State of SEIS implementation in 2018
Country Factsheet
GEORGIA

Georgia has been making progress in establishing SEIS through the implementation of the SEIS principles and three pillars: Content, Infrastructure and Cooperation. Georgia participates actively in the work of the United Nations Economic Commission for Europe (UNECE) Working Group on Environmental Monitoring and Assessment (WGEMA) and the UNECE Joint Task Force (JTF) on Environmental Statistics and Indicators, which support countries in Europe and Central Asia in the establishment of SEIS by 2021. The present document provides an overview of the state of implementation of SEIS in Georgia and offers recommendations on how to achieve the SEIS 2021 target.

KEY MESSAGES

Content
- Georgia has been making progress in making the UNECE environmental indicators accessible, however, due to administrative reforms, many indicators are not available online
- 23 out of 49 (including 7 placeholders) UNECE environmental indicators are available in 2018
- Georgia submitted a voluntary national review on SDGs implementation in 2016

Infrastructure
- Information for only three indicators is illustrated (out of the 23 selected and analyzed by UNECE)

Cooperation
- Georgia participates actively in the UNECE indicator-related processes and SEIS projects supported by the European Union (EU) and European Environment Agency (EEA)
- The ENI-SEIS EAST II project[1], a Letter of Intent on political commitments to environmental information between the EEA, Ministry of Environmental Protection and Agriculture (MEPA) and National Statistics office (GEOSTAT) was signed. While the National Implementation Team is not in place, the national SEIS assistant has been designated.

THE SEVEN SEIS PRINCIPLES[2] AND STATE OF THEIR APPLICATION IN GEORGIA[3]

According to the SEIS principles, Information should be:

Managed as close as possible to its source ●

Collected once and shared with others for many purposes ●

Readily available to easily fulfill reporting obligations ●

Easily accessible to all users ●

Accessible to enable comparisons at the appropriate geographical scale and citizen participation ●

Fully available to the general public at the national level in the relevant national language(s) ●

Supported through common free open software standards ●

● fully applied   ● partially applied   ● application is limited

---

[1] ENI-SEIS - Project "Implementation of the principles and practices of the shared environmental information system (SEIS) in the Eastern Partnership countries".

[2] More information on SEIS principles is available at: https://www.eionet.europa.eu/seis/principles.

[3] Evaluation is based on experts' opinion, there are possible changes or clarifications after discussions with Georgia's counterparts.

MANAGEMENT OF ENVIRONMENTAL INFORMATION – OVERVIEW

Organizations responsible for collecting, producing, managing and sharing environmental data and information

The Ministry of Environment Protection and Agriculture

The National Environmental Agency

The National Statistics Office

The Ministry of Internally Displaced Persons from the Occupied Territories, Labour Health and Social Affaires

The Ministry of Economy and Sustainable Development

The National Academy of Science

REC-Caucasus, NGOs

Accessibility and availability of environmental information, data and indicators

WHERE?: On the National Statistics Office (section Key Statistics, subsection Environmental indicators) and Ministry of Environment Protection and Agriculture (under renovation), Environmental Information and Education Centre websites, specific conventions websites

In the SoER, the Statistical Yearbook (environment) and Natural Resources of Georgia and Environmental Protection

In reports to MEAs (i.e. UNFCCC, UNCCD, UNCBD, BRS, etc.)

IN WHAT FORMATS?: Metadata, additional information, visuals (tables, graphs, maps, diagrams)

IN WHICH LANGUAGES?: Georgian, English

Environmental indicators in use

UNECE environmental indicators (23 indicators are covered)

SDGs (there is a potential to use)

OECD Green Growth indicators (there is a potential to use for Green Economy strategy)

Reports to MEAs

air   water   climate change   waste   biodiversity   forests   land cover   soil   env. Statistics   public relations   information dissemination

---

CONTENT AND INFRASTRUCTURE   FROM INDICATOR PRODUCTION TO USE

STATE OF PRODUCTION AND SHARING OF ENVIRONMENTAL INDICATORS

Out of 49 UNECE environmental indicators, 23 were selected and assessed as part of a 2017-2018 UNECE study on the state of production, sharing and use of UNECE environmental indicators in the EU Eastern Partnership countries[4]. Other 26 indicators were assessed in less detail and following less rigorous criteria.

23 assessed UNECE environmental indicators and data sets of Georgia (2018):

- 13 indicators indicated the designated authority for indicator production;
- 5 indicators included the time of update;
- 6 indicators contained reference to their conformity with 2 international and 2 domestic standards;
- 7 indicators included visuals.

