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ecological breakdown

It's time to act!

Shadow Report on Chapter 27

Environment and Climate Change

September, 2022



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Introduction

This report presents environmental conditions in Kosovo by covering five main themes encompassing Water Pollution, Air Pollution, Protection of Nature, Protection of Forests, and Climate Change. This first-of-its-kind report is the joint product of an informal group of civil society organizations active in the field of environment, denominated as "Coalition 27".

In view of the importance of environmental protection, citizen wellbeing, and EU accession criteria for the Republic of Kosovo, Coalition 27 is capable of playing the role of an advocacy mechanism that seeks to accelerate the fulfillment of EU criteria on environmental protection.

As Kosovo aspires to full membership in the European Union and is a signatory of the Stabilization Association Agreement and the European Green Deal, it should also assume the obligations arising from such agreements. These criteria are mainly related to reforms and alignment of domestic legislation with EU acquis, and also the undertaking of measures to enhance the capacities of the institutions responsible for environmental protection.

The findings of this report reveal that environmental protection has never been a priority for any of the Governments, in addition to numerous challenges and grave stagnation in each field. In the absence of rule of law and political will, and in the presence of indiscriminate infrastructure development, illegal constructions, and corruption, Kosovo is today confronted by a degraded environment suffering almost irreparable environmental consequences. Also, when EU criteria on environmental protection are analyzed, it becomes visible that our country is a long way far from meeting such criteria. This situation has arisen due to the failure to adopt a number of laws and to enforce them, the lack of investments, as well as the insufficient capacities of the institutions to address such challenges.

Aware of the fact that even European Commission progress reports devote very little space to environmental protection, to local and international institutions this report may provide inputs that reflect the real situation and the measures that must be taken in the field of environmental protection. The report analyzes the general situation with regards to each topic, related legislation and its enforcement, strategies and plans, main problems, institutional capacities, and ultimately provides a number of recommendations on addressing such problems. On another note, the report's research and preparation period lasted from April to June 2022.

It is also worth pointing out that besides the above-mentioned challenges, it is encouraging to witness the ever-growing engagement of Kosovo civil society organizations and citizens, who are becoming more vocal and much more demanding of the Government when it comes to addressing problems related to the environment.

Water Pollution - Kosovo has limited water resources, which can negatively affect its sustainable development. The chapter on water pollution describes the current state of water resources and water in general in Kosovo, focusing on the main causes of water pollution in Kosovo and damages caused. Artificial lakes are not under adequate protection, which needs to be improved. Kosovo's unprotected rivers are in a deplorable state due to pollution. In the absence of treatment plants, this pollution is mainly caused by sewage, industrial and solid waste discharges. In addition to these, the indiscriminate construction of hydropower plants has caused the loss of water reserves and damages to flora and fauna. Since the actual situation shows that Kosovo water resources are in a grave situation, rapid institutional mobilization and intervention is required to protect them.

Air Pollution - As a transitioning country that has yet to complete the phase of economic development, despite minimal industrial activities, Kosovo suffers the effects of heavy air pollution. Air pollution values in the country during the winter period, when the consumption of electricity for heating increases, greatly exceed the allowed values and present a health problem for citizens. This whole-of-society issue is further compounded by the dependence on fossil fuels of Kosovo's energy and transport sectors. Successive governments have not prioritized this issue and have consequently taken slow or no steps at all to improve air quality. Although increased investments in renewable energy sources, energy efficiency measures, rehabilitation of thermal power plants and installation of filters, are a few positive indicators of measures that could potentially mitigate the situation to a certain extent, the absence of a clear Energy Strategy leads us to believe that Kosovo will suffer for a long time from air pollution.

Protection of Nature - Kosovo's biodiversity is rich in flora, vegetation and fauna. Despite legally declaring a large portion of the country (11.53% of its territory) as protected areas, their classification is partially in line with the International Union for Conservation of Nature (IUCN). The protection of these areas and diversity of living organisms they host, remains an ongoing challenge. Some of the principal risk factors towards the protection of these areas are the lack of political will, lack of professional capacities within institutions, absent law enforcement, lack of special programs on biodiversity monitoring, exploitation of biological resources (logging and forest harvesting), human interventions and disturbances (recreational activities), modifications of natural systems, dams and water management/use, surface water exploitation (domestic and agricultural use), pollution (rural and urban sewage), in addition to climate change and severe weather patterns (displacement and habitat change).

Forestry - Kosovo's forests cover an area of about 481,000 ha (44.7% of the total surface)¹, which is considered sustainable. Although, under the law, forests are considered as national assets with an important vital role, in practice they are not considered as such, which has resulted in enormous damages. Despite the many years that have passed since Kosovo first started designing forestry strategies, adopting laws and management plans, the facts on the ground show us that the situation gives cause for concern. Some of the main problems of this sector are illegal logging, lack of institutional capacities to protect forests, lack of cooperation and coordination between responsible institutions, insufficient enforcement/ implementation of legal acts and by-laws, strategies and programs, insufficient and non-prioritized investments in the forestry sector, as well as the absence of a vocational upper secondary school. Although at the "Ukshin Hoti" University in Prizren, the Faculty of Life and Environmental Sciences teaches a Forestry and Environmental Sciences Program at the BA level, there is still no data on cooperation between the Kosovo Forest Agency and this faculty regarding the required employee profiles in this field. Therefore, without a serious approach from the institutional side, it will be impossible to address the problems in this sector.

Climate Change - While the European Union displays ambition and aims to reduce greenhouse gas emissions by 55% by 2030, Kosovo seems to be at the beginning of the road and far from achieving these objectives. One of the main factors that cause greenhouse gas emissions in Kosovo is the use of coal to generate power in outdated coal-fired plants (86%), followed by agriculture, forestry, waste and other industrial processes sectors. Moreover, the path towards reaching the targets set by the European Union seems very challenging for a country that lacks institutional capacities, has no energy strategy and no law on climate change. The lack of institutional capacities and the failure to adopt these two strategic documents leaves Kosovo in a limbo, because it is still not clear whether Kosovo will be ready to finally give up the use of coal, or in another scenario, which would be the alternatives to diversify its energy sources.

Being aware that Kosovo faces numerous environmental problems whose solution requires time and financial costs, Coalition 27 is ringing the alarm bell so that government institutions take immediate and concrete steps to improve environmental conditions, by making decisions to reduce greenhouse gas emissions, employ renewable energy sources, restrict or outright ban the use of plastic bags, ensure rigorous protection of reservoirs used for drinking water, as well as to manage climate change. All these actions will undoubtedly have positive effects on the environment and the protection of the health of the population, who bear, in silence, the consequences of environmental pollution.

¹ https://www.mbpzhr-ks.net/repository/docs/84090_Inventarizimi-Nacional-i-Pyjeve-Kosov%EB-2012_WEB.pdf

For the Coalition

VISION

The Republic of Kosovo must ensure the conservation of the environment at the service of the wellbeing of people and nature, a developed and low-carbon economy, which is moving towards neutrality, with efficient and sustainable use of natural resources.

MISSION

Coalition 27 will monitor and contribute to the process of harmonization and enforcement of the policies and rules of the Republic of Kosovo, so that they are in line with EU legislation in the field of environment and climate change.

ROLE

Coalition 27 will advocate and become a guardian in the process of involving Kosovo's public in EU accession negotiations, in order to propose appropriate solutions that protect the environment and improve the quality of life of citizens.

CONTRIBUTING ORGANIZATIONS:

- 1. Water Pollution GLPS
- 2. Air Pollution INDEP
- 3. Protection of Nature Active Citizens
- 4. Forestry CNVP
- 5. Climate Change WWF Adria





1. Water pollution



General Overview

The territory of Kosovo, in aspects of hydrography, is enriched in the ground and underground waters, with a variety of rivers, and artificial or natural accumulations.² The topographic watershed of Kosovo is 11.645 km², while the existing accumulations are 569.690.00 m². There are nine rivers with the largest inflows within the year located in the White Drin Basin. In hydrographic terms, Kosovo is divided into 4 river basins:

- White Drin,
- Ibri,
- Morava e Binçës, and
- Lepenci.³

Kosovo's rivers flow into four marine watersheds, and these rivers leave Kosovo within 24 hours from the source point. Since these water sources do not stay in Kosovo, it is difficult to fulfill the needs of Kosovo citizens, for drinking and irrigation water, fishery, tourism, and generation of electricity. Compared to its neighbors, Kosovo is considered to be water stressed.⁴ Also, Kosovo has the lowest level of water resources developed with infrastructure. Overall, Kosovo is relatively water scarce and has modest precipitation which generally falls in winter, and majority in the south-western part.⁵

MESPI, in harmony with the European Union Water Framework Directive (EWFD 2000) has established the Regional River Basin Authority (RRBA) as a unit that must draft managing plans for river basins, within which shall be foreseen also their Monitoring, and the protection measures. Currently, the management plan for the Drini i Bardhë basin is drafted, while the plans for other river basins, RRBA, is working in this direction with the support of the SKAT project. However, for the realization of these plans in practice, time will be needed for the development of human and laboratory capacities. Monitoring of surface waters is done by the Hydrometeorological Institute of Kosovo, which has 54 sampling points.

Kosovo has a small number of natural lakes. It has some accumulations superficial or otherwise known as Artificial Lakes (Batllava, Ujmani, Radoniqi, Perlepnica and Badovc), as well as a number of small lakes for irrigation. According to the Master Water Plan (1983), in the Kosovo territory were planned to be built also twenty surface water accumulations as well as a number of micro-accumulations.⁶

² Report on the Water State in Kosovo, 2020, Kosovo Environmental Protection Agency, https://www.ammk-rks.net/assets/cms/uploads/files/Publikime-raporte/Shqip_WEB.pdf

³ Information collected from the Water Information System, last assessed on May 2022, https://siu.rks-gov.net/Hydrography/SurfaceWaters

⁴ Water Security Outlook for Kosovo, World Bank, https://documents1.worldbank.org/curated/en/496071548849630510/Water-Security-Outlook-for-Kosovo.pdf Ihid.

⁶ Ibid.

In 2021, approximately 96.88% of the population of Kosovo were furnished with water through the public system managed by the Regional Water Company, whereas 3.16% do not have access to the service of public water supply. However, through the years there have been an increasing number of citizens who have access to the public water supply.

Rivers in Kosovo are polluted, especially the middle streams around the residences are not in good condition and are overloaded with pollutants of various natures, and they are without an effective institutional protection. Unfortunately, in the rivers are thrown inert waste, industrial discharge and converted into sites of discharge of black waters.

There is only one sewage plant until now in Kosovo that treats polluted urban waters, which is in Skenderaj. The discharge of black waters is done directly in rivers thus it represents one of the main pollution factors of surface waters.⁸ In 2021 three more sewage plants were built in Prizren, Gjakova and Peja. These sewage plants now are in the testing phase.

Regarding water pollution, the EU continuously recommends Kosovo, among others, to:

- Establish an effective water monitoring system, publish data and undertake urgent and permanent measures to reduce water pollution;
- Enforce legal provisions on environmental liability, damage and crime; implement the polluter pays principle and create and start a permanent campaign for raising public awareness on environmental protection;⁹

Strategy and Plan

According to the Kosovo Country Report 2021, Kosovo has demonstrated progress in aligning water legislation with the EU acquis. It is mentioned that Kosovo has a 2017- 2036 Water Strategy, but the level of alignment with the EU acquis remains very low and the monitoring mechanism is not sufficient. Moreover, the report recommends significantly strengthening the implementation of the Law on Waters. It is said that: "The setting up of an interministerial water council within the Office of the Prime Minister is a positive step." Also, the report says that water resource monitoring networks are still incomplete, especially for groundwater.

The Assembly of Kosovo on 4 April 2021 approved the action plan of the European Reform Agenda (ERA) II, whereas one of the activities foreseen is: the development of policies to reduce water and air pollution and improve waste management and circular economy. As an indicator is the drafting of an action plan 2022-2024 for the implementation of the Kosovo National Water Strategy (2017-2036). However, this mentioned strategy is not published on the official websites of the Assembly, the Office of the Prime minister, and MESPI. This Strategy was not published on the platform of public consultation, meaning that there were

⁷ Water Statistics in Kosovo, Kosovo Agency of Statistics, https://ask.rks-gov.net/media/6724/statistikat-e-ujrave-ne-kosove-2020-2021.pdf

⁸ Ibid.

 $^{9\} Kosovo\ Report\ 2021, \\ \underline{https://ec.europa.eu/neighbourhood-enlargement/kosovo-report-2021_en}$

¹⁰ Kosovo Country Report 2021, https://ec.europa.eu/neighbourhood-enlargement/kosovo-report-2021_en

no proper consultations as it is foreseen by legislation, specifically by the Regulation (GRK) No.05/2016 on minimum standards for public consultation process.

Law on Waters sets the rule that the Kosovo National Water Strategy should be drafted by the MESPI for a period of 20 years with a possibility to review every five years and the Strategy will be approved by the Assembly of Kosovo. However, the Strategy in force has been drafted by the Inter-ministerial Council on Waters and apparently not in coordination with other institutions. And therefore, this document is not available to the public through official resources. The research team has tried to get information from the Office of the Prime Minister, but until now there has been no response.

In the text of this Strategy, it is said that this document was prepared by the Ministry of Environment and Spatial Planning in coordination with relevant authorities. This strategy was planned to be reviewed every 5 years.

The management plan for the Drini Bardhë Basin has been drawn up, but its implementation has not yet begun, and recently, there was a process of public consultation of the Working Program and the activities calendar for the preparation of Managing Plans for River basin Management "Ibër, Morava e Binçës and Lepenc" for the period 2022 - 2028.

This plan is prepared with the intention of preventing further deterioration of water systems, promoting a water use by providing long-term protection of water resources; strengthening the protection and continuous improvement of surface and groundwater environments by taking specific measures for the progressive reduction of pollution related to discharges and other pollution, to contribute to the reduction of the consequences of floods and droughts, to ensure sustainable use of surface water resources and good quality underground. ¹¹ In this document, it is stated that the river basins in Kosovo are subject to different outside indicators such as direct discharge of wastewater and untreated by households, various industrial businesses, pollution from agriculture, and waste disposal. And therefore a consultation is needed with interested parties, especially for the identification of key issues, to set the objectives, priorities, etc.

Legislation and implementation

Most of Kosovo's legal acts on water are harmonized with the European Union Water Directive (WFD 2000/60EC), and a series of other Directives related to water management and protection. However, institutional strengthening is needed for their implementation on a large scale.

In Kosovo, natural resources such as water, according to the Constitution of the Republic of Kosovo, enjoy special protection in accordance with the law. 12 Law no. 04/L-147 on Waters of Kosovo (hereinafter: Law on Waters) in force since 2013 is a special law that provides protection to the water and all other sub-legal acts should be in compliance with this law.

¹¹ https://konsultimet.rks-gov.net/Storage/Consultations/16-27-13-27042022/Publikim-i-programit-te-punes-dhe-kalendari-i-aktiviteteve-per-pergatitjen-e-Planeve-per-Menaxhim-te-Pellgjeve-Lumore.pdf

¹² Constitution of the Republic of Kosovo, Article 122, paragraph 2, https://gzk.rks-gov.net/ActDocumentDetail.aspx?ActID=3702

The main purpose of this law is to provide sustainable development and utilization of water resources, to establish procedures for the optimal distribution of water resources, to ensure the protection of water resources from pollution, overuse, and misuse, and to determine the institutional structures for managing the water resources.¹³

The current Law on Waters is being reviewed, and it is foreseen by the Legislative Programme for the year 2022 that the Draft Law on amending and supplementing the Law on Waters was planned to be approved by the Government of Kosovo in June 2022. However, this draft law has not yet been in the process of consultations and there is only published a version that was on public consultations from 13.11.2020 until 04.12.2020. This means that there may be a delay in the proposed deadline.

There are many by-laws that derive from the Law on Waters in order to further regulate the issue of water protection. However, this can also be an obstacle during the implementation, because the public officials need to consider a large number of documents.

