European Environment Agency

SLOVENSKÁ AGENTÚRA ŽIVOTNÉHO PROSTREDIA
SLOVAK ENVIRONMENT AGENCY

# COUNTRY BRIEFING

## ON STATE OF THE ENVIRONMENT INFORMATION IN THE REPUBLIC OF AZERBAIJAN

EUROPEAN ENVIRONMENT AGENCY | SLOVAK ENVIRONMENT AGENCY 2020

Implementation of the Shared Environmental Information System principles and practices in the Eastern Partnership countries (ENI SEIS II East)

*This project is funded by the European Union and is implemented by the European Environment 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. Up-to-date data and information from other relevant official sources are also used. Suggested length: up to 800 words.

- **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 last published SoE report is comprised of 2 volumes “Information on the state of the environment and works done in Azerbaijan” and “Programs, legislation and infrastructural development” and covers years 2008-2012. However, the Ministry of the Ecology and Natural Resources prepares annual report on the accomplished activities in the field of environmental protection within its competence.

The first volume of the report was divided into 5 main sections:

1. **General info about the country (**Geographical position, Relief, Climate, Inland Water, Plant cover, Animal species, Mineral resources, Population, Political profile of the country, Economic profile),

2. **Environmental policy of the Republic**,

3. **Environmental condition** (Water resources and their ecological condition, Air quality, Land resources condition, Waste management, Radiation background, Biodiversity, Forest resources, Water biological resources, Hydrometeorological conditions, Geotechnical condition, Ecological situation in the occupied Azerbaijani territories),

4. **Works done toward environmental protection** (Protection of environment, biological conservation, forest management, greening activities, reproduction and protection of aquatic bio resources, development of hydrometeorology, geoecological measures, ecological expertize, international cooperation in the field of environment, legislation, funding of environmental protection measures),

5. **Environmental propaganda**, civil society and NGOs (Ecological propaganda and awareness, Role and activities of media in the development of ecological culture, Role of civil society in ecological situation, Activities of NGOs in the field of environmental protection).

**The second volume** of the report was dedicated to implementation of state programs, development of environmental legislation and development of environmental infrastructure.

## Key findings of the State of Environment

Emissions of air pollutants between 2005 and 2019 has increased (by 6.5%). Slight increase was recorded when the years 2018 and 2019 are compared (by 0.1%). Emissions from mobile sources in 2019 amounted to 84.2% against 47.1% in 2005 of the total number of emissions. The share of emissions from stationary sources was 15.8% in 2019, compared to 52.9% in 2005.

Air quality monitoring is being set up in the seven major industrial cities (Baku, Sumgait, Ganja, Mingachevir, Shirvan, Sheki, Nakhchivan).

According to the results of stationary observations in 2018 the limit values of selected air pollutants (powder, Nitrogen tetraoxide) were exceeded at several monitoring stations.

| | Years | Average daily concentration of air pollutants, mg/m³ | | | |
|---|---|---|---|---|---|
| | | Powder | Sulfuric anhydride | Carbon oxide | Nitrogen tetroxide |
| **Average daily permissible concentration** | | **0.15** | **0.05** | **3** | **0.04** |
| **Average actual concentrations by cities** | | | | | |
| **Baku** | **2000** | 0.1 | 0.032 | 1 | 0.06 |
| | **2018** | 0.2 | 0.032 | 2.2 | 0.07 |
| **Ganja** | **2000** | 0.3 | 0.053 | - | 0.04 |
| | **2018** | - | 0.038 | - | 0.03 |
| **Mingechevir** | **2000** | 0.3 | 0.06 | 4 | 0.06 |
| | **2018** | 0.2 | 0.035 | 3 | 0.03 |
| **Nakhchivan** | **2000** | 0.1 | 0.031 | - | 0.03 |
| | **2018** | 0.1 | 0.051 | - | 0.04 |
| **Sumgait** | **2000** | 0.2 | 0.022 | 1 | 0.07 |
| | **2018** | - | 0.027 | - | 0.09 |
| **Sheki** | **2000** | 0.1 | 0.029 | 1 | 0.03 |
| | **2018** | - | 0.036 | - | 0.04 |
| **Shirvan** | **2000** | 0.3 | 0.037 | - | 0.03 |
| | **2018** | - | - | - | - |

*Note: On the base of data of National Monitoring Department of Environment of Ministry of the Ecology and Natural Resouces*

**Greenhouse gas (GHG) emissions** increased by 1.6% when the years 2017 and 2005 are compared. GHG emissions increased from 49.9 $CO_2$ equivalent million tons in 2005 to 50.7 $CO_2$ equivalent million tons in 2017. The greatest amount of greenhouse gases was allocated in the energy sector – 75.3% and in the agriculture sector – 14%.

