



## PLATFORM 27

### SHADOW REPORT ON CHAPTER 27 ENVIRONMENT AND CLIMATE

2022



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# 1. Introduction

The shadow report on Chapter 27 for 2022 was prepared within the **project "Analysis of the progress of the compliance and implementation of the EU environmental and climate change legislation with the national legislation"**, which was implemented by the Center for Climate Change and with the financial support of Foundation Open Society Macedonia (FOSM). The main goal of the project and of Platform 27 is to monitor the progress in harmonizing the national environmental and climate legislation with the European one and to analyze its implementation at the national and local level and thus to be an active partner in the pre-accession negotiations for entry into EU in relation to Chapter 27.

*Platform 27 is an informal network* of more than 20 organizations working in the field of environmental protection and climate change that was established in 2020 within the **project "Citizens' Platform for Monitoring the Negotiations with the EU on Chapter 27"**, funded by Civica Mobilitas and which last year, in November 2021, issued the first shadow report on Chapter 27. The report was prepared on the basis of a previously developed methodology with which the four organizations that work on monitoring the harmonization of national legislation with the European one, but also on the implementation of the legislation of national and local levels analyze progress and summarize the main findings in a single report entitled Shadow Report on Chapter 27.

This report, unlike the First Shadow Report on Chapter 27, covers all sub-chapters - sectors that are part of Chapter 27 and for which the state will be required to report to the European Union and negotiate in the process of pre-accession. So in the Shadow Report for Chapter 27 for 2022 we analyzed the progress in the last year, i.e. in the period from December 2021 to November 2022 in the following sub-chapters: horizontal legislation, air quality, water, waste management, industrial pollution and risk management, nature protection, climate change, noise protection, chemicals and civil protection.

The purpose of this Report is to give a detailed overview of the progress in harmonizing national legislation with the European one for all sub-chapters that are part of Chapter 27 environment and climate change, but also to analyze the implementation at the national and local level. The report identifies the shortcomings in these processes, emphasizes them, but also proposes recommendations and manners to overcome them. For the new 3 sub-chapters (noise protection, chemicals and civil protection) it gives a complete picture and overview of the current situation in these sectors, but also notes the shortcomings and gives recommendations for improvement.

Among other things, this Report should improve the dialogue between the relevant institutions, the civil sector, the professional public, the international community and all stakeholders in the process of harmonizing the legislation and its implementation. It is of great importance that the report is being prepared by 4 organizations that have more than 10 years of experience in the field of environment and that continuously monitor the situation in the country in the field of environment and climate change.

## 2. Summary

The analysis carried out for the purposes of this Report notes a significant progress in terms of the harmonization of environmental and climate change legislation with European legislation compared to last year. Particular progress has been noted in the area of water quality management, where new Law on Waters was drafted. Furthermore, after many years of efforts, in April this year, the Law on Environmental Inspection was adopted, which further regulates the inspection in this area. At the beginning of this year, the professionals working in the field of criminal law promoted the new Criminal Code, where certain acts in the environmental field were included in the list of criminal acts and a new category was also introduced: Ecocide, thus aligning the national legislation with the Environmental Crime Directive. The new Criminal Code was adopted in November 2022.

It is particularly significant that the Law on the Environment was also changed, with the Law on amendments to the Law on the Environment (Official Gazette of the RSM No. 89 of 11.4.2022), where are stipulated provisions defining the contaminated areas, establishing a legal basis for adopting a methodology for identifying contaminated areas; the contaminated area management plan is edited; the practical part of the exam for handling refrigerants and/or products containing refrigerants is adjusted; the fee paid for obtaining a license to import protected or used tires, the fees for motor vehicles and vessels are changed, and the section on environmental financing is adjusted.

In November, the Assembly adopted the Law for loan for financing of 3 landfills for regional waste management, which enables the provision of finance and the start of the construction of sanitary landfills for 5 regions.

At the same time, progress has been made in terms of the initiation of working meetings by the MOEPP on the Draft Law on Control of Industrial Emissions and the Draft Law on Climate Action - two laws which are completely new and should improve the transposition of EU legislation on industrial emissions and EU legislation on climate action. It is expected that the Law on Control of Industrial Emissions will be adopted soon, and the Climate Action Law will be submitted to ENER for further comments and final adoption.

However, despite the progress in terms of harmonizing the national legislation with the European one, its implementation remains insufficient. Capacities and human resources remain weak and insufficient despite numerous appeals to improve administrative capacities. The state is faced with a numerous but inefficient administration that lacks adequate coordination, professional and qualified personnel and strong intersectoral cooperation.

Funding is also insufficient, i.e., large investments are needed, especially in the processes for a just transition, transformation of technological processes, renovation of old and inefficient buildings, including a change in the heating technology. All this requires long-term investment measures properly coordinated and analyzed by the relevant institutions.

## 2.1. Methodology

For the preparation of the second shadow report, i.e., for the analysis and monitoring of the achieved progress, the organizations used the same methodology used during the first shadow report preparation. Namely, the research was conducted for the new legal framework and its compliance with European legislation. At the same time, the analysis included the implementation of the legislation, i.e. it analyzed the shortcomings in the implementation of the legislation. In addition, for each of the existing chapters the main findings of the first shadow report are included, which is not the case for the new sub-chapters (noise protection, chemicals and civil protection) where the report follows the methodology of the first report.

It is particularly significant to note that the analysis includes participation of representatives from the relevant sectors in the MOEPP, with whom brief meetings were held in order to discuss the progress both in terms of the harmonization and implementation of the legislation. Also with the help of financial resources from the same donor - Foundation Open Society Macedonia (FOSM) and in coordination with Milieukontakt Macedonia, in the first 6 months of this year numerous consultations were held with various stakeholders and the participation of all 6 organizations involved in the report's preparation, namely: national and local civil society organizations, units of local self-government, regional centers for the development of planning regions, business community and private sector, professional and academic community and many other stakeholders who work in the field of environmental protection and have competences in this sector. These consultations made it possible to develop detailed recommendations for many of the priorities that were identified in the first shadow report, to be refined and to be an integral part of this report. With the help of the consultations that were held with representatives from the MOEPP, additional priorities were defined that the state will have to work on in the future.

This report does not pay particular attention to the administrative capacities for the reason that the changes are insignificant and most of the time there is almost no progress in the administrative capacities for the implementation of the environmental and climate change legislation. However, these aspects are adequately covered in the analysis and elaboration of the progress in the harmonization and implementation of the legislation. Also, the Report includes short analysis of the implementation of the Green Agenda for Western Balkan and financial capacities for implementation of the Chapter 27.

## 3. Horizontal legislation

### 3.1. Main findings from the first shadow report

#### **Main findings regarding legislation's transposition**

The first shadow report<sup>1</sup> indicates that the transposition of EU Directives into national legislation is at a properly high level.

The Directive on Strategic Environmental Assessment (SEA), the Directive on Access to Environmental Information and the Directive on Public Participation in Environmental Decision-Making have been fully transposed into the current Environmental Law and the corresponding by-laws<sup>23</sup>.

The Environmental Impact Assessment (EIA) Directive, the Environmental Liability Directive, the INSPIRE Directive – Representation of Spatial Data on the Environment, the Environmental Crime Directive and the RMCEI – Minimum Standards for the Implementation of Inspections in environment are transposed over 70%.

#### **Main findings regarding legislation's implementation**

Regarding the implementation of the **EIA Directive**, the procedures are generally carried out, but there is a lack of timely information and involvement of the affected public at the earliest stage (e.g. notices of intention to implement projects are not published on the homepage of the MOEPP, and it is not specified nor the date when they were published), thus preventing public participation in the procedure as it is stipulated.

Regarding the implementation of the **SEA Directive**, during the implementation of the procedures there are certain inconsistencies concerning the preparation of a decision for (non)implementation of a strategic assessment for a specific planning document, notification and public participation, predominantly at the local level.

There is a continuous dialogue with civil society, but further efforts are needed to improve **access to information, public participation and consultation in decision-making processes**. The first Aarhus Center in the country has been established and it will support public participation in environmental issues.

**The minimum standards for the implementation of inspection supervision (RMCEI)** are incorporated in the Draft Law on inspection supervision in the environment.

Regarding the implementation of the **INSPIRE Directive**, some progress has been made through the drafting of several implementing regulations (Metadata Regulation, Data Sharing Specification and Protocols Regulation, as well as Network Services Regulation).

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<sup>1</sup>[First Shadow Report on Chapter 27](#) pp. 43

<sup>2</sup>[Law on environment](#)

<sup>3</sup>[Rulebook on the manner and procedure for enabling access to information related to environment](#)  
[Decision to publish a list of entities that own or for which environmental information is owned](#)  
[Decree on public participation during the development of regulations and other acts, as well as plans and programs in the field of the environment](#)  
[Decree on strategies, plans and programs, including changes to those strategies, plans and programs, for which a procedure for assessing their impact on the environment and on people's life and health must be carried out](#)  
[Decree on the content of the strategic environmental assessment report](#)  
[Decree on the criteria on the basis of which decisions are made whether certain planning documents could have a significant impact on the environment and human health](#)

There is no progress regarding the implementation of the Environmental Responsibility Directive.

There has been no progress regarding the implementation of the Environmental Crime Directive.

### **Main findings in terms of administrative capacities**

**The office for environmental impact assessment and soil protection has 6 (six) employees** who carry out the obligations imposed according to the EIA procedure (in the absence of the Law on Soil). Considering how the EIA procedure is carried out from the publication of the notice of intent, the EIA study and the public consultation process, it can be said that this number partially meets the needs, but there is certainly an opportunity for additional human resources in order to distinct the elaborates on environmental protection from the EIA procedure.

The implementation of the SEA procedure within the Spatial Planning Department is carried out by only **2 (two) employees (Office for Strategic Environmental Impact Assessment)**. This number is less than sufficient and it could be concluded that the capacities in terms of human resources are insufficient. Additional human resources are needed who will be in charge exclusively of monitoring and implementing the procedure for planning documents at the local level.

**The office for communication with the public and education, has a total of 8 (eight) employees.** In view of the obligations originating from the Aarhus Convention (transparency and public availability of information on environmental protection, reception and forwarding of requests for access to information and responses in relation to requests, information for decision-making on environmental priorities and solutions, inclusion of the public when making decisions, organizing public hearings and the process of consultation with the public for decisions in the area of the environment), an increase in the number of employees is necessary.

According to the Regulation on the systematization of jobs in the **State Environmental Inspectorate**, only **25 jobs** have been filled out of the planned 50 jobs of administrative officers distributed by organizational units. By the end of 2021, the Ministry of Finance has **approved 7 new jobs** instead of the proposed 14.

### 3.2. The progress of the transposition into the national legislation

According to the National Program for the Adoption of EU Law (NPAA) 2021-2025<sup>4</sup>, in the planned period, alignment with the EU legislation presented at the Explanatory Meeting in 2019 will be performed, which foresees the adoption of the Law on the Environment, the Law on Inspection in the Environment, will be continued environment and a new Criminal Code with strengthened provisions in the area of sanctioning environmental violations.

#### **Short-term priorities according to NPAA 2021-2025**

According to Annex 1 of the NPAA<sup>5</sup>, it is planned an adoption of a Law on Changes and Amendments to the Law on the Environment, which introduces a systematic solution that defines a contaminated area, as well as identification and method of action in accordance with EU recommendations. Improving the procedures for SEA and EIA is also foreseen in the new Law on Environment.

With technical assistance from the Energy Community, a Draft version of the Law on Changes and Amendments to the Law on Environment has been prepared, with the aim of harmonizing and transposing the Directive 2014/52/EU into the Law on Environment (Chapter XI - Assessment of the impacts of certain projects on the environment). Changes and Amendments are proposed concerning

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<sup>4</sup> [NPAA 2021-2025.pdf \(sep.gov.mk\)](#)

<sup>5</sup> [https://www.sep.gov.mk/data/file/NPAA/NPAA%202021/Aneks1\\_Zakonodavstvo\\_kvartali\\_15\\_07\\_2021.pdf](https://www.sep.gov.mk/data/file/NPAA/NPAA%202021/Aneks1_Zakonodavstvo_kvartali_15_07_2021.pdf)

the environmental impact assessment procedure, in each step of the procedure, in the notifications, in the definition of the scope, appropriate assessment, etc.

The draft text of the Law is in the process of internal harmonization in the MOEPP and has not yet been published on ENER. According to Annex 1 of the NPAA, its adoption is foreseen by the end of 2021, but this deadline will be exceeded.

The Aarhus Convention is one of the most important instruments for protecting the rights of citizens for a healthy and clean environment. The Convention on Access to Information, Public Participation in Decision-Making and Access to Justice on Issues Related to the Environment (Aarhus Convention) in our country has been ratified by the Law on Ratification (Official Gazette of the Republic of Macedonia, No. 40/99). This convention in the Shadow Report has been reviewed through the Directive on access to information on the environment and the Directive on public participation in decision-making important for the environment which have been fully transposed into national legislation, the Law on Environment and the corresponding by-laws.

The Protocol PRTR - Register for the Release and Transfer of Pollutants (RIPZ) to the Convention on Access to Information, Public Participation in Decision-Making and Access to Justice on Environmental Issues in our country has been ratified by the Law on Ratification (Official Gazette of the Republic of Macedonia, 135/2010). The goal of the PRTR Protocol is the establishment of integrated national registers of the discharge and transfer of polluting substances, which will contribute to the improvement of the public's access to information from the field of the environment; public participation in decision-making on issues related to the environment; prevention and/or reduction of environmental pollution; setting priorities and monitoring the achieved progress, etc.

A Rulebook on the form, content, methodology and way of keeping the Register of discharges and transfers of pollutants was also prepared and adopted (Official Gazette of the Republic of Macedonia, no. 2/11), which stipulates all the obligations arising from the EU Regulation (EC) No 166/2006 and the Protocol. A Strategy has been developed for the implementation of the protocol for Registers of Emissions and Transfer of Pollutants in the Republic of Macedonia for the period 2016-2020, which is based on transparency, accountability, reliability, partnership, social responsibility, public participation, respecting the laws, green industry and a healthy population. This Strategy should be revised and updated with goals and activities for the upcoming period.

Immediately after the ratification of the Aarhus Convention in the Republic of North Macedonia, a Strategy for Monitoring the Environment, a Strategy for Communication in the Environment, a Strategy for Raising Public Awareness for the Environment and a Strategy for Managing Environmental Data were prepared. A Strategy for the implementation of the Aarhus Convention in the Republic of Macedonia was also prepared, which proposes guidelines for the preparation of the national action plan for the implementation of the Aarhus Convention in practice, by ensuring transparency, participation of interested parties and defining priorities. These strategic documents are currently not valid. It is necessary to revise them and/or create new ones. According to the information received from relevant persons from the MOEPP, it is planned revision of the provisions for access to environmental information and the provisions for public participation (EIA and SEA).

According to Annex 1 of the NPAA, it is planned to adopt a Law on Environmental Inspection due to compliance with the Industrial Emissions Directive, the SEVESO Directive, the Regulation on Import and Export of Waste as well as compliance with the new Law on Inspection Supervision, according to the recommendations of the SSA Subcommittee and the recommendations for minimum criteria for inspection supervision (2001) which are still in force (RMCEI).

The draft Law on Environmental Inspection was initially prepared in 2016. The adoption procedure was postponed several times (2016, 2017 and 2021) to finally be adopted by the Assembly of the Republic of North Macedonia on April 19, 2022 and published in the Official Gazette No. 99/2022 from 21st of April, 2022.

Pursuant to the Law on Environmental inspection, the planning of environmental inspection is carried out through the adoption of: National strategy for environmental inspection and Program for environmental inspection of the Republic of North Macedonia (which should be adopted within 2 years after the adoption of the law), Annual plan for inspection supervision in the environment of the Republic of North Macedonia and Monthly plan for inspection supervision in the environment.

According to Annex 1 of the NPAA, the adoption of a National Plan for Environmental Inspection is foreseen, which will be developed after the adoption of the Law on Environmental Inspection. With this Plan, a multi-year planning of environmental inspection will be carried out. According to the Matrix of goals and activities towards the NPAA, the text of this Plan is in the process of preparation.

Regarding the harmonization of the INSPIRE Directive, some progress has been achieved as a result of the drafting of several implementing regulations (Government Regulation on Metadata, Government Regulation on Data Sharing Specification and Protocols and Government Regulation on Network Services).

According to the Matrix of goals and activities towards the NPAA, e.g., the goals for compliance with the EU environmental policy and implementation, it is planned to adopt a new Criminal Code, which will additionally comply with the Environmental Crime Directive.

As part of the continuation of the 51st session on 21.11.2022, the Assembly of the Republic of North Macedonia adopted the changes and amendments to the Criminal Code. It will contribute to a higher level of compliance with EU law in terms of the Environmental Crime Directive. The main objective of the Directive is to improve environmental protection by reducing environmental crime via establishing a legal framework for this type of crime.

Chapter 25 refers to Criminal Offenses against the Environment and Nature, and it has been supplemented with new articles, such as ecocide, which foresees a penalty of 10 years up to life imprisonment, depending on the damage done; change of water regime, i.e. whoever changes or disrupts the water regime contrary to the regulations may receive a sentence of 2 years in prison; illegal operation of plants that can in any way endanger the environment or human health is a criminal offense, with a prison sentence of up to 5 years; endangering the environment with noise, vibration or non-ionizing radiation is a criminal offense, punishable by a fine or imprisonment for up to three years; destruction of a dwelling is a criminal offense, it will be punished with a prison sentence of up to three years; effective remorse, if before the occurrence of the consequences, he voluntarily prevented the danger of their occurrence or removed the consequences. Also, the fines have been significantly increased, both the fines and the penalties for years spent in prison.

The Environmental Liability Directive, in terms of prevention and remediation of damage to the environment, has been transposed into the Law on the Environment, the "polluter pays" principle and chapter XVI. Liability for damage caused to the environment, articles 157, 158, 159. This Directive has a high level of transposition, and according to the table for the achieved progress in transposition, it amounts to (83%). As per the Environmental Liability Directive (2004/35/EC), prevention and restoration procedures should be stipulated while the Law on General Administrative Procedure should comply with this Directive.

### 3.3. Implementation of the legislation

#### **EIA Directive**

The EIA procedures are being implemented, but the situation from the previous report has not changed in terms of early, timely and better informing to the public.

The information of intention to implement projects are published on the website of the MOEPP, but not on an easily visible place, and the biggest problem is that the date is missing. This is inconsistent

with the statutory provision that allows the affected public to be involved in the earliest stages of project planning and to be able to submit comments within 30 days of the publication of the notice of intent.

A brief content of the opinion, i.e. the decision on the scope of the project impact assessment study, is published on the website, but without date, both in the section of and within the notice of intent.

Draft EIA studies are not published on the home page of the MOEPP, i.e., there is no public notice that an EIA Study has been submitted by a certain investor on a certain date, neither an information for the manner of involving the public and the submission of comments from the public. A notice is published immediately before public hearing event, which prevents the public to be adequately prepared (review and study of the study, preparation of comments, etc.).

The report on the suitability of the project's environmental impact assessment study and the decision to approve or disapprove the EIA study are published in the EIA studies section. They are available to the public, but still they should be published with a date and in a more visible place on the website.

Minutes of meeting from the public hearings together with a list of attendees are published on the website in the EIA studies section. Again, the announcements are not dated, and in the minutes of meeting, only the comments received orally at the event are usually published. It is not stated whether comments were received in writing, whether they were accepted or not, and what is the rationale behind these decisions.

The procedure for assessing the cross-border environmental impact of the project carried out on the territory of the Republic of North Macedonia, the assessment of the cross-border environmental impact of the project carried out on the territory of another country and the participation of the public in those procedures are regulated by the Convention on assessment of environmental impacts in a cross-border context (Espoo, February 1991), i.e., by the Law on Ratification (Official Gazette of the Republic of Macedonia, no. 44/99). Information on the implementation or non-implementation of the provisions of this Convention are missing.

In communication with relevant persons from the MOEPP, information was received that in the new Law on Environment, there are proposed changes and amendments to the environmental impact assessment procedure, in each step of the procedure, in the notifications, in the definition of the scope, appropriate assessment and fig. Publication dates, visibility of documents and easier accessibility is subject to a technical improvements, i.e., design and maintenance of the website, and there is a readiness for performing these activities.

The launching of a new IPA Support Project for the implementation of horizontal legislation is also expected. It will generally refer to improving the compliance of national horizontal legislation, in the area of harmonization of EIA by-laws, such as public participation in EIA procedures, quality of EIA studies, revision of the Decree on activities and actions that require preparation of environmental reports, but also revision of the elaborates themselves.

### **SEA Directive**

The procedures for SEA are not carried out in accordance with the Law on Environment and the relevant by-laws. The findings of the previous shadow report regarding the implementation of SEA procedures are unchanged.

The procedure for strategic environmental assessment (SEA) of planning documents is not carried out in accordance with the Law on Environment, both in terms of publishing information for the beginning of the procedure for the SEA (decision to implement or not implement the SEA and the form), and in terms of preparation and publication of the Draft Report on SEA for certain planning documents. This is particularly happening after the adoption of the new Law on Urban Planning, which stipulates that for an Urban project outside the scope of an urban plan, the preparation of an SEA is not required. In

the new Law on Urban Planning, the former article that regulated the procedure for SEA as well as the scope of its application, no longer exists.

In the Spatial Planning Conditions issued by the Spatial Planning Agency, which are issued for almost all plans that govern land planning, as a separate item are cited "Guidelines for the need to conduct a Strategic Environmental Impact Assessment". In the majority of cases, and in particularly at the local level, these guidelines are not respected.

The decision to (not) implement the SEA and the form are not published on the website at the same time while submitted to the MOEPP. They are usually published after the received opinion/decision from the MOEPP. According to the legally stipulated provisions, the decision and the form should be published on the website of the drafter of the planning document and have to allow the public to submit comments within 15 days, that have to be submitted to the MOEPP as well. The decision received from the MOEPP should also be published on the website of the drafter of the planning document and it can be appealed by the public.

Although the Law on Environment provides for the entity that prepares the planning document to publish information related to the draft planning document and the draft report on strategic environmental assessment, including the place where the draft planning document can be reviewed together with information on the participation procedure to the public, mainly these two documents are not published together. This happens in particularly at the local level.

Although it is foreseen preparation of the Minutes of meeting concerning the public hearing in the form of Report from consultations with the public, as well as its publication on the website, than publication of the Final Report on the SEA with included comments from the public hearing (from the public and from the MOEPP), this is not the case at the local level, nor at the national level (there are only a few exceptions).

The procedure for the assessment of cross-border impacts during the preparation of the planning document in the Republic of North Macedonia, the assessment of cross-border impacts when the planning documents are prepared in another country and the participation of the public in those procedures are regulated by the Convention on the Assessment of Environmental Impacts in a Cross-Border Context (Espoo, February 1991), i.e., with the Law on Ratification (Official Gazette of the Republic of Macedonia, No. 44/99). There is information on conducting a transboundary impact assessment for Protected Area Management Plans e.g. for the Management Plan for the Natural Monument "Prespa Lake" and the Management Plan for Galichica National Park.

According to the Training Plan for 2023, which is implemented by the Department for Cooperation with Local Self-Government and Administrative Supervisory Works at the MOEPP, training at the local level is planned in line with the implementation of the SEA procedure.

It is also expected that a new IPA Project will be launched to support the implementation of horizontal legislation, which will generally refer to the improvement of the compliance of national horizontal legislation, concerning the harmonization and revision of by-laws on SEA, the quality of reports, public participation, etc.

#### **Directive on public access to environmental information**

Regarding the progress in fulfilling the obligations towards the Aarhus Convention, in November 2020, the Aarhus Center was opened in Skopje. It was established with means from European funds. The MOEPP and the Aarhus Center concluded a Memorandum of Cooperation to improve public information, facilitate public involvement in decision-making and access to justice.

The situation with the implementation of access to justice for environmental information is nearly the same or similar to the situation described in last year's shadow report.

The Aarhus Center continues to monitor the websites of around 170 information holders (ministries, agencies, municipalities). Almost all municipalities, with the exception of a few, publish information related to the environment and people's health, preparation of documents and calls for public participation in the process, public presentation of an already prepared document, call for forum sessions to determine priorities based on which annual programs are drawn up, a call for the creation of a civil budget, etc. The state of information in the area of urban planning is the same or even worse compared with the findings from the previous shadow report. The information that is published is often incomplete, especially when publishing urban plans and projects. Often, only a graphic part is published without text and there is no notification whether an opinion has been requested for the implementation of a SEA procedure, etc.

In the past period, the Aarhus Center intensified its cooperation with the Agency for Free Access to Public Information (AFAPI) and within the framework of a project supported by the OSCE Mission, held a series of trainings for local self-governing units, i.e. employees in the departments of environment and urban planning. A representative from AFAPI explained the Law on free access to public information, including information on the state of the environment. The legal obligation for transparency and open data was also emphasized, as well as the penal provisions (fine) in case of not having appointed an authorized person for handling information of a public character, not handling information, not providing information that the authorized person possesses, etc.

Aarhus Center sends letters to the holders of information who do not publish the information in accordance with the Law on Environment. The letters are submitted as an addition to a request for free access to public information. Certain institutions are responsive, while others are not. In the following period, the Aarhus Center (as a requester of information) in cases where it does not receive a response from the owner of certain information, will also submit a Complaint to the Agency for Free Access to Public Information.

Every holder of information, regardless of whether it is a unit of local self-government, a government institution or a public entity, should submit an annual report on the handling of requests to the Agency.

The MOEPP submits annual reports on handling requests for access to environmental information. It publishes the requests on its website, but does not publish the responses to those requests.

The Government of the Republic of Macedonia, on the proposal of the MOEPP, publishes and maintains a list of entities that possess or for whom are possessed environmental information. The MOEPP has published a list of public information, but it has not been updated and there is no date when it was published.

In order to fully and successfully implement the PRTR (Pollutant Release and Transfer Registers) protocol, the MOEPP has developed an Environmental Information System. The information system is maintained and continuously provides comprehensive, accurate and publicly available information on the state of nature, the state and quality of environmental media and other areas of the environment, noise, ionizing and non-ionizing radiation, including electromagnetic radiation. The Macedonian Environmental Information Center (MEIC) has a key role in implementing the Directive on Access to Environmental Information, through the active sharing of environmental information. It contains the Register of polluting substances and substances and their characteristics and the Environmental Cadastre. MEIC publishes reports on the state and quality of the environment every year. The last published report on the quality of the environment is according to the processed data for the year 2021.

Another step in the direction of fulfilling the obligations from the Protocol was the establishment of an electronic program application ([РИПЗ – online](#)) which enables network input, processing and display of data in the register in aggregated and non-aggregated form and enables their search and availability to the public through the web portal. – Pollutant Release and Transfer Register (PRTR). This

portal due to lack of human resources with adequate knowledge and skills as well as lack of financial means and adequate infrastructure, has not been updated accordingly. Article 11 of the PRTR Protocol stipulates that the signatory states are obliged to provide the public with unimpeded and free access and use of data from the register electronically, and if this is not possible then such access must be provided at the public's request, for which a fee may be charged, but only for the real material costs (for printing, copying, etc.).

### **Directive on Public Participation in Environmental Decision Making**

The situation with the implementation of the second pillar of the Aarhus Convention -public participation in decision-making procedures related to environmental issues, is the same or similar to the situation described in the last year's shadow report, with some improvements in terms of maintaining a larger number of public hearings, which are primarily due to the lifting of measures for Covid 19, predominately at the national level.

Considering that this Directive refers to public participation in decision-making on issues related to the environment (EIA, SEA, IPPC) and participation in the preparation and adoption of plans, programs, strategies and legal and by-laws, the same abovementioned issues are applicable (implementation of the EIA and SEA Directives).

The Aarhus Center continues to monitor the websites of about 170 ministries, agencies, municipalities, primarily in the area of obligations stipulated by the Decree on public participation during the drafting of regulations and other acts, as well as plans and programs in the field of environment.

The drafter of the regulation or planning document should organize at least one public hearing and to put the draft planning document for public inspection on its website within at least 30 days, inform the public about the public hearing event and the deadline for submission of comments. During the monitoring, it was determined that the deadline for the public hearing event and the legal deadline for submitting comments and observations were not always respected. From the public hearing, minutes of meeting should be prepared for the consultation with the public (with written comments included). A very small number of the institutions publish a report of the performed consultations with the public.

MOEPP, under the Environmental Impact Assessment Studies section (minutes of meeting from public hearings), publishes the minutes of meeting for all public hearings events, public hearings on strategic evaluations, public hearings on laws for declarations of protected areas, etc.

The Aarhus Center submits letters to the drafters of the regulations and documents regarding the inconsistent implementation of the procedures that provide for public participation (EIA, SEA, IPPC, documents and legal regulations).

In the past period, the Aarhus Center, within the framework of a project supported by the OSCE Mission and with the help of the Association of the units of local self-governments, held a series of trainings for the local self-governing units, i.e. the employees of the environment and urbanism departments concerning the obligations and tasks they have in the procedures that foresee public participation. The purpose of these trainings, in addition to reminding them of their obligations in public participation procedures, was to detect the reason for not applying the procedures as prescribed and in their entirety. The lack of sufficient human resources (one employee has multiple duties and functions), insufficient knowledge of the procedures, as well as insufficient cooperation between departments, i.e. colleagues from the environment and urban planning, were pointed out as main reasons. The inconsistency of the procedures, i.e., the provisions of the Law on Urban Planning and the Law on Environment is also mentioned. These trainings will continue to be carried out by the Aarhus Center, but also by the MOEPP within the framework of the Plan for strengthening administrative capacities for environmental management.

Public participation in procedures that provide for environmental impact assessment in a transboundary context (Espoo Convention) is scarcely known and applicable, especially for projects or planning documents that are prepared in another country and may have a potential impact on the Republic of North Macedonia.

According to the obligations arising from the ratification of the Aarhus Convention, the state, i.e., the MOEPP, every 3 years, submits a National Report on the implementation of the Aarhus Convention in the Republic of Macedonia. The last report was submitted in 2021, and it covered the period from 2017-2020.

Article 13 of the PRTR Protocol provides for the participation of the public in the preparation of the national registers of pollutants and the transfer of polluting substances. When making a decision to establish or significantly changing its register, each Signatory Party is obliged to ensure that the information about the decision and the aspects of the decision, are available to the public in a timely manner. According to Annex 0: Matrix of goals and activities from NPAA 2021-2025, trainings have been completed for the obligations arising from the regulations for the establishment of the register of pollutants and the management of the national cadastre of pollutants and the implementation of E-PRTR.

### **Directive on the Representation of Spatial Data for the Environment (INSPIRE)**

Macedonia still has no obligation to follow the path of INSPIRE. However, the adoption and implementation of measures from the INSPIRE directive provides a good starting position on the way to EU accession. The implementation of the Directive on the Representation of Spatial Data on the Environment (INSPIRE) and the Law on National Spatial Data Infrastructure (NSDI) is satisfactory.

In the past period, a National Geoportal has been established that provides a search for spatial data collections and services in order to find, view and download NSDI - National Spatial Data Infrastructure (pfa-ce.eu), where sections related to Documents and contents related to NSDI, INSPIRE European Infrastructure for Spatial Information and projects related to INSPIRE. The national geoportal is publicly available, but it is not yet fully functional.

The Real Estate Cadastre Agency develops a Plan and Program for the implementation of trainings on an annual level. Training for authorized surveyors to search and download geostorage data from the NSDI geoportal has been provided.

According to the NSDI Law, the collections of spatial data refer to one of the following topics, which are explained in more detail in Article 5 of the Law: coordinate reference systems; geographic network systems; geographical names; administrative units; addresses; cadastral parcels; traffic networks; hydrography and hydrographic elements; protected areas; terrain elevation model; land cover; orthophotography; geology and geological features; statistical units; buildings and other facilities; soil and other natural conditions; land use; information about human health that is directly or indirectly related to the quality of the environment; services of public interest; environmental monitoring systems; production and industrial facilities; agricultural and aquaculture facilities; population distribution; management areas; meteorological and geographical features; biogeographical regions; habitats and biotopes; species distribution; energy sources and mineral resources. The entities in NSDI<sup>6</sup> (state government bodies) that create, i.e., own, are obliged to maintain and update the metadata for the collections of spatial data and services.

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<sup>6</sup> Ministry of Justice; Ministry of Defense; Ministry of Internal Affairs; Ministry of Economy; Ministry of Agriculture, Forestry and Water Management; Ministry of Local Self-Government; Ministry of Culture; Ministry of Transport and Communications; Ministry of Environment and Physical Planning; Ministry of Information Society and Administration; The Secretariat for the implementation of the Framework Agreement; The State Statistics Office; The Real Estate Cadastre Agency; Spatial Planning Agency; The Central Registry of the Republic of Macedonia; Crisis Management Center; The City of Skopje and the Chamber

The collections of spatial data and services for which metadata has been created in accordance with this law, the responsible entities in NSDI should make them simple to use and accessible to the public. In special cases, public access to collections of spatial data and services may be limited such as in cases regulated by the law.

