

# SEIS implementation and SDGs

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**National Workshop on SEIS and Environmental Statistics for the SDGs**  
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# What is SEIS? – 3 Pillars

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SEIS stands for **Shared Environmental Information System**. It has been established to improve the collection, exchange and use of environmental data and information across the region. SEIS aims to create an integrated, web-enabled, environmental information system by simplifying and modernising existing information systems and processes.

A functional SEIS should be structured around three pillars: **content, infrastructure and cooperation**.

First, the system needs to identify the types of **content** (data) required, as well as potential sources.

Second, an effective, web-enabled technical **infrastructure** is required that takes full advantage of the most cutting-edge ICTs, including web services (where machines talk to each other without the need for costly or less efficient human involvement).

Third, a **cooperation** and governance structure is required to manage human resources, inputs and networking.

# What is SEIS? – 7 Principles

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Information should be:

- Managed as close as possible to its source.
- Collected once and shared with others for many purposes.
- Readily available to easily fulfil reporting obligations.
- Easily accessible to all users.
- Accessible to enable comparisons at the appropriate geographical scale and the participation of citizens.
- Fully available to the general public and at national level in the relevant national language(s).
- Supported through common, free, open software standards.

# What is UN Environment's SEIS project?

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## **Capacity building for environmental data sharing and reporting in support of a shared environmental information system (SEIS)**

This project is multi-regional and will develop capacities in 20 countries in 3 regions – Central Asia, Africa, and Asia-Pacific

The overall aim of the project is to support national data management and reporting needs, including the production of **national state of environment reports**, environmental performance reviews, thematic assessments, regional and global integrated assessments, **MEA reporting** and reporting on the environmental dimension of the **Sustainable Development Goals (SDGs)**.

**Funded by the European Union through the ENRTP-GPGC instrument**

# Geographical scope

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# SEIS in Central Asia

## FLERMONECA

Forest and Biodiversity Governance  
Including Environmental Monitoring



# EU-funded SEIS Project

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EU-funded SEIS project will:

- Assess the baseline for Tajikistan (based on SEIS pillars and principles & production of ECE Indicators)
- Produce a national based needs assessment to further establish SEIS in the country - identify challenges, gaps, and needs with respect to producing environmental statistics and indicators
- Provide technical assistance
- Provide a lessons learned report at the end of the project indicating next steps

In addition, it will highlight where indicators can be used for SDGs - and gaps - taking into account current progress on the production & sharing of UNECE SEIS indicators

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# Progress in the production and sharing of UNECE/SEIS environmental indicators



- The countries of Eastern Europe, Caucasus and Central Asia (EECCA) have been working together since 2009 in the UNECE Joint Task Force on Environmental Statistics and Indicators (JTF) to enhance the comparability of environmental statistics between each other and within the entire pan-European region
- The JTF serves as a forum for joint work on improving environmental data collection, reporting and assessment
- These countries have reviewed and agreed to apply a set of 41 environmental indicators contained in the UNECE Online Guidelines for the Application of Environmental Indicators (UNECE Indicator Guidelines)
- The ambition is to produce and share all the indicators and their underpinning datasets



