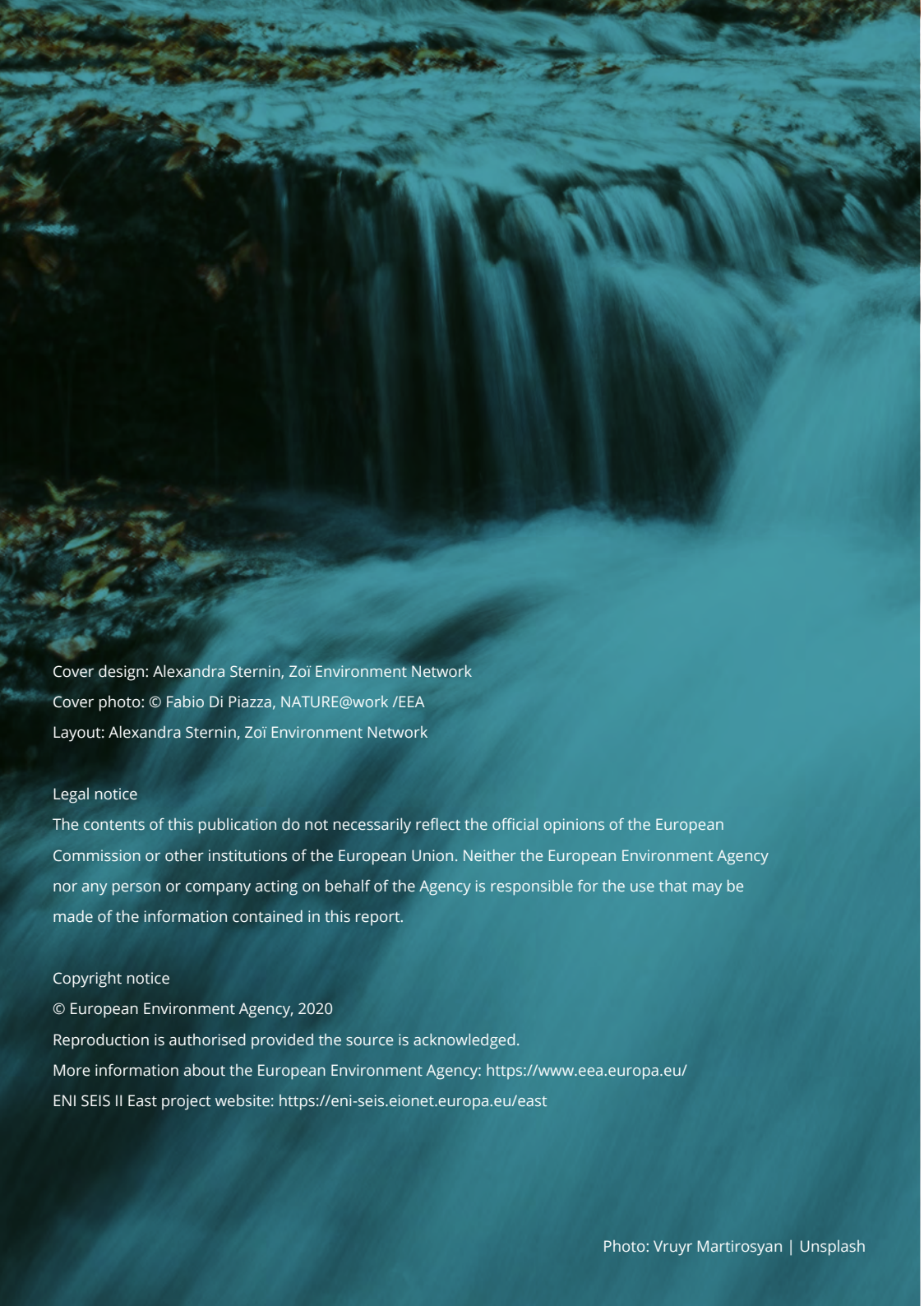
This project is funded by
The European Union
and implemented by EEA