*"Competent authorities are obliged to digitize geospatial data within three years from the entry into force of this law. Within five years from the date of entry into force of this law, all competent authorities are obliged to provide services for the exchange of geospatial data".* The law has been in force since 2014, but not all competent authorities have established the geospatial data exchange service.

In the past period, the Real Estate Cadastre Agency conducted activities to bring the use of this portal closer to the public, i.e. workshops on the topic "Open Data", which were intended for representatives from governmental and public institutions.

According to the Law, a Strategy for NSDI and annual programs for the implementation of the Strategy should be adopted. A strategy was adopted in 2012 and it needs to be updated or a new one to be prepared. Annual programs are not published on the website.

### **RMCEI – Minimum standards for conducting inspection**

It has already been stated several times that the Law on Environmental Inspection was adopted in the month of April, 2022. This success is also noted in the progress report from the European Commission for the period from June 2021 to July 2022.

Pursuant to Article 14, the State Environmental Inspectorate and the municipalities, the municipalities in the city of Skopje and the City of Skopje prepare an Annual Plan for the work of the inspection service and submit it for an opinion to the MOEPP. Based on the individually prepared Annual Plans by the State Environmental Inspectorate and the municipalities, the municipalities in the city of Skopje and the City of Skopje, the State Environmental Inspectorate is preparing an Annual Plan for environmental inspection of the Republic of North Macedonia.

Towards the end of 2021, the State Environmental Inspectorate has prepared and published an Annual Plan for the Implementation of Environmental Inspections in 2022, in which the total number of inspections in 2022 is planned, by region and municipality, which encompass a total of 2084 inspections planned (1073 regular and 155 irregular). It is also planned to carry out control inspections (a total of 226 are planned) and most of them are planned in the Skopje planning region. State Environmental Inspectorate prepares six-month reports. For the reporting period January-June 2022, it planned 865 inspections, of which 739 regular, 12 irregular and 114 control inspections. 1057 inspections were carried out, of which 692 regular, 185 irregular and 180 control inspections. **The planned number of inspections is exceeded by 192 inspections, i.e., by 22.2%, which indicates that inspections are carried-out, inspectors are on the sites and respond to the requests from citizens.** Moreover, in this period, 167 irregularities/legal violations were identified, for which 212 decisions were issued, prohibiting certain activities, i.e., sanctioning procedures were initiated. The following type of sanctions were imposed: 15 agreements, 8 payment orders and 1 criminal procedure. The committers are listed in a table encompassing the Report. An overview of the total number of discovered irregularities and conducted inspections, by region and municipality, is also given. A detailed review of the total number of requests received was also given, from whom and how they were received and what they refer to (for which subject or for which activity, i.e., damage to the environment or human health).

These reports also contain information about the trainings that have been conducted/attended and for which thematic areas. These reports also include information on the organizational structure of

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of Commerce of the Republic of Macedonia (Association of public utilities or Association of Information and Communication Technologies).

the State Environmental inspectorate and on the situation with human resources, i.e., the lack of employees/inspectors is highlighted. According to the systematized jobs for 2022, 53 jobs are planned, but as of June 30, 2022, only 26 jobs have been fulfilled.

There is no information and published annual inspection reports from the municipalities, the City of Skopje and the municipalities in the City of Skopje.

For the implementation of the Annual Plan for Environmental Inspection of the Republic of North Macedonia, the director of the State Environmental Inspectorate, i.e. the mayor of the municipality, the municipalities in the City of Skopje and the City of Skopje adopt a monthly work plan for each inspector.

There is no information and published monthly inspection reports from the municipalities, the City of Skopje and the municipalities in the City of Skopje.

Also, the State Environmental Inspectorate adopted an annual plan for individual professional development and training of each inspector for the year 2022. Continuous trainings are also planned to strengthen the capacities of state inspectors and authorized environmental inspectors.

In accordance with the principles of transparency and publicity, but also concerning the obligations and recommendations of national and European Union legislation for public availability of information from inspections, an electronic register of the subjects of inspection at the state and local level and a database of inspection reports of Supervisions of the State Environmental Inspectorate has been established. The structure and content of the electronic form for inspection reports are taken from the draft form prepared for the needs of the State Environmental Inspectorate from the European Union Network for the Implementation and Execution of Environmental Legislation (IMPEL), where the State Environmental Inspectorate actively participate. The e-register contains data on the operator of the installation, license number, the type of activity, start and end of the inspection, type of supervision, identified non-conformities and imposed measures. The last inspection that is carried-out and recorded in the register is from the end of March 2022.

Pursuant to Article 45, the Mayors of the municipality, the municipality in the city of Skopje and the City of Skopje are obliged in the administration of the municipality, the municipality in the city of Skopje and the City of Skopje no later than December 31, 2022 to appoint at least one environmental inspector at the local level who will exclusively perform environmental inspection work or to establish a joint administration (based on the principle of inter-municipal cooperation) for environmental inspection.

A large number of the mayors have not yet appointed an authorized person who will carry out environmental inspections at the local level. They do not take this legal provision seriously which can result in a fine. In a large number of municipalities where there is an appointed person - an environmental inspector, there is a clash, a conflict of work tasks, such as that the same person prepares permits, approves requests for integrated environmental permits, approves environmental reports, performs environmental and utility inspections, etc.

### **Environmental liability Directive**

The level of implementation of the Environmental Liability Directive is the same as in last year's shadow report -transposition and implementation are at an early stage. Regarding the requirements of the Directive, technical assistance is provided in order to strengthen the capacity of the administrative structure with a procedure for assessing whether the damage to the environment has occurred and whether the operator is responsible, including the necessary actions for remediation, the procedures for the interested parties to draw up prevention, reduction and remediation strategies.

The MOEPP has established a Register of authorized assessors in the field of environment. At the moment, there are 4 legal entities that are authorized to carry out activities - assessment of damage to the environment, i.e. assessment of environmental impacts and their quantification, as well as application of measures to reduce environmental damage and determine their price. Up to this moment, there is no information on an environmental damage assessment, i.e., there is no report on an environmental damage assessment that is publicly available.

Within the framework of the IPA Project for support for the implementation of horizontal legislation, the MOEPP provides for the revision of the provisions on responsibility for damage to the environment.

### **Environmental Crime Directive**

The changes and amendments to the Criminal Code were recently (21.11.2022) adopted by the Assembly of the Republic of North Macedonia.

These changes and amendments were preceded by a constructive discussion on changes to the Criminal Code in the field of environmental protection, which was carried out in the period from 2018 - 2022, in which all relevant stakeholders were included (civil organizations, representatives from Ministries, judges and public prosecutors). These forum discussions were conducted within the framework of a project on good environmental management, implemented by the Center for Legal Research and Analysis (CLRA). Within the framework of the project, a Comparative Analysis of Strategies for Dealing with Environmental Crime has been prepared, providing an overview of the mechanisms for effective prevention and protection of crime in the environment, as well as crimes encompassed by the detected mechanisms in the Republic of North Macedonia, EU member states and the region. An Analysis was also prepared that provides an overview of gender aspects in the prevention of environmental crime.

The Center for Legal Research and Analysis has produced an informative video about the most common crimes against the environment in the Republic of North Macedonia for which judgments have been issued in the period from 2017 to 2021, i.e. 56 judgments for usurpation of real estate, 20 judgments for illegal hunting and fishing, 6 verdicts for illegal exploitation of mineral resources, 8 verdicts for torturing animals, 3 verdicts for devastation of forests, 1 verdict for endangering the environment and nature with waste. However, many crimes remain unprocessed and without appropriate sanction, and the fines for these crimes are insignificant. Therefore, stricter fines are urgently needed in order to prevent new crimes from being committed. In the new Criminal Code, heavier penalties for crimes committed against the environment are proposed, and in addition to liability for natural persons, liability for legal persons has also been introduced.

The proposal for the introduction of a new crime against the environment - ecocide was proposed by the CLRA.

At this stage, it is not possible to discuss or evaluate the implementation of this Directive, i.e., the provisions of the Criminal Code that refer to Criminal Offenses against the environment and nature.

## **3.4. Recommendations**

### **Directive on Environmental Impact Assessment (EIA)**

- Publication of brief information on the project implementation notification, the decision on the scope of the EIA study, the Draft EIA Study, minutes of the public hearing, report on the adequacy of the study, approval or disapproval decision, including a link where they can be found.
- The specified documents should be published with dates, in order to ensure the legal provision of the foreseen days for comments by the public

- Draft EIA Study to be published on the website of the municipality in whose territory the project is planned to be implemented, in order to improve accessibility and involvement of the public
- The minutes of meeting regarding public hearings should include information about comments received in writing, information whether there are any or not, as well as appropriate justification for their acceptance or non-acceptance
- To establish an independent body from a group of experts that will review and evaluate the quality of EIA studies, with the aim of improving them in the future
- To revise the Decrees on activities and actions for which it is necessary to prepare an environmental protection report
- Practicing the procedure for assessing the cross-border environmental impact of the project that is carried out on the territory of the Republic of North Macedonia and vice versa (informing the public with a project that is planned in a neighboring country and may have a potential impact on the environment in our country)

### **Strategic Environmental Assessment Directive (SEA)**

- Strengthening the capacities of LSGUs in relation to the implementation of the SEA procedure
- Trainings for employees in urban planning departments on the SEA procedure including the scope of documents (plans, programs, strategies) that are subject to this procedure
- Greater cooperation at the local level between employees in the environmental and urban planning departments
- Establishing of a joint administration (urbanism and environment) according to the mechanism of inter-municipal cooperation which the legislator encourages and supports
- Harmonization of the Law on Urban Planning with the Law on Environment
- Electronic portal at the national level with information on the complete steps and procedure for SEA
- Publication of a decision on (non) implementation of the SEA and a form on the website of the adopter of the planning document (to be available 15 days from the day of publication)
- Simultaneous publication of the Draft Planning Document and the Draft Report on SEA and notification of the date of the public hearing, the manner of public participation, the deadline for comments, etc.
- Publication the minutes of meeting from the public consultations including comments received orally and in writing
- Publication of the Final Draft report on SEA with included comments from the public
- Preparation of a guideline describing the competences of the municipalities, at the local level, which provide the procedures for public participation
- Change of by-laws regarding public hearings events, criteria for the success of public hearings, reporting and publication of information, revision of the content of SEA reports
- Practicing the procedure for assessing the cross-border impact of the environment from the preparation of a specific planning document in the Republic of North Macedonia and vice versa (informing the public with the preparation of a planning document in a neighboring country that may have a potential impact on the environment in our country)

### **Directive on access to environmental information**

- Development of a new portal, a website where all information related to the procedures for EIA, SEA and IPPC will be published, including directions and advice on how the public can take part in the procedures and what are their rights and opportunities.
- Update of the Pollutant Release and Transfer Register. News on the website [РИПЗ - Новости \(moepp.gov.mk\)](http://ripz.mk) are from 2019, while the last published Report on the Implementation of the PRTR Protocol is from 2013 year.

- Revising the provisions for access to environmental information
- Update of the Strategy for Implementation of the PRTR Protocol in the Republic of Macedonia
- Implementation of activities to update the Cadastre of pollutants (air, water, noise) and the Pollutant Release and Transfer Register (RIPZ).

#### **Directive on Public Participation in Environmental Decision Making**

- Creation of a new portal, a web page that can be the same, which will have guidelines and advice on how the public can take part in the procedures and what are their rights and opportunities in the decision-making processes related to the environment.
- All comments from the public must be taken into account and at the end of the procedure, the competent authorities should inform the public about the decision made and the reasons for its adoption by preparing a report on public consultation.
- Creation of a guideline, with short and clear instructions, regarding when and where the public has the right to participate, when and how to submit comments and to whom, and what will happen in case this right is denied.
- Improving the capacities of CSOs in terms of the legally offered opportunities for public participation in the process of opinions creating and decision making
- Possible ways of organizing CSOs for joint involvement for public participation in certain processes
- Involvement of the public and ensuring their participation in the procedures for assessing the cross-border environmental impact of projects or planning documents that are planned/prepared in the territory of the Republic of North Macedonia
- Application of the Maastricht Recommendations for promoting effective public participation in environmental decision-making, under the framework of the Aarhus Convention

#### **INSPIRE Environmental Spatial Data Representation Directive**

- Achieving closer cooperation with the Real Estate Cadastre Agency, as the competent authority for establishing, maintaining and providing public access to the NSDI geoportal, maintenance of metadata services, metadata registry and related trainings
- The bodies responsible for the implementation of the Law on NSDI should consider the possibility of including representatives from civil society organizations working in the field of the environment
- Greater cooperation with the working groups for the implementation of NSDI. 4 working groups are foreseen: institutional and legal issues and capacity building, technological issues (standards, metadata, services and others), public relations and communications and economic issues
- Training or public presentation on how to use "free data" - environmental protection data, as one of the services of the Real Estate Cadastre Agency
- Preparation of a new or updating of the existing Strategy for NSDI and preparation of annual programs for its implementation
- The content of the Strategy and the term of validity should be specified in the Law
- Digitization of geospatial data (at NSDI subjects where this service is not available)
- Activities for the promotion of NSDI in cooperation with the NGO sector

#### **RMCEI – Minimum standards for conducting inspection**

- Further elaboration and adoption of the National Environmental Inspection Plan

- Insertion of a National Plan for Environmental Inspection as planning document with an obligation to be prepared in accordance to the Law on Environmental Inspection
- Updating the electronic register for the conducted inspections on a weekly and/or monthly basis
- Development and adoption of a National Strategy for Environmental Inspection (within two years from the adoption of the Law on Environmental Inspection - April 19, 2023)
- Development and adoption of the Environmental Inspection Program of the Republic of North Macedonia (within two years from the adoption of the Law on Environmental Inspection - April 19, 2023)
- Appointment of authorized inspectors in all municipalities or establishment of inter-municipal cooperation (according to the Law on environmental inspection, the deadline is 31.12.2022)
- Raising the awareness of mayors about the benefits of appointing a local inspector and using inter-municipal cooperation

#### **Directive on liability for damage caused to the environment**

- It is necessary to organize professional exams to increase the number of assessors in the field of the environment, experts who will work on issues related with the responsibility in the environment
- Adoption of the by-laws in accordance with the Directive, which refer to the definition of the criteria for determining damage to the environment and exceptions in which liability will not be claimed; determination of measures for the remediation of the damage to the environment, etc.
- Preparation of an Analysis of the implementation of the Directive in neighboring countries, exchange of experiences and application of best practices

#### **Environmental Crimes Directive**

- Organizing trainings for public prosecutors, as well as for judges, in order to familiarize them with the main elements of environmental crime, the method of determining damage and determining responsibility
- Strengthening the capacities of the competent institutions for penalty provisions for caused damage, crimes in the environment
- Strengthening the capacities, interests and motivation of CSOs for monitoring and reporting the crimes in the environment
- Creation of a database or e-register that will contain an overview of crimes committed against the environment, which should be publicly available
- Repurposing of the funds from the fines paid for financing activities for the improvement of the environment (in the absence of the Environmental Fund, they should be included in the Environmental Investment Program, which will increase the funds provided for financing activities of CSOs)
- Establishing contact and cooperation with environmental experts (the Register is maintained by the Ministry of Justice) in order to obtain information on the implementation of criminal proceedings for crimes against the environment where expert services are required

## 4. Air Quality

### 4.1. Main findings from the first shadow report

#### ***Level of compliance of the national legislation with the European one***

The first shadow report on this sub-chapter noted a high level of compliance of national legislation on ambient air quality with the Directive on Ambient Air Quality and Cleaner Air in Europe (2008/50/EC). The percentage of compliance of national legislation with Directive 2004/107/EC, which refers to arsenic, cadmium, mercury, nickel and polycyclic aromatic hydrocarbons in the ambient air, is less lower, while for the new Directive on national emission ceilings 2016/2284/ EC, (NEC Directive), the harmonization has not started, though due to the transfer of old provisions, the transposition exists for the articles related to the preparation of a program for the gradual reduction of emissions of certain polluting substances, the preparation of emissions inventories and the preparation of the cadastre of pollutants.

Compliance with the Directive on the Control of Volatile Organic Compounds from Petrol - 94/63/EC has been completed with the Law on the Control of Emissions of Volatile Organic Compounds When Using Petrol (Official Gazette of the Republic of Macedonia 38/14), and the corresponding by-laws. while the new directive on sulfur content in petrol - 2016/802/EC has not been fully transposed.

### ***Implementation of the national air legislation***

Regarding the implementation of the legislation, it is significant that despite the high level of compliance of the national legislation with the European one, the air quality still does not meet the standards, i.e., the limit values for solid particles still significantly exceed the limit values set in the directive. The concentration of PM10 and PM2.5 are still very high. Although there have been certain reductions since 2012, it is still impossible to achieve the prescribed limit values if we do not start implementing specific integrated measures by all relevant stakeholders.

Although the Macedonian Environmental Information Center (MEIC) uses reference measurement methods, as prescribed by the Ambient Air Quality Directive and cleaner air in Europe, the results can still be contested due to the lack of accreditation of the Central Laboratory where the instruments are calibrated.

MEIC successfully maintains a wide-ranging network of automatic ambient air quality monitoring stations that monitors the concentrations of most of the pollutants prescribed by the Directive on Ambient Air Quality and Cleaner Air in Europe (2008/50/EC), while monitoring of polluting substances that are an obligation according to Directive 2004/107/EC (heavy metals, VOCs, PAHs, dioxins and furans, benzene and lead), has not been established.

Last year's report notes that there is a lack of financial resources for the implementation of specific measures that will directly contribute to the reduction of air pollution. An assessment of the required funds to implement measures to deal with air pollution has not been made so far. Such a financial assessment should cover all sectors and be carried out according to a previously established plan.<sup>7</sup>

The improvement of air quality, i.e. the achievement of the limit and target values, requires long-term hard work of several sectors. In order to ensure better air quality, it is necessary to analyze the problems and manage them in an integrated manner, but the most important thing is to act simultaneously in the sectors: energy, industry, household heating, urban planning, transportation, and waste management.

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<sup>7</sup> Platform 27, First Shadow report for Chapter 27 for Republic of North Macedonia, 2021, [www.platforma27.mk](http://www.platforma27.mk)

## 4.2. Progress on the compliance of the national legislation

**In the past year, there has been no progress in terms of harmonizing the national legislation with the European one.** The start of the EU project for the implementation of the Directives on air quality was planned and was supposed to be implemented in 2022. With this project, the preparation of a new Law on Ambient Air Quality and the by-laws arising from this Law, specific plans for the implementation of the Clean Air Directive in Europe 2008/50/EC and the Directive on heavy metals, VOCs, PAHs, dioxins were planned, than for furans, benzene and lead 2004/107/EC (4th Daughter Directive), the Emission Ceilings Directive (NEC) 2016/2284/EC, amending the Protocol to Reduce Acidification, Eutrophication and Ground-Level Ozone (Under the Gothenburg Protocol) and Directive 2015/2193/EC on the reduction of emissions of certain air pollutants from medium-sized combustion plants.

Furthermore, the project also planned the preparation of monitoring plans for heavy metals (HM), organic volatile compounds and polycyclic aromatic hydrocarbons (PAH), and the establishment of zones and agglomerations for heavy metals and PAH was planned according to the fourth daughter directive.

Also, within this same project, the preparation of several planning documents was planned, namely:

- National Plan for Ambient Air Protection (for a period of 4 years)
- National Air Pollution Control Program (for a period of 10 years)
- Action plan for the implementation of the National Plan for the protection of ambient air

However, the start of this project is postponed since the procedure for procurement of the most favorable bidder was canceled by the authority that led the procedure. Until the moment of writing of the report, there is no information whether and when the call for the selection of the most favorable bidder will be opened again.

Regarding the national legislation, the last amendments were made to the Law on Ambient Air Quality (LAAQ) in June 2021, which obliges zones and agglomerations, where the levels of polluting substances in the ambient air exceed the limit or target values, as well as any other relevant margin of tolerance, to prepare an Air Quality Plan for those zones and agglomerations, in order to achieve an appropriate limit or target value determined in the regulations from articles 10 and 12 of the LAAQ.<sup>8</sup>

Pursuant to this Law, the MOEPP has an obligation, no later than March 31 of the current year, to publish a list of zones and agglomerations, where the limit values were exceeded in the previous year, which also lists the municipalities, i.e. the City of Skopje, in whose areas were determined exceedances in accordance with the assessment of ambient air quality (Article 4, paragraph 2 of the Law on Amendments and Supplements to the Law on Ambient Air Quality, Official Gazette of the Republic of North Macedonia, No. 151/2021).

Also, all municipalities with a size of over 35,000 inhabitants have an obligation to prepare Ambient Air Quality Plans in accordance with the same Law, regardless of whether they have exceeded the

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<sup>8</sup> Law on changes and amendments of the Law on ambient air quality, Official Gazette of the Republic of North Macedonia, No. 151/2021.

upper limits in the previous year (Article 4, Paragraph 5 of the Law on changes and amendments to the Law on ambient air quality, Official Gazette of the Republic of North Macedonia, No. 151/2021).

The fulfillment of the obligations according to these legal provisions and changes in the law are given in the chapter on the implementation of the legislation (4.2.).

There is no progress at the transposition of the Directive of National Emission Commitment Directive (NEC) 2016/2284/EC which is currently transposed only 11% in the national legislation mainly due to full transposition of the old Directive from where stipulations are transferred to the new Directive.

There is no progress in compliance with the Directive on the control of evaporation of organic compounds from petrol 94/63 / EC and Directive on the control of volatile compounds from petrol stations 2009/126 / EC Stage II VOCs petrol.

In regards to the Directive on Sulphur content there is an amendment of the Rulebook for liquid fuels. These changes are not in the direction of harmonizing the Directive and do not correspond to the requirements of the Directive, but refer only to the release on the domestic market of heavy fuel oil (mazute M-1 HC) with limit values for coke content of a maximum of 15% m/m and kinematic viscosity at 100 °C of maximum 32mm<sup>2</sup>/h. This additional article, which was added to the Rulebook for changes and amendments, has limited period of validity, i.e., it is valid only until 2023. It remains unclear why such purposeful changes were made in such a short period of time, and for the burning of heavy fuel oil of a lower quality (heavy fuel oil with this content was not regulated by this rulebook so far). The only thing that can be concluded is that due to the new situation with the energy crisis and the increase in the price of natural gas, hence the urgency of the heating plants to change the A integrated permits where they will use heavy fuel oil instead of natural gas (NG) for the City of Skopje, the Ministry of Economy with these changes will enable the use of lower quality heavy fuel oil in the city's heating plants. Nevertheless, it is important to note that the MOEPP did not approve the requests for changes to the A permits, so the heating plants continue to use natural gas for heating regardless of its price.

#### 4.3. Implementation of legislation

Despite the trend of decreasing concentrations of almost all polluting substances and the progress in terms of ambient air quality monitoring and reporting of concentration exceedances, air pollution is still a significant problem in a large number of cities in the country. The graphs below provide an overview of average annual concentrations for certain pollutants.

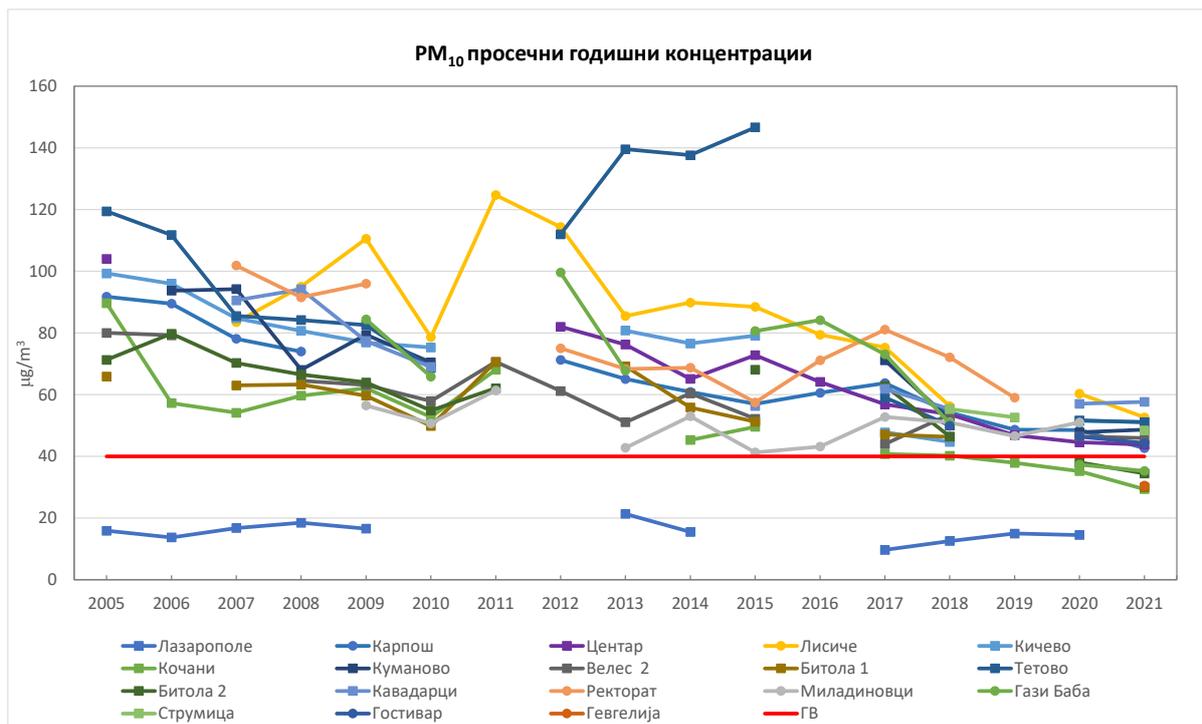


Figure 1. Annual average concentrations of PM10

Source: Macedonian Environmental Information Center (MEIC)

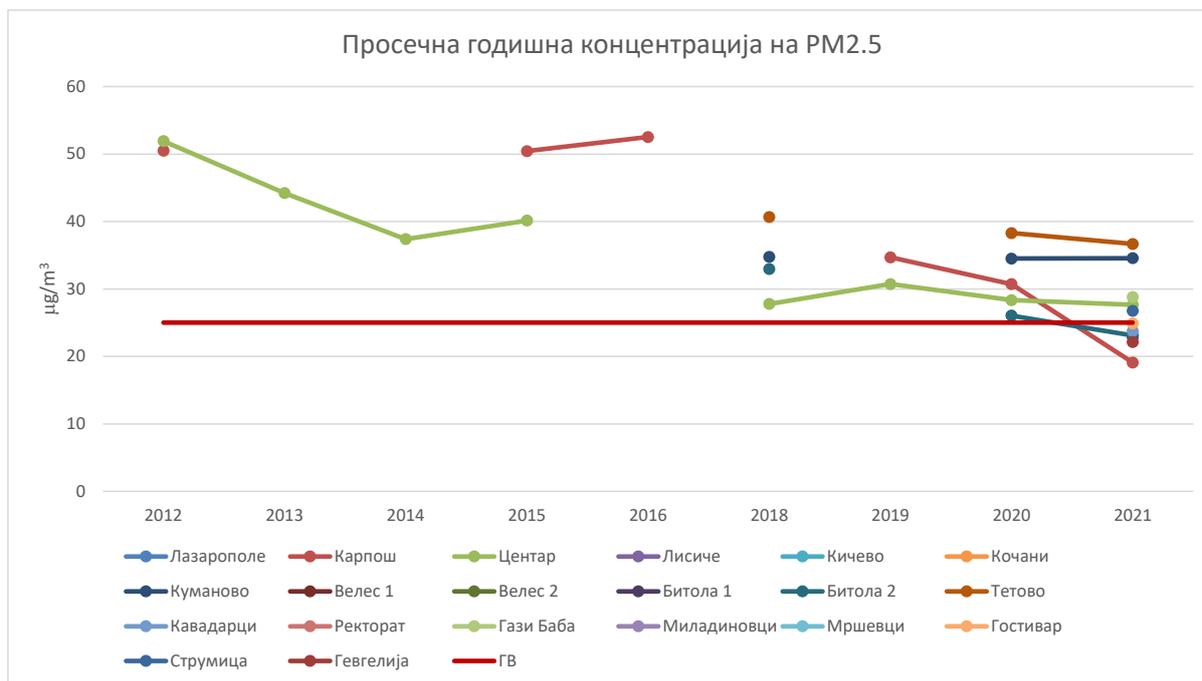


Figure 2. Annual average concentrations of PM 2,5

Source: Macedonian Environmental Information Center (MEIC)

It is evident from the graphs that despite the trend of reduction of solid particles concentrations, they are still far above the limit values. The exception are the concentrations of SO<sub>2</sub>, CO, NO<sub>2</sub>, while most of the monitoring stations registers record exceedances for the concentrations of ozone, PM10 and PM2.5 (Monthly Air Quality Reports for 2021).

### **Improvement of the automatic network for ambient air quality monitoring**

Regarding the monitoring of ambient air quality, improvements are evident, mainly in the part of installing new automatic stations and replacing the obsolete instruments. Thus, 2 monitoring stations (Prilep and Berovo) and 8 instruments (1 - O<sub>3</sub>, 4 - SO<sub>2</sub>, 3 - CO) for these stations were purchased through the budget of the MOEPP.

With donor funds, the obsolete instruments for certain automatic stations were replaced, while low-volume samplers and necessary instruments for the operation of the stations were also purchased. In addition, in October 2022, another station for monitoring the quality of ambient air in Ohrid, procured through the budget of the MOEPP, started with operation. Hence, currently the State Monitoring System for Ambient Air Quality (SMSAAQ) has a total of 20 fixed and 1 mobile monitoring station.

What is missing is an upgrade of the MOEPP server, i.e. MEIC, which will allow an uninterrupted flow of information regarding the quality of the ambient air. The new server is procured and currently there is a migration of data ongoing.

Also, in terms of monitoring and implementation of the legislation related to the 4th Daughter Directive (2004/07/EC), it is significant to note that for the Bitola 2 station, through a donor project, indicative measurements were performed to determine the concentrations of heavy metals and PAHs. However, there is a lack of more measurements of this type, i.e. the establishment of a regular practice for conducting indicative measurements to determine the concentrations of these polluting substances at specific locations, especially at locations that have been identified as hot spots and are locations with historical hazardous waste due to industry activities in heavy metallurgy. Under the EU project for the implementation of the Air Quality Directives, which was supposed to start in 2022, such indicative measurements were planned for 3 locations, but for the reason that it is not clear whether the procedure for selecting a company that will implement the project will be announced, the realization of these measurements remains uncertain.

It is important to be noted that there are plans for indicative measurements for Shtip and Struga for a period of 4 months continuously, one month in all weather seasons, but it is not known if and when will happen.

The state is largely dependent on donor funds for the purchase of equipment and for performing of the indicative measurements due to the fact that significant financial resources, equipment and qualified workers are needed to their realization.

LAAQ provides an opportunity for municipalities to establish and maintain a local monitoring network for ambient air quality, but unfortunately at the moment no single municipality has established monitoring at the local level.

*In addition to the need for more regular indicative measurements, the establishment of regular monitoring for volatile organic compounds (VOCs), PAHs and heavy metals is also missing.*

### **Reporting and information**

In terms of reporting on the ambient air quality, the MOEPP, for the needs of the MEIC, for several years has been implementing a project financed by the European Union, which encompasses the establishment of a National Information System for the Environment, which will cover several environmental media and sectors (air, water, nature, waste, etc.) Up to this moment, this software has not been put into use, although by now the project should have been completed and the system should have been put into use enabling collection of all environmental data in one place.

