

# **Implementation of Environmental Performance Review recommendations: developing a roadmap and establishing mechanisms for cooperation and regular monitoring**

## **Environmental performance reviews**

An Environmental Performance Review (EPR) is an external independent assessment of the progress a country has made in reconciling its environmental and economic targets and in meeting its international environmental commitments. With the overall objective of achieving a high level of environmental protection in the ECE region, the UNECE EPR Programme: assists countries in improving their environmental management and performance; promotes environmental sustainability; promotes information exchange among countries on policies and experiences; helps integrating environmental policies into economic sectors; promotes greater accountability to the public; contributes to the achievement and monitoring of the Sustainable Development Goals (SDGs); promotes coherence of environmental and sustainable development policies; strengthens cooperation with the international community; and assists countries in the implementation of EPR recommendations.

Third EPR for Republic of North Macedonia was developed in 2019 and equips the Government of North Macedonia and interested stakeholders in the country with recommendations to inspire future work on the achievement of the goals and targets of the 2030 Agenda for Sustainable Development and commitments under the international environmental agreements. North Macedonia established its national institutional framework to drive sustainable development in the country nearly 10 years ago and more recently entrusted it to guide the achievement of Sustainable Development Goals. Revitalising and upgrading this framework and enhancing the ownership and awareness of civil servants and the public at large about the Sustainable Development Goals, would enable the country to meet the demands of the 2030 Agenda.

## **Background**

The process of implementing the third EPR recommendations in Republic of North Macedonia began after the EPR launch, however the government responded to draft recommendations. EPR recommendations target a wide range of governmental institutions and involve various other stakeholders. Many of the recommendations are implemented within one to seven years. Generally, recommendations comprising large areas of expertise or addressing more than one actor require broader coordination, are more resource intensive and take longer to implement.

It is expected that the implementation of EPR recommendations will be assessed by the UNECE team of international experts during the process of conducting the next EPR of a country. At the same time, the country under review will remain dedicated to the self-assessment of the implementation of these recommendations (following the preparation of the roadmap).

According to the current practice, in between two EPRs, Republic of North Macedonia will assess the implementation of the EPR recommendations and present the overall implementation progress under the EPR agenda item during regular sessions of the UNECE Committee on Environmental Policy.

The country also appreciates projects and regional, sub-regional and national workshops organized on EPR related topics (for example, on transport and environment, energy and environment, waste and chemicals management and SDGs) that provide an opportunity for the participating countries to self-assess progress in implementation of their EPR recommendations related to a topic.

Establishing a process of coordinated implementation and regular self-assessment, supported by self-monitoring, involving the target governmental bodies and all stakeholders identified in the

recommendations, would help the reviewed countries to implement the EPR recommendations in a timely manner and before the next EPR is conducted.

## **Developing a roadmap for the 3<sup>rd</sup> EPR recommendation for Republic of North Macedonia**

The used template for preparation of a roadmap is adapted to the country needs, depending on the country's internal arrangements and governmental procedures. The roadmap is developed for each third EPR recommendation: the identified necessary measures and a series of detailed actions planned to implement the recommendation; the period of execution for each action; the assigned lead authority driving the coordinated implementation of the implementation measure and organizing the involvement of all other stakeholders; the estimated financial resources required for the implementation and the identified sources of financial resources; and the evidence of implementation for verification purposes. For a number of recommendations, there are comments provided to state the status, possible constraints or additional explanations.

It is highly appreciated that UNECE has provided an expert to prepare the roadmap in cooperation with the Ministry of Environment and Physical Planning and other relevant institutions, in accordance with the recommendations provided in the 3<sup>rd</sup> EPR.

### **COVID 19 and EPR process**

The Republic of North Macedonia, within its limited institutional health, economic and financial resources, successfully copes with the health crisis and its consequences. The pandemic has shown that nothing can be above the public interest and the protection of the life of every individual. Whether the influence of the community, habits or social customs move us away from that path, we can only bring the situation under control if the whole society acts responsibly.

During the epidemic, the state tried to adjust its social and economic life to reduce as much as possible the negative consequences to public health and to preserve the possibility of accelerated recovery. The measures taken to control the spread of the virus and the slowdown of economic activities have significant effects on the environment and climate, but the pandemic situation significantly improves air quality in cities, reduces GHGs emission, lessens water pollution and noise, and reduces the pressure on the tourist destinations, which may assist with the restoration of the ecological system. In addition, there are also some negative consequences of COVID-19, such as increase of medical waste, haphazard use and disposal of disinfectants, mask, and gloves; and burden of untreated wastes continuously endangering the environment.

Nevertheless, in new and difficult circumstances, with reduced capacity, measures to improve the environment at the central and local levels continued to be implemented.

During the preparation of the roadmap, i.e. during the provision of information for each of the recommendations, the effects of the epidemic were not predicted or emphasized, for the simple reason that in RNM there is no detailed analysis of the impact of COVID 19 on the implementation of measures and activities for protection of environment.

## **ABBREVIATIONS**

|       |   |
|-------|---|
| AA    | Agency of Administration                      |
| CIA   | Council of Inspection Authorities             |
| MOEPP | Ministry of Environment and Physical Planning |
| MF    | Ministry of Finance                           |
| ME    | Ministry of Economy                           |
| MOJ   | Ministry of Justice                           |
| MLSP  | Ministry of Local Self Government             |

|  |   |
|--|---|
| MES                                    | Ministry of Education and Science   |
| MTC                                    | Ministry of Transport and Communications                                  |
| MEA                                    | Multilateral environmental agreement                                      |
| MISA                                   | Ministry of Information Society and Administration                        |
| MPS                                    | Ministry of Political System and Inter-Community Relations                |
| DPM EA                                 | Cabinet of the Deputy Prime Minister responsible for Economic Affairs and |
| Coordination with the Economic Sectors |   |
| Gov.                                   | Government of the Republic of North Macedonia                             |
| Gen.Sec.                               | General Secretariat of the Government                                     |
| NCSD                                   | National Council for Sustainable Development                              |
| SL                                     | Secretariat of Legislation  |
| SEI                                    | State Environmental Inspectorate  |
| FITR                                   | Fund for Innovation and Technology Development                            |
| TF                                     | Task Force  |
| DPM EA                                 | Deputy Prime Minister economic affairs                                    |
| SSO                                    | State Statistical Office  |
| PM                                     | Prime Minister  |
| LoE                                    | Law on environment  |
| IFI                                    | International Financial Institution                                       |
| LSGUs                                  | Local Self Government Units   |
| NEIS                                   | National Environmental Information Centre                                 |
| IPH                                    | Institute of Public Health  |
| SEA                                    | Secretariat for European Affairs  |
| DRR                                    | Disaster Risk Reduction   |
| HMI                                    | Hydro meteorological Institute  |
| UWWTD                                  | Urban Waste Water Treatment Directive                                     |
| DSIP                                   | Directive Specific Implementation Plan                                    |
| ZELS                                   | Association of the Units of Local Self-Government                         |
| CCM                                    | Centre for Crisis Management  |

## Establishing mechanisms for cooperation and regular monitoring

The following template shall be used for self-assessment process that will follow starting from the year 2021. The MOEPP remains dedicated to upgrade and improve the roadmap continuously.

GENERAL REMARK: In the following text and tables status (until December 2020) of the recommendations set by the EPR for the Republic of North Macedonia developed in 2019 have been elaborated. As a general remark, it can be concluded that some of the proposed recommendations have been started or are in progress with their implementation (or have been implemented), but for some of them steps on further implementation have been elaborated.

Template for the self-assessment of the status of implementing each point of the recommendation:

| Date | Not implemented | Partially implemented | In progress | Implemented | No longer relevant | Evidence of implementation / comments |
|------|-----------------|-----------------------|-------------|-------------|--------------------|---------------------------------------|
|      |                 |                       |             |             |                    |                                       |

Table

Headers and explanation

| Implementation measures                                      | Detailed actions                         | Period of execution for each action           | Lead authority          | Other institutions & stakeholders            | Cost assessment                                     | Financial sources | Means of verification                                | Comments   |
|--|--|---|-------------------------|--|---|-------------------|--|--|
| [Identify measures required to implement the recommendation] | [Plan concrete actions for each measure] | [Establish concrete deadline for each action] | [Assign lead authority] | [Assign other institutions and stakeholders] | [Provide a cost assessment per action (NCU, \$, €)] |                   | [For example, law, programme, Governmental Decision] | [remarks regarding the implementation of measures and actions] |

## Chapter 1

### **LEGAL, POLICY AND INSTITUTIONAL FRAMEWORK**

**Sustainable Development Goals implementation and follow-up** - The country formally has an institutional framework for coordination of the implementation and monitoring of the Sustainable Development Goals, centred on the National Council on Sustainable Development supported by the Cabinet of the Deputy Prime Minister responsible for Economic Affairs. However, this institutional framework is not active. The National Council last convened in 2015. A Rapid Gap Assessment was prepared in 2016 through a multi-stakeholder consultation process but the document was not adopted and is not publicly available. As at September 2018, the Cabinet of the Deputy Prime Minister responsible for Economic Affairs and Coordination with the Economic Sectors intends to update the Rapid Gap Assessment, strengthen the National Council and establish a working group for each Sustainable Development Goal. As at September 2018, the Sustainable Development Goals are not mentioned in any adopted strategic document at national level. No assessment of the availability of Sustainable Development Goals global indicators was completed. Awareness of the Sustainable Development Goals among governmental officials is insufficient.

#### Recommendation 1.1:

| Implementation measures   | Detailed actions                  | Period of execution for each action | Lead authority | Other institutions & stakeholders                          | Cost assessment | Financial sources                        | Means of verification                        | Comments                               |
|---|-----------------------------------|-------------------------------------|----------------|--|-----------------|--|--|--|
| (a) The Government should revitalize the National Council for Sustainable Development | Revise the membership             | Feb 2021                            | DPM EA;        | Ministries; Academia; NGOs; Civil society; Private sector; | None            |  | Gov. Decision on the composition of the NCSD |  |
|   | Establish or assign a secretariat | Feb 2021                            | MOEPP;         |  | €7.5 k          | Gov./ MOEPP budget                       | State budget                                 | at the level of 1-person annual salary |
|   | Hold 1 <sup>st</sup> meeting      | Mar 2021                            | DPM EA;        | Ministries; Academia; NGOs; Civil society; Private sector; | None            | Budget of the organiser/ DPM EA or MOEPP | Agenda and Minutes                           |  |

| Implementation measures  | Detailed actions  | Period of execution for each action | Lead authority | Other institutions & stakeholders                           | Cost assessment | Financial sources  | Means of verification                               | Comments  |
|--|---|-------------------------------------|----------------|---|-----------------|--------------------|---|---|
|  | Establish a meeting schedule  | Mar 2021                            | DPM EA;        | MOEPP and other relevant institutions represented in the NC | None            |                    | Meeting Plan published on the website of the DPM EA |   |
|  | Establish a reporting procedure   | Apr 2021                            | DPM EA;        | MOEPP and other relevant institutions represented in the NC | None            |                    | Reporting procedure endorsed by the DPM EA          |   |
|  | Hold 2 <sup>nd</sup> meeting  | Oct 2021                            | DPM EA;        | Ministries; Academia; NGOs; Civil society; Private sector;  | None            |                    | Agenda and Minutes                                  |   |
| (b) Proceed with setting up aspirational and measurable national targets through a participatory and transparent process | Setup a Task Force to review and update the Rapid Gap Assessment of RNM                           | Mar 2021                            | MOEPP          | Ministries; Academia; NGOs; Civil society; Private sector;  | None            |                    | Minister's decision                                 |   |
|  | Review and update the Rapid Gap Assessment  | May 2021                            | MOEPP          | Ministries; Academia; NGOs; Civil society; Private sector;  | Up to €5 k      | Gov./ MOEPP budget | RGA endorsed by the Gov.                            | For efficiency, the Task Force members should be rewarded |
|  | Prepare a voluntary national review for the high-level political forum on sustainable development | Jun 2021                            | DPM EA;        | Ministries; Academia; NGOs; Civil society; Private sector;  | None            |                    | Review documents                                    | Each institution should cover their own costs             |

| Implementation measures   | Detailed actions   | Period of execution for each action | Lead authority | Other institutions & stakeholders                          | Cost assessment | Financial sources   | Means of verification                        | Comments   |
|---|--|-------------------------------------|----------------|--|-----------------|---------------------|--|--|
|   | Hold the high-level political forum of SD  | Sep 2021                            | DPM EA;        | MOEPP; Gen.Sec.:   | €16 k           | Gov. budget; Donors | Report from the event                        |  |
| (c) Ensure the production of indicators to measure progress towards achievement of the Sustainable Development Goals                            | Setup a Task Force to assess the availability of SDG global indicators and develop national SDG indicators | Feb 2021                            | MOEPP          | Ministries; Academia; NGOs; Civil society; Private sector; | None            |                     | Minister's decision                          |  |
|   | Develop National SDG Indicators  | Sep 2021                            | MOEPP          | Ministries; Academia; NGOs; Civil society; Private sector; | Up to €5 k      | Gov./ MOEPP budget  | National SDG Indicators endorsed by the Gov. | For efficiency, the Task Force members should be rewarded                            |
|   | Include National SDG Indicators in the biannual Environment Indicators (published by MOEPP)                | Jun 2022                            | MOEPP          |  | None            |                     | Environment Indicators 2022 published        | Budget included in the Environment Indicators publication                            |
|   | Prepare and publish the "Sustainable Development"  | Mar 2022                            | SSO            | MOEPP  | €32 k           | SSO budget; Donors  | Publication                                  | It is recommended that SSO establish a regular periodical update of this publication |
| (d) Ensure the preparation of reports presenting the results of monitoring of progress towards achievement of the Sustainable Development Goals | Setup a Task Force for preparation of the Report   | Sep 2021                            | DPM EA         | Ministries; Academia; NGOs; Civil society; Private sector; | None            |                     | DPM EA's decision                            |  |
|   | Formulate a Monitoring Plan to track progress towards achievement of the SDG                               | Dec 2021                            | DPM EA         | Ministries; Academia; NGOs; Civil society; Private sector; | Up to €5 k      | Gov budget          | Monitoring Plan endorsed by the Gov.         | For efficiency, the Task Force members should be rewarded                            |

| Implementation measures   | Detailed actions   | Period of execution for each action | Lead authority | Other institutions & stakeholders                    | Cost assessment | Financial sources | Means of verification                      | Comments  |
|---|--|-------------------------------------|----------------|--|-----------------|-------------------|--|---|
|   | Prepare and publish periodical Monitoring Reports of the progress towards achievement of the SDG   | Jun 2022                            | DPM<br>EA      |  | €8.5 k          | Gov budget;       | Monitoring Reports reviewed by the Gov.    | It is recommended that Monitoring reports are prepared annually and published by mid-year |
| (e) Ensure that the Sustainable Development Goals are integrated into future planning documents         | Introduce a provision in the Environment Law that will require all planning documents to ask for a MOEPP consent/opinion on SDG compliancy | Dec 2021                            | DPM<br>EA      | MOEPP  | None            |                   |  | Instead, the Gov. may issue a Decision  |
| (f) Raise awareness of the Sustainable Development Goals among central and local government authorities | Setup a Task Force for public awareness raise  | Mar 2021                            | DPM<br>EA/     | MOEPP and other relevant Ministries; Academia; NGOs; | None            |                   | DPM EA/<br>Minister's decision             |   |
|   | Create a Plan for public awareness raise campaign  | Jun 2021                            | DPM<br>EA      | MOEPP and other relevant Ministries; NGOs            | Up to €5 k      | Gov.              | Plan endorsed by the Gov.                  | For efficiency, the Task Force members should be rewarded                                 |
|   | Implement the Plan   | Dec 2021                            | DPM<br>EA      | All relevant Governmental institutions               | €32 k           | Gov.              | Implementation Report endorsed by the Gov. | The implementation could be outsourced  |

**Strategic environmental assessment** - The number of national planning documents undergoing SEA has increased since 2013–2014. However, some national planning documents are prepared by sectoral ministries and adopted without an SEA procedure, despite the legal requirement to conduct one. No activities to raise awareness of the SEA requirements among sectoral ministries are conducted. There are no statistics on planning documents adopted at the local level without an SEA. Though the number of SEA dossiers received by the Ministry of Environment and Physical Planning from LSGUs has decreased over the period 2011–2017, it remains high, which suggests that screening does not work well. The criteria for screening are defined in subsidiary legislation but are not used in practice. The quality of SEA reports also remains an issue. Their poor quality is partially explained by insufficient involvement of sectoral departments of the Ministry of Environment and Physical Planning in the evaluation by the Ministry of SEA reports. There are

problems with the implementation of the public participation requirements in the SEA procedure. Although the Law on Environment includes a requirement to monitor the effects of the implementation of planning documents, no monitoring and follow-up have ever been done in practice.

No regular training and capacity-building on SEA at the national and local levels takes place. Nevertheless, proper implementation of SEA is crucial for achievement by the country of target 17.14 (Enhance policy coherence for sustainable development) of the 2030 Agenda for Sustainable Development.

### Recommendation 1.2:

| Implementation measures   | Detailed actions   | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment | Financial sources | Means of verification       | Comments   |
|---|--|-------------------------------------|----------------|-----------------------------------|-----------------|-------------------|-----------------------------|--|
| (a) The Government should ensure that all documents subject to strategic environmental assessment (SEA) undergo an SEA  | Setup a Task Force to review and propose, as necessary the amendment of the relevant legislation | Mar 2021                            | MOEPP          | Ministries;                       | None            |                   | Minister's decision         |  |
|   | Amend (as necessary) the relevant legislation  | Dec 2021                            | MOEPP          | Ministries                        | None            |                   | Official Journal of the RNM |  |
|   | Establish a Check-up mechanism with MOEPP  | Mar 2021                            | MOEPP          | Relevant institutions             | None            |                   | SOP endorsed by the MOEPP   | In essence the MOEPP should be the last line of defence, where every document should be check if it observed the SEA procedural requirements |
| (b) Authorities proposing planning documents observe all stages and requirements of the SEA process, including monitoring, follow-up and public participation | See the upper (Check-up mechanism)   |                                     |                |                                   |                 |                   |                             |  |

| Implementation measures   | Detailed actions   | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment | Financial sources | Means of verification                                  | Comments   |
|---|--|-------------------------------------|----------------|-----------------------------------|-----------------|-------------------|--|--|
| (c) Improvement of screening procedures by raising awareness and encouraging the use of the criteria to determine which planning documents are subject to SEA | Prepare and publish a brochure on the SEA procedures   | Jun 2021                            | MOEPP          | NGOs                              | Up to €1 k      | MOEPP budget      | Brochure is printed and published on the MOEPP website | The brochure should be prepared in both Macedonian and Albanian languages  |
|   | Develop and deliver a training program for SEA procedures                                      | Jun 2021                            | MOEPP          | Academia NGOs                     | Up to €15 k     | MOEPP budget      | Report on training delivery                            | Target group is members of the respective institutions   |
|   | Review the screening procedure and SEA criteria  | Sep 2021                            | MOEPP          | Ministries                        | None            |                   |  |  |
| (d) Improvement of the quality of SEA reports, in particular through securing sufficient expertise for the evaluation of environmental effects                | Develop and deliver a training program for SEA   | Dec 2021                            | MOEPP          | Academia NGOs Private sector      | Up to €5 k      | MOEPP budget      | Report on training delivery                            | Target group is individual consultants as well as experts associated with the respective NGOs or private companies.<br>The training may be offered stand-alone free of charge or as part of the process of obtaining licence for SEA evaluator |
|   | Create and implement a public campaign for attracting experts to be licenced as SEA evaluators | Sep 2021                            | MOEPP          | Academia NGOs Private sector      | Up to €5 k      | MOEPP budget      | Report on the implementation of the campaign           | The campaign should utilise the electronic media and social networks   |
| (e) Training and capacity-building on SEA   | See actions under (b) and (c) above  |                                     |                |                                   |                 |                   |  |  |

**Transboundary strategic environmental assessment** - By ratifying the Protocol on Strategic Environmental Assessment in 2013, North Macedonia demonstrated its commitment to the fully fledged and efficient use of the SEA instrument, in line with the best international practice. This implies proper conduct of transboundary consultations as part of the SEA procedure. However, the country's practical experience with transboundary consultations is very limited.

### Recommendation 1.3:

| Implementation measures  | Detailed actions  | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment                                      | Financial sources     | Means of verification   | Comments  |
|--|---|-------------------------------------|----------------|-----------------------------------|--|-----------------------|---|---|
| (a) The MOEPP should solicit the support of international organizations and donors in organizing a pilot transboundary SEA   | Strengthening the capacities of MOEPP for implementation of transboundary SEA                                 | Sep 2021                            | MOEPP          |                                   | €7.5 k   | MOEPP budget          |   |   |
|  | Establish required logistical infrastructure with both international organizations and neighbouring countries | Dec 2021                            | MOEPP          | Ministries                        | Possible costs for organising the trips and meetings | MOEPP budget Donors   | MoU signed with IOs or neighbouring country(ies)                            |   |
| (b) Establish bilateral practical cooperation with neighbouring countries on SEA issues, such as establishing working groups | Improve MoU with neighbouring countries on SEA issues   | Jun 2021                            | MOEPP          | MFA SEI                           | None   |                       | Draft MoU submitted to the respective authorities in neighbouring countries | It is important to include from the very beginning the relevant staff of the MFA/SEI as well as MKD Embassies in the neighbouring countries |
|  | Sign an improved/updated MoU with neighbouring countries on SEA issues  | Dec 2021                            | MOEPP          | MFA SEI                           | Possible costs for organising the trips and events   | MOEPP/ MFA/SEI budget | MoU signed with neighbouring country(ies)                                   | This should setup the general framework for cooperation on SEA issues as well as provide for establishing the WGs                           |
|  | Establish standing Working groups with the neighbouring countries on SEA issues                               | Dec 2021                            | MOEPP          | Ministries MFA SEI                | Possible costs for organising the trips and events   | MOEPP/ MFA/SEI budget | Exchange of letters with the neighbouring countries                         |   |

**Approximation process** - The institutional capacities for the approximation of environmental legislation are rather low. Although, formally, the Department for the European Union of the Ministry of Environment and Physical Planning was enlarged in 2011 with an increase in the number of staff, when the two IPA-focused Units were brought to this Department, the number of people who work on EU integration issues and harmonization of legislation actually decreased. The staffing situation is clearly not adequate vis-à-vis the tasks to be accomplished. As at September 2018, the Ministry had not started preparation for the screening process, tentatively expected to commence in mid-2019.

## Recommendation 1.4:

| Implementation measures   | Detailed actions   | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment               | Financial sources | Means of verification   | Comments  |
|---|--|-------------------------------------|----------------|-----------------------------------|-------------------------------|-------------------|---|---|
| (a) The MOEPP should reorganize, as necessary, and strengthen the relevant main departments, including the Department for the European Union, in the Ministry of Environment and Physical Planning, with required capacity for the European Union approximation process | Prepare a functional analysis of the Ministry  | Jun 2021                            | MOEPP          | MISA                              | None                          |                   | Report on functional analysis                                 | If MOEPP outsource the preparation of the FA possible cost should be 5-10k MKD  |
|   | Amend the Rulebook on systematization of working posts   | Sep 2021                            | MOEPP          | MISA                              | None                          |                   | MISA consent  |   |
|   | Prepare an Annual plan for employment  | Sep 2021                            | MOEPP          | MISA<br>MF<br>MPS                 | None                          |                   | MISA/MF/MPS consent/ decision on accepting the SEA Report     |   |
|   | Recruit new staff  | Jun 2021                            | MOEPP          | AA<br>MISA<br>MF                  | cca. €6.5–8.5 k /year /person | MOEPP Budget      | Decision(s) for new employees                                 | In accordance with the functional analysis, new staff of MOEPP for EU approximation process should be employed each year. |
| (b) Ensure careful planning and allocation of tasks in the process of approximation to the European Union acquis  | Drafting a Strategic Plan and Annual Working Plan  | Sep 2021                            | MOEPP          |                                   | None                          |                   | SP and AWP endorsed by the Minister                           | This is rather internal managerial issue and apart of good planning it requires good and thorough implementation          |
| (c) Start preparation for the screening process to optimize tasks for policy planning and for implementation of relevant primary and secondary legislation  | Setup a Task Force(s) for screening process  | Feb 2021                            | MOEPP          | SEI                               | None                          |                   | Minister's decision   | This TF should work continuously;   |
|   | Develop and deliver relevant training program for strengthening the capacities of the TF members | Apr 2021                            | MOEPP          | SEI<br>Academia<br>NGOs           | Up to €5 k                    | MOEPP budget      | Report on training delivery                                   | Target group is TF members. The training may include the possibilities offered in the framework of TAIEX                  |
|   | Improve intra-ministry and inter-ministerial coordination  | Jun 2021                            | MOEPP          | Ministries                        | None                          |                   | Established communication channels with respective ministries | This is of utmost importance for smooth policy planning and for implementation of legislation                             |

**Mining and protection of soil** - The mining sector has been actively developed over the past 10 years but no study on the environmental impacts of the mining sector has been done. No policy document addresses environmental impacts from mining, despite high levels of public concern about the environmental impacts of new mines.

The country has no practical experience in remediation of land that is degraded by mining. The 2012 Law on Mineral Resources envisages the tool of a financial guarantee sufficient to cover the cost of the elimination of the harmful effects on the environment. However, no solution has yet been found on the type and amount of financial guarantee and no subsidiary legislation has been developed on this issue.

There is no policy document that explicitly targets the historic pollution hotspots from mining and industry.

A draft law on soil protection was prepared in 2014 but it was not adopted, largely due to its financial implications.

### Recommendation 1.5:

| Implementation measures   | Detailed actions                                   | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment | Financial sources | Means of verification                    | Comments   |
|---|--|-------------------------------------|----------------|-----------------------------------|-----------------|-------------------|--|--|
| (a) The ME and MOEPP should undertake a study on the environmental impacts of the mining sector | Develop ToR for preparation of the Study           | Jun 2021                            | ME             | MOEPP<br>DPM EA                   | None            |                   | ToR endorsed by the respective ministers | Preparation of the ToR may consult relevant academic institutions  |
|   | Contract relevant institution/team of experts      | Sep 2021                            | ME             | MOEPP<br>DPM EA                   | > €16 k         | ME Budget         | Contract signed                          | The procurement should follow respective national legislation requirements                                       |
|   | Endorsement and dissemination of the Study results | Dec 2021                            | ME             | MOEPP<br>DPM EA                   | None            |                   | Study endorsed by the ME / Gov.          | It is important to immediately implement the results of the Study, particularly if they require legal amendments |
| (b) Develop a policy document to address environmental impacts from mining                      | Develop ToR for preparation of the policy document | Jun 2021                            | MOEPP          | ME<br>DPM EA                      | None            |                   | ToR endorsed by the respective ministers | Preparation of the ToR may consult relevant academic institutions  |
|   | Contract relevant institution/team of experts      | Sep 2021                            | MOEPP          | ME<br>DPM EA                      | >€16 k          | MOEPP Budget      | Contract signed                          | The procurement should follow respective national legislation requirements                                       |

| Implementation measures  | Detailed actions   | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment  | Financial sources  | Means of verification  | Comments   |
|--|--|-------------------------------------|----------------|-----------------------------------|--|--|--|--|
|  | Endorsement and dissemination of the policy document   | Dec 2021                            | MOEPP          | ME<br>DPM EA                      | None   |  | Policy document endorsed by the MOEPP / Gov.                 | It is important to immediately translate the policy document into specific actions, including legal amendments   |
| (c) Seek support from other countries and international organizations to identify good practices on rehabilitation and remediation of land degraded by mining activities | Develop ToR for technical assistance project to be funded by IPA (twining) or bilateral donors or TOR for concession or PPP. | Jun 2021                            | MOEPP          | ME<br>DPM EA                      | None   |  | ToR endorsed by the respective ministers                     | Preparation of the ToR may consult relevant academic institutions as well EU or bilateral donors   |
|  | Implement the project  | Dec 2022                            | MOEPP          | ME<br>DPM EA                      | To be further estimated in accordance with specifics of the projects planned | IPA III<br>Bilateral donors<br>Financing by Legal entities | Contract signed and project implemented                      | The duration and cost of this activity will substantially depend on the donor rules and regulations as well as national regulations  |
| (d) Develop subsidiary legislation on financial guarantees to cover the costs of rehabilitation and remediation  | Setup a Task Force for drafting subsidiary legislation   | Jun 2021                            | MOEPP          | ME<br>DPM EA                      | None   |  | Minister's decision  | Development of the legislation may be delayed until activities (a) and (b) are completed; However, currently there are ongoing amendments of the Law on environment for introducing terms contaminated site and rehabilitation plan. |
|  | Draft the subsidiary legislation   | Dec 2021                            | MOEPP          | ME<br>DPM EA<br>SL                | None   |  | Draft legislation endorsed by the Gov. /respective ministers | The drafting and endorsement of the legislation should follow respective national requirements   |
| (e) Develop a policy document to address historic pollution from mining and industry   | Develop ToR for preparation of a new policy document   | Jun 2021                            | MOEPP          | ME<br>DPM EA                      | None   |  | ToR endorsed by the respective ministers                     | Preparation of the ToR may consult relevant academic institutions  |

| Implementation measures   | Detailed actions  | Period of execution for each action | Lead authority | Other institutions & stakeholders  | Cost assessment | Financial sources | Means of verification  | Comments   |
|---|---|-------------------------------------|----------------|--|-----------------|-------------------|--|--|
|   | Contract relevant institution/team of experts                                 | Sep 2021                            | MOEPP          | ME<br>DPM EA<br>Or other relevant governmental institutions if necessary | >€16 k          | MOEPP<br>Budget   | Contract signed  | The procurement should follow respective national legislation requirements   |
|   | Endorsement and dissemination of the policy document                          | Dec 2021                            | MOEPP          | ME<br>DPM EA   | None            |                   | Policy document endorsed by the MOEPP / Gov.                         | It is important to immediately translate the policy document into specific actions, including legal amendments                               |
| (f) Prepare the law on soil protection and promote its adoption | Setup a Task Force for review and amend the 2014 draft Law on soil protection | Sep 2021                            | MOEPP          | MAFWE<br>DPM EA  | None            |                   | Minister's decision  |  |
|   | Draft the law   | Apr 2021                            | MOEPP          | MAFWE<br>DPM EA<br>SL  | None            |                   | Draft legislation endorsed by the Gov. and adopted by the Parliament | The drafting and endorsement of the legislation should follow respective national requirements, particularly in terms of public consultation |

**Greening the Ministry of Environment and Physical Planning** - In many countries, national environmental authorities take the lead and show opportunities for functioning in an environmentally friendly way to other governmental bodies and non-governmental stakeholders. In North Macedonia, the Ministry of Environment and Physical Planning does not have a policy to lead environmental protection efforts by its own example. No efforts are applied to reduce the use of paper and the generation of waste in the Ministry's building or be energy and water efficient and carbon neutral. Green procurement is not practised for the purchase of goods and services in the framework of projects whose implementation is coordinated by the Ministry.