---

[4] The EU-funded project supports production and regular update of the regional set of indicators and strengthening environmental statistics and accounting in the six Eastern Partnership countries under the ENI SEIS East II project.

Indicators (number of data sets underpinning them)	A	R	T	M	V
A. Air pollution and ozone depletion					
A1: Emissions of pollutants into the atmospheric air (14)*	6	1	0	0	1
A2: Ambient air quality in urban areas (4)	0	0	0	0	0
A3: Consumption of ozone-depleting substances (7)	0	0	0	0	0
B. Climate change					
B1: Air temperature (1)	0	0	0	0	0
B2: Atmospheric precipitation (1)	0	0	0	0	0
B3: Greenhouse gas emissions (2)*	2	1	1	2	1
C. Water					
C1: Renewable freshwater resources (1)	0	0	0	0	0
C2: Freshwater abstraction (3)*	1	1	0	0	0
C3: Total water use (4)*	3	1	0	0	0
C5: Water supply industry and population connected (1)	1	2	2	2	1
C10: BOD and concentration of ammonium in rivers (2)	0	0	0	0	0
C11: Nutrients in freshwater (5)	0	0	0	0	0
C14: Population connected to wastewater treatment (1)	1	2	2	2	1
C15: Wastewater treatment facilities (1)	0	0	0	0	0
C16: Polluted (non-treated) wastewater (2)*	2	1	0	0	0
D. Biodiversity					
D1: Protected areas (1)	1	1	0	2	1
D3: Forests and other wooded land (1)	1	1	0	0	0
D4: Threatened and protected species (2)	1	1	0	0	0
E. Land and soil					
E1: Land uptake (2)*	1	1	0	0	0
G. Energy					
G1: Final energy consumption (2)*	2	2	2	2	1
G2: Total primary energy supply (2)	2	2	2	2	1
I. Waste					
I1: Waste generation (2)	0	0	0	0	0
I2: Management of hazardous waste (6)	0	0	0	0	0

	less than 33%		33 to 67%		over 67% of the maximum possible number

Rating criteria:

A - *Accessibility of data sets[5]*: the number of accessible data sets. The indicator "Emissions of pollutants into the atmospheric air" is an exception. This indicator includes the appraisal of emissions of sulphur dioxide (SO_2), nitrogen oxides (NO_x), non-methane volatile organic compounds (NMVOCs), ammonia (NH_3), carbon monoxide (CO), TSP, particulate matter PM_{10} and $PM_{2.5}$ from both stationary and mobile sources. If this requirement is met, the rating is 1, if the emissions from only one source type are demonstrated – 0.5. Emissions of any other substances are subdivided into emissions from neither stationary nor mobile sources (according to the indicator description) so that the score for each accessible data set is 1.

R - *Indication of the responsible authority for producing an indicator[6]*: 2 – the responsible organization and the responsible official are indicated; 1 – only the responsible organisation is indicated; 0 – none is indicated.

T - *Time of update[7]:* 2 – in or after 2016 and within 1 year from the date of the latest data point in the series; 1 – the same but before 2016; 0 – the time of the update is not indicated.

M - *Conformity with methodological standards[8]:* 2 – conform with international standards; 1 – conform with national standards; 0 – conformity with standards not specified.

V - *Availability of graphs, diagrams, maps[9]:* 1 – available, 0 – not available

The National Statistics Office of Georgia operates a website with easily-accessible, user-friendly information in both Georgian and English, containing 14 indicators relating to the water, agriculture, energy and transport sectors. The Office has paid particular attention to the international comparability of indicators by meticulously following the revised methodological *Guidelines for the Application of Environmental Indicators in countries of Eastern Europe, Caucasus, Central Asia and South-Eastern Europe*. As a result, the indicators are not only comparable, but the information is easy to use and undoubtedly credible.

---

[5] It relates to the Accessibility criterion of the revised SEIS Assessment Framework.
[6] It relates to the Clarity criterion of the revised SEIS Assessment Framework.
[7] It relates to the Timeliness and the Punctuality criteria of the revised SEIS Assessment Framework.
[8] It relates to the Clarity and the Comparability criteria of the revised SEIS Assessment Framework.
[9] It relates to the Clarity criterion of the revised SEIS Assessment Framework.

