | Improved communication of notifications on public consultations from the higher level authorities to local government units (continuously -2030) |
| Effectiveness of cooperation with the Partnership 27 | There is no institutional cooperation with the Partnership 27 | Effective cooperation with the Partnership (continuously - 2030) |
| Implementation of trainings on the Free Access to Information Law completed (FAIL) | Trainings provided occasionally | Trainings on FAIA implemented as planned (periodically - 2030) |
| Public access to environmental information on websites of the competent institutions at all levels | Partly – all information is not available on websites, that is, it is not updated regularly | Public has access to all the relevant environmental information, primarily on official websites of the institutions (continuously -2030) |
| Effectiveness of electronic/online communication between the responsible institutions and public | Channels of communication through email services developed - there is a room for improvement | Effective communication via electronic mail implemented (2026 and onwards continuously) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.028 | 0.253 | 0.281 |
| **7.4.3 Measure** | Preparation and publication of reports on the state of environment in the Federation of BiH | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| Institutional capacity for the preparation of regular reports on the state of environment | Small capacity | Increased capacity – all conditions for the preparation of regular reports on the state of environment are fulfilled (2026) |
| Intensity of promotion of the conclusions and recommendations of reports on the state of environment in the Federation of BiH | Reports on the state of environment have not been prepared | Periodical reports on the state of environment in the Federation of BiH regularly prepared and their conclusions and recommendations regularly promoted (continuously-2030+) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.151 | 0 | 0.151 |

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| **7.5 Priority** | **Set up an efficient system for record keeping and transparent reporting of environmental data in the Federation of BiH, in consultation with the Partnership 27** | **Priority indicators** | **Indicator baseline values** | **Indicator target values** |
| Effectiveness of the system for monitoring of environmental parameters | The monitoring system in place, however, the current laboratories still have no testing methods for certain environmental components and sectors Also, there are huge gaps in modus operandi of the accredited laboratories (2021) | The current system of environmental parameters monitoring upgraded (2027) |
| Implementation of an environmental management information system in accordance with the Law on Environmental Protection | No integrated information system for environmental management (2021) | An effective integrated environmental management information system set up in the Federation of Bosnia and Herzegovina (2028) |
| Effectiveness of environmental data monitoring, collection, validation system aimed at reporting in accordance with the international agreements | No standardised systems or methodologies for data gathering, communication and reporting, and statistics in the area of environment have been created. There are individual systems for environmental data collection and reporting, but this is insufficient for adequate reporting to international bodies | An effective environmental data monitoring, collection, validation system aimed at reporting in accordance with the international agreements created (2026) |
| Effectiveness of the system for sharing of spatial data in the Federation of Bosnia and Herzegovina in accordance with the INSPIRE Directives I II, and III. | No effective system for sharing of spatial data in place | An effective system for sharing of spatial data in the Federation of Bosnia and Herzegovina in accordance with the INSPIRE Directives I II, and III put in place (2030) |
| Effectiveness of PRTR in the Federation of Bosnia and Herzegovina | PRTR established in the Federation of Bosnia and Herzegovina, however a few operators do report their data and meet the legal reporting requirements of PRTR reporting There is no data verification system for data entered in the PRTR by the operators. Mutual incompatibility of PRTRs in the Federation of Bosnia and Herzegovina and Republika Srpska leads to problems in compiling data on the national level Data collected in PRTR in the Federation of Bosnia and Herzegovina are not forwarded to the national institutions as this process is not regulated The process of reporting this data to the EU institutions is also not regulated (2021) | PRTR in the Federation of Bosnia and Herzegovina is effective and harmonised with the Registers in Republika Srpska and Brcko District Data reporting from PRTR to the institutions of Bosnia and Herzegovina and EU in the Federation of Bosnia and Herzegovina is regulated (2026) |
| Level of the development of statistics for Sustainable Development Goals in the Federation of Bosnia and Herzegovina | While Bosnia and Herzegovina adopted the Framework for the implementation of the sustainable development goals in 2021, the Federation of Bosnia and Herzegovina did not develop adequate statistics for monitoring of the sustainable development goals (2021) | Statistics for the sustainable development goals associated with the environment thematic area, further indicators and reporting system developed (2026) |
| Efficiency in statistical data collection, processing and publication in the Federation of Bosnia and Herzegovina through a standardised and routine information sharing among the institutions across the levels of government | It is necessary to improve the efficiency of the collection, processing and publication of environmental statistical data in the Federation of Bosnia and Herzegovina across the administrative levels | Increased efficiency of statistical data collection, processing and publication in the Federation of Bosnia and Herzegovina through a standardised and routine information sharing among the institutions across the levels of government (2026) |
| Participation of the institutions of the Federation of BiH in the development of the European Environmental Economic Accounts which describe the relations between the environment and economy (in accordance with the (EU) Regulation no. 691/2011 on the European Environmental Economic Accounts which laid down in a common legal framework for collection, preparation, communication and evaluation of the European Environmental Economic Accounts) | European Environmental Economic Accounts have not been developed in accordance with the Regulation (EU) no. 691/2011 on the European Environmental Economic Accounts | The participation of the institutions of the Federation of Bosnia and Herzegovina in the development of the European Environmental Economic Accounts secured (2026). |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.470 | 2.3 | 2.8 |