## Recommendation 1.6:

| Implementation measures   | Detailed actions  | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment | Financial sources | Means of verification                           | Comments   |
|---|---|-------------------------------------|----------------|-----------------------------------|-----------------|-------------------|---|--|
| (a) The MOEPP should develop and implement policies for greening the activities of the Ministry, in particular with regard to water and energy efficiency, waste management and carbon neutrality | Setup a Task Force(s) for development of the green policies in MOEPP (Green Deal)                                     | Mar 2021                            | MOEPP          |                                   | None            |                   | Minister's decision                             | MOEPP may choose to have single TF that will develop all sectoral policies or multiple TF for each area  |
|   | Endorsement and dissemination of the policy documents   | Dec 2021                            | MOEPP          |                                   | None            |                   | Policies endorsed by the Minister               | It is important to immediately implement the green policies  |
|   | Establishing monitoring and evaluation mechanism to follow-up the implementation of the newly endorsed policies       | Dec 2021                            | MOEPP          |                                   | None            |                   | Monitoring and evaluation reports               | It is important to follow-up the implementation of the new policies by monitoring them and reporting on regular basis (ex. Every six months or annually) |
| (b) Introduce green criteria for public procurement for projects under the umbrella of the Ministry   | Setup a Task Force(s) for development of the green criteria   | Mar 2021                            | MOEPP          |                                   | None            |                   | Minister's decision                             | The TF is encouraged to closely liaise and cooperate with the TF under activity (a)  |
|   | Endorsement and dissemination of the green criteria   | Dec 2021                            | MOEPP          |                                   | None            |                   | Criteria endorsed by the Minister               |  |
|   | Establishing monitoring and evaluation mechanism to follow-up the implementation of the newly endorsed green criteria | Dec 2021                            | MOEPP          |                                   | None            |                   | Monitoring and evaluation reports               | It is important to follow-up the implementation of the new criteria by monitoring and reporting on their implementation on regular annual basis          |
| (c) Promote the greening of activities of other governmental institutions   | Prepare and publish a brochure on the greening activities of MOEPP  | Mar 2022                            | MOEPP          |                                   | <€1.5 k         | MOEPP budget      | Brochure is published only on the MOEPP website | The brochure should be prepared in both Macedonian and Albanian languages  |
|   | Organize a promotional event (workshop) on the MOEPP's greening activity  | Jun 2022                            | MOEPP          | Media                             | €8.5 k          | MOEPP budget      | Report on the event<br>News articles            | Target group is members of the respective governmental institutions  |

**Environment-related responsibilities at local level** - Municipalities face significant difficulties with the implementation of their environment-related competences. They interact with the Ministry of Environment and Physical Planning, but the provision of guidance and assistance is at an insufficient level. The Ministry does not conduct regular consultations and meetings with LSGUs on environmental policy issues. Although some training is provided by the Ministry of Local Self-Government and ZELS, no regular programmes exist for training LSGUs on environmental issues. Coordination between the Ministry of Environment and Physical Planning and the Ministry of Local Self-Government in assisting the LSGUs to implement their environment-related competences is insufficient.

The Department for Coordination of Work of the LSGUs and Supervision Work in the Ministry of Environment and Physical Planning has significant responsibilities on waste permitting. Only two staff (of seven) in this Department work on the supervision and coordination of LSGUs' activities. Waste permitting is consuming too much time and effort and does not allow the Department to focus on its core task – supervision and coordination.

### Recommendation 1.7:

| Implementation measures   | Detailed actions | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment | Financial sources | Means of verification | Comments   |
|---|------------------|-------------------------------------|----------------|-----------------------------------|-----------------|-------------------|-----------------------|--|
| The MOEPP should intensify efforts to assist municipalities in the implementation of their environment-related competences, including by:<br>(a) Enabling all seven staff in the Department for Coordination of Work of the Local Self-Government Units and Supervision Work to provide support and guidance to Local Self-Government Units and transferring the waste permitting responsibilities to the |                  |                                     |                |                                   |                 |                   |                       | This measure will be implemented, and results achieved following the activities described under recommendation 1.4.(a) |

| Implementation measures  | Detailed actions   | Period of execution for each action | Lead authority | Other institutions & stakeholders   | Cost assessment                            | Financial sources         | Means of verification  | Comments   |
|--|--|-------------------------------------|----------------|-------------------------------------|--|---------------------------|--|--|
| Department for Waste Management in the Administration for the Environment, while strengthening the capacity of the Department for Waste Management |  |                                     |                |                                     |  |                           |  |  |
| (b) Providing training to municipalities on environmental issues   | Setup a Task Force for providing training to municipalities  | Mar 2021                            | MOEPP          | MLSG<br>ZELS<br>Environment<br>NGOs | None                                       |                           | Minister's decision  | When implementing this activity, it should be born in mind that a new Governmental Programme for sustainable local development and decentralisation 2021-2026 is under development                                 |
|  | Develop comprehensive training program for strengthening the capacities of the municipal staff on environmental issues   | Sep 2021                            | MOEPP          | MLSG<br>ZELS<br>Environment<br>NGOs | Up to €5 k                                 | MOEPP budget              | Training Program endorsed by the Minister                            | For efficiency, the Task Force members should be rewarded  |
|  | Contract relevant NGO/training institution/team of experts to develop and deliver training curricula and presentations, following the training program developed above | Dec 2021                            | MOEPP          |                                     | €50 k                                      | MOEPP<br>Budget<br>Donors | Contract signed<br>Training curricula endorsed<br>Training delivered | The procurement should follow respective national legislation requirements. The training should involve minimum 3-5 municipal staff responsible for various environmental issues, including inspection supervision |
| (c) Establishing, together with the Ministry of Local Self-Government, Ministry of Economy, Ministry of Transport and                              | Establish standing Working group or strengthen the inter-sectoral cooperation  | Jun 2021                            | MOEPP          | MLSG<br>ME<br>MTC<br>ZELS           | Possible costs for organising the meetings | Ministries' budget        | Minister's decision  | The WG should adopt Rules of procedure, establish a schedule of meetings, carry minutes of their meeting and regularly report to their superiors   |

| Implementation measures  | Detailed actions | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment | Financial sources | Means of verification | Comments |
|--|------------------|-------------------------------------|----------------|-----------------------------------|-----------------|-------------------|-----------------------|----------|
| Communications and Association of Local Self-Government Units (ZELS), a working group on land and the environment for matters related to budget planning for several issues in waste, water and air protection |                  |                                     |                |                                   |                 |                   |                       |          |

**Training of staff** - A system for regular training of staff of the Ministry of Environment and Physical Planning is in place but it does not function properly. An annual training programme outlines the needs for general and specialized training. However, the programme is poorly financed and no resources for specialized training are provided. Specialized training courses on environmental issues are entirely project based. There is no system of training and professional development on environmental issues for staff in sectoral ministries.

### Recommendation 1.8:

| Implementation measures  | Detailed actions | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment | Financial sources | Means of verification | Comments  |
|--|------------------|-------------------------------------|----------------|-----------------------------------|-----------------|-------------------|-----------------------|---|
| (a) The Government should ensure the training of staff in the Ministry of Environment and Physical Planning, in particular by allocation of adequate resources to enable specialized training in line with needs |                  |                                     |                |                                   |                 |                   |                       | In essence there is no need for any particular action to implement this measure, as the critical aspect is the lack of funding. Therefore, all that is required is for the MOEPP to include respective amount necessary for implementation of the Training programs (both generic and specialised) in their annual budget request |

| Implementation measures  | Detailed actions   | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment   | Financial sources   | Means of verification  | Comments  |
|--|--|-------------------------------------|----------------|-----------------------------------|-------------------|---------------------|--|---|
| (b) Establish training schemes on environmental issues for civil servants in sectoral ministries | Setup a Task Force for providing training to sectoral ministries   | Mar 2021                            | MOEPP          | Ministries                        | None              |                     | Minister's decision  |   |
|  | Develop comprehensive training program for strengthening the capacities of the civil servants in sectoral ministries on environmental issues                           | Sep 2021                            | MOEPP          | Ministries                        | Up to €5 k – 16 k | MOEPP budget        | Training Program endorsed by the Minister                            | For efficiency, the Task Force members should be rewarded.  |
|  | Contract relevant NGO/training institution/team of experts to develop and deliver training curricula and presentations, following the training program developed above | Dec 2021                            | MOEPP          |                                   | €50 k             | MOEPP Budget Donors | Contract signed<br>Training curricula endorsed<br>Training delivered | The procurement should follow respective national legislation requirements. The training should target civil servants in the respective ministries that are involved or linked with the environment issues. |

## *Chapter 2*

### ***REGULATORY AND COMPLIANCE ASSURANCE MECHANISMS***

**Institutional strengthening regarding implementation of environmental legislation** - The Ministry of Environment and Physical Planning hosts services linked to the implementation of legislation, such as environmental permitting (single and integrated), EIA and environmental elaborates proceedings, environmental monitoring and reporting. Keeping these functions within the Ministry does not allow separation of policy formulation from implementation. This practice is in contradiction with good practice in environmental governance and it is limiting access to justice in environmental decision-making.

## Recommendation 2.1:

| Implementation measures   | Detailed actions  | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment | Financial sources | Means of verification  | Comments   |
|---|---|-------------------------------------|----------------|-----------------------------------|-----------------|-------------------|--|--|
| The MOEPP should propose to the Government the reorganization of the Administration for the Environment and the Macedonian Environmental Information Centre into an executive environmental agency, which should focus on the implementation of environmental legislation, ensure environmental data collection, monitoring, assessment and reporting, address nature conservation and provide expert support to the Government | Setup a Task Force for organizational changes   | Mar 2021                            | MOEPP          | SEI                               | None            |                   | Minister's decision  |  |
|   | Review of the proposal for Reorganization of Administration made within the MISA project          | Mar 2021                            | MOEPP          | SEI                               | None            |                   | Opinion of MOEPP, submitted to MISA                                  | At present MISA is implementing and IPA funded project on reorganization of Public Administration, which has conducted horizontal functional analysis and has developed a set of proposal for reorganization of state administrative bodies. |
|   | Coordinate with actions 1.4 (a) and 1.7 (a)   | Jun-Dec 2021                        | MOEPP          | SEI<br>MISA<br>MF<br>MPS          | None            |                   | Report on functional analysis<br>MISA/MF/MPS consent/ decision       | All these measures require same actions, therefore the MOEPP will need to ensure smooth coordination among various TFs   |
|   | Draft proposals for amending necessary legislation (to established executive Agency and relevant) | Sep 2021                            | MOEPP          | SEI<br>DPM EA<br>SL               | None            |                   | Draft legislation endorsed by the Gov. and adopted by the Parliament | The drafting and endorsement of the legislation should follow respective national requirements, particularly in terms of public consultation   |

**Environmental impact assessment** - The legislation on EIA and environmental elaborates do not provide for a clear EIA screening process, a key step in the overall EIA process. Also, the EIA legislation does not distinguish between the role of EIA, which is required under EU legislation, and the role of environmental elaborates, which are not so required. The decision-making process is not clearly set out in the legislation and so access to justice is not provided for in a clear and transparent manner. The list of activities does not follow the annexes of the relevant EU EIA directives and, at the same time, the listed activities do not refer to national classification of activities.

## Recommendation 2.2:

| Implementation measures  | Detailed actions  | Period of execution for each action        | Lead authority | Other institutions & stakeholders   | Cost assessment | Financial sources | Means of verification                  | Comments   |
|--|---|--|----------------|---|-----------------|-------------------|--|--|
| The MOEPP should undertake the necessary steps to streamline the environmental impact assessment (EIA) process and increase its efficiency for the public administration, investors and the public by:<br>(a) Bringing the list of activities included in national legislation into compliance with the list of activities laid down in annexes of the Convention on Environmental Impact Assessment in a Transboundary Context and relevant European Union EIA directives, and aligning the screening process with these directives, notably in terms of clarity and transparency | Setup a Task Force to review and propose, as necessary, the draft amendment of the relevant legislation | Mar 2021                                   | MOEPP          | Ministries  | None            |                   | Minister's decision                    |  |
|  | Draft (as necessary) the relevant legislation   | Sep 2021                                   | MOEPP          | Ministries<br>SL<br>Academia<br>NGOs<br>Civic organizations<br>Private sector | None            |                   | Draft legislation endorsed by the Gov. | The drafting and endorsement of the legislation should follow respective national requirements, particularly in terms of public consultation |
|  | Amend (as necessary) the relevant legislation   | Dec 2021                                   | Gov.           | Parliament  | None            |                   | Official Journal of the RNM            |  |
|  | (b) Ensuring a reasonable timeframe and opportunities for public participation, with a minimum of 30    | To be merged with the activities under (a) |                |   |                 |                   |  |  |

| Implementation measures   | Detailed actions  | Period of execution for each action | Lead authority | Other institutions & stakeholders   | Cost assessment | Financial sources | Means of verification                     | Comments  |
|---|---|-------------------------------------|----------------|-------------------------------------|-----------------|-------------------|---|---|
| days for public comments on EIA studies, which may, where appropriate, be extended as necessary, taking into account, among other matters, the nature, complexity and size of the proposed activity   |   |                                     |                |                                     |                 |                   |   |   |
| (c) Revising the legislation on elaborates for environmental protection by limiting them to small activities outside the scope of the activities subject to EIA and giving responsibility for issuing approval of decisions for elaborates to Local Self-Government Units | To be merged with the activities under (a)  |                                     |                |                                     |                 |                   |   |   |
| (d) Providing training and methodological support under institutional strengthening projects to the staff of the Unit for Environmental Impact Assessment and   | Setup a Task Force for providing training to EIA/SP Unit and respective staff in the municipalities | Sep 2021                            | MOEPP          | MLSG<br>ZELS<br>Environment<br>NGOs | None            |                   | Minister's decision                       |   |
|   | Develop comprehensive training program for strengthening the capacities                             | Dec 2021                            | MOEPP          | MLSG<br>ZELS<br>Environment<br>NGOs | Up to €5 k      | MOEPP budget      | Training Program endorsed by the Minister | For efficiency, the Task Force members should be rewarded |

| Implementation measures                       | Detailed actions   | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment | Financial sources                        | Means of verification  | Comments   |
|---|--|-------------------------------------|----------------|-----------------------------------|-----------------|--|--|--|
| Soil Protection, and to the local authorities | Contract relevant NGO/training institution/team of experts to develop and deliver training curricula and presentations, following the training program developed above | Feb 2022                            | MOEPP          |                                   | €50 k           | MOEPP<br>Budget<br>Donors<br>TA Projects | Contract signed<br>Training curricula endorsed<br>Training delivered | The procurement should follow respective national legislation requirements. The training should involve all staff of the Unit and respective municipal staff responsible for EIA and soil protection |

**Integrated environmental permitting** - Since 2011, the Ministry of Environment and Physical Planning has put significant efforts into the issuance of the A- and B-type permits in the country. Still, the current IEP process is not implemented according to the relevant EU directives. A draft law on industrial emissions aimed at the transposition and implementation of Directive 2010/75/EU on industrial emissions has not been adopted. A public register of the permits issued does not exist. There is no procedure in place that can be used to make the EU BAT conclusions binding and applicable. The self-monitoring reports submitted each year by the operators of the permitted installations are not validated by SEI and are not used for the national PRTR.

### Recommendation 2.3:

| Implementation measures  | Detailed actions  | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment | Financial sources | Means of verification | Comments |
|--|---|-------------------------------------|----------------|-----------------------------------|-----------------|-------------------|-----------------------|----------|
| (a) The MOEPP should promote the adoption of the draft law on industrial emissions | Setup a Task Force for review and amend (as appropriate) the existing draft Law on industrial emissions | Dec 2020                            | MOEPP          | ME<br>DPM EA                      | None            |                   | Minister's decision   |          |

| Implementation measures   | Detailed actions   | Period of execution for each action | Lead authority | Other institutions & stakeholders   | Cost assessment | Financial sources | Means of verification                  | Comments   |
|---|--|-------------------------------------|----------------|---|-----------------|-------------------|--|--|
|   | Draft and amend (as necessary) secondary legislation in reference to the law on industrial emissions | Jun 2021                            | MOEPP          | Ministries<br>SL<br>Academia<br>NGOs<br>Civic organizations<br>Private sector | None            |                   | Draft legislation endorsed by the Gov. | The drafting and endorsement of the legislation should follow respective national requirements, particularly in terms of public consultation   |
|   | Adopt the Law  | Jun 2021                            | Gov.           | Parliament  | None            |                   | Official Journal of the RNM            |  |
| (b) Revise the list of installations requiring an A-type permit and bring it into compliance with the list of installations laid down in Annex I of Directive 2010/75/EU of the European Parliament and of the Council on industrial emissions (Industrial Emissions Directive) | Setup a Task Force to revise the list of installations requiring an A-type permit                    | Mar 2021                            | MOEPP          | ME<br>DPM EA  | None            |                   | Minister's decision                    | The TF is encouraged to closely liaise and cooperate with the TF under activity (a) Alternatively, the TF under activity (a) may be charged to implement this measure too, as part of their work on drafting secondary legislation under law on industrial emissions |
| (c) Prepare proposals for simplifying and clarifying the legislation between B-type permit and sectoral permit requirements, especially in water and waste management   | Implementation of this measure should be merged with the measure (b)                                 |                                     |                |   |                 |                   |  |  |
| (d) Abolish the practice of issuing "permit for adjustment with an operational plan" and provide industrial   | Implementation of this measure should be merged with the measure (b)                                 |                                     |                |   |                 |                   |  |  |

| Implementation measures   | Detailed actions  | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment | Financial sources | Means of verification                        | Comments   |
|---|---|-------------------------------------|----------------|-----------------------------------|-----------------|-------------------|--|--|
| activities that cannot immediately comply with the integrated environmental permitting requirements a transition period defined in the integrated permit  |   |                                     |                |                                   |                 |                   |  |  |
| (e) Change the rules on reporting by operators with permitted installations to make reporting a useful tool   | Implementation of this measure should be merged with the measure (b)  |                                     |                |                                   |                 |                   |  |  |
| (f) Ensure that data and information in the reports are validated by the controlling authorities and made publicly available according to the requirements of Pollutant Release and Transfer Register reporting | Issue an executive ministerial order to the SEI to include report validation as a top priority for inspection supervision   | Jun 2021                            | MOEPP          | SEI                               | None            |                   | Minister's order issued                      | This measure is a matter of good management practices; however, the proposed activity should provide additional impetus for the respective administration to pursue its responsibilities |
|   | Develop a Standard Operation Procedure (SOP) for report's validation and their publishing on the dedicated website for PRTR | Sep 2021                            | MOEPP          | SEI                               | None            |                   | SOP endorsed by the minister/state secretary | The SOP should establish lines of communications, responsibilities and timeframe for each step of the process thus guaranteeing report validation and publication                        |

**State Environmental Inspectorate and authorized inspectors for environment** - Since 2011, SEI staff have worked independently of the Ministry of Environment and Physical Planning, as do all inspectorates in the country. SEI has also taken part in many institutional strengthening projects. The draft law on environmental inspection, which was developed under the twinning project “Strengthening the administrative capacities at central and local level for implementation and enforcement of the environmental acquis”, has not been adopted.

#### Recommendation 2.4:

| Implementation measures  | Detailed actions  | Period of execution for each action | Lead authority | Other institutions & stakeholders            | Cost assessment | Financial sources    | Means of verification  | Comments   |
|--|---|-------------------------------------|----------------|--|-----------------|----------------------|--|--|
| (a) The SEI should start the implementation of the outcomes of the European Union-funded projects, especially of the twinning project for which it was the main beneficiary, and organize training and methodological support for the authorized inspectors for environment at local level | Setup a Task Force for providing training to municipalities   | Mar 2021                            | SEI            | MOEPP<br>MLSG<br>ZELS<br>Environment<br>NGOs | None            |                      | Director’s decision  |  |
|  | Develop comprehensive training program for strengthening the capacities of the municipal inspectors on environmental issues | Jun 2021                            | SEI            | MOEPP<br>MLSG<br>ZELS<br>Environment<br>NGOs | Up to €5 k      | SEI budget           | Training Program endorsed by the Director  | For efficiency, the Task Force members should be rewarded  |
|  | Develop and deliver training curricula and presentations, following the training program developed above                    | Dec 2021                            | SEI            | MOEPP  | €50 k           | SEI Budget<br>Donors | Training curricula endorsed<br>Training delivered<br>If training design and delivery is outsourced, also: contract relevant NGO/training institution/team of experts to<br>Contract signed | If training design and delivery is outsourced, the procurement should follow respective national legislation requirements.<br>The training should involve municipal inspectors |
| (b) Promote the adoption of the draft law on environmental inspection  | Setup a Task Force to review and amend (as appropriate) the existing draft Law on environmental inspection                  | Jan 2021                            | MOEPP          | SEI<br>CIA                                   | None            |                      | Minister’s decision  |  |

| Implementation measures | Detailed actions   | Period of execution for each action | Lead authority | Other institutions & stakeholders                             | Cost assessment | Financial sources | Means of verification                  | Comments   |
|-------------------------|--|-------------------------------------|----------------|---|-----------------|-------------------|--|--|
|                         | Draft and amend (as necessary) the Law and secondary legislation | Jun 2021                            | MOEPP          | Ministries<br>CIA<br>SL<br>Academia<br>NGOs<br>Private sector | None            |                   | Draft legislation endorsed by the Gov. | The drafting and endorsement of the legislation should follow respective national requirements, particularly in terms of public consultation |
|                         | Adopt the Law  | Sep 2021                            | Gov.           | Parliament  | None            |                   | Official Journal of the RNM            |  |

**Voluntary arrangements for the environment** - No significant progress has been made since 2011 on the establishment of voluntary compliance promotion instruments on the environment.

### Recommendation 2.5: Voluntary arrangements for the environment

| Implementation measures  | Detailed actions   | Period of execution for each action | Lead authority | Other institutions & stakeholders  | Cost assessment | Financial sources | Means of verification | Comments |
|--|--|-------------------------------------|----------------|--|-----------------|-------------------|-----------------------|----------|
| (a) The MOEPP should prioritize work on the European Union Ecolabel and Eco-Management and Audit Scheme (EMAS) | Setup a Task Force to review and amend as appropriate the existing environment legislation | Mar 2021                            | MOEPP          | DPM EA<br>SEI<br>ME<br>Academia<br>NGOs<br>Civil organizations<br>Private sector | None            |                   | Minister's decision   |          |

| Implementation measures   | Detailed actions   | Period of execution for each action | Lead authority | Other institutions & stakeholders  | Cost assessment | Financial sources                              | Means of verification  | Comments   |
|---|--|-------------------------------------|----------------|--|-----------------|--|--|--|
|   | Draft and amend as necessary the existing primary and secondary legislation                  | Sep 2021                            | MOEPP          | Ministries<br>CIA<br>SL<br>Academia<br>NGOs<br>Private sector              | None            |  | Draft legislation endorsed by the Gov.   | The drafting and endorsement of the legislation should follow respective national requirements, particularly in terms of public consultation |
|   | Adopt the legislation  | Dec 2021                            | Gov.<br>MOEPP  | Parliament   | None            |  | Official Journal of the RNM  | Secondary legislation is adopted by the minister or the Gov.   |
| (b) Continue to promote the EMAS and ISO 14001 in collaboration with the Economic Chamber | Setup a Task Force for promotion of EMAS and ISO 14001                                       | Jun 2021                            | MOEPP          | Ministries<br>DPM EA<br>FTR<br>Economic Chambers<br>NGOs<br>Private sector | None            |  | Minister's decision  |  |
|   | Develop/Adapt EMAS User's Guide and Tools, following the EU best practices                   | Sep 2021                            | MOEPP          | Ministries<br>DPM EA<br>Economic Chambers<br>NGOs<br>Private sector        | €8.5 k          | MOEPP<br>Budget<br>Donors<br>Private companies | Guide and Tools endorsed by the minister   | All publications must be developed in both Macedonian and Albanian languages and should follow the green policy of the MOEPP                 |
|   | Design a Plan and implement the public campaign to raise the awareness on EMAS and ISO 14001 | Sep 2021                            | MOEPP          | Ministries<br>DPM EA<br>Economic Chambers<br>NGOs<br>Private sector        | >€30 k          | MOEPP<br>Budget<br>Donors<br>Private companies | Plan Endorsed by the minister<br>Contract signed (if the activity is outsourced) | The procurement should follow respective national legislation requirements   |

**Corporate social responsibility - CSR**, including reporting regarding this practice, is the key indicator to assess progress in the implementation of target 12.6 of the Sustainable Development Goals. At present, the only initiative to encourage CSR practice is undertaken by the Ministry of Economy in organizing an annual national award for the best CSR practices.

## Recommendation 2.6:

| Implementation measures  | Detailed actions   | Period of execution for each action | Lead authority      | Other institutions & stakeholders                     | Cost assessment | Financial sources                                       | Means of verification  | Comments  |
|--|--|-------------------------------------|---------------------|---|-----------------|---|--|---|
| The ME and MOEPP should promote corporate social responsibility practices and encourage companies to integrate sustainability information into their reporting | Setup a Task Force for promotion of CSR  | Mar 2021                            | MOEPP<br>ME         | DPM EA<br>FITR<br>Economic Chambers<br>Private sector | None            |   | Minister's decision  |   |
|  | Develop a set of programs and schemes to support the innovative approach of private sector in integrating sustainability into their operations | Sep 2021                            | MOEPP<br>ME<br>FITR | DPM EA<br>Economic Chambers<br>Private sector         | €8.5 k          | MOEPP/<br>FITR<br>Budget<br>Donors<br>Private companies | Programs and schemes endorsed by the Gov.  | The cost relates only to development of the programmes and schemes. The cost of actual implementation thereof will be determined in the programmes. |
|  | Design a Plan and implement the public campaign to raise the awareness on the importance of sustainability and CSR                             | Sep 2021                            | MOEPP<br>ME<br>FITR | DPM EA<br>Economic Chambers<br>Private sector         | >€30 k          | MOEPP/<br>FITR<br>Budget<br>Donors<br>Private companies | Plan Endorsed by the ministers/<br>director<br>Contract signed (if the activity is outsourced) | The procurement should follow respective national legislation requirements  |

## Chapter 3

### **GREENING THE ECONOMY**

**Pollution abatement incentives** - The polluter pays principle is enshrined in legislative acts, but it is not effectively applied. The main instrument to address air and water pollution is regulation (command and control) combined with prescription of BAT. The flat charge rates per type of polluting

substance integrated into permit fees do not create any incentives for enterprises to adopt cleaner technologies. Effective financial incentives in the form of environmental taxes are lacking.