The following by-laws in force are the following:

- Administrative Instruction (GRK) No. 06/2021 on the Structure of Water Payment;
- Regulation (GRK) No. 11/2014 on the Inter-ministerial Council Task on Water;
- Administrative Instruction (MESP) No.03/2018 on Procedures for Water Permit;
- Administrative Instruction (MESP) No. 15/2017 on Criteria of Determining the Sanitary Protection Zones for Water Resources;
- Administrative Instruction (MESP) No. 16/2017 on Classification of Surface Water Bodies:
- Administrative Instruction (MESP) No. 17/2017 for the Classification of Ground Water Bodies:
- Administrative Instruction (MESP) No. 09/2017 Instruction for Design, Construction and Use of Dams;
- Administrative Instruction (MESP) No. 05/2016 for Regulation of the Status of Water Assets;
- Administrative Instruction (MESP) No. 04 /2016 on Criteria and Procedures for the Protection of the Water Flows Coasts and Accumulations;
- Regulation (MESP) No.02/2016 on Manner for Determining the Acceptable Ecological Flow Rates.
- Administrative Instruction (MESP) No. 12/2015 for Determining the Criteria on Protected Areas for Strategic Goals;
- Administrative Instruction (MESP) No. 19/2015 for Protection from Harmful Water Actions;
- Administrative Instruction (MESP) No. 20/2015 for Criteria for Areas for Washing;
- Administrative Instruction No. 12/2013 Water Information System;
- Administrative Instruction (MESP) No. 26/2013 for Determining the Way of Verifying and Legitimating the Water Inspectorate.

¹³ Law no. 04/L-147 on Waters of Kosovo, https://gzk.rks-gov.net/ActDocumentDetail.aspx?ActID=8659

¹⁴ Legislative Programme for the year 2022, https://kryeministri.rks-gov.net/wp-content/uploads/2022/01/Programi-Legislativ-per-vitin-2022.pdf

 Administrative Instruction (MESPI) No. 02/2022 for Conditions, Manners, Parameters and Limit Values of Wastewater Discharge into Public Sewerage Network and in Water Body.

Law on Waters, among others, regulates the access to information related to waters, public participation in the decision-making process related to water management, impact assessment of various strategies, plans, and programs on the environment, impact assessments of certain projects, prevention and control of failures with the presence of the hazardous materials, integrated ecological permits for installations that affect in the water environment. However, the Ministry of Environment, Spatial Planning and Infrastructure (hereinafter: MESPI), for many years, failed to implement several dispositions of this law in some cases, for example, the water and permits for the construction of hydropower plants were issued in violence with the law since there was no proper impact assessment, and the public participation in the decision-making process was denied.

This law provides a disposition that the implementation of measures foreseen by the law on waters is not to allow worsening the water's status. And, in the past, the MESPI failed to completely act in accordance with this disposition, and this led to the degradation of rivers.

Law on waters specifies that the waters are not subject to the right of ownership of natural and legal persons, and article 48 of the Law provides a provision that does not allow building nearer than 30 meters from the line of water flows and accumulations. However, for example, some permits issued (for example permits for HPP Lumbardhi, Belaja, Sharri) allowed building construction in water ownership. And, Municipality of Shterpca gave the water ownership on utilization to a private company violating the article 109, paragraph 3 of the Law on Waters. One concerning issue is that the Draft Law on Waters published in the public consultation platform in 2020, amends article 48, paragraph 1.3 by prohibiting: "the construction of other building and facilities which do not serve flood protection and which impede access to water-flows at a distance of less than ten (10) meters from the line of reaching 100-year old high waters for all surface waters unless the owner or user has been conditioned to build the facility by taking precautionary measures to prevent or reduce the harmful effects of water." 15

Article 60 of Law on Waters regulates the release of wastewater by "prohibiting, except by water permit, the release of industrial refuses liquid quantity, agricultural and urban wastewater, and oils used in the sewage or drainage system in the surface and underground water bodies, on the coasts-line of the river and wetlands". ¹⁶ Further, the law on waters sets that the MESPI will decide regarding conditions, methods, parameters, and limit values of the wastewater released by a sub-legal act. This sub-legal act was approved by the Ministry of Environment and Spatial Planning and Infrastructure and it was signed by the Minister on 10.05.2022 and published in the Official Gazette of the Republic of Kosovo.¹⁷

¹⁵ Draft Law on amending and supplementing the Law no. 04/L-147 on Waters of Kosovo, https://konsultimet.rks-gov.net/viewConsult.php?ConsultationID=40985

¹⁶ Law no. 04/L-147 on Waters of Kosovo, Article 60, https://gzk.rks-gov.net/ActDocumentDetail.aspx?ActID=8659

¹⁷ Administrative Instruction MESPI – no. 02/2022 manners, parameters, and limit values of wastewater discharge into the public sewage and in the water body, https://gzk.rks-

 $[\]underline{gov.net/ActsByCategoryInst.aspx?Index=3} \underline{\overline{\&InstID=41}} \\ \underline{\&CatID=22} \\ \underline{\&fbclid=IwAR30bkA-1} \\ \underline{\&CatID=22} \\ \underline{\&fbclid=IwAR30bkA-1} \\ \underline{\&catID=22} \\ \underline{\&fbclid=IwAR30bkA-1} \\ \underline{\&catID=22} \\ \underline{$

<u>68xGDsWMhbmUy5Jo5MaGcT5ea2QnddbY8sx-ekh96Bb1enelRC4</u>

Main Problems

The remaining problem is the lack of implementation of legislative and strategic documents in the area of water protection and management. Especially for the current strategic document- Strategy on Waters, which is in force since 2017 but is yet not an action plan drafted and approved.

Moreover, in this strategy it is foreseen that the implementation of the State Water Strategy will be realized through the Action and Investment Plan for Water (AIPW), divided into four five-year periods. Although the first five-year period included the period 2017-2021, there is no data on how this plan was implemented, which, unfortunately, means that there is no implementation of this strategy and there is no transparency on how this document is being implemented. The Prime Minister's Office remained silent on this issue and did not provide us with information on why this document has not been published and how it is being implemented.

Another problem is the fact that in recent years the Law on Waters has been violated in the cases of the construction of the Hydropower plants (hereinafter: HPP) in Kosovo. The construction of HPP in Kosovo, not respecting the law has resulted to cause damage, and degradation of nature, which are irreparable. The noncompetency of public institutions and the lack of political will to stop the degradation of the environment resulted in making it more difficult for the lives of citizens who live in the surroundings. Unfortunately, in Kosovo, river life is currently facing risks due to the rapid development of hydropower plants. The Balkan rivers are to be known as the last free-flowing rivers in the European continent hence they offer a great ecological value – it is considered the Blue Heart of Europe.¹⁸

According to the analysis made by the environmental experts, Kosovo does not have sufficient water resources which can affect its sustainable development. The Ministry of Energy and Mining at the time (2006, 2009, and 2010) through the pre-feasibility studies identified the potential of building 79 HPP in Kosovo, with a total capacity of 34.4 MW.¹⁹

In 2005 Kosovo signed the Energy Community Treaty which took the responsibility to reach a 25% share of energy from renewable sources in gross final energy consumption in 2020. This was confirmed by Law no. 05/L-081 on Energy. Unfortunately, in trying to fulfill this obligation the Ministry has done many violations of the law and also of human rights. So, in the last decade, the HHP in Kosovo has been constructed in violation of the law. The process of constructing these planned HPP has been followed by many violations of the law. Currently, there are three lawsuits regarding the HPP, contesting the permits on hydropower plants in Deçan, HPP Brezovica, and HPP Lepenci 3. In these three cases, the court decided to suspend the contested permits until a final decision. Unfortunately, these decisions are not being respected by the companies and the hydropower plants continue to operate.

¹⁸ The Balkan Rivers: Save the Blue Heart of Europe, https://riverwatch.eu/en/balkanrivers/background

¹⁹ Rationale behind the small hydropower plants in the Lepenci River Basin and the reasons why they shouldn't be built, NGO "Gjethi".

The main law violations found for the construction of HPP (in general) are:

- 1. Non-implementation of the concession procedure;
- 2. Lack of transparency;
- 3. There is no real mitigation measure foreseen;
- 4. Construction permits have been issued several times by the Ministry, although this had to be done by Municipalities in some cases;
- 5. The buildings are close to the river in violation to the law,
- 6. There have been many constructions in the Protected Areas, such as in the Monastery of Decan and the Sharri National Protected Park,
- 7. Many hydropower plants have started operating without having an environmental permit, although this is required by law.

The non-implementation of the concession procedure is a common violation for all the HPP constructed or planned to be constructed in Kosovo. The Law on Waters of Kosovo sets the rule on the water right issuance and the conditions. As it is explained there are two ways to gain the water right, one is by the water permit and the other with concession. Further on, Article 72 and 78 of the law provides details on the procedure to receive a water permit and also sets the rule on when you need the concession. It specifies that the concession shall be issued by the Ministry and awarded, among others, for the use of water power for the generation of electricity. This violation was confirmed also by the Report issued by the Ministry, which recommends abolishing the permits given.²⁰

Lack of transparency, followed all the processes of construction of HPP, especially in the three cases that we built court cases. In all three cases, there was no proper public debate, meaning that the constitutional right of citizens to participate in decision-making regarding the environment they live in was breached.

According to the environmental experts, the MESPI issued the water permits in violation with the law. For example in the case of HPP in Deçan: a) it has not been indicated how many liters of water will be used, so there was no proper study of the ecological flow, (ii) it was necessary to measure an ecologically acceptable minimum for the flow of Lumbardh of Deçan (iii) this flow study ecological precondition should have been done before issuing the water consent, it had to be proved that the river has the necessary quantity for livelihood, flora and fauna, (iv) it is not mentioned anywhere how the trout fish will be protected, which is also protected by the Stabilization and Association Agreement, (v) since the project was designed with the storage base, obtaining a permit before the storage base is started is fraudulent and should be canceled, (vi) there is erosion and environmental degradation there where the accumulative basin, known as "Zalli i Rupes", had to be built, the nonrehabilitation of which affects the mountaineers of the village of Rashiq in Peja, (vii) a pipe has been inserted, the river goes to the springs of drinking water from which the Municipality of Deçan is supplied, (ix) the lack of rehabilitation of water catchments has been proven,

²⁰ Report of the Working Group for review of administrative procedures applied for hydropower plants and impact in water and environment, https://mmphi.rks-

gov.net/assets/cms/uploads/files/Raporti%20Final%20i%20Grupit%20Punues%20per%20Hidrocentralet-converted-2(2).pdf

which affects the drinking water for 30,000 inhabitants of the Municipality of Deçan, and (x) when water enters the pipes, the flora is endangered and fauna and river banks.

There are still no serious river restoration initiatives by none of the companies that constructed HPP, even though this is a legal obligation. This led to serious damage to the environment caused to river ecosystems and the surrounding local communities.

Another serious problem in issues of water is that the rivers are being polluted by sewage and other waste. According to the World Bank report, all major river basins of Kosovo are polluted, and it is reported that some water resources were very polluted or risked being contaminated as a result of not treatment of wastewater, industry, power plants, neglected maintenance of the sewerage system, intensive deforestation, or agriculture. There is a case in Prishtina, in the neighborhood Mati 1, where the sewage place is open which drains to the river Sitnica. This neighborhood is very populated and has a high number of residents, also there are different grocery shops. Until now this has not been treated by the responsible institutions and the wastewater continues to flow openly which poses a high risk to public health.

Also, the river Mirusha, in the Municipality of Malisheva is another example of how the river is polluted by wastewater. Even though this water resource is declared by the Government as a special natural area, it does not get proper treatment. In this river there are drained 11 sewages from villages: Bellanicë, Temeqinë, Bubël, Panorc, Rud, Turjakë, Mirushë, Lubizhdë, Banjë, Damanek and Llapqevë. As a result of this, in 2018 and 2019 there has been a massive mysterious fish death.

The polluted water poses a risk also to the health of citizens. In 2021, around 1500 persons were poisoned by the drinking water in Deçan. The result of analyses done of the drinking water in Deçan confirmed that this water was contaminated and bacteria were present, such as coliform and Escherichia coli. Regarding this case, there are accusations raised against the water supply company and the process is still ongoing.

Institutional capacities

The main bodies responsible for coordination, planning, programming, budgeting, financing, and monitoring of water issues include the Division of Waters within the Department of Environment and Water Protection of the MESPI, Municipalities, the Inter-ministerial Council for Waters, Regional River Basin Authority, Kosovo Environmental Protection Agency, Water Services Regulatory Authority, and the Kosovo Institute for Waters.

The MESPI has the main responsibilities for the implementation of the environmental legislation, but also other ministries have related responsibilities. The Local Government – Municipalities- has specific responsibilities, such as local strategic planning, monitoring,

²¹ Kosovo Water Security Outlook, June 2018/WAT, World Bank Group, https://documents1.worldbank.org/curated/en/496071548849630510/Water-Security-Outlook-for-Kosovo.pdf

inspection/enforcement, registration / licensing, data collection, reporting, and public information and consultation.

Law on Waters established the inter-ministerial Council for Waters as a coordinating and decision-making body that systematically examines issues of water, and proposes measures for the development, utilization, and protection of water resources and the system of Kosovo.²² It is foreseen that the Prime Minister of Kosovo is one out of five members of this Council.

In accordance with the Law, the River Basins Authority has an executive role for water sources, which is based in Pristina, and reports to the Minister (MESPI). Also, the Kosovo Environmental Protection Agency (KEPA) reports to the MESPI, which is responsible to carry out administrative, professional, scientific support, and investigative tasks in the field of environmental protection. KEPA regularly reports on the state of the environment regarding water supply water pollution, untreated sewage disposal, eutrophication, and surface water monitoring.

The Water Services Regulatory Authority (WSRA) is an independent regulatory body responsible to report to the Assembly of the Republic of Kosovo and is the key licensing and economic regulator for the water services sector. Therefore, the key role of WSRA is to manage an effective regulatory framework, which encourages water service providers in Kosovo to ensure a high-quality service in the monetary value paid by customers.

Problems with the institutional setup

In practice, there has been demonstrated that there are some problems in these institutions, including coordination and monitoring of the above-mentioned institutions.

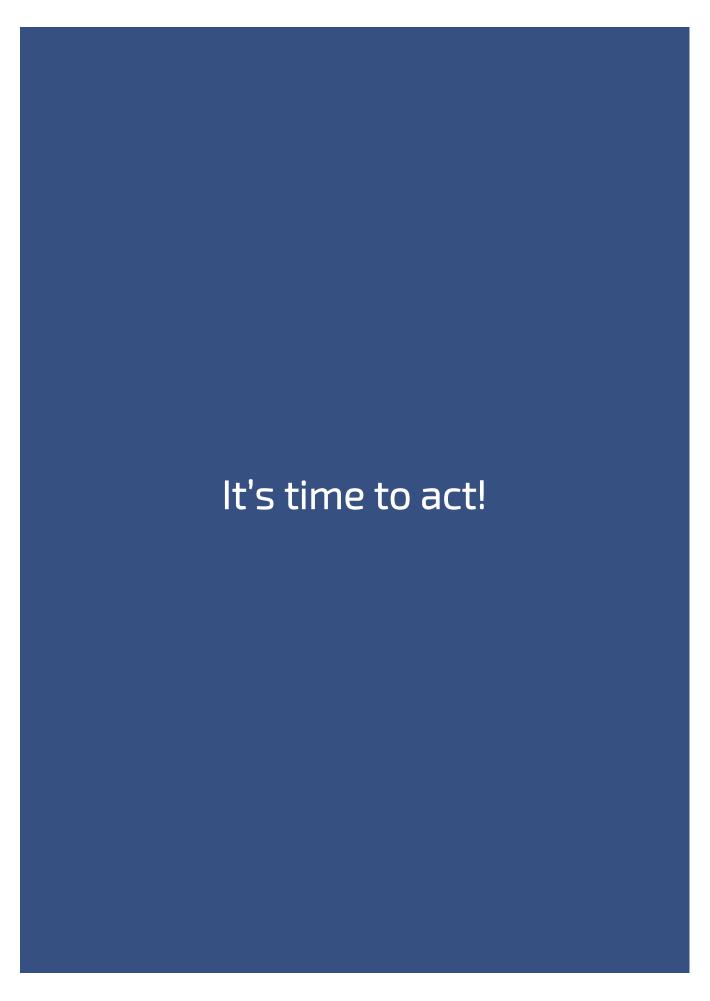
For example, there is no good coordination and cooperation between the Inter-ministerial Council of Waters and the Ministry of Environment, Spatial Planning and Infrastructure, but also with the Office of the Prime Minister.

Another issue is that under this law are foreseen to be established several independent bodies, but not all of them are operating. For example, the Kosovo Institute for Waters with the purpose of developing, researching, and projecting progress. However, this provision was never vitalized and this institute does not operate.