Sharing Environmental Information:

Highlights of the EEA cooperation with the Eastern Partnership region

2016 - 2020

European Environment Agency



Cover design: Alexandra Sternin, Zoï Environment Network
Cover photo: © Fabio Di Piazza, NATURE@work /EEA
Layout: Alexandra Sternin, Zoï Environment Network

Legal notice
The contents of this publication do not necessarily reflect the official opinions of the European Commission or other institutions of the European Union. Neither the European Environment Agency nor any person or company acting on behalf of the Agency is responsible for the use that may be made of the information contained in this report.

Copyright notice
© European Environment Agency, 2020
Reproduction is authorised provided the source is acknowledged.
More information about the European Environment Agency: https://www.eea.europa.eu/
ENI SEIS II East project website: https://eni-seis.eionet.europa.eu/east

Photo: Vruyr Martirosyan | Unsplash

Table of Contents

Foreword 4
Introduction 5
Thematic areas 7
- Air quality 7
- Biodiversity 8
- Land cover 9
- Water 10
- Waste 11

Indicators and assessments 14
System of environmental economic accounting 15
Access to environmental information 20
Communication and visibility 20
The way ahead 22
Abbreviations 23
Notes and links 24

Foreword

In July 2020, the European Environment Agency (EEA) concluded the implementation of EU-funded support to the six Eastern Partnership countries with a range of noteworthy achievements to show for its efforts. Marking the end of the four-and-a-half-year cooperation under the Implementation of the Shared Environmental Information System principles and practices in the Eastern Partnership countries project (known as ENI SEIS II East), this publication offers a concise overview of the cooperation with Armenia, Azerbaijan, Belarus, Georgia, the Republic of Moldova and Ukraine across key areas of work. The outcomes provide a solid basis for maintaining the strengthened environmental cooperation and ensuring the continuation of the achievements in the context of developing European environmental policies for the coming decades.

The cooperation under the Shared Environmental Information System framework has a long-standing history and strong pan-European relevance. The ENI SEIS II East project (2016-2020) is the second of its kind, with strong links to other EU-funded actions in the Eastern Partnership region and in support of strengthened environmental knowledge-sharing and capacity development. Teamwork with national, European and international partners on common areas of interest throughout the project enabled a number of outcomes to feed into major pan-European and global processes in the true spirit of SEIS.

The EEA extends its gratitude and appreciation to all the experts involved from the partner countries and the Eionet network and to the European Commission for the financial support, contributions and active engagement.

We encourage all partners to make further use of the results achieved, to continue to promote them widely and develop them further as a solid contribution to future environmental cooperation at the national and regional levels.

EEA Project team

Introduction

Over the past four years, the EEA has been conducting the EU funded SEIS II East project, the main goal of which was to support implementation of the Shared Environmental Information System (SEIS) principles and practices in the six Eastern Partnership (EaP) countries – Armenia, Azerbaijan, Belarus, Georgia, the Republic of Moldova and Ukraine.

The current project has been funded under the European Neighbourhood Instrument (ENI) and built on the previous EEA work in the region. It covered a wide range of activities aiming to further improve environmental governance ([1]) and to support the institutional capacities in the six partner countries in terms of data collection, indicators and assessments. The thematic focus was on water and biodiversity data and information while interested ENI countries piloted other areas such as land and waste. The project addressed ways to increase accessibility and the use of environmental data and information, to improve the effective sharing of the data and information across the region and to reduce the reporting burden. Project activities allowed the various networks and experts in the partner countries to actively engage in the work, and strengthened the communication and dialogue on environmental issues.

The implementation of the project activities enabled the six partner countries to improve their regular state of the environment reporting, develop indicator-based assessments, improve their capacities to manage and use environmental statistics, data and information, and share good practices with EU and European Environmental Information and Observation Network (Eionet ([2])) partners.