### Recommendation 3.1:

| Implementation measures  | Detailed actions  | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment  | Financial sources | Means of verification | Comments  |
|--|---|-------------------------------------|----------------|-----------------------------------|------------------|-------------------|-----------------------|---|
| The Government should complement the existing regulatory framework for integrated pollution prevention and control permitting procedures for air and water pollution with effective financial incentives to stimulate pollution abatement. | Subsidise polluters for reduction of pollution through lower taxes, soft loans etc. | Jun 2023                            | MOEPP          | Private entities                  | To be determined | Gov budget        | Gov decision          | Instrument such as regulatory approaches or use of financial incentives to correct producer's behaviour |

**User pays principle** - The user pays principle has been strengthened with the recent tariff reform in the water supply, sewerage and wastewater treatment sector and the transfer of tariff-setting authority away from the municipal governments to ERC. However, cost-reflective user fees are still lacking in the municipal waste sector, although they are required for the upgrading and modernization of the waste management sector. Potential economies of scale from regionalization of waste management have not yet been exploited. Bill collection rates at the household level are in general quite low. Measures to ensure high rates of waste service fee bill collection, such as integrating the waste service fee into the local property tax, adopting adequate types of “pay-as-you-throw” schemes and raising awareness of solid waste issues among the population are lacking.

### Recommendation 3.2:

| Implementation measures  | Detailed actions   | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment  | Financial sources               | Means of verification | Comments   |
|--|--|-------------------------------------|----------------|-----------------------------------|------------------|---------------------------------|-----------------------|--|
| (a) The Government should review available policies and measures for overcoming the current obstacles to implementation of cost-reflective waste tariffs for collection of waste and its disposal on landfills, while taking into account the need to protect poor and vulnerable groups in the population, and advancing the regionalization of waste services; | Regulatory commission to set new tariffs for waste collection and disposal on landfills. | Dec 2021                            | MOEPP          | Regulatory commission<br>LSGUs    | None             |                                 | Gov decision          | Municipalities should take into account vulnerable groups and introduce adequate subsidies |
| (b) Implement measures that are effectively raising bill collection rates for waste service fees.  | Organise and implement public awareness campaign   | Continuousl<br>y                    | MOEPP          | LSGUs                             | To be determined | Central and Local budget/donors |                       |  |

**Road transport** - Road transport is a major source of air pollution in the country. Motor vehicles are subject to excise duties and other charges; pump prices of motor fuels also include excise duties. There is scope to strengthen the potential environmental effectiveness of these charges.

### Recommendation 3.3:

| Implementation measures  | Detailed actions  | Period of execution for each action | Lead authority | Other institutions & stakeholders     | Cost assessment | Financial sources | Means of verification   | Comments   |
|--|---|-------------------------------------|----------------|---------------------------------------|-----------------|-------------------|-------------------------|--|
| (a) The Government should adjust excise duties on motor fuels to move towards European Union minimum rates and eliminate the differentiation between rates on diesel and petrol, following a broad, participatory, multi-stakeholder discussion; | Assessment and broad discussion between relevant stakeholders for the topic                         | Jun 2023                            | ME             | MOEPP and other relevant stakeholders | None            |                   |                         |  |
| (b) Reform the vehicle registration tax and the excise duty on imports of passenger motor cars by taking into account environmentally relevant factors such as emission standards, including CO2, the age of the vehicle and type of motor fuel. | Set up a Task force to review and draft amendments to the relevant legislation (Law on environment) | Jun 2021                            | MOEPP          |                                       | None            |                   | Official Journal of RNM | All relevant factors such as emission standards, including CO2, the age of the vehicle and type of motor fuel to be included in the amendment of law on environment. |

**Green procurement** - Public procurement is a major economic force in the country. However, the use of public procurement to support environmental protection has been quite limited, given the focus on the lowest price bid.

### Recommendation 3.4:

| Implementation measures  | Detailed actions   | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment | Financial sources | Means of verification | Comments  |
|--|--|-------------------------------------|----------------|-----------------------------------|-----------------|-------------------|-----------------------|---|
| The Government should make more use of green procurement, building on international experience of how to integrate environmental considerations into public tenders, including by setting credible standards for what constitutes green products and services, such as eco-labels. | Introduce voluntary instruments such as GPP (green public procurement) and verifiable environmental criteria for products by the end services in the public procurement process. | Continuously                        | Government     |                                   | None            |                   |                       | List of environmental criteria prepared and implemented |

**Greening investments** - Government environmental expenditure has been constrained by limited fiscal space. The business sector will, in any case, be the major source for mobilizing funds for the transition to green economy. The tax system provides generous incentives for business investments. However, these incentives are not discriminating between green investment and other investments. The country does not participate in the Batumi Initiative on Green Economy (BIG-E), which operationalizes the 2016 Pan-European Strategic Framework for Greening the Economy based on voluntary commitments in areas such as the greening of investments, which are part and parcel of sustainable development.

### Recommendation 3.5:

| Implementation measures  | Detailed actions  | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment | Financial sources | Means of verification | Comments |
|--|---|-------------------------------------|----------------|-----------------------------------|-----------------|-------------------|-----------------------|----------|
| (a) Create a favourable policy framework for attracting green investment and innovation, including | Introduce green measures in the yearly Governmental programme to attract green investments and innovation | Continuously                        | Gov            | FITR                              | None            |                   |                       |          |

| Implementation measures                                       | Detailed actions  | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment  | Financial sources           | Means of verification | Comments |
|---|---|-------------------------------------|----------------|-----------------------------------|------------------|-----------------------------|-----------------------|----------|
| for nature-based solutions;                                   |   |                                     |                |                                   |                  |                             |                       |          |
| (b) Join the 2016 Batumi Initiative on Green Economy (BIG-E). | Define the outlines of a green growth path for the country according to the initiative through promoting green financing in the country | Continuousl<br>y                    | Gov            | IFIs<br>LSGUs                     | To be determined | Gov budget/loan<br>s/donors | Approved Programmes   |          |

## *Chapter 4*

### ***ENVIRONMENTAL MONITORING AND INFORMATION***

**Equipment and capacity** - There is limited capacity to maintain and service the air quality monitoring network operated by the Ministry of Environment and Physical Planning and the surface water, groundwater, atmospheric precipitation and snow cover monitoring networks operated by HMS, including related databases. There is also insufficient human, technical and financial capacity in the Ministry of Agriculture and Water Resources to ensure comprehensive monitoring of forest resources and the development of a forest inventory.

The City of Skopje does not have sufficient trained resources to systematically monitor noise or develop noise maps. Its automatic monitoring station and outdoor information panel to provide air quality data to citizens in near-realtime in the city centre has been inactive since 2012.

## Recommendation 4.1:

| Implementation measures   | Detailed actions   | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment | Financial sources         | Means of verification     | Comments   |
|---|--|-------------------------------------|----------------|-----------------------------------|-----------------|---------------------------|---------------------------|--|
| (a) The Government should ensure adequate capacity of the environmental monitoring networks through providing adequate and modern monitoring equipment, replacing outdated instruments and ensuring appropriate resources for regular maintenance and servicing of each monitoring network and related integrated databases, independently of funding provided by technical cooperation projects; | Modernisation and replacement of the outdated measurement instruments of the existing air quality monitoring stations as part of the State Air Quality Monitoring System through 1. Procurement of spare parts for the measurement instruments (NO, NO <sub>x</sub> , NO <sub>2</sub> , SO <sub>2</sub> , CO, PM <sub>10</sub> , PM <sub>2.5</sub> ) | Dec 2020                            | MOEPP          |                                   | €73 k           | MOEPP Budget              | Approved budget programme | 32 new instruments have been procured (or are in a process of procurement) from the MOEPP Budget Programme for 2020. Additional finances have been allocated from IPA2 Programme in procurement of 38 new instruments (€500.000). Additionally, with the financial support from the Swedish International Development Cooperation Agency (SIDA), 27 outdated instruments will be replaced and the air quality management system AIRVIRO will be upgraded (€420.000). Procurement of one air quality monitoring station and replacement of 9 instruments has been done through IPA- |
|   | 2. Procurement of automatic analysers for O <sub>3</sub> , SO <sub>2</sub> , CO, PM <sub>10</sub> and PM <sub>2.5</sub>  | Dec 2020                            | MOEPP          |                                   | €423 k          |                           | Approved budget programme |  |
|   | 3. Procurement of sensors for meteorological parameters measurement  |                                     |                |                                   |                 |                           |                           |  |
|   | 4. Procurement of automatic sequential standard low volume sampler for PM measurement (PM <sub>10</sub> , PM <sub>2.5</sub> , PM <sub>1</sub> )  |                                     |                |                                   |                 |                           |                           |  |
|   | 5. Supply of Calibration Tower   |                                     |                |                                   |                 |                           |                           |  |
| 6. Procurement of outdated instruments and spare parts for maintenance of the State Air Quality Monitoring System   | Dec 2021   | MOEPP                               |                | €423 k                            | MOEPP Budget    | Approved budget programme |                           |  |

| Implementation measures  | Detailed actions  | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment  | Financial sources  | Means of verification     | Comments                                   |
|--|---|-------------------------------------|----------------|-----------------------------------|--|--|---------------------------|--|
|  |   |                                     |                |                                   |  |  |                           | CBC Programme.                             |
| (b) Ensuring stable and adequate funding of forest and biodiversity monitoring activities, supporting the development of a forest inventory and promoting improved coordination of different biodiversity monitoring activities within the scope of a national biodiversity monitoring system; | Regular biodiversity monitoring activities  | Dec 2021                            | MOEPP          |                                   | €8 k   | MOEPP Budget   | Approved budget programme |  |
| (c) Conducting training on the basis of international best practices to strengthen the expertise of officials and operators dealing with environmental monitoring and information.   | Regular training on new techniques for air quality measurement, relevant legislation and EN standards | Continuously                        | MOEPP          |                                   | In the frame of the programmes of the responsible donor institutions | European Commission/Joint Research Centre (EC/JRC) and European Reference Laboratory for Air Pollution (ERLAP) |                           | Membership to the JRC AQUILA working group |

| Implementation measures | Detailed actions  | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment  | Financial sources   | Means of verification | Comments  |
|-------------------------|---|-------------------------------------|----------------|-----------------------------------|--|---|-----------------------|---|
|                         | Regular participation Inter laboratory comparison measurements of inorganic pollutants in the ambient air       | Continuously                        | MOEPP          |                                   | In the frame of the programmes of the responsible donor institutions | JRC (Joint Research Centre) / EC Centre for Scientific Research |                       |   |
|                         | Regular participation on trainings/workshops on implementation of EU measures for improving air quality.        | Continuously                        | MOEPP          |                                   | In the frame of the programmes of the responsible donor institutions | Convention on Long-range Transboundary Air Pollution (CLRTAP)   |                       | Membership to the Convention on Long-range Transboundary Air Pollution including the EMEP Steering Body |
|                         | Regular participation on trainings for transition to implementing provisions for air quality e-reporting system | Continuously                        | MOEPP          | /                                 | In the frame of the programmes of the responsible donor institutions | European Environment Agency (EEA)                               |                       | Associate (cooperating Country) to EEA and membership in EIONET   |

## Recommendation 4.2:

| Implementation measures  | Detailed actions  | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment | Financial sources                   | Means of verification  | Comments   |
|--|---|-------------------------------------|----------------|-----------------------------------|-----------------|-------------------------------------|--|--|
| <p>The Government should advise the City of Skopje and other municipalities to:</p> <p>(a) ensure adequate capacity to monitor noise systematically;</p> <p>(b) Provide adequate and modern noise monitoring equipment;</p> <p>(c) Ensure appropriate resources and training for regular noise monitoring and for the timely development of city noise maps;</p> <p>(d) Develop city noise maps.</p> | Development of Noise map for City of Skopje   | Dec 2020                            | City of Skopje | MOEPP and other Municipalities    | €98 k           | City of Skopje budget, Programme P1 | Programme of activities in the area of environmental protection in the City of Skopje for 2020 | Noise intensity data collection in the City of Skopje and implementation of noise reduction measures |
|  | Development of Noise action plan with detailed analysis of the current situation, assessment, forecast and noise reduction measures |                                     |                |                                   |                 |                                     |  |  |

**Policy and institutional framework** - Responsibilities for environmental monitoring and data sharing and for the management of monitoring information flows are neither well defined nor updated in the National Book of Environmental Parameters dated 2015.

### Recommendation 4.3:

| Implementation measures  | Detailed actions  | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment   | Financial sources | Means of verification   | Comments  |
|--|---|-------------------------------------|----------------|-----------------------------------|---|-------------------|---|---|
| The Government should prepare a national strategy and action plan on environmental monitoring and integrated information management supported by an updated National Book of Environmental Parameters and protocols for data sharing, clarifying responsibilities related to environmental monitoring and management of monitoring data and information flows, including through amending the related legislation as appropriate | Development of National Environmental Monitoring Strategy with Action Plan until 2030 | Dec 2020-Sep 2021                   | MOEPP          |                                   | €1.37 million (Total amount of the project contract, only part of the sum is dedicated to development of the National Environmental Monitoring Strategy with Action Plan) | IPA II            | Contract Dossier “Development of Environmental Monitoring and Information System” EuropeAid/139107/IH/SE R/MK | The National Environmental Monitoring Strategy and Action Plan shall be approved by MOEPP and shall be presented to the Government. It will include:<br>Developing national list of environmental indicator, Strengthening legal framework through drafting the national environmental indicators bylaw, Supporting identification and research of available and low cost technologies for real-time environmental monitoring and opening data to public through piloting different low cost solutions;<br>Supporting public participation in environmental monitoring and decision making processes through development of online platforms for monitoring different |

| Implementation measures | Detailed actions   | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment   | Financial sources | Means of verification   | Comments             |
|-------------------------|--|-------------------------------------|----------------|-----------------------------------|---|-------------------|---|----------------------|
|                         | Development of a legislative act that prescribes the contents of the Environmental Monitoring Strategy and the manner of its preparation | Dec 2020-Sep 2021                   | MOEPP          |                                   | €1.37 million (Total amount of the project contract, only part of the sum is dedicated to development of the National Environmental Monitoring Strategy with Action Plan) | IPA II            | Contract Dossier “Development of Environmental Monitoring and Information System” EuropeAid/139107/IH/SE R/MK | environmental issues |

Laboratories - The Ministry of Environment and Physical Planning’s Central Environmental Laboratory and Air Quality Calibration Laboratory both face challenges related to insufficient funding and staff and are not properly accredited. Neither laboratory is provided with sufficient and stable financial and human resources for servicing, updating and calibrating monitoring and calibration equipment, and for pursuing accreditation under the ISO/IEC 17025 standard on “General requirements for the competence of testing and calibration laboratories”. The HMS laboratory also lacks capacity and resources to monitor surface water quality according to the national water-related legislation.

#### Recommendation 4.4:

| Implementation measures   | Detailed actions  | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment           | Financial sources | Means of verification | Comments                                       |
|---|---|-------------------------------------|----------------|-----------------------------------|---------------------------|-------------------|-----------------------|--|
| The Government should ensure financial and human resources and capacity for:<br>(a) The Central Environmental Laboratory and the Air Quality Calibration Laboratory of the Ministry of Environment and Physical Planning, to adequately service, update and calibrate monitoring and laboratory equipment and meet the necessary requirements for their full accreditation under the ISO/IEC 17025 standard on “General requirements for the competence of testing and calibration laboratories”; | Functionality of the Central Environmental Laboratory and the Air Quality Calibration Laboratory of the MOEPP | Jan 2021- Dec 2022                  | MOEPP          |                                   | €150 k (to be functional) | Gov budget        | Adopted programme     | Additional 50–70 k€ per year to be operational |
| (b) The laboratory of the Hydro   | Strengthening capacity of the laboratory of HMI through   | Nov 2022                            | HMI            | MOEPP                             | To be determined          | HMI budget        | Adopted programme     |  |

| Implementation measures  | Detailed actions           | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment | Financial sources | Means of verification | Comments |
|--|----------------------------|-------------------------------------|----------------|-----------------------------------|-----------------|-------------------|-----------------------|----------|
| meteorological Service, to increase its capacity to monitor surface water quality and meet the requirements of the national water-related legislation through appropriate and modern laboratory equipment. | modernisation of equipment |                                     |                |                                   |                 |                   |                       |          |

**National Environmental Information System** - No national environmental information system was developed and established in accordance with the provisions of the Law on Environment and the 2005 governmental Strategy for Environmental Data Management. There are currently no provisions to allow a new system, once established, to be effectively operated, appropriately maintained and used for different reporting obligations and decision-making processes.

#### Recommendation 4.5:

| Implementation measures  | Detailed actions   | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment | Financial sources | Means of verification  | Comments   |
|--|--|-------------------------------------|----------------|-----------------------------------|-----------------|-------------------|--|--|
| The MOEPP should:<br>(a) Establish a fully functional national integrated environmental information system able to support the | Development of Environmental Monitoring and Information System-development of equipment needs assessment, market analysis and technical specification for NEIS | Dec 2020-Sep 2021                   | MOEPP          | Industry LSGUs, SEI               | €1.37 million   | IPA II            | Contract Dossier<br>“Development of Environmental Monitoring and | The overall purpose of the Project is Development of a unique fully functional Environmental Information System that includes activities |

| Implementation measures  | Detailed actions   | Period of execution for each action    | Lead authority | Other institutions & stakeholders | Cost assessment | Financial sources | Means of verification                                     | Comments  |
|--|--|--|----------------|-----------------------------------|-----------------|-------------------|---|---|
| monitoring, processing, reporting and dissemination of information on all environmental topics, including for informed decision-making and e-reporting to international organizations;           |  |  |                |                                   |                 |                   | Information System”<br>EuropeAid/13<br>9107/IH/SER/<br>MK | that cover all Recommendations stated in point 4.5 including connecting all standalone data bases and data sources, as well as different level users of the system. One Component of the Project is solely dedicated to Assessment of the existing administrative and financial capacity for implementation of NEIS, functional analysis of the human capacities and providing of appropriate trainings and production of manuals |
| (b) Ensure sufficient and stable resources so that the new national integrated environmental information system, once developed, can be effectively operated and appropriately maintained;       | Preparation of detailed design of NEIS and development of operational software of NEIS | See and coordinate with action 4.5 (a) |                |                                   |                 |                   |   |   |
| (c) Use the new system to combine environmental information with data sources from other sectors, in order to support integrated, cross-sectoral policymaking and decision-making, including for | Trainings and support in operating the NEIS  | See and coordinate with action 4.5 (a) |                |                                   |                 |                   |   |   |

| Implementation measures  | Detailed actions   | Period of execution for each action    | Lead authority | Other institutions & stakeholders | Cost assessment | Financial sources | Means of verification | Comments |
|--|--|--|----------------|-----------------------------------|-----------------|-------------------|-----------------------|----------|
| achievement of the Sustainable Development Goals;<br><br>(d) Continue to support the implementation of Shared Environmental Information System principles of open access to data, to provide timely, relevant and reliable information on the state of the environment to policymakers and the public. |  |  |                |                                   |                 |                   |                       |          |
|  | Preparation of primary and secondary legislation amendments and preparation of new secondary legislation | See and coordinate with action 4.5 (a) |                |                                   |                 |                   |                       |          |
|  | Preparation of training manuals and delivering training for NEIS   | See and coordinate with action 4.5 (a) |                |                                   |                 |                   |                       |          |

**Environmental indicators** -The production and online sharing of environmental indicators does not yet include all relevant indicators on the ECE list of environmental indicators, due to a lack of data. OECD green growth indicators are not being produced in the country and there is no monitoring of progress towards the global Sustainable Development Goals or their environmental dimension.

## Recommendation 4.6:

| Implementation measures   | Detailed actions  | Period of execution for each action | Lead authority | Other institutions & stakeholders   | Cost assessment | Financial sources | Means of verification                       | Comments   |
|---|---|-------------------------------------|----------------|---|-----------------|-------------------|---|--|
| The MOEPP should:<br>(a) Continue with regular production of national environmental indicators and produce all remaining indicators in the ECE list of environmental indicators, as well as the Organisation for Economic Co-operation and Development green growth indicators, that are relevant to the country; | Producing National environmental indicator Report 2020 through alignment and connection to the: National priorities, EEA recommended group of indicators, UNECE and Eurostat indicators, SDG indicators, Green growth and circular economy indicators.<br><br>Introduction of new chapters on: Socio-Economic Change, Forestry, Household, Noise and Environmental Policy Instrument and connecting the National Indicators with the ECE list of environmental indicators | Dec 2020                            | MOEPP          | SSO<br><br>IPH<br><br>Directorate for Hydro meteorological Affairs<br><br>MAFWE<br><br>PE for Forest Management - Macedonian Forests,<br><br>Hydro biological Institute | None            |                   | Law on Environment, Article 45, paragraph 3 | The Report is relevant to the creation of environmental policy, moving towards a multi-sectoral integrated approach to environmental assessment, including: cross-sectoral issues, assessment of progress towards environmental objectives and the potential effects and effectiveness of the implementation of measures for environmental protection in accordance with legal obligations and strategic action plans. Each chapter is supplemented by a list of indicators and their progress with respect to the goals to be achieved and a presentation of the trend. |

| Implementation measures  | Detailed actions   | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment | Financial sources | Means of verification | Comments |
|--|--|-------------------------------------|----------------|-----------------------------------|-----------------|-------------------|-----------------------|----------|
| (b) Establish relevant environmental indicators for reporting on the environmental dimension of the Sustainable Development Goals; | Preparation of a National Environmental Monitoring Programme (NEMP) through development of a National list of environmental indicators           | See and coordinate with action 4.3  |                |                                   |                 |                   |                       |          |
| (c) Establish data collection and processing mechanisms for environmental indicators where such data are not yet available.        | Assessment of the existing National book of Environmental Indicators and preparation of a bylaw on the national list of environmental indicators |                                     |                |                                   |                 |                   |                       |          |

**Environmental reporting** - In their current form, the Annual Report on the Quality of the Environment, the biennial Environmental Indicators Report and the quadrennial SoER offer only limited potential in terms of their use in support of policymaking processes. The production of the quadrennial SoER has been interrupted since 2013.

#### Recommendation 4.7:

| Implementation measures  | Detailed actions   | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment | Financial sources | Means of verification                       | Comments   |
|--|--|-------------------------------------|----------------|-----------------------------------|-----------------|-------------------|---|--|
| The MOEPP should:<br>(a) Produce regularly reports on the state of the environment, including the biennial | Preparation of integrated Report on Environmental Indicators and State of Environment Report | Dec 2020                            | MOEPP          | SSO<br>IPH<br>Directorate         | None            |                   | Law on Environment, Article 45, paragraph 3 | The chapters in this integrated Report, compared to previous versions of the Environmental |

|  |  |  |  |  |  |  |   |
|--|--|--|--|--|--|--|---|
| <p>Environmental Indicators Report and the quadrennial State of the Environment Report, supported by better quality data and timely information in full alignment with Shared Environmental Information System principles of open access to environmental data, and include in these reports a summary for policymakers;</p> <p>(b) Strengthen the policy relevance of these reports by moving towards multisector integrated environmental assessment approaches, including: (i) cross-cutting issues; (ii) assessment of progress towards environmental goals and targets and the potential effects and effectiveness of the implementation of environmental protection measures under legal obligations and</p> |  |  |  | <p>for Hydro meteorological Affairs</p> <p>MAFWE</p> <p>PE for Forest Management - Macedonian Forests,</p> <p>Hydro biological Institute</p> |  |  | <p>Indicators Report, are supplemented with summary of the state of the environment for the specific topic, prepared on the basis of detailed overview of the situation given in each indicator individually.</p> |
|--|--|--|--|--|--|--|---|

|   |  |  |  |  |  |  |  |
|---|--|--|--|--|--|--|--|
| strategic action plans; and (iii) outlooks and projections of possible future negative trends and their implications vis-à-vis national goals and policies. |  |  |  |  |  |  |  |
|---|--|--|--|--|--|--|--|

## *Chapter 5*

### ***ACCESS TO INFORMATION, PUBLIC PARTICIPATION, ACCESS TO JUSTICE AND EDUCATION FOR SUSTAINABLE DEVELOPMENT***

**Access to information** - Public access to information related to environmental media is hindered by the lack of an open, updated and user-friendly environmental portal, which is also a challenge to the achievement of the environmental dimension of target 16.10 of Sustainable Development Goal 16. The lack of awareness in civil society about the availability of environmental information and procedures to access it is another challenge.

Access to environmental information on the websites of public institutions other than the Ministry of Environment and Physical Planning is largely lacking. A minimal approach to comply with the Law on Free Access to Public Information is implemented by the provision of only the list of information without online access to actual documents. For passive access to information, the allowed extension of an additional 30 days for complex information requests often renders useless the information finally provided, because it was needed for events taking place during the first 30 days. Information related to public hearings is often published at short notice. EIA reports are not easy for the public to understand. The required procedures for getting access to various types of information are in place, but the quality of the information provided and the efficiency of these procedures are often questionable.

Consolidated versions of laws and secondary legislation are not available to the public free of charge. This refers not only to environmental legislation. To increase the accessibility of environmental legislation, the Ministry of Environment and Physical Planning publishes such legislation on its website, but the scope of legislative acts published is limited to core environmental topics and the texts displayed are not the latest versions and do not include consolidated versions of the laws that incorporate all amendments.

## Recommendation 5.1:

| Implementation measures  | Detailed actions  | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment | Financial sources                     | Means of verification   | Comments   |
|--|---|-------------------------------------|----------------|-----------------------------------|-----------------|---------------------------------------|---|--|
| a) The MOEPP should Improve its website to ensure the provision of continuously open and user-friendly free access to environmental information, and enhance the use of social media | Setup a Task Force for redesigning of the MOEPP & SEI websites following the new corporate image of the Government  | Jan 2021                            | MOEPP          | SEI                               | None            |                                       | Minister's decision   |  |
|  | If necessary, contract relevant IT company to redesign the websites following the instructions of the Task Force  | Mar 2021                            | MOEPP          | SEI                               | €5 k            | MOEPP & SEI Budget Donors TA Projects | Contract signed Websites redesigned and upgraded  | The procurement should follow respective national legislation requirements. The new websites should be three-lingual with more open data and web services  |
|  | Coordinate with actions 1.4 (a), 1.7 (a) and 2.1 to intervene in the Rulebooks on organization and systematization of the MOEPP to appropriately amend them aiming at strengthening the capacities for website maintenance and update, as well as social networks profiles of MOEPP | Jun-Dec 2021                        | MOEPP          | SEI<br>MISA<br>MF<br>MPS          | None            |                                       | Report on functional analysis<br>New Rulebooks endorsed by the minister/director of SEI<br>MISA/MF/MP<br>S consent/<br>decision | All these measures require same actions, therefore the MOEPP will need to ensure smooth coordination among various TFs. This should accordingly include SEI, but in light of the upcoming reorganization of the state administrative bodies, also the future Environment Agency. |
| b) Ensure that the future national integrated environmental information system   | Coordinate with appropriate actions implemented in current project for MEIC "Development of the Environmental Monitoring Information  |                                     |                |                                   |                 |                                       |   | The MOEPP should also ensure that the new system is exchanging data with other national e-systems, using the   |

| Implementation measures   | Detailed actions   | Period of execution for each action | Lead authority | Other institutions & stakeholders        | Cost assessment | Financial sources               | Means of verification             | Comments   |
|---|--|-------------------------------------|----------------|--|-----------------|---------------------------------|-----------------------------------|--|
| is fully accessible through its website   | System”  |                                     |                |  |                 |                                 |                                   | interop platform operated by MISA  |
| c) Ensure free online access to a wider spectrum of updated environmental legislation   | Coordinate with actions under 5.1 (a)  |                                     |                |  |                 |                                 |                                   | The MOEPP should ensure that the documents for primary and secondary legislation are originating from the Official Journal and whenever possible they should be available in both Macedonian and Albanian languages, as well as in English (at least for the consolidated versions of primary legislation) |
| d) Support other relevant institutions to make available environmental information in their possession on open access on their websites | Setup a Task Force for developing a brochure for open environmental information targeting relevant national and local institutions | Sep 2021                            | MOEPP          | SEI                                      | None            |                                 | Minister’s decision               |  |
|   | Develop an e-book brochure for open environmental information targeting relevant national and local institutions                   | Nov 2021                            | MOEPP          | SEI                                      | Up to €5 k      | MOEPP budget                    | Brochure endorsed by the Minister | For efficiency, the Task Force members should be rewarded  |
|   | Organize an event to promote the brochure (coordination with 1.6 (c) is most important)  | Dec 2021                            | MOEPP          | Relevant national and local institutions | €1.5 k          | MOEPP Budget Donors TA Projects | Event Report                      | The event may be organized as a workshop or open debate with target institutions<br>The brochure should be available only as an e-book in line with green policies of the MOEPP  |

| Implementation measures   | Detailed actions                                   | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment | Financial sources  | Means of verification                          | Comments  |
|---|--|-------------------------------------|----------------|-----------------------------------|-----------------|--------------------|--|---|
|   |  |                                     |                |                                   |                 |                    |  | that will be developed within the scope of 1.6 activities   |
| e) Conduct awareness-raising activities to enhance the civil society capacity to access environmental information and monitor progress in raising the level of public awareness of environmental issues | Merge and coordinate with activities under 1.1 (f) |                                     |                |                                   | €32 k           | Gov./ MOEPP budget | Implementation Report endorsed by the minister | As there are various measures that require awareness raising activities, MOEPP should strive to ensure full coordination among those and whenever possible merge them to achieve higher synergy |

**Public participation** - The main challenges in ensuring effective public participation in decision-making on specific activities in line with the provisions of the Aarhus Convention are:(i) the lack of adequate financial resources; and (ii) the lack of appropriate expertise and insufficient human capacities. Effective public participation procedures are largely not developed. There is no public participation envisaged in the decision-making on chemicals. The lack of effective public participation procedures is a barrier to delivery on the environmental dimension of target 16.7 of Sustainable Development Goal 16.