## Planning documents

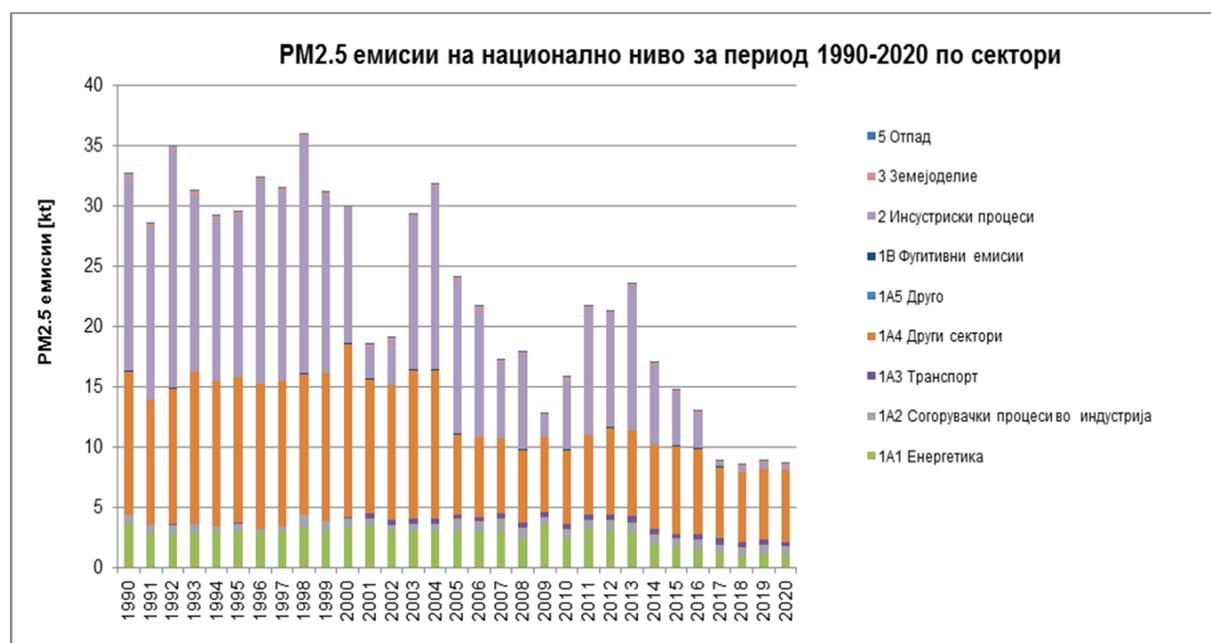
Progress in terms of the implementation of the new legal provisions in accordance with the changes amendments to the LAAQ from 2021, is also evident. Namely, on 21.03.2022, the MOEPP, through MEIC, published a list of municipalities where limit values are exceeded and which have the obligation to prepare an ambient air quality plan.

Also, the ambient air quality plans for Kočani, Kicevo, Kavadarci and Gostivar have been finalized so far, although they have not yet been adopted by the municipality councils, but nevertheless they have been prepared with the budget of the MOEPP.

In addition, at the moment, the MOEPP plans to finance ambient air quality plans for Veles, Ohrid, Prilep, Struga, Shtip and Gevgelija through its own budget. Also, these cities with over 35,000 inhabitants are put on the list for mandatory preparation of such plans.

However, despite the prepared planning documents, especially those for Veles and Strumica, which were adopted a long time ago, reports are not submitted to the MOEPP, since it is required to be submitted on an annual basis. Likewise, the MOEPP - MEIC does not submit reports to the Government in accordance with the national plans for improving air quality.

Regarding the Directive on emissions ceilings, the MOEPP, through MEIC, prepares regular annual reports on the inventory of polluting substances in the air. Thus, the last report issued for 2020 shows a significant trend of reduction of all polluting substances that are part of the inventory.



Source: National inventory of polluting substances emissions for 2020

Although according to the latest national inventory, the amount of emissions has decreased in the last few years, we are still far from achieving the targets according to the new Directive on upper limits - emission ceilings, that is, it is necessary to create a National Program for the control of air pollution with which we will commit ourselves for certain reductions in emissions of polluting substances for the period of 2020-2029 and 2030 compared to 2005.

In terms of the inventory and the implementation of this directive, it is absolutely necessary to work on the full implementation of COPERT V as a tier 3 method in the transport sector, but also the implementation of a tier 2 method in the Energy and Industry sector. It is also necessary to work on improving the inventory as well as to prepare national reduction potentials by implementing models in different sectors of energy, transport, agriculture.

In terms of reducing emissions, several large projects for air pollution were implemented in the past period, and it is significant that the start of a large project is planned through the IPA III program, which will provide funds for investments to reduce air pollution.

Currently, the Ministry of Finance, through a loan provided by the World Bank, is implementing a large project for the renovation of public buildings (health centers, schools, municipal and public buildings) in the amount of 35 million euro. The main goal of the project is to improve energy efficiency, but of course the implemented measures and investments in public buildings will directly contribute to improving air quality.

### **Administrative capacities**

The administrative capacities in this field are getting more and more weaker. Currently, there is no consideration for reforming the MEIC department, which is responsible for the monitoring of ambient air quality, but also the reporting and preparation of planning documents. In this sector, there is no separate office for preparing planning documents and creating policies for improving air quality. These activities are performed by the employees in other offices depending on their opportunities and available time as well as the current needs. That is why the measures that are proposed for improvement are not properly monitored, i.e., there is no progress reported. There is no intersectoral coordination and cooperation, which is mainly the result of insufficiently number of employees in relevant institutions.

## 4.4. Recommendations

Solving air pollution is impossible without planning significant investments that are largely based on the need for strong political will, qualified employees and dedicated long-term work of all concerned institutions. Intersectoral cooperation is also necessary in order to coordinate and implement measures in different sectors: household heating, administrative buildings, decarbonization and application of low-carbon technologies in industrial processes, solving the problem of non standard landfills, increasing public green spaces, controlled urbanization, long-term investments in the energy sector with the aim of phasing out the use of fossil fuels and of course measures to stimulate sustainable transport because transport has a significant share in air pollution particularly in conditions where the background pollution is lower.<sup>9</sup>

All these measures need to be part of a long-term (minimum 10-year) national strategy for clean air that will be coordinated by a single authority (National Council or similar).

This national strategy for dealing with air pollution should include several measures grouped in sectors:

### **1. Households**

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<sup>9</sup> Study for the influence of Covid 19, on the air quality in Skopje, pp. 73,

For this sector, it is necessary to adopt legislation on firewood that will regulate the distribution of firewood to end users and the percentage of moisture for the wood that is distributed.

Furthermore, the measures for the use of inverters are seemingly insignificant but have yielded results, so it is necessary to continue with the stimulation for the use of inverters, but only in settlements and municipalities where there is no possibility of connecting to a distribution network for heat supply. It is necessary for municipalities to plan subsidy measures in their budgets, and for the state to work on reducing the % of VAT for high-efficiency inverters.

It is also necessary to ban the use of solid fuels in urban areas, especially where they are easily available.

## ***2. Heat distribution and supply***

The state should work on establishing a PPP or other type of cooperation with the private sector in order to increase the number of heating plants that will use fuel that emits less polluting substances (RES, biomass, etc.). Also, the state should work on the decentralization of the distribution network for heat, that is to stimulate the construction of smaller heating systems that will be easier to manage and will supply heat to households and public facilities in a more controlled manner.

At the same time, with the aim of greater utilization of the distribution network for heat, in the cities where it is already established, it is necessary to change the legal framework, i.e., to make decisions at the local level for the mandatory use of the central heating system.

## ***3. Greater use of renewable energy sources in households, the commercial sector and industry***

In order to increase the use of RES, especially energy from the Sun, which, in addition to reducing energy consumption, will indirectly affect air quality, both locally and nationally, it is necessary to reduce the percentage of VAT on rooftops PV in order to facilitate the long-term energy transition and ensure the supply of electricity. Furthermore, for households it is necessary to provide subsidies in the amount of 30% of the investments of 6kW for rooftops PV in households. The energy efficiency of rooftop PV should be established as a criterion for subsidies (higher efficiency, higher subsidies). Apart from that, to enable the installation of rooftop PV with an installed power greater than 6KW, i.e., equal to the power already limited in the existing energy consent of the households for connection to the electricity distribution network.

In addition, in order to enable greater use of RES in households, it is necessary to revise the net metering scheme and the prices of electricity delivered to the grid. Taking into account the volume of substitution of own consumption, as well as the fact that the energy surplus delivered to the grid is not significant, the IRR values are longer than the one declared by the project developers (often longer than 10 years). In addition, household electricity prices are implicitly subsidized (state intervention), which also contributes to long IRR values. The change in the legal regulations will significantly contribute to a greater share of RES in the final energy consumption.

## ***4. Industry***

The polluter pays principle has been put into practice and implemented accordingly. In that direction, to ensure greater transparency about the amount of fees from A and B environmental permits, about where they end up and how they are used. It is necessary to establish a Fund that will use part of these means for the implementation of measures that will enable less air emissions from industrial processes.

The green transition must be continued and the Government must start implementing measures for decreasing the use of fossil fuels. Regardless of the energy crisis, heating plants and heating systems in administrative buildings should continue to use gas if it is available.

### **5. Inspection supervision**

To change the legal framework in order enabling the inspection services to carry out inspections in households in order to control the type of fuel used for heating. Also, the inspection supervision should also work on detecting illegal burning of various objects and materials in the open air, as well as locating illegal dumps and illegal burning on these sites. In order to stimulate objective supervision, the state should introduce a reward system depending on the number of sentences issued by state and local authorized inspectors.

### **6. Energy poverty**

To define energy poverty and determine the number of households that are a vulnerable category.

### **7. Improvement of monitoring for VOCs, PAHs and HM**

To establish monitoring of those polluting substances that are not monitored at the moment (VOCs, PAH, heavy metals) but also to provide a budget for the maintenance of the already established monitoring stations. Also, the state should provide an annual budget for the realization of indicative measurements.

### **8. Waste management**

Illegal landfills, i.e. their burning, contribute significantly to air pollution in every period of the year. It is recommended that the municipal authorities continuously work on removal of all illegal landfills that regularly occur in rural areas, along roads and riverbeds. It is necessary to work on mapping and implementation of measures to prevent creation of the illegal landfills (installation of urban equipment, greening of the spaces, etc.). Communal wardens and local authorized inspectors to perform regular and objective supervision and to report on the number of fines imposed at the local level.

### **9. Transportation**

Regarding the transport sector, it is necessary to stimulate measures for non-motorized transport in urban areas, increase the number of bicycle routes, while municipalities have to continue issuing subsidies, as well as to increase the funds for subsidizing the purchase of scooters and bicycles.

On the days when the limit values are exceeded, to ban the motor vehicles below the EURO 4 standard through the urban areas of the cities that are polluted. Also to enable a free and greater availability of public transport in these days.

### **10. Administrative capacities and better planning**

In terms of administrative capacities, it is necessary to separate the creation of policies from the monitoring of ambient air, and to establish a separate organizational unit for the creation and monitoring of the implementation of the legislation and the measures proposed in the planning

documents. It is also necessary to establish a body that will aim to enable intersectoral cooperation between all relevant institutions that will work together to solve the problem.

### **12. Urban greenery and preservation of the forest fund**

The provisions of the Law on construction, for the mandatory percentage (share of greenery) are not properly implemented, i.e., the percentage of greenery that every newly built building must contain is neglected.

## 5. Waters

### 5.1. Main findings from the first shadow report

The analysis of the water sector shows a poor condition and extensive problems in the management of water resources at the level of the entire country. The main reasons for the poor state of the water sector are mainly the result of the poor organizational setting of the sector and the division of the competencies among different central and local institutions, the lack of professional and competent staff, the size of the financial investments that are needed, as well as the significant complexity of the problems that are encompassing the water resources sector.

Issues related to water resources in the EU are regulated by nine directives that are relevant and should be transposed into national legislation. Most of the EU directives have been transposed into the national Water Law (Official Gazette of the Republic of Macedonia, 87/08, 6/09, 161/09, 83/10, 51/11, 44/12, 23/13, 163/13, 180 /14, 146/15, 52/16) and the by-laws arising from this law. EU legislation relevant to the area of water is moderately transposed, i.e., the percentage of compliance ranges from 14% - 100% for the various directives.

The biggest challenges in the water sector are in the implementation of the legislation, namely:

1. Lack of strategic and planning documents - Plans for all river basins have not been adopted, and the Water Management Foundation has expired since 1992. The only legally valid document is the National Water Strategy (2012 – 2042), but this document is of very poor quality and cannot be used for strategic management of water resources.
2. Problems with water supply and water safety - which can be seen in the enormously high rate of non-revenued water of 62%, the incomplete connection of the population to the public water supply network (82% connection rate), regional unevenness in the coverage of public water supply (57 - 91 %) and poor water quality from individual/local water systems.
3. Weak and incomplete water monitoring – not all parameters stipulated by the Water Law are followed, nor is there a program for operational monitoring and a developed monitoring network, which results in ignorance of the condition and status of surface and underground waters in the territory of the state.
4. Issuing permits for water use – there is no publicly available information on water users, nor a Book of Water Rights, although it is stipulated by the Water Law; only a small number of Public Utility Companies have permission to use water.
5. Significant lack of financial resources for implementation
6. Weak and insufficiently qualified administrative capacity and small number of inspectors

Serious efforts and prioritization of water problems in the country are needed to achieve better implementation of legislation and to manage water resources on a efficient and sustainable manner.

## 5.2. Progress on compliance with national legislation

In general, the same percentage of EU directives transposition in the Macedonian legislation remains as in the previous shadow report. The lowest transposition remains for the Floods Directive, the Bathing Water Directive and the Nitrates Directive.

	Level of transposition (%)			
	0 - 25%	26 - 50%	51 - 75%	76 - 100%
<b>Framework water directive</b>				92%
<b>Urban waste water directive</b>				100%
<b>Drinking water directive</b>				100%
<b>Nitrates directive</b>			59%	
<b>Bathing water directive</b>	22%			
<b>Groundwater directive</b>		50% (20%)		
<b>Water quality standard</b>			63%	
<b>Floods directive</b>	14%			
<b>Freshwater fish directive</b>		44%		

In February 2022, the MOEPP started a procedure for changes and amendments of the main law that regulates the area of water in the country, i.e., the Law on Waters. This law was adopted in 2008 and has undergone several changes and amendments (87/08, 6/09, 161/09, 83/10, 51/11, 44/12, 23/13, 163/13, 180/14, 146/15 and 52/16 and 151/21)). With this changes and amendments to the Law on Waters, it is further harmonized, i.e., it further transposes the Framework Directive on Water (2 (2006/118/ EC). The main reasons for amending and supplementing the Law on Waters stem from:

- Recommendations and conclusions of the State Audit Office given in the audit report "Effectiveness of the policies, measures and activities in the exploitation of gravel and sand from the Vardar river basin" refer to changing the procedure for the protection and improvement of the water regime by extracting sand, gravel and stone from the beds and banks of surface water bodies with the new permit for arrangement and regulation of the beds and banks of surface water bodies
- The need to ensure greater transparency of the procedure for awarding water use concessions, as well as providing documents on the basis of which the sustainability of the concession can be assessed, is the reason for the change in the procedures.
- The need to make an additions to the procedures for issuing permits for the use of water rights, in order to enable their more efficient implementation, though certain additions have been already made.
- The need to specify and clarify certain definitions in the law as well as adding new definitions that will enable easier and more efficient implementation of the provisions in the law.

The main goals that will be achieved by the changes and amendments to the Law on Waters include: 1) Easier and more efficient implementation of the law, by specifying and explaining certain provisions; 2) Demarcation and definition of the specific activities of the responsible authorities and institutions in the implementation of the law; 3) Achieving more efficient supervision in the area of water by adjusting the provisions of the inspection supervision; and 4) Achieving greater transparency by enabling public involvement in the procedure for awarding water use concessions. It is significant that the new amendments to the Law on Waters strengthen the "Environmental objectives for water (Article 90) by introducing a new objective for "ecological flow", which is defined as "the flow that ensures the quality, quantity and temporal distribution of the surface and groundwater needed to maintain the functions and processes of dependent ecosystems, on which humans also depend", which completely replaces the principle/connotation of "minimum acceptable flow" in the legislation. Regarding the issuing of water use concessions, the new Law on Waters includes a provision for submitting a feasibility study on the justification of issuing the water use concession, and has a new article (54a) which introduces for the first time a binding procedure for "public participation in the procedure for issuing a concession", via the availability of documentation for the public, organizing public hearings/consultations and taking into account the opinion of the public when making the decision to issue the concession. According to the changes in the Law on Waters, apart from the water inspectors and the state environmental inspectors, the state nature inspectors also have the right to perform inspection supervision over the application and regulations of this law, i.e. to supervise the waters located in the protected areas. Likewise, the responsibility for monitoring the overall monitoring of water bodies covered by the state monitoring network, implementation, operation, maintenance and development is transferred to the Hydrometeorological Service. By changing the method of protection and improving the water regime, better regulation of extracting sand, gravel and stone will be enabled, which will contribute to reducing the use of material from the beds and riverbeds of the surface water bodies.

These proposed changes and amendments to the Law on Waters are essential and will significantly enable better and more sustainable use and management of water resources in the country.

The proposed changes and amendments to the Law on Waters should enter the parliamentary procedure at the end of 2022. It will be necessary to draft and adopt six new by-laws arising from this proposed Law, within one year of the adoption of this law.

### 5.3. Legislation's implementation

The analysis carried out for the requirements of the Second Shadow Report indicates that very small steps have been taken in the last period in the implementation of the water legislation. This is in line with the conclusions of the European Commission's Progress report, which indicates that limited progress has been made towards implementing existing water legislation.

Furthermore, the aforementioned Progress Report emphasizes that no progress has been made in finalizing of any of the three River Basin Management Plans (for Crn Drim, Vardar and Strumica) and that although the River Basin Councils have been constituted, they are still not operational. There is also no progress on the designation/declaration of eutrophication sensitive areas.

According to the Law on Waters, the River Basins Management Plans together with the National Water Strategy and the Water Management Basis represent the basic planning documents for the planning and development of water management in the Republic of North Macedonia. Similarly, as with the River Basins Management Plans, no progress was made in the last year to adopt a new Water Management Basis, nor was any action taken to initiate a revision of the National Water Strategy. The problem regarding the poor quality of the National Water Strategy (2012-2042) was elaborated in the First Shadow Report and is one of the recommendations of the State Audit Office from 2019.

According to the audit report, "the MOEPP and the Government of the Republic of North Macedonia in cooperation with the Assembly, have to undertake activities to review the adopted National Water Strategy from the perspective of the possibility of its improvement, by defining strategic goals and priorities in water management, as well as activities, assigned responsibilities and deadlines for their implementation". This audit recommendation has not yet been implemented and the National Water Strategy has not yet been revised.

Certain progress in the implementation of the legal regulation has been achieved with the drafting of several by-laws. Namely, in September 2022, the MOEPP prepared draft texts for three by-laws arising from the Law on Waters:

1. [Decree on the method of calculating the unit of damage and the method of payment of the variable value of the amount of compensation for discharge into water](#)

This decree was drawn up on the basis of Article 214 paragraph (5) of the Law on Waters, and it determines the method of calculating the damage unit according to the amount of water discharged and the type and quantity of waste substances and substances that are discharged into surface waters and underground waters, as well as the method of payment of the variable value of the amount of compensation for discharge into waters. A damage unit is calculated for each discharge into a recipient, based on the measured amount of water discharged and the type and quantity of waste materials and substances, and the variable value of the amount of compensation for discharge into water is determined in the water discharge permit based on the damage unit and is billed on a monthly level.

2. [Rulebook on the necessary measures for technical monitoring of dams and associated facilities and reservoirs](#)

This rulebook was drawn up on the basis of Article 195 paragraph (1) of the Law on Waters, and it establishes the necessary measures for technical monitoring of dams and associated facilities and reservoirs that are above settlements, thoroughfares or other economic facilities or other goods of general interest. which are under special control and are important for defense and for dams that are not under special control.

3. [Rulebook on the form and content of the water book and the manner of its establishment and maintenance](#)

This rulebook was prepared on the basis of Article 160 paragraph (3) of the Law on Waters, and it stipulates the form and content of the water book and the manner of its establishment and maintenance. The water book should consist of registers for: water use permits, water discharge permits, gravel, sand and stone extraction permits from the beds and coasts of surface water bodies, protection zones, flooded areas, old rights and obligations, water management consents, agreements for water use concessions, temporary enforcement authorities and opinions from the aspect of water protection. The adoption of this rulebook is extremely important, because it will enable a better assessment of the pressures on water resources, it will enable more efficient work of the competent inspectors and it will be a good basis for the adoption of further sustainable policies for the water sector.

The public had the opportunity to submit opinions and comments on these three by-laws until November 1, 2022, after which they should be adopted by the Government of the Republic of North Macedonia in the following period.

Within the framework of the project "Clear it up" (Разбистри се), which was implemented by the Institute for Communication Studies - ICS, "Rulebook for the methodology and parameters for measuring and monitoring the quality and quantity of all water bodies, except for the water bodies

intended for consumption by the human and bathing zones". This rulebook derives from Article 147 of the Water Law. At the proposal of the Ministry of Education and Culture, this Rulebook was adopted by the Government of RSM in April 2022 (Official Gazette of the Republic of North Macedonia, 86/2022). This rulebook defines the methodology and procedure for determining the parameters for measuring and monitoring the quality and quantity of all water bodies, i.e. it contains instructions for conducting monitoring of hydromorphological changes, hydrological monitoring, monitoring of the ecological and chemical status and ecological potential, and groundwater monitoring.

This rulebook is of crucial importance for establishing an integrated approach to the protection of water resources in the country and it should be applied during the development of the Plans for the management of the river basins of the Republic of North Macedonia. With the preparation of this rulebook for monitoring and the issuing of competence for the overall state monitoring of waters to the Hydrometeorological Service of the Republic of North Macedonia, essential prerequisites for starting continuous monitoring of waters in the state will be fulfilled and significant progress in the implementation of the legal regulation of waters will be made.

Within the framework of the above-mentioned project "Clear it up" (Разбистри се), and in cooperation with the MOEPP, a digital platform for the Water Book was also prepared and started to be operational in 2022. Through the digital Water Book, for the first time, the public and all stakeholders have been provided with a simple insight into the records of the MOEPP for the issued permits, concessions and consents for the use of water. The Digital Water Book will contribute to transparency and public participation in decision-making in the area of water. The Digital Water Book is publicly available on the website of the MOEPP at <https://mzspp.flexivue.org/>.

On the initiative of the MOEPP, this year a financial loan of 50 million euros was provided from the European Investment Bank (EIB) for the improvement of water infrastructure in the municipalities of the country. This project will include rehabilitation, modernization and expansion/construction of water supply infrastructure, wastewater collection and treatment infrastructure, storm sewer systems and emergency flood protection measures, as well as procurement of specialized maintenance equipment. The MOEPP will prepare a program with priorities, to which the municipalities will apply, and the MOEPP will be the responsible institution for the implementation of the projects. Considering the amount of this investment, in the next period a more significant step will be taken in the implementation of the national legislation on water and the EU Directive on drinking water. On the other hand, this year through the regular Water Management Program, which is financed from the collected fees for the use and discharge of water, extracting gravel, sand, etc., 25% less funds were allocated compared to the previous year (a total of 50,940,000 denars).

In the course of this year, the project for the preparation of the Cadastre of underground water for the whole country, which is financially supported by the Swiss Development Agency, will be completed, and it will cover the shortcomings in the implementation of the legal legislation related to underground water.

On the initiative of the MOEPP, after Shar Mountain was declared a national park, in October 2022 the concession agreements for the use of water for the production of electricity through the construction of seven small hydropower plants on Shar Mountain were terminated. As for the long-planned project for the construction of the Chebren hydropower plant (more than 20 years) on Crna River, in the current year the tender procedure for this project was successfully implemented. According to the progress in the procedure, the MOEPP expects that in the first half of 2023, the contract for public-private partnership for the construction and management of HPP Chebren will be signed, and the first production of electricity with a capacity of 333 MW will begin in 2028-2029.

## 5.4. Recommendations

The report of the European Commission for North Macedonia indicates that some progress has been achieved in the field of the environment and that in the next year it is necessary to increase and accelerate efforts to reduce both point and diffuse pollution of water resources.

For some of the recommendations that were defined as part of the First Shadow Report, certain activities were undertaken during the past one-year period, which achieved progress in establishing water monitoring and the Water Book, as well as improving public access to information related to water permits. However, further efforts are needed for their full realization.

In order to improve the situation concerning the waters and to achieve a good implementation of the legislation, the following recommendations are proposed:

- Revision of the existing National Water Strategy
- Amending of the Law on Waters that refers to the National Water Strategy, by adding an article or an obligation to adopt a by-law that will more closely define the methodology for developing and adopting the strategy, define the minimum content of the strategy and set deadlines for binding review and update of the strategy.
- Development and adoption of a new Water Management Basis, or inclusion of this document into the National Water Strategy
- Finalization and adoption of all four River Basins Management Plans
- Adoption of all by-laws stipulated by the Law on Waters
- Developing a monitoring program and establishing operational monitoring of all water bodies in the country
- Taking over of all water supply systems by public utility/water supply companies
- Developing a campaign to educate the population about connecting to the public water supply network
- Implementation of a proactive policy and ensuring the reduction of the amounts of non-revenued/lost water
- Strengthening the capacities of public utilities
- Drastic increase in the water management budget
- Conduct a functional analysis of the institutional capacities for water management and proposal for improvements.

## 6. Waste management

### 6.1. Main findings from the first shadow report

The compliance of waste legislation is at a moderate level, although it can be noted that with the adoption of the new six laws in this area, the percentage of compliance has increased significantly, especially with regard to the framework directive on waste, but also in terms of the directives on special waste streams. It is significant that it is very important to adopt a new Waste Management Strategy (or to revise the old one 2008-2020), as well as to monitor the implementation of the Waste Management Plan 2021-2027. It is necessary to adopt the planning documents as prescribed by the new Law on Waste Management, as well as the by-laws arising from the new Law on Waste Management (Official Gazette of the RSM No. 216/2021) in order to enable its efficient implementation.

Apart from the framework directive on waste, the MOEPP has been working for years on harmonizing the directives on special waste streams, such as:

- 94/62/EC- Directive for management of packaging and packaging waste
- 96/59/EC – Directive on the disposal of polychlorinated biphenyls (PHB)
- 2012/19/EU WEEE- Waste electrical and electronic equipment (WEEE) Directive
- 1999/31/EC Landfill – Directive on the landfill of waste
- EC/1013/2006 Shipment of Waste Directive

Although there is a solid basis for appropriate treatment and management of waste at the national and local level, even after 15 years since the adoption of the first Law on Waste Management, waste management in North Macedonia is based on collection and its disposal. The waste management hierarchy is not respected and waste management is based on the least desirable management option, which is landfilling. The prevention of waste generation and the tendency to reduce it are not integrated into the policies of the state. In addition, apart from Drisla, which meets the minimum technical conditions for work, the rest of the landfills in the country are non-standard, actually they are more like garbage dumps and represent hot spots for the environment.<sup>10</sup>

## 6.2. Progress in harmonizing national legislation with European legislation

As it was already mentioned, in the First Shadow Report on Chapter 27, in September 2021 six new laws in this area were adopted, namely:

- Law on waste management – LWM - (Official Gazette of the RNM No. 216/2021)
- Law on batteries and accumulators and waste batteries and accumulators– LBAWBA - (Official Gazette of the RNM No. 215/21)
- Law for management of packaging and packaging waste–LMPPW – (Official Gazette of the RNM No. No.215/21)
- Law for management of the electrical and electronic equipment and waste electrical and electronic equipment -LMEEEWEEE - (Official Gazette of the RNM No. 215/21)
- Law for management of additional waste sources – LMAWS - (Official Gazette of the RNM No. 215/21)
- Law on extended producers' responsibility for management of the specific waste streams – LEPR - (Official Gazette of the RNM No. 215/21)

Although the new legal solutions do not differ substantially from the previous ones, they significantly increase compliance with European directives and contribute to a better definition of some provisions. Also, with these legal solutions, the expanded responsibility of the manufacturer and the management of special waste streams are more precisely arranged.

According to the new Law on waste management, the following planning documents are the responsibility of the Ministry of Education and Culture for preparation and adoption:

- Waste management strategy
- Regional waste management plans

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<sup>10</sup> First shadow report for Chapter 27, Waste management

- Plan for the prevention of waste generation
- National sludge management strategy
- Waste management programs

From all these above listed planning documents, the Regional Waste Management Plans, Waste Prevention Plan and Waste Management Plan have been adopted so far.

In addition, during 2022, the MOEPP prepared a set of by-laws arising from the Law on the Management of Packaging and Packaging Waste (Official Gazette of the RNM No. 215/21) and the Law on Extended Producer Responsibility (Official Gazette of the RNM No. 215/21). Below are the proposed by-laws arising from these two laws. With a large part of these by-laws, harmonization with European regulations in the management of packaging waste and extended responsibility of the producer is carried out.

### **1. Law for management of packaging and packaging waste (Official Gazette of RNM, No.215/21)**

- Rulebook on the form and content of the form for keeping records on the quantities of received packaging waste by type and category (Article 29, paragraph 5)
- Rulebook on the form and content of the annual report form, the form and content of the production specification form, the form and content of the record form (Article 19, paragraph 6)
- List of illustrative examples of packaging (Article 7 paragraph 2)
- Rulebook on the form and content of the offending payment order (Article 52 paragraph 4)
- Rulebook on the method of numbering and the abbreviations on which the system for identification and marking of the materials from which the packaging is made is based, as well as the form and content of the label for handling the packaging (Based on Article 16 paragraph 5)<sup>11</sup>
- Rulebook on the form and content of the form for the quarterly calculation of the compensation, as well as the method, procedure and necessary documentation for the refund of the compensation, as well as the form and content of the form of the request for the refund of the compensation (Article 35 paragraph 16)
- Rulebook on the method of calculating the goals for collection, processing and recycling of packaging waste, as well as the method of calculating the adjusted goals, reporting the data and keeping records (Article 21 paragraph 11)<sup>12</sup>
- Rulebook on the method and conditions for exceeding the levels of the content of heavy metals in packaging, as well as the method of keeping and the content of the records and the report on the handling of packaging waste (Article 14 paragraph 6)<sup>13</sup>
- Rulebook on the manner of keeping, maintaining and saving records of the calculated and paid compensation, as well as the form and content of the calculation form for the paid compensation (Article 36 paragraph 5)

<sup>11</sup> This Regulation complies with the Commission's Decision of January 28, 1997 to establish an identification system for packaging materials in accordance with the Directive of the European Parliament and of the Council 94/62/EC on packaging and packaging waste

<sup>12</sup> With this Rulebook is made compliance with the Commission Decision 2005/270/EC establishing the formats relating to the database system pursuant to European Parliament and Council Directive 94/62/EC on packaging and packaging waste и Commission Implementing Decision (EU) 2019/665 of 17 April 2019 amending Decision 2005/270/EC establishing the formats relating to the database system pursuant to European Parliament and Council Directive 94/62/EC on packaging and packaging waste (notified under document C(2019) 2805)

<sup>13</sup> This Rulebook complies with the Commission's Decision No. 292 of March 24, 2009 on the establishment of derogation conditions for plastic crates and plastic pallets in relation to the concentration levels of heavy metals determined in Directive 94/62/EC of the European Parliaments of the Packaging and Packaging Waste Council (CELEX number 32009D0292) and 2001/171/EC Commission Decision of 19 February 2001 determining the conditions for derogation for glass packaging in relation to the concentration levels of heavy metals determined in Directive 94 /62/EC on packaging and packaging waste (CELEX number 32001D0171)

## **2. Law on extended producers responsibility for management of the specific waste streams – LEPR (Official Gazette of RNM, No.215/21)**

- Rulebook on the manner of keeping the database, as well as the form and content of the database (Article 46 paragraph 4)
- Rulebook on the form, content and form of the request for the issuance of the permit for a collective or independent operator, the method of delivery, as well as the necessary documentation attached to the request (Article 22 paragraph 6)
- Rulebook on the form and content of the report that the mayor submits to the professional body (Article 42 paragraph 12)
- Rulebook on the form and content of the quarterly report that the collective agent submits to the professional body, as well as the form and content of the annual report (Article 31 paragraph 12)
- Methodology for calculating the total amount of products placed on the market in the Republic of North Macedonia in the previous year for each separate group and type of separate waste flow (Article 13 paragraph 3)
- Rulebook on the form and content of the record of warnings issued (Article 56 paragraph 3)
- Rulebook on the form and content of the offending payment order (Article 63 paragraph 3)
- Guidelines for the type of activities for informing the public and raising public awareness for the management of special waste streams, which can be carried out by the collective or independent operator and which can be shown as an expense in the annual report (Article 41 paragraph 6)
- Guidelines for what is considered infrastructure for the collection of waste products and/or a separate stream of waste for which the funds of the collective or independent operator can be used (Article 39 paragraph 9)

Prior to the preparation of these by-laws, the MOEPP adopted the following by-laws arising from the LMPPW for the management of special waste streams:

- Rulebook on the form and content of the waste stream permit form, for each separate waste stream, as well as the manner of issuing the permit (Official Gazette of the RNM No. 80 of 31.03.2022)
- Rulebook on the form and content, as well as the manner of submitting the confirmation for fulfilling the extended responsibility for managing a special waste stream (Official Gazette of the RNM No. 80 of 31.03.2022)
- Rulebook on the form and content of the request for registration of the producer, the form and content of the request for deletion from the Register of producers with extended responsibility, the form and content of the Register of producers with extended responsibility, the manner of keeping and maintaining the Register, as well as the form and the content of the certificate of registration and the certificate of deletion of the producer in the Register of producers with extended responsibility (Official Gazette of RNM No. 58, 12.03.2022)<sup>14</sup>

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<sup>14</sup> This Rulebook complies with Directive 2013/56/EC of the European Parliament and of the Council of November 20, 2013 amending Directive 2006/66/EC of the European Parliament and of the Council on batteries and accumulators and on waste batteries and accumulators, regarding the placing on the market of portable batteries and accumulators that contain cadmium and are intended for use in cordless power tools, as well as button-shaped batteries with a low mercury content and for the repeal of Decision 2009/603/EC of the Commission (CELEX no. .32013L0056) and Directive 2012/19/EU of the European Parliament and of the Council of July 4, 2012 on waste electrical and electronic equipment. (CELEX No. 32012L0019).