In 2018, **the total amount of abstracted water from natural resources** amounted to 12 167 million $m^3$ and only a slight increase was recorded when the years 2005 and 2018 are compared. More than 6 500 million $m^3$ of total amount of water consumption was used for irrigation and agriculture supply.

In 2018, 5 142 million $m^3$ of sewage water was discharged and total volume of sewage **water discharges** increased by 5.4% between 2005 and 2018. 266 million $m^3$ of discharged sewage water was untreated.

The total **area of the country** in 2018 amounted to 8 660 thsd. ha, out of which the share of agricultural land was 55.2%. From selected categories of non-agricultural lands the share of wooded areas was 12%, lands under water 2% and other lands 22%. The shares in the longer term remained almost unchanged.

In 2017, the system of **specially protected nature areas** included 10 national parks, 10 reserves and 24 state natural wildlife refuges. (Share of protected areas in total country area – 10.3%)

In 2018, 3 276.5 thsd. tons of **wastes** were generated (it was 326.9 kg per capita) of which 338.7 thsd. tons were hazardous wastes. Total amount of hard domestic waste was 1 756.1 thsd. tons. When comparing the years 2017 and 2018 the total amount of waste per capita decreased by 35.5 kg.

# Main policy responses to key environmental challenges and concerns

**National Strategy of Azerbaijan on the Use of Alternative and Renewable Energy Sources 2015-2020**[1]

The Strategy presents a detailed roadmap towards achieving a significant increase in the share of alternative energy sources in Azerbaijan's energy consumption. It sets renewable energy targets by 2020, with accurate megawatt figures for solar, biomass and wind power plants.

**Azerbaijan 2020: Look into the Future**[2]

One of the main targets of the concept is to achieve sustainable socio-economic development from an ecological point of view. The necessary measures will be continued in the future to protect biodiversity, neutralize the negative impact of the fuel-energy complex on the environment, eliminate the pollution of the sea and its basin and protect them, restore green areas and effectively protect the existing resources. In the sphere of creating and restoring forests, the correlation of forests to common areas will increase, road-protecting green areas will be created to protect roadside areas and the atmosphere and to reduce traffic noises.

**National Strategy of the Republic of Azerbaijan on Conservation and Sustainable Use of Biodiversity for 2017-2020** [3]

The National Strategy has the following priority objectives:

- Ensuring broad extension of environmental education in the society for improving awareness of population on biological diversity and ecosystem services; v Improving biodiversity monitoring systems;
- Restoring and conserving biodiversity, ecosystems, genetic diversity;
- Developing and effectively managing the protected areas and expansion of the current network;
- Reducing the negative impacts on biodiversity and its sustainable use; v Improving regulatory framework for ensuring the sustainability of biodiversity;
- Increasing public participation in biodiversity conservation at the national and local level;
- Developing collaborative management in biodiversity conservation;
- Providing adequate resources for conservation and sustainable use of biodiversity;
- Strengthening institutional capacities in the planning, management and use of biodiversity.

**National Water Strategy**

Currently, the Strategy of the Republic of Azerbaijan for 2017-2035 regarding integrated water resources management is under development. The National Water Strategy (NWS) will be aimed at the development of water resources management and water protection as well as water supply and sanitation in Azerbaijan to better meet both international and EU level standards and objectives. The draft Strategy contains goals which are divided into short-term (6 years), medium-term (18 years) and long-term goals. Strategy proposes that the regional administration would be based on the catchment areas.