### Recommendation 5.2:

| Implementation measures   | Detailed actions  | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment | Financial sources | Means of verification | Comments |
|---|---|-------------------------------------|----------------|-----------------------------------|-----------------|-------------------|-----------------------|----------|
| (a) The MOEPP should ensure effective public participation procedures | Setup a Task Force to review the existing public participation procedures and, as necessary to propose amendments of the relevant legislation | Jun 2021                            | MOEPP          |                                   | None            |                   | Minister's decision   |          |

| Implementation measures   | Detailed actions   | Period of execution for each action | Lead authority | Other institutions & stakeholders                                | Cost assessment | Financial sources                           | Means of verification   | Comments  |
|---|--|-------------------------------------|----------------|--|-----------------|---|---|---|
|   | Prepare a Report on the existing public participation procedures and, as necessary, propose amendments of the relevant legislation                                     | Dec 2021                            | MOEPP          | NGOs<br>Civic organizations                                      | €5 k            | MOEPP<br>Budget                             | Report endorsed by the minister                                       | For efficiency, the Task Force members should be rewarded   |
|   | Draft & amend (as necessary) the relevant legislation  | Jun 2022                            | Gov.           | Ministries<br>SL<br>Academia<br>Private sector<br>Parliament     | None            |   | Draft legislation endorsed by the Gov.<br>Official Journal of the RNM | The drafting and endorsement of the legislation should follow respective national requirements, particularly in terms of public consultation  |
| (b) Develop capacity and expertise to ensure effective public participation | Coordination with activities under 5.2 (a)   |                                     |                |  |                 |   |   |   |
|   | Develop training program to strengthen the capacities of public officials responsible for public participation   | Dec 2021                            | MOEPP          | Ministries<br>ZELS<br>Environment<br>NGOs<br>Civic organizations | Up to €5 k      | MOEPP<br>budget                             | Training Program endorsed by the Minister                             | For efficiency, the Task Force members should be rewarded   |
|   | Contract relevant NGO/training institution/team of experts to develop and deliver training curricula and presentations, following the training program developed above | Mar2022                             | MOEPP          | Ministries<br>ZELS<br>Environment<br>NGOs<br>Civic organizations | €32 k           | MOEPP<br>Budget<br>Donors<br>TA<br>Projects | Contract signed<br>Training curricula endorsed<br>Training delivered  | The procurement should follow respective national legislation requirements. The training should involve all public officials at both central and local level, that are responsible or related to the public participation |
| (c) Enable public participation in decision-making on                       | To be merge with the activities under (a)  |                                     |                |  |                 |   |   | The proposals should include initiating dialogue with the   |

| Implementation measures | Detailed actions | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment | Financial sources | Means of verification | Comments   |
|-------------------------|------------------|-------------------------------------|----------------|-----------------------------------|-----------------|-------------------|-----------------------|--|
| chemicals               |                  |                                     |                |                                   |                 |                   |                       | involvement of authorities and relevant stakeholders, including producers, researchers, civil society organizations and health and environmental specialists |

**Public participation in decision-making on genetically modified organisms** - North Macedonia has not ratified the 2005 Almaty Amendment on Genetically Modified Organisms to the Aarhus Convention. The Law on Genetically Modified Organisms provides for public participation in decision-making, but by-laws setting detailed procedures for engaging the public are lacking. To date, the Ministry of Environment and Physical Planning has not received an application for a GMO-related licence.

The Law on Food Safety does not include provisions for public participation in decision-making on food products containing or consisting of GMOs.

### Recommendation 5.3:

| Implementation measures   | Detailed actions                                     | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment | Financial sources | Means of verification | Comments |
|---|--|-------------------------------------|----------------|-----------------------------------|-----------------|-------------------|-----------------------|----------|
| (a) The Government should establish detailed procedures to ensure effective public participation in decision-making on the deliberate release of genetically modified organisms (GMOs) into the environment and | Coordinate with activities under 5.2 (a) and 5.3 (b) | Jun 2021                            | MOEPP          | MAFWE                             |                 |                   |                       |          |

| Implementation measures   | Detailed actions  | Period of execution for each action | Lead authority | Other institutions & stakeholders   | Cost assessment | Financial sources | Means of verification                  | Comments   |
|---|---|-------------------------------------|----------------|---|-----------------|-------------------|--|--|
| placing them on the market  |   |                                     |                |   |                 |                   |  |  |
| (b) Amend the 2010 Law on Food Safety to include provision for public participation in decision-making on food and food products containing or consisting of GMOs, and establish detailed procedures to ensure effective public participation, in anticipation of accession to the European Union | Setup a Task Force for drafting an amendment (as appropriate) to the Law on Food Safety | Jun 2021                            | MAFWE          | MOEPP<br>AFV<br>DPM EA  | None            |                   | Minister's decision                    |  |
|   | Draft and amend (as necessary) the Law on Food Safety                                   | Sep 2021                            | MAFWE          | Ministries<br>SL<br>Academia<br>NGOs<br>Civic organizations<br>Private sector | None            |                   | Draft legislation endorsed by the Gov. | The drafting and endorsement of the legislation should follow respective national requirements, particularly in terms of public consultation |
|   | Adopt the Law   | Dec 2021                            | Gov.           | Parliament  | None            |                   | Official Journal of the RNM            |  |

**Access to justice** - The lack of knowledge, capacity and expertise in the governmental authorities, judiciary and independent review bodies in promoting and implementing effective access to justice in environmental matters is the main bottleneck in access to justice in environmental matters. That bottleneck, as well as the lack of a specific law, by-law or guiding document on procedures for processing environmental cases in the courts, is also an impediment to effective delivery of target 16.3 of Sustainable Development Goal 16.

No guidance document on the application of environmental legislation exists.

#### Recommendation 5.4:

| Implementation measures         | Detailed actions                                    | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment | Financial sources | Means of verification | Comments |
|---------------------------------|---|-------------------------------------|----------------|-----------------------------------|-----------------|-------------------|-----------------------|----------|
| The Ministry of Justice should: | Setup a Task Force to develop a training program on | Mar 2021                            | MOJ            | AJPP<br>MOEPP                     | None            |                   | Minister's decision   |          |

| Implementation measures  | Detailed actions  | Period of execution for each action | Lead authority | Other institutions & stakeholders                                      | Cost assessment | Financial sources       | Means of verification  | Comments  |
|--|---|-------------------------------------|----------------|--|-----------------|-------------------------|--|---|
| (a) Ensure, in cooperation with the Academy for Judges and Public Prosecutors and the Ministry of Environment and Physical Planning, regular training on environmental legislation for judges, prosecutors and lawyers   | environmental legislation for judges and public prosecutors   |                                     |                |  |                 |                         |  |   |
|  | Develop comprehensive training program and curricula for environmental legislation to be included in the curricula for judges and public prosecutors          | Sep 2021                            | MOJ            | AJPP<br>MOEPP  | Up to €5 k      | MOJ/<br>AJPP<br>Budget  | Training Program and Curricula endorsed by the respective ministers and the director of AJPP | For efficiency, the Task Force members should be rewarded   |
|  | Deliver training curricula, following the training program developed above  | Dec 2021                            | AJPP           |  |                 | AJPP<br>Budget          | Training delivered   | The environment legislation curricula should be included in the AJPP program at latest before the end of 2021   |
| (b) Promote, in cooperation with the Ministry of Education and Science, Ministry of Environment and Physical Planning and respective universities, the inclusion of a course on environmental law, as either a mandatory or elective course, at major faculties of law | Setup a Task Force to organize a round table meeting to discuss the inclusion of a course on environmental law  | Jun 2021                            | MOJ            | MES<br>MOEPP   | None            |                         | Minister's decision  |   |
|  | Organize a round table meeting to discuss the inclusion of a course on environmental law, as either a mandatory or elective course, at major faculties of law | Jun 2021                            | MOJ            | MES<br>MOEPP<br>Academia/<br>Universities<br>(both public and private) | €16 k           | MOJ<br>Budget<br>Donors | Report and recommendations from the round table  | The desirable output of the discussion at the round table should be a set of guidance and recommendations to universities on the inclusion of a course on environmental law |
|  | Inclusion of environmental law course (mandatory or elective) in the universities' curricula  | Jun 2022                            | MOJ            | MES<br>MOEPP<br>Academia/<br>Universities<br>(both public and private) |                 |                         | Universities' curricula  | If the recommendations are accepted by the universities, it would be expected that they include the environment law course with the academic year 2022/2023                 |
| (c) Raise awareness, train public officials and develop other  | Merge and coordinate with activities under 1.1 (f) and 5.1 (e)  |                                     |                |  |                 |                         |  |   |

| Implementation measures  | Detailed actions | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment | Financial sources | Means of verification | Comments |
|--|------------------|-------------------------------------|----------------|-----------------------------------|-----------------|-------------------|-----------------------|----------|
| preventive measures, in cooperation with the Ministry of Environment and Physical Planning and Ministry of Internal Affairs, to protect environmental defenders from being penalized, persecuted or harassed in any way in exercising their rights |                  |                                     |                |                                   |                 |                   |                       |          |

### Recommendation 5.5:

| Implementation measures  | Detailed actions          | Period of execution for each action | Lead authority | Other institutions & stakeholders                 | Cost assessment | Financial sources | Means of verification | Comments  |
|--|---------------------------|-------------------------------------|----------------|---|-----------------|-------------------|-----------------------|---|
| The Ministry of Justice should develop a guiding document for the courts on the application of environmental law | To be included in 5.4 (a) | Dec 2021                            | MOJ            | Judicial Council<br>Council of Public Prosecutors |                 |                   |                       | The Guidance document should be developed as an additional output in the above activities |

**Enabling the promotion of environmental democracy** - A considerable challenge in implementing effective public access to environmental information, public participation and access to justice in environmental matters is the lack of dedicated centres across the country to actively promote environmental democracy to the public at large and contribute to the development of the capacity of environmental CSOs.

Challenges identified for effective implementation of access to information, public participation and access to justice in relation to environmental matters by the Ministry of Environment and Physical Planning include the lack of human and financial resources and the lack of expertise. However, the resource needs are not estimated.

### Recommendation 5.6:

| Implementation measures   | Detailed actions   | Period of execution for each action | Lead authority | Other institutions & stakeholders                     | Cost assessment | Financial sources  | Means of verification                    | Comments  |
|---|--|-------------------------------------|----------------|---|-----------------|--------------------|--|---|
| The Government should establish mechanisms to actively promote access to information, public participation and access to justice in relation to environmental matters | Setup a Task Force to review the possibilities of establishing the mechanism   | Mar 2021                            | Gov.           | DPM SD<br>National Coordinator<br>MOJ<br>MOEPP        | None            |                    | Government's decision                    |   |
|   | Develop the mechanism for active promotion of access to information, public participation and access to justice in relation to environmental matters | Sep 2021                            | Gov.           | DPM EA DPM SD<br>National Coordinator<br>MOJ<br>MOEPP | €5 k            | Gov. Budget Donors | Gov. decision on endorsing the mechanism | For efficiency, the Task Force members should be rewarded |

### Recommendation 5.7:

| Implementation measures   | Detailed actions  | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment | Financial sources   | Means of verification                           | Comments   |
|---|---|-------------------------------------|----------------|-----------------------------------|-----------------|---------------------|---|--|
| The MOEPP should undertake a comprehensive analysis to estimate the necessary expenditures (human and financial resources) for the satisfactory | Prepare a ToR for procurement of an expert team to do the analysis<br>Consider combining with measure 6.1 (b), for cost-effectiveness | Jun 2021                            | MOEPP          | DPM SD                            | None            |                     | ToR endorsed by the Minister                    | As this activity requires high level of expertise, and will be time consuming, it is recommended that the activity is outsourced |
|   | Draft a comprehensive analysis to estimate the necessary expenditures   | Dec 2021                            | MOEPP          | DPM SD<br>National Coordinator    | >€16 k          | MOEPP Budget Donors | The Analysis is endorsed by the minister and/or |  |

| Implementation measures  | Detailed actions | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment | Financial sources | Means of verification | Comments |
|--|------------------|-------------------------------------|----------------|-----------------------------------|-----------------|-------------------|-----------------------|----------|
| implementation on the ground of access to information, public participation and access to justice in relation to environmental matters |                  |                                     |                | MISA<br>MF                        |                 |                   | by the Gov.           |          |

**From environmental education to education for sustainable development** - The framework for environmental education is provided by the Programme on integration of environmental education into the education system, which is not formally adopted and implemented by the Government. ESD is broader than environmental education and no legal document includes ESD. The 2005 Law on Environment has a requirement to integrate environmental protection into the curricula of primary or secondary education as either an optional or compulsory subject, which is not sufficient for the adequate implementation of ESD.

Furthermore, no formal strategic or policy document on ESD is available in the country as at November 2018. A detailed assessment of VET programmes, with a view to integrating ESD into them, was made in 2016 in the framework of the project “Introducing the United Nations Sustainable Development Goals in Schools in South Eastern Europe (SEEDLING)”. The Ministry of Education and Science’s role in integrating environmental education and ESD into curricula and overseeing implementation is not clearly defined.

The lack of a legal framework or a formal strategic or policy document on ESD is a barrier towards achieving the global targets 4.7 and 12.8 of the Sustainable Development Goals.

### Recommendation 5.8:

| Implementation measures  | Detailed actions  | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment | Financial sources | Means of verification | Comments |
|--|---|-------------------------------------|----------------|-----------------------------------|-----------------|-------------------|-----------------------|----------|
| (a) The Government should develop an action plan for education for | Setup a Task Force to develop a policy document with an action plan for ESD | Mar 2021                            | MES            | MOEPP<br>DPM SD<br>MLSP<br>ZELS   | None            |                   | Minister’s decision   |          |

| Implementation measures  | Detailed actions   | Period of execution for each action | Lead authority | Other institutions & stakeholders           | Cost assessment  | Financial sources               | Means of verification                               | Comments  |
|--|--|-------------------------------------|----------------|---|------------------|---------------------------------|---|---|
| sustainable development (ESD)                                    |  |                                     |                | Academia                                    |                  |                                 |   |   |
|  | Develop a policy document with an action plan for ESD                                      | Sep 2021                            | MES            | MOEPP<br>DPM SD<br>MLSP<br>ZELS<br>Academia | €10 k            | MES<br>Budget<br>Donors         | The policy document and AP are endorsed by the Gov. | For efficiency, the Task Force members should be rewarded<br>The Policy document should, inter alia:<br>- analyses the present status of environmental education,<br>- synthesizes a statement as to the character of current curricula and materials development efforts,<br>- presents strategies and guidelines for curriculum and materials development in ESD at primary, secondary and tertiary levels. |
| (b) Develop competences for educators in ESD                     | Setup a Task Force to develop competences for educators in ESD                             | Sep 2021                            | MES            | MOEPP<br>MLSP<br>Academia<br>BDE            | None             |                                 | Minister's decision                                 |   |
|  | Develop competences for educators in ESD   | Dec 2021                            | MES            | MOEPP<br>MLSP<br>Academia<br>BDE            | €5 k             | MES/<br>BDE<br>Budget<br>Donors | The competences are endorsed by the minister (Gov.) | For efficiency, the Task Force members should be rewarded<br>The competences should be developed in view of the Policy document for ESD and ECE Strategy for ESD  |
| (c) Integrate ESD into the curricula of all education levels and | Activities should be developed based on the outcomes of the Policy document and its action | Jun 2022                            | MES            | MLSP  | To be determined | The Budget                      | New curricula developed                             | Integration should start with the school/ academic year of  |

| Implementation measures  | Detailed actions  | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment  | Financial sources | Means of verification                       | Comments   |
|--|---|-------------------------------------|----------------|-----------------------------------|------------------|-------------------|---|--|
| in lifelong learning, teacher education and in-service training    | plan (measure 5.8 (a))  |                                     |                |                                   |                  |                   |   | 2022/23  |
| (d) Integrate ESD into student assessments at all education levels | Activities should be developed based on the outcomes of the Policy document and its action plan (measure 5.8 (a)) | Jun 2022                            | MES            | MLSP                              | To be determined | The Budget        | Guidance for assessment curricula developed | Integration should start with the school/ academic year of 2022/23 |

**Enabling the implementation of education for sustainable development** - Environmental education and ESD are promoted mostly within project-based activities; the process is not continuous and sustainable. Progress has been made in environmental education, mostly in primary and secondary schools and mostly through the eco-school programme. Eco-schools serve as a good example of integrating environmental education and show the interest and involvement of teachers, students and parents in environmental activities.

State-supported in-service training for teachers does not exist. In-service training for teachers does not include ESD. The lack of teacher in-service training on ESD is a barrier towards achieving global target 4.7 of Sustainable Development Goal 4.

In the review period, the country has not benefited from the tools and materials developed in the framework of the ECE Strategy for Education for Sustainable Development, such as indicators to measure the implementation of ESD, the ESD competences for educators, the tools for policy and practice workshops on competences in ESD and examples of good practices in ESD, including in support of greening the economy.

### Recommendation 5.9:

| Implementation measures   | Detailed actions                                  | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment | Financial sources | Means of verification  | Comments  |
|---|---|-------------------------------------|----------------|-----------------------------------|-----------------|-------------------|--|---|
| (a) The Government should assign a clear mandate on ESD for the Ministry of Education and Science | Draft amendments for competences (mandate) of MES | Jun 2021                            | MISA           | MES<br>MOEPP<br>DPM SD            | None            |                   | Draft LOSOB endorsed by the Gov. and adopted by the Parliament | This should be done within the process of reorganization of the state administrative. The drafting and endorsement of the |

| Implementation measures  | Detailed actions  | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment  | Financial sources | Means of verification                       | Comments   |
|--|---|-------------------------------------|----------------|-----------------------------------|------------------|-------------------|---|--|
|  |   |                                     |                |                                   |                  |                   |   | legislation should follow respective national requirements, particularly in terms of public consultation   |
| (b) Establish a coordination mechanism on ESD among all relevant stakeholders                    | Setup a standing coordinative body (ex. task force, working group, committee or alike)                            | Jun 2021                            | MES            | MOEPP<br>MLSP<br>Academia         | €1.5 k           | MES<br>Budget     | Gov.'s decision                             | The coordinative body should be established by the Gov. in order to provide for political support.<br>The founding act should also determine the ToR of the coordinative body. The members of the body should participate on pro-bono basis; however, some funds may be necessary to cover the running cost incurred. It is recommended that the coordinative body is chaired by the representatives of MES/MOEPP on the basis of rotation |
| (c) Nominate a national focal point and participate in ECE regional activities on ESD            | Decision to appoint the national focal point on ESD and his/her alternate   | Jun 2021                            | MES            | MOEPP<br>MLSP                     |                  |                   | Gov.'s decision                             | It is recommended that the national focal point on ESD and his/her alternate are members of the coordinative body  |
| (d) Amend the mandate of the Academy for Teachers to include ESD in its activities and establish | Activities should be developed based on the outcomes of the Policy document and its action plan (measure 5.8 (a)) | Jun 2022                            | MES            | MLSP                              | To be determined | Gov<br>Budget     | Guidance for assessment curricula developed | Integration should start with the school/ academic year of 2022/23   |

| Implementation measures  | Detailed actions                      | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment      | Financial sources | Means of verification                    | Comments   |
|--|---------------------------------------|-------------------------------------|----------------|-----------------------------------|----------------------|-------------------|--|--|
| the Academy so that it can support the in-service training of educators and teachers   |                                       |                                     |                |                                   |                      |                   |  |  |
| (e) Allocate resources for the implementation of ESD, including to support eco-schools | Set up a dedicated trust fund for ESD | Sep 2021                            | MOEPP          | MES<br>MF<br>MLSP                 | min €150 k per annum | The Budget        | The Budget is endorsed by the Parliament | The current common form of this is to set a financial program within the MOEPP; however, the distribution of the funds should be based on a set of criteria, that may be developed by the task force (or by the coordinative body established under 5.9 (b)), that may also decide on the disbursement of the funds. |

## *Chapter 6*

### ***IMPLEMENTATION OF INTERNATIONAL AGREEMENTS AND COMMITMENTS***

**Capacity and resources** - The extended mandate of environmental bodies and units in the public administration to ensure the country's implementation of and compliance with obligations deriving from global and regional agreements has not been matched by increased capacity and financial resources. Currently, in addition, no efficient coordination structure among relevant state institutions charged with the implementation of those obligations is established. Furthermore, there are difficulties with the harmonization of obligations under the high number of ratified MEAs. Also, there is no harmonization of activities with other sectors that have or may have an impact on biological diversity.

## Recommendation 6.1:

| Implementation measures   | Detailed actions  | Period of execution for each action | Lead authority    | Other institutions & stakeholders           | Cost assessment | Financial sources | Means of verification | Comments   |
|---|---|-------------------------------------|-------------------|---|-----------------|-------------------|-----------------------|--|
| a) The Government should establish efficient coordination mechanisms among relevant state institutions, scientific institutions and civil society organizations | Appoint a national coordinator for MEAs                             | Jun 2021                            | PM<br>Chancellery | MOEPP<br>DPM SD<br>Gen. Sec                 | €50 k per annum | Gov.<br>Budget    | Gov.'s decision       | The appointment of a national coordinator responsible to the PM will ensure highest level of political support to the implementation of MEAs.<br>The national coordinator will chair the standing coordinative body.<br>The costs shall cover the salaries of the coordinator and its team of assistants as well as their running costs.   |
|   | Setup a standing coordinative body (ex. National committee on MEAs) | Jun 2021                            | PM<br>Chancellery | MOEPP<br>ME<br>DPM SD<br>DPM EA<br>Gen.Sec. | €1.5 k          | Gov.<br>Budget    | Gov.'s decision       | The coordinative body should be established by the Gov. and chaired by the national coordinator for MEAs and should operate under the umbrella of the PM Chancellery.<br>The coordinative body should be composed of the focal points of each MEAs.<br>The founding act should determine the ToR of the coordinative body.<br>The members of the body should participate on pro- |

| Implementation measures  | Detailed actions   | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment    | Financial sources   | Means of verification                                       | Comments   |
|--|--|-------------------------------------|----------------|-----------------------------------|--------------------|---------------------|---|--|
|  |  |                                     |                |                                   |                    |                     |   | bono basis; however, some funds may be necessary to cover the running cost incurred.   |
| b) Undertake an in-depth analysis of the administrative and technical capacity and financial needs of the bodies in charge of the implementation of obligations deriving from multilateral environmental agreements (MEAs) | Prepare a ToR for procurement of an expert team to do the analysis and prepare an action plan<br>Consider combining with measure 5.7, for cost-effectiveness | Jun 2021                            | MOEPP          | ME National Coordinator MEAs      | n/a                | n/a                 | ToR endorsed by the Minister                                | As this activity requires high level of expertise, and will be time consuming, it is recommended that the activity is outsourced |
|  | Draft the in-depth analysis and action plan  | Dec 2021                            | MOEPP          | ME National Coordinator MEAs Gov. | >€15 k             | MOEPP Budget Donors | The Analysis is endorsed by the minister and/or by the Gov. |  |
| c) On the basis of the analysis, prepare an action plan to ensure that the adequate administrative and technical capacity and financial resources are secured for the implementation of obligations deriving from MEAs     |  |                                     |                |                                   |                    |                     |   | Merge with measure 6.1 (b)   |
| d) Increase efforts to fulfil its reporting obligations under MEAs and ensure the quality of national reports  | Setup a Task Force to develop a quality control mechanism and criteria therein<br>Develop a quality control mechanism and criteria therein                   | Jun 2021<br>Dec 2021                | MOEPP<br>MOEPP |                                   | None<br>Up to €5 k |                     | Minister's decision<br>output endorsed by the Minister      |  |
| e) Ensure the participation of its representatives in the  |  | On a regular basis in               | MOEPP          |                                   | As necessary       | MOEPP budget        | Reports on the participation at the meetings                | This is management issue and it requires no special activity   |

| Implementation measures   | Detailed actions | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment | Financial sources | Means of verification | Comments |
|---|------------------|-------------------------------------|----------------|-----------------------------------|-----------------|-------------------|-----------------------|----------|
| meetings of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) |                  | accordance with meetings schedule   |                |                                   |                 |                   |                       |          |

**Energy sector** - Since 2011, two non-compliance cases were filed under the Bern Convention and the 1985 Sulphur Protocol to the Air Convention; both cases concerned activities in the energy sector. These cases point to gaps in the current environmental governance and inadequate streamlining of environmental considerations in the country's energy sector development. Notwithstanding the presence of a requirement for compliance with MEAs in the Energy Development Strategy, in practice, its implementation in conformity with MEAs has proved to be challenging. The priorities for energy sector development, aimed to be harmonized with MEAs, have driven the national energy policy in the direction of rapid construction of HPPs, with many planned in protected areas, resulting in tensions with obligations under the Bern Convention.

Elevated ELVs for sulphur, mainly granted to large coal-fired TPPs, caused a breach of sulphur reduction commitments under the 1985 Sulphur Protocol for the period 2013–2015. Furthermore, the country failed to fulfil some obligations under the Energy Community Treaty. Challenges exist in meeting the country's legally binding renewable energy target, due to its reliance predominantly on fossil fuels and hydropower, while its solar energy potential remains untapped.

Concerns have also been raised by CSOs with respect to a lack of transparency on the number and locations of the proposed HPPs. This points to a need for a more harmonized approach in the energy sector, development of which inherently touches upon several cross-cutting environmental issues covered by MEAs. In the absence of such an approach, the future implementation of MEAs will continue to be constrained and more non-compliance cases are likely to occur in the domain of energy sector development. Nature protection obligations should be recognized and respected by the Government whenever hydropower, mining or large infrastructure investments are planned.

## Recommendation 6.2:

| Implementation measures | Detailed actions                 | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment | Financial sources | Means of verification | Comments |
|-------------------------|----------------------------------|-------------------------------------|----------------|-----------------------------------|-----------------|-------------------|-----------------------|----------|
| (a) The MOEPP and       | Setup a Task Force to revise all | Jun 2021                            | MOEPP          | DPM EA                            | None            |                   | Joint ministers'      |          |

| Implementation measures   | Detailed actions  | Period of execution for each action | Lead authority | Other institutions & stakeholders          | Cost assessment | Financial sources       | Means of verification   | Comments   |
|---|---|-------------------------------------|----------------|--|-----------------|-------------------------|---|--|
| ME should revise all legal and strategic documents that regulate and foresee hydropower construction to ensure that the site selection criteria applied to hydropower plants are based on international best practice, which excludes hydropower construction in protected areas and areas with high hydro-morphological and biodiversity status        | legal and strategic documents that regulate and foresee hydropower construction                                       |                                     | ME             | CSOs<br>Academia                           |                 |                         | decision  |  |
|   | Develop a Report on the existing selection criteria and, as necessary, propose amendments of the relevant legislation | Dec 2021                            | MOEPP<br>ME    | DPM EA<br>CSOs<br>Academia                 | €5 k            | MOEPP/<br>ME<br>Budgets | Report endorsed by the ministers and/or by the Gov.                                     | For efficiency, the Task Force members should be rewarded  |
|   | Draft & amend (as necessary) the relevant legislation   | Jun 2022                            | Gov.           | Ministries<br>SL<br>Academia<br>Parliament | None            |                         | Draft legislation endorsed by the Gov.<br>Official Journal of the RNM                   | The drafting and endorsement of the legislation should follow respective national requirements, particularly in terms of public consultation |
| (b) In cooperation with neighbouring countries that are pursuing a similar path in energy sector development, conduct a transboundary study into the cumulative and combined effects on the environment of planned small hydropower plants and associated new infrastructure construction, taking into consideration seismic and climate change effects | Develop a Project proposal/ fiche to be included in the IPA cross border program                                      | Sep 2021                            | MOEPP<br>ME    | DPM EA<br>CSOs<br>Academia                 | None            |                         | Project proposal endorsed by the ministers and included in the IPA cross border program |  |
|   | Develop ToR for conducting a transboundary study  | Dec 2021                            | MOEPP<br>ME    | DPM EA<br>CSOs<br>Academia                 | None            |                         | ToR approved by the respective managing body  |  |
|   | Implement the project   | Dec 2022                            | MOEPP<br>ME    | DPM EA<br>CSOs<br>Academia                 | Up to €245 k    | IPA Cross Border        | Contract signed<br>Training curricula endorsed<br>Training delivered                    | This activity is conditional upon approval of the previous activity  |

| Implementation measures  | Detailed actions | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment | Financial sources | Means of verification | Comments  |
|--|------------------|-------------------------------------|----------------|-----------------------------------|-----------------|-------------------|-----------------------|---|
| (c) Promote the production of electrical energy from renewable sources other than hydropower   |                  |                                     |                |                                   |                 |                   |                       | Already underway (this measure is already being promoted by NGOs and MOEPP with Governmental support) |
| (d) Ensure that SEAs carried out on energy sector plans and programmes under development are based on international best practice and provide greater transparency and public engagement |                  |                                     |                |                                   |                 |                   |                       | Combine (and merge) with respective activities under 1.2  |

**Industrial accidents** - The country did not identify hazardous activities falling under the scope of the Industrial Accidents Convention and subsequently did not notify potentially affected countries. As a beneficiary country of the Convention's Assistance and Cooperation Programme, North Macedonia benefited from a subregional workshop for the countries in South-Eastern Europe on industrial accident prevention by identification and notification of hazardous activities and making linkages with the relevant EU legislation.