QUALITY OF SELECTED SEVEN DATA FLOWS (2018)

7 data flows[10] underpinning 3 UNECE indicators selected for the SEIS mid-term review and assessed in detail in the framework of the aforementioned 2017-2018 UNECE study on indicators' production and sharing (Georgia has not provided the results of self-assessment yet). The mid-term review was based on a SEIS Assessment Framework. The quality assessment follows criteria aligned with the quality criteria used by the UNECE Statistical Division and the EEA, and corresponds to three SEIS pillars. These criteria include:

- Relevance;
- Accuracy;
- Timeliness and punctuality;
- Accessibility;
- Clarity;
- Comparability;
- Institutional and organizational arrangements.

The summary on a selected data flow (biodiversity) is presented below. Data on selected data flows on atmospheric air and water were not accessible.

Biodiversity: There are available data sets on the total territory of protected areas and territories of IUCN categories (strict nature reserves, other reserves, national parks, nature monuments, protected landscapes). Methods of indicator production are indicated and comply with the IUCN standards.

USE OF ENVIRONMENTAL INDICATORS

Use of environmental indicators in environmental assessments, state of the environment reports and other thematic environmental reports or statistical bulletins

Georgia does not produce indicator-based reports. At the same time, the UNECE environmental indicators are progressively used as visual materials (time-series graphics, tables, maps) in some national documents, such as the 2013 National Report on Environmental Conditions for 2008-2012[11], the 2017 Statistical Yearbook of Georgia (Environment)[12], National Resources of Georgia and Environmental Protection[13] and other thematic reports. In 2015, a training on SoER preparation was organized by the EEA.
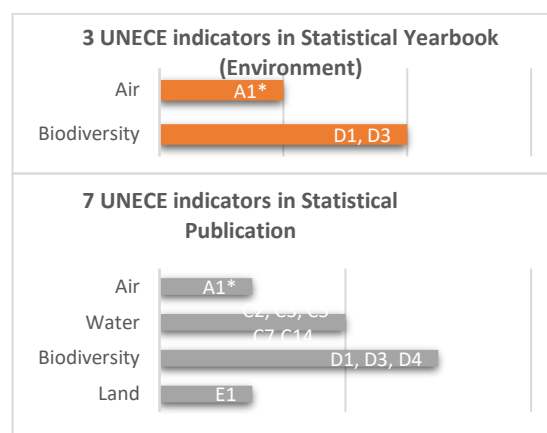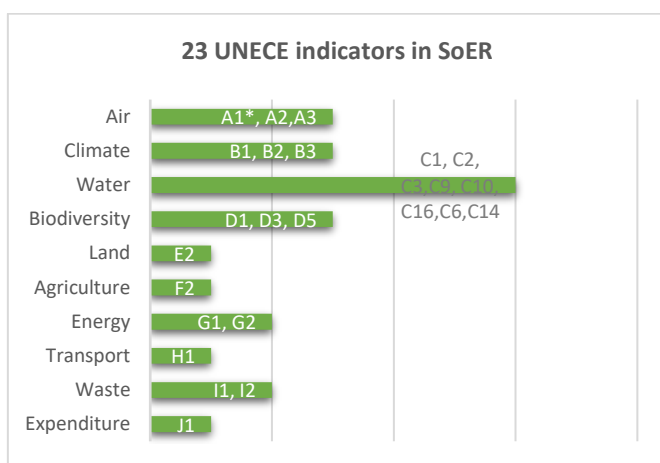
*Abbreviations as used in the Guidelines for the Application of Environmental Indicators accessible at https://www.unece.org/env/indicators.htm

Use of environmental indicators for reporting on international obligations under MEAs

One of the SEIS principles stipulates that environmental information and indicators should be readily available to easily fulfill reporting obligations, including under MEAs. UNECE environmental indicators are used for country's reports