²² Law no. 04/L-147 on Waters of Kosovo, Article 15, https://gzk.rks-gov.net/ActDocumentDetail.aspx?ActID=8659

Recommendations

- 1. Approve the new Law on Waters in accordance with EU acquis and best practices, in order to improve the actual situation of waters and not worsen it.
- **2.** Publish the Kosovo National Water Strategy 2017 2036 on the official websites of the public institutions.
- **3.** Develop and approve the Action Plan of the Kosovo National Water Strategy 2017 -2036 and a concrete plan to monitor the implementation of this Strategy.
- **4.** Improve the monitoring of the implementation of legal and sub-legal acts in the field of water protection.
- **5.** Develop and implement the management plans for river basins, which also include the plan for their continuous monitoring.
- **6.** Monitor the process of construction of hydro power plants, make sure that the construction will be done in full respect of the environmental legislation, and go through proper environmental assessments due to their harmful environmental cumulative effects.
- 7. Strengthening the mechanisms in the MESPI and ensuring that all the licenses and permits, especially regarding the hydro power plants will be in accordance with the law.
- **8.** Ensure that there will be an inclusion of the public in decision-making on the issues related to the environment in accordance with the Constitution of the Republic of Kosovo.
- **9.** Identify agglomerations and sensitive areas, in line with the Urban Waste Water Treatment Directive.
- **10.** Develop specific strategies to improve investment in wastewater treatment facilities. Functionalize sewage implants in order to clean the rivers from wastewater. Identify all the open sewages in the country and make sure to close them in order to not pose a risk to the residents in the surroundings.
- **11.** Adopt key strategic and planning documents for alignment with EU water management legislation and practice.
- **12.** Strengthen the coordination between the public institutions that implement the Law on Waters and work on the water sector.
- 13. Take concrete actions to punish the polluters of water resources.





2. Air Pollution



General Overview

Kosovo suffers from poor air quality. Air pollution levels in Prishtina can sometimes be compared to those in mega cities like Beijing and Mumbai.²³ Kosovo's poor air quality is primarily due to concentrations of particulate pollutants such as PM2.5 and PM10, ozone (O_3) , carbon monoxide (CO), sulfur dioxide (SO₂) and nitrogen dioxide (NO₂), which will be discussed later in this chapter.

Planning to reduce air pollution relies on the availability of data and its analysis, in order for the findings to be incorporated into long-term plans. The reduction of anthropogenic air pollution sources can only be regulated by establishing adequate legislation and strategies that target this problem at the central and local level. These environmental policies exist in Kosovo, but there are no measures to ensure their implementation.

Air pollution is an issue that must be addressed urgently, as it is one of the main factors that cause diseases in respiratory system organs and premature deaths. Reduced lung function, respiratory infections, and aggravated asthma, are the result of short-term and long-term exposure to polluted air. Therefore, the reduction of this type of pollution is essential for the development of a healthy society.

Strategy and Plan

The "Environmental Protection Strategy (2013 – 2022)" (EPS) was published by the MESPI in 2013. The adopted strategy aimed to "specifically address environmental management obligations at the national and international level". 24 EPS objectives "harmonization with EU acquis" and "gradual reduction of air, water and land pollution". 25 Regarding air pollution, the EPS provided a list of priorities, some of which, such as the completion of the air quality monitoring network, have been met.²⁶ Priorities include local issues, such as improving public transport to reduce emissions from fuels and increasing the use of district heating systems, as well as nationwide issues such as enforcement of legislation and enhancement of cooperation between public authorities. The EPS also emphasizes the importance of environmental education and public awareness about the development of environmental policies. The strategy sets out clear objectives and priorities to provide a plan on improving air quality in Kosovo.

In 2018, MESP developed the "Climate Change Strategy 2018-2027". The main focus of this strategy is the reduction of greenhouse gases and adaptation to climate change, which

²³ World Bank, Western Balkans Regional AQM - Western Balkans Report – AQM in Kosovo, Washington D.C., USA, October 2019. 24 Ministry of Environment and Spatial Planning [MESP]. Environmental Protection Strategy 2013-2022, Republic of Kosovo, Prishtina, 2013, https://mmphi.rks-

gov.net/assets/cms/uploads/files/Publikimet/Strategija_e_Mbroities_s%C3%AB_Miedisit_-_2013_-2022_Shqip_748721.pdf 25 Ibid. 13.

would promote sustainable development.²⁷ Its general targets for reduction of air pollution constitute major shifts towards meeting EU directives and reducing greenhouse gases. Also, an essential objective is greater participation by citizens and institutional structures, such as non-governmental organizations and the government itself.²⁸ As the creator of the strategy, MESP was responsible for monitoring the implementation of this strategy. The Inter-Ministerial Working Group on Climate Change, established for the drafting of the Climate Change Strategy and Action Plan, will be used to establish a team responsible for monitoring and reporting on the implementation of the CCS/AP.

The National Emissions Reduction Plan (NERP) (2018) refers to policy guidelines from the Secretariat of the Energy Community, which can be used, until 2027, as an alternative, to setting the emission limit values. As a signatory to the Energy Committee Treaty (2006), the Government of Kosovo is required to make improvements in limiting certain air pollutants, such as SO2, NOx and dust.²⁹ NERP seeks "to reduce emissions of major pollutants from large combustion plants and concerns emission reduction targets for existing combustion plants with a rated thermal input of 50MW or more, which were granted permission for emissions before 31 December 1992".³⁰ Central to NERP are the Kosova A and B thermal power plants. It is essential that these power plants reduce their combustion "every year starting from 1 January 2018 until 31 December 2027" to ensure that they comply with the emission ceiling values stated by the EU Directive 2010/75/EU. The plan requires an annual report, which will include ceiling emissions and actual emissions; a description of the penalties for plants that do not comply with the limits, and details on ideal pollutant reduction levels.³¹

Polluters	2014	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Dust tons/year	15,175	5,255	3,993	3,302	1,556	883	885	475	475	475	475
S0x tons/year	12,746	12,757	11,112	10,150	10,111	11,077	11,125	9,497	9,497	9,497	6,129
NOx tons/year	21,412	21,176	13,890	10,239	8,948	8,829	5,563	6,129	6,129	6,129	6,129

Table 1. Combined ceiling emissions for combustion plants of NERP participants in Kosovo

Legislation and Enforcement

The European Union (EU) has long established and enforced directives on air quality and pollution. Council Directive 96/62/EC of 27 September 1996 on ambient air quality assessment and management, aimed to create a common strategy in all Member States to

²⁷ MESP, Climate Change Strategy 2019–2028. Republic of Kosovo, Kosovo: Prishtina. (2018), https://gzk.rks-gov.net/ActDocumentDetail.aspx?ActID=29356

²⁸ Ibid, 52-53.

²⁹ Republic of Kosovo. National Emissions Reductions Plan, Kosovo: Prishtina. (2018), 3.

³⁰ Ibid. 5.

³¹ Ibid. 12.

assess ambient air quality and obtain adequate data on air quality.³² Directive 2004/107/EC, known as the "Fourth Daughter Directive", aimed to monitor arsenic, cadmium, mercury, nickel and polycyclic aromatic hydrocarbons in ambient air.³³ Directive 2008/50/EC repealed all previous air quality legislation - except the Fourth Daughter Directive - and established "the need to reduce pollution" and "protect human health and the environment as a whole".³⁴ The latest legislation provides directives regarding exchange of air quality information and methods, data collection and sampling for the assessment of ambient air quality.³⁵

The Government of Kosovo pursues legislation similar to that of the EU, "recognizing the need to harmonize environmental standards in Kosovo with those of the European Union".³⁶ Law No. 03/L-025 on Environmental Protection, "shall harmonize economic development and social welfare with basic principles for environmental protection according to the concept of sustainable development".37 Law No. 2004/30 on Air Protection, which is currently being amended³⁸, was designed "to regulate and guarantee the rights of citizens to live in a healthy and clean air environment". The legal framework on protection of air from pollution, has also been completed with AIs (by-laws), such as;

- Administrative Instruction (GoK) No. 06/2007 on the rules and standards of the discharges on air by the stationary sources of pollution;
- Administrative Instruction (GoK) No. 04/2009 on the control of emissions of volatile organic compounds during disposal, release, intake and transport of fuels;
- Administrative Instruction (MESP) No. 02/2011 on Air Quality Assessment;
- Administrative Instruction No. 15/2010 on criteria for defining of air quality monitoring points, number and frequency of measurements, classification of pollutants which are monitored, the methodology of work, form and timing;
- Administrative Instruction (GoK) No. 21/2013 on arsenic, cadmium, mercury, nickel and polycyclic aromatic hydrocarbons in the air;
- Administrative Instruction (GoK) No. 16/2013 on substances that deplete the ozone layer and fluorinated greenhouse gases;
- Administrative Instruction (GoK) No. 19/2013 on access to information on economic expenses of fuel consumption and CO₂ emissions of new personal vehicles;
- Administrative Instruction (GoK) No. 01/2016 on mechanism for monitoring greenhouse gas emissions

source=docs&ust=1655386299053739&usg=A0vVaë2Tsfln88vj5FiJSë50EdN3

³² European Union [hereafter EU]. Council Directive 96/62/EC of 27 September 1996 on ambient air quality assessment and management [1996] CD 96/62/EC. https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:31996L0062.

³³ EU. Directive 2004/107/EC of the European Parliament and of the Council of 15 December 2004 relating to arsenic, cadmium, mercury, nickel and polycyclic aromatic hydrocarbons in ambient air [2004] 2004/107/EC. https://eur-lex.europa.eu/legalcontent/EN/TXT/HTML/?uri=CELEX:32004L0107&from=en.

³⁴ EU. Directive 2008/50/EC of the European Parliament and of the Council of 21 May 2008 on ambient air quality and cleaner air for Europe [2008] 2008/107/EC. https://eur-lex.europa.eu/legalcontent/EN/TXT/HTML/?uri=CELEX:32008L0050&from=en.

³⁵ Commission Implementing Decision 2011/850/EU; Directive 2015/1480/EC.

³⁶ Assembly of Kosovo. Law No. 2004/30 on Air Protection. [2004]

http://old.kuvendikosoves.org/common/docs/ligjet/2004_30_en.pdf. 37 Republic of Kosovo. Law No. 03/L-25 on Environmental Protection. [2009]. https://mmphi.rks-

gov.net/assets/cms/uploads/files/Legjislacioni/pdf-test%20(38).pdf. 38 Assembly of Kosovo. Draft Law No. 08/L-025 on Air Protection from Pollution $\underline{https://www.google.com/url?q=https://www.kuvendikosoves.org/shq/projektligjet/projektligji/?draftlaw\%3D263\&sa=D\&tolerander.org/shq/projektligjet/projektligji/?draftlaw%3D263&sa=D\&tolerander.org/shq/projektligjet/projektligji/?draftlaw%3D263&sa=D\&tolerander.org/shq/projektligjet/projektligji/?draftlaw%3D263&sa=D\&tolerander.org/shq/projektligjet/projektligji/?draftlaw%3D263&sa=D\&tolerander.org/shq/projektligji/?draftlaw%3D263&sa=D\&tolerander.org/shq/projektligji/?draftlaw%3D263&sa=D\&tolerander.org/shq/projektligji/?draftlaw%3D263&sa=D&tolerander.org/shq/$

Administrative Instruction (GoK) No. 08/2016 on allowed norms of discharges in air from mobile sources.

Law No. 03/L-043 on Integrated Prevention Pollution Control aims at the prevention and reduction of emissions that pollute the air, water and land.³⁹ The environmental impact on the air of new projects is legally required to be assessed under Law No. 03/L-214 and Law No. 03/L-024 on Environmental Impact Assessment. 40 Furthermore, in 2011, the Ministry of Environment and Spatial Planning was established as the authority to assess air quality and to establish methods and criteria for ambient air quality as specified in EU Directives 2004/107/EC and 2008/50/EC.

Legislation on air quality and assessment is well integrated into Kosovo's legal system and is in line with EU directives. However, laws are minimally enforced in Kosovo. 41

As part of EU integration, the European Commission issues an annual report on development in Kosovo against the EU acquis. Each year, there is a chapter dedicated to the environment. Despite the Law on Air Protection coming into force in 2004, the EC's first report of 2005 noted "no progress in the field of air quality". 42 The same was observed in 2006, 2007 and 2008. So for four years in a row, despite adopting a law that provides for the protection of air from pollution, Kosovo has not managed to mobilize adequate mechanisms to enforce this law.

The MESP, in 2009, purchased the equipment to start implementing a mobile air quality monitoring system, but by 2010, only one of the four stations was operating successfully. 43 The other three stations were established in 2011 and air quality monitoring analyzed sulfur dioxide, nitrogen oxides, carbon monoxide, ozone and suspended particles.

The European Commission reported that in 2013 additional stations were added, enabling the monitoring of ambient air quality throughout Kosovo. However, the implementation of air quality monitoring was still weak, as reports on the state of the air contained only basic information and the European Commission stated that the lack of maintenance of the stations "jeopardized their accuracy". 44

Four years ago, the European Commission reported that the air quality monitoring system with real-time data, was finally operational. 45 In 2019, 2020 and 2021, air quality monitoring was rated as making "some progress", including making it accessible to the public. 46 Despite this, the 2020 report pointed out that: "Insufficient funding and administrative capacities prevent the proper implementation of the current strategic framework". 47 In 2021, air quality

³⁹ Republic of Kosovo, Law No. 03/L-043 on Integrated Prevention Pollution Control. http://old.kuvendikosoves.org/common/docs/ligiet/2009_03-L-043_en.pdf.

⁴⁰ Republic of Kosovo, Law No. 03/L-214 on Environmental Impact Assessment. [2010] https://mmphi.rksgov.net/assets/cms/uploads/files/Legiislacioni/pdf-test%20(29).pdf.

⁴¹ Tchounikine, Mathilde. Air Quality in Kosovo: Towards European Standards. Prishtina, Kosovo: Institute for Development Policies, June 2019.

⁴² European Commission [hereafter EC]. "Kosovo Progress Report 2005", European Commission, Luxembourg: 2005.

⁴³ EC, "Kosovo Progress Report 2006", EC, "Kosovo Progress Report 2007"; EC, "Kosovo Progress Report 2008".

⁴⁴ EC, "Kosovo Progress Report 2014".

⁴⁵ EC, "Kosovo Progress Report 2018". 46 EC, "Kosovo Progress Report 2019", EC, "Kosovo Progress Report 2020"; EC, "Kosovo Progress Report 2021".

⁴⁷ EC, "Kosovo Progress Report 2020", 93.

plans still lacked sufficient action as "plans have not yet been prepared for areas where pollutant levels clearly exceed limit values". 48

Legislation for air standards in Kosovo is well defined in law. However, the enforcement of such laws has been inconsistent by the Government of Kosovo. The Government's efforts to improve ambient air quality and the lives of citizens, face significant challenges related to improving the institutional framework for managing ambient air quality and enforcement of the law, as well as the lack of financial resources. 49

Main Problems

In Kosovo, the main contributors to air pollution are:

1. Kosovo Energy Corporation (KEK)

The Kosovo Energy Corporation operates two coal-fired (lignite) power plants in Obiliq, Kosovo. The Kosova A and B TPPs are active throughout the year and continuously contribute to the levels of CO_2 , SO_2 , NO_2 , O_3 , Pb, dust, smoke dioxins and PM2.5 and PM10 particles in the air. The World Bank has described Kosovo A as "the worst source of pollution in Europe". 50 Also, in 2017, the year of the World Bank report, the three ambient air monitoring stations in proximity of KEK activities, reported PM2.5 and PM10 exceedances during nine months of the year.⁵¹ Dust emissions from TPP Kosova A have not exceeded permitted limit values in 2021. In TPP Kosova B, dust emissions have exceeded the permitted limit values up to 8 times.⁵²

Under the European Commission's Instrument for Pre-Accession (IPA), EUR 76.4 million of EU funding were committed to provide filters for Kosova B in order to reduce the environmental impact of the power plant in accordance with the Large Combustion Plants Directive (2001/80/EC) and the Industrial Emissions Directive (2010/75/EU).53 It has also been reported that there was a trend of decreasing PM2.5 and PM10 concentrations between 2013 and 2020 that "may be related to the measures taken to reduce pollution". 54 However, in February 2020, the Secretariat of the European Energy Community issued "Reasoned Opinions" against Kosovo for failing to meet NERP ceilings in 2018 and 2019. This means that there was no significant reduction in SO_2 , NO_2 and dust emissions, as required by the Large Combustion Plants Directive.55 Work is still needed if KEK is to mitigate its environmental impact on air quality.

⁴⁸ EC, "Kosovo Progress Report 2021", 100.

⁴⁹ World Bank, AQM in Kosovo.

⁵⁰World Bank. "Implementation completion and results report on two grants and a credit in the amount of SDR 9.90 million (US\$ 14.7 million equivalent) to the Republic of Kosovo for an energy sector clean-up and land reclamation project" February 2017, accessed in April 2022, https://documents1.worldbank.org/curated/zh/323961490279093640/pdf/ICR-Main-Document-P096181-2017-02-28-17-46-03202017.pdf.