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| **7.5.1 Measure** | Effectiveness of the system for monitoring of environmental parameters | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| Capacity of reference centres and professional institutions/institutes for monitoring | Capacity available, but there is a room for improvement | Increased professional capacity of reference centres and professional institutions/institutes for monitoring (2027) |
| Status of adoption of rulebooks regulating mandatory parameters and environmental quality measurements in accordance with the international standards | Rulebooks are not update or they do not exist | All the rulebooks regulating mandatory parameters and environmental quality measurements aimed at greater diversification of environmental parameters which are monitored prepared/updated and adopted (2027) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.045 | 0.183 | 0.229 |
| **7.5.2 Measure** | Build an effective integrated information system for environmental management in the Federation of BiH | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| Status of the development of a single environmental protection information system | No single environmental protection information system available | The single environmental information system up and running (2027) |
| Status of the adoption of environmental data exchange methodology for all the segments of environment among the institutions at all the levels in the Federation of BiH | The methodology is not adopted | The environmental data exchange methodology for all the segments of environment among the institutions at all the levels in the Federation of BiH defined and adopted (2026) |
| The environmental data exchange procedure in the Federation of BiH based on the adopted methodology | The procedure is not defined | The data exchange procedure in the Federation of BiH based on the adopted methodology defined (2027) |
| Effectiveness of the institutional systems for environmental data collection | Partly effective institutional systems for environmental data collection | Institutional systems for environmental data collection fully effective (2028) |
| Effectiveness of the environmental data monitoring system | There is a system of environmental data monitoring, but there is a need for improvement | The environmental data monitoring system improved (2028) |
| Effectiveness of cooperation with the representatives of environmental NGOs aimed at improving options of environmental data collection | Partial cooperation | Effective cooperation with representatives environmental NGOs (2029 |
| Stage of the establishment of the environmental data validation system | There is no environmental data validation system | The environmental data validation system up and running (2026) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.076 | 0.684 | 0.760 |
| **7.5.3 Measure** | Establishment of an effective system for monitoring, collection, validation of environmental data in accordance with the international agreements | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| Performance of an analysis to review the current indicators and provide a proposal of an expanded set of indicators which should be monitored in all areas | No analysis has been completed | The analysis with a proposal of an expanded set of indicators which should be monitored in all areas completed (2024) |
| The list of environmental indicators of the Federation of BiH | Not adopted | The list of environmental indicators of the Federation of BiH adopted (2024) |
| Effectiveness of cooperation with the working group which will provide expert proposals and coordinate the implementation of conclusions and proposals of the analysis | The working group not formed | Effective cooperation within the Working Group (2025) |
| Training and education programme of all agencies and institutions in the Federation of Bosnia and Herzegovina involved in reporting | The training and education programme not prepared | The training and education programme prepared (2025) |
| Level of the implementation of the training and education of all agencies and institutions in the Federation of Bosnia and Herzegovina involved in reporting | The training and education programme not prepared | Training and education programme implemented in all agencies and institutions of the Federation of Bosnia and Herzegovina involved in reporting (continuously– 2030.+) |
| Level of the implementation of the Strategy on monitoring the state of environment, data management and reporting | The Strategy on monitoring the state of environment, data management and reporting is not adopted at the level of Bosnia and Herzegovina | Advanced implementation of the strategy on monitoring the state of environment, data management and reporting in the Federation of Bosnia and Herzegovina after it had been adopted at the national level (continuously as of 2026 onwards (2030+) |
| Level of the implementation of the Action Plan for the Implementation of the Regulation EIONET in BiH in the territory of the Federation of Bosnia and Herzegovina | The Action Plan is not adopted | The Action Plan for the implementation of the Decree on EIONET BiH in the territory of Federation of BiH adopted and implemented (continuously as of 2026 ) |
| Level of the implementation of the Action Plan for the Implementation of the Directive on standardised reporting in the territory of the Federation of Bosnia and Herzegovina | The Action Plan is not adopted | The Action Plan for the Implementation of the Directive on standardised reporting in the territory of the Federation of Bosnia and Herzegovina adopted and implemented (continuously as of 2025). |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.048 | 0.433 | 0.481 |
| **7.5.4 Measure** | Establishment of a system for spatial data exchange in the Federation of BiH in accordance with the INSPIRE Directives I II, and III | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| Status of the adoption of a methodology for spatial data management in the Federation of BiH | The methodology is not adopted | The methodology for spatial data management in the Federation of BiH developed and adopted (2025) |
| Status of the adoption of bylaws required for an effective establishment of SDI in the Federation of BiH | The bylaws not adopted | The bylaws required for an effective establishment of SDI in the Federation of BiH adopted (2024) |
| Status of setting up SDI in the Federation of BiH | SDI not established | SDI in the Federation of BiH in place and operational (2030+) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.053 | 0.482 | 0.536 |
| **7.5.5 Measure** | Establishment of an effective PRTR | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| Status of the legal framework and institutional arrangements for PRTR in Federation of Bosnia and Herzegovina | The legal framework is not update and there are no effective institutional arrangements for PRTR in Federation of Bosnia and Herzegovina. | The legal framework updated and institutional arrangements for PRTR in Federation of Bosnia and Herzegovina.(2025) effectively in place. |
| Effectiveness of PRTR database ensured through the application of a methodology harmonised with the methodologies applied in Republika Srpska and the Brcko District | PRTR not in operation. | An effective and viable PRTR database set up, and harmonised with the methodologies applied in Republika Srpska and the Brcko District |
| Public access to data in PRTR | Partial access to data collected in the past | Public access to data from the PRTRs ensured through web portals (2026) |
| Viability of PRTR | / | Viability of PRTR ensured through allocation of funds for its maintenance and upgrade (2030+) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.124 | 0 | 0.124 |
| **7.5.6 Measure** | Development of statistics for Sustainable Development Goals in the Federation of BiH | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| 2) Effectiveness of the system of producing official statistics of the Federation of BiH for indicators of the Sustainable Development Goals for the environment. | Partially effective system | The system for production of official statistics of the Federation of Bosnia and Herzegovina for indicators of the environmental Sustainable Development Goals effective (2026) |
| The level of cooperation among all the institutions in the Federation of BiH engaged in collecting indicators of the environmental Sustainable Development Goals | Partially effective cooperation and coordination among the relevant institutions | Effective cooperation among all the institutions in the Federation of BiH engaged in collecting indicators of the environmental Sustainable Development Goals (2030+) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.121 | 0.283 | 0.404 |
| **7.5.7 Measure** | Enhancing the efficiency in the process of collecting, processing and publication of environmental statistics | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| Quality of cooperation of all the institutions involved in data collection, processing and dissemination | Partially effective cooperation | Effective cooperation of all the institutions involved in environmental data collection, processing and dissemination ensured (2026) |
| Compliance with the requirements of the EU statistic system | Partial compliance | Compliance with the requirements of the EU statistic system achieved (2026) |
| Quality of cooperation pursuant to the provisions of the Statistical Requirements Compendium, published by Eurostat | The reporting system in the phase of development | Improved quality of reporting pursuant to the provisions of the Statistical Requirements Compendium, published by Eurostat (2026) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0 | 0.135 | 0.135 |
| **7.5.8 Measure** | Development of European Environmental Economic Accounts | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| Level of the implementation of the Regulation (EU) no. 691/2011 on the priority European Environmental Economic  Accounts Partly implemented | The Regulation (EU) no. 691/2011 on the European Environmental Economic Accounts partly implemented (2026) | The Regulation (EU) br. 691/2011 on European Environmental Economic Account implemented (2026.) |
| Status of expansion of the environmental accounts to new areas in accordance with the System Environmental Economic Accounting | The Environmental Accounts partly developed | Water Accounts, Forest Accounts, Accounts of Resources Management Expenditures, Ecosystem Accounts developed (2026) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0 | 0.128 | 0.128 |

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| **7.6 Priority** | **Ensuring a strong synergy in cross-sectoral and inter-sectoral action, and integration of public environmental policies** | **Priority indicators** | **Indicator baseline values** | **Indicator target values** |
| Level of the integration of environmental requirements in sectoral policies legislation | Poor integration of the environmental requirements in sectoral policies and legislation (2021) | Substantial integration of the environmental requirements in sectoral policies and legislation through enhanced cross-sectoral cooperation (2030) |
| Level of the integration of the requirements of the Climate Change Adaptation and Low Carbon Development Strategy of Bosnia and Herzegovina | The requirements of Strategy on climate change adaptation and low-carbon development are not integrated in sectoral policies (2021) | The requirements of Strategy on climate change adaptation and low-carbon development are integrated in sectoral policies (2028) |
| Level of the integration of standards and principles of gender equality, social equality and poverty in the key environmental policies, strategies, and programmes | Poor integration (2021) | Standards and principles of gender equality, social equality and poverty integrated in the key environmental policies, strategies, and programmes (2026)  Tools such as gender analysis, gender impact assessment, gender responsible budgeting, gender index in the environment sector and gender audit applied to planning, implementation, monitoring and evaluation of policies, programmes and projects in the environmental management |
| Effectiveness of the institutional mechanism of coordination in the domain of gender equality | Conditions created for the establishment of a special coordinating gender equality and environment body, but it has not been established (2021) | An efficient coordination gender equality and environment body established (2026) |
| Status of the preparation of a sectoral policy focusing on laying the ground for the implementation of a circular economy | The Federation of Bosnia and Herzegovina has currently no such sectoral policy in writing A multi-sectoral cooperation lead by the industry and environment sectors is required in order to design a clear environmental policy with a focus on creating conditions for the implementation of a circular economy (2021) | The sectoral policy adopted and conditions created for the transition to a circular economy (2027) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.065 | 0.555 | 0.620 |