---

[10]**Theme:** A. Air pollution and ozone depletion / **Indicator:** A2. Ambient air quality in urban areas / **Data flow:** Annual average concentration of PM_{10}
Theme: A. Air pollution and ozone depletion / **Indicator:** A2. Ambient air quality in urban areas / **Data flow:** Annual average concentration of sulphur dioxide
Theme: A. Air pollution and ozone depletion / **Indicator:** A2. Ambient air quality in urban areas / **Data flow:** Annual average concentration of nitrogen dioxide
Theme: A. Air pollution and ozone depletion / **Indicator:** A2. Ambient air quality in urban areas / **Data flow:** Annual average concentration of ground-level ozone
Theme: C. Water / **Indicator:** C10: BOD and concentration of ammonium in rivers / **Data flow:** Mean concentration of BOD_5 in major rivers
Theme: C. Water / **Indicator:** C10: BOD and concentration of ammonium in rivers / **Data flow:** Mean concentration of ammonium in major rivers
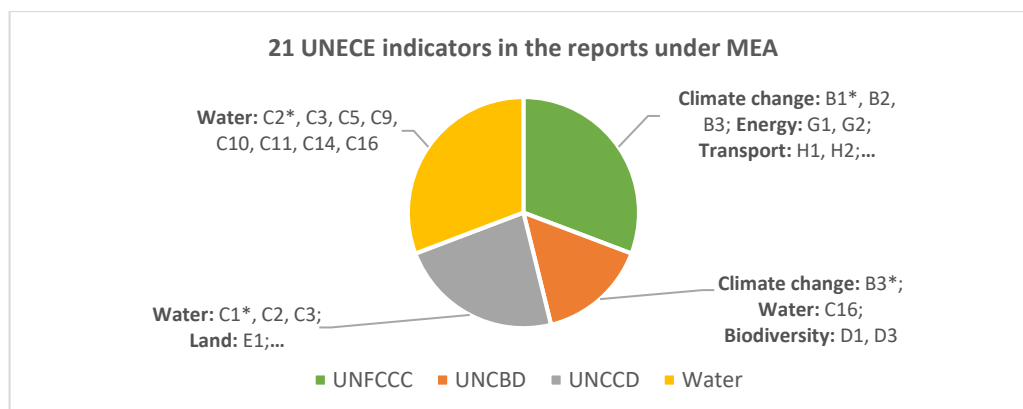**Theme:** D. Biodiversity / **Indicator:** D1: Protected areas / **Data flow:** Total protected areas (by IUCN categories)
[11]The National Report on Environmental Conditions for 2010-2013 (2013, in Georgian). For an overview of overall user perspectives on SoER, its role and impact on the country's environmental policy , see 2017 report "Effectiveness and relevance of recent environmental assessments for policy-making and public information in Georgia" (in English and in Georgian).
[12]2017 Statistical Yearbook of Georgia (Environment) provides data that correspond to UNECE environmental indicators.
[13]2016 National Resources of Georgia and Environmental Protection (in English) (Statistical publication).

under UNFCCC[14], UNCBD[15], UNCCD[16], the Protocol on Water and Health under the Water Convention[17]. Some indicators are used for reporting under the Basel convention.[18]

21 UNECE indicators in the reports under MEA

Water: C2*, C3, C5, C9, C10, C11, C14, C16

Climate change: B1*, B2, B3; **Energy:** G1, G2; **Transport:** H1, H2;…

Climate change: B3*; **Water:** C16; **Biodiversity:** D1, D3

Water: C1*, C2, C3; **Land:** E1;…

■ UNFCCC   ■ UNCBD   ■ UNCCD   ■ Water

*Abbreviations as used in the Guidelines for the Application of Environmental Indicators accessible at https://www.unece.org/env/indicators.htm

Use of environmental indicators for reporting on the Sustainable Development Goals (SDGs) and Green Growth
Georgia conducted activities on assessing capacity and the needs in the development of SDGs indicators, analysing and choosing national indicators[19]. In 2016, Georgia conducted the First Voluntary national review on the implementation of the Sustainable Development Goals. Several indicators correspond to the OECD Green Growth indicators.

The potential use of UNECE indicators for SDGs monitoring in Georgia

Water: C4*, C5, C7, C16 (fully); C2, C3 (partially); C9, C10, C11 (limited)
Air: A1 (partially)

Energy: G2, G3, G4(fully)

Air: A1 (partially); A2 (limited); **Land:** E1 (fully); E2 (limited); **Waste:** I3, I4 (limited)

Air: A3 (limited); **Water:** C2, C3 (partially); **Biodiversity:** D3 (fully); **Agriculture:** F2. F4 (fully); **Waste:** I1, I2, I3, I4 (limited)

Climate change: B1, B2 (limited); B3 (fully)

Water: C16 (fully); C12, C13 (limited)

Biodiversity: D1, D3 (fully); D4 (partially); D5 (limited); **Land:** E2 (limited)

---

[14]Third National Communication of Georgia to the United Nations Framework Convention on Climate Change (2015, in English).
[15]Georgia's Fifth National Report of the Republic to the Convention on Biological Diversity (2014, in English).
[16]National Report to the United Nations Convention on Combat Desertification (2012, in English). Indicators are mainly linked to Aichi biodiversity targets.
[17]The Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Water Convention).
[18]Georgia submitted Electronic Reporting System of the Basel convention (2016). Georgia submitted the report within the second round of reporting under the Rotterdam convention (2011).
[19]Sub-regional workshop on National SDG indicator frameworks in Georgia.