The Eionet served as inspiration for the organisation of a network of experts at both the national and the regional levels. Two National Focal Points — one appointed from the ministry responsible for the environment and one from the statistical authority — coordinated the project activities in each of the six partner countries, supported by national SEIS assistants ([3]). The thematic activities were managed by experts as part of the National Implementation Teams that met on a regular basis to assess progress and agree on the next steps, agree on the country priorities and advance national pilot projects. At its annual meetings, the project's steering committee reviewed the implementation activities, set regional priorities and monitored the overall progress.

The successful cooperation with the Eionet and the use of its structure ensures the sustainability of the evolving national networks and encourages a community of practice with the common goal of allowing access to harmonised and comparable environmental data and information. Moreover, close dialogue was ensured with other EU-funded actions and relevant partners at the regional and national levels to promote synergies and sustainability of the project activities.

The EEA had a central role in the project management and implementation, in line with its unique position in supporting sustainable development and helping achieve significant and measurable improvements in Europe's environment through the provision of timely, targeted, relevant and reliable information to policy-making agents and the public. By introducing tested methodologies, practices and tools, the project activities advanced the implementation of SEIS in the Eastern Partnership region and provided the necessary support for the countries' environmental commitments.

The objective of this publication is to provide an overview of the ENI SEIS II East project activities across key areas of work. The document highlights different aspects of the EEA cooperation with the Eastern Partnership region for the period 2016-2020 and can be used as a reference by those interested in the project activities and environmental cooperation in the region. A comprehensive website developed for the project could provide the interested public with in-depth information on each project component and related output ([4]).

At the core of ENI SEIS II East activities in the region were the SEIS principles that 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.

Thematic areas

The ENI SEIS II project supported the development of institutional capacities of environmental and statistical authorities, and aimed to strengthen the production of environmental data, indicators and assessment reports on the thematic areas identified jointly with the partner countries: air quality, biodiversity, land cover, water and waste.