With these by-laws, legal entities that carry out activities or activities with which certain products are placed on the market in the Republic of North Macedonia, and their usage generate waste that belongs to the special waste streams, have the obligation to register in the MOEPP no later than 15 days from the day of the beginning of the activity.

### 6.3. Implementation of the legislation

#### 6.3.1. Planning of the waste management

##### **Waste management at the regional level**

The Waste Framework Directive allows member states to organize waste management in the way they consider most appropriate for their country. The new LWM which is mainly in line with this directive provides for regional waste management, whereby according to some additional analyzes and studies prepared in 2020 a total of 5 regional landfills and 5 waste regions are foreseen<sup>15</sup> :

1. Regional landfill in Drisla for the Skopje region (only reconstruction of the existing landfill is envisaged here),
2. Regional landfill for the Polog region in Rusino,
3. Regional landfill in Sveti Nikole for Eastern and Northeastern regions,
4. Regional Landfill in Vasilevo for the Vardar and Southeast regions and
5. Regional landfill in Novaci for the Pelagonian and Southwest regions.

For the construction of landfills in Novaci, Rusino and Vasilevo, the state will take up a loan of 55 million euros from the EBRD. The loan law was prepared in June 2022 and submitted to the Parliament for consideration, and it was adopted on 11/18/2022. The adoption of the law should be followed by the signing of the agreement with the EBRD for the financing of the regional project for solid waste. With this investment project, it will be possible to build three regional landfills that will be fully compliant with European requirements, i.e., a regional integrated waste management system will be established in the Southeast, Vardar, Pelagonia, Southwest and Polog planning regions. In addition, it is expected to approve additional grant from European funds through the Investment Framework for the Western Balkans (WBIF), and also to secure an additional 9 million Swiss francs grant from the Swiss government.

Financial resources have been secured for the construction of a sanitary landfill for the eastern and northeastern regions - a grant through the EU-IPA program. It is especially important to emphasize that the problems with waste management have been a decades-long problem, the solution of which requires huge financial resources, as well as coordination and cooperation between the national and local levels. With the Loan Agreement with the EBRD, which according to the information from the MOEPP should be signed in January 2023, apart from the construction of the sanitary landfills, funds will be provided for equipment, vehicles and access road to the landfills.

Proper waste management must begin with the construction of regional landfills, in order to further develop and implement the integrated waste management system at the regional level. Furthermore, municipalities and planning regions will have to be the bearers of the regional waste management system, i.e. be responsible for the appropriate implementation of the Waste Management System (setting up a waste selection system, construction and maintenance of transfer stations, construction of collective centers for waste storage). In addition to that, municipalities will have to work on

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<sup>15</sup> EBRD Study, Solid Waste Management in 4 Regions of North Macedonia, Baseline and Finance Options Study

increasing the percentage of households that receive waste collection services. In a large percentage of municipalities, especially the rural ones, the percentage of coverage with waste collection services is 60-70% of the total number of households.

### **Waste management hierarchy**

Furthermore, in parallel with the development of the waste management system at the regional level, it will be necessary to work on the implementation of the hierarchy of waste management, which at the moment, apart from the fact that we have a Plan for the prevention of waste generation, is not at all implemented. The implementation of the waste hierarchy will require harmonization of the policies at all levels in order to prevent the creation of waste or possibly reduce the amount of waste through reuse, appropriate selection and recycling.

### **Waste selection**

The selection of waste is an important segment of the integrated system that does not yet exist in the country, and the selection is based on the initiatives of the collective operators and their infrastructure set up in accordance with the obligations for extended responsibility of the producers. At the local level, a small number of communal enterprises (PUCs) have started the selection of certain fractions of municipal waste, while the Prilep PUC is among the only ones that have been working for about 10 years on the establishment of the waste selection system. This enterprise manages a waste warehouse very well, where the secondary selection of the primary selected household waste is carried out. Apart from this enterprise, efforts for primary selection are also made in other municipalities, but on a smaller scale and a smaller percentage of covered households.

### **Recording and reporting**

A huge problem for all municipalities and PUCs is that the record of collected and transported waste is inadequate, i.e., the waste is recorded by the number of trucks that unloaded municipal waste at the municipal landfill, and the unit of measure for each truck is the volume. Such records are inadequate and do not provide accurate data on the quantities of waste that have been collected, and thus the data on generated waste cannot be calculated.

Reporting on the collected quantities at the local level is not carried out regularly, so even those municipalities that have data on collected waste on an annual basis do not submit it in a timely manner or do not submit it at all to the MOEPP - MEIC. Proof of this is the annual environmental report, where only 1/3 of the municipalities had submitted data for the waste collected on their territory.

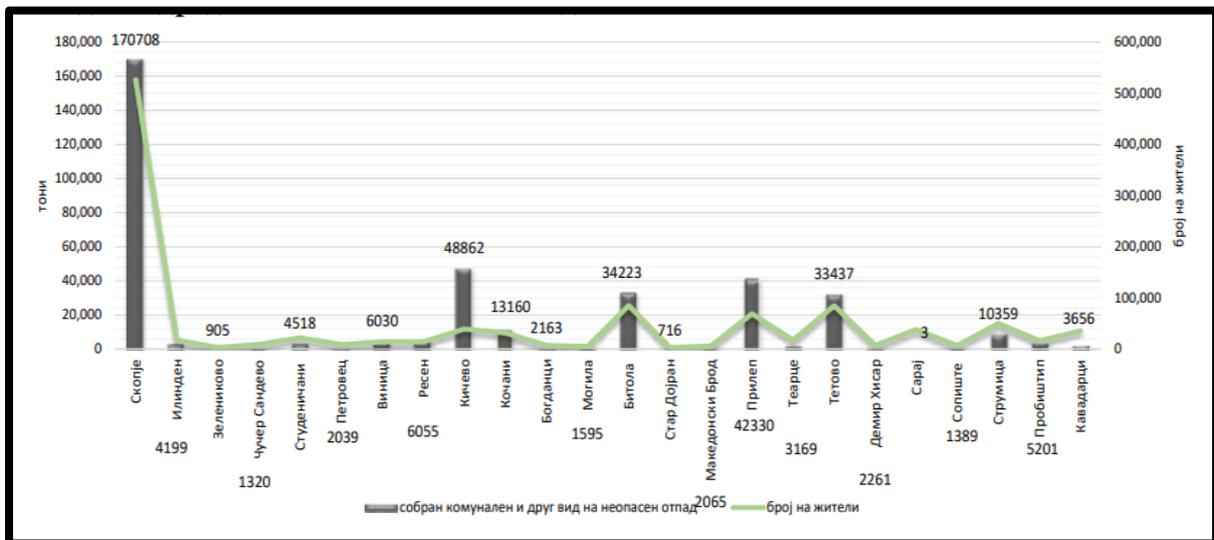


Figure 1. Reported, collected and transported communal waste in 2021

In addition to this, a large percentage of the collected waste ends up in a landfill, i.e., in 2021, only the city of Skopje, Makedonski Brod, Bogdanci, Bitola, Probishtip, Dojran and Prilep, reported 2,860 tons of processed municipal and other types of non-hazardous waste. Expressed as a percentage, this amounts to 0.7% in relation to the total reported, collected and transported municipal and other types of non-hazardous waste in 2021 at the level of the entire territory. Of the reported amounts of processed waste, 2,693 tons is the recycling of paper, cardboard, plastic, nylon, glass, metals, discarded electrical and electronic equipment, and 167 tons of waste is composted biodegradable waste.<sup>16</sup>

### Landfills

Most of the municipal landfills do not meet minimum technical requirements. Apart from the Drisla Landfill in Skopje, no other landfill is fenced and there are no scales for measuring the waste. In most cases, waste is measured according to the number of trucks that have deposited waste on a daily basis, taking into account the volume of the truck and not the weight. This gives approximate amounts of collected and deposited waste, and not for every municipality, because monitoring and keeping records of collected and deposited waste is not present in many of the municipal landfills.

### Management of Construction Waste

The management of construction waste is responsibility of the Municipalities, i.e. Mayors shall dedicate location where the private sector and individuals will be able to dispose their waste appropriate. Up to the moment, with exception of several municipalities (exp. Ohrid, the Mautcker Landfill) where there is a dedicated location for disposal of this type of waste, biggest part of the municipalities doesn't dedicate a location for construction waste. The construction was is officially landfilled at the municipal landfill and very often ends up in the river beds or in the valleys.

**Conclusion:** From all of the above, it can be concluded that although we have excellent waste legislation, which is not implemented at all. Exceptions are the laws on special waste streams and the Law on extended responsibility of producers (LMEEWEEE, LBAWBA, LMPWP, and LERP). The only

<sup>16</sup> Environmental Quality report in North Macedonia — Annual Report for 2021

progress is the adopted Law on raising a loan from the EBRD, which is expected to start the implementation of the legislation. However, for the successful implementation of the legislation, significant investments are necessary, dedicated work not only at the national level, but more importantly at the local and regional level. Furthermore, what is of great importance is the need for a coordinated multi-year campaign for waste management in order to raise the awareness of citizens and understand the need for regional action and disposal. In parallel with this, it is necessary to work on the awareness of reducing the generation of waste and increasing the rate of its reuse.

In order to successfully deal with waste problems, it is necessary to work on several things in parallel, namely: strengthening the awareness of citizens, strengthening the capacities of PUCs and municipalities, not only for the waste management, but also with the aim of developing potential business models for waste trade, strengthened inspection controls and an increase in the garbage fee per household. Only with an integrated approach and work in all these spheres we can expect an improvement in the situation with the waste management in Macedonia. In Macedonia, there are excellent prerequisites for dealing with waste properly, it is only necessary for PUCs to work responsibly and to have appropriate planning regarding waste management.

It is necessary to work on eradicating the concept “not in my backyard”, i.e., a resistance to regional landfills and regional waste management, for which funds have already been provided for the Eastern and North-Eastern regions but cannot be used due to resistance from the local population. Similar situations existed in the South-Western region and are expected in the Pelagonian region as well. Such a problem can be solved with a continuous public campaign, direct communication of the municipality with the citizens, study visits and similar activities.

It is especially important that the regional waste management for the Eastern and North-Eastern regions, start with operation as soon as possible, since it will be an example of successful waste management. This project needs to be implemented in the best way to be the basis for further development of the concept of regional waste management.

## 6.4. Recommendations

### **National multi-year campaign to raise citizens' awareness**

A national campaign to raise citizens' awareness is needed, which will include the general public, since the problems with waste refer to several aspects, such as:

- low awareness for proper waste disposal
- low awareness for the need to select recyclable fractions (packaging waste)
- acceptance of the concept of regional waste management and construction of regional landfills
- municipalities to develop education programs but also other actions to secure direct engagement with the citizens about the way of dealing with the waste and its appropriate disposal

### **Strengthening of inspection supervision**

Increasing inspection supervision, authorizing local inspectors from different regions to carry out inspections in a region/municipality to which they do not belong, which will avoid the possibility of subjectivity but also enable impartiality in the performance of inspection supervision. In addition, it is necessary to increase the fines for inappropriate handling of waste (improper disposal), as well as the establishment of communal police or another type of mechanism over the inspection supervision.

The State Environment Inspectorate (SEI) should control all landfills to determine whether the minimum technical requirements have been met.

### **Strengthening of capacities at the local level (municipalities and PUCs)**

Strengthening of the capacities of PUCs in order to establish circular business models, appropriate and responsible operations and timely planning of obligations.

Cooperation with collective operators and producers of waste must be at the highest level. All municipalities should have an infrastructure for waste selection for at least 20% of the packaging waste generated in that municipality. Furthermore, all municipalities should have concluded an agreement with a collective operator for taking over the selected waste. The selection must take place gradually and all municipalities and PUCs need to have a clear goal and plan in their annual programs for the expansion of the infrastructure and conditions for selection.

The MOEPP and the Directorate of environment urgently need to implement the procedure for securing permits for waste management of Public Utilities. Also, the MOEPP should make public the list of all waste management permits held by PUCs.

In order to achieve the goals of the National Plan for waste management, i.e. for the progressive reduction of biodegradable (organic), the Municipalities (through PUCs or other interested parties - civil associations) should initiate cooperation with local restaurants, markets and green markets for the purpose of selection of biodegradable waste and its further composting.

### **Increasing the fee for garbage per household**

As per the increasing the fee for garbage per household, although it is planned to adopt a new methodology and the price to be defined by the Regulatory Commission for Energy, still until this moment, it is necessary for the municipal councils to adopt a new price for compensation for garbage collection per household.

### **Clearing up the illegal dumps**

Illegal landfills need not only to be cleared up, but should be identified the reasons for their creation. Municipalities together with PUCs should carry out regular cleaning up of non-standard landfills, and in order to achieve a permanent weaning of citizens from these bad practices, it is necessary to give the same place another purpose (to place facilities for recreation, benches, greenery, toys for children, etc.), of course if the terrain allows it. To achieve the same goal, PUCs and municipalities must increase controls and introduce stricter sanctions for perpetrators.

## 7. Industrial pollution and risk management

### 7.1. Main findings from the first Shadow report

The analysis of this area identifies problems primarily in the implementation of the legislation, lack of financial resources for it, as well as a lack of administrative capacities, especially at the local level.

EU legislation relevant to the area has been partially transposed (61%), while the Medium Combustion Plant (MCP) Directive has not been transposed. Environmental criteria, although they exist for individual products and services, are yet not applied, primarily due to the weak awareness of the

entities about their application and usefulness, as well as due to the absence of mechanisms for their implementation.

The Law on Environment and the chapters relating to XII. Integrated environmental permits for the operation of installations that affect the environment, XIV. Permits to comply with operational plans, XV. Prevention and control of accidents with the presence of dangerous substances and XX. Supervision, provide a good basis for regulating and limiting emissions from industrial installations, as well as for regulating issues related to protection against accidents caused by installations that have hazardous chemicals. However, the implementation of the Law on Environment is carried out partially or it is adapted to the administrative capacities, both in terms of the number and in terms of the professional competencies of the administration. The implementation of the Law on environment is not taken with due care, which leads to the existence of issued environmental permits of different quality. In addition, almost every environmental permit has been issued by extending the legally prescribed period. The municipalities and the City of Skopje do not have sufficient capacities, and a greater number of municipalities don't have employed responsible officers for issuing and controlling B environmental permits. This situation leads to the existence of B environmental permits that have very poor quality, thus resulting in poor control and reduction of pollution at the local level.

The registers for A and B environmental permits are not maintained in accordance with the Law on environment, and they are not publicly available, which reduces transparency in this area and opens up space for speculation and misinformation of the public. As of June 2021, the MOEPP – The Directorate of Environment, has issued a total of 180 A permits.

There are no specially designated funds from the budget of the MOEPP for financing the implementation of the IPPC sub-chapter, especially for the issuance and control of integrated environmental permits. Although individual installations may pay a fee, it is not shown separately, nor is it spent according to the purpose and method established in the Law on Environment. At the same time, it cannot be determined, due to inconsistent determination of the compensation by the competent authorities (Directorate of Environment and the local self-governments units), what is the amount that is collected due to the above mentioned fee. Transparency concerning these issues is very low, both at the national and local level, in particularly regarding the spending of the funds collected from the fee for energy production from fossil fuels (Article 185-a of the Law on Environment).

The Law on the Control of Emissions from Industrial Activities (transposition of the Industrial Emissions Directive (2010/75/EU) and the Directive on Medium Combustion Plants (EU/2015/2193)) has not been adopted, as well as the Law on environmental inspection. Moreover, serious efforts are needed for specific and effective actions regarding the transposition of the SEVESO III Directive (Directive on the control of the hazards of major accidents involving dangerous substances).

## 7.2. Progress in harmonizing national legislation with European legislation

**The Law on Environmental Inspection**, after several years of delay, was adopted in April 2022 (Official Gazette No. 99 of April 21, 2022). The new law, which was prepared by the MOEPP, is focused on ensuring reform, better organization and cooperation of inspection services at the central and local level. Of course, the ultimate goal is better and more efficient environmental protection. The main

elements of this legal act are in the direction of establishing a coordinated planning of inspection supervision in the entire territory of the state. This law complies with Directive 2012/18/EU of the European Parliament and of the Council of July 4, 2012, on the control of major accident hazards involving hazardous substances, amending and subsequently repealing Directive 96/82/ EC of the Council (CELEX no. 32012L0018), Directive 2010/75/EU of the European Parliament and of the Council on emissions from industry (CELEX no. 32010L0075) and Regulation (EU) no. 910/2014 of the European Parliament and of the Council of 23 July 2014 on electronic identification and confidential services for electronic transactions in the internal market and repealing Directive 1999/93/EC (CELEX No. 32014R0910). The delay in the adoption of this law was continuously noted in the reports of the European Commission as a negative remark and as an obligation that has not been fulfilled.

The Law precisely specifies the qualifications in terms of education that the environmental inspector should have, while it is clearly stated that with the act on the systematization of jobs of the State Environmental Inspectorate, an inspector can be assigned to carry out inspections only for certain area and/or media of the environment and/or for certain activities in each of the areas or media of the environment. The law provides adequate planning of inspection supervision at the central and local level in accordance with environmental policies, as well as more detailed procedures for emergency and irregular inspections. One of the main issues regulated by the law is the supervision over the legality of the work of local self-government units (LGUs) in the area of inspection services. The supervision is carried out by the MOEPP through a supervision committee and on the basis of a prepared supervision plan.

The State environmental inspectorate and municipal inspection services should jointly develop a Strategy and Program for environmental inspection at the area level, not at the inspection service level. The strategy is adopted for a period of six years, and the Program for a period of three years. The preparation of Annual and Monthly plans for environmental inspection is also a legal obligation. This should enable the coordination and cooperation of the central and local authorities in terms of planning, which should enable the avoidance of overlaps in inspections, but at the same time, lack of coverage by controls in certain media and areas. In order to specialize the inspectors for certain areas or environmental media, inter-municipal cooperation is included in the Law. This is expected to improve the situation with human resources in inspection supervision, i.e., their knowledge and competencies. Also, for the realization of the obligations arising from the regulations for inspection supervision in the environment, the inspectorate has the right and duty of continuous specialized professional training and capacities improvement.

The provisions regarding the performance of irregular inspections, the possibilities and the method of taking samples in exceptional and urgent circumstances have been specified, and a special additional obligation has been provided for the preparation of reports for certain types of installations in accordance with the requirements of the EU legislation. With these solutions, the aim is also to provide adequate evidence for the way of operation of the subjects of the supervision, that will be used in eventual further criminal or other procedures. By-laws for the implementation of the law should be adopted within one year from the date of its entry into force.

But on the other hand, it must be pointed out the reaction of the Citizen Inspection Council and the Alliance "Clear it up!" (Разбистри се!) for almost completely ignoring their proposed 23 amendments to the Law proposal, which were not accepted. The coalitions, encompassing 35 civil society organizations, higher education institutions and experts, demanded that the inspectors have equipment and perform indicative measurements of polluting substances, passively be on duty at

weekends and at night, must use checklists, as well as the supervision of the work of local inspectors should be carried out by the State environmental Inspectorate and the Inspection Council, not a commission in the MOEPP. The new law did not even include their proposal to publish a database with the inspection acts on the website with the possibility of searching by various parameters, as well as to stipulate criminal sanctions if the inspection acts, warnings, solutions, reports, strategic and monthly plans are not published. and programs. However, the proposal for the mandatory use of checklists by inspectors during inspections is included in the law, in Article 35.

Although a significant part of the activities in the preparation of the **Law on the Control of Industrial Emissions** were completed in the period 2015 - 2017 as a part of the Twinning project financed by the EU: "Strengthening the administrative capacity at the central and local level for the transposition and implementation of the new Industrial Emissions Directive 2010/75/EU", however, the finalization of this legal act took several more years, and finally, in September 2022, the draft law was uploaded to ener.gov.mk, with the aim of involving stakeholders through public hearings, enabling public inspection and collection of written opinions, remarks and suggestions. Up to date, the law has not been adopted. On March 29, 2022, the MOEPP held a consultative meeting on the draft law with representatives of civil society organizations working in the field of environmental protection<sup>17</sup>. The remarks and suggestions by civil society organizations presented at the public hearing have not been published on the website of the MOEPP. On 20<sup>th</sup> of October 2022, a public hearing was organized with the general public regarding the draft law on the control of industrial emissions. The remarks and suggestions from this event are published on MOEPPS website<sup>18</sup>.

The Law on the Control of Industrial Emissions transposes the Industrial Emissions Directive (IED) (2010/75/EU). At the same time, it must be pointed out that the Annex of the Directive, which covers the values of limit emissions for different types of installations, has not been transposed into the draft law on the control of industrial emissions. In that direction, for A permits the limit values according to the BAT Conclusions are still valid, and for B permits the existing Rulebooks under the law on ambient air quality are valid. The main novelties included in the draft law refer to the scope of the type of installations – new types of installations are included in accordance with the IED (Decree on the determination of the activities of installations that require an A environmental permit) including installations of a smaller scale (B- permits), as well as the direct application of EU BAT (Best Available Techniques) Conclusions. Namely, within six months after the publication of a new BAT Conclusion, the Minister who manages the state authority responsible for environmental affairs, on the proposal of the expert body, with special decisions adopts the BAT Conclusions of the bodies of The European Union. Furthermore, no installation may be put into operation before receiving an environmental permit, and an obligation has been introduced for operators to prepare and submit a Basic Report for certain installations. The operator is obliged to prepare a basic report, and submit to submit it to the Professional Authority, if in the performance of the activity or actions of the industrial installation, i.e.

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<https://www.moep.gov.mk/nastani/%D0%BA%D0%BE%D0%BD%D1%81%D1%83%D0%BB%D1%82%D0%B0%D1%82%D0%B8%D0%B2%D0%B5%D0%BD-%D1%81%D0%BE%D1%81%D1%82%D0%B0%D0%BD%D0%BE%D0%BA-%D1%81%D0%BE-%D0%B3%D1%80%D0%B0%D1%93%D0%B0%D0%BD%D1%81%D0%BA%D0%B8/>

<sup>18</sup> <https://www.moep.gov.mk/wp-content/uploads/2022/11/%D0%98%D0%97%D0%92%D0%95%D0%A8%D0%A2%D0%90%D0%88-%D0%97%D0%9A%D0%98%D0%95-.pdf>

the plant, uses, produces or emits dangerous substances and/or substances into the environment, as well as if there is a possibility of polluting the soil and groundwater at the location of the installation or plant. As extenuating circumstances for the installations are the provisions according to which the operator has a period of one year after the entry into force of the law, to determine and notify the competent authority if there is a need for changes in the installation in order to comply with the new legal requirements. Additionally, within a period of four years after the entry into force of the law, the operator is obliged to determine whether it needs to change the environmental permit in order to comply with the new legal requirements. There is a possibility of a transition period, according to the transitional national plan, which sets a threshold for defining the maximum of total annual emissions for all plants covered by the plan based on the total heat nominal input of each plant on the day the law comes into force.

An interesting aspect in relation to emission limit values is that in relation to the so-called Environmental Standards, according to Article 18 of the Industrial Emissions Directive (IED) (2010/75/EU). Namely, as stated above in this report, the limit values in the permits are determined according to the BAT conclusions, but taking into account the national Environmental Standards. In doing so, will be taken those values that are stricter. But the approach that the same limit values apply to the territory of the entire country, regardless of the characteristics of a certain agglomeration, is wrong. Hence, the agglomeration that is more saturated should have more rigorous limit values. Namely, in Article 3 of the Draft Law on Control of Industrial Emissions, it is stated that during pollution control, "if necessary, the economic situation and local conditions where the activity takes place should be taken into account". Therefore, in the future, the practice of the same limit values for the entire country should be revised. On the other hand, the wording "economic situation" can be a barrier, i.e., a justification for allowing a higher threshold of the limit values in certain cases.

In the one-year period since the publication of the First Shadow Report on Chapter 21, there has been no progress regarding the transposition of the SEVESO III Directive (Directive on the Control of Major Accident Hazards Involving Dangerous Substances). In Article 14 of the draft law on the control of industrial emissions, the obligations of the operator in the event of major breakdowns and accidents are stipulated, as well as the role of the State Environmental Inspectorate. In terms of strengthening administrative capacities, last year, the employees from the risk management office participated in a regional workshop on land use planning and industrial safety in Belgrade. (Sub-regional workshop on land-use planning and industrial safety for South Eastern Europe, 21-29 October 2021, Belgrade).

The medium combustion plants (MPC) Directive (EU/2015/2193) has not yet been transposed, i.e., included in the existing draft law on the control of industrial emissions.

Regarding the EC/66/2010 Eco-label –Regulation on Eco labeling and EC/1221/2009 EMAS, 2001/832/EU EMAS Global –Regulations on Environmental Management and Audit scheme, there are also no changes. Namely, the Program for awarding an environmental label has still not been adopted, and not a single new Rulebook on environmental criteria for products and services has been adopted, except for the existing eight.

### 7.3. Implementation of legislation

**Law on Environmental Inspection.** Pursuant to Article 9, for the implementation of environmental inspection in the territory of the municipality, the municipality in the city of Skopje and the City of Skopje, the mayors of the municipality, the municipality in the city of Skopje and the City of Skopje are obliged to assign at least one person employed in the local administration who will exclusively perform the work of an environmental inspector at the local level. For municipalities with less than 20,000 inhabitants, one person (on the basis of a concluded agreement) can perform these tasks for another municipality. The deadline for implementing these provisions of the Law is 31.12. 2022.

In terms of administrative capacities, apart from the insufficient number of environmental inspectors, there is a lack of continuity in training and in the narrow specialization of inspectors for specific areas. The situation regarding the number of environmental inspectors has not changed comparing the findings in the first shadow report for chapter 27. Namely, the total number is 19 environmental inspectors, while the optimal number for normal functioning is estimated at around 35. In parallel with increasing the number, it is necessary (and the same is planned) narrower specialization of inspectors for certain areas. In that direction, among other things, it is planned that a certain number of inspectors will specialize exclusively in the field of industrial pollution. The fact that nearly 40% of the municipalities do not have an environmental inspector is concerning. With the aim of greater visibility and transparency in terms of administrative capacities, a national organogram can be made as a part of the register. In that way, it will be visible where environmental inspectors are lacking (municipalities, regions), and to put pressure on the authorities not only to approve funds for hiring staff, but staff who will meet the professional criteria for the position. Regarding the legal obligation to conduct specialized trainings, in the period from the adoption of the law to the preparation of this report, four trainings were performed.

The development of the Strategy and the Program for the inspection services prescribed by the law on inspection supervision in the environment is planned to be developed as part of the EU Twinning project, whereby a part will be developed as a draft version in the last quarter of 2022 and the first quarter of 2023. . Annual and monthly plans are regularly prepared in accordance with the Law.

The State Environmental Inspectorate (SEI) has published the Annual Plan for 2022<sup>19</sup>, as well as the first semi-annual report on operations for the period January - June 2022. Monthly plans and monthly reports are not published. In the annual plan for 2022, the criteria are determined and installations with increased risk are identified by area, but it is not specifically stated which installations have a higher risk in terms of total pollution, which is why they should have more frequent inspections. The register of subjects of supervision and inspection reports functions through a web platform, which allows inspection reports to be properly recorded and stored in a database. The electronic inspection report contains the main information regarding the inspection, whether the installation meets the requirements (compliance) and the measures to be taken in case of non-compliance. The structure and content of the electronic form for inspection reports are taken from the draft form prepared for the needs of the State Environmental inspectorate by the European Union Network for the Implementation and Enforcement of Environmental Legislation (IMPEL).

A more serious analysis of the results of the reports on the performed inspection supervision and overcoming the identified weaknesses through appropriate planning is needed. At the same time, it

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<sup>19</sup> <http://www.sei.gov.mk/uploads/22.pdf>

is necessary to identify the problems with the greatest negative impact, i.e., the greatest weighting factor, and to define their solution as a priority.

Given that the municipal inspectors themselves live in the municipalities that are subject to inspection supervision, the danger of subjectivity and bias in their actions is not excluded, especially in smaller municipalities. In order to alleviate such situations, the possibility of an inspector from one municipality performing supervision in another municipality different from his place of residence should be examined. This can be realized at the regional level. For example, an inspector from Tetovo should conduct inspections in Gostivar and vice versa, given that it is the same region.

In terms of transparency and openness to the public, it should be pointed out that in the period after the First Shadow Report, the State Environmental Inspectorate is quite active on its Facebook and LinkedIn profiles, where it publishes news and information about its activities almost on a daily basis.

**Law on control of industrial emissions.** The Law on environment stipulates the maintenance of several registers that are closely related to the IPPC, namely: Register of A-integrated environmental permits (Article 109 of the Law on environment) and Register of A permits for compliance with operational plans (Article 140 paragraph 5 of the Law on Environment) - obligation of The sector for industrial pollution and risk management in the Directorate of environment, and Register of B integrated environmental permits and Register of B permits for compliance with operational plans (Article 126 paragraph 5 and 6 of Law on Environment) - obligation of the Directorate for environment, the municipalities and the City of Skopje.

The obligation to keep a register of industrial installations is also stipulated in Article 16 of the proposed law on the control of industrial emissions, including the record of issued environmental permits.

In April 2022, the digital register of A and B environmental permits, prepared by the MOEPP, become operational. On the website <https://registers.mk> are available digitized and mapped information with names, addresses and activity of subjects, as well as the industries where they belong, including a link to the archive of the Ministry containing the information from when the permit was issued and all the additional documents included in it. A map with the exact location of the installation was also created. The register contains data on 125 A environmental permits and 343 B environmental permits (as of September 2022). Regarding the B environmental permits, links to the documents for the specific permit have not yet been uploaded. Also, certain links to the documentation for A environmental permits are not correct, i.e. under the record of one subject there is documentation for another subject (for example, in the record for REC Bitola, the link contains documentation for REC Oslomej). Furthermore, the records are not filtered on issued permits and pending applications. There is no information about the status of the requests for obtaining environmental permits that are still in the procedure of issuing.

On the other hand, on the website of the MOEPP, there is a precise record of the issued A and B environmental permits, with all accompanying documentation. This site is updated every Friday. (MOE/Services/Integrated pollution prevention and control/Issued environmental permits).

In order to improve transparency towards the public in relation to issues in the field of industrial pollution, and in accordance with the obligations that Macedonia has as a signatory of the Protocol for Pollutants Release and Transfer Registers (PRTR), to the Aarhus Convention on Access to

Information, public participation in decision-making and access to justice in cases related to the environment – (AC), on the site <https://ripz.moepp.gov.mk/> relevant information is provided for 65 industrial activities covered in 9 industrial sectors. However, the internet (web) page is not constantly available, that is, it is not loaded on every http request through the internet browsers or the page loading in the internet browser has a long response time.

According to the draft law on the control of industrial emissions, the local self-government units are obliged to keep a register of B environmental permits, in accordance with Article 96, and they are also obliged to appoint at least one person in the local administration, who has a high level of professional training in the field of natural or technical sciences (Article 88). Although the first report indicated the need to strengthen the administrative capacities of the department for industrial pollution and risk management in the MOEPP, in the past period only one person with a secondary education (referent) was employed in the IPPC office, and the plan for 2022 foresees the employment of two advisors and one junior associate. There have been no new employments in risk management office in the past period neither new hires are planned until the end of 2022.

There is no information about the current members of the Scientific and Technical Commission for BAT, nor a current program for its work. The last published program of this commission is from 2010. The formation of this commission is an obligation according to the Law on Environment, and also according to the draft Law on Control of Industrial Emissions, where its obligations are stated in Article 39.

Regarding the informing of the affected public about the procedures for issuing permits and holding public hearings, although the legal obligation is respected, it is still mostly carried out formally and not essentially. Certain local communities that are directly affected by the operation of the installation are still not able to be informed through the announcement on the website of the MOEPP or in a newspaper that is available throughout the territory of the Republic of North Macedonia, and therefore it is necessary to inform them on another way (local media, local communities, etc.). As a result of these situations, it is often the case that the affected public reacts very late, i.e., when the operator actually starts the operational phase.

There is no data on which installations have submitted reports from the conducted monitoring that is determined in the permits. In Article 21 of the draft law on the control of industrial emissions, it is stated that "the results of the environmental monitoring owned by the operator and documents issued by the environmental inspection of the installations are public documents". In that direction, the register of pollutants is still being finalized, through which the reports from the monitoring of the installations will be available, i.e., published, while the reports from the inspections are already available on the website of the State Environmental Inspectorate in accordance with the obligation that this institution has under the Law on environmental inspection.