Linking of 13 UNECE indicators to the OECD Green Growth indicators in Georgia
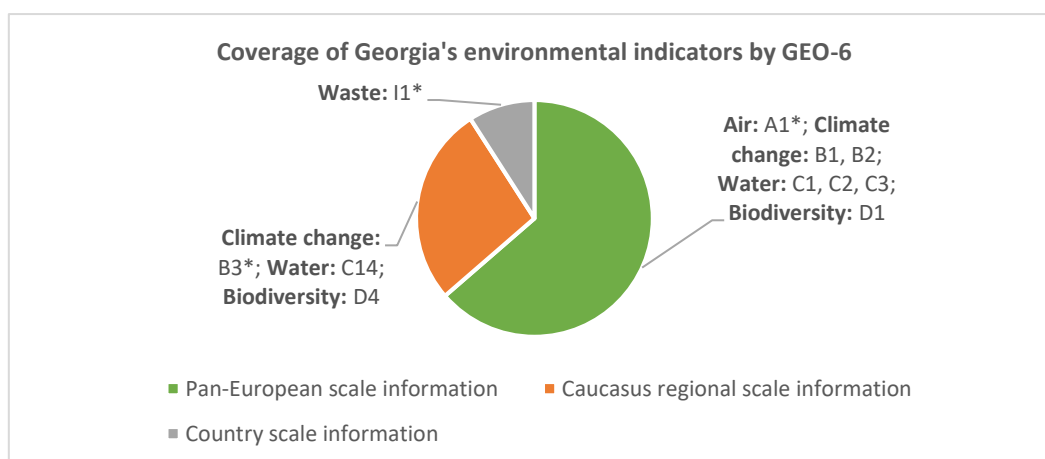
1. CO_2 productivity (1.1)**	**Climate change:** B3*
2. Energy productivity (2.1, 2.2, 2.3)	**Energy:** G1, G2, G4
3. Material productivity (non-energy) (3.4)	**Agriculture:** F2
4. Water productivity	**Water:** C3, C7
7. Freshwater resources	**Water:** C2
8. Forest resources	**Biodiversity:** D3
11. Land resources:	**Land:** E1
	Agriculture: F2
13. Wildlife resources	**Biodiversity:** D4
16. Access to sewage treatment and drinking water (16.1)	**Water:** C14

*Abbreviations as used in the Guidelines for the Application of Environmental Indicators are accessible at
https://www.unece.org/env/indicators.htm
** Abbreviation as used in the list of OECD Green Growth indicators.

Use of indicators in the pan-European volume of GEO-6[20]
The 6th Global Environmental Outlook (GEO-6), produced in 2016 by UNEP and UNECE, covers the use of environmental indicators in the regional context by Georgia.

Coverage of Georgia's environmental indicators by GEO-6

Waste: I1*

Air: A1*; **Climate change:** B1, B2; **Water:** C1, C2, C3; **Biodiversity:** D1

Climate change: B3*; **Water:** C14; **Biodiversity:** D4

- Pan-European scale information
- Caucasus regional scale information
- Country scale information

*Abbreviations as used in the Guidelines for the Application of Environmental Indicators accessible at https://www.unece.org/env/indicators.htm

COOPERATION	REGIONAL AND INTERNATIONAL SUPPORT FOR THE DEVELOPMENT OF SEIS

The cooperation between the two main entities on environmental information management - The Ministry of Environment and Natural Resource Protection and the National Statistics Office – was previously based on Memoranda of Understanding. After national reforms, institutional arrangements should be resigned. The Environmental Information and Education Centre under the Ministry was established to collect and disseminate environmental data and information. Good cooperation between the Centre and data producers is thus essential.

The ENPI-SEIS project (2010-2015)[21], implemented by the EEA and funded by the EU, was aimed at the engagement of the countries of the European Neighborhood (including Georgia) in regional cooperation. The project was meant to improve national capacities for managing and sharing environmental data and information. The ENPI-SEIS project addressed the three **SEIS pillars**—*cooperation, content and infrastructure*— through enhanced networking with the national authorities on environmental information.