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| **7.6.1 Measure** | Integration of environmental requirements in sectoral policies legislation | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| Level of institutionalisation of some forms of cooperation between the environment sector and other sectors | Poorly institutionalised | Institutionalised cooperation between the environmental and other sectors (2030) |
| Contribution of the environmental institutions to the integration of environmental requirements in sectoral policies | Poor contribution of the environmental institutions to the integration of environmental requirements in sectoral policies | The environmental institutions proactively contribute to the integration of environmental requirements in sectoral policies (continuously- 2030) |
| 5) Compliance of environmental plans and programmes and projects with the applicable spatial plans | Partially in compliance | Compliance of environmental plans, programmes, and projects with the applicable spatial plans secured (continuously 2030+) |
| 6) Contribution of the environmental institutions to the preparation of documents addressing topics other than environment aimed at the integration of climate change adaptation | Relatively minor contribution | The environmental institutions proactively contribute to the preparation of documents addressing topics other than environment aimed at the integration of climate change adaptation provided (2027) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.037 | 0.088 | 0.125 |
| **7.6.2 Measure** | Integration of standards and principles of gender equality, social equality and poverty in key environmental policies, strategies, and programmes | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| Preparation of guidelines for the integration of gender equality, social equity and poverty principles in all the phases of the environmental management | No guidelines available | The Guidelines for the integration of gender equality, social equity and poverty standards in all the phases of the environmental management prepared (2024) |
| Level of knowledge and awareness of focal points nominated for gender equality in the institutions on interlinkages of the environment and gender dimension | Relatively poor | Persons appointed as gender equality officers possess knowledge and awareness on the interlinkage between the environment and gender equality (2026) |
| Level of institutional communication among the institutions in the environment sector and Gender Centre of Federation of BiH | Very poor communication | Effective institutional communication among the institutions in the environment sector and Gender Centre of the Federation of BiH instituted (2026) |
| Level of promotion of gender sensitive approach in all the segments of environmental management | Poor promotion | Gender sensitive approach applied in all segments of the environmental management (2030) |
| Capacities of the environmental institutions responsible for the application of gender mainstreaming tools | Poor capacity | The environmental institutions possess capacities for the application of gender mainstreaming tools (2029) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.027 | 0.247 | 0.275 |
| **7.6.3 Measure** | Transition to a circular economy | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| Status of the adoption of the Roadmap and Action Plan on the implementation of the circular economy in the Federation of Bosnia and Herzegovina | The Roadmap and Action Plan are not adopted | The Roadmap and Action Plan on the transition to a circular economy adopted (2024) |
| Initiation of enabling instruments for green business | Enabling instruments not implemented | Enabling instruments implemented (2025) |
| Application of green procurements in public institutions and private sector | Poor application of green procurement (it is not possible to determine the total amount of funds spent through the application of green procurement criteria) | Extensive application of green procurements in public institutions and private sector (2030) |
| Status of the preparation of Action Plan for small and medium enterprises | The action plan is not prepared | The Action Plan prepared (2026) |
| Status of passing the legislation on eco-design products | The legislation is not adopted | The legislation on eco-design products adopted (2026) |
| Financial support to strengthening of voluntary instruments for the implementation of green business | No financial support provided | Financial support to strengthening of voluntary instruments for the implementation of green business provided (continuously– 2030) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0 | 0.219 | 0.219 |

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| **7.7 Priority** | **Ensuring financial sustainability of the environment sector in the Federation of BiH** | **Priority indicators** | **Indicator baseline values** | **Indicator target values** |
| Transparency of reporting of the institutions about funds they collect from taxes and the purposes for which they used them | Non-transparent reporting of the institutions about funds they collect from taxes and the purposes for which they used them (2021) | Responsible institutions routinely prepare and transparently publish reports on funds raised and on use of dedicated funds (2030) |
| Level of the Implementation of currently available economic instruments | Perception of economic instruments is not systemic Ineffective planning of economic instruments (2021) | The currently available economic instruments efficiently and robustly implemented (2030) |
| Application (implementation) of taxes and fees defined in the applicable legislation | Lack of taxes or fees in individual areas which have a significant impact on the environment (2021) | All taxes stipulated in the Law on Fund of for the Federation of Bosnia and Herzegovina and other laws which regulate individual areas implemented (2030) |
| Implementation/application of new innovative and stimulating economic mechanisms | Lack of innovative and stimulating economic mechanisms (2021) | New innovative and stimulating economic mechanisms introduced (2030) |
| Level of the use of the available EU funds and international funds for environmental protection and complementary sectors | Insufficient use of the available financial mechanisms and international funds for environmental protection and complementary sectors (2021) | Increased use of the financial mechanisms and international funds designated for environmental protection and complementary sectors (2030) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.194 | 0.180 | 0.375 |

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| **7.7.1 Measure** | Efficient and comprehensive implementation of currently available environmental economic instruments | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| Status of amending the Law on the Fund of the Federation of BiH | Amendments have not been adopted | Amendments to the Law on the Fund of Federation of BiH, according to which cantons and municipalities should report on the use of dedicated funds for environmental projects adopted (2024) |
| Stage of completion of an in-depth analysis on the types of taxes which are not classified as environmental fees, but partly cover environmental aspects | The analysis has not been completed | A centralised and multi-sectoral analysis completed and all the types of taxes which are not classified as environmental fees, but partly cover environmental issues identified (2023) |
| Status of the reform of taxes which partly cover environmental issues. | The reform has not been undertaken | The reform of taxes carried out through amendments to the applicable regulations (2028) |
| Status of efforts aimed at regulating taxes for users of environmental assets, energy efficiency, waste landfilling, etc. | The taxes for users of environmental assets, energy efficiency, waste landfilling are not regulated. | The taxes for users of environmental assets, energy efficiency, waste disposal, etc. regulated. (2030.+) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.092 | 0 | 0.092 |
| **7.7.2 Measure** | Initiation of new innovative and incentive economic mechanisms for funding environmental protection | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| Level of improvement of the current and initiation of new economic instruments for environmental protection which are stimulative for Target groups | Inadequacy of mechanisms which are stimulative for the Target groups | The existing economic instruments of environmental protection enhanced and new ones initiated (2030) |
| Involvement of business entities in fund raising efforts for environmental projects | Business entities are not actively involved | Business entities play an active role in fund raising efforts and participate in the implementation of environmental projects |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.020 | 0.180 | 0.201 |
| **7.7.3 Measure** | Use of EU and other international funds designated for environmental protection and complementary sectors | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| Status of setting up of an intermediary body at the level of Federation of Bosnia and Herzegovina for the implementation of EU supported environmental projects | Not formed | The intermediary body at the level of the Federation of BiH formed using the capacities of the current institutions, such as: Environmental Protection Fund of the Federation of BiH which is engaged in the implementation and monitoring of environmental projects, with the view of implementing EU projects in the territory of the Federation of Bosnia and Herzegovina (2028) |
| Setting up an information system for project application and partners from the level of Bosnia and Herzegovina and management of international projects | Not established | An online system (e-service) for identification of projects, review of applications, and monitoring and reporting on the implementation of projects set up in the Environmental Protection Fund of the Federation of BiH (2029) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.081 | 0 | 0.081 |