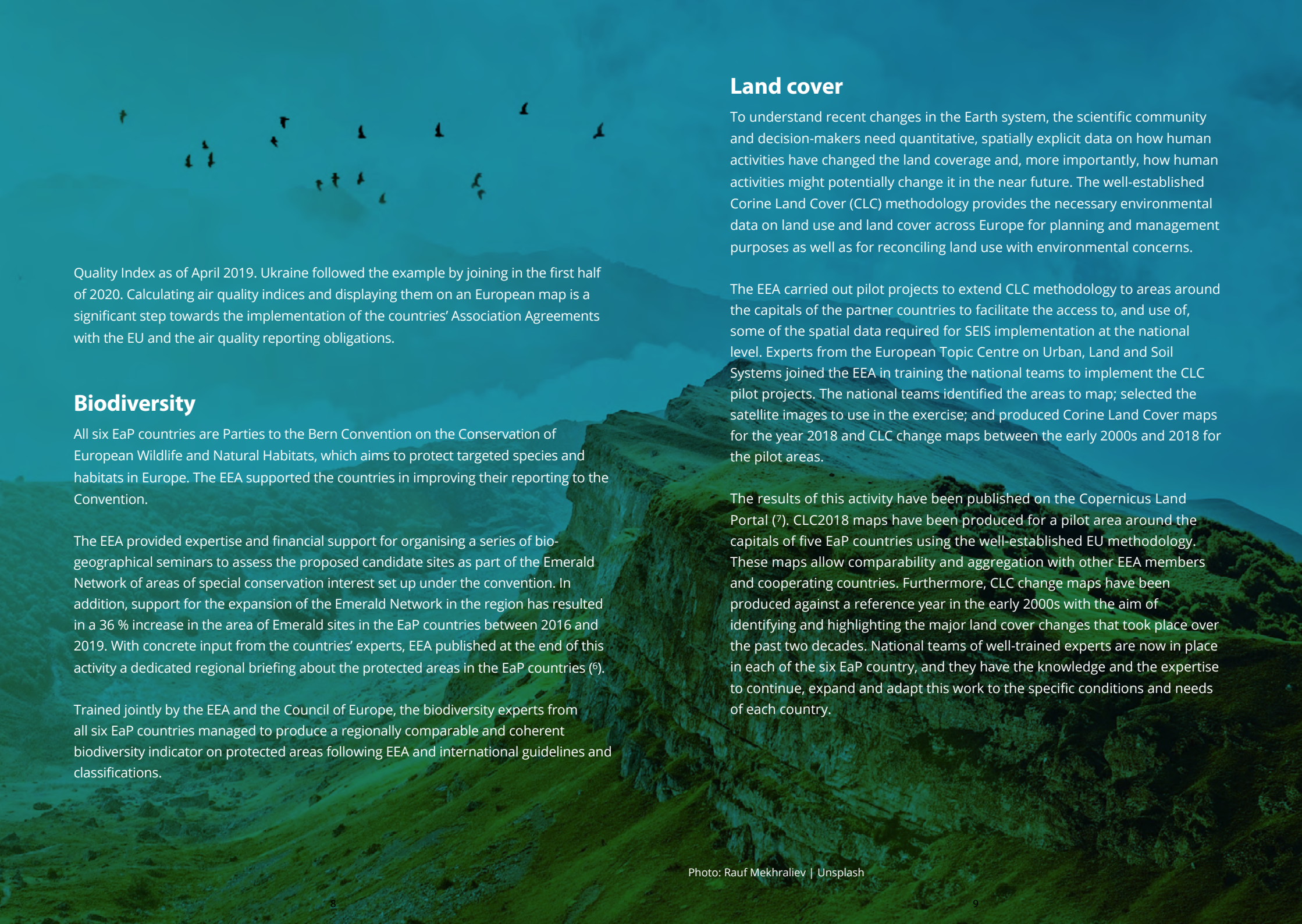
Air quality

Poor air quality can seriously affect public health and the environment, resulting in considerable socio-economic impacts. The provision of accurate and timely information to citizens and policy-makers can help address this challenge and prevent future negative impacts

Within the framework of the ENI SEIS II project, the EEA supported the countries in adding new near real-time air quality monitoring stations from the EaP region and in improving the EU Air Quality Index Map ([5]). EEA experts conducted two regional capacity-building events with follow-up country visits to assess the national situation related to air quality covering legislation, institutional set-up and existing infrastructure. Based on this assessment, the EEA experts delivered hands-on training on the EEA open source e-reporting tool. Moreover, fact sheets have been prepared on the status of air quality monitoring and data management for the six EaP countries, while the 2019 version of the joint EMEP/EEA air pollutant emission inventory guidebook has been translated into Russian. These activities also supported the countries in meeting their reporting obligations under the United Nations Economic Commission for Europe (UNECE) Convention on Long-range Transboundary Air Pollution and the EU National Emission Ceilings, while providing expert guidance on how to compile an inventory of atmospheric emissions.

Capacity building and the provision of methodology and IT tools based on the EU Air Quality Directives and the European Air Quality Index enhanced the accessibility and use of air quality measurement data in the region. More concretely, as a follow up to the technical assistance provided by the EEA, Georgia started reporting, on a voluntary basis, real-time air quality data, automatically feeding into the EU Air

Photo: Jairph | Unsplash



Quality Index as of April 2019. Ukraine followed the example by joining in the first half of 2020. Calculating air quality indices and displaying them on an European map is a significant step towards the implementation of the countries' Association Agreements with the EU and the air quality reporting obligations.

Biodiversity

All six EaP countries are Parties to the Bern Convention on the Conservation of European Wildlife and Natural Habitats, which aims to protect targeted species and habitats in Europe. The EEA supported the countries in improving their reporting to the Convention.