Building on the achievements of the aforementioned project, a four-year EU-funded ENI SEIS II EAST project (2016-2020), now aims to support the promotion of environmental protection by strengthening environmental governance. As per 2018, project implementation in Georgia is in progress: National Focal Points are confirmed and a letter of Intent on political commitments to environmental information was signed. However, a new governmental reform is underway. While the National Implementation Team is not in place, a national SEIS assistant has been designated.

---

[20]United Nations Environment Programme. Global Environment Outlook GEO-6. Assessment of the pan-European region. 2016.
[21]The main achievements and outcomes can be found in the East Region Synthesis report 'Building SEIS with the Eastern Neighborhood'.

Georgia has been making progress in ensuring the accessibility of UNECE environmental indicators, which are increasingly being published on the websites of national environmental authorities, statistical agencies and open data portals in compliance with the UNECE requirements. Due to administrative reforms, many indicators are however not available online.

Georgia has potential to use UNECE environment indicators to monitor the progress under SDGs. Some UNECE environmental indicators have linkages to the OECD Green Growth indicators.

Georgia has experience in the preparation of indicator-based reports (i.e. indicator-based chapter on air to the SoER). SoER, Statistical Yearbook (environment) and thematic reports provide sufficient environmental information and data. The reports should be complemented with analysis and assessments. Documents should include relevant material and case studies and should contain visuals. Some information is available only in the national language, limiting access by international users.

The reports such as the State of the Environment are available on the MEPA website. Some reports to the MEAs are accessible on the websites of the Conventions and on the website of the LEPL Environmental Information and Education Centre, under the thematic section. The websites of LEPL Environmental Information and Education Centre, National Statistics office of Georgia and the MEPA are the main sources of environmental information. The MEPA website is under reconstruction, limiting user access to the information.

Reporting under the MEAs remains one of the main tasks for the country. The use of environmental indicators for different purposes, including reporting under the MEAs should be promoted and strengthened. The quality of the reports should be improved.

✔Continue advancing the production and sharing of environmental indicators in compliance with recommendations of the UNECE Joint Task Force on Environmental Statistics and Indicators;
✔Continue methodological work on existing and new environmental indicators in order for the number of accessible indicators to increase by 2021;
✔Maintain cooperation and interaction between environmental information producers in Georgia to achieve full SEIS implementation.

✔Assess the linkages and capacities of using UNECE environmental indicators to monitor the SDGs progress;
✔Increase the use of indicators for different purposes and monitoring capacities on the progress in the achievement of SDGs and Green Economy.

✔Strengthen communication and the role of the environmental assessments (especially SoER) in policy development and decision-making;
✔Improve the analytical parts of the SoER/thematic reports with using indicators (shift from providing environmental information to environmental assessment, visual explanations);
✔Continue the preparation of indicator-based reports;
✔Ensure information and data is available in both national and English languages and single national platforms managed by national statistical authorities.

✔Strengthen the capacity of Ministries (website) to ensure that all environmental information and data are available for users;
✔Make sure all produced reports are available on the nationally managed websites; reports are well presented to a broader public.

✔Improve the quality of reports under the MEAs by involving more experts and including visuals;
✔Increase usage of the environmental indicators for the preparation of reports under the MEAs.

About the activity:

Countries of Eastern Europe, the Caucasus and Central Asia have long traditions in the fields of environmental information, assessment and reporting. At the Seventh Environment for Europe Ministerial Conference (Astana, 2011) the attending ministers decided to establish a regular process of environmental assessment and to develop SEIS across the region to keep the Pan-European environment under review. The UNECE Working Group on Environmental Monitoring and Assessment and the Joint Task Force on Environmental Statistics and Indicators created a platform for the countries to gradually consolidate the shared vision on how to select, calculate, present and use environmental indicators to communicate factors and trends reflecting the state of the environment. The European Environment Agency is supporting the development of the SEIS in the EU Neighbourhood region.

This initiative, funded by the Russian Federation, aims to support the activity of the Environmental Monitoring and Assessment (EMA) Programme. It also aims at strengthening national capacities in Central Asia, the Caucasus and Eastern Europe in environmental monitoring and assessment and at enhancing the understanding of ECE member States of environmental data sharing and the establishment of SEIS.

Sources:

The current status of production, sharing and use of UNECE environmental indicators in the EU Eastern Partnership countries, June 2018; Effectiveness and relevance of recent environmental assessments for policy making and public information in Georgia, October 2017; Ministry of Environment Protection and Agriculture, and National Statistics Office of Georgia.