⁵¹ KEPA, "Annual Report on State of Air 2017", MESP, Kosovo: Prishtina, (2017)

⁵² Annual Air State Report 2021, KEPA <u>https://www.ammk-</u>

 $[\]underline{rks.net/assets/cms/uploads/files/Dokumente\%202022/Raporti\%20vjetor\%20i\%20Ajrit\%202021\%20(final\%20280422).pdf$ 53 EU Press Release, "EU helps tackle air pollution in Kosovo with €76.4 million", 30 January 2020, accessed on 12 April 2022, https://ec.europa.eu/commission/presscorner/detail/MT/ip_20_141.

⁵⁴ KEPA, "Annual Environment State Report 2020", MESP, Kosovo: Prishtina, (2020).

⁵⁵ Energy Community, "Secretariat brings forward cases against three Contracting Parties for not reducing air pollution from thermal power plants", 23 February 2022, Accessed on 12 April 2022 https://energy-community.org/news/Energy-Community-News/2022/02/23a.html.

2. Road transportation, mainly within urban areas

Pollutant emissions from vehicles have increased continuously due to high-intensity traffic and congestion in city centers. Population growth also affects the rising number of vehicles on the road. Between 2011 and 2021, the number of vehicles increased by over 89%. The transportation sector is overwhelmed by a large number of old vehicles and the use of low-quality fuels. The average service life of a vehicle in Kosovo is nineteen years, compared to about nine years in Western Europe. As a result of these factors, it is estimated that road transportation accounts for about 10% of total emissions in Kosovo in 2018. The number of vehicles on the road is still increasing, and it is likely that these vehicles are older and therefore more polluting, so further legislation and access to modern public transportation is needed to minimize pollution levels.

3. Wood and lignite

Wood and lignite are the main sources of energy for heating houses in Kosovo.⁶⁰ The largest number of PM10 exceedances in 2020 was recorded in the autumn-winter season as a result of the use of fuels in the country.⁶¹

As a measure to reduce gas emissions that affect air quality, the Government of Kosovo has increased power generation from alternative sources (water, wind), however, for power generation KEK still uses very high levels of coal as the main input, which is the main cause of air pollution, and keeps the country far from harmonization with EU acquis.

4. Industry

Industrial areas are also one of the main sources of emissions of particulates and other air pollutants, due to outdated technologies and the use of sulfur-rich fuels. According to the KEPA, the main sources of air pollution include, among others, the industrial complex in Mitrovica; nickel, lead and zinc extraction and smelting in Drenas; cement production in Han i Elezit; construction and stone quarries; while lead mines and their waste remain the main sources of lead emissions in Kosovo (World Bank 2013). Vehicles have been the main source of lead emissions until the lead content of gasoline was regulated in 2012. Maxhuni et al. (2015) found elevated concentrations of toxic heavy metals, including chromium, nickel, lead and zinc, particularly in the western part of Kosovo, and ambient lead concentrations in the country were on average six times higher than the average for European countries. Industrial sources, including mining, industrial areas and traffic, were identified as the main emission sources of these heavy metal pollutants.⁶²

⁵⁶ Kosovo Agency of Statistics, "Transport Statistics", January 2022, accessed on 12 April 2022, https://ask.rks-gov.net/media/6639/transport-statistics-q4-2021.pdf.

⁵⁷ MESP, "Environmental Protection Strategy 2013-2022," Republic of Kosovo, Prishtina, 2013.

⁵⁸ World Bank, "Kosovo: A Future of Green Transport and Clean Air," accessed on 13 April 2022,

https://openknowledge.worldbank.org/bitstream/handle/10986/32283/Kosovo-A-Future-of-Green-Transport-and-Clean-Air.pdf?sequence=1&isAllowed=y.

⁵⁹ Ibid. 10.

⁶⁰ World Bank, "Western Balkans Regional AQM - Western Balkans Report - AQM in Kosovo", October 2019, accessed on 13 April 2022, https://openknowledge.worldbank.org/bitstream/handle/10986/33041/Air-Pollution-Management-in-Kosovo.pdf?sequence=1&isAllowed=y.

⁶¹ KEPA "Annual Report 2020".

⁶² World Bank, Air Quality Management in Kosovo, Report, October 2018.

5. Agriculture

Agriculture is an important sector for Kosovo; it accounts for 11.9% of the GDP and offers development and employment opportunities. ⁶³ Agriculture is the second largest contributor to greenhouse gas emissions, generating 8% of total emissions.⁶⁴ The main causes of emissions are livestock, deforestation and crop fertilization, all of which generate increased amounts of CO₂.65 There is high demand for agricultural products, such as beef and dairy products, which means agriculture can continue to have a high impact on greenhouse gas emissions. Despite being an important sector for the Government of Kosovo, the agriculture sector suffers from a host of issues, such as weak land management systems, weak production systems, lack of monitoring and data management, and reliance on government subsidies and international grants. 66 These factors increase pollution, not only in the air, but also in water and land, contributing to other climate-related issues such as eutrophication and infertile soil.

6. Waste

The waste sector causes about 3% of greenhouse gas emissions.⁶⁷ Kosovo lacks an integrated waste management system and practically no waste is recycled.⁶⁸ Although 90% of waste is collected in urban areas, waste collection is inexistent in rural areas, which encourages inappropriate waste dumping. Waste - collected by authorities or illegally dumped - is generally sent to landfills or burned, which contributes to emissions. Coal ash and mine tailings are also dumped, rather than safely collected or recycled. 69 Current waste disposal practices lead to high levels of land and water pollution, emissions of methane and dioxins, and fine particulate matter into the air. It is estimated that waste disposal equates to 345,000 tons of CO_2 and 2,300 tons of PM10 per year. ⁷⁰ There is no complete data on waste management, which presents a problem to efforts to improve conditions in the country.

Institutional Capacities

As of 2020, Kosovo has twelve monitoring stations and one mobile station to assess air quality throughout the country. Particle dust (PM10, PM2.5), NO₂, SO₂, O₃ and CO₂ level, are monitored at these stations. 71 Data reporting can also be administered through an online air quality reporting system, which is administered by the Hydrometeorological Institute of

⁶³ MESP, Climate Change Strategy.

⁶⁴ KEPA "Annual Report 2020".

⁶⁵ MESP, Climate Change Strategy.

⁶⁶ Fjolle Caka, "Moving Towards Sustainable Agricultural Land Management and Practices in Kosovo," WIT Transactions on Ecology and the Environment, Vol 249, 24. https://www.witpress.com/Secure/elibrary/papers/SC20/SC20003FU1.pdf. 67 MESP, Climate Change Strategy.

⁶⁸ World Bank, "Kosovo Country Environmental Analysis: Cost Assessment Of Environmental Degradation, Institutional Review, and Public Environmental Expenditure Review", January 2013. 69 Ibid.

⁷⁰ Ihid. 38-39.

⁷¹ KEPA "Annual Report 2020", 11.

Kosovo.⁷² This can encourage citizens to become more informed about air quality in their region.

The Kosovo Environmental Protection Agency (KEPA) is responsible for air quality monitoring and has collaborated with the Millennium Foundation Kosovo in the "Supply of Project Management, Air Quality Information Management, Behavior Change and Communication Services" Project, which means that sources of air pollutants have been identified for the entire territory of Kosovo and an inventory of air emissions for Kosovo has been created. The inventory is one of the main tools for air quality management. For KEPA, it "provides information through which we understand who the relative contributors are according to activities and sources, thus enabling effective action to reduce emissions and improve ambient air quality". The inventory is one of the main tools for air quality according to activities and sources, thus enabling effective action to reduce emissions and improve ambient air quality.

Investments

Investments in the air protection sector are not proportionate to air pollution coming from multiple sources. During 2021, investments in the air protection sector were limited. Investments from the public budget in the air protection sector for 2021 were geared towards supply and maintenance of air quality monitoring stations under KEPA's management (Tab.21). Thus, no investments were made in any other aspect to improve air quality.

Donor investments in the air protection sector in 2021 were at a low level. In this regard, foreign investments are more appreciated in terms of assessment and monitoring of air and health impacts. Projects from donors that are related to the air sector are presented in the table below.⁷⁵

Name of project	Donor	Project Value	Implementation Period
Improve environmental performance of the Kosova B TPP	EU-IPA	EUR 76,400,000.00	2019-2022
"Development of Capacities for Air Pollution Control" Project	JICA – Japanese Governm ent	USD 4,000,000.00	2017-2021
Environmental Data Collection (MCC Threshold Program)	MCC-USA	USD 3,000,000.00	2017-2021
Investments in efficient energy in the household sector (MCC Threshold Program)	MCC-USA	USD 20,700,000.00	2017-2021
Investment in the district heating system (MCC Threshold Program)	MCC-USA	USD 10,900,000.00	2017-2021

⁷² Hydrometeorological Institute of Kosovo, "State Air Quality Monitoring Network", accessed on 20 April 2020, http://www.ihmk-rks.net/?page=2.21.

⁷³ KEPA "Annual Report 2020", 15.

⁷⁴ Ibid. 16

⁷⁵ Annual Air State Report 2021, KEPA, https://www.ammk-rks.net/assets/cms/uploads/files/Dokumente%202022/Raporti%20vjetor%20i%20Ajrit%202021%20(final%20280422).pdf

Capacity building for the use of environmental data; cooperation project between the KEPA and the Swedish Environmental Protection Agency	SIDA	SEK 2,262,400.00	2020-2023
Enhancement of Pollutant Release and Transfer Registers (PRTRs) in the Western Balkan countries and the Republic of Moldova	German Governm ent	EUR 355.301	2021-2023
Participation in the work and program of the European Environment Agency (regional project)	EU-IPA	Multi-Beneficiary IPA Fund EUR 2,480,202.00	2018-2022
Transition towards lower emissions and climate resilient economy in the Western Balkans and in Turkey (TRATOLOW)	EU-IPA	Multi-Beneficiary IPA Fund	2021-2022

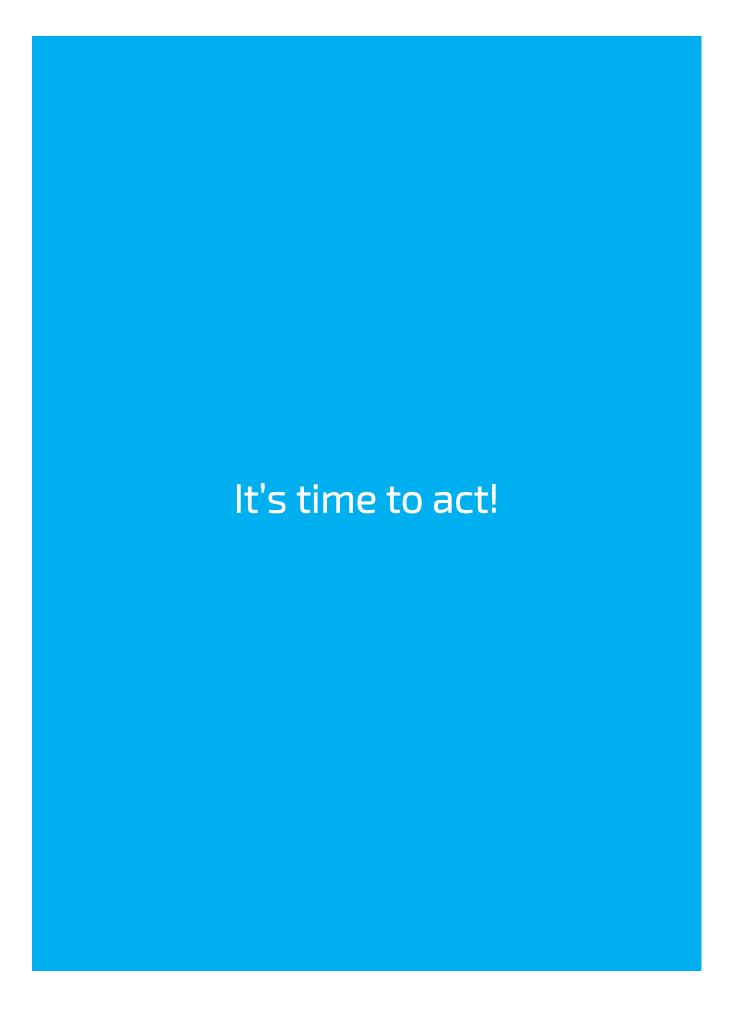
As a result of the intervention with investments from the European Commission, JICA and MCC/MFK, the MESPI has enhanced the communication system for the collection, processing and reporting of air quality data. In addition, during 2020, with MCC/MFK support, the MESPI has continuously enhanced the communication system for the collection, processing and reporting of air quality data, by publishing real-time air quality data and the AQI forecast through the national air quality portal at https://airqualitykosova.rks-gov.net/sg/, as well as by reporting the data update to the European Environment Agency (EEA) https://airindex.eea.europa.eu/Map/AQI/Viewer/. The public can also access the air quality index through a smartphone app.⁷⁶

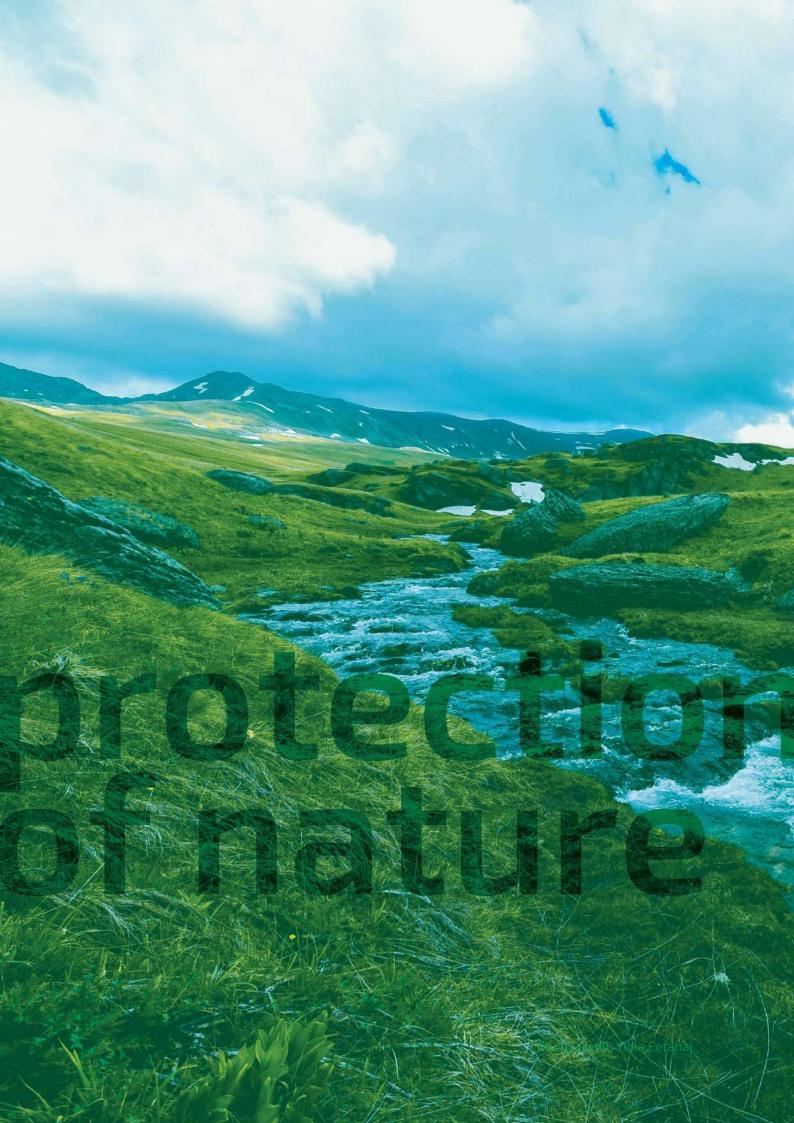
Also, in 2021, the contract for the installation of new substations, heat tank, and SCADA system, was signed by Termokos, the District Heating Utility. This contract was signed under the "Prishtina District Heating Improvement" Project, which is realized thanks to the support of the German Development Bank (Kfw). According to the contract, 320 new substations are expected to be installed in the capital. With this expansion of the district heating system in Prishtina, there will be a significant impact on reducing air pollution during the winter season.

⁷⁶ Annual Air State Report 2020, KEPA.