Since 2012, the country did not submit an updated national self-assessment and action plan under the Convention's strategic approach, nor related project proposals addressing needs and challenges identified through the self-assessment and in the national action plan.

No progress has been made on transposing Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances (Seveso III Directive).

The country is expected to submit an implementation report for the period 2016–2019 in 2019.

### Recommendation 6.3:

| Implementation measures  | Detailed actions  | Period of execution for each action | Lead authority | Other institutions & stakeholders  | Cost assessment | Financial sources | Means of verification                            | Comments   |
|--|---|-------------------------------------|----------------|--|-----------------|-------------------|--|--|
| (a) The MOEPP should transpose into national legislation Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances (Seveso III Directive) and work on implementing it | Setup a Task Force for drafting a new law on major accident hazards or amendment of the law on environment      | Jun 2022                            | MOEPP          |  | None            |                   | Minister's decision                              |  |
|  | Prepare corresponding tables for transposition of Directive 2012/18/EU  | Dec 2022                            | MOEPP          |  | None            |                   | Table of correspondence endorsed by the SL       |  |
|  | Draft the new law (or law amendments of the LoE) and respective secondary legislation on major accident hazards | Jun 2023                            | MOEPP          | Ministries<br>SL<br>CCM<br>Academia<br>Civic organizations<br>Private sector | None            |                   | Draft legislation endorsed by the Gov.           | The drafting and endorsement of the legislation should follow respective national requirements, particularly in terms of public consultation |
|  | Adopt the Law or amendments of the LoE  | Sep 2023                            | Gov.           | Parliament   | None            |                   | Official Journal of the RNM                      |  |
| (b) Identify hazardous activities falling under the scope of the Convention on the Transboundary Effects of Industrial Accidents and notify potentially affected countries accordingly                   | Setup a Task Force to Identify hazardous activities falling under the scope of the Convention                   | Mar 2022                            | MOEPP          | ME<br>DPM SD<br>DPM EA<br>Academia   | None            |                   | Minister's decision                              |  |
|  | Develop a comprehensive list of companies/activities falling under the scope of the Convention                  | Sep 2022                            | MOEPP          | ME<br>DPM SD<br>DPM EA<br>Academia   | €5 k            | MOEPP<br>Budgets  | List endorsed by the minister and/or by the Gov. | For efficiency, the Task Force members should be rewarded  |
|  | (as necessary) Prepare and submit notifications to potentially affected neighbouring countries                  | Dec 2022                            | MOEPP          | Gov.   | None            |                   | Notifications send & received                    |  |
| (c) Submit an updated national self-assessment and action plan under the   | Setup a Task Force to update national self-assessment and action plan under the Convention                      | Jun 2021                            | MOEPP          | ME<br>DPM SD<br>DPM EA<br>Academia   | None            |                   | Minister's decision                              |  |

| Implementation measures  | Detailed actions   | Period of execution for each action | Lead authority | Other institutions & stakeholders  | Cost assessment | Financial sources | Means of verification   | Comments  |
|--|--|-------------------------------------|----------------|------------------------------------|-----------------|-------------------|---|---|
| Convention's strategic approach, together with project proposals addressing needs and challenges identified  |  |                                     |                | CSOs                               |                 |                   |   |   |
|  | Develop an update national self-assessment and action plan under the Convention  | Jun 2021                            | MOEPP          | ME<br>DPM SD<br>DPM EA<br>Academia | €5 k            | MOEPP<br>Budgets  | National self-assessment and action plan endorsed by the Gov. | For efficiency, the Task Force members should be rewarded |
|  | Develop project proposals addressing identified needs and challenges   | Sep 2021                            | MOEPP          | ME<br>DPM SD<br>DPM EA<br>Academia | €5 k            | MOEPP<br>Budgets  | Project proposals endorsed by the minister                    | For efficiency, the Task Force members should be rewarded |
|  | Submit the updated national self-assessment and action plan under the Convention's strategic approach, including project proposals | Dec 2021                            | MOEPP          | Gov.                               | None            |                   | National self-assessment and action plan send & received      |   |
| (d) Prepare in a participatory and transparent manner the implementation report on the Convention for the period 2016–2019 and submit it by the due date to the Convention's Secretariat |  |                                     |                |                                    |                 |                   |   | This is done on an annual basis continuously              |

**Access to information and public participation** - The list of ratified MEAs is available to the public on the Ministry of Environment and Physical Planning website. However, no information on the status of implementation of MEAs or other international commitments, including the national reports submitted, is provided by the Ministry of Environment and Physical Planning to the public, except the 2018 national implementation report to the Aarhus Convention and the 2014 national implementation report to the CBD. The public, including CSOs, is not involved in the decision-making processes regarding the country's substantive contributions to and participation in MEA-related and other international processes.

## Recommendation 6.4:

| Implementation measures  | Detailed actions   | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment | Financial sources | Means of verification               | Comments  |
|--|--|-------------------------------------|----------------|-----------------------------------|-----------------|-------------------|-------------------------------------|---|
| (a) The MOEPP should make publicly available the information on the participation of the country in environmental agreements and international environmental processes and commitments, and the related national implementation and progress reports | Coordinate with 5.1 (a)  |                                     | MOEPP          |                                   |                 |                   |                                     | The MOEPP should ensure that all relevant documents are published on the updated and redesigned web site in both Macedonian and Albanian languages, as well as in English where available |
| (b) Provide timely access to information on environmental agreements and international processes and commitments to enable effective public participation  | Setup a Task Force to develop a Standard Operation Procedure for provision of timely access to information on MEAs | Mar 2021                            | MOEPP          | SEI                               | None            |                   | State secretary's decision          |   |
|  | Develop a Standard Operation Procedure for provision of timely access to information on MEAs                       | Jun 2021                            | MOEPP          | SEI                               | None            |                   | SOP endorsed by the State secretary | Availability of SOP should ensure the processes are always done properly and in time  |
| (c) Ensure the effective participation of the public in decision-making on environmental agreements and international processes and commitments, and   | Merge and coordinate with activity 6.4 (b)   |                                     |                |                                   |                 |                   |                                     |   |

| Implementation measures  | Detailed actions  | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment | Financial sources | Means of verification                        | Comments  |
|--|---|-------------------------------------|----------------|-----------------------------------|-----------------|-------------------|--|---|
| in the preparation of national reports and other substantive inputs on their implementation  |   |                                     |                |                                   |                 |                   |  |   |
| (d) Include representatives of relevant environmental civil society organizations in national delegations participating in international environmental processes | Improve the cooperation and actual implementation of signed MoU between MOEPP with NGOs | Continuously                        | MOEPP          | NGOs                              | As necessary    | MOEPP budget      | Reports on the participation at the meetings | This is management issue and it requires no special activity but to ensure appropriate budget |

**Participation in multilateral environmental agreements to which North Macedonia is not party** - The country is clearly committed to preventing and combating air pollution and to accession and implementation of international agreements in this domain. Further joint work between the country and the ECE Secretariat of the Air Convention would allow the country to accept amendments to the Protocol on Heavy Metals, POPs Protocol and Gothenburg Protocol.

Though the country is a party to the Aarhus Convention, it has yet to ratify the 2005 Almaty Amendment on Genetically Modified Organisms. Although some preparatory work was carried out, the country has yet to accede to the Protocol on Water and Health and the Kigali Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer. Furthermore, the country has not yet joined the Nagoya Protocol and has yet to accede to the Sofia and Cavtat Amendments to the Espoo Convention. Although the Government has already conducted primary activities of the Minamata Initial Assessment in 2018, it has not yet ratified the Minamata Convention on Mercury.

### Recommendation 6.5:

| Implementation measures | Detailed actions | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment | Financial sources | Means of verification | Comments |
|-------------------------|------------------|-------------------------------------|----------------|-----------------------------------|-----------------|-------------------|-----------------------|----------|
|                         |                  |                                     |                |                                   |                 |                   |                       |          |

| Implementation measures  | Detailed actions  | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment | Financial sources | Means of verification                  | Comments   |
|--|---|-------------------------------------|----------------|-----------------------------------|-----------------|-------------------|--|--|
| (a) The Government should start ratification of the Minamata Convention on Mercury;  |   |                                     | MOEPP          | SEI                               | None            |                   | Government                             | Ratified with Law on ratification published in Official Gazette of RNM no. 34/2020   |
| (b) Accession to the Kigali Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer;   |   |                                     | MOEPP          | SEI                               | None            |                   | Government                             | Ratified with Law on ratification published in Official Gazette of RNM no. 34/2020   |
| (c) Accession to the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity;   | Draft laws for ratification/ accession/ acceptance of the respective MEAs | 2021/2022                           | MOEPP          | Ministries SL                     | None            |                   | Draft legislation endorsed by the Gov. | The drafting and endorsement of the legislation should follow respective national requirements, particularly in terms of public consultation |
|  | Adopt the Laws  | 2021/2022                           | Gov.           | Parliament                        | None            |                   |  | Official Journal of the RNM  |
| (d) Acceptance of amendments to the Protocol on Heavy Metals, Protocol on Persistent Organic Pollutants, and Protocol to Abate Acidification, Eutrophication and Ground-level Ozone (Gothenburg Protocol) to the Convention on Long-Range Transboundary Air Pollution; | Draft laws for ratification/ accession/ acceptance of the respective MEAs | 2021/2022                           | MOEPP          | Ministries SL                     | None            |                   | Draft legislation endorsed by the Gov. | The drafting and endorsement of the legislation should follow respective national requirements, particularly in terms of public consultation |
|  | Adopt the Laws  | 2021/2022                           | Gov.           | Parliament                        | None            |                   |  | Official Journal of the RNM  |
| (e) Ratification of the  | Draft laws for ratification/  | 2021/2022                           | MOEPP          | Ministries                        | None            |                   | Draft legislation                      | The drafting and   |

| Implementation measures  | Detailed actions  | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment | Financial sources | Means of verification                  | Comments   |
|--|---|-------------------------------------|----------------|-----------------------------------|-----------------|-------------------|--|--|
| Almaty Amendment on Genetically Modified Organisms to the Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters; | accession/ acceptance of the respective MEAs                              |                                     |                | SL                                |                 |                   | endorsed by the Gov.                   | endorsement of the legislation should follow respective national requirements, particularly in terms of public consultation                  |
|  | Adopt the Laws  | 2021/2022                           | Gov.           | Parliament                        | None            |                   |  | Official Journal of the RNM  |
| (f) Accession to the Protocol on Water and Health to the Convention on the Protection and Use of Transboundary Watercourses and International Lakes;                                   | Draft laws for ratification/ accession/ acceptance of the respective MEAs | 2021/2022                           | MOEPP          | Ministries<br>SL                  | None            |                   | Draft legislation endorsed by the Gov. | The drafting and endorsement of the legislation should follow respective national requirements, particularly in terms of public consultation |
|  | Adopt the Laws  | 2021/2022                           | Gov.           | Parliament                        | None            |                   |  | Official Journal of the RNM  |
| (g) Accession to the Sofia and Cavtat Amendments to the Convention on Environmental Impact Assessment in a Transboundary Context.  | Draft laws for ratification/ accession/ acceptance of the respective MEAs | 2021/2022                           | MOEPP          | Ministries<br>SL                  | None            |                   | Draft legislation endorsed by the Gov. | The drafting and endorsement of the legislation should follow respective national requirements, particularly in terms of public consultation |
|  | Adopt the Laws  | 2021/2022                           | Gov.           | Parliament                        | None            |                   |  | Official Journal of the RNM  |

## Chapter 7

### CLIMATE CHANGE

**Establishing a strong legal and institutional framework** - The country lacks a comprehensive law on climate change and an overall long-term strategy on climate action. While there is coordination among the different ministries that participate in the National Climate Change Committee, participating ministries tend not to have units or departments dedicated to climate change.

#### Recommendation 7.1:

| Implementation measures                          | Detailed actions                                 | Period of execution for each action | Lead authority | Other institutions & stakeholders  | Cost assessment               | Financial sources        | Means of verification | Comments   |
|--|--|-------------------------------------|----------------|--|-------------------------------|--------------------------|-----------------------|--|
| The MOEPP should develop a Law on Climate Action | Assessments reports developed and ToCs developed | Dec 2020                            | MOEPP          | ME<br>MAFWE<br>MoTC<br>MH<br>IPH<br>DPM EA<br>SSO<br>Civil Aviation Agency<br>SEI<br>Institute for Accreditation | €1.1 million                  | EU/<br>through<br>IPA II |                       | Adopted by the Project steering Committee<br><br><a href="https://climateaction-ipaproject.mk/">https://climateaction-ipaproject.mk/</a> |
|  | Consultation with different interested parties   | Dec 2020-<br>Mar 2021               | MOEPP          | ME<br>MAFWE<br>MTC<br>MH<br>IPH<br>DPM EA<br>SSO   | Within the project activities |                          |                       |  |

| Implementation measures                    | Detailed actions                                     | Period of execution for each action | Lead authority | Other institutions & stakeholders   | Cost assessment               | Financial sources        | Means of verification   | Comments   |
|--|--|-------------------------------------|----------------|---|-------------------------------|--------------------------|-------------------------|--|
|  |  |                                     |                | Civil Aviation Agency<br>SEI<br>Institute for Accreditation   |                               |                          |                         |  |
|  | Amending first draft proposal based on consultations | Mar 2021-<br>Aug 2021               | MOEPP          |   | Within the project activities |                          |                         |  |
|  | Adoption of the Law                                  | Sep 2021-<br>Apr 2022               | MOEPP/<br>Gov. | Parliament  | None                          |                          | Official Journal of RNM |  |
| Developing of a Strategy on climate Action |  |                                     | MOEPP          | ME<br>MAFWE<br>MTC<br>MH<br>IPH<br>DPM EA<br>SSO<br>Civil Aviation Agency<br>SEI<br>Institute for Accreditation | €1.1 million                  | EU/<br>through<br>IPA II |                         | Adopted by the Project steering Committee<br><br><a href="https://climateaction-ipaproject.mk/">https://climateaction-ipaproject.mk/</a> |
|  | Consultation with different interested parties       | Dec 2020-<br>Mar2021                | MOEPP          | ME<br>MAFWE<br>MTC<br>MH<br>IPH<br>DPM EA<br>SSO<br>Civil Aviation Agency<br>SEI                                | Within the project activities |                          |                         |  |

| Implementation measures | Detailed actions                                     | Period of execution for each action | Lead authority | Other institutions & stakeholders   | Cost assessment               | Financial sources | Means of verification   | Comments |
|-------------------------|--|-------------------------------------|----------------|---|-------------------------------|-------------------|---|----------|
|                         |  |                                     |                | Institute for Accreditation   |                               |                   |   |          |
|                         | Amending first draft proposal based on consultations | Mar 2021-May 2021                   | MOEPP          | ME<br>MAFWE<br>MTC<br>MH<br>IPH<br>DPM EA<br>SSO<br>Civil Aviation Agency<br>SEI<br>Institute for Accreditation | Within the project activities |                   |   |          |
|                         | Adoption of the Strategy                             | May-Oct 2021                        | Gov            | MOEPP   | None                          |                   | Long-term strategy on climate action adopted by Governmental decision |          |

### Recommendation 7.2:

| Implementation measures  | Detailed actions                                    | Period of execution for each action | Lead authority | Other institutions & stakeholders                          | Cost assessment | Financial sources | Means of verification | Comments   |
|--|---|-------------------------------------|----------------|--|-----------------|-------------------|-----------------------|--|
| (a) The Government should strengthen human capacities of the most relevant institutions, especially those participating in | Proposed draft Plan on administrative strengthening | Dec 2021                            | MOEPP          | ME, MLSG, Regulatory Commission, DPM Office, MF, SEA, SSO, | None            | EU/IPA/GEF/UN DP  | Governmental Decision | Draft Plan completed as a project activity under:<br>- IPA project on Development of a Law and Long-term |

|   |  |           |                       |  |      |          |  |  |
|---|--|-----------|-----------------------|--|------|----------|--|--|
| the National Climate Change Committee, by establishing in all participating ministries climate change units or climate focal points with a clear mandate for mainstreaming climate change in the relevant sectors |  |           |                       | MAFWE, MH, HydroMet, Civil Aviation, MTC   |      |          |  | strategy on climate Action<br>- GEF/UNDP supported climate change projects |
|   | Establishing of National Network of Climate Change Practitioners   | Dec 2020  | MOEPP                 | 64 representatives from 27 institutions and organizations (61% women). In addition to civil servants, NGO, academia, universities and international organizations that implement complementary projects. | None | GEF/UNDP | Third Biennial Update Report on Climate Change | Completed as a project activity under CBIT project supported by GEF/UNDP   |
|   | Establishing of a network of persons working in the field of gender equality and climate change at the administrative level. | Dec 2020  | MOEPP/                | MLSP/MISA  | None | GEF/UNDP | Third Biennial Update Report on Climate Change | Completed as a project activity under CBIT project supported by GEF/UNDP   |
|   | Establishing of climate focal points in line ministries through the revision of acts on systematisation                      | 2022/2023 | Relevant institutions | ME, MLSG, Regulatory Commission, DPM Office, MF, SEA, SSO, MAFWE, MH, HydroMet,  | None |          | Revised systematisations publicly available    | Availability of acts on systematisation                                    |

|  |   |            |       |  |             |          |  |   |
|--|---|------------|-------|--|-------------|----------|--|---|
|  |   |            |       | Civil Aviation, MTC)                                       |             |          |  |   |
|  | A detailed training plan has been prepared in order to strengthen individual capacity needs in relevant governmental institutions. Implementation is underway | Dec 2021   | MOEPP | Governmental institutions, private sectors, NGOs, Academia | 30,000 EURO | GEF/UNDP |  | Completed as a project activity under CBIT project supported by GEF/UNDP<br>www.klimatskipromeni.mk |
| (b) Provide a stronger institutional framework to the national greenhouse gas (GHG) inventory preparation process, which is currently implemented through international projects | Establishing a legal basis on GHG inventory system  | April 2022 | MOEPP | Governmental institutions, private sectors, NGOs, Academia | None        |          |  |   |

**Adaptation to climate change** - There is no dedicated strategy for adaptation to climate change. A draft project is being developed for GCF to prepare a national action plan for adaptation to climate change.

Within the national plans on climate change (also known as National Communications under UNFCCC), vulnerability and adaptation assessments have been prepared for the sectors of agriculture, forestry, water, health, biodiversity, crisis management, tourism and cultural heritage protection. Therefore, in the absence of another strategic document for adaptation to climate change, the national plans on climate change serve as strategic documents for adaptation to climate change. The country is very vulnerable to climate change, especially to extreme weather events, as has been tragically shown during recent flash floods. The country lacks clear strategic priorities to be able to adapt to climate change and reduce disaster risks. Despite the economic impact that climate change is expected to have on various economic sectors in the country, no estimation of the costs of inaction for the different sectors is carried out.

### Recommendation 7.3:

| Implementation measures             | Detailed actions                                   | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment  | Financial sources | Means of verification | Comments         |
|-------------------------------------|--|-------------------------------------|----------------|-----------------------------------|------------------|-------------------|-----------------------|------------------|
| (a) The Government should develop a | Draft project concept for NAP and submitted to GCF | Jun 2021                            | DPM EA NDA     | MOEPP                             | To be determined | GCF               |                       | Work in progress |

| Implementation measures   | Detailed actions   | Period of execution for each action | Lead authority               | Other institutions & stakeholders               | Cost assessment  | Financial sources | Means of verification        | Comments  |
|---|--|-------------------------------------|------------------------------|---|------------------|-------------------|------------------------------|---|
| national adaptation plan in response to climate change  |  |                                     | focal point                  | UNDP  |                  |                   |                              |   |
|   | NAP implementation   | 2022-2025                           | DPM EA<br>NDA<br>focal point | MOEPP   |                  |                   | Governmental decision        |   |
| (b) Develop a national disaster risk reduction strategy in line with the Sendai Framework for Disaster Risk Reduction | Identify entry points for integrating adaptation into the National Platform for Disaster Risk Reduction to increase awareness and information on climate change adaptation   | Jan 2022                            | DPM EA                       | DPM EA<br>MOEPP<br>Centre for crisis management | To be determined | GCF               |                              | TOR under preparation   |
|   | Analysis and recommendation report developed for integrating adaptation into the National Platform for Disaster Risk Reduction policies.   | December 2022                       | DPM EA                       | DPM EA<br>MOEPP<br>Centre for crisis management | To be determined | GCF               |                              | TOR under preparation   |
|   | Implementation of the findings and recommendations   | ≥ 2023                              |                              |   |                  |                   |                              | Measures to be addressed after 2023   |
|   | Streamline and Strengthen DRR, SDGs and Climate change reporting   | Dec 2021                            | Centre for Crisis Management | DPM EA<br>MOEPP<br>Centre for crisis management | €16 k            | GEF               | Centre for Crisis Management | Project activity under CBIT project supported by GEF/UNDP   |
| (c) Estimate the costs of inaction, and where possible undertake cost-benefit analysis for different sectors;         | Preparation of specific studies to address the insufficient data about sector specific climate impacts and their economic implications as well as apparent deficit in climate related economic analysis, including damage and loss analysis, | 2021-2022                           | MOEPP                        | DPM EA<br>MAFWE<br>ME                           | €80 k            | GEF               |                              | project activity under CBIT project supported by GEF/UNDP; 4 <sup>th</sup> National Communication on Climate Change (under development) |

| Implementation measures   | Detailed actions   | Period of execution for each action | Lead authority      | Other institutions & stakeholders    | Cost assessment | Financial sources                            | Means of verification | Comments                            |
|---|--|-------------------------------------|---------------------|--------------------------------------|-----------------|--|-----------------------|-------------------------------------|
| (d) Implement specific measures identified in the Vulnerability Assessment of the Forestry Sector, including a programme for the adaptation of forestry to climate change | Current methodology for preparation of the section - forest protection from insects and diseases in the forest management plans in the Republic of Macedonia implemented | Jul 2017-Mar 2021                   | PE National forests | Faculty of forestry in Skopje, MAFWE | €30 k           | PENF, Public budget and donors               | Governmental Decision | In progress according PENF Strategy |
|   | Identification of techniques for early detection of allochthone diseases and pests in the forests of the Republic of Macedonia   | Jul 2017-Mar 2021                   | PE National forests | Faculty of forestry in Skopje, MAFWE | €30 k           | PENF, Public budget and International donors | Governmental Decision | In progress according PENF Strategy |
|   | Monitoring of the health condition of the afforestation in Macedonia   | Jul 2017-Mar 2021                   | PE National forests | Faculty of forestry in Skopje, MAFWE | €40 k           | PENF, Public budget and International donors | Governmental Decision | In progress according PENF Strategy |
|   | Procurement of special vehicles for initial attack and trucks for forest fire suppression  | Dec 2021                            | PE National forests | MAFWE                                | €2 million      | PENF, Public budget and International donors | Governmental Decision | In progress according PENF Strategy |
|   | Establishment of the Center for monitoring and management of forest fire suppression actions   | Dec 2021                            | PE National forests | MAFWE, Faculty of forestry in Skopje | €650 k          | PENF, Turkish Cooperation and Coordination   | Governmental Decision | In progress according PENF Strategy |

| Implementation measures   | Detailed actions   | Period of execution for each action | Lead authority      | Other institutions & stakeholders      | Cost assessment | Financial sources   | Means of verification | Comments   |
|---|--|-------------------------------------|---------------------|--|-----------------|---|-----------------------|--|
|   |  |                                     |                     |  |                 | tion Agency (TIKA) Public budget and International donors |                       |  |
|   | Establishment of the forest fires early detection system   | Dec 2021                            | PE National forests | MAFWE<br>Faculty of forestry in Skopje | €500 k          | PENF, Public budget and International donors              | Governmental Decision | In progress according PENF Strategy  |
|   | Conduction of fuel management measures (mapping, fuel reduction and fuel breaks construction) in the afforestation | Jul 2018<br>Dec 2021                | PE National forests | MAFWE<br>Faculty of forestry in Skopje | €200 k          | PENF, Public budget and International donors              | Governmental Decision | In progress according PENF Strategy  |
| (e) Conduct a specific study on the incidence of forest fires under changed climatic conditions in the country; | To be planned in 2021  |                                     |                     |  |                 |   |                       |  |
| (f) Address the issue of the increasing vulnerability of the agricultural sector to climate change              | Food-water -energy nexus analysed in detail and prepared   | Dec 2021                            | MOEPP               | DPM EA<br>MAFWE<br>ME                  | €40 k           | GEF   |                       | Project activity under CBIT project supported by GEF/UNDP; 4 <sup>th</sup> National Communication on Climate Change (under |

| Implementation measures  | Detailed actions  | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment | Financial sources | Means of verification | Comments  |
|--|---|-------------------------------------|----------------|-----------------------------------|-----------------|-------------------|-----------------------|---|
|  |   |                                     |                |                                   |                 |                   |                       | development)  |
| (g) Update and fully implement actions contained in the 2011 Climate Change Health Adaptation Strategy and Action Plan, including intersectoral engagement and coordination with local governments, and improvement of information on climate change health adaptation | Providing continuous medical education and training of health professionals for dealing with the climate change impacts and adaptation measures | Jan 2023-<br>Jan 2025               |                |                                   |                 |                   |                       | To be determined through the Readiness proposal to the GCF*   |
|  | Assessing needs and tools for healthcare data collection related to climate vulnerabilities and action  |                                     |                |                                   |                 |                   |                       | To be determined through the Readiness proposal to the GCF (Project proposal title: Building capacities towards sustainable and climate-resilient human capital development, enhancing readiness and access to climate finance in the health, education and social protection sectors of North Macedonia) |
|  | Improving of a health monitoring, surveillance and early warning systems for heat   |                                     |                |                                   |                 |                   |                       | To be determined through the Readiness proposal to the GCF*   |

| Implementation measures | Detailed actions   | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment | Financial sources | Means of verification | Comments   |
|-------------------------|--|-------------------------------------|----------------|-----------------------------------|-----------------|-------------------|-----------------------|--|
|                         | stress, vector-borne and other communicable diseases, natural disasters, fresh water supply, food chain and other. |                                     |                |                                   |                 |                   |                       |  |
|                         | Assessment of specific health co-benefits from carbon reductions.  | Dec 2021                            | WHO MH         | MOEPP                             | €13 k           | WHO               |                       | 4 <sup>th</sup> National Communication on Climate Change (under development) |

**Climate change mitigation** - The WEM and WAM scenarios prioritize the energy sector for the identification of mitigation measures. Mitigation measures have been implemented in the energy sector, ranging from the introduction of energy audits to subsidies for energy efficiency measures in households. Because of the dominant use of domestic lignite for electricity production, there is potential for GHG emissions reductions. The percentage of renewable energy reached 19.9 per cent in 2015, leaving a gap to fill in order to reach by 2020 the renewable energy target of 23.9 per cent as a percentage of gross final energy consumption.

