



# Country Briefing

## on State of the Environment Information in Moldova



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European Environment Agency



SLOVENSKÁ AGENTÚRA  
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### Overall aim and specific objectives of the Country Briefing

The overall aim of the Country Briefing is to provide an overview of and make accessible state of environment information available at the country level.

More specifically, Country Briefing has three objectives:

- To provide interested parties with comparable, accurate and timely information on the environmental status in the six Eastern Partnership Countries of the ENI SEIS II East project that provides useful input into national environmental policy debates in international context.
- To demonstrate country performance and enable the user/reader to compare countries with other Eastern Partnership Countries
- To share good experience in the field of environmental assessment, information and environmental protection.

### Methodological approach to the Country Briefing preparation

The methodological approach is based on the approach used in the preparation of The European environment state and outlook report 2015 (SOER 2015) – Part Countries and regions and is slightly modified in relation to the needs of the ENI SEIS II East project.

The Country Briefings are presented in interactive online versions at the website of the ENI SEIS II East project. Each Country Briefing contains separate sections to address the four main topics:

#### **Main themes and sectors addressed in the national State of Environment report**

The purpose of this part is to provide an introduction to the national SOER and understanding of its structure as well as the main topics that are addressed in the report. The text addresses the legal requirement and frequency of the national SOER, methodological basis and use of indicators, structure of the report, overview of main themes addressed in the report and provides links to additional underlying information (e.g. national indicator system, additional reports if relevant, etc.). Suggested length: up to 250 words.

#### **Key findings of the State of Environment report/ Key finding of the state of the environment**

The purpose of this part is to provide brief overview of the state of the environment in the country. It provides a summary of the key messages as well as key findings within the topics addressed in the latest national SOE report. Suggested length: up to 800 words.

**Notice:** *By mutual agreement with Armenia, Azerbaijan and Moldova, the latest available official data on the environment was used for summary evaluations.*

#### **Main policy responses to key environmental challenges and concerns**

The purpose of this part is to reflect on the state of the environment in the wider national context, focusing on the main challenges, environmental concerns and existing policies addressing these challenges/concerns in the country. In this part there are also highlighted policy responses to improve the state of the environment. Suggested length: up to 500 words.

#### **Country specific issues**

The purpose of this part is to provide an opportunity to highlight country specific issues addressed in the SOE report or in relevant adopted policies, including emerging issues and how countries are dealing with them and, innovative policies supporting long term transition towards a more sustainable society in the country. The aim is to help to identify interesting developments and innovative approaches that could be an interest for other Eastern Partnership Countries. This includes the environmental political agenda; green economy, forward looking information and scenarios, regional issues etc. The suggestions mentioned below are based on the discussions during the country visit. Suggested length: up to 500 words.

## Main themes and sectors addressed in the national State of Environment report (SOER)

According to the Law on Environmental Protection 1515/1993, Moldavian State of Environment Report (SOER) is produced by the Ministry of Environment, SOER should be published once in 5 years. The elaboration of the National Report on the State of the Environment, once in 4 years, is the responsibility of the Environment Agency, which is the administrative authority subordinated to the Ministry of Agriculture, Regional Development and the Environment, responsible for the implementation of the state policy in the field of environmental protection, created on the basis of the Government Decision no. 549 of 13.06.2018. The last Moldavian SOER<sup>1</sup> was published in 2011 and covered the period 2007-2010. The report was prepared by ministry of Environment of the Republic of Moldova and Institute of Ecology and Geography. The report contained some visuals elements - tables, graphics and maps.

The National Report “State of the Environment in the Republic of Moldova from 2007–2010” was organized into 10 chapters:

- **General overview of the environment**
- **Impact of the economy on the environment**
- **Air pollution and protection**
- **State of water resources and protection**
- **Soil condition and protection**
- **Biological and landscape diversity**
- **Waste**
- **Processes and dangerous natural and technical phenomena**
- **Environmental management and sustainable development**
- **Environmental Policy**

Short version of SOER<sup>2</sup> is available in English language.

## Key findings of the State of Environment

Prevention and recovery of environment degradation in the Republic of Moldova is a continuous process, the efficiency of which is conditioned by the systematic assessment of state of the environment.

**Air pollution** has an impact on life expectancy, because long-term effects include lung and heart disease. On average, the transport accounts for 86.2% of the total volume of harmful substances emitted into the air. The number of transport units is steadily increasing (2015 - 867.2 thousand units of transport, 2016 - 892.7 thousand units) and the import of obsolete, higher-emission vehicles contributes strongly to air pollution.

From 2001 to 2018 the volume of pollutants introduced into the atmosphere by stationary pollution sources increased from 14.5 kt (1990) to 15.2 kt (2018).

In 2001-2018, NO<sub>x</sub> emissions decreased by circa 43.3%, SO<sub>2</sub> emissions decreased by circa 72%, PM emissions decreased by 27% while CO emissions increased by 25.6%.