The EEA provided expertise and financial support for organising a series of bio-geographical seminars to assess the proposed candidate sites as part of the Emerald Network of areas of special conservation interest set up under the convention. In addition, support for the expansion of the Emerald Network in the region has resulted in a 36 % increase in the area of Emerald sites in the EaP countries between 2016 and 2019. With concrete input from the countries' experts, EEA published at the end of this activity a dedicated regional briefing about the protected areas in the EaP countries ([6]).

Trained jointly by the EEA and the Council of Europe, the biodiversity experts from all six EaP countries managed to produce a regionally comparable and coherent biodiversity indicator on protected areas following EEA and international guidelines and classifications.

Land cover

To understand recent changes in the Earth system, the scientific community and decision-makers need quantitative, spatially explicit data on how human activities have changed the land coverage and, more importantly, how human activities might potentially change it in the near future. The well-established Corine Land Cover (CLC) methodology provides the necessary environmental data on land use and land cover across Europe for planning and management purposes as well as for reconciling land use with environmental concerns.

The EEA carried out pilot projects to extend CLC methodology to areas around the capitals of the partner countries to facilitate the access to, and use of, some of the spatial data required for SEIS implementation at the national level. Experts from the European Topic Centre on Urban, Land and Soil Systems joined the EEA in training the national teams to implement the CLC pilot projects. The national teams identified the areas to map; selected the satellite images to use in the exercise; and produced Corine Land Cover maps for the year 2018 and CLC change maps between the early 2000s and 2018 for the pilot areas.

The results of this activity have been published on the Copernicus Land Portal ([7]). CLC2018 maps have been produced for a pilot area around the capitals of five EaP countries using the well-established EU methodology. These maps allow comparability and aggregation with other EEA members and cooperating countries. Furthermore, CLC change maps have been produced against a reference year in the early 2000s with the aim of identifying and highlighting the major land cover changes that took place over the past two decades. National teams of well-trained experts are now in place in each of the six EaP country, and they have the knowledge and the expertise to continue, expand and adapt this work to the specific conditions and needs of each country.

Photo: Rauf Mekhraliev | Unsplash

Water

Water pollution and water scarcity continue to be major problems in the EaP countries, especially since almost all the large basins in the region are transboundary. The project aimed to improve the countries' ability to manage their water resources and to ensure the production of comparable and harmonised data, information and indicators at the regional level.

The EEA assisted by the European Topic Centre for Inland, Coastal and Marine Waters, brought together experts from across the EaP countries to develop a set of indicators consistent with EEA methodology and in line with the UNECE regional set. The project also supported the development of EcoPortals for Armenia and Azerbaijan and a Water Information System for Georgia. In 2020, based on the information available and with support from the national experts, the EEA prepared an indicator-based assessment of water availability, surface water quality and water use in the Eastern Partnership countries ([8]).

Producing comparable indicators across the region enabled access to national water data and contributed to gradually harmonising the data used. Moreover, it improved the knowledge-based policy-making process overall. The portals serve the national water agencies and others to share the data and information available and to provide external users access and download options to such products as indicators, reports, visual materials, interactive charts and thematic maps.