#### Recommendation 7.4:

| Implementation measures  | Detailed actions  | Period of execution for each action | Lead authority | Other institutions & stakeholders                   | Cost assessment                              | Financial sources | Means of verification | Comments  |
|--|---|-------------------------------------|----------------|---|--|-------------------|-----------------------|---|
| The Government should integrate climate change issues into overall energy planning and develop integrated climate and energy plans, which would include the gradual switch from the use of domestic lignite for electricity production to more | Final draft of integrated energy and climate plans prepared | May 2021                            | ME             | MOEPP, energy companies, Chambers of commerce, NGOs | Part of regional project, data not available | GIZ               | Governmental decision | First draft prepared, envisaged to be proposed for adoption by the Government in June 2021. Possible risk is linked with the adoption of a revised Law on energy setting a legal basis for the preparation of a Plan. |

|   |  |  |  |  |  |  |  |  |
|---|--|--|--|--|--|--|--|--|
| sustainable and less polluting sources of energy, and the increase of the percentage of gross final energy consumption from renewable energies to meet the national target of 23.9 per cent by 2020 |  |  |  |  |  |  |  |  |
|---|--|--|--|--|--|--|--|--|

### Recommendation 7.5:

| Implementation measures  | Detailed actions                               | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment  | Financial sources                                       | Means of verification | Comments  |
|--|--|-------------------------------------|----------------|-----------------------------------|--|---|-----------------------|---|
| The Government should address GHG emissions from the waste sector through an integrated approach, including by improving the current waste management system | Rapid assessment on circular economy potential | implemented                         | MOEPP          | ME                                | Part of Climate initiative project, service contract, data not available | Climate promise initiative implemented through the UNDP |                       | Study available at: <a href="https://klimatskipromeni.mk/data/rest/file/download/a6aebd5fbc39eb38094ab488c9ffd4c96b408a35d0d33abe126425ab7b4a1ad8.pdf">https://klimatskipromeni.mk/data/rest/file/download/a6aebd5fbc39eb38094ab488c9ffd4c96b408a35d0d33abe126425ab7b4a1ad8.pdf</a><br>( it was assessed that applying circular practices to the selected case studies (Construction & Demolition Waste(C&D), Biowaste, Secondary Residual Fuels (SRF), E-WasteEnd of Life Vehicles, Plastics and waste streams)can deliver, by 2030: • 951 |



## Recommendation 7.6:

| Implementation measures  | Detailed actions   | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment  | Financial sources   | Means of verification   | Comments  |
|--|--|-------------------------------------|----------------|-----------------------------------|------------------|---|-------------------------|---|
| (a) Encouraging cities to become signatories to the Covenant of Mayors for Climate and Energy and to subsequently prepare, adopt and implement sustainable energy (and climate) action plans   | Draft and amend the Law on energy to serve as a legal basis for preparation of an integrated energy and climate plans at local level | Jun 2022                            | ME             | MOEPP                             | None             |   | Official Journal of RNM |   |
| (b) Supporting the implementation of measures that would achieve GHG emissions reduction at local level, which are included in the 2011 Skopje Sustainable Energy Action Plan  | Supporting of EE and RES projects at municipal level   | 2020-2025                           | ME             | MF<br>MLSG<br>MOEPP<br>LSGUs      | To be determined | WB,<br>EBRD,<br>governmental and municipal, GCF, IPA, SWISS |                         | It is ongoing through several initiatives                   |
| (c) Advise the City of Skopje to integrate the updated 2011 Skopje Sustainable Energy Action Plan with the 2017 Resilient Skopje Climate Change Strategy, financed by the United Nations Development Programme, to avoid duplications and overlaps | Development of an integrated energy and climate plan for the City of Skopje  | Dec 2022                            | ME             | City of Skopje<br>MOEPP           | To be determined | To be determined  |                         | It will be legally set with the revision of a Law on Energy |

| Implementation measures  | Detailed actions   | Period of execution for each action | Lead authority                                  | Other institutions & stakeholders | Cost assessment | Financial sources | Means of verification | Comments   |
|--|--|-------------------------------------|---|-----------------------------------|-----------------|-------------------|-----------------------|--|
| (d) Advise municipalities to use the experience gained in the implementation of the 2015 Municipal Climate Change Strategies Project, funded by the United States Agency for International Development (USAID), for the eight municipalities involved, including the project participatory process, in considering the preparation of their local climate change strategies and in raising the awareness of the local population | Make publicly available already developed municipal strategies | Continuously                        | Mileiukontakt<br>Makedonija<br>Skopje,<br>USAID | MOEPP<br><br>City of Skopje       | None            |                   |                       | Eight municipal CC strategists publicly available<br><a href="https://milieukontakt.mk/index.php/publications/">https://milieukontakt.mk/index.php/publications/</a> |

**Awareness** - Despite improvements in awareness of climate change, overall, awareness remains limited. Climate change issues are not integrated into primary, secondary and tertiary education curricula. Most awareness-raising measures are foreseen in the framework of donor-financed projects.

### Recommendation 7.7:

| Implementation measures                 | Detailed actions                                    | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment | Financial sources | Means of verification | Comments |
|---|---|-------------------------------------|----------------|-----------------------------------|-----------------|-------------------|-----------------------|----------|
| (a) The Government should regularly and | Raising awareness through promotion of CCE-platform | 2020-2025                           | MOEPP          | LSGUs<br>Households               | None            |                   |                       |          |

| Implementation measures   | Detailed actions   | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment  | Financial sources | Means of verification                             | Comments  |
|---|--|-------------------------------------|----------------|-----------------------------------|------------------|-------------------|---|---|
| systematically implementation of measures aimed at raising awareness on climate-change-related issues       | already published on <a href="https://www.klimatskipromeni.mk/activities#/index/main">https://www.klimatskipromeni.mk/activities#/index/main</a> |                                     |                | Education institutions<br>CSOs    |                  |                   |   |   |
| (b) Ensure that climate-change-related issues are integrated into primary, secondary and tertiary curricula | Revision of relevant laws in the area of education;  | Jan 2022-<br>Jan 2024               | DPM EA         | MES<br>MOEPP                      | To be determined | GCF               | Approved by GCF Board;<br>Official Journal of RNM | Assigning a clear mandate on a Ministry of Education and Science on education on sustainable development (ESD, including climate change, including a focal point for participation in national and regional activities;<br>Establishing a coordination mechanism on ESD among all relevant stakeholders;<br>Amend the mandate of the Academy for Teachers to include ESD in its activities and enhance the capacity for in-service training of educators and teachers;<br>develop competences for educators in ESD;<br>Activities are proposed as part of the new Third readiness project proposal to the GCF |
|   | Develop an action plan for introducing the education for   | Jun 2024                            | MES<br>MOEPP   | To be determined                  |                  |                   |   |   |

| Implementation measures | Detailed actions   | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment | Financial sources | Means of verification | Comments |
|-------------------------|--|-------------------------------------|----------------|-----------------------------------|-----------------|-------------------|-----------------------|----------|
|                         | sustainable development (ESD) including climate change into pre-school, primary, secondary and tertiary education; |                                     |                |                                   |                 |                   |                       |          |

## Chapter 8

### *AIR PROTECTION*

**Improvement of air quality data** - Air quality monitoring is in the competence of MEIC under the Ministry of Environment and Physical Planning, which has limited human resources and technical and financial capacities to perform this task.

Data on air quality are often fragmented, due to inconsistent measurement that leads to a failure to meet data quality objectives (75 per cent of measurements valid during the year) and makes them unsuitable for official use. The calibration laboratory is not accredited, which again puts data quality into question.

There is no accredited laboratory at the national level to analyse parameters such as heavy metals and PAHs. The air quality network mainly comprises stations positioned in urban settlements, which are affected by multiple sources (traffic, industry, household heating), and hence does not allow for the distinction of dominant sources from background pollution. All of these limitations distort the picture on air quality.

#### Recommendation 8.1:

| Implementation measures          | Detailed actions  | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment      | Financial sources | Means of verification | Comments                                   |
|----------------------------------|---|-------------------------------------|----------------|-----------------------------------|----------------------|-------------------|-----------------------|--|
| (a) The Government should ensure | Programme for maintenance of the State Air Quality Monitoring | Continuously                        | MOEPP          |                                   | Up to €50 k per year | MOEPP budget      | MOEPP Programme       | Planned activities related to calibration, |

| Implementation measures   | Detailed actions  | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment                           | Financial sources                                | Means of verification  | Comments  |
|---|---|-------------------------------------|----------------|-----------------------------------|---|--|--|---|
| sufficient financial and human resources for regular maintenance and operation of the air quality monitoring network, including regular (every five years) recomposition of the network | Network   |                                     |                |                                   |   |  |  | maintenance and servicing of the existing equipment; activities related to completing and modernization of the State Air Quality Monitoring Network, data management, as well as project related activities and financial and human capacity needs  |
|   | Preparation of a National Environmental Monitoring Programme  | Sep 2021                            | MOEPP          |                                   | €1.3 million (Part of the Project budget) | Instrument for Pre-Accession Assistance (IPA II) | Contract Dossier "Development of Environmental Monitoring and Information System" EuropeAid/139107/IH/SER/MK | National Environmental Programme will define the competencies of the institutions that monitor, the frequency of monitoring, designated monitoring sites, methodologies, needed equipment and personnel and necessary funding for regular and continuous operation of the state monitoring network including programming of future activities |
| (b) Accreditation of the existing calibration laboratory;   | Preparation – Update of the necessary documentation to start the process of the accreditation of the Calibration and the Central Environmental Laboratory | Dec 2020                            | MOEPP          | Institute for accreditation       | €10 k                                     | MOEPP Budget                                     | Service Contract between the MOEPP and the selected Contractor signed  | A review of the existing supporting documents for the accreditation of the calibration laboratory (quality manual, SOPs) taking into account new  |

| Implementation measures  | Detailed actions   | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment                                 | Financial sources  | Means of verification   | Comments  |
|--|--|-------------------------------------|----------------|-----------------------------------|---|--|---|---|
|  |  |                                     |                |                                   |   |  |   | requirements by the accreditation body. Updates to the documentation and new documents will be done as needed. Plan for the accreditation of the calibration laboratory will be updated   |
| (c) Establishment of an accredited analytical laboratory for the regular analysis of contents of heavy metals and PAHs in particulate matter or outsourcing of this task on a regular basis. | Strengthening the administrative capacities for emission inventories, modelling, monitoring and air quality assessment;<br>Preparation of a Plan for monitoring of heavy metals (HM), volatile organic compounds (VOCs), inorganic compounds and polycyclic aromatic hydrocarbons (PAHs) in air and precipitation prepared | Mar 2021<br>Dec 2022                | MOEPP          |                                   | Up to €1.5 million (Part of the Project Budget) | Instrument for Pre-Accession Assistance (IPA II) – Sector Operational Programme for Environment and Climate Action 2014 – 2020 | Service Contract "Support in the Implementation of Air Quality Directives, EuropeAid/140684/IH/SER/MK | The plan should define the number of measurement locations and precise measurement sites, define the frequency and duration of measurements in accordance with the available budget for implementation of this activity. The Plan should also be in accordance to the provisions set down in the CAFÉ directive, 4th daughter directive and EMEP protocol Currently PAHs and HM are measured only when financial sources are available but not regular and in compliance with 2004/107/EC Directive |

**Impact of air pollution on human health** - Reliable data are lacking to assess the impact of air pollution on human health and the environment, establish cause-and-effect relationships and design appropriate actions to mitigate negative impacts. Although some project-based environmental health assessment activities are performed in the country, the mortality rate attributed to indoor and outdoor air pollution is not monitored. Integrated air quality and health assessments are not carried out on a systematic basis.

### Recommendation 8.2:

| Implementation measures   | Detailed actions  | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment                            | Financial sources  | Means of verification   | Comments   |
|---|---|-------------------------------------|----------------|-----------------------------------|--|--------------------|---|--|
| (a) The MH through PHI should monitor population exposure to PM2.5 and PM10, including in support of achieving Sustainable Development Goals target 3.9 and monitoring the global indicator 3.9.1 (Mortality rate attributed to household and ambient air pollution); | Calculation of a mortality rate attributed to household and ambient air pollution   | Continuously                        | IPH            |                                   | To be determined                           | Ministry of Health | Yearly Programme for Public Health                            | This activity is not done regularly, however the PHI collects the data and does certain analysis when it is requested or needed.<br><br>Also, during a Twinning project ‘further strengthening the capacities for effective implementation of the acquis in the field of air quality’ a “Study on effects of particulate air pollution on mortality in Skopje Region” as a joint effort between representatives from IPH and the Twinning project team |
| (b) Implement an integrated environmental and health monitoring system with an adequate level of  | Development of web service interfaces between the NEIS and other systems including the Institute of Public Health (IPH) through preparation of detailed design of NEIS which includes | Dec 2021                            | MOEPP          | IPH<br>HMI<br>SSO                 | €1.37 million (Part of the Project budget) | (IPA II)           | Contract Dossier “Development of Environmental Monitoring and | Not all institutions will be connected to the NEIS in the frame of this project, however the system will provide options for further   |

| Implementation measures  | Detailed actions  | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment | Financial sources | Means of verification                          | Comments   |
|--|---|-------------------------------------|----------------|-----------------------------------|-----------------|-------------------|--|--|
| spatial resolution to enable monitoring of the implementation of policy measures on air pollution abatement and assessment of their effectiveness. | all existing information systems and development of operational software of NEIS. |                                     |                |                                   |                 |                   | Information System” EuropeAid/139107/IH/SER/MK | development and interconnection to other related institutions. |

**Impact of air pollution on the environment** - The lack of monitoring of air quality at rural sites prevents the assessment of the impact of air pollution on ecosystems and biodiversity. The only rural background station is at a high altitude and measurements of ozone and its precursors is highly inconsistent. There are no data on parallel assessments of foliar damage or other indicators of the impact of air pollution on vegetation.

### Recommendation 8.3:

| Implementation measures  | Detailed actions   | Period of execution for each action | Lead authority | Other institutions & stakeholders   | Cost assessment                           | Financial sources  | Means of verification   | Comments  |
|--|--|-------------------------------------|----------------|---|---|--|---|---|
| The MOEPP should ensure the monitoring of the negative impacts of air pollution on ecosystems, based on a network of monitoring sites that is representative of their freshwater, natural and semi-natural habitats and forest ecosystem types, using a cost-effective and risk- | Completion of the legal framework for air quality in line with the requirements of the EU acquis through development of Directive Specific Implementation Plans (DSIPs) for the 2016/2284/EC NEC directive (including Article 9) | Mar 2021<br>Dec 2022                | MOEPP          | HMI<br><br>Hydro biological institute in Ohrid<br><br>Faculty of Forestry | €1.5 million (Part of the Project Budget) | Instrument for Pre-Accession Assistance (IPA II) – Sector Operational Programme for Environment and Climate Action | Service Contract "Support in the Implementation of Air Quality Directives, EuropeAid/140684/IH/SER/MK | Monitoring sites are partly in place however only after DSIP is developed the management of monitoring effects may be establish |

| Implementation measures | Detailed actions   | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment | Financial sources | Means of verification  | Comments   |
|-------------------------|--|-------------------------------------|----------------|-----------------------------------|-----------------|-------------------|--|--|
| based approach.         |  |                                     |                |                                   |                 | 2014 – 2020       |  |  |
|                         | Completion of the legal framework for air quality in line with the requirements of the EU acquis through development of a Rulebook on Methodology on air pollution effects in accordance with Directive 2016/22/84 | Sep 2024                            | MOEPP          | /                                 | /               | /                 | National Programme for Adoption of the Acquis Communautaire (NPAA) | The rulebook will define the manner of gathering needed data |

**Monitoring of the implementation of policy documents** - The current strategic framework for air protection was created in 2012, when all the main policy documents were created with the support of international technical assistance. By 2018, none of these documents has been updated and there are no reports on their implementation and the effect of the implemented measures. This makes air quality monitoring and analysis of emissions of air pollutants largely senseless, since gathered knowledge on recognized air pollution problems is not properly used for their solution.

The Ministry of Environment and Physical Planning focuses on the collection of data, their processing and the production of information on air pollutant concentrations and emissions, but the measures proposed to improve air quality, even those proposed by an intersectoral working group, are not given enough political backing to ensure their implementation.

The 2018 Programme for Reduction of Air Pollution does not contain precise deadlines and institutions competent for its implementation, measurable indicators, financial estimations and other elements to enable the smooth realization of proposed measures, their monitoring and estimation of their impact on the improvement of air quality.

#### Recommendation 8.4:

| Implementation measures                            | Detailed actions   | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment | Financial sources | Means of verification                   | Comments  |
|--|--|-------------------------------------|----------------|-----------------------------------|-----------------|-------------------|---|---|
| The MOEPP should establish a system to monitor the | Monitoring of the situation with the air quality and definition of appropriate | Continuously                        | MOEPP          | MH<br>ME<br>IPH                   | None            |                   | Governmental decision for foundation of | The scope and the obligations of the IRG include: |

| Implementation measures   | Detailed actions  | Period of execution for each action | Lead authority | Other institutions & stakeholders   | Cost assessment      | Financial sources | Means of verification | Comments  |
|---|---|-------------------------------------|----------------|---|----------------------|-------------------|-----------------------|---|
| implementation of policy documents on air protection, entrusting this task to a separate administrative unit that would regularly estimate the effectiveness and appropriateness of implemented measures and, based on this, update policy documents to improve air quality and achieve progress towards the achievement of Sustainable Development Goals targets 3.9 and 11.6. | recommendations and measures to be taken to improve the air quality through setting-up Inter-sectorial Task Force                     |                                     |                | MLSG<br>Centre for crises management<br>Hydro-meteorological Administration<br>Other air quality wise relevant institutions |                      |                   | IRG                   | to continuously monitor the information on air quality, air emissions from all types of emission sources and to be regularly informed about the meteorological situation and climatic influences; make an assessment of the air quality situation and identify the sources of air pollution in the event of pollution that will affect the increase of concentrations of pollutants above the limit and target values; Timely propose measures to reduce and prevent air pollution and occurrence of concentrations of pollutants above the limit and target values |
|   | Set up a Task Force for organisational changes in systematisation to establish a unit to monitor implementation of planning documents | Dec 2022                            | MOEPP          |   | Up to €10 k per year | MOEPP Budget      | Minister's decision   | Unit established and 2 people hired on permanent base   |

**Renewal of the vehicle fleet** - Transport is a significant source of pollution, especially in Skopje. The main characteristic of passenger transport, which dominates the sector, is a very high share of passenger cars (77 per cent), the average age of which was 18.6 years in 2016. The average estimated age of public transport buses in 2016 was 17.8 years. The share of urban and suburban public transport (11.9 per cent in 2016) is low compared with the use of

individual passenger cars. End-of-life vehicles and the low rate of use of public transport against that of passenger cars together multiply significantly the negative impacts of transport on air quality.

### Recommendation 8.5:

| Implementation measures   | Detailed actions  | Period of execution for each action | Lead authority         | Other institutions & stakeholders | Cost assessment      | Financial sources    | Means of verification   | Comments   |
|---|---|-------------------------------------|------------------------|-----------------------------------|----------------------|----------------------|-------------------------|--|
| (a) The ME should introduce measures for renewal of the passenger vehicle fleet, favouring fuel economy through the “feebate” system of charges and rebates, whereby energy-efficient or environmentally friendly practices are rewarded while failure to adhere to such practices is penalized | Enactment of a new Law on motor vehicle tax   | Dec 2019                            | Customs Administration | ME<br>MOEPP                       | None                 |                      | Official Journal of RNM | This law replaced the former excise for motor vehicles that was calculated only against the market value of the vehicle, while the new Law introduces motor vehicle taxation against the vehicle’s average CO2 emission and as such influences the increase of the price of the old imported vehicles and is favourable in the import of clean technology vehicles. Additionally, this Law introduced 50% tax exemption of hybrid plug-in powered passenger vehicles |
|   | Subsidize part of the costs for purchasing and instalment of LPG, methane or other alternative fuel propulsion converters in petrol and diesel powered vehicles | Continuously                        | ME                     | MOEPP                             | €244 k per two years | Government Programme | Gov decision            | The Law on vehicles is enacted. The Programme is prescribed in the law   |

|   |   |                    |   |  |                              |                      |  |  |
|---|---|--------------------|---|--|------------------------------|----------------------|--|--|
|   | Subsidize part of the costs for purchasing new vehicles by phasing-out old ones as part of the scrapping policy | Jan 2021- Dec 2023 | ME  |  | €2.7 million per three years | Government Programme | Gov decision   | The Law on vehicles is enacted. The Programme is prescribed in the law, however the finances although planned, were not approved in the 2020 budget. It remains to be implemented in the next period |
| (b)Introduce a green public procurement system and advise national public institutions and municipalities to renew the public transport fleet, including by using the green public procurement system, favouring electric and gas-powered buses | Procurement of 33 energy efficient busses with EURO 6 standard  | Dec 2020           | Public Transportation Company Skopje City of Skopje |  | €10 million                  | EBRD loan            | Public procurement Programme of the Public Transportation Company Skopje | Implemented  |

**Reducing air pollution by improving energy efficiency** -Energy production (public electricity and heat production) contributed 41 per cent of the total emissions of NO<sub>x</sub> and 91 per cent of the SO<sub>2</sub> emissions in 2016. Its contribution to CO emissions is 8 per cent, while its contribution to PM<sub>10</sub> and PM<sub>2.5</sub> emissions is estimated at 11 per cent and 6 per cent respectively. Consumption of energy, especially in residential heating, makes a major contribution to PM emissions. Energy production is also a dominant source of emissions of lead (38 per cent), mercury (45 per cent) and cadmium (49 per cent).

Residential heating has a major share in total national emissions of PAHs (79 per cent) and PCDD/Fs (77 per cent). It also contributes 67 per cent of the total national emissions of carbon monoxide, although emissions of this pollutant decreased by 14 per cent in 2016 compared with 2015, due to greater use of natural gas and briquettes and pellets for residential heating instead of fossil fuels and wood. Residential heating also has a dominant share in emissions of PM<sub>10</sub> (46 per cent) and PM<sub>2.5</sub> (58 per cent), which represent a major air quality concern in the country. Moreover, it contributes 29 per cent of total national emissions of VOCs, 10 per cent of emissions of PCBs and 8 per cent of emissions of NH<sub>3</sub>.

## Recommendation 8.6:

| Implementation measures  | Detailed actions   | Period of execution for each action | Lead authority           | Other institutions & stakeholders  | Cost assessment       | Financial sources                        | Means of verification | Comments  |
|--|--|-------------------------------------|--------------------------|--|-----------------------|--|-----------------------|---|
| Implementation of the “Plan for clean air” (The Government should introduce measures to improve energy efficiency and to stimulate changes towards using more sustainable fuels in the housing and energy sectors) | Replacement of the existing inefficient and highly polluting heating systems in public institutions, including energy efficiency measures  | Dec 2019- Dec 2023                  | Gov/ General Secretariat | MOEPP<br>ME<br>MLSG<br>MF  | €1.5 million per year | Gov Budget                               | Off. Journal of RNM   | Yearly Gov. budget, Programme for air pollution reduction   |
|  | Implementation of Air pollution reduction measures through Programme for subsidizing the total cost for purchasing highly efficient inverter air conditions to the citizens that use solid fossil fuel for heating | 2020                                | Gov                      | City of Skopje<br>Municipality of Tetovo<br>Municipality of Kicevo<br>Municipality of Bitola | €10 million           | AD Power Plants of North Macedonia - ESM | Governmental decision | This measure will continue to be implemented in the period 2021-2024 in accordance with the Working Programme of the Gov. |

## Chapter 9

### ***WATER MANAGEMENT***

**Enhancement of water monitoring** - No comprehensive data on the quantity of groundwater resources are available. Although numerous hydrogeological studies have been carried out, there is no nationwide systematic and continuous monitoring and evaluation. The same applies to surface water monitoring.

#### Recommendation 9.1:

| Implementation measures   | Detailed actions  | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment                    | Financial sources | Means of verification | Comments   |
|---|---|-------------------------------------|----------------|-----------------------------------|------------------------------------|-------------------|-----------------------|--|
| (a) The Government should allocate an adequate regular budget for remediation and maintenance of the water monitoring network to enable the systematic monitoring and assessment of the status of surface water and groundwater bodies in line with international and European Union practices. | Assessment of national monitoring network for conducting monitoring in accordance with the WFD  | Dec 2023                            | MOEPP          | HMI                               | To be determined                   | Gov Budget/IP A   |                       | This measure requires specific actions, therefore the MOEPP will need to ensure smooth coordination for implementation |
|   | Strengthening of the administrative capacities for implementation of the monitoring program for surface and groundwater in accordance with the WFD                | Jun 2023                            | MOEPP          | HMI                               | To be determined (€5 k per person) | Gov Budget/IP A   |                       | It is necessary to strengthen the capacity with at least 3 new employees in HMI by 2023                                |
|   | Estimation of monitoring cost for all catchment areas for implementation of monitoring programs for SE and WB in accordance with the River Basin Management Plans | Dec 2023                            | MOEPP          | HMI                               | To be determined                   | Gov Budget/IP A   |                       | Relevant capital and operational cost for all catchment areas  |

| Implementation measures | Detailed actions   | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment | Financial sources | Means of verification                       | Comments |
|-------------------------|--|-------------------------------------|----------------|-----------------------------------|-----------------|-------------------|---|----------|
|                         | Develop a comprehensive training programme for strengthening the capacities of the administration for procurement of equipment | Oct 2023                            | MOEPP          | HMI                               | Up to €5 k      | HMI Budget        | Training programme endorsed by the Director |          |

**Water supply** - Due to the lack of accurate data, unknown and unregulated use of surface water and groundwater, especially by industry, can occur. Higher water requirements are sometimes required, for example, for irrigating agricultural land during hot weather periods. Water demand from other areas, such as for drinking water, is increasing. The total national availability of water is expected to decrease. This would increase the value and importance of and competition for water. The loss of water in drinking network systems, leakage from degraded irrigation systems and awareness and technical devices for saving water resources are of major concern. The lack of sanitary protection of the sources leads to cases of non-compliance.

## Recommendation 9.2:

| Implementation measures   | Detailed actions  | Period of execution for each action | Lead authority | Other institutions & stakeholders             | Cost assessment  | Financial sources      | Means of verification                 | Comments   |
|---|---|-------------------------------------|----------------|---|------------------|------------------------|---------------------------------------|--|
| (a) The Government should improve data collection on groundwater and surface water abstraction and use; | Establishment of a GIS data management system with online data entry from water abstraction and use                   | Dec 2023                            | MOEPP          | Legal and physical entities-owners of permits | To be determined | Swiss - SECO           |                                       |  |
|   | Establishment of data sharing system with State Environmental Inspection  | Dec 2021                            | MOEPP          | SEI   | To be determined | Gov budget/ SEI budget |                                       |  |
| (b) Apply the water-user and polluter-pays principles for all   | Draft proposal for amendment of the Law on Waters and Tax Law regarding fee for use and discharge of various physical | June 2022                           | MOEPP          | MF, ERC, MTC, ZELS                            |                  |                        | Draft legislation endorsed by the Gov | Published in Of. Journal of RNM after adoption by the parliament |

| Implementation measures   | Detailed actions   | Period of execution for each action | Lead authority | Other institutions & stakeholders     | Cost assessment | Financial sources | Means of verification                 | Comments  |
|---|--|-------------------------------------|----------------|---------------------------------------|-----------------|-------------------|---------------------------------------|---|
| water users and dischargers according to the 2008 Law on Waters, taking into account the needs of poor and vulnerable groups in the population; | and legal entities that are in the group for poor and affected population  |                                     |                |                                       |                 |                   |                                       |   |
|   | Draft proposal for amendments in Law on Waters in the area of water compensation   | Dec 2022                            | MOEPP          | MF, ERC, MTC, ZELS                    |                 |                   | Draft legislation endorsed by the Gov | Published in Of. Journal of RNM after adoption by the parliament                          |
| (c) Raise awareness of water-saving measures and provide water-saving technical devices;  | Conduct raising awareness activities/campaign for water saving   | Dec 2022                            | MOEPP          | ADKOM, PCUs, NGO, LSG                 | 50.000 Euro     | IPA/Budget        |                                       |   |
|   | Development of a manual for water saving technology and techniques   | Dec 2022                            | MOEPP          | ADKOM, LSG, PCUs, NGO                 | 50.000 Euro     | IPA               |                                       | This manual will enable the establishment of a system for sustainable water use           |
| (d) Introduce domestic, municipal and industrial reuse and recycling of water, and rainwater collection for non-potable uses;                   | Draft proposal for amendments of the Law on Waters and the Law on Water Supply and Drainage of Urban Wastewater in order to fully apply the principle of reuse and collection of rainwater | Dec 2023                            | MOEPP          | MTC<br>Public enterprises PE<br>ADKOM | None            |                   |                                       | The PEs suffer great losses due to the fact that this particular issue is not implemented |
| (e) Ensure a special regime for the sanitary protection of sources of drinking water supply.  | Development of an action plan for the determination of all drinking water protection zone  | Dec 2021                            | MH             | PUCs, LSGU, MOEPP                     | None            |                   | Governmental decision                 | It is necessary to determine all drinking water protection zones in the country           |
|   | Determination of all protection zones around springs of interest of public water supply for water intended for human consumption   | Dec 2023                            | Government     | MH/MOEPP                              | None            |                   | Governmental decision                 | In accordance with Art. 96 (1) of the Law on Waters                                       |
|   | Implementation of the measures   | Continuously                        | LSG            | MOEPP                                 | To be           | Municipality      | Decision of the                       |   |

| Implementation measures | Detailed actions                                | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment | Financial sources | Means of verification     | Comments |
|-------------------------|---|-------------------------------------|----------------|-----------------------------------|-----------------|-------------------|---------------------------|----------|
|                         | from the adopted Decisions for protection zones | after adoption of Decision          |                |                                   | determined      | budgets           | Council of Municipalities |          |

**Irrigation** - The existing irrigation structures, facilities and equipment are in poor technical condition. High water losses are characteristic. There are no reliable data on water consumption for irrigation. The price for irrigation is defined by area and the cultivated crop and not by the water consumed.