The lack of regular emissions monitoring reports (especially for B permits) also raises the questions related to the amount of the annual fee for obtaining an environmental permit and for regular supervision. There is no transparency regarding whether the funds from the special budget accounts to which the fees for the issuance of environmental permits are paid are purposefully spent. Namely, in accordance with the Law on Environment, the MOEPP has no obligation to publicly reports these data and the information can be obtained only upon a written request referring to the Law on Free Access to Public Information. Transparency in this segment has not been improved even in the new proposed law on the control of industrial emissions. Namely, it is stated what exactly these funds can

be spent on, which are poured into special purpose accounts, but without stipulating an obligation to publish them either regarding the total amount collected, or regarding how they are spent. These issues were also addressed in the first shadow report on chapter 27, but they were not included as a legal obligation in the draft law on the control of industrial activities. In such circumstances, i.e., in the absence of a legal obligation, an improvement in transparency in this segment on a voluntary basis could not be expected.

By inspecting some of the issued environmental permits, it was noted that the municipalities have largely exceeded the deadlines for issuing permits. In determining the limit values, different criteria were used, different monitoring conditions were defined for installations that belongs to the same industrial activity, or parameters were determined for monitoring substances that are not present in the installation. There is inconsistency in the quality and procedure of the issued B permits, which varies depending on the administrative capacity of the municipalities themselves. This situation also leads to the disruption of the economic conditions of work and competitiveness, which allows certain installations to have no or minimal costs related to environmental protection, compared to municipalities where there are better capacities for issuing B permits. The poor quality of the completed applications is often pointed out as one of the factors affecting the long terms in which permits are issued (remarks from the competent authority, revision and resubmission). Given that there are currently no legal restrictions in the form of authorizations and licenses, at the working meeting on Industrial Pollution and Risk Management, which was organized by the Center for Climate Change on 18.05.2022.<sup>20</sup>, in it was suggested to consider regulation in this sphere in the future, i.e., the introduction of certain certification for the consultants, i.e., the consulting houses for the preparation of applications for environmental permits.

To control and reduce emissions from large combustion plants, Macedonia has adopted the National Emission Reduction Plan (NERP) (obligation from the air sub-chapter), instead of complying with emission limit values on an individual basis. The energy production facilities MPC Bitola, MPC Oslomej and Energetika have not yet received the A environmental permits, though applications were submitted in 2007. The necessary amendments to the Environmental Law regarding the updating of the deadlines for issuing permits (2026 in accordance with NERP) were adopted in April 2022<sup>21</sup>. In the period until the end of 2022, the issuance of the A environmental permit for MPC Bitola is expected.

Regarding the consistent implementation of the "polluter pays" principle, the report of the European Commission notes again that there is no progress, which negatively affects the establishment of a quality system for preventing pollution and preventing industrial (chemical) incidents.<sup>22</sup>

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<sup>20</sup> <https://ckp.org.mk/%d1%80%d0%b0%d0%b1%d0%be%d1%82%d0%bd%d0%b0-%d1%81%d1%80%d0%b5%d0%b4%d0%b1%d0%b0-%d0%b7%d0%b0-%d0%b8%d0%bd%d0%b4%d1%83%d1%81%d1%82%d1%80%d0%b8%d1%81%d0%ba%d0%be-%d0%b7%d0%b0%d0%b3%d0%b0%d0%b4%d1%83/>

<sup>21</sup> Official Gazette of the Republic of North Macedonia, No.99, from 19<sup>th</sup> of April 2022

<sup>22</sup> European Commission (EC), 2022. COMMISSION STAFF WORKING DOCUMENT North Macedonia 2022 Report, Communication on EU Enlargement Policy <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52022SC0337>

## 7.4. Recommendations

According to the previous elaboration of the situation in the field of Industrial Pollution and Risk Management, as well as the advantages and weaknesses observed in the past one-year period after the publication of the first shadow report on Chapter 27, the following recommendations can be pointed out:

- Further improvement of the efficiency in the process of preparation and adoption of the Law and by-laws that regulate this area
- Political will for reforms and implementation of the merit system in employment and promotion of the staff in the competent institutions
- Greater progress in the implementation of polluter accountability, as well as consistent application of the "polluter pays" principle
- Greater cooperation and exchange of knowledge and experiences among the responsible officers for environmental permits at the central and local level
- Mandatory appointment of a responsible person for issuing B environmental permits in the municipalities
- Cooperation among municipalities and transfer of knowledge and experience, as well as providing assistance to those with less developed capacities for issuing B environmental permits
  
- Greater involvement of the competent institutions (MOEPP, Directorate for Protection and Rescue and the concerned municipalities) in relation to relevant international experiences and practices for the preparation of the SEVESO III directive. In that direction, regional networking and professional contacts are of particular importance.
- Establishing practices of regular communication with the affected public (especially at the local level) whenever certain deviations are determined in the operation of the installations compared to what is prescribed in the permits.
- Formation of a new Commission for BAT within the legally prescribed period, involving professionals with experience in various industrial branches, i.e., technological processes.
- Transposing the Medium combustion plants (MCP) Directive (EU/2015/2193) as soon as possible
- Ensuring transparency regarding the amount of funds collected from the fee for issuing environmental permits and tax for the production of energy from fossil fuels, as well as the way they are spent. In order to improve accountability, and taking into account the lack of funds for the environment, as well as suspicions of corrupt behavior and citizens' mistrust of institutions in general, this should be foreseen as a legal obligation in the next amendments to the relevant laws.
- Ensuring better quality of applications for environmental permits, through the introduction of appropriate licensing/certification of the companies/experts that prepare the permits.
- More frequent consultative meetings and meetings between the competent institutions, civic organizations, the business community and the affected public in

order to collect information for further actions and improvements, through an inclusive and integrated approach (for example by planning regions)

- Strengthening the role of the media through their greater cooperation with the civil sector, with the aim of preparing analytical texts and research stories that will point out certain shortcomings, but also examples of good practice in the behavior of industrial facilities and in the behavior of competent institutions.

## 8. Nature protection

### 8.1. Main findings from the First Shadow Report

The first shadow report was of particular importance because it provided an overview of the national legislation's current level of compliance with EU legislation, of the country's obligations related to the implementation of EU directives for the protection of wild species and habitats of European importance, as well as the country's efforts to implement European legislation through various initiatives and programs for research and nature protection.

The main obligations of EU legislation relating to nature protection derive from the two most important directives – the Birds Directive (2009/147/EC)<sup>23</sup>, which is transferred to a high degree into the national legislation (84%), and the Habitats Directive (92/ 43/EEC) which is transferred to a medium degree (55%). These two directives represent the basis for the establishment of the ecological network Natura 2000, which should ensure the protection of species and habitats of European importance.

In addition to the two main directives, in the field of nature protection the EU Acquis also works with the following acts: Regulation on trade with endangered species of animals and plants (338/97/EC), known as CITES, which regulates the implementation of the Convention on International Trade in Endangered Species of Wild Fauna and Flora at an EU level and the Leg Trap Regulation (3254/91/EEC) which regulates the use of leg traps that are transferred to a high degree. However, the Zoos Directive (1999/22/EC)<sup>24</sup> which confirms/regulates the role of zoos in the protection of biological diversity is transferred to a low degree.

One of the *priorities in legislation* that was identified is the adoption of a new Law on Nature Protection, including the planned by-laws. It is necessary to revise the Lists of strictly protected and protected wild species of plants, fungi and animals, as well as to harmonize them with the types of game and the hunting seasons included in the Law on Hunting. In fact, in addition to hunting, compliance with related sectoral laws (forests, pastures and water) is necessary, which includes the incorporation of some of the provisions of the EU Directives into the sectoral laws. In the recommendations, the need to draft a special law to regulate trade in endangered wild species of plants, fungi, and animals was also mentioned.

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<sup>23</sup> Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds which replaced Directive 79/409/EEC

<sup>24</sup> Council Directive 92/43/EEC as of 21 May 1992 on the conservation of natural habitats and of wild flora and fauna

From the aspect of *implementation of the national legislation*, emphasis is placed on the need to intensify field research to collect data on species and habitats that are of European importance, and to continue with the preparation of red lists for the rest of the taxonomic groups. Continuing with the identification of future Natura 2000 areas, finalizing the process of re-proclamation of protected areas (proclaimed before the adoption of the Law on Nature in 2004), expanding the network of protected areas, drawing up and carrying out management plans for all protected areas, as well as establishing a centre for the care of wild animals, are equally important recommendations.

For the appropriate implementation of the legislation, it is imperative to improve the capacities of the Ministry of Environment and Physical Planning (MOEPP), the State Environmental Inspectorate, related sector inspectorates, public prosecutors' offices, courts, and the Customs Administration. It was identified that there is a need to establish an expert body for nature (Institute or Agency) as a separate entity that would coordinate and implement activities related to nature conservation, establishment of the network of protected areas and Natura 2000 areas, etc. In order to raise the insufficient public awareness regarding protected areas and Natura 2000 areas, it is necessary to carry out different campaigns, informative and educational activities at different levels.

The final conclusion is that it is necessary to improve *intersectoral communication and cooperation* on different levels, to support the overall work for the management of protected areas, as well as to cooperate with various associations of citizens and scientific institutions. In order to realize this support, it is necessary to secure *funding* for efficient management of the existing and future protected areas, that is to say, sufficient means for the state funding of the protection of biodiversity.

## 8.2. Progress in the harmonization of the national legislation with European legislation

In the past year, no progress has been recorded in terms of harmonizing the **Law on Nature Protection** (as the basic law that regulates this area) with EU directives and regulations on nature protection. Namely, the drafted law from 2017 is in the phase of intersectoral harmonization and it is not yet available for public comments.

In order to effectively regulate the trade in endangered wild species of plants, fungi, and animals, the MOEPP decided to regulate this issue with a special law, for which a gap analysis was made and the drafting of an appropriate law was initiated within the framework of the IPA II project "Improving the capacities for Natura 2000 and CITES".

Considering that the area of nature protection is multisectoral and should be included in several legal documents, it is necessary to mention other sectoral laws. Namely, a draft **Law on Forests** was prepared with the support of the EU IPA project "Support for the Reforms in Forestry Policies and Legislation in North Macedonia", which introduces the principle of close to nature forestry. The working group included representatives from the various institutions/organizations and a stakeholder consultation process was carried out.

The draft **Law on Pastures** was prepared and submitted to the procedure of the Government of the Republic of North Macedonia for adoption, but it was withdrawn for finalization due to numerous shortcomings pointed out by several institutions. It is unknown what stage of development it is currently in.

A new **Law on Hunting** is also being drafted, but the whole process is conducted in a non-transparent manner and there is still no draft version available for public comment.

The Department of Spatial Planning of the MOEPP has begun working on a draft **Law on Spatial Planning** together with the Macedonian Ecological Society – MES through the project “Increasing Connectivity Along the Balkan Green Belt”, in which the concept of Green Infrastructure will be incorporated.

In the amendments and additions to the **Criminal Code**, additional provisions related to environmental crimes have been incorporated, but the most significant ones refer to the fact that the penalty for environmental crime has been doubled, and destruction of a dwelling is now considered a criminal offense, punishable with a prison sentence of up to three years. In addition, it is expected that the Standard Operating Procedures (SOP) for environmental crime will be defined in the new **Law on Environmental Inspection**.

A revision of the **Law on Water** has begun, with some of the foreseen changes being particularly significant for the protection of biodiversity, such as the introduction of a new goal for “ecological flow”, the implementation of water monitoring, a regulated way of extracting sand, gravel, stone, etc. Amendments to the Water Law should enter the parliamentary procedure at the end of 2022, after which six by-laws will be adopted. From the aspect of nature, it is important to prepare the Plans for the management of river basins in the Republic of North Macedonia.

The process of drafting a **Law on Soil** has begun with the involvement of various stakeholders, while a draft law is expected to be prepared at the end of next year, and the deadline for the adoption and formalization of that law is expected to be in the first quarter of 2024.

### 8.3. Implementation of Legislation

In the past year, the amount of realized and initiated activities related to nature protection within the framework of various projects indicates an increased level of implementation of the Law on Nature Protection, but it is still insufficient for the implementation of EU legislation.

A contribution to the **establishment of the Natura 2000 network** was made through activities in the Eastern Planning Region (IPR) within the framework of the Nature Conservation Program in North Macedonia (NCP), whereby Standard Data Forms (SDFs) were developed and/or supplemented for the three proposal Natura 2000 areas from IPR – Ovche Pole, Dolna Bregalnica and Maleshevski Mountains. Two draft plans for the management of the future Natura 2000 areas Dolna Bregalnica and Ovche Pole are in the final stages of development.



*Figure 3. The newly declared Protected Area "Maleshevo" and future Natura 2000 area*

In order to supplement the Natura 2000 network in North Macedonia, the IPA II project "Strengthening the Capacities for Natura 2000 and CITES" has been launched, through which 11 new proposals for Natura 2000 areas will be developed. With that, the national network of identified Natura 2000 areas will include a total of 24 areas with a total of 25 completed SDFs. In 2022, by analyzing the data collected in the period 2015-2018, a new proposed area was identified that meets the criteria for the identification of a SPA-Special Protected Area according to the Birds Directive (forest habitats on the mountain Plackovica), but additional research and data collection is needed for filling in the SDFs.

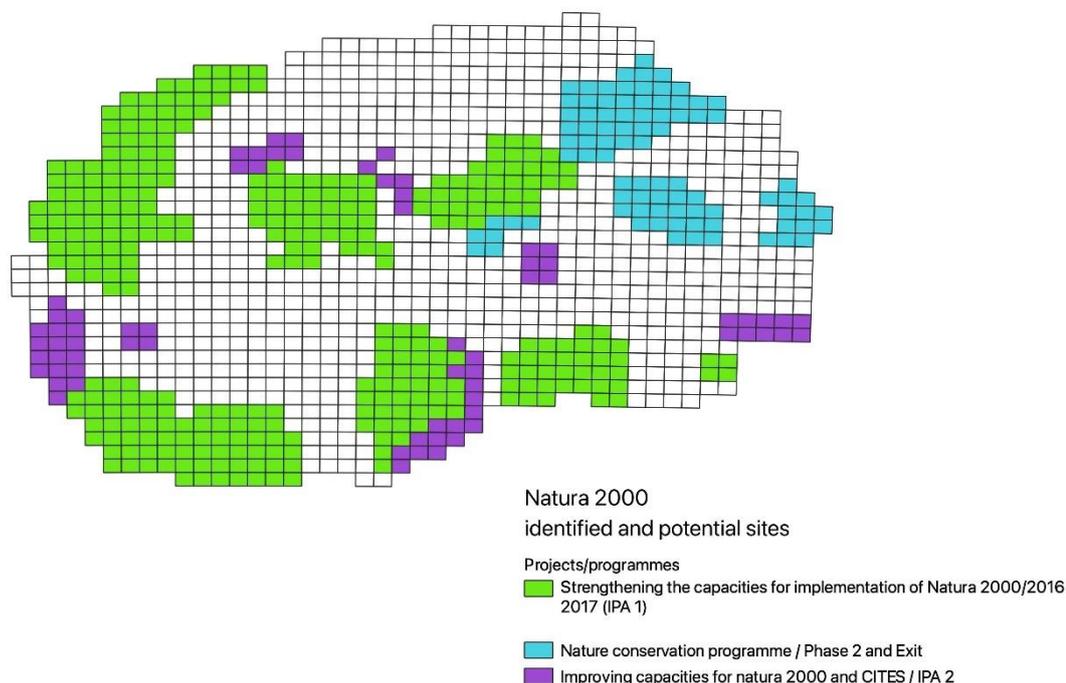


Figure 4. Proposed Natura 2000 areas developed in previous projects which will need to be developed within the IPA II project

In the Republic of North Macedonia, a lot of progress has been recorded in the **increase of the network of protected areas** in the past two years, which currently covers 13,9% of the country's territory. After the proclamation of the Protected Area "Osogovo Mountains" in 2020, the National Park (NP) "Shar Mountain" and the Protected Area "Maleshevo" were proclaimed in 2021, and a part of Vodno was re-declared as Category V – protected area. In addition, procedures for the declaration of Studenchishko Blato and Belchishko Blato were started, alongside the declaration of the Natural Monument "Matka Canyon". The fact remains that the network of protected areas is still in a transitional phase because it also includes areas that were declared according to the old categorization system (from 1973), that is, they have not been re-declared in accordance with the obligation prescribed in the Law on Nature Protection from 2004 and do not conform to the IUCN categorization. Consequently, the number of protected areas listed in different documents is different (82 areas published on the website of the MOEPP, 86 areas listed in the Sixth National Report to the Convention on Biodiversity, etc.).

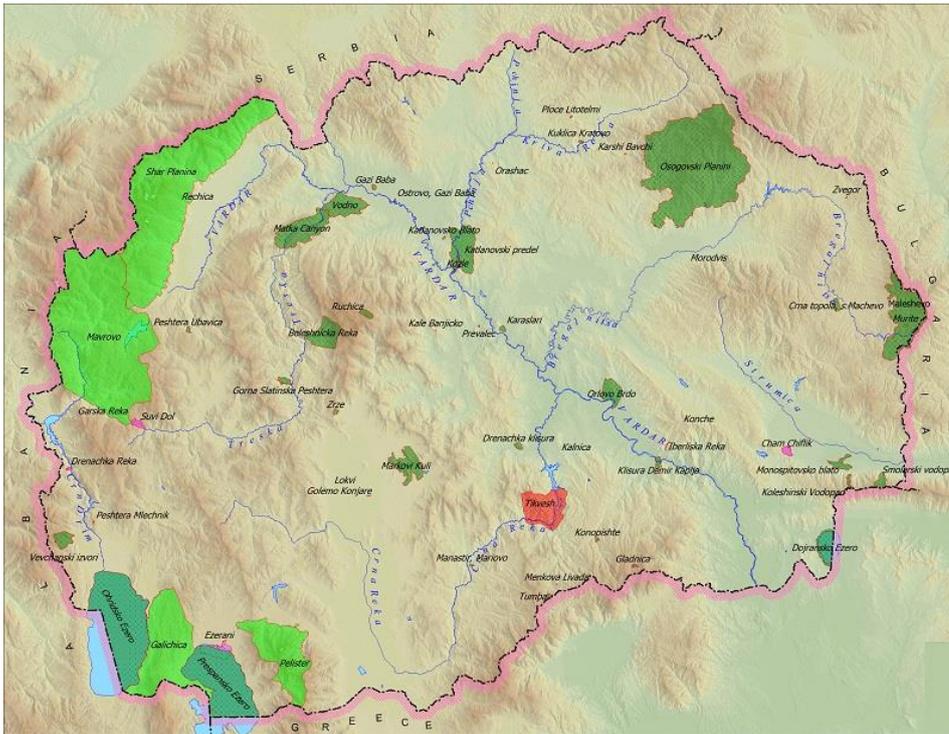


Figure 5. National Protected Areas in the R.N. Macedonia (Source: MOEPP, 2021)

The establishment of the managing bodies for the new protected areas was supported through supplying the appropriate equipment and conducting trainings for PE National Forests (as the manager of PA Osogovo Mountains and PA Maleshevo) with the support of the Swiss Programme for Nature Conservation. A Management Plan for the new protected areas PA “Osogovo Mountains” has been drawn up (and already adopted), as well as a draft Management Plan for PA “Maleshevo”. For NP “Shar Mountain”, UNEP/the GEF STAR 5 project provided support for the development of a Management Plan, which is currently in the adoption phase. The management plan for NM “Prespa Lake” has not yet been adopted. PONT provides regular support to the subjects for the management of protected areas in the Prespa region, and this year it expanded its influence through the Ohrid region, NM “Vevchani Springs”, NP “Mavrovo”, and NP “Shar Mountain”, as well as two larger areas for maintaining connectivity. Still, a large amount of the protected areas still do not have nominated managers, appropriate zoning and/or Management Plans.

A **draft reference list of habitats** of European significance at the national level (according to annex I of the Habitats Directive) which includes 51 types of habitats, was prepared in 2016 and supplemented during 2020 through activities within the framework of the PZP project phase II. This list is being updated within the framework of the IPA II project for Natura 2000 and CITES and it includes 58 habitat types. In addition, during 2022 activities were started for the creation of a **map of habitats**<sup>25</sup> which will be very significant in the future for the planning and development of infrastructure projects on the territory of the Republic of North Macedonia. The degree of accuracy of habitat mapping should be up to level three according to the European classification of habitat types (EUNIS). The final version of this map should be ready in the first half of 2023.

<sup>25</sup> Within the framework of the project “North Macedonia: Biodiversity & Natural Habitats Mapping”, financed by the European Bank for Reconstruction and Development

An audit of the condition of the habitats around Prespa Lake was carried out during 2022 when the recordings taken by a team of experts from the Macedonian Ecological Society using a drone were processed in detail. Ortho-photographic recording of Prespa's coast was conducted during 2021. The purpose of this audit was to determine the changes in the mosaic of habitats, as well as the degree of transformation of habitats compared to the situation in 2018 when a detailed map of habitats was prepared by a team of experts from the R.N. Macedonia and the R. of Greece<sup>26</sup>. The finalization of this map should be completed by the end of 2022, and the data obtained from it will be used for the next four-year planning for the management of natural resources in the Prespa region.

Through the monitoring of forest species of animals and plants in the past years, 188 areas with **High Nature Value Forests**<sup>27</sup> (covering an area of 55,988 ha) were identified, but only 30% of these sites are already protected. In addition, draft management plans have been prepared for two pilot areas with such forests on the mountains Belasica and Bukovikj.

The identification of ecosystem services (ES) and the prescription of recommendations/measures for improvement of five municipalities in the north part of the country<sup>28</sup> continued, and so did the introduction of the ECU plan for payment in the pilot region Nature Monument "Vevchani Springs" as a part of the Swiss Program for Nature Conservation in North Macedonia.

In the Prespa region, in the past few years, pilot activities have been undertaken to improve the condition of wet ecosystems by determining the condition, conducting monitoring, and implementing appropriate restoration and management measures in two types of wet ecosystems – alder forests and wet meadows.

**Alder forests** are a priority habitat type (91E0 Alluvial forests with *Allnus gutinosa* and *Fraxinus excelsior*) according to the Habitats Directive, and have a limited distribution at a national level. From an ecological perspective, these forests have a major role in regulating coastal zones by regulating land erosion, flooding and partial filtration of pollutants, as well as supporting biodiversity. Given that alder forests are on a declining trend, in the region there are various activities for revitalization, awareness raising on the importance and the need to protect these forests, as well as the application of nature-based solutions for forestation. Up until now, an area of 0.8 ha has been revitalized in NP "Ezerani" through forestation with alder seedlings, which are regularly cared for by the rangers of the protected area in cooperation with the PE National Forests.

Four types of wet habitats have been identified in the Prespa region, one of which is in the Habitats Directive (6420 Mediterranean tall humid grasslands of the Molinio-Holoschoenion). The team of experts determined a significant decrease of the area of wet meadows due to successive changes and anthropogenic pressure, and because of this, awareness raising activities for the local population were started regarding the importance of meadows and measures for managing a part of the surfaces that fall under wet meadows with

<sup>26</sup>Fotiadis G., Melovski L., Sakellarakis F.-N., Pejovic S., Avukatov V., Zaec D. & Pantera A. 2018. Assessment and mapping of the Great Prespa Lake wetland habitat types in the FYR of Macedonia - Final Report. TEI of Sterea Ellada, Society for the Protection of Prespa, Macedonian Ecological Society, 45p. (+ Annexes)

<sup>27</sup> Within the framework of the UNEP/GEF STAR 5 project "Achieving Biodiversity Protection Through the Creation and Effective Management of Protected Areas and Integrating Biodiversity in Land Use Planning"

<sup>28</sup> Within the UNEP/GEF STAR 6 project "Land Use and Assessment of Ecosystem Services for Forest and Grass Ecosystems in the Pilot Locations in the North-Western Part of North Macedonia"

the method of mowing meadows and producing hay for feeding livestock. Pilot activities for mowing wet meadows were implemented in order to slow down the successive changes affecting meadow communities that have a very high capacity for biodiversity. During 2022, about 6 hectares were mowed and about 1,400 bales of hay were produced, which were donated to the Deer Breeding Center at NP "Galichica" and local ranchers who raise mainly cows, sheep, and goats.

A certain amount of data on the presence or absence of species in certain areas, population status, and threats have been provided from the conducted monitoring activities of various species from the annexes of the birds and habitats directives during 2022. The list of implemented monitoring activities includes:

- monitoring of wild species (birds, reptiles, amphibians, plants, mammals, and insects) was carried out within the framework of the new protected areas and other important areas (Malesevo Mountains, Belasica, Jablanica and Bukovikj), in order to supplement the knowledge of the state of wildlife populations in their territory;
- monitoring of the Balkan lynx in NP Mavrovo and its wider range of distribution (in the Multi-Purpose Area "Jasen" and the pilot hunting grounds in the western part of North Macedonia);
- census of wild goats in NP Galichica and NP Mavrovo;
- research on small mammals, bats, and marbled polecats in the south of the country;
- research on the corridors for the brown bear at a cross-boundary level in the Prespa region;
- continuation of the program for the reintroduction of the red deer in NP Galichica
- monitoring of several types of plants, butterflies, amphibians, birds and ungulates on the territory of NP Galichica;
- detailed research of colonial nesting waterfowl species on Prespa Lake, as well as monitoring of the number of wintering waterfowl throughout the country;
- new research on the ecology of several bird species – the nesting colony of the great cormorant on the island Golem Grad (from the aspect of following their diet) and the nesting ecology of the rock partridge in NP Galichica through monitoring their use of space with the help of GPS locators;
- monitoring of the nesting colonies and nesting success of the griffon vulture and the Egyptian vulture, respectively;
- continuation the population surveys of reptiles on the island of Golem Grad, which have been carried out for 15 years;
- monitoring of the condition and natural restoration of riparian ecosystems in Dolna Bregalnica and in the Prespa region;
- research was carried out on the flora, habitats and landscapes of Jablanica;
- monitoring of the wet meadows of the Osogovo Mountains, Shar Mountain and in the Prespa region (Nature Park "Ezerani");
- revitalization of the alder forests in the Prespa region; and
- monitoring of the caves in the Prespa region and education about their importance as an ecosystem.

Most of these surveys of species in the above-mentioned areas and regions are not systematic (except for the Balkan lynx and some bird species), therefore the data obtained are not sufficient to propose suitable Natura 2000 areas for their protection, i.e. maintaining them in a favorable state of conservation. Data on conducted monitoring activities are also collected through nature research permits issued by the MOEPP, NGOs, scientific institutions, etc. that conduct research in nature, but not all subjects submit a request for a permit and not all submit a report of the conducted research. A pilot activity for the establishment of citizen science with the aim of monitoring the condition of some species and habitats was carried out in SP “Vevchansi Springs” through the use of the application ‘I naturalist’ and the involvement of students from Vevchani. This can be a good tool for providing additional data for some species of European or national importance and supplementing biodiversity monitoring activities. Storing and managing data in an appropriate database is a long-standing problem, and a National Information System for Nature has not yet been established.

A draft national **reference lists for species** was made in accordance with Annex II of the Habitats Directive and Annex I of the Birds Directive that were developed in 2016. As an initial activity within the framework of IPA II, the project for Natura 2000 and CITES served as their revision, and they now include 109 species identified according to the Habitats Directive and 126 bird species from Annex I of the Birds Directive.

The first national **Red Book** of reptiles<sup>29</sup> has been made, while the national Red Book of amphibians is in the final stage of preparation.

From the perspective of direct protection of wild species, installation of **insulators for medium-voltage power lines** in Ovche Pole has been carried out, as a measure to protect the birds of European and world importance that are found there. A total of 180 individual transmission poles have been isolated.

Environmental crime and the loss of protected animal species due to **the illegal use of poisons in nature** are a serious threat to biodiversity. The formed National Working Group for the fight against poisons at the Ministry of Environment and Physical Planning was formalized and is working on the adoption of an Action Plan for the fight against poisoning of wild animals, as well as prescribing a Standard Operating Procedure (SOP) for investigating cases of poisoning of wild animals. Equipment was also procured and trainings were conducted for representatives from the Veterinary Institute for performing toxicological analyses and autopsies.

**The collection and trade of endangered wild species** of plants, fungi and animals is still a major challenge; the illegal collection of wild plant species is particularly represented in the border regions along the Macedonian-Albanian border (noted in the boundaries of NP “Mavrovo” and NP “Shar Mountain”, and probably also on Mount Jablanica). Within the framework of the IPA II project for Natura 2000 and CITES, a complex training program for the implementation of CITES is foreseen for the various competent institutions, which will help strengthen their capacities and ease their handling of the illegal trade in wild species.

In relation to the construction of hydropower plants in protected areas, no cumulative analysis of the impact of hydropower plants on biodiversity in a protected area has been done so far. However, a step forward was made by terminating the contracts for the construction of 7 small hydropower

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<sup>29</sup> Within the framework of the UNEP/GEF STAR 5 project “Achieving Biodiversity Protection Through the Creation and Effective Management of Protected Areas and Integrating Biodiversity in Land Use Planning”

plants located in the zones of strict protection and active management in the newly declared NP “Shar Mountain”, which was recognized as good progress by the Berne Convention for the implementation of Recommendation no. 211 of 2021.

The quality of EIA and SEA studies for different infrastructure projects is different (the rules are primarily set by the financier) and mainly only the protected areas are taken into account, but not the areas included in the National Emerald Network or the identified future Natura 2000 areas. There are cases of the Ministry of Agriculture, Forestry and Water Management issuing concessions for agricultural production and fish ponds within the boundaries of protected areas without approval from the Ministry of Environment and Physical Planning, or the Ministry of Economy issuing concessions for wind power plants, photovoltaics, hydro plants and mines before having completed an EIA procedure. Additionally, municipalities give approval for projects in protected and future Natura 2000 areas based on reports, that is, they are probably not informed about the importance of the area, and the procedure bypasses the active involvement of the public.

The creation of appropriate planning and strategic documents that adequately treat nature protection is particularly important for effective biodiversity conservation. To that end, it is necessary to mention the activity started for the preparation of a special study for nature protection (including a study on forests and forest land, climate change, agriculture and agricultural land) for the needs of the new Spatial Plan of the Republic of North Macedonia until 2040. The current strategic documents for nature protection – Nature Protection Strategy (for the period 2017-2027) and the National Biodiversity Strategy with an action plan (for the period 2018-2023) were analyzed in terms of the fulfillment of the measures/activities from the action plan and show a good degree of fulfillment. A new National Strategy for Agriculture and Rural Development for the period 2021-2027 has been adopted. In addition, a process of revising the National Strategy for Sustainable Development in Forestry was carried out and a draft version was prepared, which should be put into the adoption procedure next year.

### **Financing/Funding**

Providing adequate financial resources and mechanisms for nature conservation is still a big challenge in the country – it’s primarily activities/projects supported by various foreign donors that are implemented (the support from the Governments of Switzerland and Germany, the Prespa-Ohrid Nature Fund, European funds, GEF and others), but the payment mechanism for ecosystem services is being tested in the “Vevchani Springs”<sup>30</sup> Nature Monument, which could help in securing finances for the functioning of the protected areas. The recommendation from the Bern Convention (211/2021) to provide funds from the state budget for the basic functioning and management of national parks remains unfulfilled.

With the Annual Program for Nature Protection for 2022, adopted by the Government of R.N. Macedonia in February 2022, funds in the amount of 52,604,730.00 denars were allocated, which were provided by:

- The budget of the Republic of North Macedonia for 2022, in the amount of MKD 1,500,000.00,

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<sup>30</sup> Within the framework of the Swiss Program for Nature Conservation in North Macedonia

- A larger part of the budget was provided by donor funds from ongoing multi-year projects of the Ministry of Environment and Physical Planning (GEF/UNEP STAR 5, SDC Program for Nature Conservation in North Macedonia and EU IPA II project for Natura 2000 and CITES) in the amount of 51,104,730 denars.

Financing, co-financing and implementation of programs, projects and other activities in the area of the environment are supported through the Program for investment in the environment (according to Article 172 of the Law on the Environment). For the year 2022, (Official Gazette of RNM No. 33/2022) 98,000,000.00 denars were approved, of which only 5,000,000.00 for the protection of nature and biological diversity and 1,000,000.00 denars for supporting measures and activities for the protection and promotion of nature, but these are small and short-term interventions.

A detailed analysis of the needs and possibilities for the establishment of an Environmental Fund was made in 2022 with the support of the GEF Small Grants Program.