<sup>1</sup> STAREA MEDIULUI ÎN REPUBLICA MOLDOVA ÎN 2007–2010 (Raport Național)

<sup>2</sup> State of the Environment in the Republic of Moldova, 2007 – 2010 (National Report - Synthesis)

## Emission of pollutants in atmospheric air by stationary sources of economic agents by Indicators and Years

|                    | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Solid              | 3.3  | 3.9  | 4.2  | 4.4  | 5.2  | 5.3  | 4.6  | 4.6  | 4.3  | 4.2  | 3.5  | 3.5  | 3.4  | 3.1  | 2.8  | 2.6  | 2.3  | 2.4  |
| ...dioxide sulphur | 2.5  | 2.3  | 2.5  | 2.2  | 2.4  | 1.9  | 1.7  | 1.5  | 1.6  | 1.1  | 1.3  | 1.1  | 0.9  | 0.7  | 0.7  | 0.8  | 0.8  | 0.7  |
| ...oxide carbon    | 3.9  | 5.7  | 4.5  | 5.1  | 6.1  | 6.1  | 5.4  | 4.7  | 3.9  | 4.4  | 4.5  | 4.3  | 4.5  | 4.5  | 4.8  | 4.6  | 4.1  | 4.6  |
| ...oxide nitrogen  | 3.0  | 3.0  | 2.5  | 2.5  | 2.9  | 2.9  | 2.0  | 2.0  | 1.8  | 1.8  | 1.6  | 1.6  | 1.7  | 1.9  | 2.1  | 1.8  | 1.7  | 1.7  |

### Footnotes

Information is presented without the data on districts from the left side of the river Nistru and municipality Bender

### Information

Unit  
thousand tonnes

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Source  
National Bureau of Statistics of the Republic of Moldova

**Greenhouse gas emissions (GHG)** is a significant danger for the atmosphere. The results of air quality monitoring show that the number of economic units with activities that have measurable negative environmental impact increased during 2007 –2010.

In the time series from 1990 to 2016, the total CO<sub>2</sub> emissions (without LULUCF) decreased by circa 73.8% (from 36.9 Mt in 1990 to 9.6 Mt in 2016). CH<sub>4</sub> and N<sub>2</sub>O emissions decreased by circa 44.1% (from 5.1 Mt CO<sub>2</sub> equivalent in 1990 to 2.8 Mt CO<sub>2</sub> equivalent in 2016). Development of F-gases emissions has shown a steady trend towards increase in recent years, though their share in the total national GHG emissions structure is insignificant for now.

Energy Sector is the most important source of national direct GHG emissions, its share varying over the time series from 1990 to 2016 from 81.5% to 68.1%. Other relevant sources are represented by the agriculture sector, waste sector and industrial processes and product use sector. The LULUCF sector represented a net source of carbon removals (in 1990 – the removals represented circa 3.4 % of the total national GHG emissions, while in 2016 it represented circa 6.3%).

By 2015, 95% of the urban and 39.8% of the rural population was connected to centralised **drinking water supply systems**, an average of 67%. In addition, 96% of the urban population and 81% of the rural population have access to improved drinking water sources.

According to data from 2015, of the 742 aqueducts in the country overall, only 677 were in operation. These serve 378 localities (or 38.7% of the total in the country), of which 76.7% are cities and 36.2% rural. The number of localities equipped with water supply systems has been increasing annually, given intensified investment in the sector.

The performance of **water supply and sanitation** sector is hampered by the fact that water supply systems are not combined with proper waste water collection and treatment systems. Of the 743 aqueducts, only 166 are equipped with canalisation systems (of which only 121 are functional).

Only 101 are equipped with **waste water treatment stations**, (of which only 70 are functional). Only 22.2% of the population (761 000 people) have access to canalisation, 42% of the urban and only 3% of the rural population. The total length of the canalisation network in 2015 was 2.78 million kilometres, 2.23 million in urban areas and 546 in rural areas. The total volume of treated waste water in 2015 was 67.6 million cubic metres.

Efficiency in the use of materials can be assessed by the level of **waste generation**. In 2015, the generation of municipal waste per capita was on average 0.8 tonnes, 20% higher than in 2010. In the past decade, waste generation grew by 10% annually.

The **number of species of animals and plants** in the Republic of Moldova that are endangered and under threat of extinction has doubled in the past 15 years. The flora in the Republic of Moldova includes **5 568 species of plants**. Over 30 species of ligneous plants are an important resource for the rural population. About 200 species of medicinal plants are also available, while about 700 species of plants from spontaneous flora serve as fodder for wild animals and livestock. Of **15 000 animal species** in the country, 474 are vertebrate (75 species of mammals, 281 species of birds, 14 species of reptiles, 14 species of amphibians and 90 species of fish) and the others nonvertebrate (principally insects).

**Forest ecosystems** in the Republic of Moldova cover 377 500 hectares (11.2% of the country). The degree of forestation was 8.9% in 2008, rose to 11.1% in 2010 and remained virtually constant till 2016, at 11.2%. Most of the forest area is dominated by hardwood species (97.8%), while coniferous species are limited (2.2%).

## Main policy responses to key environmental challenges and concerns

The European Union-Moldova Association Agreement (AA) fully entered into force on 1 July 2016 after being applied provisionally since September 2014. The AA significantly strengthens political association and economic integration between Moldova and the EU. Moldova is working towards the fulfilment of all obligations stipulated in this AA. In the area of environment and climate action Moldova continues to make gradual progress in the approximation of EU environmental legislation.