### Recommendation 9.3:

| Implementation measures   | Detailed actions  | Period of execution for each action | Lead authority | Other institutions & stakeholders         | Cost assessment  | Financial sources | Means of verification | Comments  |
|---|---|-------------------------------------|----------------|---|------------------|-------------------|-----------------------|---|
| (a) The Government should ensure rehabilitation of irrigation systems and expansion of the percentage of closed pipe systems in relation to open systems; | Preparation of a Rehabilitation Plan for extension of existing irrigation systems as well as drainage system                  | Dec 2022                            | MAFWE          | MOEPP                                     | To be determined | IPA/ State Budget |                       | As there are basins where water shortages are not binding   |
|   | Construction of low-cost small-scale irrigation systems in those areas that are not covered by state owned irrigation systems | 2023-2024                           | MAFWE          | MOEPP; Private natural and legal entities | To be determined | IPA/ State Budget |                       | IPA Project: Small-scale, low-cost, environment friendly irrigation schemes: sites selection and preparation of full work tender dossier EuropeAid/137393/DH/SER/MK |
| (b) Provide measurement devices in irrigation systems for water quantity intake and water consumption by farmers and                                      | Establishment of Sustainable use of water resources   | Dec 2025                            | MAFWE          | IPARD AFV                                 | To be determined | Budget/ donors    |                       | Will be introduced through stimulation of user pay principle (installation of water measurement devices in irrigation systems and introduction volumetric           |

|   |   |          |       |                 |                  |               |   |   |
|---|---|----------|-------|-----------------|------------------|---------------|---|---|
| promote high-value, low-water-use crops;  |   |          |       |                 |                  |               |   | tariffs), water saving irrigation techniques, introduction of less water demanding crops etc. |
|   | Develop training programmes for adaptation to climate change    | Dec 2025 | MAFWE | IPARD AFV MOEPP | To be determined | Budget/donors | Training Program endorsed by the Minister | This action could be implemented through climate action programmes and measures               |
| (c) Strengthen agricultural advice on different irrigation methods, selection of crops adapted to local boundary conditions and optimization of existing systems. | Complete introduction of a system for optimal water consumption | Dec 2025 | MAFWE | PE IPARD        | To be determined | Budget/donors |   | At present the water consumption is not efficiently utilised                                  |

**Sewerage systems** - About 12.5 per cent of rivers assessed are of good ambient water quality. One of the main reasons for this low proportion is the discharge of untreated wastewater. Wastewater treatment capacity is meeting 25 per cent of the demand of settlements. Bigger cities still have no sewage treatment plants. The average rate of wastewater collection in sewage collection systems is around 60 per cent for households (2002 Census).

Although certain rural areas have developed combined domestic sewage and storm wastewater collection systems, no treatment is performed prior to wastewater discharge. This situation worsens during low-flow periods in rivers during summer, due to lower sewage dilution. Industrial wastewater is discharged without prior treatment, or pretreatment is carried out in poorly maintained and inefficient facilities. Besides organic matter, toxic sewage is being discharged into rivers. Landfills close to rivers or lakes are a further source of pollution by infiltration or run-off into surface water and groundwater.

#### Recommendation 9.4:

| Implementation measures              | Detailed actions                                | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment | Financial sources | Means of verification | Comments                            |
|--------------------------------------|---|-------------------------------------|----------------|-----------------------------------|-----------------|-------------------|-----------------------|-------------------------------------|
| (a) The Government should ensure the | Development of a Plan for implementation of the | Dec 2024                            | Gov            | SEA MOEPP                         |                 | Budget/IPA        |                       | Prepared DSIP with a time frame for |

| Implementation measures   | Detailed actions   | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment  | Financial sources | Means of verification | Comments   |
|---|--|-------------------------------------|----------------|-----------------------------------|------------------|-------------------|-----------------------|--|
| construction of wastewater treatment plants and sewage collection systems for cities over 100,000 population equivalent as a priority and for municipalities over 10,000 population equivalent as a secondary priority; | UWWTD  |                                     |                |                                   |                  |                   |                       | implementation   |
|   | Preparation of an Investment Program for the implementation of UWWTD   | Jan 2021-Dec 2024                   | MOEPP          | MTC, Municipality                 |                  | Budget/IPA        |                       | This is a long and ongoing process which requires high amount of funds for implementation of the programme   |
| (b) Ensure that the sewage collection systems focus on separating wastewater from storm water, with the storm water being returned to the hydrological cycle by infiltration  | Draft proposal for amendment to the Law on Water Supply and Drainage of Urban Wastewater in order to apply the requirements for separation of the atmospheric from the sewerage system | December 2024                       | MTC/MOE PP     | ADKOM, ZELS, LSG, PCUs            | None             | State Budget      | Endorsed by the Gov   | Adopted by the Parliament and published in the Off. Gazette; This action is necessary having in mind that most of the Municipalities don't have separated atmospheric from sewage system |
|   | Development of a plan for rehabilitation and construction of a sewerage network with a proposed solution for separation of wastewater from storm water                                 | Dec 2024                            | MTC/MOE PP     | ADKOM, ZELS, LSG, PCUs            | To be determined | Gov Budget        |                       |  |
| (c) Prevent the deterioration of the existing sewage collection systems, which should be repaired or renewed  | Preparation of a FS for the condition of the existing sewerage network   | Dec 2023                            | MTC/MOE PP     | ADKOM, LSG, PCUs, ZELS            | To be determined | Gov Budget/Donors |                       | Infiltration study for the city of Skopje is planned to be developed with the support of EBRD; PEs suffer great losses due to the poor conditions of the networks;                       |
|   | Adoption of a plan for rehabilitation of the sewerage network  | Dec 2023                            | MTC/MOE PP     | ADKOM, LSG, PCUs, ZELS            | None             | None              |                       | This plan needs to provide prioritization of sewerage networks   |
| (d) Ensure  | Development of an action plan  | Jun 2023                            | MTC/           | ADKOM,                            | Up to €9 k       | Budget/donor      |                       | Strengthening the  |

| Implementation measures  | Detailed actions  | Period of execution for each action | Lead authority | Other institutions & stakeholders            | Cost assessment  | Financial sources        | Means of verification | Comments  |
|--|---|-------------------------------------|----------------|--|------------------|--------------------------|-----------------------|---|
| maintenance and operation of sewage collection systems   | for reforms of the public utility companies   |                                     | MOEPP          | LSGU/PCUs                                    |                  | s                        |                       | institutional capacities and identify equipment needs for efficient work and quality service to users       |
| (e) Consider the establishment of decentralized sewage treatment systems in rural areas  | Development of analysis of all systems for collection, drainage and treatment of wastewater under the management of municipalities  | Dec 2024                            | PCUs, LSGUs    | ADKOM/MOE PP/MLSG                            | Up to €9 k       | To be determined         |                       | The management of this system in Municipalities is required for the process of decentralisation             |
| (f) Ensure that industry applies appropriate wastewater treatment prior to discharge into water bodies according to national standards | Consistent implementation of the Law on Waters for issuing permits with precisely defined limit values for wastewater discharge in accordance with the national requirements for water quality standard | Continuously                        | MOEPP          | SEI  | None             |                          |                       | Fulfilment of the obligation by the industry/operators in accordance with the legislation and IPPC permits  |
|  | Regular monitoring and submission of data from the measurements of the operators  | Continuously                        | MOEPP          | SEI  |                  | Operators private budget |                       | In accordance with the conditions of the licenses   |
|  | Regular inspections and extraordinary inspections   | Continuously                        | SEI            | Private and legal entity with issued permits | None             |                          |                       | Continuous inspection by the state and authorized inspectors  |
| (g) Close and remediate all dumpsites along river banks exposed to flooding and infiltration into groundwater.                         | Development of FS for landfill remediation in accordance with legal regulations   | December 2023                       | MOEPP          | ME, MH                                       | €100 k per study | Gov budget/ donors       |                       | Implementation of an excise plan in accordance with the prioritization of the areas that are at higher risk |

**River protection** - The national legislation requires good ecological status for rivers and lakes. That can be achieved through good water quality and good hydromorphology status of riverbeds, banks and flood plains. Although rivers and, in part, lakes suffer from wastewater discharges, most reaches of the rivers are not hydromorphologically degraded (except from reservoirs) by channelizing, embankments and loss of flood plains. This offers an excellent opportunity to ensure that most water bodies can reach good ecological status according to the Law on Waters, once water quality has improved. Dams in rivers and reservoirs are severe interruptions in the structure and ecology of a natural river. Fish migration and gravel and sediment transport are stopped and sedimentation, eutrophication, warming and oxygen depletion occur.

### Recommendation 9.5:

| Implementation measures  | Detailed actions   | Period of execution for each action | Lead authority       | Other institutions & stakeholders | Cost assessment  | Financial sources | Means of verification | Comments   |
|--|--|-------------------------------------|----------------------|-----------------------------------|------------------|-------------------|-----------------------|--|
| (a) The Government should ensure a sufficient buffer strip along rivers and lakes for agricultural lands exposed to erosion, and that relevant cultivation methods are applied to protect from erosion | Determining the boundaries of erosive areas and areas endangered by erosion and determining the measures for protection of the land from erosion and the regulation of the torrent according to Article 135 and 191 of the Law on Waters | Dec 2022                            | LSGUs, Water economy | MOEPP/MAFWE                       | None             |                   | Minister's decision   |  |
| (b) Ensure that ecological improvements on dams, such as fish ladders and fish ways, are considered and that the environmental flow below dams is set and inspected;                                   | Analysis of the legislation and the manner of implementation of the measures from the Elaborate / Environmental Impact Assessment Studies where environmental measures are determined  | Dec 2023                            | MOEPP                | SEI                               | To be determined | Gov Budget        |                       |  |
|  | Regular controls by the SEI for the implemented measures and taking additional actions in case of environmental disturbance  | Continuously                        | MOEPP                | SEI                               | None             |                   |                       | More frequent inspections by SEI and authorised inspectors |

|  |   |          |       |      |                  |     |  |   |
|--|---|----------|-------|------|------------------|-----|--|---|
| (c) Consider more twinning arrangements with countries that have experience in implementing Directive 2000/60/EC of the European Parliament and of the Council establishing a framework for Community action in the field of water policy (Water Framework Directive) and river basin management | Preparation of a ToR for implementation of some of the requirements of the WFD by applying a twinning arrangement | Dec 2024 | MOEPP | CFCD | Up to €500 k     | IPA |  | Developed and implemented twinning project (partner to be identified) |
| (d) Establish reference conditions for water bodies to enable their classification   | Preparation of a project for establishing a reference state of water bodies.                                      | Dec 2025 | MOEPP | HMI  | To be determined | IPA |  |   |

**Flood management** - Directive 2007/60/EC of the European Parliament and of the Council of 23 October 2007 on the assessment and management of flood risks is not transposed into the national legislation. Over recent decades, there have been many floods resulting in high levels of damage and even deaths. It took a long time to eliminate the negative consequences of those floods. Due to climate change, an increase in the number and size of floods is also to be expected. Nevertheless, there is still high pressure for new buildings, construction and land use on flood plains.

### Recommendation 9.6:

| Implementation measures   | Detailed actions  | Period of execution for each action | Lead authority | Other institutions & stakeholders   | Cost assessment    | Financial sources | Means of verification | Comments  |
|---|---|-------------------------------------|----------------|-------------------------------------|--------------------|-------------------|-----------------------|---|
| (a) The Government should ensure that flood plains are left open without further building, construction | Implementation of the project for preparation of flood risk plans<br>A) flood areas will be identified<br>b) appropriate measures will be | Dec 2023                            | MOEPP          | HMI, CKM, DPS, LSG<br>Water economy | Up to €2,5 million | IPA               |                       | There is a IPA project under evaluation for flood risk management that will tackle the actions proposed |

| Implementation measures   | Detailed actions  | Period of execution for each action | Lead authority | Other institutions & stakeholders  | Cost assessment | Financial sources | Means of verification | Comments  |
|---|---|-------------------------------------|----------------|--|-----------------|-------------------|-----------------------|---|
| and land use involving water-polluting substances   | defined to ensure urban planning in accordance with the conditions  |                                     |                |  |                 |                   |                       |   |
| (b) Consider preparing a handbook of flood-adaptation planning and building in flood areas if it is unavoidable;  | Develop a manual within the IPA project for implementation of the Floods Directive  | Dec 2023                            | MOEPP          | HMI, CKM, DPS, LSG<br>Water economy  |                 | IPA               |                       | In the frame of the upcoming IPA project as stated in 9.6 (a)   |
| (c) Raise public awareness of floods through reconnaissance and preparation for flood events, supported by flood preparedness and response exercises for those involved in flood management | Preparation of a Public Involvement Plan with specific exercises within the IPA project for implementation of the Floods Directive                        | Dec 2023                            | MOEPP          | HMI, CKM, DPS, LSG<br>Water economy  |                 | IPA               |                       | In the frame of the upcoming IPA project as stated in 9.6 (a)   |
| (d) Ensure the maintenance of existing flood protection systems and consider the building of flood protection systems, including precise flood predictions and hydrological forecasts       | Control of the system of use and maintenance of the hydro-technical facilities for flood protection   | Dec 2023                            | MOEPP          | SEI, Water Economy, municipalities, legal entities managing dams and reservoirs and protective embankments |                 | Budget            |                       |   |
|   | Analyzes with a proposal for improvement and the system for flood forecasting and hydrological forecasting within the IPA project for the Flood Directive | Dec 2023                            | MOEPP          | HMI, DPS, CCM,   |                 | IPA               |                       | There is a IPA project under evaluation for flood risk management that will tackle the actions proposed (In the frame of the upcoming IPA project as stated in 9.6 (a)) |
| (e) Adapt the   | Regular control over the  | Continuously                        | SEI            | legal entities   |                 | SEI Budget        |                       | Strengthened control by   |

| Implementation measures   | Detailed actions   | Period of execution for each action | Lead authority   | Other institutions & stakeholders                       | Cost assessment | Financial sources | Means of verification   | Comments  |
|---|--|-------------------------------------|--|---|-----------------|-------------------|---|---|
| management of reservoirs to flooding  | legislation obligation for all technical monitoring of dams and associated facilities and reservoirs, based on a project for technical monitoring (auscultation)   |                                     |  | managing dams and reservoirs and protective embankments |                 |                   |   | SEI needed  |
|   | Preparation of a report for analysis and assessment of the stability and functionality of the dams with the associated facilities and reservoirs and for the stability of the terrain around the dams, associated facilities and reservoirs. | Continuously                        | legal entities managing dams and reservoirs and protective embankments |   | None            |                   | Report for analysis and assessment of the stability and functionality of the dams | The report must be prepared in accordance with the Law on waters and associated bylaws. |
| (f) Promote the increase of the percentage of pervious surfaces in urban areas by considering the introduction of specific minimum values for new urban development's and for the regeneration of existing parts of urban areas | Preparation of a Spatial Planning Proposal for each of the river basin areas within the IPA project for implementation of the Floods Directive.  | Dec 2023                            | MOEPP  | HMI, CKM, DPS, LSG<br>Water economy                     |                 | IPA               |   | In the frame of the upcoming IPA project as stated in 9.6 (a)                           |
| (g) Promote the implementation of nature-based solutions in urban areas to increase adaptation to climate change  | Analysis of proposed innovative measures for naturally based solutions within the IPA project for implementation of the Floods Directive.  | Dec 2023                            | MOEPP  | HMI, CKM, DPS, LSG<br>Water economy                     |                 | IPA               |   | In the frame of the upcoming IPA project as stated in 9.6 (a)                           |

**Institutional framework** - In water management planning, the Ministry of Environment and Physical Planning has an exclusive and coordinating role. It is responsible for the protection of waters from pollution and water permitting. It also has to prepare and manage monitoring activities. Furthermore, in agreement with the Ministry of Agriculture, Forestry and Water Economy and the Ministry of Transport and Communication, and in collaboration with the Ministry of Finance, the Ministry of Environment and Physical Planning has a responsibility for the definition of a plan for the use of funds for water management.

Since 2011, the Ministry of Environment and Physical Planning has been strengthened in the water management sector. However, the HMS, which is responsible for the meteorological and hydrological observation network and measurements, and monitoring and research of water resources, is not under the structure of the Ministry.

### Recommendation 9.7:

| Implementation measures  | Detailed actions   | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment                | Financial sources  | Means of verification    | Comments   |
|--|--|-------------------------------------|----------------|-----------------------------------|--------------------------------|--------------------|--------------------------|--|
| (a) The Government should provide sufficient financial and personnel resources to the Ministry of Environment and Physical Planning to enable it to perform its role in water management | Set up a task force for preparation of administration proposal for organisational changes for the water sector | Dec 2025                            | MOEPP          | MH, MAFWE, MTC, ME, HMI           | €5 k per person                | MOEPP Budget       |                          | Functional analysis performed in 2020; at least 5 persons employed in the water department by 2025 |
| (b) Consider establishing comprehensive data management;   | Preparation of the National Environmental Information System   | Dec 2021                            | MOEPP          | MH, HMI, ME, MTC, MAFWE           |                                | IPA                |                          | In the frame of the IPA project as stated in 4.3   |
| (c) Consider concentrating all state investments in the water sector within the Ministry of Environment and Physical Planning,   | Dedicate more financial resources through Gov programmes for water measures                                    | Continuously                        | MOEPP          | MF                                | Additional €1 million per year | Gov/MOEPP Budget   | Adopted Programme by Gov |  |
|  | Preparation of an investment plan in the area of water supply with sources of financing                        | Dec 2023                            | MOEPP          | ZELS, PUCs, MOTC, MTC, MH, ADKOM  | To be determined               | Gov Budget/ Donors |                          | The investment plan should be based on data from all involved                                      |

| Implementation measures  | Detailed actions  | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment  | Financial sources  | Means of verification | Comments   |
|--|---|-------------------------------------|----------------|-----------------------------------|------------------|--------------------|-----------------------|--|
| including for irrigation and public water supply   |   |                                     |                |                                   |                  |                    |                       | institutions that are financing water supply including the LSGUs   |
|  | Preparation of an investment plan for irrigation with identified sources of financing   | December 2023                       | MOEPP          | MAFWE                             | To be determined | Gov Budget/ Donors |                       | The investment plan should be based on data from all involved institutions that are financing irrigation including the LSGUs |
| (d) Ensure, by contract, subsequent maintenance and operation and consider fines in the case of infringement;  | Preparation of contracts with precisely defined responsibilities and penalties in accordance with national regulations  | Continuously                        | MOEPP          | contractor                        |                  | Gov Budget         |                       |  |
| (e) Consider transferring the Hydrometeorological Service to the Ministry of Environment and Physical Planning to complete the transition of competences for water management. | Set up a task force for assessment of the administrative capacities for implementation of the monitoring program for surface and groundwater in accordance with the WFD | December 2023                       | HMI<br>MOEPP   |                                   |                  | MOEPP Budget       |                       |  |

**River basin management** - According to the Law on Waters, river basin management councils (RBMCs) will be created with the purpose of preparing, implementing and monitoring river basin management plans (RBMPs), and for proposing measures for improving water management. The establishment of RBMCs is new in the country and many aspects of their functioning, such as detailed criteria for representation of various groups of stakeholders, methodological guidance and funding issues, are not yet defined and tested and may require adjustment after a certain period of their work. RBMPs for Lake Prespa and the Bregalnica River have been developed, while RBMPs for the Strumica and Vardar River Basins have been drafted. None of the RBMPs so far developed has been adopted by the Government and none of them has been subject to SEA. In addition, RBMPs suffer in some areas from the lack of data, due to the poor state of the qualitative and quantitative water monitoring system.

As at November 2018, the National Water Council is not in operation.

### Recommendation 9.8:

| Implementation measures   | Detailed actions   | Period of execution for each action | Lead authority | Other institutions & stakeholders   | Cost assessment  | Financial sources | Means of verification | Comments                                       |
|---|--|-------------------------------------|----------------|---|------------------|-------------------|-----------------------|--|
| (a) The Government should establish as a pilot project, based on a proposal by the Ministry of Environment and Physical Planning, a river basin management council for which a river basin management plan is at the final drafting stage, and work out the modalities for the effective launch and functioning of the new institution by seeking support from other countries to benefit from similar experience | Established pilot form for RBMP  | Dec 2023                            | MOEPP          | All stakeholders in the preparation of the PUR in accordance with the Law on Waters | €1.5–2.5 million | IPA II            |                       | Planned project for reform in the water sector |
| (b) Apply, in due time and taking into consideration the lessons learned, the tested working arrangements for establishing river basin management councils in the other designated river  | Establish River Basin Councils   | Dec 2021                            | MOEPP          | Stakeholders established by the Rulebook on the composition of river basin councils | To be determined | Gov Budget        |                       |  |
|   | Strengthened capacities of the members of the Councils along the river basin through trainings | Dec 2023                            | MOEPP          | Stakeholders established by the Rulebook  | €1.5–2.5 million | IPA II            |                       | See 9.8 (a)                                    |

| Implementation measures  | Detailed actions  | Period of execution for each action | Lead authority | Other institutions & stakeholders                            | Cost assessment  | Financial sources | Means of verification | Comments        |
|--|---|-------------------------------------|----------------|--|------------------|-------------------|-----------------------|-----------------|
| basins, based on proposals by the Ministry of Environment and Physical Planning            | within IPA  |                                     |                | on the composition of river basin councils                   |                  |                   |                       |                 |
| (c) Ensure that river basin management plans for the remaining river basins are developed; | Within the GEF project, preparation of a management plan for the Black Drim watershed | Dec 2023                            | MOEPP          | All stakeholders responsible for the preparation of the RBMP |                  | GEF               |                       | Ongoing project |
| (d) Ensure that the National Water Council is operational.                                 | Established and operational National Water Council                                    | Dec 2021                            | Gov            | MOEPP  | To be determined |                   |                       |                 |

## *Chapter 10*

### ***WASTE AND CHEMICALS MANAGEMENT***

**Inspections** - The current regulations on the inspection system and final waste disposal were designed with the aim to ensure adequate control of landfills that comply with the national law. However, in the current situation, the lack of proper landfills makes it impossible to control the municipal disposal sites against the standards set by the legislation. The existing non-compliant municipal landfills will continue to operate for at least another few years, but most of them do not fulfil the basic legal requirements and are subject to inspections checking only on limited parameters, which is not sufficient to ensure basic sanitary conditions.

## Recommendation 10.1:

| Implementation measures  | Detailed actions  | Period of execution for each action                 | Lead authority                   | Other institutions & stakeholders | Cost assessment          | Financial sources | Means of verification   | Comments                              |
|--|---|---|----------------------------------|-----------------------------------|--------------------------|-------------------|-------------------------|---------------------------------------|
| The State Environmental Inspectorate should undertake relevant measures to stop environmentally harmful activities at non-compliant landfills. | Adopting the Law on inspection supervision  | Jan 2021  | SEI                              | CIA<br>MOEPP                      | None                     |                   | Official journal of RNM |                                       |
|  | Appointment of state environmental inspectors for waste management based on new act of systematization of SEI   | Sep 2021  | SEI                              |                                   | €12 k per year           | Gov. budget       | Approval from the MoF   |                                       |
|  | Regular inspection of the non-compliant landfills based on annual list for inspection of non-compliant landfills  | Continuously  | SEI                              | MOEPP                             | Annual budget of the SEI | Gov. budget       | SEI programme           |                                       |
|  | Organizing workshops together with the representatives from MOEPP (at least 4 per year) on implementation of the regulations related to waste management                    | January 2021 (continuously for a period of 4 years) | SEI and MOEPP                    | LSGUs                             | None                     |                   | Annual programme        | Established procedure for cooperation |
|  | Cooperation with the local self-Government<br>Organizing meetings together with the local self-Government (at least 4 per year)   | January 2021 (Continuously)                         | State Environmental Inspectorate | LSGUs                             | None                     |                   | Annual programme        | Established procedure for cooperation |
|  | Resolving environmentally harmful activities at non-compliant landfills (stipulate conditions in terms of the technical equipment for the activity of landfilling of waste) | January 2021 (Cont'd)                               | State Environmental Inspectorate | Public communal Utilities         | None                     |                   | Annual programme        | Established procedure for cooperation |

**Separate collection and recycling** - Collective packaging waste management schemes are run by non-profit companies, which cannot perform waste management activities by themselves. This means that the collective waste handling companies have only indirect tools to promote separate collection and recycling. This separation of the activities prescribed by the law for the handler of waste, on the one hand, and those undertaken by the actual waste manager, on the other hand, hinders the provision and development of separate collection and recycling activities, because the collective waste handlers cannot directly affect and enhance the efficiency of such activities. Nevertheless, the experience of the existing EPR schemes shows that this system is an adequate way to manage different waste streams; thus, it is worth considering covering new waste types within this system and to ensure their separate collection and recycling.

### Recommendation 10.2:

| Implementation measures   | Detailed actions  | Period of execution for each action | Lead authority | Other institutions & stakeholders    | Cost assessment         | Financial sources | Means of verification   | Comments   |
|---|---|-------------------------------------|----------------|--------------------------------------|-------------------------|-------------------|-------------------------|--|
| The MOEPP should assess the efficiency and impacts of the existing legislation on extended producer responsibility and introduce extended producer responsibility for other waste streams, in particular waste textiles, waste oils, used tyres and end-of-life vehicles. | Adopting the Law on Extended Producer Responsibility  | Dec 2020                            | MOEPP          | Ministry of Finance, Business sector | None                    |                   | Official Journal of RNM |  |
|   | Adopting the Law on additional waste streams (waste textiles, waste oils, used tyres and end-of-life vehicles)  | Dec 2020                            | MOEPP          | Ministry of Finance, Business sector | Official Journal of RNM |                   | Official Journal of RNM |  |
|   | Establishment of an electronic register for manufacturers to keep records of the type and quantity of products released on the market (Prepared softer for collection of all necessary information by Environmental | Dec 2021                            | MOEPP          | MEIC Ministry of Finance             | €20 k                   | Gov budget        |                         | Prepared online platform for registration of the producers |

| Implementation measures | Detailed actions   | Period of execution for each action | Lead authority                             | Other institutions & stakeholders  | Cost assessment | Financial sources | Means of verification | Comments   |
|-------------------------|--|-------------------------------------|--|--|-----------------|-------------------|-----------------------|--|
|                         | Administration and Macedonian Information center for Environment (MEIC)-MOEPP  |                                     |  |  |                 |                   |                       |  |
|                         | Organizing workshops for introduction of the EPR system for special waste streams for the producers (Delivered at least 10 workshops)  | Mar 2021 - 2022 continuous process  | MOEPP and State Environmental Inspectorate | Business sector chambers of commerce                                       | None            |                   |                       | Conferences rooms will be provided by the chamber of commerce and trainings will be performed by the Expert Body |
|                         | Organizing workshops for introduction of the EPR system for special waste streams for the relevant inspectorates (Delivered at least 10 workshops)   | Mar 2021 - 2022 continuous process  | MOEPP and State Environmental Inspectorate | LSGUs,<br>SEI<br>State tax inspectorate<br><br>State communal inspectorate | None            |                   |                       | Conferences rooms will be provided by the institutions, trainings will be performed by the Expert Body           |
|                         | Adopting a Rulebook on the form and content of the form of the records for all stages of treatment of waste vehicles, waste textiles and waste tires and oils, the manner of keeping records as well as the form and content of the forms of the report for recycled or exported waste | Jan 2022                            | MOEPP                                      | SL   | None            |                   | Minister's decision   |  |
|                         | Adopting a Rulebook on the manner of keeping, maintaining and keeping the records for the calculated   | Jan 2022                            | MOEPP                                      | SL   | None            |                   | Minister's decision   |  |

| Implementation measures | Detailed actions   | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment | Financial sources | Means of verification | Comments                                       |
|-------------------------|--|-------------------------------------|----------------|-----------------------------------|-----------------|-------------------|-----------------------|--|
|                         | and paid compensation as well as the form and content of the form                      |                                     |                |                                   |                 |                   |                       |  |
|                         | Assessment of the current level of public awareness regarding special waste management | Jan 2022                            | MOEPP          | Business sector and LSGUs         | €20 k           | To be determined  |                       | Risk of delay due to the procurement procedure |

The 2008 Strategy for Waste Management and National Waste Management Plan (2008–2020), and the relevant legislation, define and focus on targets for separate collection of waste and waste recovery and recycling, but currently do not provide for adequate measures for the growth of a domestic recycling industry. In the absence of a strong recycling industry, the recycling rate within the country cannot be increased.

Waste collectors are not encouraged to collect waste separately (by type) wherever waste is generated. Industrial enterprises that use waste as raw material are not incentivized to recycle. Also, there is no encouragement of consumers to purchase products made of recycled materials. To address concerns related to waste reduction, reuse and recycling, a draft national waste prevention plan has been prepared and is pending adoption.