**Other relevant documents:**

**Long-Term Action Plan for the Use of the Alternative and Renewable Energy Sources in the Republic of Azerbaijan for 2016-2020**
**Action Plan for 2016-2018 for the Sectors Covered by the Ministry of Ecology and Natural Resources**
**National Action Plan for Combating Desertification in 2018-2022**

[1] *National Strategy of Azerbaijan on the Use of Alternative and Renewable Energy Sources 2015-2020*
[2] *Azerbaijan 2020: Look into the Future*
[3] *National Strategy of the Republic of Azerbaijan on Conservation and Sustainable Use of Biodiversity for 2017-2020*

# Country specific issues

**Project of Rehabilitation of Absheron Lakes**[4]

The rehabilitation project of Boyukshor lake is realized within the scope of the tasks on improvement of environmental situation of 9 lakes of Absheron Peninsula (Khojahasan, Boyukshor, the lake in front of Binagadi Sports Complex, Girmizi, Puta (Lokbatan), Gu, Zabrat, Bulbula, Zig) as stated in the State program for socio-economic development of Baku and its settlements confirmed by the President of the Republic of Azerbaijan Ilham Aliyev.

Boyukshor Lake is the biggest lake in Absheron Peninsula. The area of lake is 1060 ha and historically, especially in Soviet period it was critically contaminated with oil, sewage waters, and municipal and construction waste. The rehabilitation project of Boyukshor Lake will be realized in two phases. In the first phase to be implemented in 2014-2015 the 300 ha area located close to the Olympic Stadium will be rehabilitated. It is planned to isolate North part of the lake that was historically contaminated with oil from shoreline through the construction of dam in this phase. It will enable prevention of oil, contaminated water and floating waste. Within the scope of the project, a dam will be constructed along the Western shore of the area and this dam will serve as six-line and two-sided highway in the near future. This road will be integrated to Ziya Bunyadov Avenue from one side and with Balakhani- Binagadi highway from the other and it will reduce the load of city road infrastructure. Total length of the highway located in the lake part will be 1570 meters. The highway to be constructed as a dam will also serve to isolate Eastern part of the lake to be cleaned till the European Games in 2015. Furthermore, in the first phase contaminated waters flowing into Boyukshor Lake will be prevented and the contaminated water during circle will be directed to Hovsan Aeration Station. It's also planned to dredge and treat the contaminated sediments from the lake and also to cancel illegal waste disposal sites currently existing around the lake. Sewage waters will completely be prevented on the Southern shore and wide beautification and construction works will be carried out here and parks and green areas will be made. To prevent pollution on the Stadium shore of the lake wastewater collector will be constructed and contaminated ground waters will be isolated from the lake water via special metal boards. It is also planned to construct a promenade along the shoreline and to make a path to the Stadium area through this promenade. The second phase on the rehabilitation of Boyukshor Lake will be realized in 2015-2020. All these measures will serve to restore the lake to its natural course, to balance water level and to restore ecosystem.

**Environment technologies in mine rehabilitation, reforestation**[5]

Mine rehabilitation, an important factor in environmental sustainability, involves returning the land to its natural state post operation through well-researched strategies of revegetation and regeneration of natural ecosystem. Rehabilitation involves a comprehensive process of classifying the overburden materials, land recontouring and reforestation or revegetation.

At Marcventures Mining and Development Corporation (MMDC), environmental works aimed at restoring disturbed areas are carried out progressively as soon as practicable. The objective of mine rehabilitation is to create a structurally stable landform capable of future productive use.

MMDC's reforestation program also aims to increase forest cover of Sipangpang mined-out area, which recently underwent resurfacing and benching. The technique uses large planting materials to hasten the re-vegetation or reforestation of the area.

MMDC's reforestation program has three primary objectives: ecological rehabilitation of mined-out area, create livelihood projects for the community such as coffee plantation, rubber plantation, cacao plantation, bamboo plantation and others and develop the area to productive use or an Ecopark.

The company's reforestation program also actively supports the Mining Forest Program (MFP) of the Mines and Geosciences Bureau and National Greening Program of the Department of Environment and Natural Resources.

[4] *Project of Rehabilitation of Absheron Lakes*
[5] *Environment technologies in mine rehab, reforestation*