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| **7.8 Priority** | **Developing a system of strategic decision-making, investments and monitoring of effects in environmental education, research and innovation** | **Priority indicators** | **Indicator baseline values** | **Indicator target values** |
| Level of the integration of environmental protection issues in curricula of educational institutions and nonformal education | Environmental issues are insufficiently integrated in curricula of educational institutions at all the levels (2021) | Environmental issues integrated in curricula of educational institutions across the levels (2030) |
| Capacity of employees of educational institutions | Eco-pedagogical competencies of the staff of educational institutions need to be improved (2021) | Strengthen the capacity and eco-pedagogical competencies of the staff of educational institutions (2030) |
| Creating dedicated funds to support the nonformal environmental education | Insufficient budgets allocated to support the programming in the domain of nonformal environmental education (2021) | Dedicated funds for support to nonformal environmental education created (2030) |
| Availability of dedicated funds for innovation and development in the environment sector | Dedicated budgets for investments in innovation and development, and application of new technologies aimed at reducing the pollution are not sufficient given an increasing need to catch up with international trends (2021) | Larger budgets dedicated for innovation and development, and application of new technologies aimed at reducing pollution in place (2028) |
| Research capacity building in the environment sector | Poor capacities for research and development in the environment sector Scientific research in this area insufficient (2021) | Capacities for environmental research strengthened by (2030) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.193 | 0.393 | 0.587 |

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| **7.8.1 Measure** | Embedding environmental education in curricula of at all the levels of education | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| Analysis of the quality of the curricular content | No overarching analysis has been performed. | An overarching analysis of the quality of the curricular content performed (2023) |
| Measure aimed at innovating educational programmes which will be integrated in curricular and extra-curricular programmes | There is a room for improvement | Innovated educational programmes on environmental protection which will be integrated in curricular and extra-curricular programmes, contribute to the development of environment-friendly culture in students, and their acceptance of environmental values and focus on the values (periodically 2030) |
| Number of schools which obtained the status of an Eco-school | / | Increased number of schools which have the status of an Eco-school (continuously - 2030) |
| Legal provisions which facilitate opening of innovation centres for development in primary education | The legislation does not include such provisions | The legal provisions which enable opening of innovation centres for development in primary education adopted (2025) |
| Development of educational programmes to be implemented in protected areas created | The programmes have not been developed | Educational programmes in protected areas prepared (2029 |
| Number of educational institutions which cooperate with farms and agricultural holdings | / | The number of educational institutions which cooperate with farms and agricultural holdings increased (continuously – 2030) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.083 | 0.195 | 0.278 |
| **7.8.2 Measure** | Strengthen the capacity and eco-pedagogical competencies of the staff of educational institutions | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| Level of improvement of eco-pedagogical competencies of the staff of educational institutions through environmental education in accredited programmes | There is a need to improve eco-pedagogical competencies of the staff of educational institutions | Teachers have competencies for the transfer of knowledge, possess eco-pedagogical competencies for the implementation of environmental contents (2029) |
| Status of the preparation of teachers manuals on the integration of environmental protection and sustainable use of resources in curricula and syllabi for primary and secondary schools and teaching methodologies | Manuals have not been prepared | The teachers manuals on the integration of environmental protection and sustainable use of resources in curricula and syllabi for primary and secondary schools and teaching methodologies (2026) |
| Level of education of the staff of educational institutions on environmental protection in accredited programmes for the purpose of digitalisation | No such educations have been provided | Teachers have competencies for the transfer of knowledge, competencies for teaching contents on environmental protection and use predefined thematic digital contents (continuously– 2030) |
| Status of the preparation of digital textbooks and contents on environmental protection | Digital textbooks were no prepared. | Learning with the use of digital textbooks enabled (2026) |
| Status of development of conducting a gap analysis of the current curricula for master programmes | No analysis has not been conducted | The gap analysis of the current curricula for master programmes completed and recommendations provided to incorporate the topic of sustainable use of natural resources in master programmes (2028) |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.085 | 0.198 | 0.283 |
| **7.8.3 Measure** | Support to nonformal environmental education | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| The level of cooperation among the institutions engaged in the nonformal environmental education | Partial cooperation | Effective cooperation established among the institutions engaged in the nonformal environmental education (2026) |
| Allocation of dedicated funds to support nonformal environmental education | Budgets of the Federation Ministry of Education and Science and cantonal ministries of education allocated certain amounts of dedicated funds to support the nonformal environmental education, but this is not sufficient | Funds secured for the nonformal education (based on needs of the target group) of different interest groups (employees of educational institutions, students, professors, parents). |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0.024 | 0 | 0.024 |
| **7.8.4 Measure** | Strengthening research capacities in the environment sector | **Measure indicators** | **Indicator baseline values** | **Indicator target values** |
| Awareness of representatives of academia and industry about available funds for which they may routinely apply | Partial knowledge on access to funds | Representatives of academia and industry informed of available funds and apply on a regular basis for international projects (continuously - 2030) |
| Regular patterns of budget allocations for investments into innovations and development in the Federation Ministry of Education and Science and cantonal ministries of education | Certain funds have been allocated, but this is not sufficient | Regular planning of budget allocations in the Federation Ministry of Education and Science and cantonal ministries of education for investments in innovation and development (2028) |
| Number of projects relevant for sustainable natural resources management annually funded by the Federal Fund for Science | / | The Federal Fund for Science funds at least 3 projects relevant for sustainable natural resources management (continued - 2030) |
| Number of conferences co-funded by the Federal Fund for Science | / | The Federal Fund for Science funds at least 1 professional-scientific conference every two years |
| Quality of contacts and forms of cooperation between academia and industry | Partial cooperation | New contacts and forms of cooperation between academia and economy developed |
| **Government budget (BAM million)** | **Other sources (BAM million)** | **Total (BAM million)** |
| 0 | 0 | 0 |