Waste

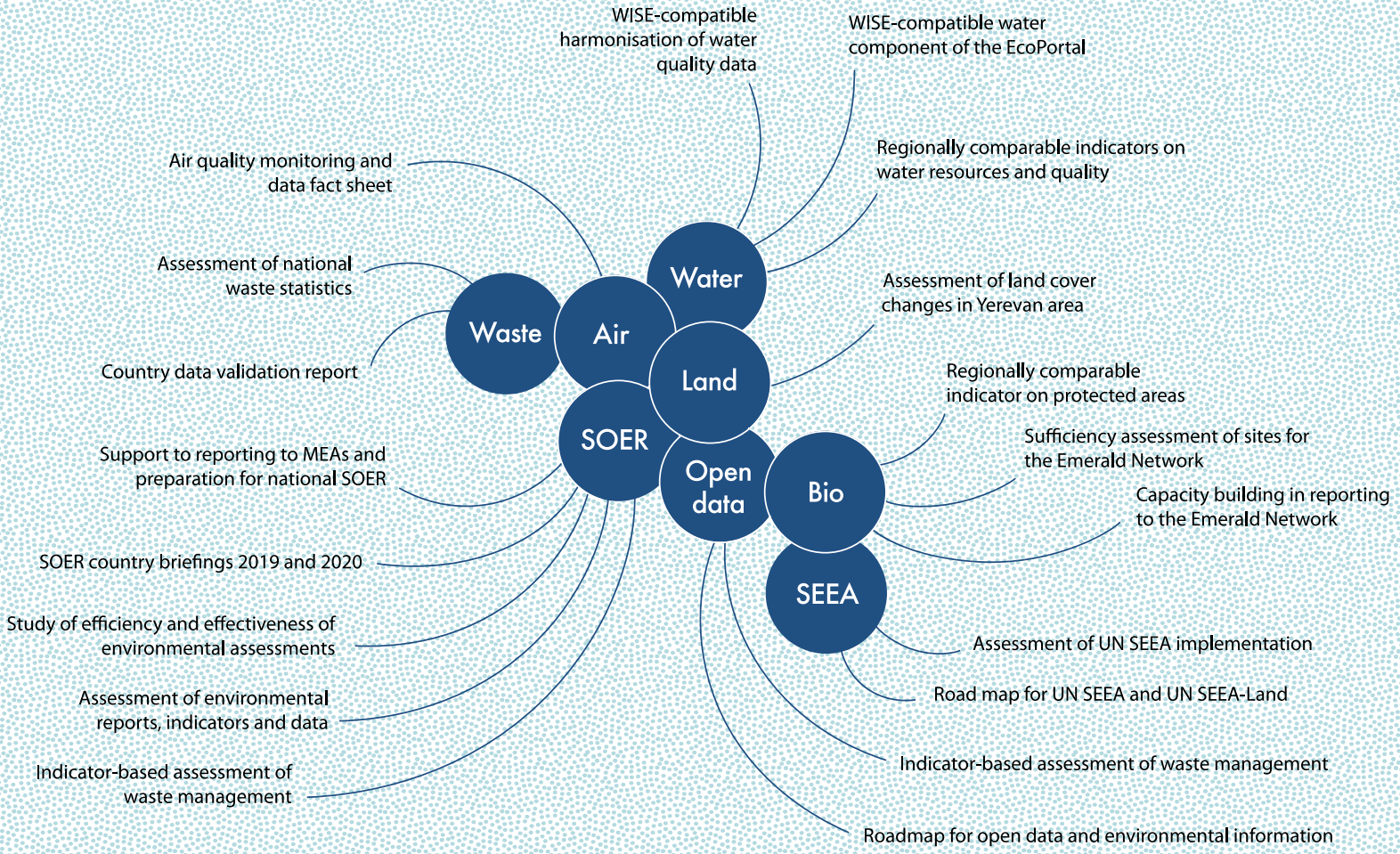
The previous work in this area found a need to continue strengthening the national capacities to produce, manage and report waste data and statistics in support of the implementation of international environmental reporting commitments.
To achieve this improvement, the Statistical office of the EU –– Eurostat –– in collaboration with the EEA, provided the EaP countries with methodological support for improving their waste statistics. This activity was carried out as a parallel two-year project (in 2016 and 2017) strongly embedded in the ENI SEIS context. The objectives included aligning waste data reporting and validation with EU guidelines and practices as well as improving data quality procedures. In addition, the Eurostat experts produced a waste management glossary and guidance document on how to estimate the uncollected waste in the EaP Region.

The waste component delivered a country checklist ([9]) and a self-assessment tool to be used by the national waste statistical system. In addition, country factsheets summarising the current status of waste statistics for each EaP country complement regional and country data validation reports based on a joint questionnaire of the UN Statistics Division and the UN Environment Programme.

