



# Country Briefing

## on State of the Environment Information in Armenia



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SLOVENSKÁ AGENTÚRA  
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AGENCY

### 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)

The Constitution of the Republic of Armenia adopted in 1995 provided in its Chapter 10 rights for State responsibility regarding environmental protection and the rational use of natural resources. Although its Constitution was adopted in 1995, Armenia had started to create new environmental legislation at the end of 1990, soon after the Declaration of Independence (September 1990).

In Armenia the rights for the public to participate in environmental decision making and to access data is guaranteed by the Constitution and the Law of on Freedom of Information and the Aarhus Convention ratified by Armenia in 2001.

The last Armenia Ministerial Report was published in 2011, in Armenian. The Ministry of Nature Protection was responsible for coordination of the document preparation. The report analyses the major achievements during the period from the Belgrade to the Astana Ministerial Conferences. It encompasses the state of the environment, the development trends by sector and the country's priorities for environmental protection. The report summarize the activities, to assess the achievements and identifies prospective opportunities. The document is organized in 5 chapters:

### 1 State Governance of the Environment. Mechanisms for Nature Protection

- Legislation Regulating the Environmental Sector and Institutional Issues
- Economic Mechanisms
- Awareness, Participation and Environmental Education
- Environmental Monitoring
- Inspection Control
- International Cooperation

### 2 Environmental Protection

- Conservation of Natural Resources
  - Biological and Landscape Diversity. Specially Protected Areas
  - Water Resources
  - Land Resources
  - Environmental Impact of Mining Industry
  - Atmosphere
- Management of Hazardous Wastes and Chemicals

### 3 Global Issues within National Context

- Climate Change
- Ozone Layer Protection
- Combating Desertification

### 4 National Priorities

- Lake Sevan Issue
- Forest Protection
- Environmental Issues Associated with Mining Industry
- Towards "Green" Economy
  - Introducing Green Technologies
  - Organic Agriculture
  - Introduction of relevant environmental management schemes in business operations

### 5 Major Achievements of 2007-2011

<sup>1</sup> [http://www.minpriroda.gov.by/ru/press\\_sluzhba-ru/view/podgotovlen-proekt-natsionalnogo-doklada-o-sostojanii-okruzhajuschej-sredy-respubliki-belarus-1720/](http://www.minpriroda.gov.by/ru/press_sluzhba-ru/view/podgotovlen-proekt-natsionalnogo-doklada-o-sostojanii-okruzhajuschej-sredy-respubliki-belarus-1720/)

<sup>2</sup> <http://www.minpriroda.gov.by/ru/ecoza2015/>

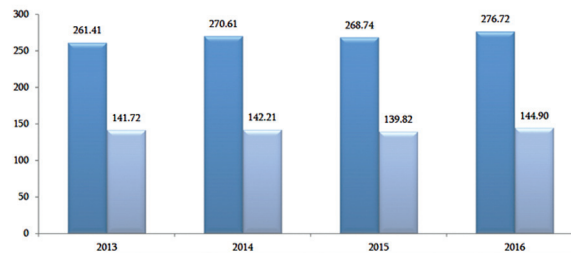
<sup>3</sup> <http://www.belstat.gov.by/en/ofitsialnaya-statistika/macroeconomy-and-environment/okruzhayuschaya-sreda/>

## Key findings of the State of Environment

Armenia in its transition towards a market economy is undergoing rapid changes with accompanying environmental issues and problems requiring immediate attention. Some of these problems are inherited from the Soviet era, while others are products of the country's political and economic transformation.

In 2017, **total emissions into atmosphere** amounted to 291.1 thsd. tons, of which 51.5% were emissions from mobile sources and 48.5% emissions from stationary sources. The total volume hazardous substances from stationary sources of emission comprised 239.7 thsd. tons, 41.1% of which was captured, the rest 58.9% (141.3 thsd. tons.) of emissions were emitted into atmosphere. Atmospheric emissions per capita in Armenia comprised 47.4 kg and 4.96 tons per square km (without mirror of Lake Sevan).

Մթնոլորտ արտանետված վնասակար նյութերի քանակը, 2013-2017թթ.  
Quantity of hazardous substances emitted into atmosphere, 2013-2017



Մթնոլորտային արտանետումների ըստ տնտեսական գործունեության հիմնական տեսակների (ըստ ՏԳՏՏ՝ խմբ. 2-ի), 2015-2017թթ.