# UNECE/SEIS environmental indicators

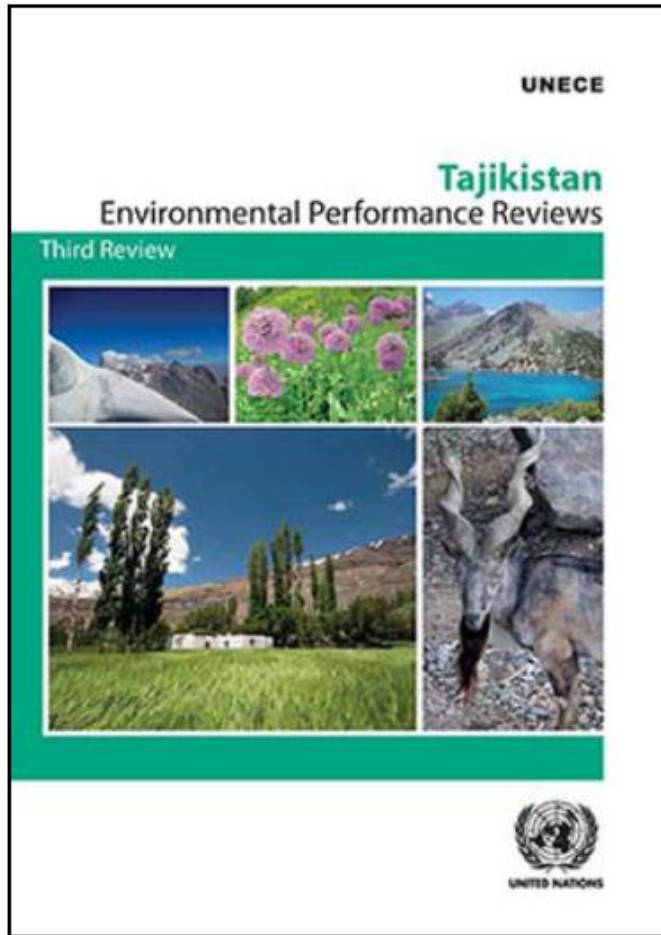
Indicator	Description	Production	Glossary of terms
A. Air pollution and ozone depletion			
A1. Emissions of pollutants into the atmospheric air (updated October 2014)	<a href="#">PDF</a>	<a href="#">XLS</a>	<a href="#">PDF</a>
A2. Ambient air quality in urban areas (updated October 2014)	<a href="#">PDF</a>	<a href="#">XLS</a>	<a href="#">PDF</a>
A3. Consumption of ozone-depleting substances (updated October 2014)	<a href="#">PDF</a>	<a href="#">XLS</a>	<a href="#">PDF</a>
B. Climate change			
B1. Air temperature (updated October 2014)	<a href="#">PDF</a>	<a href="#">XLS</a>	<a href="#">PDF</a>
B2. Atmospheric precipitation (updated October 2014)	<a href="#">PDF</a>	<a href="#">XLS</a>	<a href="#">PDF</a>
B3. Greenhouse gas emissions (updated October 2014)	<a href="#">PDF</a>	<a href="#">XLS</a>	<a href="#">PDF</a>
C. Water			
C1. Renewable freshwater resources (updated October 2014)	<a href="#">PDF</a>	<a href="#">XLS</a>	<a href="#">PDF</a>
C2. Freshwater abstraction (updated October 2014)	<a href="#">PDF</a>	<a href="#">XLS</a>	<a href="#">PDF</a>
C3. Total water use (updated October 2014)	<a href="#">PDF</a>	<a href="#">XLS</a>	<a href="#">PDF</a>
C4. Household water use per capita (updated October 2014)	<a href="#">PDF</a>	<a href="#">XLS</a>	<a href="#">PDF</a>
C5. Water supply industry and population connected to water supply industry (updated October 2014)	<a href="#">PDF</a>	<a href="#">XLS</a>	<a href="#">PDF</a>
C6. Connection of population to public water supply	Integrated into C5		
C7. Water losses (updated October 2014)	<a href="#">PDF</a>	<a href="#">XLS</a>	<a href="#">PDF</a>
C8. Reuse and recycling of freshwater (updated October 2014)	<a href="#">PDF</a>	<a href="#">XLS</a>	<a href="#">PDF</a>
C9. Drinking water quality (updated October 2014)	<a href="#">PDF</a>	<a href="#">XLS</a>	<a href="#">PDF</a>
C10. BOD and concentration of ammonium in rivers (updated October 2014)	<a href="#">PDF</a>	<a href="#">XLS</a>	<a href="#">PDF</a>
C11. Nutrients in freshwater (updated October 2014)	<a href="#">PDF</a>	<a href="#">XLS</a>	<a href="#">PDF</a>
C12. Nutrients in coastal seawaters (updated October 2014)	<a href="#">PDF</a>	<a href="#">XLS</a>	<a href="#">PDF</a>
C13. Concentrations of pollutants in coastal seawater and sediments (except nutrients) (updated October 2014)	<a href="#">PDF</a>	<a href="#">XLS</a>	<a href="#">PDF</a>
C14. Population connected to wastewater treatment (updated October 2014)	<a href="#">PDF</a>	<a href="#">XLS</a>	<a href="#">PDF</a>
C15. Wastewater treatment facilities (updated October 2014)	<a href="#">PDF</a>	<a href="#">XLS</a>	<a href="#">PDF</a>
C16. Polluted (non-treated) wastewaters (updated October 2014)	<a href="#">PDF</a>	<a href="#">XLS</a>	<a href="#">PDF</a>