13.9. Annex 9 Indicative financial framework

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| **INDICATIVE FINANCIAL FRAMEWORK** | | | | | |
| **FOR THE PERIOD COVERED BY THE STRATEGY** | | | | | |
| **No. and code** | **Funding structure (u %)\*** | **Total KM** | **Budget of institutions (KM)** | **Other sources** | |
|
| **(KM)** |  |
| **Water management** | **37%** | **4,378,231,002** | **450,488,717** | **3,927,742,284** |  |
| **1.1. Priority** | **0.1%** | **2,797,022** | **279,702** | **2,517,320** |  |
| **1.1.1. Measure** | **100%** | **2,797,022** | **279,702** | **2,517,320** | **Government budget, Loans, Funds from EU and other international donors** |
| **1.2. Priority** | **0.1%** | **2,943,591** | **365,647** | **2,577,944** |  |
| **1.2.1. Measure** | **97%** | **2,864,382** | **286,438** | **2,577,944** | **Government budget, Loans, Funds from EU and other international donors** |
| **1.2.2. Measure** | **3%** | **79,209** | **79,209** | **0** | **Government budget** |
| **1.3. Priority** | **2%** | **83,025,188** | **16,672,473** | **66,352,714** |  |
| **1.3.1. Measure** | **99.9%** | **82,940,893** | **16,588,179** | **66,352,714** | **Government budget, Funds from EU and other international donors** |
| **1.3.2. Measure** | **0.1%** | **84,295** | **84,295** | **0** | **Government budget** |
| **1.4. Priority** | **0.4%** | **17,265,064** | **5,195,073** | **12,069,991** |  |
| **1.4.1. Measure** | **9%** | **1,547,756** | **464,327** | **1,083,429** | **Government budget, Funds from EU and other international donors** |
| **1.4.2. Measure** | **90.9%** | **15,695,088** | **4,708,526** | **10,986,562** | **Government budget, Funds from EU and other international donors, Other donations** |
| **1.4.3. Measure** | **0.1%** | **22,220** | **22,220** | **0** | **Government budget** |
| **1.5. Priority** | **98%** | **4,271,679,579** | **427,455,263** | **3,844,224,315** |  |
| **1.5.1. Measure** | **0.0005%** | **20,391** | **20,391** | **0** | **Government budget** |
| **1.5.2. Measure** | **0.001%** | **48,837** | **48,837** | **0** | **Government budget** |
| **1.5.3. Measure** | **0.006%** | **250,000** | **250,000** | **0** | **Government budget** |
| **1.5.4. Measure** | **100%** | **4,271,360,350** | **427.136.035** | **3,844,224,315** | **Government budget, Loans, Funds from EU and other international donors** |
| **1.6. Priority** | **0.01%** | **520,558** | **520,558** | **0** |  |
| **1.6.1. Measure** | **55%** | **287,791** | **287,791** | **0** | **Government budget** |
| **1.6.2. Measure** | **32%** | **167,047** | **167,047** | **0** | **Government budget** |
| **1.6.3. Measure** | **9%** | **44,460** | **44,460** | **0** | **Government budget** |
| **1.6.4. Measure** | **4%** | **21,261** | **21,261** | **0** | **Government budget** |
| **Waste Management** | **6%** | **659,951,069** | **69,064,950** | **590,886,120** |  |
| **2.1. Priority** | **0.2%** | **1,489,703** | **297,941** | **1,191,763** |  |
| **2.1.1. Measure** | **100%** | **1,489,703** | **297,941** | **1,191,763** | **Government budget, Funds from EU and other international donors** |
| **2.2. Priority** | **0.3%** | **2,208,120** | **441,624** | **1,766,496** |  |
| **2.2.1. Measure** | **100%** | **2,208,120** | **441,624** | **1,766,496** | **Government budget, Funds from EU and other international donors** |
| **2.3. Priority** | **0.01%** | **58,675** | **58,675** | **0** |  |
| **2.3.1. Measure** | **100%** | **58,675** | **58,675** | **0** | **Government budget** |
| **2.4. Priority** | **81%** | **532,630,874** | **53,816,556** | **478,814,318** |  |
| **2.4.1. Measure** | **0.2%** | **813,840** | **162,768** | **651,072** | **Government budget, Funds from EU and other international donors, Other donations** |
| **2.4.2. Measure** | **99%** | **527,096,185** | **52,709,619** | **474,386,567** | **Government budget, Loans , Funds from EU and other international donors** |
| **2.4.3. Measure** | **0.9%** | **4,720,850** | **944,170** | **3,776,680** | **Government budget, Loans, Funds from EU and other international donors** |
| **2.5. Priority** | **16%** | **102,469,678** | **10,336,026** | **92,133,652** |  |
| **2.5.1. Measure** | **100%** | **102,370,724** | **10,237,072** | **92,133,652** | **Government budget, Loans, Funds from EU and other international donors, Other donations** |
| **2.5.2. Measure** | **0.1%** | **98,954** | **98,954** | **0** | **Government budget** |
| **2.6. Priority** | **3%** | **20,047,258** | **4,009,452** | **16,037,806** |  |
| **2.6.1. Measure** | **100%** | **20,047,258** | **4.009.452** | **16,037,806** | **Government budget, Funds from EU and other international donors, Other donations** |
| **2.7. Priority** | **0.2%** | **1,046,762** | **104,676** | **942,086** |  |
| **2.7.1. Measure** | **100%** | **1,046,762** | **104,676** | **942,086** | **Government budget, Funds from EU and other international donors** |
| **Biodiversity and Nature Conservation** | **0.5%** | **53,808,847** | **10,180,384** | **43,628,464** |  |
| **3.1. Priority** | **2%** | **1,283,675** | **128,367** | **1,155,307** |  |
| **3.1.1. Measure** | **100%** | **1,283,675** | **128,367** | **1,155,307** | **Government budget, Funds from EU and other international donors** |
| **3.2. Priority** | **18%** | **9,562,471** | **1,122,490** | **8,439,981** |  |
| **3.2.1. Measure** | **0.1%** | **9,876** | **9,876** | **0** | **Government budget** |
| **3.2.2. Measure** | **16.5%** | **1,573,548** | **314,710** | **1,258,838** | **Government budget, Funds from EU and other international donors** |
| **3.2.3. Measure** | **83%** | **7,979,048** | **797,905** | **7,181,143** | **Government budget, Funds from EU and other international donors** |
| **3.3. Priority** | **11%** | **5,654,830** | **1,602,857** | **4,051,973** |  |
| **3.3.1. Measure** | **89%** | **5,015,735** | **1,504,721** | **3,511,015** | **Government budget, Funds from EU and other international donors, Other donations** |
| **3.3.2. Measure** | **6%** | **342,270** | **68,454** | **273,816** | **Government budget, Funds from EU and other international donors** |
| **3.3.3. Measure** | **5%** | **296,824** | **29,682** | **267,142** | **Government budget, Funds from EU and other international donors** |
| **3.4. Priority** | **8%** | **4,384,436** | **979,822** | **3,404,614** |  |
| **3.4.1. Measure** | **37%** | **1,621,079** | **324,216** | **1,296,863** | **Government budget, Funds from EU and other international donors** |
| **3.4.2. Measure** | **6%** | **245,010** | **49,002** | **196,008** | **Government budget, Funds from EU and other international donors** |
| **3.4.3. Measure** | **23%** | **1,029,348** | **308,804** | **720,543** | **Government budget, Funds from EU and other international donors** |
| **3.4.4. Measure** | **34%** | **1,489,000** | **297,800** | **1,191,200** | **Government budget, Funds from EU and other international donors** |
| **3.5. Priority** | **45%** | **24,336,100** | **4,941,144** | **19,394,956** |  |
| **3.5.1. Measure** | **99%** | **24,084,819** | **4,816,964** | **19,267,856** | **Government budget, Funds from EU and other international donors, Other donations** |
| **3.5.2. Measure** | **0.4%** | **92,405** | **92,405** | **0** | **Government budget** |
| **3.5.3. Measure** | **0.7%** | **158,876** | **31,775** | **127,101** | **Government budget, Funds from EU and other international donors** |