Photo: Vruyr Martirosyan | Unsplash

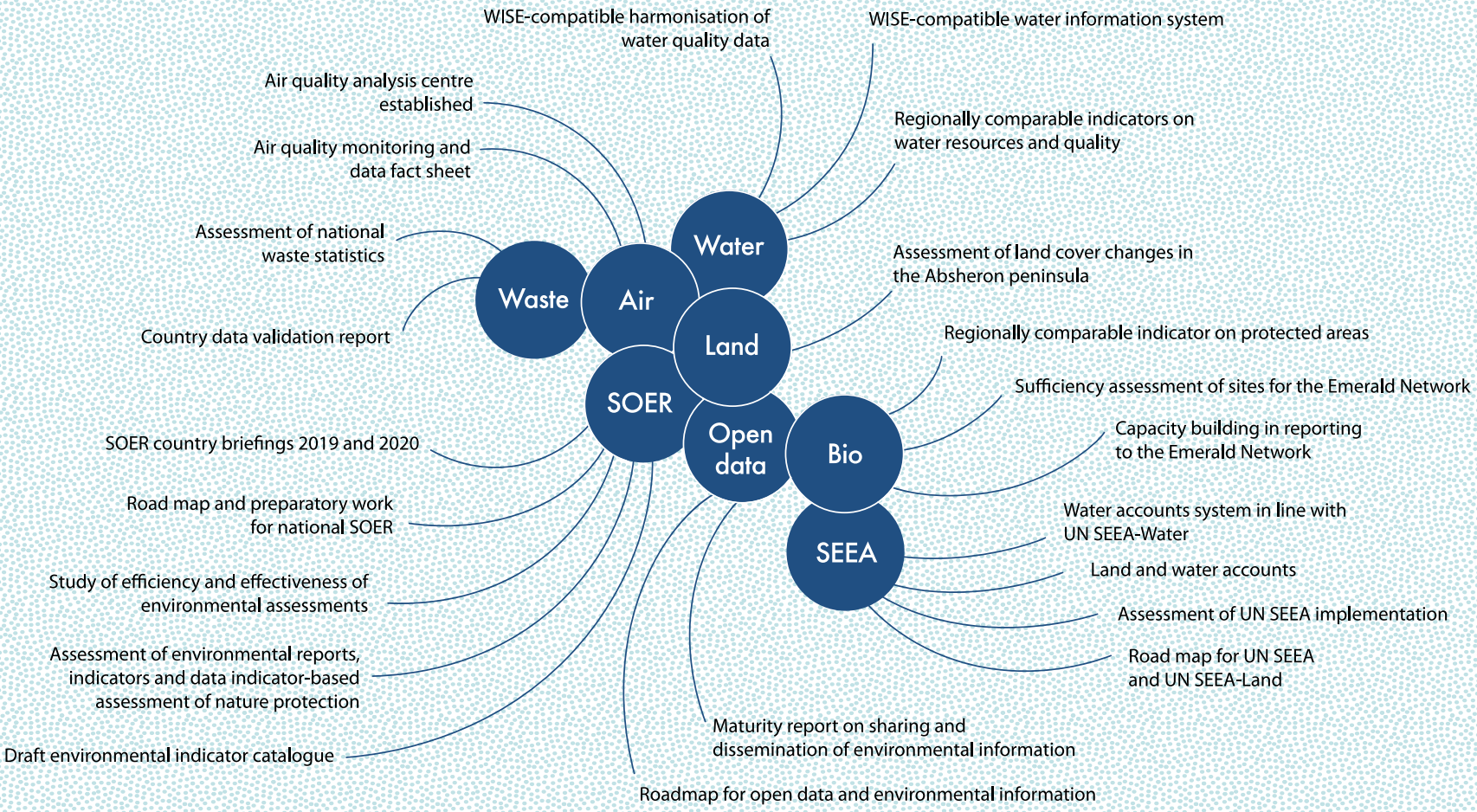
ARMENIA