Recommendations

- 1. The Government of Kosovo should take measures to ensure the enforcement of applicable legislation. Since the legal basis on air pollution is regulated, only the enforcement component of this legislation is missing.
- **2.** Periodically monitor the implementation of long-term and short-term strategies to ensure the achievement of the intended results.
- **3.** Adopt the new Energy Strategy that will have a direct impact on reducing air pollution, since this strategy foresees the decarbonization of the energy sector, which in Kosovo relies primarily on burning coal.
- **4.** Invest in reducing pollution from the Kosova A and Kosova B TPPs. The Government of Kosovo should invest, as soon as possible, in the installation of air filters at our TPPs, as a measure of the transition to clean energy.
- **5.** Realize the necessary investments in energy efficiency to reduce air pollution. Kosovo's energy supply is heavily reliant on fossil sources, therefore, higher levels of energy efficiency would help reduce consumption and, in parallel, reduce air pollution.
- **6.** Promote public transportation to help improve air conditions. Transportation is one of the factors with a significant impact on air pollution. The use of urban transportation would result in reducing the number of vehicles circulating within cities.
- **7.** Enhance capacities required for forest management and brownfield regeneration. Forest areas are of particular importance to achieve a balance of emissions and absorb greenhouse gases. Kosovo, with its growing trend of deforestation, should turn its attention towards the conservation and restoration of this wealth.
- **8.** Polluters must pay. Across the European Union and beyond, governments have already introduced tariffs to tax air pollutants. Kosovo should follow this example, and force polluting industries to reduce their greenhouse gas emissions.





3. Protection of Nature



General Overview

Although Kosovo is a small country, it stands out for its rich biodiversity. The country's geographical position, geological, pedological, hydrological factors, relief and climate, are some of the principal drivers of Kosovo's rich biological diversity of flora, vegetation, fauna, and landscapes, and it is worth emphasizing that Kosovo's environment also hosts relict and endemic species, as well as species of particular importance. With its numerous floral species, and with the richest fauna in the Balkan Peninsula, Kosovo's biodiversity constitutes invaluable wealth.77

The total number of protected nature zones in Kosovo (2019) is 210, covering a surface area of 1251814.1 ha, or 11.53% of the surface of Kosovo. These zones include:

- 19 Strict Nature Reserves ("Arnen Reserve", "Ropsi Peak", "Rusenica", "Kamilja", etc.),
- 2 National Parks ("Sharri" and "Accursed Mountains"),
- 182 Natural Monuments ("Source of the White Drin with the Radavci Cave", "The Gadima Cave", "Mirusha Waterfalls", "Rugova Gorge", "The White Drin Canyon at Fshajte Bridge", "Marash Oak", etc.),
- 1 Nature Park ("Mount Pashtrik and Lake Vermica"), a category not in line with those of the IUCN
- 5 Protected Landscapes (Gërmia, Shkugëza, Decan Pinewood, Strazha Pinewood, municipality of Kaçanik, and Shtime Pinewood), and
- 1 Special Protected Zone for Birds ("Henci-Radeve Marsh").

The largest share of protected areas is made up of the "Accursed Mountains" and "Sharri" National Parks, followed by the "Mount Pashtrik and Lake Vermice" Nature Park, the "Gërmia" Protected Landscape, and the "Mirusha Waterfalls" Natural Monument, etc.

The classification of Protected Zones in the Law on Nature Protection is partially in harmony with that of the International Union for Conservation of Nature (IUCN). Protected nature areas according to this Law are classified into 7 categories: strict nature reserve, national park, special protected zone, nature park, natural monument, protected landscape, and park architecture monument.⁷⁸

First efforts to protect natural areas in Kosovo were initiated in the 1950s, with the designation of several natural reserves, such as in Kozhnjer, Rusenica, Gubavc, etc., with more developments in this regard following in the eighties, when the first national park, the Sharri Mount Park, was instituted. This protected area was further expanded in 2012. Another national park was established in 2014, the Accursed Mountains National Park. Currently, about 11.53% of Kosovo's territory has the status of a legally protected area.

⁷⁷ https://www.ammk-rks.net/assets/cms/uploads/files/Biodiversiteti%20lK/Biodiversiteti_i_Kosoves.pdf.

⁷⁸ https://www.ammk-rks.net/assets/cms/uploads/files/Publikime-raporte/Shqip_WEB_(ok).pdf.

However, the protection of these areas and diversity of living organisms they host, remains an ongoing challenge.

Compared to surrounding countries, research efforts to study living organisms in Kosovo were taken relatively late and, consequently, there is still no systematic inventory of biodiversity in general. Knowledge of the species wealth of animals is especially lacking. Most research work in fauna carried out in the past, was of sporadic nature and covered only certain groups, was nonsystematic, and was conducted in narrow areas in Kosovo. Most of such research work miss the ecological aspect that would enable the undertaking of concrete actions for the protection or conservation of species. Only in recent years, some groups of animals have been researched more intensively, and this has produced new species and even new genera for science. All this research work, carried out over several decades in Kosovo, and especially together with the work carried out within the project of the Red Book of Fauna of the Republic of Kosovo, show that Kosovo, despite its small territory, contains a number large number of species, which are often restricted to narrow areas and which are important from a conservation point of view in the wider European and global context.⁷⁹

Flora

Some plant species are endemic to the Balkans, i.e. they are found throughout the Balkans. In our country, it is thought that there are 2600–2800 different species of tall plants, among which, in addition to endemic species, stenoendemic species are also found. The latter are species that grow only in our country and nowhere else, and there are a total of seventeen (17) such species. Stenoendemic plants grow in specific locations and are predominantly restricted in their spatial reach; the number of their specimens is small and they are rich in floristic terms, they grow mainly in the territory of the "Sharri" and "Accursed Mountains" National Parks.

In 2012, the Kosovo Plant Atlas was published, which contained data on a total of 902 plant species. Since that time, the team of experts that participated in the drafting of this Atlas, has continued field research and now, in the updated Kosovo Plants Atlas published in 2021, they bring photos of and data on 228 other plant species, thus increasing the number of recorded plant species to 1,130, and including 1/3 of Kosovo's plants, out of about 3,000 plant species estimated to be found in our country.

Kosovo's endemic plants grow in specific locations and are predominantly restricted in their spatial reach; often they are also found in small numbers of individuals. It is in the interest of Kosovo to protect by law such plants from extinction, because they can be endangered by ignorance or careless use.

Endemic plants are floristic assets and are found mainly in the Albanian Alps and the Sharri Mountains. These plants are rare, but at the same time also the pride of Kosovo. Of them, 11 species are included in this Atlas: Stipa mayer, Bornmuellera dieckii, Achillea alexandri-regis, Potentilla doerleri, Micromeria albanica, wulfenia blecicii, Plantago dardanae, Tulipa kosovarica, Centaurea alberti, Solenanthus krasniqii and Cerastium neoscardicum. This Atlas

^{79 &}lt;a href="https://www.ammk-rks.net/assets/cms/uploads/files/Publikime-raporte/v2Libri_i_Kuq_-6shtator_1_(1).pdf?fbclid=lwAR3EHo10Y7np6tRwRLwgEGIrEkXLpVXdLmucV7DxwOwfHK_VTxdtrOoa09o">https://www.ammk-rks.net/assets/cms/uploads/files/Publikime-raporte/v2Libri_i_Kuq_-6shtator_1_(1).pdf?fbclid=lwAR3EHo10Y7np6tRwRLwgEGIrEkXLpVXdLmucV7DxwOwfHK_VTxdtrOoa09o

contains 103 plant species endemic to the Balkans and 18 species endemic to Kosovo and Albania.⁸⁰

Fauna

The Red Book of Fauna of the Republic of Kosovo is the most important official document produced so far in Kosovo in terms of fauna diversity, because it provides for the first time qualitative and measurable data about the types of animals present in Kosovo, their reach, aspects of endemism, and measures for their protection. By simultaneously identifying the threats to these species, this document will serve as a roadmap for the protection of the species, the avoidance of threats to them, and establishment of conservation policies.

A total of 306 species are included in the Red Book of Fauna of the Republic of Kosovo, which belong to these groups of animals: Gastropoda, Bivalvia, Oligochaeta, Hirudinea, Arachnida (Araneae, Mesostigmata), Malacostraca, Diplopoda, Insecta (Ephemeroptera, Plecoptera, Odonata, Coleoptera, Mecoptera, Diptera, Trichoptera, Lepidoptera), Cyclostomata, Actinopterygii, Amphibia, Reptilia, Aves and Mammalia. The number of observed species is much larger, but due to limited space, the assessment was made only for these species. During the implementation of Component Two for the Red Book, under the framework of Kosovo's Environmental Program, a new species for science was found by animal research activities, which belongs to the group Insecta, order Trichoptera and genus Potamophylax, which is an endemic group of the Balkans with narrow proliferation.

A large number of species of Ephemeroptera, Coleoptera, Mollusca, Araneae, and others, form part of this group of as yet unidentified material, and the completion of their determination may produce important results for the fauna of the Republic of Kosovo.

The largest number of species included in the Red Book of Fauna of the Republic of Kosovo belong to the following groups: Insecta (140 species), Mammalia (39), Aves (24), Reptilia (20) and Gastropoda (20), while other groups are represented with a smaller number of species.

The largest number of species included in the Red Book of Fauna of the Republic of Kosovo belong to Insufficient Data (total of 90) and Near-Threatened (total of 80) categories, while the smallest number of species belong to the Endangered (24) and Critically Endangered (25) categories.

This data reflects the actual situation in animal diversity research in Kosovo, with substantial lack of data on a large number of species in terms of data about populations, number of individuals, their trends, and the factors that threaten them. This is an urgent warning to initiate the of monitoring such species, so that species that could not be assessed for threat categories due to lack of data can be assessed correctly, before they are irreversibly endangered from anthropogenic and other risks.⁸¹

⁸⁰ https://www.ammk-rks.net/assets/cms/uploads/files/Publikime-raporte/Atlasi_i_bimeve_WEB_version_ammk.pdf

⁸¹ https://www.ammk-rks.net/assets/cms/uploads/files/Publikime-raporte/v2Libri_i_Kuq_-

_6shtator_1_(1).pdf?fbclid=lëAR3EHo10Y7np6tRëRLëgEGIrEkXLpVXdLmucV7Dxë0ëfHK_VTxdtr0oa09o.

Vegetation

Kosovo stands out with its fairly rich vegetation that forms characteristic ecosystems, which are also habitats for many animal species. The most developed forests are found within the "Mount Sharri" and "Accursed Mountains" National Parks; their vegetation consists of three altitudinal vegetation belts, the lower, middle, and high altitudinal belts. These forest communities represent very important ecosystems, which must be conserved as such, because the conservation of these resources creates conditions for the conservations of plant and animal species. However, in some cases there have been interventions in forest vegetation resulting from the development of various activities in the environment, such as road construction, illegal logging, fires, quarries, etc. Therefore, these phenomena have negatively impacted natural values and ecosystems in general.⁸²

Over the last three years, about 20 fires have developed in Mount Sharri, damaging quite a bit of the park's surface.

Fires in Sharri Park during the 2017-2020 period:

- In 2017: there were 6 fires in the mountainous areas of Kortinik, Kabashi Highlands, Oshlak, Konjushke, Kobolicë and Vrtop. Damages concerned primarily the herbaceous vegetation on an area of about 3 ha.
- In 2018: there were 5 fires in the mountainous areas of Delloci Highlands, Kobilica, Konjushke, Koxha Balkan, and Gotovush. Damages concerned primarily herbaceous vegetation on an area of about 2 ha.
- In 2019: there were 8 more serious fires: 5 fires in the mountainous areas of Brod and Firaja (municipality of Shtërpce) and 3 fires in the regions of the villages of Brod, Restelicë and Krushë (municipality of Dragash). Damages concerned primarily grassy areas (pastures) on an area of about 100 ha.
- In 2020: The fire in the region of the village of Manasterica stands out for burning down an area of 2 ha of grassland and shrubbery.⁸³

Protected Areas and Biodiversity

Despite the continuous increase in the number of protected areas and their surface, the efficient management of protected areas and the prevention of illegal actions in such areas, continue to remain a problem for Kosovo institutions.

There are still protected areas that enjoy a special protection status but that still do not have relevant management bodies. A major problem is considered the lack of spatial, management and regulatory plans for some of these areas.

Construction works or investments in recreational facilities in Protected Nature Areas, undertaken by the Ministry or local government, display many legal violations, while some do not even have an environmental permit. In the Mirusha Park and Waterfalls, the Mirusha spatial plan has not been respected either, the first zone and the second zone, which are strict zones, have been degraded, while the project, while being financed by the Ministry of

⁸² https://www.ammk-rks.net/assets/cms/uploads/files/Biodiversiteti%20IK/Biodiversiteti_i_Kosoves.pdf.

^{83 &}lt;a href="http://qendrapress.com/flet-drejtori-i-parkut-kombetar-sharri-ne-3-vitet-e-fundit-nga-zjarret-jane-djegur-mbi-100-hektare/">http://qendrapress.com/flet-drejtori-i-parkut-kombetar-sharri-ne-3-vitet-e-fundit-nga-zjarret-jane-djegur-mbi-100-hektare/

Environment, Spatial Planning and Infrastructure, has no environmental permit, no environmental impact assessment, was not submitted to public debate, nor were citizens involved in decision-making, as required by the Law on Nature Protection itself.84

Also, in the case of the construction of the Adventure Park in the Gërmia Protected Landscape, the recommendation of the Kosovo Institute for Nature Protection was not given any weight, there was no public hearing and no environmental impact assessment, and the Municipality has exceeded its competences.⁸⁵

In both cases, we can clearly see patterns of cooperation and coordination between the Ministry and the Municipality for granting consents and allowing legal violations.

The environmental inspectorate does not react in timely fashion and does not take sufficient preventive measures, also as a result of the small number of environmental inspectors.

Protected Nature Zones are also at risk from the illegal construction of villas, hotels and various restaurants, as well as from the uncontrolled movement of visitors. Meanwhile, even activities in possession of environmental permits feature many abuses.

In the "Brezovica" case, so far the Basic Prosecution in Ferizaj has arrested 26 people, among them senior Ministry officials and the Mayor of the Municipality, and many other involved officials.86

In the name of economic development and tourism, investments are made without any specific and detailed plan that would guarantee sustainable development, and instead, these wild and unmonitored developments will degrade Nature. Protected Nature Zones have to deal with very small budgets, a lack of clear vision, as to this day the protection of Nature has not been a priority in the Republic of Kosovo.

Strategy and Plan

Kosovo has satisfactorily developed the strategic and programmatic framework on the environment and its sectors, but the level of implementation still remains at a low level. Table 35 presents the main strategic and programmatic documents on the environment sector and the level of their implementation.⁸⁷

Strategy/Plan	Validity Period	Document Status	Implementation Level
Kosovo Environmental	2013-2022	Approved by the	Implementation has
Strategy and National		Government of the	not started due to
Environmental Action		Republic of Kosovo by	ambiguities in the
Plan			approval process

⁸⁴ https://ekonomiaonline.com/nacionale/dorezohet-kallezim-penal-per-degradimin-e-ujevares-dhe-parkut-te-mirushes/.

⁸⁵ https://kallxo.com/komuna/gjykata-supreme-le-ne-fuqi-vendimin-per-pezullim-te-projektit-parku-i-aventurave-negermi/.

⁸⁶ https://gazetainfokus.com/rasti-brezovica-26-te-arrestuar-19-nga-ta-ne-paraburgim-dhe-afer-6-milione-euro-te-

⁸⁷ https://www.ammk-rks.net/assets/cms/uploads/files/Publikime-raporte/Shqip_WEB_(ok).pdf.