| **3.6. Priority** | **13%** | **7,097,599** | **904,445** | **6,193,153** |  |
| **3.6.1. Measure** | **2%** | **172,442** | **51,732** | **120,709** | **Government budget, Funds from EU and other international donors** |
| **3.6.2. Measure** | **11%** | **800,985** | **240,296** | **560,690** | **Government budget, Funds from EU and other international donors** |
| **3.6.3. Measure** | **36%** | **2,578,263** | **257,826** | **2,320,436** | **Government budget, Funds from EU and other international donors** |
| **3.6.4. Measure** | **50%** | **3,545,909** | **354,591** | **3,191,318** | **Government budget, Funds from EU and other international donors** |
| **3.7. Priority** | **0.2%** | **111,202** | **111,202** | **0** |  |
| **3.7.1. Measure** | **55%** | **61,230** | **61,230** | **0** | **Government budget** |
| **3.7.2. Measure** | **45%** | **49,972** | **49,972** | **0** | **Government budget** |
| **3.8. Priority** | **0.4%** | **211,746** | **211,746** | **0** |  |
| **3.8.1. Measure** | **14%** | **30,372** | **30,372** | **0** | **Government budget** |
| **3.8.2. Measure** | **86%** | **181,374** | **181,374** | **0** | **Government budget** |
| **3.9. Priority** | **1%** | **498,963** | **111,528** | **387,436** |  |
| **3.9.1. Measure** | **97%** | **484,295** | **96,859** | **387,436** | **Funds from EU and other international donors, Other donations** |
| **3.9.2. Measure** | **3%** | **14,669** | **14,669** | **0** | **Government budget** |
| **3.10. Priority** | **1%** | **667,826** | **66,783** | **601,043** |  |
| **3.10.1. Measure** | **100%** | **667,826** | **66,783** | **601,043** | **Government budget, Funds from EU and other international donors** |
| **Air quality, climate and energy** | **28%** | **3,325,700,554** | **332,985,337** | **2,992,715,218** |  |
| **4.1. Priority** | **10%** | **324,806,327** | **32,575,808** | **292,230,519** |  |
| **4.1.1. Measure** | **0.3%** | **951,751** | **190,350** | **761,401** | **Government budget, Funds from EU and other international donors** |
| **4.1.2. Measure** | **100%** | **323,854,576** | **32,385,458** | **291,469,118** | **Government budget, Loans, Funds from EU and other international donors, Other donations** |
| **4.2. Priority** | **7%** | **241,799,089** | **24,179,909** | **217,619,180** |  |
| **4.2.1. Measure** | **1%** | **3,340,737** | **334,074** | **3,006,663** | **Government budget, Funds from EU and other international donors** |
| **4.2.2. Measure** | **99%** | **238,458,352** | **23,845,835** | **214,612,517** | **Government budget , Funds from EU and other international donors, Other donations** |
| **4.3. Priority** | **0.3%** | **8,874,483** | **887,448** | **7,987,035** |  |
| **4.3.1. Measure** | **100%** | **8,874,483** | **887,448** | **7,987,035** | **Government budget, Funds from EU and other international donors, Other donations** |
| **4.4. Priority** | **18%** | **597,648,872** | **59,838,699** | **537,810,173** |  |
| **4.4.1. Measure** | **0.1%** | **738,117** | **147,623** | **590,494** | **Government budget, Funds from EU and other international donors, Other donations** |
| **4.4.2. Measure** | **100%** | **596,910,755** | **59,691,075** | **537,219,679** | **Government budget, Loans, Funds from EU and other international donors, Other donations** |
| **4.5. Priority** | **62%** | **2,048,245,270** | **204,949,048** | **1,843,296,222** |  |
| **4.5.1. Measure** | **95%** | **1,956,024,103** | **195,602,410** | **1,760,421,692** | **Government budget, Loans, Funds from EU and other international donors, Other donations** |
| **4.5.2. Measure** | **0.1%** | **1,245,212** | **249,042** | **996,170** | **Government budget , Funds from EU and other international donors, Other donations** |
| **4.5.3. Measure** | **4%** | **90,975,955** | **9,097,596** | **81,878,360** | **Government budget, Loans, Funds from EU and other international donors, Other donations** |
| **4.6. Priority** | **3%** | **104,206,444** | **10,434,355** | **93,772,089** |  |
| **4.6.1. Measure** | **0.1%** | **137,104** | **27,421** | **109,684** | **Government budget , Funds from EU and other international donors** |
| **4.6.2. Measure** | **100%** | **104,069,339** | **10,406,934** | **93,662,405** | **Government budget, Loans, Funds from EU and other international donors** |
| **4.7. Priority** | **0.004%** | **120,070** | **120,070** | **0** |  |
| **4.7.1. Measure** | **100%** | **120,070** | **120,070** | **0** | **Government budget** |
| **Chemical safety and noise** | **0.2%** | **7,641,013** | **1,486,423** | **6,154,590** |  |
| **5.1. Priority** | **5%** | **401,539** | **324,274** | **77,264** |  |
| **5.1.1. Measure** | **64%** | **257,548** | **180,283** | **77,264** | **Government budget, Funds from EU and other international donors** |
| **5.1.2. Measure** | **5%** | **19,558** | **19,558** | **0** | **Government budget** |
| **5.1.3. Measure** | **31%** | **124,432** | **124,432** | **0** | **Government budget** |
| **5.2. Priority** | **19%** | **1,445,854** | **364,693** | **1,081,161** |  |
| **5.2.1. Measure** | **93%** | **1,351,451** | **270,290** | **1,081,161** | **Government budget, Funds from EU and other international donors** |
| **5.2.2. Measure** | **1%** | **15,925** | **15,925** | **0** | **Government budget** |
| **5.2.3. Measure** | **5%** | **78,478** | **78,478** | **0** | **Government budget** |
| **5.3. Priority** | **30%** | **2,326,066** | **267,639** | **2,058,427** |  |
| **5.3.1. Measure** | **98%** | **2,287,141** | **228,714** | **2,058,427** | **Government budget, Funds from EU and other international donors** |
| **5.3.2. Measure** | **1%** | **33,948** | **33,948** | **0** | **Government budget** |
| **5.3.3. Measure** | **0.2%** | **4,977** | **4,977** | **0** | **Government budget** |
| **5.4. Priority** | **7%** | **501,659** | **50,166** | **451,493** |  |
| **5.4.1. Measure** | **100%** | **501,659** | **50,166** | **451,493** | **Government budget, Funds from EU and other international donors** |
| **5.5. Priority** | **2%** | **115,345** | **115,345** | **0** |  |
| **5.5.1. Measure** | **100%** | **115,345** | **115,345** | **0** | **Government budget** |
| **5.6. Priority** | **12%** | **905,774** | **90,577** | **815,197** |  |
| **5.6.1. Measure** | **100%** | **905,774** | **90,577** | **815,197** | **Government budget, Funds from EU and other international donors** |
| **5.7. Priority** | **18%** | **1,368,644** | **273,729** | **1,094,916** |  |
| **5.7.1. Measure** | **100%** | **1,368,644** | **273,729** | **1,094,916** | **Government budget, Funds from EU and other international donors** |
| **5.8. Priority** | **8%** | **576,133** | **0** | **576,133** |  |
| **5.8.1. Measure** | **100%** | **576,133** | **0** | **576,133** | **Funds from EU and other international donors** |
| **Sustainable use of resources** | **29.2%** | **3,479,511,961** | **348,980,610** | **3,130,531,351** |  |
| **6.1. Priority** | **4%** | **141,876,906** | **14,337,100** | **127,539,806** |  |
| **6.1.1. Measure** | **0.1%** | **165,984** | **16,598** | **149,386** | **Government budget, Funds from EU and other international donors** |
| **6.1.2. Measure** | **0.2%** | **313,281** | **62,656** | **250,625** | **Government budget, Funds from EU and other international donors** |
| **6.1.3. Measure** | **0.07%** | **100,778** | **100,778** | **0** | **Government budget** |