D. Biodiversity			
D1. Protected areas (updated October 2014)	<a href="#">PDF</a>	<a href="#">XLS</a>	<a href="#">PDF</a>
D2. Biosphere reserves and wetlands of international importance	Placeholder		
D3. Forests and other wooded land (updated October 2014)	<a href="#">PDF</a>	<a href="#">XLS</a>	<a href="#">PDF</a>
D4. Threatened and protected species (updated October 2014)	<a href="#">PDF</a>	<a href="#">XLS</a>	<a href="#">PDF</a>
D5. Trends in the number and distribution of selected species (updated October 2014)	<a href="#">PDF</a>	<a href="#">XLS</a>	<a href="#">PDF</a>
D6. Invasive alien species	Placeholder		
E. Land and soil			
E1. Land uptake (updated October 2014)	<a href="#">PDF</a>	<a href="#">XLS</a>	<a href="#">PDF</a>
E2. Area affected by soil erosion (updated October 2014)	<a href="#">PDF</a>	<a href="#">XLS</a>	<a href="#">PDF</a>
F. Agriculture			
F1. Irrigation	Placeholder		
F2. Fertilizer consumption (updated October 2014)	<a href="#">PDF</a>	<a href="#">XLS</a>	<a href="#">PDF</a>
F3. Gross nitrogen balance	Placeholder		
F4. Pesticide consumption (updated October 2014)	<a href="#">PDF</a>	<a href="#">XLS</a>	<a href="#">PDF</a>
G. Energy			
G1. Final energy consumption	<a href="#">PDF</a>	<a href="#">XLS</a>	<a href="#">PDF</a>
G2. Total primary energy supply	<a href="#">PDF</a>	<a href="#">XLS</a>	<a href="#">PDF</a>
G3. Energy intensity	<a href="#">PDF</a>	<a href="#">XLS</a>	<a href="#">PDF</a>
G4. Renewable energy consumption	<a href="#">PDF</a>	<a href="#">XLS</a>	<a href="#">PDF</a>
G5. Final electricity consumption	Placeholder		
G6. Gross electricity production	Placeholder		
H. Transport			
H1. Passenger transport demand (updated October 2014)	<a href="#">PDF</a>	<a href="#">XLS</a>	<a href="#">PDF</a>
H2. Freight transport demand (updated October 2014)	<a href="#">PDF</a>	<a href="#">XLS</a>	<a href="#">PDF</a>
H3. Composition of road motor vehicle fleet by fuel type (updated October 2014)	<a href="#">PDF</a>	<a href="#">XLS</a>	<a href="#">PDF</a>
H4. Age of road motor vehicle fleet (updated October 2014)	<a href="#">PDF</a>	<a href="#">XLS</a>	<a href="#">PDF</a>
I. Waste			
I1. Waste generation (updated October 2014)	<a href="#">PDF</a>	<a href="#">XLS</a>	<a href="#">PDF</a>
I2. Management of hazardous waste (updated October 2014)	<a href="#">PDF</a>	<a href="#">XLS</a>	<a href="#">PDF</a>
I3. Waste reuse and recycling	<a href="#">PDF</a>	<a href="#">XLS</a>	<a href="#">PDF</a>
I4. Final waste disposal	<a href="#">PDF</a>	<a href="#">XLS</a>	<a href="#">PDF</a>
J. Environmental financing			
J1. Environment protection expenditure	Placeholder		

<https://www.unece.org/env/indicators.html>

# 3<sup>rd</sup> Environmental Performance Review (EPR) of Tajikistan & SEIS implementation

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## *Recommendation 4.4:*

*The Government should:*

- (a) Ensure that all governmental bodies collecting and managing environmental information and data apply Shared Environmental Information System (SEIS) principles to their respective environmental information and data;*
- (b) Establish a "one-stop shop" portal in line with SEIS principles for environmental data and information and using geographic information system (GIS) technologies to improve the online accessibility of environmental information and data;*
- (c) Ensure access to all environmental information in accordance with the provisions of the Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus Convention).*

**<https://www.unece.org/index.php?id=46564>**

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# Sustainable Development Goals

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17 Sustainable Development Goals (SDGs)

169 targets

244 indicators developed by the Inter-Agency Expert Group on SDG Indicators (IAEG-SDGs)

There are more than 80 SDG indicators related to the environment

UN Environment is the custodian for 26 indicators.

<https://unstats.un.org/sdgs/indicators/indicators-list/>

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# Summary

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In summary the establishment of SEIS will:

Improve data and information management to support:

- National state of environment reporting;
- Reporting to international agreements; and
- Reporting on the environmental dimension of the Sustainable Development Goals

It will do this through:

- Organizing and making available relevant information from different ministries/ organizations and allowing it to be used for multiple reporting purposes; and

- Making the information easily available to policy / decision-makers and the public

# Thank you

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