		Decision No. 05/140, of 17.07.2013	
Strategy and Action Plan for Biodiversity	2011-2022	Approved by the Government of the Republic of Kosovo (currently under revision)	Partial
Strategy on Air Quality 2013-2022	2013-2022	Adopted by Assembly of the Republic of Kosovo	Partial
Action Plan for the implementation of the Strategy on Air Quality	2018-2020	Adopted by Assembly of the Republic of Kosovo	Initial stage of implementation
Strategy of the Republic of Kosovo on Waste Management	2013-2022	Approved by the Government of the Republic of Kosovo	Partial
Plan of the Republic of Kosovo on Waste Management	Under review	Under review	Under review
Kosovo Climate Change Strategy and Action Plan	2017-2026	Approved by the Government of the Republic of Kosovo by Decision No. 05/90, of 19.02.2019	Initial stage of implementation
National Water Management Strategy	2017-2022	Approved by the Government of the Republic of Kosovo and Assembly of Kosovo in 2018	Initial stage of implementation
Kosovo Spatial Plan and Spatial Planning Strategy	2010-2020+	Adopted by Assembly of the Republic of Kosovo	Partial – Kosovo Zoning Map is under implementation
Spatial Plan of "Sharri" National Park	2013-2022	Adopted by Assembly of the Republic of Kosovo	Partial – two more regulatory plans pending approval
Spatial Plan of the Natural Monument of Special Importance "Mirusha waterfalls"	2014-2023	Adopted by Assembly of the Republic of Kosovo	Implementation has not started due to absence of managing body of this protected zone
Spatial Plan of the Protected Zone of Special Importance "Battle of Koshare"	2014-2023	Adopted by Assembly of the Republic of Kosovo	Partial
Spatial Plan of the Zone of Special Importance "KLA	2014-2023	Adopted by Assembly of the Republic of Kosovo	Partial

General HQ, Kleçka and Divjaka"			
Spatial Plan of the Zone of Special Importance "New Mining Field"	2010-2020	Adopted by Assembly of the Republic of Kosovo	Partial
Management Plan of "Sharri" National Park	2015-2024	Approved by the Ministry of Environment and Spatial Planning	Partial

Legislation and Enforcement

Kosovo has an elaborate legal framework on environmental protection. The Constitution recognizes environmental protection as one of the principles on which the Republic of Kosovo is based. Likewise, the Constitution of the Republic of Kosovo obliges public governance institutions to engage in guaranteeing the right to public participation in decision-making related to the environment. The principal laws dealing with the environment include, Law. No. 03/L-233 on Nature Protection, Law. No. 03/L-025 on Environmental Impact Assessment, Law. No. 03/L-230 on Strategic Environmental Assessment, Law. No.04/L-087 on "Sharri" National Park, Law. No. 04/L-147 on Waters of Kosovo, Law. No. 03/L-160 on Air Protection, Law. No. 04/L-060 on Waste, Law. No. 03/L-043 on Integrated Prevention Pollution Control.

However, the comparative review of EU directives, regulations and decisions with acts issued in Kosovo, has shown that a lot of work is required to bring Kosovo into line with EU directives, in particular when it comes to issuing Administrative Instructions. Enforcement of environmental legislation remains a major challenge (EC 2010 and 2011).88

- Law No. 03/L-233 on Nature Protection⁸⁹
- Law No. 03/L-025 on Environmental Protection⁹⁰
- Law No. 03/L-214 on Environmental Impact Assessment⁹¹
- Law No. 04/L-174 on Spatial Planning⁹²
- Administrative Instruction (GoK) No. 18/2013 on proclamation of the Ecological
- Administrative Instruction (MESP) no. 01/2021 on amending and supplementing the Administrative Instruction MESP - No. 03/2016 on determination of tariffs for issuance of consents, permits, licenses, certificates and verifications prescribed by legislation on nature protection (Repealed by Decision of GoK, No. 02/50, dated 23.12.2021)
- Administrative Instruction MEE No. 12 /2020 on proclamation of wild protected and strictly protected species

⁸⁸ https://WEB.worldbank.org/archive/WEBsite01352/WEB/IMAGES/KOSOV-10.PDF.

⁸⁹ https://gzk.rks-gov.net/ActDetail.aspx?ActID=2716.

⁹⁰ https://gzk.rks-gov.net/ActDetail.aspx?ActID=2631.

⁹¹ https://gzk.rks-gov.net/ActDetail.aspx?ActID=2708#.

⁹² https://gzk.rks-gov.net/ActDetail.aspx?ActID=8865.

- Administrative Instruction MESP No. 05 /2018 the content and way of taking the professional exam for protected areas supervisors (Repealed by Decision GRK, No. 02/50 dated 23.12.2021)
- Regulation MESP No. 23/2014 on internal order for the nature monument of particular importance "Gadime Cave"
- Administrative Instruction MESP No. 24/2014 on classification of protected nature values by importance
- Administrative Instruction MESP No. 02/2015 on permission of scientific research in nature (Repealed by Decision of the GoK, No. 02/50 dated 23.12.2021)
- Administrative Instruction MESP No. 23/2013 on the manner and conditions of performing the ranger tasks for nature protection
- Administrative Instruction MESP No. 05 /2018 the content and way of taking the professional exam for protected areas supervisors (Repealed by Decision GRK, No. 02/50 dated 23.12.2021)
- Regulation No. 21/2013 on internal order of national parks
- Administrative Instruction No. 19/2013 on assessment of acceptability of plan, program or intervention of Ecological Network
- Administrative Instruction No. 14/2013 on the manner of the development and implementation of risk assessment study for the introduction, re-introduction and cultivation of the wild species
- Administrative Instruction MESP No. 15/2014 on prevention and compensation of damages caused by wild species of strictly protected animals
- Administrative Instruction No. 06.2013 on type appearance, procedure and manner of award of gratitudes and rewards for achievements in the field of nature protection
- Administrative Instruction No. 07.2013 on the sign of Nature Protection
- Administrative Instruction No. 27/2012 on the form and manner of providing the official card and sign for Nature Protection Inspector
- Administrative Instruction No. 26/2012 on cross-border movement and trade in wild protected species
- Administrative Instruction No. 24/2012 on the content, form and manner of issuing of identification card and appearance of uniform of nature supervisors and rangers
- Administrative Instruction No. 16/2012 on wildlife crossings
- Administrative Instruction No. 07/2012 on the content and manner of keeping the Protected Nature Values Register
- Administrative Instruction No. 01/2012 on the keeping conditions, the manner of marking and evidencing of the protected animals in captivity
- Administrative Instruction No. 12/2011 on the sources of natural habitat types, natural habitat map, threatened and rare natural habitat types, as well as safeguard measures for conservation of natural habitat types
- Administrative Instruction No. 01/2017 on issuance of Municipal Environmental Permit
- Law No. 03/L-214 on Environmental Impact Assessment
- Administrative Instruction MESP No. 10/2017 on licensing compilers of Environmental Impact Assessment Reports
- Administrative Instruction MESP No. 16/2015 on information, public participation and interested parties in the proceedings of Environmental Impact Assessment

- Administrative Instruction MESP No. 08/2015 on determining the tariff value of services related to the process of Environmental Impact Assessment
- Administrative Instruction No. 08/2015 on determining of documentation for application for environmental consent according to nature of the project
- Administrative Instruction No. 07/2011 on licensing compilers of Environmental Impact Assessment Reports
- Administrative Instruction No. 09/2011 on information, public and interested parties participation in the Environmental Impact Assessment Procedures
- Law No. 03/L-025 on Environmental Protection
- Strategic Environmental Assessment Drafting Guide⁹³

Requirements of the Convention on Biodiversity and other International Treaties

Kosovo, as a newborn state, is not a signatory party to any convention or party to any agreement in the field of protection of nature, which would bind it to fulfilling the obligations arising from them. There are hopes that Kosovo will soon become a signatory party to the Convention on Biological Diversity and will be obliged to have a NBSAP (National Biodiversity Strategy and Action Plan). This strategy aims to fulfill obligations arising under other conventions, such as the Convention on International Trade in Endangered Species (CITES), Convention on Migratory Species, Convention on Natural and Cultural Heritage, Convention on Wetlands, and others.94

Kosovo follows a development plan based on the same idea, and the best illustration of this is the adoption by the Assembly of the resolution on taking steps towards achieving the 2030 Agenda. The resolution was approved in order to establish a partnership with various actors for the implementation of the agenda and the operationalization of the Council tasked with monitoring and ensuring the implementation of the SDGs. Both final results of the resolution are left to rhetorical discourse alone. The partnership has been stagnant, making no visible effort to fulfill the 2030 Agenda. 9596

Level of enforcement of laws

Legal enforcement still remains a challenge for Kosovo Institutions responsible for the protection of Nature; we have many cases, both when it comes to water permits, especially for hydropower plants, and environmental permits in protected zones, where nongovernmental organizations have found serious violations of laws in the granting of permits, and lawsuits have been filed against the Ministry and the relevant municipalities. 979899100101

^{93 &}lt;u>http://unhabitat-kosovo.org/old/repository/docs/2. Udhezues_per_hartimin_e_Vleresimit_Strategjik_Mjedisor_932520.pdf</u>.

⁹⁴ https://WEB.worldbank.org/archive/WEBsite01352/WEB/IMAGES/KOSOV-10.PDF.

⁹⁵ https://indep.info/wp-content/uploads/2019/07/SDG_ALB.pdf

⁹⁶ https://WEB.worldbank.org/archive/WEBsite01352/WEB/IMAGES/KOSOV-10.PDF.

^{97 &}lt;u>https://ekonomiaonline.com/nacionale/dorezohet-kallezim-penal-per-degradimin-e-ujevares-dhe-parkut-te-mirushes/</u>.

⁹⁸ https://kallxo.com/komuna/giykata-supreme-le-ne-fuqi-vendimin-per-pezullim-te-projektit-parku-i-aventurave-negermi/.

⁹⁹ https://kallxo.com/lajm/dorezohet-padi-ndaj-ministrise-dhe-zrre-se-per-lejet-e-hidrocentraleve-ne-gryken-e-decanit/.

¹⁰⁰ https://demokracia.com/giykata-supreme-rikthen-masen-pezulluese-mbi-punen-e-hidrocentralit-ne-brezovice/.

^{101 &}lt;u>https://ekonomiaonline.com/nacionale/glps-dhe-ojq-gjethi-kane-paraqitur-padi-per-konflikt-administrativ-per-te-</u> kontestuar-lejen-ujore-dhe-lejen-mjedisore-per-hidrocentralin-lepenci-3-ne-kacanik/?1.

Main Problems

In the absence of an adequate budget for the protection of biodiversity, as well as in the absence of monitoring and institutional professional capacities, biodiversity in Kosovo is highly endangered.

There is a lack of special programs for monitoring biodiversity in general or specific species in particular. The implementation of several cross-border management initiatives and projects for natural areas, are considered positive and important steps.

Among the main factors that endanger biodiversity in Kosovo are:

- exploitation of biological resources (logging and harvesting of forests),
- human interventions and disturbances (recreational activities),
- modifications of natural systems, dams and water management/use,
- exploitation of surface water (use in households and agriculture),
- pollution (rural and urban sewage),
- climate change and extreme weather (displacement and habitat change).

Other threatening factors are also: habitat loss and degradation, deforestation, water pollution and unsustainable management, unsustainably managed recreational and tourism activities, as well as limited penetration and low density, fires and their control, other ecosystem modifications, residential and commercial development (residential and urban areas), use of biological resources (collection of terrestrial plants), garbage and solid waste, droughts, hunting of terrestrial animals, intentional use (the species being assessed is the target), fishing and use of aquatic resources, non-native invasive species, alien diseases, introduced genetic material, habitat degradation and destruction, predation, hunting and chasing by humans for various purposes, application of different chemicals in agriculture, transformation of agricultural areas from extensive to intensive, as well as changing agricultural practices. 102103

Institutional Capacities

The main responsibility for environmental protection and environmental management rests with the Ministry of Environment, Spatial Planning and Infrastructure (MESPI), which is responsible for defining the country's environmental policies. MESPI's Departments cover environmental protection, waste management, air protection and industrial affairs, as well as a water issues. The environmental inspectorate is under the Ministry of Environment and is responsible for inspection activities.

The MESPI is under-resourced, as its relatively low budget was further reduced in 2011, posing a greater challenge to its role in environmental management and policy-making (CE 2011, see also chapter 8).

^{102&}lt;a href="https://www.ammk-rks.net/assets/cms/uploads/files/Publikime-raporte/v2Libri_i_Kuq_-6shtator_1_(1).pdf?fbclid=IwAR3EHo10Y7np6tRwRLwgEGIrEkXLpVXdLmucV7DxwOwfHK_VTxdtrOoa09o.">https://www.ammk-rks.net/assets/cms/uploads/files/Publikime-raporte/v2Libri_i_Kuq_-6shtator_1_(1).pdf?fbclid=IwAR3EHo10Y7np6tRwRLwgEGIrEkXLpVXdLmucV7DxwOwfHK_VTxdtrOoa09o.

^{103 &}lt;u>https://www.ammk-rks.net/assets/cms/uploads/files/Publikime-raporte/Shqip_WEB_(ok).pdf</u>.

The Kosovo Environmental Protection Agency (KEPA) is responsible for professional, support, scientific and research tasks, including environmental monitoring, environmental information management, and research. It also has some administrative responsibilities, such as issuing opinions on environmental impact assessment and environmental compliance for building permits, issuing opinions on protected nature zones, and organizing the environmental protection Information System (SIDA 2009 and Administrative Instruction No. 22/03 on the creation of the Kosovo Environmental Protection Agency). The KEPA has three directorates: monitoring, information systems, programs and reports. Other government bodies with responsibilities regarding the environment include the Ministry of Agriculture, Forestry and Rural Development and the Kosovo Forest Agency, the former Ministry of Energy and Mines, responsible for the design and implementation of energy and mining policies, for promoting the reduction of environmental pollution in these two sectors, for energy efficiency, and for renewable energy, which was transformed into the Ministry of Economic Development in 2011, and the Independent Commission for Mines and Minerals (ICMM), responsible for regulating mining activities. The ICMM issues licenses for exploration and mining, a process that often requires environmental compliance assessment from the MESPI (often based on an environmental impact assessment), the Kosovo Forest Agency, as well as municipalities. Issuing licenses requires better coordination between agencies with environmental responsibilities (EC 2011).

Municipalities are tasked with protecting the environment, monitoring and managing natural resources within their borders (SIDA 2009). Some municipalities have an environmental unit, usually within the Department of Urban Planning, often with only one or two employees. The transfer of some responsibilities from the central government to the local government during the 2009-2010 period, has burdened the already limited municipal resources even more (EC 2009a). 104

Amongst the setbacks and barriers to the strengthening of environmental institutions during this period, the following stand out:

- Absence of network for underground water monitoring;
- Lack of capacities in relevant institutions (MESPI, KHMI), with the exception of the Prishtina University, for monitoring biological/ecological parameters of surface waters;
- Absence of a special institution at the central level for monitoring chemicals;
- Small number of educational programs at bachelor and master levels in the field of environment;
- Small number of staff in the nature sector, especially in the Institute for Nature Protection;
- Failure to operationalize the Environmental Advisory Board;
- Trained and more experienced staff leave the responsible institutions of the environmental sector due to low salaries
- Limited capacities of municipalities in the environmental sector;
- Small number of environmental inspectors at the central and local level;

^{104 &}lt;u>https://WEB.worldbank.org/archive/WEBsite01352/WEB/IMAGES/KOSOV-10.PDF</u>.

- Failure to certify officers (rangers) and limited number of professional staff (nature supervisors) in the National Parks Administration Directorate;
- Limited number of regular staff in the Natural Monuments of Special Importance Administration Directorate;
- The Environmental Advisory Board is still not operational and there initiatives are taken to establish it, although it is foreseen according to the provisions of the Law on Environmental Protection;
- Failure to operationalize the Ecofund or a special fund/program for the environment;
- The revenues collected in the name of environmental protection are poured into the Kosovo Budget but are not used for environmental projects;
- Failure to fully enforce Regulation (GoK) No. 05/2017 on the internal organization and systematization of workplaces in the Ministry of Environment and Spatial Planning;
- Lack of coordination of relevant institutions for the processing and approval of the necessary Protected Nature Zone Spatial Plans and Management Plans.¹⁰⁵

Recommendations

- 1. Continue/intensify research, identification and monitoring of nature areas and inventory of plant and animal species and natural habitats,
- 2. Allocate a dedicated budget for capital investments in National Parks,
- **3.** Approve the Spatial Plan for the "Accursed Mountains" National Park, the Management Plan for the "Accursed Mountains" National Park, and Regulatory Plans for all protected zones that do not yet have such necessary plans,
- 4. Comply with the Zoning of the 2 parks,
- 5. Increase the budget and institutional professional capacities,
- 6. Establish management bodies for protected and special interest zones,
- 7. Prevent illegal logging through sustainable management of forests according to protection zones,
- 8. Prevent illegal hunting in the PZs,
- **9.** Carry out strict supervision of constructions based on the spatial and management plan,
- 10. Ban the construction of hydropower plants within National Parks,
- 11. Prevent and monitor forest fires,
- 12. Protect/manage river basins and prevent water pollution,
- 13. Construct wastewater treatment and waste management plants,
- **14**. Take measures to protect endangered species of fauna according to the recommendations and findings from the Book of Fauna of Kosovo,

¹⁰⁵ https://www.ammk-rks.net/assets/cms/uploads/files/Publikime-raporte/Shqip_WEB_(ok).pdf.