**The administrative capacities** of the Department of Nature at the Ministry of Environment and Physical Planning are still insufficient to implement all the obligations arising from the implementation of the EU legislation, as well as the management of the negotiation process. The lack of administrative capacities is particularly evident in the absence of an expert body for nature protection that would exclusively deal with the assessment and monitoring of natural wealth and biodiversity, submitting reports and proposing protection measures. The capacity of the State Environment Inspectorate, with only two nature inspectors, is insufficient to undertake appropriate field inspection. The capacities of local self-governments for the implementation of nature legislation are even weaker, as is the case in other relevant institutions – the Customs Administration, the police, prosecutor's offices, courts, etc.

On the other hand, the established National Council for Nature Protection under the Ministry of Environment and Physical Planning functions properly with regular sessions, and the Council for Agriculture and Rural Development under the Ministry of Agriculture, Forestry and Water Management was renewed.

## 8.4. Recommendations

In accordance with the previously presented information on the progress in the field of nature protection in the past one-year period and with an overview of the recorded priorities and shortcomings, the started and planned projects in the field of nature protection, recommendations for improving nature conservation have been singled out and grouped into several categories.

### 8.4.1. Alignment of National Legislation with EU Legislation

- to speed up the process of revising and adopting the Law on Nature Protection and the corresponding by-laws;
- to draft a new Law for the regulation of international trade in endangered wild species;
- to adopt a new Law on Forests;
- to revise the Laws on pastures and hunting through the inclusion of appropriate expertise in the field of nature protection;
- to intensify the drafting of the Law on Soils;
- to draft and adopt the Law on Spatial Planning;

- to prepare a Study for the protection of nature for the needs of preparing a new Spatial Plan of the Republic of North Macedonia for a period of 20 years;
- to adopt an Action Plan of the working group for the fight against poisons;
- to propose appropriate subsidies for the management of grass ecosystems in areas with limited opportunities; and
- to start the development of agro-ecological measures (through the IPARD III program) which will also include the areas of Natura 2000.

#### 8.4.2. Implementation of Nature Legislation

- to speed up the process of collecting data for new potential Natura 2000 areas and filling in appropriate SDFs;
- to speed up the preparation of the Study for the revaluation of the “Mavrovo” National Park, which will serve as the basis for the implementation of the procedure for re-promulgation and adoption of the Law on the “Mavrovo” National Park, after which a Management Plan and a Spatial Plan for the park would be drawn up;
- to speed up the process of declaring new protected areas (Studenichishko Blato and Belchishko Blato) and re-proclaiming other protected areas (e.g. Matka, Demir Kapija, Tikvesh, Katlanovsko Blato, etc.) that were declared before 2004, in accordance with the prescribed obligation in The Law on Nature Protection, which should have been completed a long time ago;
- to adopt management plans for the protected areas NM “Prespa Lake” (which is awaiting approval), NM “Malesevo” (which has a draft plan), NP “Mavrovo” (the draft plan was not adopted, it is outdated and needs to be completely revised), NP “Matka” (the drafted plan is out of date), NP “Ezerani” (the management plan is expired and needs to be revised by the manager – Municipality of Resen), NP “Studenichishko Blato”, NP “Belchishko Blato”;
- to accelerate the process of updating the national Action Plan for the preservation of the Balkan lynx;
- in the period from the identification to the declaration of Natura 2000 areas in the country, infrastructural projects in and around the potential Natura 2000 areas should be limited in order not to destroy important European habitats (Amzabegovo case study);
- to create a map of residences for Macedonia in accordance with the EUNIS classification;
- to speed up the implementation of Recommendation No. 211 from the 2021 Permanent Committee of the Berne Convention in connection with the open case of 2013 “NP Mavrovo and the planned hydroprojects on its territory”, in particular for taking steps to cancel the remaining three concessions in the NP “Mavrovo” (MHE Zhirovnica 5 and 6 and MHE Ribnichka) and implementing a process of re-proclamation of NP “Mavrovo”;
- to speed up the implementation of the recommendations of the UNESCO Committee for the Ohrid region (in August 2021, an additional period of two years was given for their implementation), especially in the area of infrastructure facilities for which the Standing Committee of the Berne Convention opened a case in December 2021 for the two Emerald areas – NM “Ohrid Lake” and NP “Galichica”;
- to continue monitoring designated species (such as the Balkan lynx, the brown bear, the Egyptian vulture, the griffon vulture, the red-headed pelican) and habitats (such as the priority Mediterranean wet meadows with tall herbaceous plants and alder forests), while for the

habitats that extend to the cross-border level, it is necessary to harmonize monitoring protocols and take coordinated measures for their proper management and maintenance;

- it is necessary to prepare a list of invasive species (from all taxonomic groups) with a distribution map at the national level and to propose measures to reduce or prevent their distribution and expansion;
- to continue with the preparation of red lists of affected species for other taxonomic groups;
- to establish a national information system for nature and to connect it with other such information systems (for forests, soils, waters, etc.);
- to continue with measures to isolate dangerous electrical infrastructure in cooperation with EVN and MEPSO;
- to establish a center for the care of wild animals for which a feasibility study has already been prepared, and until its establishment, to develop a procedure for the temporary care of individuals of the priority species for protection;
- to incorporate measures for the management of High Nature Value Forests in the forest management plans;
- to harmonize the various obligations/initiatives for forestation with the aim to have coordinated activities and selection of appropriate indigenous species;
- to develop the areas for the preservation of connectivity (ecological corridors) and to start prescribing appropriate measures for their management;
- to continue with the identification of ES and the prescription of recommendations/measures for improvement, as well as introduction of ES payment scheme;
- to create a Register of pastures and harmonize the management of pastures in protected areas;
- to take measures for the preservation of traditional practices in livestock farming; and
- to encourage the introduction of agro-tourism (through traditional practices of growing local varieties and breeds) and other forms of eco-tourism.

#### *8.4.3. Strengthening Capacities*

- it is necessary to further strengthen the capacities of the Ministry of Environment and Physical Planning (Nature Department, Water Department, etc.) and other state institutions for the implementation of nature protection legislation, especially related to the implementation of the two directives on habitats and birds and the Regulation on International Trade in Endangered Species and their derivatives;
- it is necessary to strengthen intersectoral cooperation in order to effectively implement the EU legislation on nature;
- to include representatives from the NGO sector in the negotiation teams in order to provide adequate information during negotiations;
- to hire additional inspectors for nature in the State Environmental Inspectorate;
- to strengthen the capacities of the Customs Administration and other entities involved in the trade of wild species of plants, fungi and animals;
- to take measures to prevent the use of poisons and to adopt standard operational procedures for dealing with cases of animal poisoning;

- to strengthen the capacities of PE National Forests as an institution responsible for the management of state-owned forests, for their maintenance and restoration through the application of nature-based solutions;
- to strengthen the capacities at the local level, especially in the municipalities that are responsible for managing a protected area or within whose borders there is a protected area;
- to develop the civil sector at the local level related to the management of national protected areas or internationally significant areas or ecological corridors; and
- to strengthen the environmental education of children by establishing a network for experiential learning

Raising **public awareness** among the population about various aspects related to nature protection (conservation of endangered species and habitats, opportunities to be involved in the management of PAs, establishment of the Natura 2000 network, involvement in “citizen science” for collecting data on biodiversity, taking simple measures for the management of some significant habitats, etc.) is a high priority. It is also important appropriately mark the protected areas and to provide accessible information for citizens and visitors about how to behave in nature.

Ensuring adequate financial means is necessary for taking effective measures for nature conservation. To that end, introducing innovative mechanisms for financing protected areas can help to provide the necessary funds for the implementation of management plans. If there is political will to establish an **Environment/Nature Fund**, it can provide partial financing of protected areas and the implementation of other nature conservation measures.

## 9. Chemicals

### 9.1. EU Legislation and international agreements on chemical management

The EU legislation on chemicals is extensive and covers about 40 acts, such as the Regulation on Registration, Evaluation, Authorization, and Restriction of Chemicals (REACH) and the Regulation on Classification, Labeling, and Packaging of Hazardous Substances (CLP), which are the main contributors. Accordingly, specific legislations regulate certain groups of chemicals, such as biocides and fertilizers, pesticides, detergents, pharmaceutical products, precursors, cosmetics, food, etc., including provisions related to environmental protection.

The purpose of the legislation is to provide better protection to citizens and the environment, but it also aims to accelerate innovation for safe and sustainable chemicals. More specifically, with its legislation, the European Union aims to:

- banning the most harmful chemicals in consumer products - allowing their use only where necessary,
- to take into account the cocktail effect of chemicals when assessing the risks of chemicals,
- phasing out the use of per- and polyfluoroalkyl substances (PFAS) in the EU, unless their use is essential,
- strengthening investment and innovation capacity for the production and use of chemicals that are safe and sustainable by design and throughout their life cycle,

- promoting EU resilience for the supply and sustainability of critical chemicals,
- establishing a simplified process of "one substance, one assessment" for assessing the risk and danger of chemicals,
- a leading role at the global level by advocating and promoting high standards and not exporting chemicals banned in the EU.

EU's chemicals legislation covers several areas, as shown in the table below.

Area/Sector	Legislation
Registration, Evaluation, Authorisation and Restriction of Chemicals	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), and 40 amendment
Classification, labelling and packaging	CLP regulation for classification, labelling and packaging of hazardous substances (EC) no 1272/2008 <sup>31</sup>
Regulation on Biocidal Products	The Biocidal Products Regulation (BPR, Regulation (EU) 528/2012) concerns the placing on the market and use of biocidal products, which are used to protect people, animals, materials or objects from harmful organisms such as pests or bacteria, by action of the active substances contained in the biocidal product. This regulation aims to improve the functioning of the biocidal product market in the EU, while ensuring a high level of protection for people and the environment.
The Prior Informed Consent Regulation	The Prior Informed Consent Regulation regulates trade in certain hazardous chemicals that are banned or severely restricted in the EU. It places obligations on companies that want to export these chemicals to non-EU countries or import them into the EU. PIC implements the Rotterdam Convention within the EU. It promotes shared responsibility and cooperation in the international trade in hazardous chemicals. It also protects human health and the environment by providing importing countries with information on how to safely store, transport, use and dispose of hazardous chemicals.
The Carcinogenic and Mutagenic Chemicals Directive	The Carcinogenic and Mutagenic Chemicals Directive (Directive 2004/37/EC) sets out the minimum requirements to protect workers from risks to their health and safety - arising or likely to arise - from exposure to carcinogens and mutagens at work. It establishes preventive and protective measures, as well as exposure limits.
The Chemical Agents Directive	The Chemical Agents Directive (Directive 98/24/EC) sets out the minimum requirements for the protection of workers from risks to their safety and health - arising or likely to arise - from the effects of chemical agents in the workplace or the use of chemical agents at work. It establishes indicative and binding limit levels for the working environment, as well as biological limit values.
Waste Framework Directive	WFD sets measures to deal with the negative impacts of the creation and management of waste on the environment and human health, as well as to improve the efficient use of resources that are key to the transition to a circular economy. As part of the implementation of the EU Circular Economy Action Plan, the revised Waste Framework Directive entered into force in July 2018. It carries the task of the

<sup>31</sup>[https://single-market-economy.ec.europa.eu/sectors/chemicals/chemicals-legislation\\_en](https://single-market-economy.ec.europa.eu/sectors/chemicals/chemicals-legislation_en)

Area/Sector	Legislation
	<p>European Chemicals Agency to develop a database with information on things containing substances of very high concern (SVHCs) on the so-called Candidate list. New substances are regularly added to the database, based on REACH.</p> <p>Companies that manufacture, import or supply items containing substances from the Candidate List must submit information about these substances placed on the EU market to the SCIP database, starting on 5 January 2021. These items can be manufactured in the EU or imported from non-EU countries. The information in the database can assist waste operators in sorting and recycling when items contain listed substances and support consumers to make informed choices and consider how best to use and dispose of such items. Overall, the database should contribute to the progressive replacement of SVHC in articles and the development of safer alternatives.</p>
Persistent Organic Pollutants (POPs)	<p>POPs are organic substances that persist in the environment, accumulate in living organisms and pose a risk to our health and the environment. They can be transported by air, water or migratory species across international borders, reaching regions where they have never been produced or used. International risk management is necessary because no single region can manage the risks posed by these substances alone.</p>
Revised drinking water Directive	<p>It aims to protect citizens and the environment from the harmful effects of contaminated drinking water and to improve access to drinking water. The directive introduces minimum requirements for materials in contact with water intended for human consumption across the EU. This harmonization contributes to achieving a uniform level of health protection for all EU citizens and improves the functioning of the internal market. Article 11 of the revised directive establishes the framework for minimum hygiene requirements for materials in contact with drinking water.</p>
Fertilizers	<p>Establishing rules for placing on the EU market products for fertilizing and amending Regulation (EC) no. 1069/2009 and (EC) no. 1107/2009 and repeal of Regulation (EC) no. 2003/2003</p>
Detergents	<p>REGULATION (EC) no. 648/2004 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 31 March 2004 on detergents</p>
Explosives	<p>Directive 2014/28/EU on the approximation of the laws of the Member States relating to the placing on the market and the supervision of explosives for civil use (recast), adopted on 26 February 2014 and applicable on 20 April 2016, replacing and repealing Directive 93/15/EEC.</p>
Good laboratory practices	<p>Directive 2004/9/EC of the European Parliament and of the Council of 11 February 2004 on inspection and verification of good laboratory practice (GLP)</p>
Drug Precursors	<p>Regulation (EC) no. 273/2004 of the European Parliament and of the Council of 11 February 2004 on drug precursors</p>
Mercury	<p>Regulation (EU) 2017/852 of the European Parliament and of the Council of May 17, 2017 on mercury, and repealing Regulation (EC) no. 1102/2008</p>

### 9.1.1. International agreements

Conventions such as the Stockholm Convention on Non-Degradable Organic Pollutants, the Basel Convention on the Transboundary Transport of Hazardous Wastes and Disposal, the Rotterdam

Convention on the Procedure for Obtaining Prior Consent for Certain Hazardous Chemicals and Pesticides in International Trade and Minamata Convention on Mercury, regulate the management of chemicals at the international level. The common goal of these conventions is to protect human health and the environment from hazardous chemicals and waste.

### **Stockholm Convention**

Persistent organic pollutants (POPs) are chemicals that remain unchanged for an exceptionally long time. As a result of natural processes involving water, soil, and air, they become distributed in the environment over large distances. In response to this global problem in 2001, the Stockholm Convention adopted provisions requiring member states to implement measures to eliminate or reduce POPs emissions in the environment.

Accordingly, to its provisions, the Convention classifies the POPs into three Annexes. The first one, Annex A of the Convention, contains POPs whose production and utilization are prohibited. The second one, Annex B, includes the POPs whose production and utilization are restricted, while the third one, Annex C, includes the unintentionally produced and released POPs. Initially, there were 12 POPs adopted at the Convention, and as of now, the list extends to 30 chemicals. While the original 12 POPs were chlorinated chemicals and had direct applications as pesticides or industrial chemicals, many of the recently produced POPs are integrated into products or are products such as fire extinguishers.

### **Basel Convention**

The Basel Convention was adopted in 1989 and entered into force in 1992. It is the most comprehensive global agreement on hazardous and other waste. The Convention's main objective is to protect human health and the environment from the detrimental effects linked to the creation, transboundary movement, and management of hazardous and other waste. The Convention covers a broad range of hazardous waste, including explosive, flammable, poisonous, infectious, corrosive, toxic, or ecotoxic waste, household-derived waste, and ash from waste incineration plants.

The Convention determines the categories of waste and the hazard characteristics in Annexes I, II, and III of its provisions.

The Convention complies with the following main objectives: reduction of the generation of hazardous waste and promotion of environmentally sound management of hazardous waste regardless of the place of disposal, restriction of transboundary movement of hazardous waste, except in cases where compliance with the principles of environmental management is considered, and the application of a regulatory system in cases where cross-border movement is permitted.

### **Rotterdam Convention**

Over the years, the global community has faced several issues regarding the international trade in chemicals and their management. In that direction, two initiatives emerged from the United Nations Conference on Environment and Development in 1992. One refers to a previously issued consent for certain hazardous chemicals and pesticides in international trade (henceforth PIC procedure), adopted in Rotterdam in 1998, while the second refers to persistent organic pollutants, adopted in Stockholm in 2001. According to the Rotterdam Convention, the countries which are importers of goods could decide whether they want to accept future shipments of certain chemicals. Moreover, the exporting countries must respect such a decision.

The Convention creates a legal obligation to implement a procedure for prior information (the above-stated PIC procedure). The Convention aims to promote shared responsibility between exporting and importing countries in protecting human health and the environment from the harmful effects of such chemicals and foresees an exchange of information on potentially dangerous chemicals that may be exported and imported.

### **Minamata Convention**

Mercury pollution is a global problem because it is carried over great distances through air and water and thus does not recognize borders between countries. The Minamata Convention was adopted in 2013 and entered into force in 2017. The implementation of this agreement aims to protect human health and the environment from anthropogenic emissions and discharges of mercury and mercury compounds. The Minamata Convention follows and is an extension of the Basel, Rotterdam, and Stockholm Conventions. Together with the other three conventions, it forms a comprehensive global regime for the sound management of chemicals and hazardous waste.

The convention establishes a framework that should be taken by the member countries to protect human health and the environment.

The framework aims to control the supply and trade of mercury, including restrictions on specific sources of mercury. Its purpose is to regulate mercury emissions and releases and contains procedures for the temporary storage of mercury and mercury waste.

### **Strategic Approach to International Chemicals Management**

SAICM - Strategic Approach to International Chemicals Management is a global initiative adopted at the International Conference on Chemicals Management held in Dubai from 4-6 February 2006. This initiative provides a global framework for countries aiming to achieve the goal of the World Summit on Sustainable Development Goals (SDGs) for good chemicals management by 2020. SAICM is composed of a High-Level Declaration (Dubai Declaration on International Chemicals Management), a Comprehensive Policy Strategy, and a Global Plan of Action.

The goal of good chemicals management is to apply best practices in the management of chemicals throughout their life cycle to prevent and, where this is not possible, reduce or minimize the potential for exposure of people and the environment to toxic and hazardous chemicals (i.e through pollutant emissions, use, disposal, etc.). This requires enhanced management and improved techniques and technologies in the production, use, storage and disposal or recovery of chemicals.

## 9.2. Compliance of national legislation with the EU legislation

The Law on Chemicals, adopted in 2010, regulates a broad framework. It includes procedures for risk assessment, classification, packaging, and labeling of regulated substances (or organisms), conditions for registration, evaluation, requirements for market intervention, restrictions of production, supply and use, application of good laboratory practices, as well as control and reporting on exports and imports.

The Law on Chemicals contributes to the reduction of the negative impact originating from chemicals utilization on human health and the environment by instituting a suitable system for the placement and use of chemicals concerning the danger and risk they possess and by establishing appropriate institutional capacities and creating administrative tools to achieve control of chemicals.

The Law on Chemicals complies with European legislation through the harmonization of the following regulations:

- The Regulation on the Registration, Evaluation, Authorization, and Restriction of Chemicals (REACH) (EC) no. 1907/2006 on the chemicals management system,
- Regulation (EC) no. 1272/2008 on classification, labeling, and packaging of substances and mixtures, Directive 98/8/EC on the placing of biocides on the market,
- Regulation (EC) no. 689/2008 on the import and export of dangerous chemicals and
- Regulation (EC) no. 648/2004 on detergents.

### 9.2.1. By-laws resulting from the harmonization of national legislation with European legislation

The following acts derive from the Environmental Law related to refrigerants (substances that deplete the ozone layer):

- Legal order prohibiting the trade with 1,1-dichloro-1-fluoroethane (HCFC 141b) and mixtures containing 1,1-dichloro-1-fluoroethane (HCFC 141b) („Official Gazette of the Republic of North Macedonia“ no. 111/21)  
This order prohibits trade with 1,1-dichloro-1-fluoroethane (HCFC-141b) and mixtures containing HCFC-141b.
- Legal order imposing a limitation on the import of substances that deplete the ozone layer („Official Gazette of the Republic of North Macedonia“ no. 111/21)  
The order should begin with a 50% reduction in 2021 and continue subsequently with a 6% reduction each year until 12/31/2027. The decrease from the previous paragraph is calculated considering the average of the imported quantities in the period from 2009 to 2010.
- Legal order prohibiting the distribution of chlorofluorocarbons (HCFCs) („Official Gazette of the Republic of North Macedonia“ no. 111/21)  
As of 01/01/2028, the import of HCFs is prohibited.
- Legal order prohibiting the distribution of refrigerants in disposable cylinders („Official Gazette of the Republic of Macedonia“ no. 140/13)
- Legal order imposing limitations on the import of air conditioning devices containing chlorofluorocarbons (HCFC) („Official Gazette of the Republic of Macedonia“ no. 92/10)  
This order limits the import of 20,000 air conditioning devices containing chlorofluorocarbons (HCFC) during the following period: 01.01.2011 to 31.12.2011.
- Legal order prohibiting the importation and exportation of products containing chlorofluorocarbons (HCFC) („Official Gazette of the Republic of Macedonia“ no. 92/10)  
As of 01/01/2012, the importation and exportation of products containing HCFCs in the Republic of North Macedonia are prohibited.
- Legal order imposing a limitation on the import of substances that deplete the ozone layer („Official Gazette of the Republic of Macedonia“ no. 92/10, 150/12)  
The order is achieved with a 5% annual reduction of HCFC imports starting from 01.01.2013 to 31.12.2020, whereby the total reduction will amount to 40% regarding the average import amounts during the period 2009 - 2010.

### 9.2.2. Compliance with International legally binding agreements

The Republic of North Macedonia has adopted international agreements on chemical management in the national legislature. The first one, Basel Convention, was ratified in 1997, followed by the Stockholm Convention in 2004, the Rotterdam Convention in 2010, and the Minamata Convention in 2020. In addition to the ratification, part of the obligations from the conventions are already present in the domestic legislation. For instance, the Law on Chemicals, the Law on the Environment, the Law on Waste Management, the Law on Ambient Air, the Law on Safety and Health at Work, and the Law on Phytopharmacy, including relevant subordinate legislation derived from them.

- ❖ The Stockholm Convention was ratified by the Law on the Ratification of the Stockholm Convention on Non-Degradable Organic Pollutants („Official Gazette of the Republic of Macedonia“ no. 17/04). The Basel Convention was ratified by the Law on the Ratification of the Basel Convention on Control of Transboundary Transfer of Hazardous Waste and Storage in 1997. The jurisdiction of these two conventions' provisions belongs to the Ministry of Environment and Spatial Planning.
- ❖ The Kigali Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer has been ratified by the Law on Ratification of the Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer („Official Gazette of the Republic of North Macedonia“ no. 34/20).
- ❖ The Convention has been ratified by the Law on Ratification of the Rotterdam Convention on the Procedure for Obtaining Prior Consent for Certain Hazardous Chemicals and Pesticides in International Trade („Official Gazette of the Republic of Macedonia“ no. 83/2010). The Ministry of Agriculture, Forestry, and Water Management and the Ministry of Health share the responsibilities of the convention's provisions regarding pesticide regulation and industrial chemicals, respectively.
- ❖ The Republic of North Macedonia signed the Minamata Convention on July 25, 2014, while ratification took place in 2020 with the Law on Ratification of the Minamata Convention on Mercury. The responsibilities of this convention's provisions belong to the Ministry of Environment and Spatial Planning.

The Republic of North Macedonia is a signatory in the international legally binding agreements regarding the ozone-layer depletion substances, persistent organic pollutants (POPs), and the Rotterdam Convention on the procedure for obtaining prior consent for certain hazardous chemicals and pesticides in international trade, as well as a party to the Convention for mercury (Minamata). In addition, the Republic of North Macedonia is a signatory in the regional legally binding agreements regarding persistent organic pollutants, heavy metals, and industrial disasters. For this purpose, specific legislation has been adopted that strengthens the control of the circulation of substances that deplete the ozone layer, and with the amendments to the Law on the Environment, the rules for the collection and recycling of refrigerants have been incorporated.

### 9.3. Main findings from for transposition of the legislation

The compliance of the obligations from the Basel and Rotterdam Conventions with the national legislation is satisfactory. Concerning the Stockholm Convention, certain chemicals are not incorporated yet, since they were introduced in the Convention later on. Regarding the Minamata Convention, certain shortcomings are expected to be overcome soon, with the adoption of the Law on Amendments and Supplements to the Law on the Environment and the subordinate legislature

arising from it, while some will be regulated by other laws and subordinate legislature that are identified in the GAP analysis for this Convention. In addition, it is necessary to adopt a national plan for the implementation of the obligations of this convention, which is expected to be adopted in the next 2 years.

In terms of POPs regulation, the transposition will be completed once Regulation (EC) no. 850/2004 is adopted. Following the above-stated and covered by the National Action Plan for the safe management of chemicals, it is necessary to strengthen the control of access to chemicals on the market. In addition, it is crucial to improve the information about the chemicals present on the market through the Global Harmonized System, improve the safety of chemicals and protect the health of the occupational and general population exposed to chemicals. Furthermore, the augmentation, application of good agricultural practices, and the establishment of a legal framework regarding high-risk areas in contaminated sites and obsolete stocks are required.

The legislation in the field of chemicals requires further approximation through the adoption of bylaws arising from the Law on Chemicals. It is of utmost importance adoption of the new Rulebook for the manner of classification and labelling of the hazardous substances.

#### 9.4. Implementtation of the legislation

The most important steps taken to implement the Chemicals Act 2010 included the Government's approval of the "List of Substances of High Risk of Concern" (Regulation 2011) and the "List of Restrictions and Prohibitions on the Use of Chemicals" (Regulation 2014). Furthermore, on the Department of Chemicals at the Ministry of Health website, may retrieve publicly available information, such as legal entities selling and utilizing chemicals and precursors, a list of approved biocidal products, as well as the implementation of the "Globally Harmonized System for classification and labeling of chemicals" (GHS) and the "Registration, Evaluation, Authorization, and Restriction of Chemicals Regulation" (REACH) regulations on the domestic market. Implementation challenges are mainly related to institutional capacity.

In 2013, the country prohibited the importation and utilization of asbestos and asbestos-containing materials. The "Waste Management Act" of 2004 and the "Asbestos Waste and Asbestos-Containing Product Waste Management Regulations" of 2006 regulate asbestos-containing waste. At the Drisla landfill in Skopje, a facility was installed intended for the disposal and storage of asbestos waste. However, experts believe that asbestos waste is being disposed of in other landfills alongside other types of waste.

Furthermore, a series of activities were conducted to implement the provisions of the Montreal Protocol, resulting in the elimination of 99% of the consumption of ozone-layer depletion substances in the country. In 2004 a National Implementation Plan (NIP) was prepared to tackle the challenges imposed by the persistent organic pollutants. Restrictions and removal of POPs were carried out in 2005, while data collection and removal were done for polychlorinated biphenyls (PCBs). In this context, a detailed identification of PCB equipment and waste was made, a temporary warehouse for PCB equipment was built and treatment technology was installed (170 tons of PCB transformers were treated). In the period between 2012-2014, activities were carried out to update the NIP, with the additional incorporation of actions to reduce and remove the 10 recently regulated POPs. In terms of implementing the priorities and actions of the NIP, the solution to the historical problem with the waste from the HCH in the OHIS landfill, Skopje has been approached.

As in many other countries, chemicals were treated as individual groups accessed in series/sequences, through the implementation and fulfillment of obligations arising from the above-stated conventions,

for separate groups of chemicals. Nowadays, global trends are leaning towards an integrated approach to chemical management. Hence a strategic approach was proposed, in the form of the global initiative for integrated chemicals management (SAICM). The Republic of North Macedonia is actively involved in this initiative, both at the global and regional level, while at the national level it was among the first countries to implement a project to incorporate chemicals into the country's development planning.

### **Contaminated areas**

"OHIS" which stands for "organic chemical industry Skopje" was the largest chemical factory in Macedonia for the production of plastic products (fibers, pipes, foils), detergents and cosmetics, plant protection agents, paints, varnishes, etc. Consisting of 18 facilities, this factory was built and upgraded from 1958 to 1965 and operated until 1995.

Considering the broad factory's production range, its location represented an "environmental hot spot" for many years due to confirmed and suspected impacts related to improper disposal of chemicals of various types (non-degradable organic pollutants, mercury, and other unknown constituents).

Several detailed investigations were conducted to identify and eliminate the hazardous influence:

- In 2007, the company Eptisa carried out site surveys - geoelectrical (resistance) mapping to assess possible anomaly zones indicating soil and groundwater contamination with HCH and Hg and to propose a site remediation strategy (project funded by the EU, managed by the European Agency for Reconstruction)
- Intrusive research carried out by ENACON s.r.o. in 2007-2008 to: assess contamination levels of soil, groundwater, and construction materials, characterize the waste landfills containing HCH isomers, and evaluate the potential negative impact on the native vegetables near the OHIS site.
- Site characterization (landfill for HCH) and risk assessment in 2018 ("Provision of services on the Site Investigation related to Removal of Technical and Economic Barriers to Initiating the Clean-up Activities for Alpha-HCH, Beta-HCH and Lindane Contaminated Sites at the Organic Chemical Industry of Skopje AD (OHIS)")

To solve the long-standing problem of technical HCH waste (lindane and its isomers) deposited in the vicinity of the OHIS plant (known as the small and large landfill), the Ministry of Environment and Spatial Planning, initiated the implementation of the project "Removal of technical and economic barriers for starting the remediation of the locations contaminated with  $\alpha$ -HCH,  $\beta$ -HCH and lindane in OHIS" through its Persistent Organic Pollutants (POPs) Project Office in 2015. The project is financially supported by the GEF (Global Environmental Fund) and implemented by the United Nations Industrial Development Organization (UNIDO).

As a result of the preparatory activities, full documentation was completed for the publication of an international tender by the UN agency responsible for the implementation of the project (UNIDO), for the selection of the best solution/technology for the decontamination of the small landfill with lindane located in the vicinity of OHIS. To this end, UNIDO entered into an agreement with the most viable candidate for the cleanup of lindane from the small landfill and for the consequent treatment of the HCH waste outside the country. A Remediation Plan was prepared and approved, which passed a triple audit, based on which the selected company carried out preparatory activities in the field and started with the safe cleaning of the lindane. Just recently, these activities of UNIDO have ended, and the

activities to clean up lindane from the small landfill continue with the support of UNOPS. Estimates are that the costs associated with cleaning up the small landfill would amount to around 10 million euros.

Meanwhile, the process of funding acquisition continues since it is an essential step to resume the ongoing activities, such as the clean-up of lindane from the small and the large landfill. Activities for research and confirmation of additional amounts of lindane deposited at a location called Pelenica in the vicinity of Drachevo have also been initiated.

Additionally, as part of the cleanup of historical contamination from the OHIS site, in February 2021, the last shipment of approximately 4.6 tons of initiators and 5.2 tons of chemicals of unknown composition was transported to an incineration facility in France. The following waste chemicals were exported from the state by AD OHIS Skopje:

- 25 tons of acrylonitrile monomer (final disposal destination VALOREC Services AG from Basel "SUEZ" Germany)
- 15 tons of waste chemical with unknown composition, waste tert-butyl hydroperoxide, initiator percabox amine, initiator preoxane BCC and initiator butylhydroperoxide 70%. (final disposal destination TREDI SA, France)
- 84 barrels (15,120 kg) of waste methanol (final destination for disposal in Bulgaria).
- 13.5 tons of vinyl chloride monomer (final destination for destruction VALOREC Services AG from Basel "SUEZ" Germany)
- 4.6 tons of initiators and 5.2 tons of chemicals of unknown composition (France).

Furthermore, it is prepared list of contaminated areas where are identified a total amount of 16 contaminated areas (hot spots), divided in following categories:

#### A) Areas of high environmental risk

- OHIS
- Buchim, copper mine
- Veles smelter

#### B) Areas with medium risk for the environment

- Lojane
- SASA Mine
- Silmak (Yugochrome)
- Toranica
- Maxtil
- Zletovo mine
- REK Bitola

### C) Areas of low environmental risk

- FENI Industries Kavadarci
- Zletovo - Factory for artificial fertilizers in Veles
- Oslomej River in Kicevo
- Kozara Godel in Skopje
- OKTA Refinery
- Tane Tsaleski in Kichevo

According to the prepared feasibility study in which these contaminated areas are identified, the total cost of remediation amounts to EUR 77,000,000

Furthermore, detailed feasibility studies for risk assessment and remediation plans have been made for 5 of the identified contaminated areas. These studies were done in 2007 with the help of EU funding, but to this day, with the exception of OHIS, these studies have not been implemented and no remedial measures have been taken.

The list of contaminated areas was prepared 15 years ago and has never been updated.

## 9.5. Institutional capacities in chemicals management

The previously stated institutions distribute their obligations among each other, though cooperation within a larger institutional frame is required to implement the conventions.