### Recommendation 10.3:

| Implementation measures  | Detailed actions  | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment | Financial sources | Means of verification | Comments  |
|--|---|-------------------------------------|----------------|-----------------------------------|-----------------|-------------------|-----------------------|---|
| (a) The MOEPP should adopt the draft national waste prevention plan to serve as the national policy on waste reduction, reuse and recycling; | Adopt the first National Waste Prevention plan–NWPP (2021-2027) | Feb 2021                            | MOEPP          |                                   |                 |                   | Gov’s decision        | Obligatory public consultation for adoption of the NWPP after adoption of the new Law on waste management |
| (b) Undertake, in cooperation with   | Development of National Waste Management Public                 | Dec 2021                            | MOEPP          | NGOs                              | €10 k           | Gov budget        |                       | Risk of delay due to the procurement procedure  |

| Implementation measures  | Detailed actions   | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment | Financial sources | Means of verification | Comments   |
|--|--|-------------------------------------|----------------|-----------------------------------|-----------------|-------------------|-----------------------|--|
| collective waste handlers, awareness-raising and information campaigns for manufacturers and consumers on reduction, reuse and recycling of urban waste; | Awareness Program  |                                     |                |                                   |                 |                   |                       |  |
|  | Monitoring the impact of the Public Awareness Campaign to the public (Annual reports)  | Jan- Dec 2023 and continuous        | MOEPP          | NGOs LSGU                         | €10 k           |                   |                       |  |
| (c) Promote, in cooperation with the Ministry of Economy and Ministry of Finance, recycling and reuse of waste by domestic industry and manufacturers    | Delivery of a Public Awareness Campaign for a period of at least 12months that will support the implementation of the EPR schemes (Delivered16 public awareness campaigns -two per each of the eight regions in the country) | Jan - Dec 2022                      | MOEPP          | NGOs Business sector              | €10 k           | Gov budget        |                       | National Waste Management Public Awareness Program Developed |
|  | Monitoring the impact of the Public Awareness Campaign to the public (Annual reports)  | Jan-Dec 2023 and continuous         | MOEPP          | NGOs LSGU                         | None            |                   |                       |  |

**Waste management infrastructure** - The slow implementation of regional waste management plans and regional landfills hinders the effectiveness of the whole waste management system in the country. Therefore, the completion of the regional landfills has to be high on the Government's agenda.

## Recommendation 10.4:

| Implementation measures   | Detailed actions  | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment                              | Financial sources  | Means of verification  | Comments |
|---|---|-------------------------------------|----------------|-----------------------------------|--|--|--|----------|
| The Government should support the establishment of the regional waste management systems and take measures to speed up the construction of regional landfills | Adopting the Law on waste management  | Jan 2021                            | MOEPP          | MF Business sector                | None   |  | Official Journal of RNM  |          |
|   | Adopting the National Waste Management Plan 2020-2030   | Feb 2021                            | MOEPP          |                                   | None   |  | Gov decision   |          |
|   | Organisational unit for regional waste management to be established within the Centre for development of each planning region by an act for establishing of the Centre for development for each planning region, in accordance with the regulations for a balanced regional development and LWM | Jun 2021 - Jun 2023                 | LSGUs          | MLSG MOEPP                        | €12 k per year per region                    | Municipality budgets (to be financed by every municipality in the respective region) | Established organization units in all eight regions in the country |          |
|   | Governmental decision for finding funds (IPA or IFs) for financing the basic infrastructure for the establishing a regional waste management in all eight regions   | Jun 2021                            | MOEPP          | MF MLSG                           | None   |  | Gov Decision   |          |
|   | Secured resources for financing the regional waste management system in South-East, Pelagonija, Vardar, South-West, Polog and Skopje region   | Dec 2021                            | Government     | MOEPP MF                          | €55 million – 100 million (to be determined) | Loan from IFI (World Bank, EBRD etc.) or IPA III                                     | Signed contract for financing                                      |          |

**Data collection** - For some waste types (e.g., MSW and hazardous waste), both SSO and the Ministry of Environment and Physical Planning collect and publish data. There are discrepancies in data published by the two institutions. Calculation methodologies are not adjusted, and there is a lack of clear delineation between the two institutions and their responsibilities in data collection, thus leading to overlaps.

### Recommendation 10.5:

| Implementation measures   | Detailed actions   | Period of execution for each action | Lead authority | Other institutions & stakeholders      | Cost assessment | Financial sources | Means of verification | Comments   |
|---|--|-------------------------------------|----------------|--|-----------------|-------------------|-----------------------|--|
| (a) The MOEPP and State Statistical Office should adjust their data collection methodologies and clearly delineate their tasks and roles, and propose the necessary amendments to the legislation related to data collection on waste;<br>(b) Establish an expert group to agree on waste-related indicators, underlying statistics, data collection and reporting methods, to avoid overlap and the duplication of efforts, especially under conditions of limited financial resources and capacity. | Establishing a task force for processing waste information   | Jun 2021                            | MOEPP SSO      |  | None            |                   | Gov decision          |  |
|   | Preparing a methodology for collecting and processing the information data for waste management  | December 2022                       | MOEPP SSO      |  | None            |                   |                       | Task force will work on a methodology for related indicators, underlying statistics, data collection and reporting methods     |
|   | Preparing a softer according to the Methodology for collecting and processing the information date regarding waste management                | Jan 2023                            | MOEPP SSO      | MF                                     | €20 k           | Gov budget        |                       | Engaging an IT company for preparation of the softer collecting and processing the information date regarding waste management |
|   | Organizing workshops for informing the stakeholders regarding the softer collecting and processing the information date for waste management | Jun 2023- Jun 2024                  | MOEPP SSO      | Business sector, Chamber of commerce's | €25 k           | To be determined  |                       | At least 5 workshops delivered   |

**Waste Management Information System** - The Waste Management Information System was developed to facilitate reporting to the Ministry of Environment and Physical Planning by all the obligated parties (municipalities, health-care facilities, enterprises on the EPRscheme and public communal companies). The system is not operational because it is not fully compliant with the current legislation. Reports are submitted on paper, which makes their validation, further processing and publication much more burdensome.

### Recommendation 10.6:

| Implementation measures  | Detailed actions   | Period of execution for each action | Lead authority | Other institutions & stakeholders             | Cost assessment | Financial sources | Means of verification | Comments  |
|--|--|-------------------------------------|----------------|---|-----------------|-------------------|-----------------------|---|
| The MOEPP should ensure the implementation of the activities necessary to bring the Waste Management Information System into operation, to facilitate the legally binding reporting of all obligated parties to the Ministry and reduce the burden for data validation, exchange, processing and publication of information. | Establishing an information system for waste management as a part of the overall Macedonian Environmental Information System | Jun 2021                            | MOEPP          | Business sector,<br><br>Chamber of commerce's |                 | IPA II            |                       | Established information system for waste management as part of the Macedonian Environmental Information System (Establishing a network for obtaining data on the waste management from ministries, organisational units for regional waste management, organisations, scientific and research institutions, legal entities and individuals managing waste and other entities) |
|  | Organizing workshops for informing the stakeholders regarding the information system for waste management                    | Jun 2021-<br>Jun 2022               | MOEPP<br>SSO   | Business sector,<br>chamber of commerce's     | €25 k           | To be determined  |                       | At least 5 workshops delivered  |

## Chapter 11

### ***BIODIVERSITY AND PROTECTED AREAS***

**Biodiversity monitoring, inventories and research programmes** - The availability of reliable, comprehensive and up-to-date information on biodiversity is a prerequisite for proper formulation of national policies, strategies, species conservation action plans and protected area management plans, and for the proper setting of hunting quota. The National Biodiversity Information System, once in operation, will not be able to perform its planned policy support tool functions unless it is continuously provided with reliable and continuously updated information derived from biodiversity monitoring, field inventory work and scientific research. The lack of access to high quality data on biodiversity is an obvious impediment to progress in achieving targets 15.1, 15.2 and 15.5 of the 2030 Agenda for Sustainable Development.

#### Recommendation 11.1

| Implementation measures   | Detailed actions   | Period of execution for each action | Lead authority | Other institutions & stakeholders          | Cost assessment  | Financial sources     | Means of verification | Comments  |
|---|--|-------------------------------------|----------------|--|------------------|-----------------------|-----------------------|---|
| (a) The MOEPP should implement the national biodiversity monitoring programme, with a special focus on rare and threatened flora, fungi and fauna species, plant communities and ecosystems, and invasive alien species | Develop plan with methodology for biological diversity monitoring  | Dec 2022                            | MOEPP          | Scientific institutions<br>NGOs<br>experts | To be determined | Gov budget,<br>Donors | Minister's decision   | Bylaw with developed plan for biological diversity monitoring   |
|   | Adopt monitoring protocols of biodiversity   | Dec 2021                            | MOEPP          | scientific institutions<br>experts         | To be determined | Donors                | Minister's decision   | prepared 7 protocols  |
|   | Identify species and habitats to be subject of monitoring, including rare and threatened species               | Oct 2022                            | MOEPP          | scientific institutions                    | To be determined | Donors                |                       | select species and habitats for monitoring  |
|   | Assessment and improvement of capacity (individual, institutional, technical, etc.) for monitoring performance | Jan 2021-<br>Dec 2023               | MOEPP          | experts                                    | To be determined | Gov budget,<br>Donors |                       | Institutions and individuals for monitoring selected; assessment of their capacity to implement monitoring; transfer of knowledge |

| Implementation measures   | Detailed actions   | Period of execution for each action | Lead authority | Other institutions & stakeholders                 | Cost assessment  | Financial sources          | Means of verification | Comments   |
|---|--|-------------------------------------|----------------|---|------------------|----------------------------|-----------------------|--|
|   |  |                                     |                |   |                  |                            |                       | (training, workshops, international institutions, etc.)  |
|   | Prepare action plans about key species and habitats, invasive species, etc   | Dec 2021                            | MOEPP          | scientific institutions                           | To be determined | Gov budget                 |                       | action plans; activities ensuing from action plans implemented                                     |
| (b) Mobilize adequate financial resources to ensure the continuation of state programmes related to biodiversity monitoring and research in the long run; | Continuation of the process for biological diversity conservation  | Cont.                               | MOEPP          | To be determined                                  | To be determined | Gov budget                 |                       |  |
|   | Include a mechanism for biological diversity incentives and fund reinvestment  | Dec 2022                            | MOEPP          | Bodies of protected areas<br>Experts              | To be determined | Gov budget                 |                       | include an introduction mechanism  |
|   | Establish mechanisms for financing biological diversity conservation from the budgets of the local self-governments                    | Cont.                               | MOEPP          | MLSG<br>LSGUs                                     | To be determined | Gov budget<br>LSGUs budget |                       | Relevant financing mechanism established   |
|   | Encourage the social accountability with companies to support project activities referring to the conservation of biological diversity | Cont.                               | MOEPP          | Relevant ministries in cooperation with companies | To be determined | Private sector budget      |                       | Number of companies supporting biodiversity conservation projects; projects supported by companies |
| (c) Complete the inventory and assessment of the status of threatened species, in cooperation with relevant academic and scientific research institutions | Assessment of the status and elaboration of measures for conservation of the Habitats Directive Annex V species                        | Jan 2021-<br>Dec 2023               | MOEPP          | scientific institutions<br>NGOs                   | To be determined | Gov budget/<br>donors      |                       | Studies assessing the status of Annex V species; measures to conserve Annex V species defined      |
|   | Preparation of action plans for key species and habitats, invasive species, etc  | Dec 2022                            | MOEPP          | scientific institutions<br>NGOs                   | To be determined | Gov budget                 |                       |  |
|   | Development of catalogues of individual taxonomic  | Jan 2021-<br>Dec 2024               | MOEPP          | MES<br>scientific                                 | To be determined | Gov budget                 |                       | shaping team to work on catalogues; number of  |

| Implementation measures  | Detailed actions   | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment   | Financial sources | Means of verification | Comments   |
|--|--|-------------------------------------|----------------|-----------------------------------|-------------------|-------------------|-----------------------|--|
| and environmental civil society organizations  | groups and their updating and publishing   |                                     |                | institutions                      |                   |                   |                       | issued catalogues                                    |
| (d) Adopt the Red List and corresponding Red Book(s), paying due account to the globally applied International Union for Conservation of Nature (IUCN) methodology and criteria, and update the 2011 lists of strictly protected and protected species accordingly | Prepared red lists and red books   | Jan 2021-Dec 2023                   | MOEPP          | scientific institutions           | To be determined  | Gov budget/donors |                       | Number of developed/published red lists and books    |
|  | Revision of the Lists of strictly protected and protected wild species                                 | Jan 2021-Dec 2022                   | MOEPP          | scientific institutions           | Gov budget/donors | MOEPP budget      |                       | Lists reviewed                                       |
|  | Prepare and implemented of action plans for conservation of threatened species identified in red lists | Jan 2021-Dec 2023                   | MOEPP          | scientific institutions NGOs      | To be determined  | Gov budget/donors |                       | Prepare action plans; activities ensuing from action |

## Recommendation 11.2

| Implementation measures  | Detailed actions   | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment | Financial sources | Means of verification | Comments   |
|--|--|-------------------------------------|----------------|-----------------------------------|-----------------|-------------------|-----------------------|--|
| (a) The MAFWE should implement research on forest ecosystems and habitats, in cooperation with relevant academic | Harmonize the legislation for nature protection with the laws on forests and hunting | Cont.                               | MOEPP          | MAFWM and other relevant sectors  | None            |                   |                       | harmonized legislation   |
|  | Fostering of the integration of biological diversity components (especially          | Cont.                               | MOEPP          | MAFWM PE National Forests         | None            |                   | Minister's decision   | Rulebooks adopted; methodology in line with laws on nature, forestry |

| Implementation measures   | Detailed actions   | Period of execution for each action | Lead authority | Other institutions & stakeholders                                 | Cost assessment  | Financial sources | Means of verification | Comments   |
|---|--|-------------------------------------|----------------|---|------------------|-------------------|-----------------------|--|
| and scientific research institutions and environmental civil society organizations  | threatened species and habitats) into forestry practices   |                                     |                | Scientific institutions Experts                                   |                  |                   |                       | and hunting  |
|   | Develop a study for identification of biodiversity-rich forests, including near-virgin forests                                       | Jan 2021- Dec 2022                  | MAFWE          | MOEPP PE National Forests Protected Areas Scientific institutions | To be determined | Donors            |                       | Study identifying HBD forests  |
|   | Reduce the application of clearcutting over large areas and other practices in forestry that may pose threat to biological diversity | Cont.                               | MAFWE          | PE National Forests Scientific institutions Private forest owners | None             |                   |                       | penalty provisions; practical methods and tools for better coordination and efficiency of competent services             |
| (b) Carry out a national inventory of forest resources, including scientific studies on the status of game species populations, for setting appropriate hunting quotas. | Fostering of the forest inventory and certification process  | Jan 2021- Dec 2023                  | MAFWE          | PE National Forests Scientific institutions Private forest owners | None             |                   |                       |  |
|   | Develop a scientific study on the status of game population for the purpose of setting more appropriate hunt quotas                  | Jan 2021- Dec 2023                  | MAFWE          | MOEPP in cooperation with scientific institutions                 | To be determined |                   |                       | Studies on the status of game population prepared; game covered by the studies   |
|   | Strengthening of the capacity of institutions and hunting site managers for game protection against poaching and control of          | Jan2021- Dec 2024                   | MAFWE          | Hunting grounds managers  | To be determined | Gov budget Donors |                       | Number of training sessions held; number of reported and solved cases of poaching (it should be observed whether falling |

| Implementation measures | Detailed actions                            | Period of execution for each action | Lead authority | Other institutions & stakeholders | Cost assessment | Financial sources | Means of verification | Comments   |
|-------------------------|---|-------------------------------------|----------------|-----------------------------------|-----------------|-------------------|-----------------------|--|
|                         | unselective methods and products in hunting |                                     |                |                                   |                 |                   |                       | trends occur in parallel to the strengthening of capacities) |

**Development and implementation of policies, strategies and conservation action plans** - The integrity of almost all natural ecosystems in the country is currently threatened, due partly to ongoing climatic changes but also to growing anthropogenic pressures. The biodiversity loss continues, and populations of several rare species continue to decline in size. This means that the currently applied management approaches and strategies do not provide for effective biodiversity conservation. For instance, a national policy or programme on wetlands protection is still lacking, even though its development and implementation is mandatory. Similarly, only a few rare and potentially threatened species are currently covered by the existing species conservation plans, as the threats to species have not yet been adequately researched and assessed. Putting in place new national policies, strategies and ecosystem or species conservation action plans, and monitoring and evaluating progress in their implementation, will facilitate the achievement of targets 15.1 and 15.5 of the 2030 Agenda for Sustainable Development.

### Recommendation 11.3

| Implementation measures   | Detailed actions   | Period of execution for each action | Lead authority | Other institutions & stakeholders  | Cost assessment  | Financial sources    | Means of verification | Comments   |
|---|--|-------------------------------------|----------------|------------------------------------|------------------|----------------------|-----------------------|--|
| (a) The MOEPP should develop a national policy or a programme for wetlands conservation | Develop program for conservation and restoration of wetlands/swamp habitats and riparian habitats    | Jan 2021-Dec 2023                   | MOEPP          | Scientific and expert institutions | To be determined | Gov budget<br>Donors |                       |  |
|   | Specify measures for preservation of wetlands in favourable status of conservation                   | Jan 2021-Dec 2023                   | MOEPP          | Scientific and expert institutions | To be determined | Gov budget<br>Donors |                       | to be adopt habitats conservation measures   |
| (b) Develop relevant action plans/programmes for ecosystems and species conservation    | Identify the most affected ecosystems and species and prepare of action plans for their conservation | Jan 2021-Dec 2023                   | MOEPP          | Scientific and expert institutions | To be determined | Gov budget<br>Donors |                       | Trends in existing threats to ecosystems; list of priority ecosystem according to the level of threat prepared; action plans for |

| Implementation measures  | Detailed actions   | Period of execution for each action | Lead authority | Other institutions & stakeholders      | Cost assessment  | Financial sources | Means of verification | Comments  |
|--|--|-------------------------------------|----------------|--|------------------|-------------------|-----------------------|---|
|  |  |                                     |                |  |                  |                   |                       | most affected ecosystems and species                                      |
|  | Develop map of important and threatened ecosystems and species   | Jan 2021-Dec 2023                   | MOEPP          | Scientific and expert institutions     | To be determined | Gov budget Donors |                       | ecosystems mapped in GIS  |
|  | Prepare plans and programmes for revitalization of the key ecosystems in the country   | Jan 2021-Dec 2023                   | MOEPP          | Scientific and expert institutions     | To be determined | Gov budget Donors |                       | Number of plans and programmes for preparation                            |
| (c) Mobilize adequate resources to ensure the implementation of the national policy or programme for wetlands conservation, as well as action plans/programmes for ecosystems and species conservation in the long run | Develop encouraging measures and practices for conservation and improvement of ecological values of wetlands and ecosystems  | Jan 2021-Dec 2023                   | MOEPP          | Scientific institutions, experts, NGOs | To be determined | Gov budget Donors |                       | Introduce measures and practices  |
|  | Introduce procedures of the integration of biological diversity components (especially threatened species and habitats) into sectoral strategies, plans and programs (energy, waters, agriculture, rural development, forestry, etc.) by including alternative solutions | Jan 2021-Dec 2022                   | MOEPP          | Other state institutions               | To be determined | Gov budget        |                       | Incorporation of biodiversity conservation goals into sectoral strategies |
|  | Reduce direct and indirect pressures on habitats, ecosystems and species   | Cont.                               | MOEPP          | Scientific institutions, experts, NGOs | To be determined | Gov budget Donors |                       |   |

**Strengthening the national protected area network** - In 2017, the national protected area network encompasses only 8.93 per cent of the country's territory, which is below the CBD Aichi Biodiversity Target 11 (at least 17 per cent to be conserved by 2020). Simultaneously, this network is currently in a transitional phase of development, given that not all existing protected areas have been firmly enshrined in the network, due to the fact that the procedures

for their revalorization and reproclamation have not been finalized, while the expected accession to the EU would then require the designation of the Natura 2000 network (probably overlapping to some extent with the currently existing protected areas). Last, but not least, the existing network does not provide for the expected ecological continuity and spatial connectivity. Hence, to achieve targets 15.1 and 15.4 of the 2030 Agenda for Sustainable Development requires additional effort.

## Recommendation 11.4

| Implementation measures   | Detailed actions   | Period of execution for each action | Lead authority | Other institutions & stakeholders                           | Cost assessment  | Financial sources | Means of verification | Comments                                |
|---|--|-------------------------------------|----------------|---|------------------|-------------------|-----------------------|---|
| (a) The MOEPP should complete the revaluation and reproclamation of existing protected areas  | Finalize the process of protected areas re-designation   | Dec 2023                            | MOEPP          | Scientific institutions, Protected area management entities | To be determined | Gov budget Donors |                       | Number of re-designated Protected Areas |
|   | Harmonize the system of protected and proposed areas with other relevant sectors   | Jan 2021- Dec 2023                  | MOEPP          | Cooperation with other stakeholders                         | To be determined | Gov budget Donors |                       |   |
|   | Establish effective management of protected areas  | Jan 2021- Dec 2023                  | MOEPP          | Protected area management entities                          | To be determined | Gov budget Donors |                       | Established effective management system |
| (b) Proceed with the identification and valorization of areas with high potential for their future designation as Natura 2000 sites, and areas of key importance for the spatial coherence of the future national | Identify Special Conservation Areas (SCAs) and Special Protection Areas (SPAs) in the frames of the process of Natura 2000 establishment | Dec 2022                            | MOEPP          | Scientific and expert institutions, NGOs                    | To be determined | Gov budget Donors |                       | Natura 2000 sites                       |
|   | Select a proposal potential pilot areas for Natura 2000 network at national level  | Dec 2022                            | MOEPP          | Scientific and expert institutions, NGOs                    | To be determined | Gov budget Donors |                       | Number of Identified Natura 2000 sites  |

| Implementation measures   | Detailed actions  | Period of execution for each action | Lead authority | Other institutions & stakeholders      | Cost assessment  | Financial sources | Means of verification | Comments  |
|---|---|-------------------------------------|----------------|--|------------------|-------------------|-----------------------|---|
| ecological network;   |   |                                     |                |  |                  |                   |                       |   |
|   | Nomination and designation of new internationally protected areas   | Dec 2022                            | MOEPP          | Scientific and expert institutions     | To be determined | Gov budget Donors |                       | Ramsar site, UNESCO sites   |
| (c) Designate new protected areas, and, where deemed necessary, extend the territories of existing protected areas, with a focus on providing for adequate coverage of all main ecosystem types representative of the country, as well as the sufficient inclusion of habitats of all rare and threatened wildlife species. | Designate new protected areas based on the Spatial Plan of the Republic of North Macedonia, other strategic documents and relevant studies  | Jan 2021- Dec 2023                  | MOEPP          | Scientific institutions, experts, NGOs | To be determined | Gov budget Donors |                       | Number of newly designated Protected areas  |
|   | Provide conservation of priority species and habitats outside the system of protected areas identified in the frames of Important Plant Areas, Important Bird Areas and Prime Butterfly Areas | Continuously                        | MOEPP          | Scientific institutions, experts, NGOs | To be determined | Gov budget Donors |                       | Status of habitats (monitoring); activities (projects) related to such habitats and species |

**Establishing a strong institutional framework for nature protection** - The Ministry of Environment and Physical Planning develops and implements national policies on nature protection, protection of biological and landscape diversity and protection of natural heritage, as well as undertaking control and supervision over the enforcement of the provisions of the 2004 Law on Nature Protection. The competences of the Ministry of Agriculture, Forestry and Water Economy include the development and implementation of other important policies for biodiversity conservation, concerning, for example, agricultural land management, rural development, protection and use of forests, forestry (including afforestation and reforestation), hunting and fishing, and melioration. Various other institutions and organizations are involved in activities for biodiversity conservation and nature protection. Concerted efforts to coordinate activities are lacking.

Nature protection is a multisectoral issue that requires a high level of coordination and collaboration between the responsible ministry for environmental affairs and many different sectors, such as forestry, agriculture, transport, energy and tourism. Insufficient intersectoral coordination and cooperation, as well as overlapping responsibilities, weak communication, lack of capacities at the national and local levels and lack of financial resources have been identified as the main obstacles for implementation of the Convention on Biological Diversity at the national level. Usually, the benefits acquired from

biodiversity and ecosystem services are overlooked and undervalued by decision-makers, which not only leads to loss of biological diversity but has also adversely affected human health.

Through the mapping and assessment of ecosystems and ecosystem services (measures under the EU 2020 Biodiversity Strategy and Convention on Biological Diversity), the country's role in implementing legislation and policy for the delivery of ecosystem services could be evaluated (e.g., the contribution of the Natura 2000 network to the delivery of ecosystem services, and the mapping, indexing and implementing of payment for ecosystem services).

### Recommendation 11.5

| Implementation measures   | Detailed actions  | Period of execution for each action | Lead authority | Other institutions & stakeholders                | Cost assessment  | Financial sources                   | Means of verification | Comments   |
|---|---|-------------------------------------|----------------|--|------------------|-------------------------------------|-----------------------|--|
| (a) The MOEPP and MAFWE should establish effective coordination mechanisms with the involvement of all relevant actors for the coherent development and implementation of policies on biodiversity conservation and nature protection | Integrate biodiversity conservation aspects in the preparation of local economic development, strategies and other strategic planning documents at local and regional levels  | Cont.                               | MOEPP          | LSGUs, Bureau for Regional Development           | To be determined | Gov budget<br>LSGU budget<br>Donors |                       | Number of developed strategies and other planning documents at local level including of biodiversity aspects       |
|   | Establish partner relation between the government institutions, local self-governance, planning regions, nongovernmental organizations, economy etc. in view of biodiversity and nature protection and conservation | Cont.                               | Gov            | MOEPP, MAFWE, LSGUs, NGOs                        | None             |                                     |                       | Partnerships for nature protection and biodiversity conservation   |
| (b) Establish an effective coordination mechanism for issues related to   | Implement the status assessment of the basic types of ecosystems and their potential to deliver ecosystem services  | Dec 2022                            | MOEPP          | scientific institutions, expert, Protected areas | To be determined | Gov budget<br>Donors                |                       | Status of basic ecosystem types; ecosystem potential to provide ecosystem services; number of evaluated ecosystems |

| Implementation measures   | Detailed actions  | Period of execution for each action | Lead authority | Other institutions & stakeholders                | Cost assessment  | Financial sources     | Means of verification | Comments   |
|---|---|-------------------------------------|----------------|--|------------------|-----------------------|-----------------------|--|
| payment for ecosystem services  | Implement the economic evaluation of ecosystems   | Dec 2022                            | MOEPP          | scientific institutions, expert, Protected areas | To be determined | Gov budget Donors     |                       | Economic evaluation of ecosystems  |
|   | Identify important ecosystem services on national level and their mapping, i.e. mapping the demand for certain ecosystem services   | Dec 2022                            | MOEPP          | scientific institutions, expert, Protected areas | To be determined | Budget of RNM, Donors |                       | Team working on ecosystem services; demand for certain ecosystem services mapped |
| (c) Set up and ensure the operation of a national council for nature protection   | Complete the National Council for Nature Protection   | Nov 2021                            | MOEPP          | scientific institutions, experts                 | To be determined | Gov budget            | Minister's decision   |  |
|   | Provide operability and functionality of the National Council for Nature Protection   | Nov 2021                            | MOEPP          | scientific institutions, experts                 | To be determined | Gov budget            |                       | functional National Council for Nature Protection                                |
| (d) Conduct regular training to develop the capacity of civil servants involved in biodiversity conservation and nature protection activities | Encourage creation of professional staff related to study of biological diversity conservation and nature protection and provision of appropriate involvement at all levels of state administration and scientific and educational institutions | Cont.                               | Gov            | MOEPP, ME, scientific institutions, NGOs         | To be determined | Gov budget            |                       | Staff employed in the administration on proper positions                         |
|   | Strengthening the capacities of civil servants scientific   | Cont.                               | Gov            | MOEPP, scientific                                | €20 k            | Gov budget Donors     |                       | Number of delivered trainings, workshops,  |

| Implementation measures | Detailed actions   | Period of execution for each action | Lead authority                     | Other institutions & stakeholders               | Cost assessment  | Financial sources | Means of verification | Comments   |
|-------------------------|--|-------------------------------------|------------------------------------|---|------------------|-------------------|-----------------------|--|
|                         | and expert institutions working in the field of nature protection and conservation of biological diversity (exploration, study and protection) |                                     |                                    | and expert institutions, Protected areas        |                  |                   |                       | seminars, etc.<br>Number of trained persons              |
|                         | Give a priority to scientific research in the area of biological diversity   | Cont.                               | Scientific and expert institutions | MOEPP, Bodies for management of protected areas | €100 k           | Gov budget        |                       | Program with priorities for scientific research projects |
|                         | Establish and maintain the clearing house mechanism (CHM) for biological diversity   | Cont.                               | MOEPP                              | scientific institutions, NGOs                   | To be determined | Donors            |                       | Mechanism for biological diversity information exchange  |