- 15. Engage in continuous monitoring of the condition of rare and endangered plant and animal species,
- 16. Protect the habitats of rare and endangered species, as well as prepare the professional justifications for the declaration of protected zones of birds and habitats according to the "Nature 2000" ecological network,
- 17. All activities that are carried out within the territory of protected zones must be in harmony with the Law on Nature Protection (No. 03/L-233),
- 18. MESPI's Inspectorate should carry out continuous inspections in protected zones.
- **19**. Increase number of staff in the nature and biodiversity protection sector. ¹⁰⁶

Additional recommendations necessary for flora and fauna

- 1. Protect land/water,
- 2. Manage land/water,
- **3.** Protect resources and ecosystems,
- 4. Manage species,
- **5.** Restore habitat and natural process,
- 6. Replenish species,
- 7. Re-introduce species,
- 8. Educate and build awareness.
- **9.** Provide adequate trainings,
- 10. Law and policies,
- 11. Comply with and enforce laws,
- 12. Livelihood, economic and other incentives,
- 13. Ongoing research (population size, distribution and trends, life history and ecology),
- 14. Monitoring (Population Trends, Habitat Trends)¹⁰⁷

It's time to act!

¹⁰⁶ https://www.ammk-rks.net/assets/cms/uploads/files/Publikime-raporte/Shqip_WEB_(ok).pdf.

^{107 &}lt;u>https://www.ammk-rks.net/assets/cms/uploads/files/Publikime-raporte/v2Libri_i_Kuq_</u>-

_6shtator_1_(1).pdf?fbclid=IwAR3EHo10Y7np6tRwRLwgEGIrEkXLpVXdLmucV7DxwOwfHK_VTxdtrOoa09o

FOREST.

Photo credit: Yllka Fetahai

4. Forestry



General Overview

Based on the Law on Forests No. 2003/3, forests are considered national assets of general interest. Forests, around the world, give rise to multi-dimensional interests to the fact that they fulfill an important vital role. Based on this, forests are important in fulfilling goals in ecological-environmental, economic and social terms.

Kosovo has carried out two national forest inventories, in 2003 and 2013. According to the latest inventory, the forest area in Kosovo is about 481,000 ha (44.7% of the total surface), which is considered sustainable. About 38% of forest areas are privately owned, while 62% are public forests. Forest areas are dominated to the extent of 84% by coppice forests that are managed at short rotations, mainly for the production of wood for heating. Purely deciduous forests cover almost 83% of the forest area. The forest coverage of the Republic of Kosovo is higher than neighboring countries (Albania 28%, North Macedonia 39%, Montenegro 40%, and Serbia 31%).

The volume of standing trees with a diameter > = 7 cm at breast height is 40.5 million m³. Among the trees, Fagus (beech) species account for 46% of the volume, while Quercus (oak) species account for 23%. The average volume of standing trees in Kosovo is 84 m³/ha (European average: $104 \text{ m}^3/\text{ha}$).

Annual growth is calculated at 1.55 million m³. The net maximum level of long-term logging for Kosovo stands at 1.2 million m³ per year. This estimate should be further reduced due to areas unavailable for wood supply, taking into account the volume within the National Parks. An analysis carried out on about 60% of the documents on forest areas, shows that every year an average of 950,000 m³ was cut. Consequently, annual logging can be estimated at approximately 1.6 million m³. Only a small part of the logging (7%) was carried out in compliance with forest legislation.

From the beginning of the 90s until 2006, long-term management plans were not drafted for most management units. After 2006, with donor support, the development of forest management plans (FMP) was launched, which has continued to be a priority for the Government of Kosovo. Not all forest management units (FMUs) have management plans. About 82% of public forests are covered by management plans. Currently, private forests are not covered by adequate management plans. The average size of a private forest is about 1.4 ha.

¹⁰⁸ https://gzk.rks-gov.net/ActDetail.aspx?ActID=2566.

¹⁰⁹ https://www.mbpzhr-ks.net/repository/docs/84090_Inventarizimi-Nacional-i-Pyjeve-Kosov%EB-2012_WEB.pdf.

Strategy and Implementation

Based on the importance and role of forests, as well as the protection of the environment in general as one of the main objectives of the policies of the European Union, and given Kosovo's goals for integration, at the beginning of 2010 the Government of Kosovo approved the Strategy on Forestry Sector Development 2010-2020. Among the policies for intervention and the priorities of this strategy were: forest management and silviculture, forest planning and information management, use and transport of wood, capacity building, protection of forest environments, use and development of the forestry industry, development of the private sector and NWFPs. Although the level of implementation of the 2010-2020 strategy has not been officially assessed, despite developments in terms of some objectives, limited progress has been evidenced in most of its objectives and priorities.

Next, the new Strategy on Forestry Sector Development 2021–2030 was drafted, which was approved by the government in December 2021.¹¹⁰ Strategically aligned with national development policies and in harmony with other related sectoral policies and strategies, the Strategy on Forestry Sector Development 2021–2030 has been prepared in accordance with the EU Forest Strategy 2020. In order to protect Kosovo's forest resources and promote their sustainable management, the SFSD 2022–2030 is structured according to the SFM criteria and approach agreed by *Forest Europe*. It takes into account future political and socioeconomic outlooks for Kosovo, as well as the generation of a theory of change, which describes the steps and their connections that will lead to the planned outcome.

The strategy has five strategic objectives:

- 1. Improve state of forest resources,
- 2. Protect forest resources,
- 3. Sustainable and highly functional use of forest resources,
- 4. Develop capacities of forestry sector,
- 5. Digitize and improve communications.

Legislation and Enforcement

Kosovo's forests are managed based on the Law on Forests No. 2003/3¹¹¹. After the declaration of independence of the Republic of Kosovo, and on the basis the Ahtisaari Plan for decentralization, the law on forests has been amended. Based on these amendments, forest management powers are divided between the central and local level. The Department of Forestry within the MAFRD, is responsible for the drafting of legislation and policies, while the Kosovo Forest Agency as an executive institution is responsible for the implementation of forest management, planning and drafting of management plans, treatment and monitoring of forest use. At the local level, municipalities are responsible for the protection

^{110 &}lt;u>https://konsultimet.rks-gov.net/viewConsult.php?ConsultationID=41272</u>.

^{111 &}lt;u>https://gzk.rks-gov.net/ActDetail.aspx?ActID=2566</u>.

and use of forests, tendering and granting permits for logging, as well as issuing permits for the transportation of lumber.

There are 45 by-laws (administrative instructions) related to forestry and hunting and some of them have been amended and supplemented once or twice. In addition to the Constitution and the Law on Forests, there are about 13 laws that are directly or indirectly related to forests.

Also, the National Forestry and Reforestation. Program (NFRP) 2018-2027 and National Forest Health Program (NFHP) 2018–2027 have been prepared. NFRP's objective is to promote sustainable forestry and its economic, social and environmental functions, implementing schemes and services that stimulate rural development. The national program is not yet being implemented according to the objectives and recommendations.

The new law on forests has been drafted several times since 2013 and has undergone several stages of review, but due to frequent political changes, it has not been able to for the Assembly of the Republic of Kosovo to adopt it. After the creation of new institutions in 2021, the new law on forests has been re-examined by the MAFRD and approved by the government. As of the drafting this report, the law is under review by the relevant parliamentary committee and is expected to be processes for adoption by the Assembly. 112

The new draft law on Forests is divided into 13 chapters and 79 articles, and its purpose is to create a legal basis for the sustainable management of forests and forest lands as a resource of general interest. Some of the changes that are foreseen in the new draft law on forests are also the powers of forest management and protection. The powers of forest protection pass from the municipal level to the Kosovo Forest Agency. The forests within the national parks are expected to be managed by the Kosovo Forest Agency according to the protection zones.

Main Problems

Indiscriminate logging continues to be the main problem and challenge of the forestry sector. According to the estimates of international organizations, the demand for firewood (about 1.8 million m³ per year) exceeds the annual growth of the wood mass, which is about 1.5 million m³.

Based on the 2021 Green Report¹¹³ from the MAFRD, the lumber volume in state forests planned for exploitation in 2020 was 67,513 m³, while the logged amount was only 25,947 m³ (38.43% of the plan). The planned use of private forests in 2020 was 132,000 m³. In total, the annual controlled logging amounted to about 200,000 m³ or 11% of the total estimated demand of 1.8 million m³.

Among other challenges the sector faces, are the limited capacities of the institutions responsible for forest management and protection. The Kosovo Forest Agency has limited

^{112 &}lt;u>https://www.kuvendikosoves.org/Uploads/Data/Documents/PLperpyjet_dPCgz4Ywtr.pdf</u>.

^{113 &}lt;u>https://www.mbpzhr-ks.net/repository/docs/Raporti_i_Gjelber_2021__.pdf</u>.

professional and technical staff, while work and field tools are also limited. Municipalities responsible for the protection of forests also have limited staff of forest rangers, and on average one ranger covers over 2000 ha of forest.

Another problem remains the low level of cooperation and coordination between the responsible institutions, such as the MAFRAD, MESPI and municipalities. National parks, as the main carriers of annual growth and the total volume of lumber, are not used according to zoning criteria. Limited professional management capacities and numbers of employees remain as a challenge. No forestry engineers are employed in either national park. The total staff in both national parks is 30 employees, while according to estimates the number of employees should be around 150.

Some of the other problems:

- Insufficient enforcement of legal acts and by-laws, strategies and programs,
- Insufficient and non-prioritized investments and budget allocations for the forestry sector,
- Absence of a vocational upper secondary school and lack of investments in capacity building.

Institutional Capacities

Based on the law on forests, the Kosovo Forest Agency (KFA) within the MAFRD, is responsible for the administration and management of public forests and forest lands and control of the management of private forests and forest lands, including the collection of non-wood forest products. Based on the Law on Hunting, the KFA is also partially responsible for hunting and wildlife management. The Department for Forestry within the MAFRD is responsible for the policies and strategies of the forestry sector. The MESPI, through the "Sharri" National Park Directorate and the "Accursed Mountains" National Park Directorate, is responsible for the management of Kosovo's two national parks. They also sporadically collect information on biodiversity and ecosystems on the ground. The Environmental Protection Inspectorate is responsible for the inspection of nature protection, while the Forestry and Hunting Inspectorate within the KFA, monitors the sustainable management of forests, the management of wild animals, and the collection of non-wood forest products.

According to the report of the Ministry of Finance, the total number of personnel working in the forestry sector is 162 employees (155 for the KFA and 7 for the DF within the MAFRD), while the number of personnel working at the municipal level is 194 employees. Some municipalities lack staff in this sector.

Municipalities have limited capacities of forestry staff (4 engineers, 35 technicians, 205 forest rangers). Discouraging wages, inadequate working conditions, as well as lack of equipment and vehicles, are among the problems hindering forestry activities in the field.

The legal definition of forests as a national resource of general interest dictates the cooperation and coordination of many stakeholders, central and municipal government institutions, as well as non-governmental associations.

The main stakeholders from Governmental and Non-Governmental Institutions are:

- Ministry of Agriculture, Forestry and Rural Development (MAFRD);
- Kosovo Forest Agency (KFA);
- Department of Forestry (DF);
- Ministry of Education, Science, Technology and Innovation (MEST);
- Ministry of Environment, Spatial Planning and Infrastructure (MESPI);
- Ministry of Industry, Entrepreneurship and Trade (MIET);
- Privatization Agency of Kosovo (PAK);
- Ministry of Finance, Labor and Transfers (MFLT);
- Municipalities:
- Association of Wood Processors of Kosovo (AWPK);
- National Association of Private Forest Owners (NAPFO);
- Kosovo Chamber of Commerce (KCC).

Investments

Although Kosovo's forests represent an important source of economic potential, current practices ensure no significant revenues for the country's economy. Weak enforcement of laws and ineffective and inefficient governance lead to a loss of economic output that would otherwise contribute to local economies and improve sustainable livelihoods.

Based on the studies and reports distributed by various projects, the following conclusions can be reached:

Forestry in Kosovo currently employs only about 2% of the total workforce.¹¹⁴ Formal and informal employment in forest exploitation operations amounts to between 2,500-3,000 jobs. Government institutions related to forests employ 288 employees, of which 48 are women. The wood processing industry contributes which a higher share to employment. In Kosovo, there are 1,778 wood products and joinery businesses, which are mainly micro enterprises with less than 10 employees. The total number of employees in the wood industry is estimated to be around 5,000-6,000 employees.

The number of non-wood forest product (NWFP) collectors is estimated to be between 11,400-20,000, with about 100 growers, 30-40 collection centers, and 10 processing companies.

The contribution of forestry to GDP is about 1% and the value of timber production amounts to between 24-48 million Euros, while the final wood processing industry accounts for between 40-50 million Euros. There is no official data on NWFPs.

Wood products exports accounted for a total of 28.6 million Euros in 2019 (mainly from the joinery sector), representing 7.5% of total exports. NWFP exports are estimated to be around 16.6 million Euros. The export-import ratio is 1:7, compared to 1:29 in 2012.

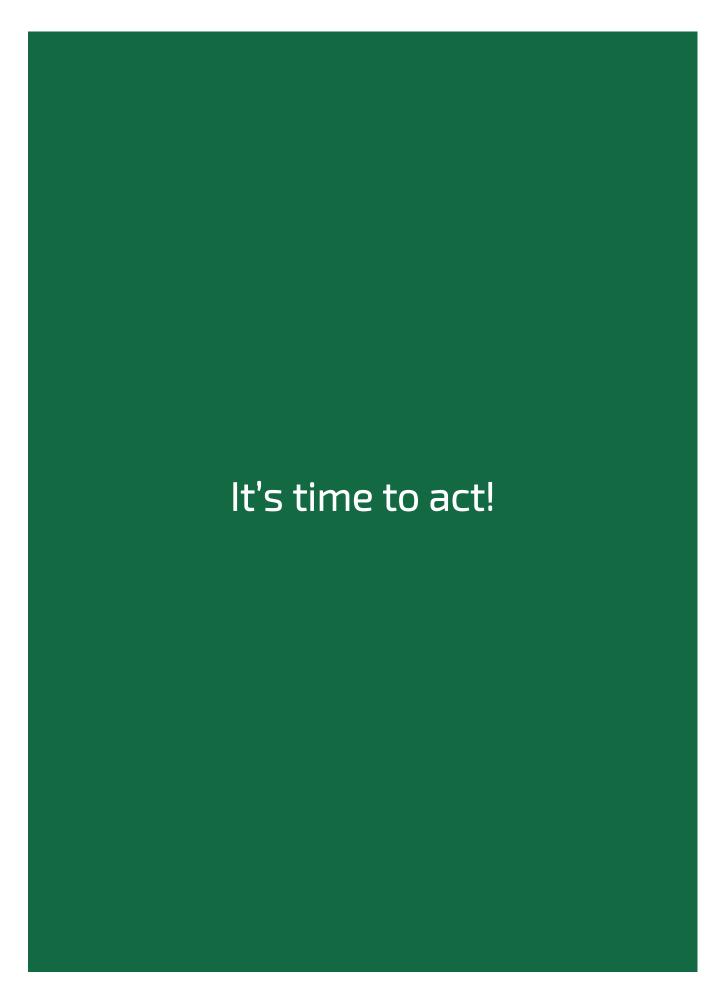
Budget appropriations and capital investments in the forestry sector have not been a priority for local institutions. In total, the annual budget allocated to the forestry sector in the last 5 years has been about 2.2 million Euros/year, out of about 60 million Euros from the general

¹¹⁴ https://konsultimet.rks-gov.net/viewConsult.php?ConsultationID=41272.

budget of the MAFRD. Revenues from the forestry sector have shown a slight increase over the same period, reaching 1.9 million Euros in 2019, which is higher than the total expenses of 0.5 million Euros.

Recommendations

- **1.** Start implementing the objectives of the Strategy on Forestry Sector Development,
- 2. Adopt the law in the Assembly of the Republic of Kosovo,
- 3. Increase the budget and capital investments in forestry,
- **4.** Improve the planning of legal logging and meet the needs for supply with lumber,
- **5.** Improve existing capacities and provide scholarships to students who wish to study in the field of forestry,
- **6.** Increase energy efficiency, which leads to the reduction of the demand for wood for heating,
- **7.** Promote the use of wood biomass and wood waste as renewable energy, and clean forests.
- **8.** Support private forest owners through direct payment schemes and investment grants,
- 9. Establish the fund for forest ecosystem services,
- **10.** Implement national park forest use according to the protection zones, by exercising rigorous logging control.





5. Climate Change



General Overview

According to scientific studies, climate change is a direct result of human activities emitting greenhouse gases, which are largely caused by the use of fossil fuels to generate power, deforestation, agriculture, farming, and production of chemicals. The rising effects of greenhouse gases in the atmosphere are causing an increase in the earth's temperature, which then brings climate change. According to scientific studies, if measures are not taken now, the consequences will be severe, including: premature deaths due to air pollution, heat, lack of water, as well as economic losses.