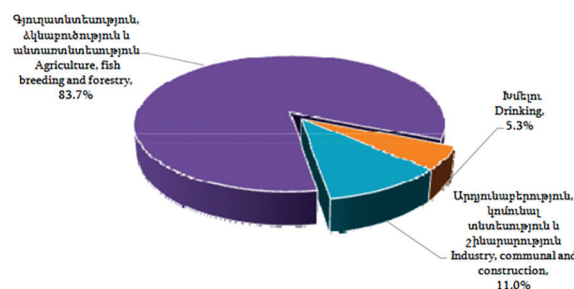
In 2017 the quantity of **hazardous substances** emitted into atmosphere **from mobile sources** comprised 149.8 thsd. tons. A large share was comprised by carbon oxide 108.7 thsd. tons or 72.6% of total emissions, volatile organic compounds – 24.7 thsd. tons or 16.5%, nitrogen oxides – 15.8 thsd. tons or 10.6%.

Total anthropogenic **emissions of greenhouse** gases for 2016 represented 9,801.24 Gg of CO<sub>2</sub> equivalents. In comparison with 1990, the total emissions **decreased** by 60.85%; in a year-on-year comparison they increased by 0.15% (compared to 2015). After their decrease in 2009 due to the economic crisis, the trend of total anthropogenic emissions for 2010 – 2016 is slightly decreasing. Energy sector is the most important source of national direct **GHG emissions**, its share varying over the time series from 1990 to 2016 from 88 % to 68 %. Other relevant sources are represented by the agriculture sector, waste sector and industrial processes and product use sector.

According to the summary data of statistical reports on **mineral water production and use**, received from organizations that produce natural mineral water and included in the accounting system of the Statistical committee of Armenia, in 2017 extraction of mineral water comprised 117.2 thsd. m<sup>3</sup>.

In 2017, **the water abstraction** comprised 2 865.4 mln. m<sup>3</sup>, water use – 2 040.0 mln. m<sup>3</sup> (83.7% – agriculture, fish breeding and forestry, 11.0% – industry, communal and construction, 5.3% – drinking). Water losses during transit comprised 825.4 mln. m<sup>3</sup> or 28.8% of water abstraction. In 2017 the volume of discharged waste water comprised 550.8 mln. m<sup>3</sup>. The volume of water inflow into the Lake Sevan through Arpa-Sevan chanal comprised 110.5 mln. m<sup>3</sup> (including under-ground inflow). The water outflow from Lake Sevan has been implemented during the period May 7 - September 14 and comprised 266.757 mln. m<sup>3</sup>.

Ջրօգտագործումն ըստ նշանակության, 2017թ.  
Water use by purpose, 2017



In 2017, **surface water** samples were sampled at monitoring points of 43 rivers, at 131 points of observation of the Arpa-Sevan tunnel, Arpilich, Akhuryan, Aparan, Azat, Kechut, Yerevan Lake reservoirs and Lake Sevan. There were determined 40 water quality parameters in the each of 949 samples.

In 2017, 60 116.4 thsd. tons **waste** of different hazardous classes was generated in Armenia, 57 110,2 thsd. tons of which was transported to landfills. The total amount of the industrial waste presented 59 622,4 thsd. tons (99.2% of total) in 2017. The quantity of the generated waste at the organizations' territories was 20 tons per capita and 2 094,6 tons per square km of the territory of Armenia (excluding the surface area of Lake Sevan).

In 2017, 493.9 thsd.tons of **solid household waste** was transported into municipal landfills.

**Forest lands** of Armenia comprised 334.1 thsd. ha in 2017, 86.6% of which was covered with forests.

## Main policy responses to key environmental challenges and concerns

Armenia is a party to multiple international conventions and agreements and undertook a broad set of commitments related to environmental protection and sustainable development that address issues such as biodiversity, climate change, desertification, and the preservation of cultural and natural heritage.

In 1991, the National Assembly (Parliament) passed the "Green Constitution" – "Principles of Legislation on Nature Protection". The general requirements of the Principles of Legislation on Nature Protection are reflected in the specialized laws. For example, **the Water Code**<sup>1</sup> regulates State management and control over water use and water consumer rights and duties in water protection and water impact prevention; **the Land Code**<sup>2</sup> classifies territories, regulates competence and functions of land protection, as well as the status and structure of the State Land Register; **the Forest Code**<sup>3</sup> regulates the conservation, protection and management of forests, **the Subsoil Code**<sup>4</sup> contains the main directives for the use and protection of the mineral resources, etc.

The key documents setting out the Government policies for agriculture, rural and agro-industry development include: **Armenia Development Strategy, 2014-2025**<sup>5</sup>; **Sustainable Development Programme, 2009-2021** (the Second Poverty Reduction Strategy); **Strategy for Sustainable Rural and Agricultural Development, 2010-2020**; **Cattle Breeding Programme, 2007-2015**; **Food Security Concept, 2011 and Food Safety Strategy, 2010-2015**; **Land Consolidation Concept, 2011** and other directly and indirectly relevant country strategies.