| **6.1.4. Measure** | **6%** | **8,996,818** | **899,682** | **8,097,136** | **Government budget, Funds from EU and other international donors** |
| **6.1.5. Measure** | **93%** | **132,163,137** | **13,216,314** | **118,946,823** | **Government budget, Loans, Funds from EU and other international donors, Other donations** |
| **6.1.6. Measure** | **0.1%** | **136,908** | **41,072** | **95,836** | **Government budget, Funds from EU and other international donors** |
| **6.2. Priority** | **0.05%** | **1,762,876** | **177,766** | **1,585,109** |  |
| **6.2.1. Measure** | **0.1%** | **1,643** | **1,643** | **0** | **Government budget** |
| **6.2.2. Measure** | **100%** | **1,761,233** | **176,123** | **1,585,109** | **Government budget, Funds from EU and other international donors** |
| **6.3. Priority** | **0.02%** | **645,424** | **234,700** | **410,724** |  |
| **6.3.1. Measure** | **9%** | **58,675** | **58,675** | **0** | **Government budget** |
| **6.3.2. Measure** | **91%** | **586,749** | **176,025** | **410,724** | **Government budget, Funds from EU and other international donors** |
| **6.4. Priority** | **96%** | **3,335,066,513** | **334,182,972** | **3,000,883,541** |  |
| **6.4.1. Measure** | **0.01%** | **398,360** | **398,360** | **0** | **Government budget** |
| **6.4.2. Measure** | **0.04%** | **1,291,471** | **129,147** | **1,162,324** | **Government budget, Funds from EU and other international donors** |
| **6.4.3. Measure** | **93%** | **3,102,742,802** | **310,274,280** | **2,792,468,522** | **Government budget, Loans, Funds from EU and other international donors, Other donations** |
| **6.4.4. Measure** | **0.01%** | **353,107** | **353,107** | **0** | **Government budget** |
| **6.4.5. Measure** | **7%** | **230,280,772** | **23,028,077** | **207,252,695** | **Government budget, Funds from EU and other international donors, Other donations** |
| **6.5. Priority** | **0.005%** | **160,243** | **48,073** | **112,170** |  |
| **6.5.1. Measure** | **100%** | **160,243** | **48,073** | **112,170** | **Government budget, Funds from EU and other international donors** |
| **Environmental management** | **0.09%** | **10,329,305** | **2,023,855** | **8,305,450** |  |
| **7.1. Priority** | **14%** | **1,492,573** | **291,361** | **1,201,212** |  |
| **7.1.1. Measure** | **89%** | **1,334,680** | **133,468** | **1,201,212** | **Government budget, Funds from EU and other international donors** |
| **7.1.2. Measure** | **6%** | **94,111** | **94,111** | **0** | **Government budget** |
| **7.1.3. Measure** | **4%** | **63,782** | **63,782** | **0** | **Government budget** |
| **7.2. Priority** | **11%** | **1,085,449** | **220,374** | **865,075** |  |
| **7.2.1. Measure** | **6%** | **62,890** | **0** | **62,890** | **Funds from EU and other international donors** |
| **7.2.2. Measure** | **15%** | **158,620** | **47,586** | **111,034** | **Government budget, Funds from EU and other international donors** |
| **7.2.3. Measure** | **67%** | **727,881** | **145,576** | **582,305** | **Government budget, Funds from EU and other international donors** |
| **7.2.4. Measure** | **13%** | **136,058** | **27,212** | **108,846** | **Government budget, Funds from EU and other international donors** |
| **7.3. Priority** | **25%** | **2,544,135** | **292,336** | **2,251,798** |  |
| **7.3.1. Measure** | **85%** | **2,164,905** | **216,491** | **1,948,415** | **Government budget, Funds from EU and other international donors** |
| **7.3.2. Measure** | **4%** | **105,335** | **21,067** | **84,268** | **Government budget, Funds from EU and other international donors** |
| **7.3.3. Measure** | **5%** | **124,596** | **24,919** | **99,677** | **Government budget, Funds from EU and other international donors** |
| **7.3.4. Measure** | **6%** | **149,299** | **29,860** | **119,439** | **Government budget , Funds from EU and other international donors** |
| **7.4. Priority** | **8%** | **822,023** | **296,376** | **525,647** |  |
| **7.4.1. Measure** | **47%** | **388,618** | **116,585** | **272,033** | **Government budget, Funds from EU and other international donors, Other donations** |
| **7.4.2. Measure** | **34%** | **281,794** | **28,179** | **253,615** | **Government budget , Funds from EU and other international donors, Other donations** |
| **7.4.3. Measure** | **18%** | **151,611** | **151,611** | **0** | **Government budget** |
| **7.5. Priority** | **27%** | **2,802,022** | **470,073** | **2,331,949** |  |
| **7.5.1. Measure** | **8%** | **229,101** | **45,820** | **183,280** | **Government budget, Funds from EU and other international donors** |
| **7.5.2. Measure** | **27%** | **760,136** | **76,014** | **684,123** | **Government budget, Funds from EU and other international donors** |
| **7.5.3. Measure** | **17%** | **481,892** | **48,189** | **433,703** | **Government budget, Funds from EU and other international donors** |
| **7.5.4. Measure** | **19%** | **536,571** | **53,657** | **482,914** | **Government budget, Funds from EU and other international donors** |
| **7.5.5. Measure** | **4%** | **124,922** | **124,922** | **0** | **Government budget** |
| **7.5.6. Measure** | **14%** | **404,902** | **121,471** | **283,432** | **Government budget, Funds from EU and other international donors** |
| **7.5.7. Measure** | **5%** | **135,863** | **0** | **135,863** | **Funds from EU and other international donors** |
| **7.5.8. Measure** | **5%** | **128,634** | **0** | **128,634** | **Funds from EU and other international donors** |
| **7.6. Priority** | **6%** | **620,574** | **65,290** | **555,284** |  |
| **7.6.1. Measure** | **20%** | **125,884** | **37,765** | **88,119** | **Government budget, Funds from EU and other international donors** |
| **7.6.2. Measure** | **44%** | **275,247** | **27,525** | **247,723** | **Government budget, Funds from EU and other international donors, Other donations** |
| **7.6.3. Measure** | **35%** | **219,442** | **0** | **219,442** | **Funds from EU and other international donors, Other donations** |
| **7.7. Priority** | **4%** | **375,430** | **194,497** | **180,933** |  |
| **7.7.1. Measure** | **25%** | **92,717** | **92,717** | **0** | **Government budget** |
| **7.7.2. Measure** | **54%** | **201,036** | **20,104** | **180,933** | **Government budget, Funds from EU and other international donors, Other donations** |
| **7.7.3. Measure** | **22%** | **81,677** | **81,677** | **0** | **Government budget** |
| **7.8. Priority** | **6%** | **587,100** | **193,548** | **393,551** |  |
| **7.8.1. Measure** | **47%** | **278,764** | **83,629** | **195,135** | **Government budget, Funds from EU and other international donors, Other donations** |
| **7.8.2. Measure** | **48%** | **283,452** | **85,036** | **198,416** | **Government budget, Funds from EU and other international donors, Other donations** |
| **7.8.3. Measure** | **4%** | **24,883** | **24,883** | **0** | **Government budget** |
| **7.8.4. Measure** | **0%** | **0** | **0** | **0** |  |
| **Total of strategic document\*\*** | **100%** | **11,915,173,753** | **1,215,210,276** | **10,699,963,477** |  |
| **SUMMARY BY SOURCES** | | | | | |
| **(amounts in BAM and percentages)** | | | | | |
| **Government budget** | | **Loans** | | **Funds from EU and other international donors** | **Other donations** |
| **1,215,210,276** | | **3,209,989,043** | | **7,340,174,945** | **149,799,489** |
| **10.20%** | | **26.94%** | | **61.60%** | **1.26%** |