Kosovo is not a signatory to the United Nations Convention on Climate Change (UNFCCC) and the Paris Agreement, but since it aspires to join the European Union and has signed the Stabilization and Association Agreement (SAA), it is obliged to implement the policies that emerge from chapter 27 and are related to the environment and climate change.

Starting from the fact that Kosovo is a newborn state still facing elementary problems related to the development of the economy, health and the rule of law, it has not yet managed to pay enough attention to the protection of the environment or designate it as a priority in its government program.

The steps it has taken so far are still initial and rather minor compared to EU criteria and the needs of the country. Regarding environmental protection and impact on climate change, Kosovo is now at a crossroads, because it still lacks a National Energy Strategy. As it is unknown whether Kosovo will continue to generate power by using coal, which is also one of the main producers of greenhouse gases that have a great effect on climate change, it is impossible be guarantee that Kosovo will be able to take fair and sustainable actions that would have a positive effect in this regard.

On the other hand, it should be mentioned that in recent years some positive steps have been observed in the field of environmental protection. In the 2021-2025 Government program, the chapter on Environment and Spatial Planning, the drafting of a strategy for sustainable development and environmental protection is foreseen. In the framework of this program, the adoption of a series of laws related to the protection of nature and biodiversity, including the law on climate change and the inventory of greenhouse gas emissions, is foreseen.

Meanwhile, the signing of the SAA in 2015 and the Green Agenda in 2020, are two important initiatives with which Kosovo also wants to prove that it is committed to giving its contribution to the protection of the environment.

Within the framework of the SAA, Article 116, climate change section, Kosovo is expected to address climate concerns, align the legislation with the EU acquis, and take measures to monitor and reduce greenhouse gas emissions related to the fields of energy, transportation, industry and agriculture. With these actions, Kosovo will be able to join global efforts that contribute to the field of climate change.

Strategy and Plan

In order to respond to climate change, in 2020, the European Commission approved the ambitious "European Green Deal", which foresees that the countries of the European Union shall undertake initiatives that will make them carbon neutral by the year 2050. The target plan for the 2030 Agenda has envisaged three main objectives (European Commission):

- Sett more ambitious and cost-effective targets to achieve climate neutrality by 2050,
- Stimulate the creation of green jobs and continue the work to evidence the reduction of greenhouse gases even during economic growth,
- Encourage international partners to seek to limit the increase in global temperature to 1.5°C and avoid the consequences of climate change. 115

As for the strategic documents that produce effects in the field of climate change, in 2019 the Government approved the Climate Change Strategy and Action Alan for the 2019-2021 period, as well as the important concept document (21.12.2020) that will lead to the preparation of the law on climate change. On the other hand, the inter-ministerial groups that are working on the national energy and climate plan have also been established.

As the first strategic objective in the field of climate change is foreseen: Develop capacities to meet future obligations under the UNFCCC and EU accession.

The strategy also contains four other strategic objectives, which aim to:

- Reduce greenhouse gas emissions;
- Develop new mechanisms and improve current ones to reduce the risk of disasters in sectors of economic importance that are vulnerable to climate change;
- Build capacities for adaptation of natural systems;
- Build capacities of central and local partners, actors and stakeholders, for the integration of climate change issues in development processes and adaptation to them.

Meanwhile, within the action plan, activities are foreseen that require the preparation of several important documents, such as:

- Drafting of the concept document on climate change;
- Drafting of AI on carbon dioxide capture;
- Development of the national greenhouse gas monitoring and reporting system in accordance with EU Regulation No. 525/2013, Articles 5, 7, 12, on monitoring mechanism and reporting 2019-2021;
- Revision of Administrative Instruction (GoK) No. 01/2016 on mechanism for monitoring greenhouse gas emissions¹¹⁶

Whereas, if the timelines for the implementation of the measures foreseen in the strategy are analyzed, then it can be said that there are still delays in the implementation of some

¹¹⁵ European Commission, European Climate Law, accessed on 2 May, 2022, https://ec.europa.eu/clima/eu-action/european-green-deal/european-climate-law_en.

¹¹⁶ MESP, Climate Change Strategy 2019–2028. Republic of Kosovo, Prishtina, 2018, 7. https://gzk.rks-gov.net/ActDetail.aspx?ActID=29356.

measures. According to the official answers MESPI provided in May 2022, there are several strategic documents that the Government is working on, which are:

- Long-Term Decarbonization Strategy whose drafting was initiated at the start of this year. An inter-ministerial working group was also established and the first meeting of the group was held.
- The National Energy and Climate Plan has also been drafted the plan is being finalized and the approval of the Energy Strategy is expected in order to harmonize these two documents.
- Climate Change Action Plan this document will be drafted in 2023, while the existing Plan covered the 2019-2021 period, leaving 2022 without any measures to be taken.

Legislation and Enforcement

The European Commission has proposed the European Climate Law (July 29, 2021) that sets new targets for a 55% reduction in the level of greenhouse gas emissions by 2030, compared to 1990 levels. To implement this law, reforms would have to be made in the energy, industrial, transportation, farming, agricultural sectors and others.

The objectives of this law (European Climate Law)¹¹⁷ are:

- "Set the long-term direction to achieve the objective of climate neutrality by 2050, through all policies in a social and cost-effective manner,
- Set more ambitious EU targets to make Europe more responsible towards a climateneutral path by 2050,
- Create a system for monitoring progress and take measures if necessary,
- Provide forecasts for investors and other economic actors,
- Ensure that the climate neutrality transition is irreversible".

In the framework of this law, measures have been foreseen for which progress must be proven, and which will be reflected in the governing processes for EU member states, national energy and climate plans, regular reports from European Environmental Agencies using the latest scientific evidence on climate change and its impact.

In addition, the Union's governance Rules on energy and climate action, have foreseen that there will be National Energy and Climate Plans (NECPs) through which energy efficiency, renewable energy, reduction of greenhouse gas emissions, interconnections, research and innovation, would be addressed.

Kosovo still lacks a law on climate change, which is in the process of being drafted. At the same time, this is one of the main laws that will enable concrete results in the field of climate change (MESPI response, May 2022).

¹¹⁷ European Commission, European Climate Law, accessed on 2 May, 2022, https://ec.europa.eu/clima/eu-action/europeangreen-deal/european-climate-law_en.

Currently, Kosovo has a legal framework that consists of these main normative acts:

- Law on Air Protection;
- All on substances that deplete the ozone layer and fluorinated greenhouse gases;
- Al on access to information on economic expenses of fuel consumption and CO₂ emissions of new personal vehicles;
- Al on application of clean development flexible mechanisms;
- Al on mechanism for monitoring greenhouse gas emissions;
- Al on monitoring greenhouse gas emissions;
- Al on capture and storage of carbon dioxide in suitable geological formations

It is important to note that these normative acts have transposed the following EU acquis acts:

- Directive 1999/94/EC of the European Parliament and of the Council of 13 December 1999 relating to the availability of consumer information on fuel economy and CO2 emissions in respect of the marketing of new passenger cars;
- Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive 96/61/EC;
- Directive 2004/101/EC of the European Parliament and of the Council of 27 October 2004 amending Directive 2003/87/EC establishing a scheme for greenhouse gas emission allowance trading within the Community, in respect of the Kyoto Protocol's project mechanisms;
- Directive 2009/29/EC of the European Parliament and of the Council of 23 April 2009 amending Directive 2003/87/EC so as to improve and extend the greenhouse gas emission allowance trading scheme of the Community;
- Directive 2009/31/EC of the European Parliament and of the Council of 23 April 2009 on the geological storage of carbon dioxide and amending Council Directive 85/337/EEC, European Parliament and Council Directives 2000/60/EC, 2001/80/EC, 2004/35/EC, 2006/12/EC, 2008/1/EC and Regulation (EC) No 1013/2006;
- Regulation (EC) No 219/2009 of the European Parliament and of the Council of 11
 March 2009 adapting a number of instruments subject to the procedure referred to
 in Article 251 of the Treaty to Council Decision 1999/468/EC with regard to the
 regulatory procedure with scrutiny Adaptation to the regulatory procedure with
 scrutiny;
- Commission Regulation (EU) No 291/2011 of 24 March 2011 on essential uses of controlled substances other than hydrochlorofluorocarbons for laboratory and analytical purposes in the Union under Regulation (EC) No 1005/2009 of the European Parliament and of the Council on substances that deplete the ozone layer;
- Regulation (EU) No 525/2013 of the European Parliament and of the Council of 21 May 2013 on a mechanism for monitoring and reporting greenhouse gas emissions and for reporting other information at national and Union level relevant to climate change;
- Commission Regulation (EU) No 744/2010 of 18 August 2010 amending Regulation (EC) No 1005/2009 of the European Parliament and of the Council on substances that deplete the ozone layer, with regard to the critical uses of halons; Regulation (EC) No

- 842/2006 of the European Parliament and of the Council of 17 May 2006 on certain fluorinated greenhouse gases;
- Regulation (EC) No 1005/2009 of the European Parliament and of the Council of 16
 September 2009 on substances that deplete the ozone layer;
- Commission Regulation (EC) No 1493/2007 of 17 December 2007 establishing, pursuant to Regulation (EC) No 842/2006 of the European Parliament and of the Council, the format for the report to be submitted by producers, importers and exporters of certain fluorinated greenhouse gases
- Commission Regulation (EC) No 1494/2007 of 17 December 2007 establishing, pursuant to Regulation (EC) No 842/2006 of the European Parliament and of the Council, the form of labels and additional labelling requirements as regards products and equipment containing certain fluorinated greenhouse gases;
- Commission Regulation (EC) No 1516/2007 of 19 December 2007 establishing, pursuant to Regulation (EC) No 842/2006 of the European Parliament and of the Council, standard leakage checking requirements for stationary refrigeration, air conditioning and heat pump equipment containing certain fluorinated greenhouse gases.

In order to facilitate the implementation of the SAA, Kosovo has compiled the National Program for the implementation of the Stabilization and Association Agreement (NPISAA). In the framework of the NPISAA, chapter 27 talks about the Environment and climate changes, as well as the measures that must be taken. A total of 14 measures are included in this plan, with 8 of them related to legislation and 6 other measures being implementation measures. The analysis of this document shows that there are delays in this regard, because only 7 measures have been implemented out of the 14 above-mentioned measures. ¹¹⁸

The measures that have not been implemented are:

- Adoption of draft law on Integrated Prevention and Pollution Control.
- Approval by the Government of the draft law on Kosovo's waters (amendments);
- Approval by the Government of the draft law on forests (amendments);
- Approval of AI No. 30/2014 on conditions, manners, parameters and limit values of wastewater discharge into the public sewerage network and water body (amendments);
- Approval of the concept document on the Environment, Water, Nature, Spatial Planning, Construction and Housing Inspectorate;
- Completion of the feasibility study for the Mirash landfill in Obiliq;
- Completion of the safety assessment study of existing dams.

Whereas, regarding the implementation of the Green Agenda, with the exception of the monitoring that was done by civil society organizations, at this stage there is no document that can prove the implementation of the measures planned under this Agenda.

¹¹⁸ Report on Implementation of National Program for the Implementation of the Stabilization and Association Agreement (NPISAA) in 2021, 38, https://kryeministri.rks-gov.net/wp-content/uploads/2021/10/1-NPISAA-2021-2025-miratuar-nga-Kuvendi.pdf.

Main Problems

Based on the report of the Environmental Protection Agency for 2019, the main cause of greenhouse gas emissions in Kosovo is the energy sector, which accounts for 86% of emissions, followed by the agriculture, forestry and land use sectors, which account for 8 %, the waste sector with 5%, and industrial processes with 1%.

Based on the data of greenhouse gas emissions over the years, it can be observed that from 2014 to 2018 Kosovo has experienced a gradual annual increase, from 216 Gg CO_2 eq. to 250 Gg CO_2 eq, with a small decrease in 2019, resulting in 235 Gg CO^2 eq.

Regarding CO_2 emissions (eq.) per capita, Kosovo stands better compared to some developed countries, with 5 tons of CO_2 /capita, compared to the USA (15 tons of CO_2 /capita), Germany (8.8 tons of CO_2 /capita) and the United Kingdom (5.8 tons of CO_2). The reason why this happens can be explained by the great industrial development found in these countries, which Kosovo does not possess. However, if compared to the region, then Kosovo does not fare so well, where with the exception of Bosnia and Herzegovina (6.5 tons of CO_2) and Serbia (6.4 tons of CO_2), all other countries have lower values.

Moreover, if the state of the environment is analyzed for two decades in a row, then it can be freely said that Kosovo is significant delayed in environmental protection and the implementation of measures that would have a positive impact on climate change. This comes as a result of the lack of awareness of policy makers about the real threats climate change entails, as well as the lack of political will, and human and financial capacities. Also, in the absence of rule of law, the rapid economic development accompanied by indiscriminate constructions that fail to apply criteria for environmental protection and corruption, constitute the main causes of the enormous environmental degradation that impacts climate change. Unless response measures are taken now, the situation will only worsen, leaving behind long-term and almost irreparable consequences for future generations. In addition, some of the measures that have a positive impact on reducing greenhouse gas emissions can also be undertaken at the municipal level, including: investments in efficient energy, district heating, waste and landfill management, as well as mobility plans for transportation. Unfortunately, the lack of awareness of policy makers is also observed at the municipal level, where, with the exception of the Municipality of Prishtina and Gjakova, which have made investments in district heating, no other municipality has undertaken initiatives that would lead to the reduction of greenhouse gas emissions.

Institutional Capacities

The main responsibility for the National Greenhouse Gas Inventory System lies with the Kosovo Environmental Protection Agency (KEPA), within which the group of experts for different sectors also operates. Also, the KEPA is responsible for reporting and publishing

¹¹⁹ Kosovo Greenhouse Gas Emissions Report 2014-2019, 7, https://www.ammk-rks.net/assets/cms/uploads/files/Publikime-raporte/Raporti_GHG_2014-2019 (final_ueb_version).pdf.

inventory data. The importance of the inventory is related to the identification of the origin of emissions, through which appropriate policies and measures can be created that would help control and reduce greenhouse gas emissions.

Although the KEPA prepares the inventory of greenhouse gases every year based on the IPCC 2006 manual, the data in its report is not published regularly. Based on the evidence, this data has been published only twice, for the years 2008-2013 and the years 2014-2019. Meanwhile, if Kosovo joins the UNFCC, then it will be obliged to file annual reports.

As for the institutional capacities required to address climate change, Kosovo has just started working in this direction, and it still needs to build its capacities, especially for monitoring the implementation of plans and laws related to this field. According to KEPA's official response (June, 2022), the failure to establish a separate sector to carry out this activity, couple to trained staff turnover, remain particularly challenging. They also emphasize that they need to strengthen their capacities for monitoring greenhouse gases. On the other hand, some initiatives and projects from foreign donors have recently been noticed, which have started to provide assistance in this regard.

Investments

The cost for the implementation of all activities foreseen in the climate change strategy plan for the years 2019-2021, is 2,877,600.00 EUROS. Meanwhile, the value of the budget for the following years is unknown, because the MESPI is still in the process of preparing the plan.

As for investments in projects that have an impact on reducing greenhouse gas emissions, the Ministry of Economy has planned investments within the Energy Efficiency and Renewable Energy Project, divided into two components:¹²⁰

- 1. Investment in energy efficiency and renewable energy in public buildings (29.56)
- 2. Policy and regulatory framework support for RE/EE (2.30 million USD)

This project is supported by the World Bank through an IDA loan, with a total amount of 31 million USD.

¹²⁰ Ministry of Economy, Kosovo Energy Efficiency and Renewable Energy Project, May 15, 2022.

Recommendations

- 1. Adopt the Energy Strategy, which must be in line with the Climate Change Strategy and Plan;
- **2.** Adopt the Law on Climate Change, based on EU requirements on climate change;
- **3**. Establish a special unit within the KEPA, which would deal with the preparation of the inventory, employment of the relevant staff, and their training. Since the law on climate change is in the process of being drafted, this opportunity should be used to establish a special unit.
- **4.** Provide the necessary training and technology for the staff who will deal with the inventory of greenhouse gas emissions.
- **5.** Enhance MESPI capacities for monitoring the implementation of plans and laws related to climate change.
- **6.** Increase government investments in projects that would lead to the reduction of greenhouse gas emissions (power generation through renewable sources, investments in energy efficiency, prepare mobility plans for transportation aimed at reducing CO_2 emissions, improve management of waste and landfills, improve forest management, increase green spaces, and raise public awareness to reduce mass consumption, to recycle and reuse different materials).
- 7. Provide funds and design municipal projects to invest in measures that will have a positive effect on climate change (energy efficiency, district heating, improved waste and landfill management, mobility plans for transportation).
- **8.** Organize awareness campaigns for citizens regarding climate change and how to manage it.