Government decision No. 301 on the approval of the **Environmental Strategy** for the years 2014-2023<sup>3</sup> and of the Action Plan for its implementation was adopted in 2014. The general objective of the Strategy is the creation of an efficient environmental management system, which would contribute to the increase in the environmental factors' quality and guarantee the right of the population for a clean, healthy and sustainable environment.

Moldova is a country highly vulnerable to climate change. National **Climate Change** Adaptation Strategy until 2020 and Action Plan for implementation of Strategy were approved in 2014<sup>4</sup>. Low Emissions Development Strategy until 2030 was approved by the Government in 2016. One of the main targets in the area of climate change is to reduce the total national level of greenhouse gas emissions by at least 20% by 2020 compared to the baseline. The Paris Agreement on climate change was ratified by the Parliament in May 2017.

The Energy strategy until 2030<sup>5</sup> sets priorities to increase energy efficiency, reduce energy losses during transmission and reduce GHG emissions. The National energy efficiency program for 2011-2020 and its Action plan are focused on an overall reduction of energy consumption, and establish a sector-specific approach to reducing energy consumption in the economy.

In the **biodiversity** area Moldova implements Strategy on Biodiversity for the period 2015-2020<sup>6</sup>.

In the **water quality** area, Moldova has implemented the Water Supply and Sanitation Strategy (2014)<sup>7</sup>, which establishes the goal to assure the access of the 80% of population to secure water supply system and the access of 65% of population to the sanitation system. National Program for implementation of the targets under the Protocol on Water and Health in the Republic of Moldova was approved in 2016.

According to statistics, the **air quality** in cities is influenced mainly by emissions from transport, power plants, large enterprises, while in district centers and rural areas by emissions of smaller enterprises, heating plants and household sources. Environmental Strategy for the years 2014-2023 has defined the air quality related specific objective: Creation of an integrated air quality management system, reduction of pollutants emissions into the atmosphere by 30% by 2023 compared to the baseline scenario.

**Waste management** domain is covered by Waste Management Strategy for 2013-2027<sup>8</sup>, which establish how the waste management system should be developed in the country.

<sup>3</sup> Environmental Strategy for the years 2014-2023

<sup>4</sup> National Climate Change Adaptation Strategy until 2020 and Action Plan for implementation of Strategy

<sup>5</sup> The Energy strategy until 2030

## Country specific issues

Besides the obligations in accordance with the AA which are reflected in laws relating to different areas of the environment Moldova has its own web portal<sup>9</sup> dedicated to sustainable developments goals and green economy. The portal was created within the common UNDP/GEF project „Strengthening capacities to undertake the environmental fiscal reform to meet national and global priorities“ is implemented by the United Nations Development Programme (UNDP) and the Ministry of Environment of the Republic of Moldova, and funded by the Global Environmental Facility (GEF) implementation period 2012-2015. The website represents **a platform to promote the concepts of sustainable development and green economy**, decentralization policies and other sectoral reforms, all together with the aim to ensure sustainable and green development of the Republic of Moldova. The site serves also as **tool to popularize the „green ideology“**, which is a new concept still little known in Moldova and fulfils several essential functions.

Currently, whole chapters that comprise environmental protection measures are included into the national documents of strategic planning, as the Government Activity Programme and Action Plan, National Security Strategy, National Action Plan on Human Rights, Medium-term budgetary framework. Environmental protection was recognized as an important area for socio-economic development of the country by the National Development Strategy „Moldova 2020“.

Relate to **environmental information** and challenges in implementation:

Republic of Moldova is Party to the Aarhus Convention since 1999, and ratified the PRTR Protocol in 2013. The Directive on access to environmental information is approximated into the national legislation by Law 982/11.05.2000 on access to information and the Regulation on public access to environmental information, adopted on 30.12.2016.

There are a number of databases and information systems developed. These include the:

1. **national PRTR system**<sup>10</sup> established pursuant to the Regulation on the National Registry for pollutant emissions and transfers, adopted in April 2018, to be managed by Environmental Agency.

The National Pollutant Release and Transfer Register is systematized data on emissions of pollutants into air, water, soil and diffuse sources as well as off-site transfers of waste and of pollutants in waste water reported by the industrial operators carrying out one or more of the activities.

The overall objective of PRTR is to create an informational resource of information on environmental pollution, emissions to the air, water, soil and diffuse sources and the transfer of waste and pollutants, as well as to facilitate the access of decision-makers, public institutions, economic agents and the general public to this information.

2. **Waste Management Informational System (SIAMD)**<sup>11</sup> - a platform developed for collecting **waste-related information** to implement the European Classifier on the Waste List, including the hazardous ones, based on the Concept on the establishment of an automated information system and registry “Management of waste” that was adopted in July 2018.

At the same time, the informational system will perform permitting procedure.

<sup>9</sup> [www.green.gov.md](http://www.green.gov.md)

<sup>10</sup> National PRTR system

<sup>11</sup> Waste Management Informational System (SIAMD)