### **Ministry of Environment and Spatial Planning**

The "Department of Chemicals" is an integrated part of the "Environmental Administration" and is ultimately under the supervision of the Ministry of Environment and Spatial Planning. The Department covers two areas of control, namely, 1) Prevention of accidents in the presence of hazardous materials and 2) Management of specific chemicals.

The labor systematization of the Ministry of Environment and Spatial Planning distinguishes five positions required for the Department of Chemicals. Unfortunately, only three positions remain occupied as of now.

The implementation of the obligations from the international agreements on the management of chemicals, the Stockholm and Minamata Conventions, is supported by a project office that functions as part of the Ministry of Environment and Spatial Planning: 1) Project Office for the Protection of the Ozone Layer ([www.ozoneunit.mk](http://www.ozoneunit.mk)), and 2) Project office for non-degradable organic pollutants ([www.pops.org.mk](http://www.pops.org.mk)).

The National Office for POPs is under the supervision of the Ministry of Environment and Spatial Planning, serving as an institutional unit coordinating the preparatory activities related to the elimination of POPs in the country. One of those activities includes the composition of a comprehensive national implementation plan. Accordingly, since 2002, the National Office has executed intensive activities to fulfill the obligations of the Stockholm Convention and to join the global incentive to reduce and eliminate POPs. In 2017, the institutions updated the national implementation plan and, as of now, accomplished 20 projects.

The National Office for POPs is actively involved in cooperating at the international, regional, and bilateral level with all relevant actors active in the global network for the safe management of chemicals and have successfully implemented 20 projects in the field of implementation of the Stockholm Convention, including the "Safe management of chemicals" (SAICM). The National Office for POPs is responsible for facilitating the implementation of Multilateral Agreements in the field of the environment related to chemicals on behalf of the Ministry of Environment and Spatial Planning: Vienna Convention for the Protection of the Ozone Layer, Montreal Protocol on Substances that Deplete the Ozone Layer, Stockholm Convention on Persistent Organic Pollutants (POPs), the licensing and monitoring of the consumption of certain chemicals (ODS and POPs) using specially developed software (database) containing the available data on export, import, and consumption of these chemicals based on consumer reports. Considering the above-stated, the National Office for POPs has obligations for monitoring, reduction, and elimination (if possible) of relevant chemicals, institutional augmentation, and raising public and professional awareness of management in support of chemical safety.

### **Ministry of Health**

The Department for Chemicals carries out activities related to the management of chemicals under the supervision of the Ministry of Health. The Department carries out work related to professional issues important for chemicals management, originating from the legal provisions regarding the issuance of approval for placing poisonous chemicals on the market, the examination of the composition, the classification in a toxicity group, the import/ export and transportation of malicious and other chemicals. For the ascertained conditions, the Department proposes measures to surmount certain obstacles. The Department conducts electronic monitoring of the data from the software concerning the approved chemicals, their distribution in the appropriate groups of chemicals, the sale of chemicals, and the production and sale of poisons and chemicals. To overcome the addressed challenges, the Department obligates to propose measures. Generally, the sub-units of Chemicals Management and the Chemicals Inspection conduct the activities of the Department for Chemicals.

The Department of Chemicals, supervised by the Ministry of Health, supports the implementation of the Law on Chemicals and brings understanding to the industrial facilities executives regarding their upcoming obligations and responsibilities originating from the newly adopted legislation. The Agency of Medicals deemed it necessary to establish an Integrated Register of Chemicals. It should consist of a Register of Chemicals and a Register of Biocidal Products (as well as data on chemicals for plant protection). The registers should be composed of an electronic database where chemicals produced or imported into the country would be registered. The Agency of Medicals is working on instituting a basis for establishing the integrated register.

### **Ministry of Agriculture, Forestry and Water Management**

The Phytosanitary Administration / Department of Agrochemistry performs the most complex expert analytical and operational work related to plant protection products and artificial fertilizers, which are used in agriculture and related fields, performs expert analytical work on related subjects, etc.

### **Inter-sectoral bodies**

The Law on Chemicals gives the Government of the Republic of Macedonia the authority to establish an inter-sectoral body for chemicals. The Government instituted such a body, though, unfortunately, it is not functional.

## 9.5. Recommendations

### **Recommendation for transposition of the legislation**

Regarding the provision originating from the Minamata Convention, the adoption of the Law on Amendments and Supplements to the Law on the Environment partially overcomes the current shortcomings. In particular, the introduction of a legal basis that regulates the contaminated areas, which prerequisites further development of the subordinate legislation. Furthermore, it is necessary to transpose the EU Mercury Regulation 2017/852 and adopt a national plan for the implementation of the obligations of this convention. Such accomplishments should be expected in the upcoming year with the already-started project of the National Office for POPs.

Concerning the regulation of POPs, it is necessary to transpose Regulation (EC) no. 850/2004 on persistent organic pollutants.

Regarding water management, there is a revised EU directive on the quality of drinking water that will need to be transposed into our legislation.

### **Recommendation for administrative capacities**

The implementation of the conventions' provisions implies the involvement of numerous institutions in the country, and sequentially, this process requires regular communication among the institutions and proper inter-institutional coordination and cooperation. Currently, a defined framework for mutual communication and cooperation is non-existent. Nevertheless, within the framework of past projects, a few inter-sectoral bodies have been established on several occasions for the implementation of various agreements. It is deemed necessary to invent a long-term, sustainable solution for the integrated management of chemicals and waste. Such actions would ensure constant communication and efficient cooperation between the institutions involved, as well as the advancements of the labor force and technical capacities. Henceforth, the implementation will be fully and promptly accomplished.

### **Recommendation for implementation of the legislation**

Furthermore, it is necessary to revise the competencies and tasks of the sub-unit for chemicals at the Ministry of Environment and Spatial Planning since it covers the majority of the responsibility regarding the management of chemicals, and such circumstances present an unmountable burden for the current capabilities of this institution.

It is necessary to provide financial resources to establish and operationalize the Register of Chemicals, to develop the REACH support office (help desk), and to include it in the network of already registered support offices. Furthermore, it is necessary to educate the Agency for Medicals' employees regarding the challenges of the implementation process. Concerning the implementation of the provisions of the Law on Chemicals, in terms of the Globally Harmonized System of Classification, Labeling, and Packaging, it is necessary to strengthen the institutional capacities. Programs for increasing public awareness should be planned, involving all affected social parties.

## 10. Noise

## 10.1. EU Legislation

The noise sub – chapter is an integral part of the negotiations for Chapter 27. The EU legislation for noise aims to take measures and activities to avoid, prevent and reduce the noise in the environment through establishing mandatory technical standards for products. The most important legal tools are the established noise emissions limits for certain products, such as: motor vehicles, motorcycles, tires, airplanes, household appliance and outdoors equipment. Everything related to the noise sub – chapter is covered by the EU legislation and it is regulated by the following EU directives and regulations:

### **The environmental noise Directive 2002/49/EC**

The environmental noise Directive 2002/49/EC from 25<sup>th</sup> June 2002 aims to provide a common EU approach to avoiding, preventing and reducing the harmful effects of noise exposure. The directive does not include a common noise reducing target or EU noise limits. It requires EU members states to appoint competent authorities who will prepare strategic noise maps for major road, railways, airports and agglomerations using harmonized noise indicators. In accordance with the provisions from the Aarhus Convention, the directive requires the public to be informed and consulted about the noise exposure, its effects and measures being considered to deal with noise. Also, the directives do not set any limit values and does not prescribe any measures to be adopted, it requires the competent authorities to prepare action plans to reduce noise where is necessary and to maintain noise quality where good.

The environmental noise directive is the main EU law for identifying the noise levels and how to deal with them. The focus is on four action areas:

- Determining the exposure to noise in the environment and assessing its health effects at the level of one residence
- Information about environmental noise to be available to the public
- Prevention and reduction of environmental noise
- Preservation the environmental noise in the areas where it is good

The directive requires EU countries to prepare and publish strategic noise maps and noise management action plans every 5 years for:

- Agglomerations with more than 100 000 residents
- Main road (more than 3 million vehicle per year)
- Main railways (more than 30 000 trains per year)
- Main airports (more than 50 000 take – offs and landings per year, including small airplanes and helicopters)

### **Directive 2012/34/EU of the European Parliament and of the Council of 21th November 2012 establishing a single European railway area (recast) Text with EEA relevance**

The directive entered into force on 15 December 2012 and should be transposed by 16 June 2015. This directive applies to the use of railway infrastructure for domestic and international rail services.

- Infrastructure managers are required to approve access to non – discriminatory railways undertakings operating on the European rail network
- The principle of open access is applied for use of railway infrastructure for domestic and international rail services

- Member – states may exclude a certain network and service from the mandatory rail access regime, such as local and regional independent networks, networks intended for operation of urban and suburban passenger railways only, or infrastructure whose track is different from the main railway network within the EU
- The basic provisions of the directive determine the requirements and procedures for allocating the capacity of the railway infrastructure and the methods for calculation and collection of infrastructure charges.

This directive establishes:

- The rules that apply to the management of the railway infrastructure and to the railway transport activities of the railway companies that are established or should be established in the member states.
- The criteria applied for issuing, renewing or amending permits from the member states intended for railway companies that are or will be established in the EU
- The principles or procedures applied to the setting and collection of railway infrastructure charges and the allocation of railway infrastructure capacity.

#### **Directive 2000/14/EC - noise - equipment for use outdoors**

The directive 2000/14/EC from the European parliament and of the Council of 8 May 2000 aims at approximating the laws of the member states relating to noise emission standards, conformity assessment procedures, marking, technical documentation and data collection in relation to environmental noise emissions from outdoor equipment. It will contribute to the uninterrupted functioning of the internal market, protecting people's health and well – being. This directive only covers equipment that is on the market or has been put into service as a complete unit suitable for its intended use.

#### **Regulation 2014/540 – Sound level of motor vehicles and of replacement silencing systems**

This regulation aims to improve the environmental protection and public safety and to ensure a better quality of life and health for the people of EU by reducing the main sources of noise caused by vehicles.

#### **Council Directive 86/594/EEC of 1 December 1986 on airborne noise emitted by household appliances**

The directive includes provisions that are related to:

- General principles regarding to publication of information about airborne noise emitted by household appliances
- Measurement methods for determining the airborne noise emitted by household appliances
- Arrangements for monitoring/tracking the levels of airborne noise emitted by household appliances

### 10.2. Compliance of EU legislation and relevant national legislation

Most of the obligations contained in the EU legislation, which refer to the area of noise protection, are transposed in the national legislation. The Law on Environmental Noise Protection is aligned with the Environmental Noise Directive 2002/49/EC, which refers to the assessment and management of environmental noise. So far, all by-laws have been adopted, with which the EU Directive 32002L0049

has been fully transposed into the legislation of the Republic of Macedonia in connection with environmental noise protection.

**Law on Environmental Noise Protection (Official Gazette of the Republic of Macedonia No. 79/2007, 124/10, 47/11, 163/13 and 146/15 and "Official Gazette of the Republic of North Macedonia" No. 151/21)**

The Law on Environmental Noise Protection is a law that regulates the basic principles of environmental noise management. The law was drafted according to the European legislation, with the aim of establishing a general legal framework for the regulation of environmental noise in an integrated and comprehensive manner. It directly transposes the requirements of Directive 2002/49/EC of the European Parliament and of the Council of June 25, 2002 regarding the assessment and management of environmental noise.

The Law on Environmental Noise Protection transposes the provisions relating to:

- Sources of noise in the environment
- The limit values of noise level in the environment
- Environmental noise indicators
- Management and monitoring of environmental noise
- Methods for evaluating harmful effects
- Creation, adoption and implementation of planning documents
- Environmental noise protection measures
- Information system
- Inspection supervision and competent authorities

Based on the provisions of the Law on Noise Protection, 11 by-laws have been developed that increase the compliance of the national legislation with the EU legislation on noise protection. They relate to noise indicators, monitoring and inspection of noise in the environment.

- Rulebook on the form and content of the invitation to education, the method of conducting the education, as well as the method of keeping the only record of the conducted education ("Official Gazette of the Republic of Moldova" No. 118/11 of September 1, 2011)
- Decision to determine under which cases it is considered that the peace of the citizens is disturbed by harmful noise ("Official Gazette of the Republic of Moldova" No. 1/09 of 01.01.2009)
- Rulebook on the form and content of the seal of the State Environmental Inspectorate, the authorized environmental inspector of the municipality and the municipality of the city of Skopje and the authorized inspector of the city of Skopje ("Official Gazette of the Republic of Moldova" No. 112/07 of 19.09.2007)

Adopted by-laws on environmental noise indicators express the limit values of the environmental noise level. In accordance to Article 9 of the Law on Noise Protection, it is prohibited to emit noise in the environment that exceeds the prescribed limit values. Limit values are prescribed to limit the levels of all noise sources, including the time period, the location of the source and the types of areas and areas in which noise is generated, in order to avoid, prevent or reduce harmful effects on human health and on the environment. The limit values are prescribed by the minister in charge of the state administration body responsible for health matters in accordance with the minister in charge of the state administration body responsible for environmental matters and the minister in charge of the state administration body responsible for the affairs from the field of internal affairs.

- Rulebook on limit values of the noise level in the environment ("Official Gazette of the Republic of Macedonia" No. 147/08 of 26.11.2008)
- Rulebook on the application of noise indicators, additional noise indicators, the method of noise measurement and assessment methods with noise indicators in the environment ("Official Gazette of the Republic of Macedonia" No. 117/08 of 29.08.2008)

Noise indicators are used in order to determine the standards for noise protection and the level of noise in the environment, i.e. the limit values of noise in the environment, assessment and prediction of the noise situation, development of strategic noise maps and planning of measures for noise protection.

Noise indicators, according to this law, are:

- Indicator of total noise exposure (all – day noise) in the environment
- Indicator for noise exposure during the night
- Indicator of noise exposure during the day
- Indicator of noise exposure during the evening
- Additional noise indicators

Also, directive 2000/14/EC – noise – equipment for outdoor use has been transposed through the rulebook on the closer types of special noise sources as well as conditions that must be met by plants, equipment, installations and devices that are used in an open space with regard to the emitted noise and noise protection standards ("Official Gazette of the Republic of Macedonia" no. 142/13 of 17.10.2013).

### 10.3. Implementation of the noise legislation

In accordance with the Law on Noise Protection, the Ministry of Environment and Physical Planning (MOEPP) as a competent authority is obliged to prepare, adopt and implement the following documents:

- Strategy noise maps
- Noise action plans

Strategy noise maps mandatorily prepared for all agglomerations, main road, main railways and main airports on the territory of Republic of Macedonia. The strategic noise maps for populated areas and areas of special interest are prepared if needed based on a decision made by the legal entity that manages the area. Then, based on the strategic noise maps, action plans for noise in the environment are drawn up. The noise action plans contain analyzes of the existing noise situation, assessment, predictions and measures to reduce and prevent noise, related to exceeding the limit values of a certain noise indicator in the areas of agglomerations, populated areas and areas of special interest, and near to the main roads, the main railways, the main airports in the territory of the Republic of Macedonia.

The bodies of the state administration, the bodies of the municipalities, the city of Skopje and the municipalities in the city of Skopje are obliged to take measures for noise protection, that is:

- to carry out appropriate noise monitoring in accordance with the monitoring programs of the state and local monitoring networks in order to measure, monitor and control the noise conditions in the environmental areas;

- to undertake occasional limitation of the noise emission from the noise sources
- to limit or prohibit the emission of sound from the transmitting source
- to perform acoustic measurements for checking and constant monitoring of the noise situation
- to inform the public about the noise situation
- to take other measures for noise protection

For noise monitoring in the area of the municipalities, the city of Skopje and the municipalities in the city of Skopje can establish local monitoring networks after previously receiving an opinion from the competent authority for performing professional work in the field of the environment, under the conditions and manner regulated by this law and the Law on the Environment.

The minister in charge of the authority for environmental affairs adopts an annual program for the work of the state network for noise monitoring.

The municipalities and the city of Skopje adopt an annual program for the work of the local noise monitoring network, which they submit for approval to the state administration body responsible for environmental matters.

### 10.3. Deficiencies in the enforcement of noise legislation

#### **Determination of agglomerations**

Agglomerations, main roads, main railways, main airports and areas of special interest that do not belong to the established agglomeration for which strategic noise maps should be prepared are presented in the picture.

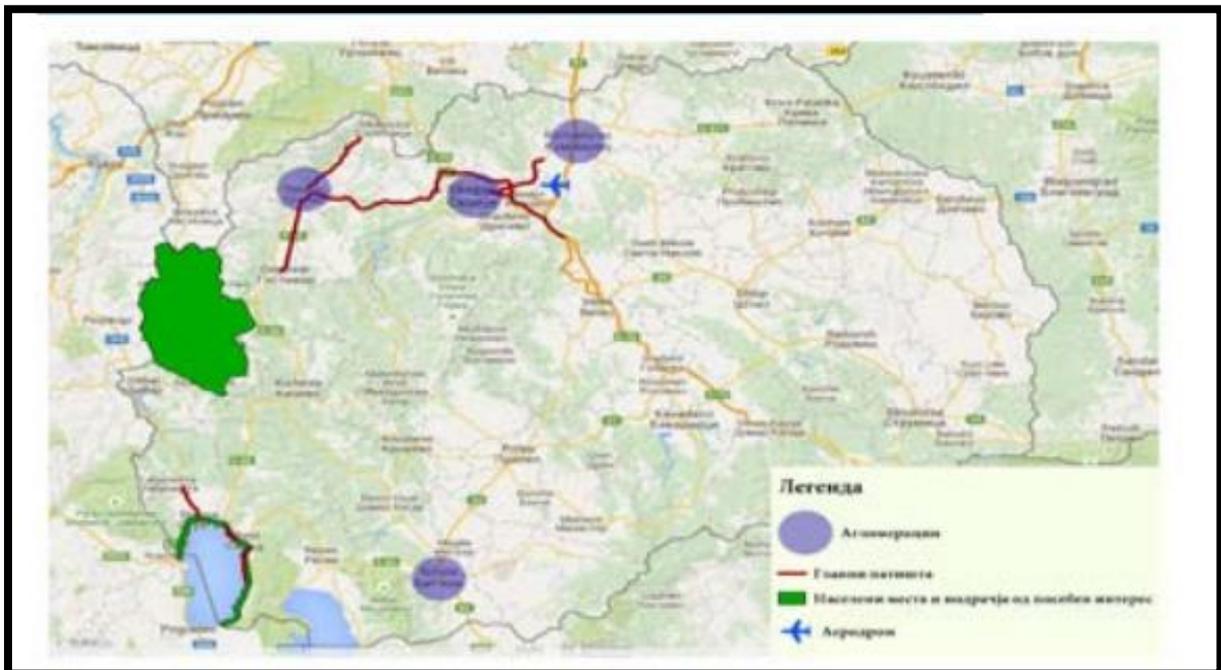


Figure 6. Agglomerations and facilities for which strategic noise maps should be made

Furthermore, MOEPP is responsible for the preparation, adoption, use and storage of Strategic Maps and Noise Action Plans for main roads, main railways and main airports. Likewise, the Council of the

municipalities and the city of Skopje, on the proposal of the mayor of the municipalities and the city of Skopje, are responsible for making, adopting, using and keeping strategic maps and noise action plans for agglomerations and populated areas. If we are talking about the area of special interest, in that case the legal entity that manages that area is responsible for creating the strategic map and the noise action plan for the area of special interest.

### **Strategic noise maps and action plans**

However, despite the existing agglomerations, as well as the specific locations and facilities for which strategic maps should be prepared, even though it is a legal obligation, the Ministry has not yet prepared strategic noise maps, and thus there is a lack of noise action plans. As a result, there is a lack of analyzes of the situation with the level of noise, and there are also measures to reduce and prevent noise in certain locations.

### **Noise measurement and monitoring**

Apart from the environmental reports, but also the A and B environmental permits where some of the operators undertake to carry out noise measurements, i.e. monitor the noise level, the noise level is also monitored through the Public Health Centers in Skopje, Bitola, Kumanovo and Kichevo. The measurements are carried out twice a year in accordance with the provisions of the Law on Noise, and the intensity is monitored according to the basic noise indicators defined in the Rulebook for the Application of Noise Indicators, additional noise indicators, the method of noise measurement and the evaluation methods with environmental noise indicators.

However, despite the measurements, and certain exceedances that are evident according to the Annual Environmental Report<sup>32</sup>, it is unclear what measures have been taken in order to overcome the situation, that is, to reduce the noise level at these locations.

Regarding the noise emitted by industry and commercial facilities, despite the obligation to report to the MOEPP, there is still no data on the monitoring carried out by industrial facilities, and a large number of them have not fulfilled their legal obligations to submit reports to the Ministry<sup>33</sup>.

### **Cadaster of noise pollutants**

Regarding the cadaster of noise pollutants, the Macedonian Information Center for the Environment has the obligation to update it. Despite the obligation, this cadaster is not publicly available and it is unclear whether it is updated in a timely and appropriate manner.

### **Urban planning**

The regulation of the noise level is a huge problem in the process of urban planning. Namely, during the preparation of the Detailed Urban Plans and the issuance of the use permits for various buildings that are an integral part of a larger building, no care is taken of the legal regulations related to noise. Thus, a cafe or a night bar can get a use permit for the performance of the activity in a residential building, which is mostly used for housing. The situation in the process of urban planning is similar, where no care is taken for the planning of facilities that may emit more noise (shopping centers, business facilities, etc.)

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<sup>32</sup> Annual report of processed environmental quality data for 2021

#### 10.4. Administrative capacities and institutional setting

The competent authority for the area of environmental noise, especially for the establishment of policies and implementation of the Law on Environmental Noise Protection and the regulations adopted on the basis of this law, is the MOEPP, Environmental Administration and the environmental inspection of local self-government units.

All these bodies lack an appropriate administrative structure. According to the existing systematization of the Ministry of Environment and Physical Planning, the Department for Environmental Noise Protection functions as part of the Environment Department within the Environmental Administration and works in accordance with the Law on Noise Protection ("Official Gazette of the Republic of North Macedonia" No. 79/07,124/ 10 and 47/11) and the by-laws arising from it. Local self-government units (LGUs) are responsible for establishing local monitoring networks for noise management and implementing activities for appropriate environmental noise control. In accordance with the Law on Environmental Noise Protection, the data from the measurement and monitoring of the noise levels are submitted to the Macedonian Information Center for the Environment. Inspection supervision over the application of the law and the regulations adopted on the basis of the law is carried out by the State Environmental Inspectorate, as well as the authorized environmental inspectors in the local self-government units. The State Sanitary and Health Inspectorate, a body within the Ministry of Health, has separate competences in the management of noise, in relation to the control of noise from a health aspect, i.e. for assessing the harmful impact of environmental noise, on the health of the population that is exposed. on the same. The Ministry of Economy has competence in relation to the control of the noise generated by products and LGUs in relation to the noise generated by catering, craft and tourist activities.

Complete environmental noise protection will be achieved by establishing a system of making and implementing strategic noise maps and noise action plans. These documents will provide a complete overview of the level of environmental noise, as well as the measures that should be taken in places where the noise level has increased, with the aim of reducing the noise level, and thus also reducing the harmful effects that arise from the same for human health and for the entire environment in general.

In terms of noise monitoring, the public health centers in Bitola, Kichevo and Kumanovo (and Skopje until 2005) carry out measurements of noise levels in the environment and assessment of its harmful impact on the population exposed to noise, at several measuring points. , and the processed results are submitted to the Macedonian Information Center for the Environment, where the Cadastre of noise pollutants is maintained and updated. The collected, verified and processed data and information on the noise situation in the environment represent an official database on the noise situation in the environment, which serves as a basis for noise management and protection. The first step towards the establishment of a state network for monitoring noise in the environment was made with the adoption of the Decision on the establishment of a state network for monitoring noise in the environment.

Responsibilities of the environmental noise protection department are:

- development of strategic noise maps and noise action plans
- participates in organizing public hearings for the development of Action Plans for noise
- prepares a report on the situation from the public, monitors the noise situation
- proposes an annual work program for the state noise monitoring network
- gives opinions on the annual work program of the local network

- gives opinions regarding the impact of noise in separate activities and activities on the environment
- manages the noise and proposes and takes measures to bring it within the allowed limits
- participates in the drafting of laws and by-laws in the field of environmental noise protection
- the implementation of international multilateral agreements and ratified conventions in the field of environmental noise protection

## 10.5. Main findings and recommendations

### **10.5.1. Main findings and recommendations for compliance with legislation**

- Adoption of action plans for noise protection in areas belonging to agglomerations and zones where limit values are exceeded.
- Adoption of strategic maps for environmental noise
- Adopting a National strategy for environmental noise protection
- Adoption of the Rulebook on the closer types of special noise sources, as well as the conditions for protection against noise caused by road, rail, air and water traffic (2012)
- Adoption of the Rulebook on the closer types of special noise sources, as well as the conditions that must be met by devices, means and household appliances in terms of noise protection standards (2013)
- Making decisions to determine quiet zones

### **10.5.2. Main findings and recommendations for implementing the legislation**

- Provision of financial resources for the establishment of a monitoring system for management and protection against noise in the environment at the central and local level, as well as for the purchase of appropriate equipment
- Establishment of an integrated regional noise protection system in all regions where planning documents have been prepared
- Increasing the supervision of the Ministry of Environment and Physical Planning over the municipalities on the way of implementation of obligations
- Revising the limit values of noise for the purpose of control especially on areas and zones in which there is a risk of exceeding them
- In the process of making the spatial and urban plans and the acts for their implementation, within the protection content, they must also contain protective measures for noise;
- The planning documents for the facility that are subject to construction approval should meet the special conditions and measures related to the standards for noise protection during construction;
- To preserve the quiet zones in the agglomerations and outside them.

### **10.5.3. Main findings and recommendations for improving administrative capacities**

Strengthening of administrative capacities and cooperation is necessary:

- Increasing the number of state and municipal environmental inspectors who will be specialized in environmental noise protection
- Increasing the number of inspectors for conducting inspections in all areas of the environment
- The existing noise department to be strengthened with at least 3 more qualified staff Greater cooperation between the Ministry of Environment and Physical Planning and the local self-government in order to manage noise at the local level
- Employment of professional staff with competences for the implementation of legislation from the environmental noise sector
- Trainings at the central and local level (management of noise data and monitoring of the noise network; operation of instruments for measuring noise and vibration; implementation of legislation in the area of noise at the local level; development of action plans and strategic noise maps and other noise questions);
- Trainings to strengthen the capacities of the Ministry of Environment and Physical Planning and the municipalities for the implementation of the legislation
- Procurement of equipment (software for creating strategic noise maps; software for managing a single information system of a noise database obtained from measurements and strategic noise maps; application software that will enable a documented database and a single communication transfer of the data in the Ministry of Environment and Physical Planning; an instrument for measuring noise and vibrations in order to expand the monitoring network for monitoring and measuring noise levels; terminals for continuous and semi-continuous noise monitoring with geo-oriented data, a portable sound meter for mobile measurements at important locations that are not covered with continuous and/or semi-continuous monitoring)
- Cooperation of state inspectors and authorized environmental inspectors (referral to jurisdiction; mutual notifications and joint inspections; providing expert assistance in case management, other cooperation)

## 11. Climate Change

### 11.1. Main findings from the first Shadow report

The first shadow report on the climate change sub-chapter noted a low level of compliance of European climate legislation with the national ones. The **Law on Environment** as the main legal framework for climate change, specifically Article 187 which refers to the National Climate Change Mitigation Plan and Article 188 which refers to the National Inventory of Anthropogenic Emissions by Sources and Sinks of Greenhouse Gases. Namely, the law does not transpose the EU climate regulation.

The EU legislation in the monitoring and reporting mechanism section has 5 directives and regulations, 3 of which have been transposed into the draft law on Climate Action, which has not yet been adopted. By transposing the EU legislation regulating the monitoring and reporting mechanism, responsibilities

and rules for monitoring and reporting greenhouse gas emissions should be stipulated for the first time in the national legislation. The EU legislation on the Emissions Trading System (EU ETS) has 25 directives and regulations dealing with the general provisions of this system. They have to be transposed into national legislation, while in the draft Climate Action Law only one directive is transposed. The EU legislation on the Emissions Trading System (EU ETS) has 34 directives and regulations governing emissions from aviation activities, while only two regulations have been transposed in the draft Climate Action Law. This EU legislation also covers the quality of fuels, protection of the ozone layer and F-gases.

As a party to the United Nations Framework Convention on Climate Change as a non-Annex 1 country and a party to the Kyoto Protocol as a non-Annex B country, the country signed the Paris Agreement in 2016 and Parliament ratified it in 2017. In 2019 the country ratified the Doha Amendment revising the list of reportable greenhouse gas emissions, in 2020 it ratified the Kigali Protocol to reduce hydrofluorocarbons and reaffirmed its commitment to climate action. As a non-Annex 1 party to the UN Framework Convention on Climate Change and a signatory to the Paris Agreement in 2016, like all developing countries, **North Macedonia submits a national climate change plan every four years (NCs) and biannual updates reports (BURs)**. Our country has so far submitted three national communications/plans on climate change, in 2003, 2008 and 2014, while the Fourth National Plan on Climate Change (4th NP) is currently being prepared and is expected to be ready and adopted by the Government by the end in 2022. S. Macedonia has so far submitted three biennial reports. **The submission and revision of National Climate Change Contributions (NDCs) every five years is also an obligation stemming from the Paris Agreement.** The attention of the NDC is focused on mitigating the impact of climate change, i.e., on policies and measures that lead to the reduction of greenhouse gas emissions, and especially on CO<sub>2</sub> emissions caused by burning of fossil fuels, which accounts for almost 80% of total greenhouse emissions gases in the country. The following sectors have a dominant share: electricity supply, buildings and transport. The revision of the national contributions to climate change was made during 2020 and the Government of the Republic of North Macedonia submitted them to the UNFCCC in December 2020. They have high-targeted goal of 51% reduction in national greenhouse gas emissions by 2030. The process of developing the NDCs was not transparent and CSOs were involved in the final stages of the presentation of the already developed document.

During 2019/2020, the country started the process of integrating climate and energy policies into the National Climate and Energy Plan, which is the first document where climate change is integrated into a document from the energy sector.

**The Strategy and the Law for climate action** were prepared during 2019-2021, and the civil sector participated in the working meetings with two representatives, which gave the CSO the opportunity to make comments in the early stages of preparing the documents. The processes took place in a very short period of time due to delays in the implementation of the project.

As a candidate country for EU membership, our country has the obligation to develop a **national plan for adapting the country's vulnerable sectors to climate change**. Republic of North Macedonia has not yet developed a Strategy for adaptation to climate change. A draft National Adaptation Plan was being developed in 2020 with a plan to submit it to the GCF and if funded immediately, the National Adaptation Plan would be developed during 2022 and completed in 2023.

**North Macedonia also has obligations stemming from other international agreements and pacts** related to climate action, such as the National Plan for Dealing with Desertification and Mitigating the Effects of Droughts 2017-2023, National Strategy for Adaptation of the Health Sector to Climate Change with an Action Plan 2011- 2015 and the National and Action Plan 2016-2030 for the implementation of the SDGs. It is not clear and transparent how and whether the level of implementation of these documents is monitored, nor whether the MOEPP, as the competent authority for climate change in the country, has insight into the activities undertaken to implement these plans.

## 11.2. Progress in harmonizing national legislation with European legislation

In the past year, certain steps have been taken to integrate climate change into sectors of importance for climate action. The most significant progress is the **adoption of the National Climate and Energy Plan (NPEC)** in May 2022, which is the first document where climate change is integrated into a document from the energy sector. As a country in which most of the greenhouse gases arising from the energy sector, the measures planned in this document will ensure the reduction of the country's greenhouse gas emissions, which means getting closer to the ambitious goals of the revised national contributions to the climate. The implementation of one of the measures - a national plan for a just transition - has also been started, but the processes for implementing the planned measures are delayed or not started at all. It should also be noted that CSOs submitted comments on the document in the draft stage, which were not answered at all and were not addressed in the adopted document.

**The long-term strategy for climate action and the action plan** have been adopted and provide a roadmap for mainstreaming climate change in sectors relevant to climate action. However, the process of adoption of this document as well as the accompanying Climate Action Communication Strategy did not provide adequate consultation, communication and information to all stakeholders, which will again slow down or disable the implementation of this document, especially at the local level.

A bigger problem is the **inconsistency or complete collision** of these key climate action documents with current Government energy policies. Despite the high promised goals in the revised contributions to climate change for a 51% reduction in greenhouse emissions by 2030, of which 66% in the energy sector alone, the opening of new coal mines (Zivojno) has been announced as well as the constant postponing of the closure deadline of the Oslomej TPP, despite the planned closure of this station operating without an A integrated permit by the end of 2021. In addition, in December 2021, TPP Negotino, which operates on heavy fuel oil and use obsolete technology, was restarted.