***Figure*** ***14***: *Structure of funding (u %) in FBiH*

1. As applied in the strategies for the other levels of government. [↑](#footnote-ref-2)
2. Data in this Decision differ from the data presented in the Sava River Basin Water Management Plan in the Federation of BiH 2016-2021, according to which the area covered by the Sava River Basin in the Federation of BiH is 17,315 km2. *Data on areas provided in the Plans were calculated with the help of software tools that were able to calculate the “basin area” more accurately.* [↑](#footnote-ref-3)
3. Data in this Decision differ from the data presented in the Adriatic Sea Watershed Water Management Plan in the Federation of BiH 2016-2021, according to which the area covered by the Adriatic Sea Basin in the Federation of BiH is 8,782 km2. *Data on areas provided in the Plans were calculated with the help of software tools that were able to calculate the “basin area” more accurately.* [↑](#footnote-ref-4)
4. Waters bodies that appear/are formed in the Federation [↑](#footnote-ref-5)
5. (Study of hydro-morphological pressure and evaluation of its influence for water courses with more than 10 km2 of watershed area in the Sava River Basin in the Federation of BiH 2019); (Study of improvements of hydro-morphological characteristics of water courses with more than 10 km2 watershed area in the Sava River Basin in the Federation of BiH 2019); (Study of improvement of flow regime and establishment of ecologically acceptable flow on water courses with more than 10 km2 watershed area in the Sava River Basin in the Federation of BiH 2019) [↑](#footnote-ref-6)
6. Annex IV to the Management Plans – Evaluation of Hydro-Morphological Status [↑](#footnote-ref-7)
7. (Sava River Basin Agency 2021); (Adriatic Sea Watershed Agency 2021) [↑](#footnote-ref-8)
8. Report of FMAWMF on implementation of the GEF Project “Water Quality Protection” – WWTP Zivinice, adopted by Federation Government Conclusion number: 704/2018 of 24 May 2018. [↑](#footnote-ref-9)
9. Monitoring transposition and implementation of the EU environmental acquis”, Bosnia and Herzegovina; EPPA; ECRAN; 2022. [↑](#footnote-ref-10)
10. In the EAS FBiH document from 2017, transposition status of the Directive on the assessment and management of flood risks has been described “Transposed up to a certain measure”; however, in the period following the development of EAS FBiH, transposition of this Directive has improved significantly, so Table 6 shows the updated information on transposition status of this directive. [↑](#footnote-ref-11)
11. Calculated based on the total amount of municipal waste collected , % of coverage, and estimate number of population in 2020 of 2,168,602 according to information published on the website of the Institute for Statistics of the Federation of BiH [↑](#footnote-ref-12)
12. Consultant’s assessment, pertains to the amount of the waste not collected [↑](#footnote-ref-13)
13. Within the project “Environmental friendly management of persistent organic pollutants (POPs) in the industrial and hazardous waste management sectors“, funded by Sweden, and implemented by UNDP, 2020. [↑](#footnote-ref-14)
14. Value is prescribed for one hour mean values and must not be exceeded more than 24 times in a calendar year for SO2 [↑](#footnote-ref-15)
15. Values are prescribed for one-day average and must not be exceeded more than 3 times in a calendar year [↑](#footnote-ref-16)
16. Value is prescribed for one hour mean values and must not be exceeded more than 18 times in a calendar year for SO2 [↑](#footnote-ref-17)
17. Values are prescribed for one hour mean values, and must not be exceeded more than 35 times in a calendar year for PM10 [↑](#footnote-ref-18)
18. Limit value, in line with currently valid rulebook, is provided as a long term target expressed as a maximum daily 8-hour value [↑](#footnote-ref-19)
19. The co-operative programme for monitoring and evaluation of the long-range transmission of air pollutants in Europe (*European Monitoring and Evaluation Programme*‒ EMEP) [↑](#footnote-ref-20)
20. Ministry of Foreign Trade and Economic Relations of Bosnia and Herzegovina [↑](#footnote-ref-21)
21. The most critical environmental institutions in the Federation of BiH are: Federation Ministry of Environment and Tourism, Environmental Protection Fund of the Federation of Bosnia and Herzegovina, Federation Ministry of Agriculture, Water Management and Forestry, Adriatic Sea Watershed Agency, Sava River Basin Agency, Hydrometeorological Institute of the Federation of BiH, Federation Ministry of Health, Institute for Statistics of the Federation of BiH, Institute for Agropedology of the Federation of BiH, Institute for Public Health of the Federation of Bosnia and Herzegovina. [↑](#footnote-ref-22)
22. The Federation Ministry of Environment and Tourism has a total of 43 staff members (32 civil servants, 9 employees, and 2 advisers) of 93 staff envisaged in the applicable staffing plan. The three sectors responsible for the development, application and implementation of environmental legislation and policies employ:

    Environment sector ‒ 6 employees of 15 employees envisaged in the staffing plan (staffing level 40%)

    Sector for environmental permits, environmental impact assessments, register and clean technologies - 8 of 15 (staffing level 42%)

    Sector for waste management, implementation of plans and strategic projects - 8 of 13 (staffing level 62%).

    The Federation Ministry of Environment and Tourism is faced with an aging staff. 16 civil servants and employees are expected to meet the requirements for an old age pension in the period 2022-2029 (data sources: the Federation Ministry of Environment and Tourism).

    According to the report “Answers of Bosnia and Herzegovina to the questions from the Questionnaire of the European Commission - Chapter 27, the Water Sector in the Federation Ministry of Agriculture, Water Management and Forestry has 8 staff members (7 technical staff and 1 administrative employee), while the total number of employees in the staffing plan is 10.

    The Environmental Protection Fund of the Federation of BiH has 5 sectors, with 44 employees envisaged for the Environmental Protection Sector and only 15 were actually recruited.

    The Adriatic Sea Watershed Agency has only 24 employees, while the current staffing plan envisages a total of 44. The Sava River Basin Agency has only 75 employees, while the current staffing plan envisages a total of 102.

    The Hydrometeorological Institute of the Federation of BiH operates with 74 staff members, while the number of employees envisaged in the staffing plan is 118. Only 18 employees hold university degree while the staffing plan envisages 50 members of the staff with this level of education (source: Hydrometeorological Institute of the Federation of BiH). [↑](#footnote-ref-23)
23. The United Nations Framework Convention on Climate Change - UNFCCC, United Nations Convention on Biodiversity– UNCBD), and United Nations Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa - UNCCD [↑](#footnote-ref-24)
24. According to the list of accredited bodies for assessment of compliance (on 09.02.2021) of the Institute for Accreditation of BiH, out of 78 accredited testing laboratories in BiH, 5 6 laboratories are in the Federation of BiH. The responsibility of the ministries of the Federation of BiH is to create conditions for the issuance of decisions authorising the operation of accredited laboratories, however, accreditation is in the hands of the national institutions. [↑](#footnote-ref-25)
25. Adriatic Sea Watershed Agency and Sava River Basin Agency [↑](#footnote-ref-26)
26. A cantonal body is responsible for development planning in the Cantons, while pursuant to *the Decree on Triannual and Annual Planning of Work, Monitoring, and Reporting in the Federation of BiH*, a body of the city/municipality has the responsibility for development planning and development management at the level of local government units. [↑](#footnote-ref-27)
27. Note: Placement of secondary row materials should be realised through the extended producer responsibility scheme [↑](#footnote-ref-28)