To reverse and prevent desertification and land degradation and to mitigate the effects of drought was adopted **The National Strategy and Action Program to Combat Desertification in the Republic of Armenia**<sup>6</sup>, 2015.

Armenia has advanced on biodiversity conservation and management of natural resources. A number of legal acts on flora and fauna, forests, specially protected nature areas, education and other related fields were developed and adopted with the aim to ensure biodiversity conservation and sustainable use (**Strategy and National Action Plan on Development of the Specially Protected Nature Areas of the Republic of Armenia, Law of the Republic of Armenia on changes in the Republic of Armenia, Law on Specially Protected Nature Areas**)<sup>7</sup>.

Armenia ratified the UN Framework Convention on Climate Change (UNFCCC in 1993, UNFCCC **Kyoto Protocol** in 2002, **Doha Amendment of Kyoto Protocol** and **Paris Agreement** in 2017. The current national program for Intended Nationally Determined Contributions (INDC) under the UNFCCC was adopted in 2015. It is an integrated strategy aimed at ensuring effective adaptation to the adverse impacts of climate change and fostering climate resilience and low greenhouse gas emissions. To coordinate climate change activities, the Intergovernmental Council on Climate Change was established in 2012.

<sup>1</sup> Water Code of the Republic of Armenia\_ENG.pdf

<sup>2</sup> Land Code of the Republic of Armenia.pdf

<sup>3</sup> The Forest Code of the Republic of Armenia

<sup>4</sup> The Subsoil Code of the Republic of Armenia

<sup>5</sup> Development Strategy of the Republic of Armenia for 2014-2025\_ENG.pdf

<sup>6</sup> The National Strategy and Action Program to Combat Desertification in the Republic of Armenia

<sup>7</sup> Strategy and National Action Plan on Development of the Specially Protected Nature Areas of the Republic of Armenia



A comprehensive set of enabling regulatory documents was adopted to support the effective implementation of objectives on achieving availability, accessibility and sustainability of energy in Armenia. These documents include: **the Energy Sector Development Strategy<sup>8</sup>; the National Program on Energy Saving and Renewable Energy<sup>9</sup>; the National Security Strategy; the Energy Security Action plan for 2014 - 2020; the Hydro Energy Development Concept of the Republic of Armenia; the Second National Energy Efficiency Action Plan.**

## Country specific issues

In 2017, to improve the water management in the country, Armenia prepared and published its first **Satellite Water Account System** which provides a comprehensive data and picture of water resources and the use of the existing resources. It is an important instrument that will contribute to enhancing the effectiveness of water monitoring and planning.

A number of successful projects were implemented in the energy efficiency field, particularly:

- The establishment of a **revolving fund for energy efficiency retrofits** in public/municipal/social buildings based on energy performance contracting through the Renewable Resources and Energy Efficiency Fund (R2E2), which so far helped to achieve 50 percent energy saving in 64 public objects (more than 160 buildings and 9 urban lighting systems. Armenia will continue working in this direction and roll out this financial tool to banks for further commercialization and scale up the public-sector energy efficiency investments.
- Effective **cooperation** with the Energy Efficiency Coordination Group under the Energy Community Treaty as a valuable platform for access to best practices and coordination on the regional level. Through Energy Charter secretariat the Ministry of Energy Infrastructures and Natural Resources cooperates towards eliminating bottlenecks in building energy efficiency and eco-labeling legislation.
- **The program «Energy Efficient»** started in August 2017 to develop green energy and generate renewable energy in non-gasified communities of Armenia.
- **“Bright Border” project** launched 2016, under which 16,480 LED lamps were installed in borderline houses in 17 villages.

During 2011-2013 the most active cooperation in the environmental field has been with the Islamic Republic of Iran. In 2012 a Memorandum of Understanding was signed on **“Establishment of a Park on Friendship and Peace”** on the common border of Iran and Armenia, for which the mapping materials of the areas adjacent to Arevik National Park were provided to the Iranian side.

In the frames of regional cooperation Armenia along with the other Caucasian countries (Georgia, Azerbaijan, Russia, Turkey and Iran) has active participation in implementation of the **Ecoregional Conservation Plan** for the Caucasus. The first version of the Plan was developed in 2006 by the efforts of WWF and participation of about 150 experts from six countries. In 2012 the plan was revised and updated. The activities of the Plan are envisaged for implementation till 2025 and their majority refers to all six countries of the ecoregion as they reflect similar problems in the field of biodiversity conservation. Some other activities are envisaged for implementation by separate countries.

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<sup>8</sup> The Energy sector development Strategy

<sup>9</sup> The National Program on Energy Saving and Renewable Energy