There is still no harmonization of the climate sector with the European regulation because the **climate action law has not been adopted**.

The delay in harmonizing EU regulation in other sectors such as industrial pollution and air, which are sectors that contribute to greenhouse gas emissions, additionally slows down the harmonization of EU climate regulation in the country.

Despite the fact that the country is vulnerable to the consequences of climate change and suffers serious damages and losses, **the process of making the National Adaptation Plan has not yet started.**

### 11.3. Legislation's implementation

A significant step forward is **opening a space for discussion on a clear division of the roles of the institutions in implementing climate action** in the country through the establishment of a national coordinating body defined in the climate action law.

There is a certain level of discussion between the Government and the competent institutions for the introduction of a **carbon tax** in the country, but it remains unclear how it will be introduced and which document will serve as the legal framework for the carbon tax.

A **methodology for budget tagging** has been developed as part of a project together with a road map for the implementation of the revised national contributions to climate. It should be inserted into the budget law in order to provide the necessary finances for the implementation of the activities that the institutions should undertake towards climate action and achieving of the promised climate goals.

Administrative capacities for the implementation of climate action obligations in all institutions remain very low. The MOEPP has two employees in the climate sector, while other institutions with responsibilities in climate action do not have at all employees who understand this topic.

### 11.4. Recommendations

#### **1. Adoption of documents required to fulfill the country's promised climate goals**

- The Law on Climate Action is the legal framework for the country's climate action measures. Hence, it is necessary to adopt it before the end of 2022 in order to speed up the implementation of the EU regulation and avoid further delays due to new/amendments to the EU climate regulation. It is of particular importance that the climate action law follows and supports the climate goals of the national climate contributions, the national climate action strategy and the national energy and climate plan. Currently, National contributions to climate change are voluntary for North Macedonia, thus they are not seen as a serious obligation by the competent institutions. Therefore, this document together with the description of the development process should be included in the Law on Climate Action in order to provide a legal framework for the same and to ensure full transparency.
- The same situation is reflected at the local level, where Local Adaptation Plans are not prepared at all or do not contain the necessary measures and are adopted without the participation of stakeholders and without informing the public. A description of the preparation process and content of Local Adaptation Plans must be included in the Law on Climate Action in order to provide a legal framework for them.
- Currently North Macedonia is a signatory of at least five conferences related to the climate sector, which it has ratified, but it is unknown which institution is responsible for monitoring the implementation of these obligations, including the particularly important plan for

adapting the health sector to climate change. It is necessary to integrate the obligations stemming from other international agreements and pacts into the climate action plan and the climate action law in order to facilitate and ensure their implementation (desertification and droughts, health and climate, innovation and education).

- Development and adoption of a National Adaptation Plan (NAP) with a long and appropriate consultation process for all stakeholders, which will represent a roadmap for adapting all vulnerable sectors to climate change and will provide specific implementation measures for all competent institutions, agencies and municipalities. The process of NAP's preparation must ensure the participation of all competent institutions, agencies and municipalities in order to be informed and educated about the specific activities that they will have to undertake.

## **2. Improving the institutional framework and administrative capacities for the implementation of climate policies**

- Despite the explanation of the roles of the institutions in the national strategy for climate action, a clear definition of the roles and responsibilities of the institutions and municipalities is needed in order to facilitate and foster the implementation of the measures and the law and by-laws for climate action. As a systemic problem that affects several sectors, it is crucial to ensure inter-institutional coordination and communication through a clear definition of a system for mutual informing.
- Due to the low administrative capacities for the implementation of climate policies in the country, it is necessary to prepare a functional analysis and appropriate job's systematization, which will be mandatory for all institutions with competences in climate action. Such systematization should ensure sufficient employees in the sectors with obligations arising from the law and the climate action strategy.
- Development of a program to increase climate capacities in all institutions as part of the Law on Climate action's by-laws, will provide a mandatory framework for all institutions with responsibilities in climate action
- Since climate change is a particularly professional and complex topic, it is necessary to employ professional and qualified staff capable of understanding and responding to obligations in all institutions and authorities that have competences in implementing legislation from the climate change sector.

## **3. Providing a climate legal framework that responds to and follows the needs of society**

- Although it is particularly important to transpose the EU climate regulation, the country must also respond to the needs of society because it is a problem that threatens the safety and normal everyday life of citizens.
- Defining a carbon tax and a minimum legal framework for it, which must be included in the climate action law
- Providing of an appropriate mechanism and a competent authority for the implementation of the monitoring, evaluation and verification system

- Improvement and renewal of the methodology for creating the national inventory of greenhouse gases in order to cover more sectors (land use, methane from dams)

#### **4. Transparency in adoption and implementation of the climate policies**

- The adoption of climate policies should be carried out in a transparent manner, ensuring a sufficiently long period of time for the implementation of these processes and adequate information to the public including the involvement of all stakeholders
- Adequate and timely coordination, communication and information of all stakeholders and citizens on all matters defined by the Strategy and the Law on climate action, as well as the corresponding by-laws.
- Anticipating a two-year audit of the level of implementation of climate action plans and measures as one of the obligations of the coordinating body for climate (from the strategy, NPEC, NAP, NDC and the Law)
- Possibility of delegating competences to CSOs when it is assessed that they have better capacities to implement certain activities and measures than competent authorities in the climate sector
- Establishment of a supervisory body for the level of implementation of local adaptation plans

#### **5. Climate action must be a high priority for the country**

- Climate policies should be integrated in all sectors in order to improve the understanding of other institutions on climate and enabling their change and timely and accelerated implementation.

Energy policies should be put at the service of fulfilling the country's promised climate goals.

## 12. Civil protection

### 12.1. EU legislation and mechanisms for civil protection

In the EU, the civil protection legislation does not have a separate directive that should be transposed by the member states and on which the civil protection mechanism is based.

The tasks and competences of the agencies in the field of protection and rescue correspond to the principles established at the international level in the First Additional Protocol of the Geneva Conventions: distress; evacuation; taking shelter; protection and rescue from natural disasters and accidents; detection and marking of dangerous zones; decontamination; health services and religious assistance; providing emergency medical assistance; establishing and maintaining order in the affected zones; immediate establishment of necessary services of public interest; immediate burial; help in preserving goods essential for survival.

The first additional protocol to the Geneva Conventions in the EU legislation has been translated into provisions, regulations and decisions by the European Parliament and the Council of the EU on which the mechanism for civil protection of the EU is based.

The mechanism operates under the Directorate-General for European Civil Protection and Humanitarian Aid Operations (DG ECHO) of the European Commission.

The overall objective of the EU Civil Protection Mechanism is to strengthen cooperation between the EU and Member States in the field of civil protection, with the aim of improving disaster prevention, preparedness and response.

The mechanism supports the efforts of participating countries to protect primarily people, but also the environment and property, including cultural heritage, from all types of natural and man-made disasters, including the consequences of environmental disasters, marine pollution and health emergencies, which are happening inside and outside the Union. All EU member states participate in the EU civil protection mechanism, as well as 7 participating countries (Bosnia and Herzegovina, Iceland, Norway, Serbia, North Macedonia, Montenegro and Turkey)

The EU Civil Protection Mechanism was established in October 2001.



Figure 7. The mechanism of civil protection in the EU

## 12.2. Legislation on civil protection in RSM

The protection and rescue of people, the environment, material goods, natural resources, animal and plant life and cultural heritage from natural disasters and other accidents in peace, state of emergency and war, in the Republic of North Macedonia are regulated by laws that derive from the constitution of the Republic of North Macedonia and from the following articles:

Article 125, 126, 127, 128

The laws that derive from the articles of the constitution and regulate the protection and rescue of people, the environment, material goods, natural resources, animal and plant life and cultural heritage from natural disasters and other accidents in peace, emergency and war are:

- The Protection and Rescue Law
- The law on crisis management
- The Law of Defense and
- The Fire Act

### **Protection and Rescue Act**

The Law on Protection and Rescue establishes the system for the protection and rescue of people and material goods from natural and technological disasters in peacetime, emergency or war.

The law describes the system of planning, financing, coordination and mitigation of consequences and preparedness to respond to natural and technological disasters.

SSO is the leading government body with the authority to organize and implement this system. The Law on Protection and Rescue indicates how responsibilities are divided among participants in protection and rescue activities, including the state, local authorities, private companies and public enterprises, facilities and services.

Article 5 of the law describes the measures and actions through which protection and rescue are carried out in our country:

- organizing and preparing the protection and rescue system;
- ensuring the functioning of the protection and rescue system;
- proposing measures for equipping and developing the protection and rescue system;
- making an assessment of natural disasters and other accidents;
- preparation of the plan for protection and rescue from natural disasters and other accidents;
- preparation of the national strategy for protection and rescue;
- ensuring the timely engagement and efficient use of the Republic's protection and rescue forces and rapid response teams;
- care for the full incorporation of protection and rescue measures in the planning, construction of facilities and infrastructure and in the technological process;
- care for the realization of the strategic and mid-term goals for protection and rescue;
- ensuring the replenishment of the republican forces with personal and material resources and their successful mobilization;
- provision of material reserves for the needs of protection and rescue;
- preparation of protection and rescue operations and ensuring their implementation;
- organizing and conducting training, training, training and exercises for the needs of protection and rescue;
- control and assessment of the readiness of the protection and rescue system;
- planning and implementation of international cooperation in the field of protection and rescue;

- preparation of analyses, reviews, information and reports in the field of protection and rescue for own needs and the needs of the Government of the Republic of North Macedonia and the Assembly of the Republic of North Macedonia;
- plans, organizes and provides training activities and participation in collective protection and rescue systems outside the territory of the Republic of Macedonia;
- identification, assessment of hazards, their gradation and possible consequences thereof;
- maintains a database of all sources of risks and dangers from natural disasters and other accidents;
- development of curricula and programs for training, development, training and exercises for protection and rescue;
- preparation of professional instructions in the field of protection and rescue;
- preparation of proposals for laws and other normative acts in the field of protection and rescue;
- determination of norms and standards for the protection and rescue system;
- inspection supervision in the implementation of the provisions of the legal and by-law regulations that regulate it
- the matter of protection and rescue

The law regulates the division of responsibilities in accordance with the provisions of the Law on Local Self-Government, which further provides the responsibilities and obligations for protection and rescue at the local level.

The Law on Protection and Rescue works with several strategic documents:

- The national strategy for rescue and protection – is adopted by the Parliament every five years; (Article 8)
- National Threat Assessment – adopted by the government; and
- National plan for rescue and protection from natural and other disasters - adopted by the Government.
- Annual Protection and Rescue Program (Article 9)

The latest national strategy for rescue and protection as a basic strategic document is valid from 2014 to 2018.

The new, draft strategy for protection and rescue for the period 2022-2025 has been finalized and has been submitted to the RSM government, but it has not yet been published for comment, nor have there been any announcements about the initiation of the adoption procedure by the RSM assembly. In addition, the legislation states that a strategy is carried out for a period of 5 years based on the information received during the period when this report is being finalized, the new strategy has a duration of only 3 years. The same information can be obtained from the EU progress report of our country.. "Regarding civil protection, the new National Protection and Rescue Strategy for the period 2022-2025 was finalized..."

The indirect regulation of responsibilities and duties for an effective crisis management system in North Macedonia are divided into:

- Ministry of Internal Affairs
- Ministry of Defense

- Ministry of Transport and Communications
- The Directorate for Protection of Classified Information
- Ministry of Environment and Spatial Planning (MZSPP).

These laws are basic acts that regulate the implementation of protection and rescue measures. In addition to the laws, when dealing with threats and implementing protection measures, decrees have been established on the way of implementing protection and rescue measures. The decrees refer to the way of using the forces, planning, the way of organizing the prevention, as well as the operational and remedial measures that also regulate the way of using the different types of resources. For this purpose, 33 decrees, 23 regulations and 4 instructions were adopted. (Annex 2)

Legislation in the field of civil protection includes a large number of laws and by-laws that describe the activities and/or competences of institutions and other entities in the field of CZ at the national and local level.

Responsibilities and competences for Civil Protection based on the legislation in RNM:

<b>National level</b>	Constitution of North Macedonia; Protection and Rescue Law; Crisis Management Law; Fire Protection Law; Law on Spatial and Urban Planning; Construction Law; and Law on transportation of dangerous substances in road and rail traffic.
<b>Government Level</b>	All relevant legislation is published in the RSM official gazette and is defined as legislation at the national level. At the ministerial level, legislation consists of internal regulations which are numerous and are found in every government body.
<b>Interdepartmental and intersectoral coordination</b>	National strategy for protection and rescue; National Security Strategy; and Concept of national security and defense.
<b>Local level</b>	Law on Local Self-Government
<b>Private Sector</b>	The Law on Protection and Rescue and related supporting laws, which define in detail the rights and obligations of individual participants in protection and rescue; Assessment of threats to North Macedonia; and The plan for the protection and rescue of the Republic of North Macedonia
<b>Volunteers</b>	The law on protection and rescue, which regulates the rights and obligations of volunteers in the field of protection and rescue; and Cooperation agreements for protection and rescue between SSO and volunteer associations.
<b>Associations of Citizens</b>	Law on the Red Cross of the Republic of North Macedonia

<b>Bilateral agreements</b>	Laws on the ratification of agreements on cooperation in protection and rescue between North Macedonia and: Bosnia and Herzegovina (signed 2008); Montenegro (signed 2008); Hungary (signed 2009); Slovenia (signed 2010); Croatia (signed 2010); Memoranda of understanding and cooperation in the field of protection and rescue of people and material goods from natural and other disasters between the SSO and the Danish Emergency Management Agency (DEMA), signed in 2010 in Skopje; and Negotiations are ongoing with Bulgaria, Serbia and Italy to determine the final version of the text of the agreement and their signing.
<b>International agreements</b>	Memorandum of understanding on the institutional framework of DPPI SEE, signed in 2007 in Zagreb; Agreement on the establishment of the Council for Civil-Military Emergency Planning (CMEP) for Southeast Europe, signed in 2001 in Sofia; and EUR-OPA Major Hazards Agreement, established by the Committee of Ministers of the Council of Europe in 1987.

### **Law on Crisis management**

The law on crisis management introduces and defines the term "crisis" as a phenomenon that threatens the fundamental values, long-term and vital interests, and goals of the state, threatening the constitutional order and security of North Macedonia. The law covers:

- Organization and functioning of the crisis management system;
- Making decisions and using resources ;
- Communication, coordination and cooperation;
- Planning and financing; and
- Security risk assessment for North Macedonia.

The comprehensive approach of the Law on Crisis Management stems from the fact that it divides the responsibilities of crisis management among different stakeholders. The crisis management system includes the bodies and organs of the state administration (the Assembly, the President and the government), the armed forces, the protection and rescue forces, the municipalities and the city of Skopje. The law on crisis management also assumes that public enterprises and institutions, as well as private companies, can participate in the prevention, early warning and handling of crises .

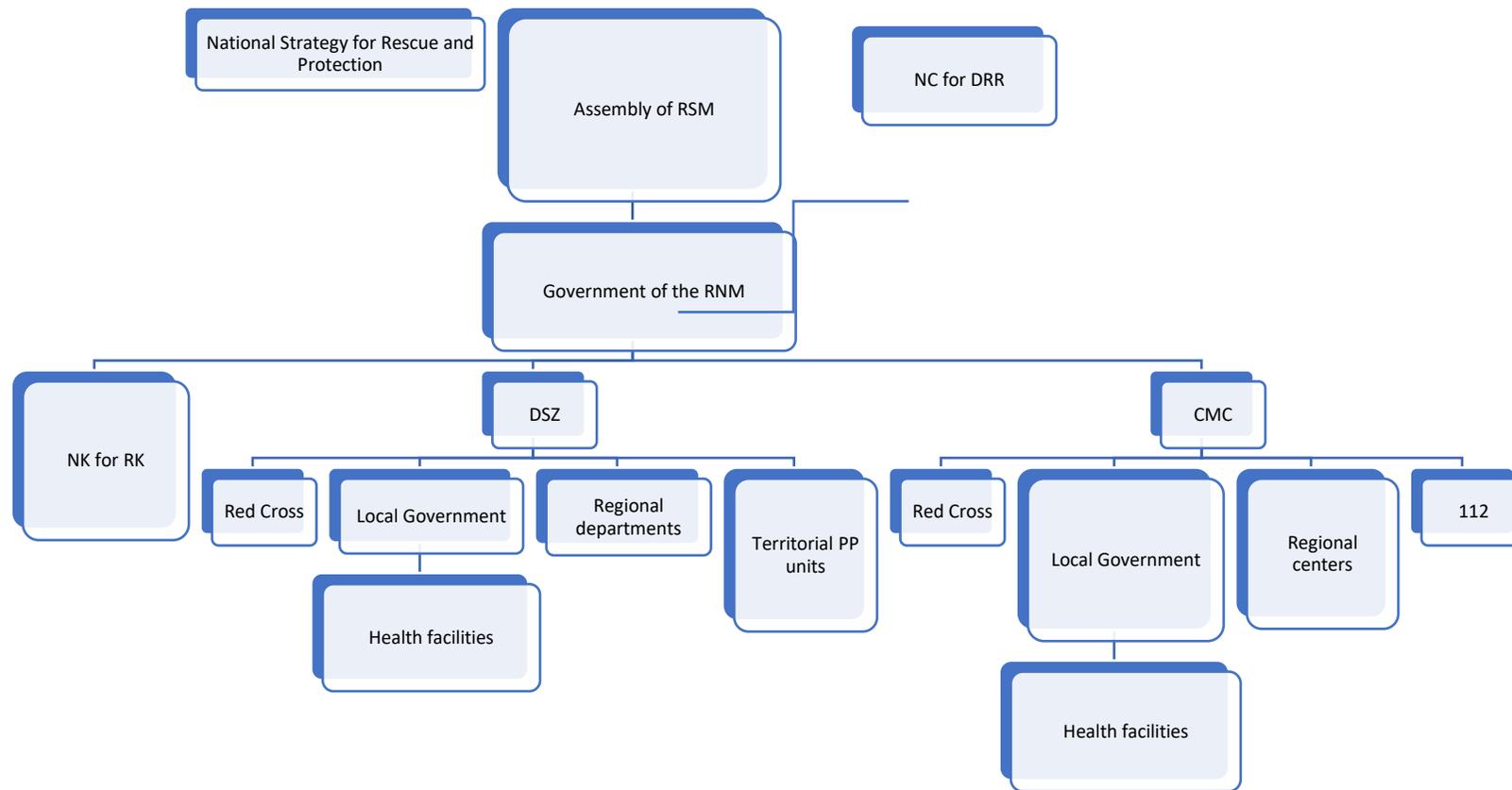
Based on the crisis management law, the responsibility for early warning and alarming the population is under the authority of the Crisis Management Center.

Conclusions:

- RNM has very unclear legislation that regulates the systems of civil protection and risk and crisis management. Both laws, the Law on Protection and Rescue and the Law on Crisis Management relate to dealing with emergencies. Parts and elements of these laws overlap

and lack clear coherence between them. This results in a large number of disputed reactions as well as complications in the coordination and implementation of measures and activities in practice.

- There is no direct and clearly established hierarchy of responsibility for crisis management within municipal and national structures.
- There is no direct responsibility for risk management at the national and local level. Who is responsible for inspecting, testing and ensuring that facilities and equipment are working and people are trained for the jobs they are doing?
- There is duplication of authority and duplication of positions and jobs that cannot be monitored and coordinated.
- The basic strategic document for protection and rescue has expired and the new one has not been adopted
- The legal amendments to both the law on civil protection and the law on crisis management refer to personnel issues, regulation of finances and management of institutions.
- From a review of the available documentation and the current legislation in the country, it can be determined that there are no clearly defined roles and mandates of the institutions for reacting and acting. Operational and strategic coordination between the police, firefighting/civil protection and health institutions does not exist.
- There is no legal regulation that will regulate the operation of rescue services in RSM



### 12.3. Administrative facilities

#### **Rescue Directorate**

The protection and rescue system in our country functions through the main operating entity SSO (Rescue Directorate) and the entities that make up the public enterprises and services are the bearers of the protection and rescue operations in the area of prevention, operational and remedial tasks. Most often, they have the first contact in the operational phase when crisis situations occur.

The protection and rescue system is established in the law on protection and rescue (2005) and is segmentally divided into tasks that include: preparation, training and equipping of the population and immediate implementation of protection and rescue measures. The same (defined as protection and rescue measures and activities) are divided according to the specialties of the protection and rescue forces:

- Evacuation;
- Sheltering;
- Caring for the suffering and endangered population;
- Radiological-chemical biological protection;
- Flood protection and rescue;
- Protection and rescue from debris;
- Fire protection and rescue
- Protection from unexploded ordnance and explosive devices;
- First aid;
- Protection of animals and animal products;
- Protection and rescue of plants and plant products;
- Sanitation of the field;
- Protection and rescue from technical technological accidents;
- Rescue from traffic accidents.

In the area of prevention, headed by the SSO, and in coordination with the territorial fire fighting units, local self-government units (ELS) and citizens, data and information about the danger are collected starting from the local level.

The readiness for operational response is increased and the competent institutions and entities in the crisis management system are notified. Coordination and communication includes regular reporting to decision makers in the crisis management system who determine the needs for hiring human and material-technical resources.

Operational tasks in protection and rescue also include the implementation of protection and rescue measures by specialized forces for protection and rescue, as well as taking measures and activities to prevent the spread of danger.

**The SSO, as the host entity, when a crisis situation is declared, coordinates the activities of all participants in the implementation of operational measures and plans the manner and scope of the use of forces.**

The Directorate for Protection and Rescue has been operational since 2005 and its priority goal is to ensure the protection and rescue of people, the environment, material goods, natural resources,

animal and plant life and cultural heritage from natural disasters and other accidents in peace, emergency and martial law. The Directorate, as part of the security system in the Republic of North Macedonia, prepares the Risk Assessment from natural disasters and other accidents, ensures the coordinated and timely use of the forces and material and technical means that are put into operation to deal with the accidents. It acts strategically and operationally by preparing and training the forces and carrying out protection and rescue of endangered population and all other interventions in coordination with other authorities. The former services in the field of protection and rescue in the Republic are united within the framework of the SSO, namely the Department for Fire Protection in the Ministry of Defense and the Department for Fire Protection in the Ministry of Internal Affairs.

In the conditions of a crisis, the SSO activates the Republic Headquarters for Protection and Rescue in the form of a Main Headquarters, which is managed by the director of the SSO.

In addition, rapid response teams and specialized forces for protection and rescue are engaged, using the protection and rescue measures prescribed by the law on protection and rescue.

SSO is organized on the territory of the Republic of North Macedonia in sectors and departments. 6 sectors operate within the SSO. phpMBIpTC.PNG (1669×942) (dzs.gov.mk) Based on the latest systematization of jobs published by DSZ in 2021, 355 job positions with 416 executors are described and 277 executors are assigned.

### **Crisis Management Center (CMC)**

A central agency that was established to respond to the challenges that crises bring with them. CMC in the Republic of North Macedonia acts independently as an organ of the state administration. Since its establishment and official start of work, this institution has been in charge of the organization and coordination of the entities that are key in dealing with a crisis situation or crisis, as well as their full administrative-technical support during the handling of accidents.

The basic competencies of the Crisis Management Center are:

- ensuring continuity in interdepartmental and international cooperation, consultation and coordination in crisis management;
- creating and updating a unique assessment of all risks and dangers to the security of the Republic;
- proposing measures and activities to resolve a crisis situation;

In addition to the above, CMC has competences in the field of cooperation, internally and with external entities. In the domain of issues for which this institution includes constant assessment of threats and renewal of plans for dealing with crisis situations, exchanging important information with knowledgeable persons from the subjects of the crisis management system. The CMC obtains the information it needs to forward to the decision-makers by monitoring the current situation with risks and threats to national security.

At the Center for Crisis Management, the Main Headquarters is established, as an operational-professional body that manages the activities for prevention and handling of crisis situations. The main staff consists of representatives from the participants in the Steering Committee. Members of the staff include the head of the emergency medical aid in Skopje, the director of the Directorate for Protection and Rescue, representatives of the Army, the Intelligence Agency and the Directorate for Security of Classified Information. The Headquarters is managed by the director of the Crisis

Management Center. CMC is a body with permanent staff that offers support in case of emergency situations and service information for the citizens of the Republic from different areas, in accordance with the legal competences for which it was established as an agency. other matters established by law.

The latest systematization of the crisis management center published in 2022 has confusing figures on the total number of jobs, namely:

Article 1 of the rulebook on systematization states:

"This rulebook determines the total number of 501 employed civil servants and auxiliary technical persons in the Crisis Management Center, the schedule, the code, the title and the description of the jobs by organizational units and the special conditions required for the performance of the works and the tasks of the separate jobs"

Article 6 and 7 of the same rulebook:

"In this regulation, a total of 644 positions of civil servants are determined and described, distributed by organizational units in accordance with the Regulation on the internal organization of the Crisis Management Center, namely:"

Article 7 describes in detail the number of jobs, which in total amounts to 634, which number does not coincide with the numbers given in any of the previous articles.

In the last part of the rulebook, the current situation is given with the systematization which is as follows:

Systematized jobs 666, filled jobs 287.

Conclusions:

- Human resource management in institutions should be improved to become more efficient. There is a serious lack of qualified staff in certain sectors of the SSO, which can be concluded from the systematization of the SSO.
- According to the systematization of CMC, we can also conclude that there is a lack of personnel.
- The systematization of CMC is quite confusing, the figures given in aggregate and disaggregated form do not match.
- There are job positions in institutions for which there are requirements and qualifications that do not match the job description.
- There is no direct and clearly established hierarchy of responsibility for crisis management within municipal and national structures.
- There is no direct responsibility for risk management at the national and local level. Who is responsible for inspecting, testing and ensuring that facilities and equipment are working and people are trained for the jobs they are doing?
- The firefighter training center operates in minimal and substandard conditions.
- Fire and rescue services are underfunded and in need of modern equipment and training.
- The fire fighting teams in the country have a serious need for modernization of the equipment, the premises and the conditions in which they work, as well as the staff they have at their disposal.
- The exchange of information between institutions is at a very low level, which leads to sluggishness of the system and inert reactions.

## 12.4. Recommendations

- To start a process for consolidating the legal regulation in the country that refers to the measures for civil protection and responding in crises with an emphasis on the implementation in the legislation of the decisions of the EU 32014D0762 ; CELEX\_32018D0142 ; 32019D0570
- Formation of the Directorate for Civil Protection under the Ministry of Internal Affairs, which will be formed by merging the SSO and CMC into one body, with two sectors: operational and strategic. All European countries operate on the same principle. RSM is the only one that has such a division, which is non-functional, and with these changes we will get closer to the standards of civil protection of the EU.
- To prepare risk assessments of disasters, floods and fires by planning regions in order to be able to set up a structure and infrastructure for rapid response which infrastructure will be easily mobile and ready for response.
- Campaign for the promotion of the number 112 and its use by citizens.
- To organize a protocol and define a mechanism for early warning of the population with a system of SMS messages. CMC to sign agreements with mobile operators in the territory of RSM for quick notification.
- A law on rescue services of the RSM should be drafted as a matter of urgency
- To strengthen the capacities of the training center of the RSM Rescue Directorate

## 13. Financing

The chapter on environment and climate change is one of the most expensive chapters to implement compared to other chapters in European legislation. According to some rough projections for the total necessary investments for projects in the area of environmental protection, about 4 billion euros are needed, or according to other sources reduced per capita about 2000 euros/inhabitant. Among the priorities are of course the improvement of ambient air quality, waste management, urban wastewater treatment and the fight against climate change (decarbonization). As for air quality, the priority is to change the way households are heated, i.e. the application of low-carbon technologies (greater coverage of remote central heating systems and their decarbonization, renewable energy sources in final consumption, elimination of solid fuels from urban environments, etc.), sustainable public transport and financial incentives for the renewal of the vehicle fleet. According to the Specific Implementation Plan of the Urban Wastewater Treatment Directive produced in 2017, the total investment needs for the waste water sector alone are estimated at approximately 1.2 billion euros by 2041 (Eptisa, 2017). This indicates that the country should allocate a much higher percentage of the national budget and should increase efforts to secure foreign investments to improve the implementation of legislation not only in the area of wastewater treatment, but also in general for environmental protection.

The fight against climate change is one of the most complex areas considering that it involves several competent institutions and several sectors, including energy, traffic and agriculture. In 2021, Macedonia adopted the revised National Determined Contribution (NDC), according to which it commits to having 51% lower greenhouse gas emissions in 2030 compared to the 1990 level. In order to achieve this goal, investments worth 7.7% of the annual average GDP have been estimated for each year until 2030. Of course, significant investments in the energy sector are expected here, in the form of renewable energy power plants.

However, in spite of this Mainly, the investments in Macedonia in the area of the environment are implemented with financial support from the EU and from bilateral aid of EU member states and other countries. And instead of prioritizing investments in the environment, primarily for the purpose of ensuring a better quality of life, there is a trend of constant reduction of the budget intended for environmental protection. Thus, in 2020 it was €10,486,569, in 2019, €10,811,770, while in 2018 it was €10,925,590. But the fact that during the rebalancing of the budget, environmental protection suffers the most, that is, the already modest initially projected budget for environmental protection is reduced (28.42% in 2018, 22.77% in 2019 and 36.45% in 2020).

The figure below provides an overview of the 2022 annual budget of the Ministry of Education and Culture, broken down by category, where it is clear that a fairly large budget is allocated to investments for environmental protection. However, compared to the total budget of the state, the budget of the Ministry of Education and Culture is less than 1%, i.e. 0.62%, which includes the costs of salaries and current expenses.

## Budget of the Ministry of Environment and Physical Planning

	Description	Re-balance 2022	% from the total budget
1	Administration	67.728	0,03%
2	Environmental protection	1.059.717	0,49%
3	Spatial plans	48.385	0,02%
C	Environmental enhancement	182.965	0,08%
	<b>Total budget of MoEPP</b>	<b>1.358.795</b>	<b>0,62%</b>

2	Environmental protection	Re-balance 2022
23	Management and water protection	206.140
24	Air quality	54.560
25	Waste water treatment	513.141
26	Waste management	145.876
26	Dojran Lake	140.000
	<b>Total budget for environmental protection</b>	<b>1.059.717</b>

Total Budget of RNM (re-balance 2022)	217.686.574	
Total Budget of MoEPP (ребаланс 2022)	1.358.795	0,62%

Figure 8. Budget of Ministry of Environment and Physical Planning

This situation of continuously low financial support indicates that the environment is not a priority for the Government (and previous governments), which is a particularly worrying situation considering that compliance with the EU's requirements regarding Chapter 27 requires primarily capital investments and continuous dedication on solving environmental problems and investments. Although the support from donors, which provides grants for the implementation of important projects in the field of environmental protection, is significant, such an approach must not dominate if significant progress is desired.

## 14. Green Agenda for Western Balkan

In December 2019, the European Commission launched its flagship policy, the European Green Deal. Its achievement could lead Europe to climate neutrality where by 2050 the economies of the European Union will produce with zero emissions. Also, this policy aims to achieve zero pollution by the industry, thus protecting the health of its citizens.

In accordance with its policy of enlargement, which should result in bringing the candidate countries for EU membership closer to the EU's requirements, the European Union realized that the Green Deal must be applied beyond its borders, so for the countries of the Western Balkans it developed Green Agenda for the Western Balkans, an agreement signed in December 2020 by the leaders of the countries of the Western Balkans.

However, despite some positive examples, the adoption of policies and decisions is largely carried out in a non-transparent manner with limited opportunities for the involvement of the civil sector and independent experts, Governments show commitment to the environmental agenda mostly in a declarative manner, and the adoption of new strategies and decisions the green transition is still very slow and implementation is lacking, which shows a lack of political will.

Water and air pollution, inadequate waste management, unsustainable and uncontrolled use of natural resources and coal-based energy production remain the biggest environmental challenges in the Western Balkans region. Nature protection is not recognized by other sectoral policies, is not considered a priority and there are no significant financial resources to support sustainable practices and management of protected areas.

Around 730 million euros were committed to support the implementation of the Green Agenda in bilateral and regional projects from 2021, including technical assistance and investments in energy efficiency, renewable energy, transition from coal and investments in environmental management.

What remains unclear is how and who leads the process and the management of finances for the implementation of the Green Agenda. Civil organizations, although recognized as a key player in the planning and implementation of the Green Agenda, have not yet been involved in any effective way in the process of implementing the Green Agenda.

In most countries in the region there is very little information and understanding of the intent and purpose of the Green Agenda, while government-led processes related to the preparation of the project are conducted behind closed doors.

Some projects proposed under the Green Agenda include the construction of roads, gas pipelines, coal mining and the opening of new mines, which contradict the region's decarbonisation goals and the principles of the Green Agenda.

Although the governments signed the Sofia declaration, the lack of political will and capacity to implement the Green Agenda is clearly visible.