SEIS project results



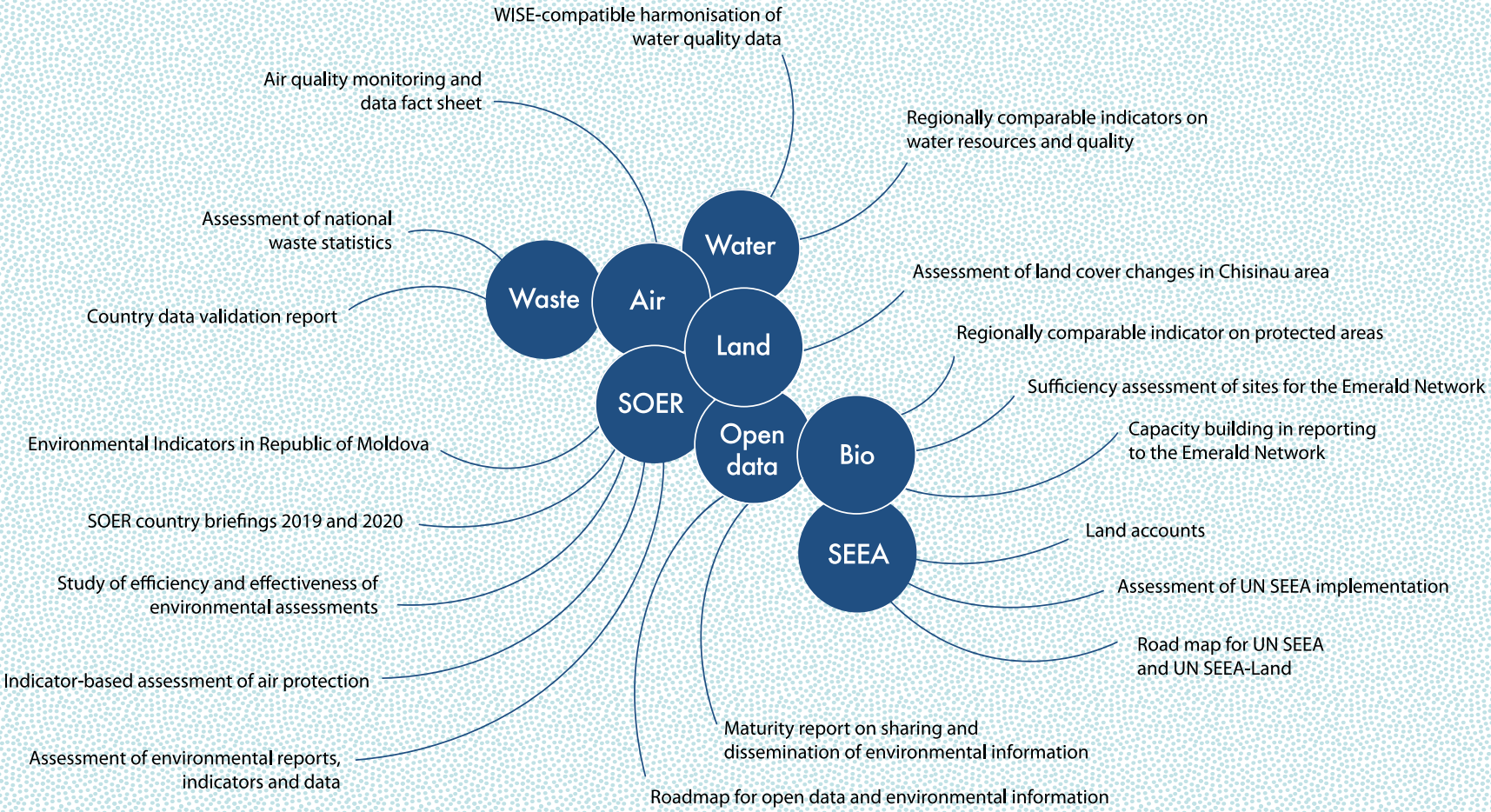
AZERBAIJAN

SEIS project results



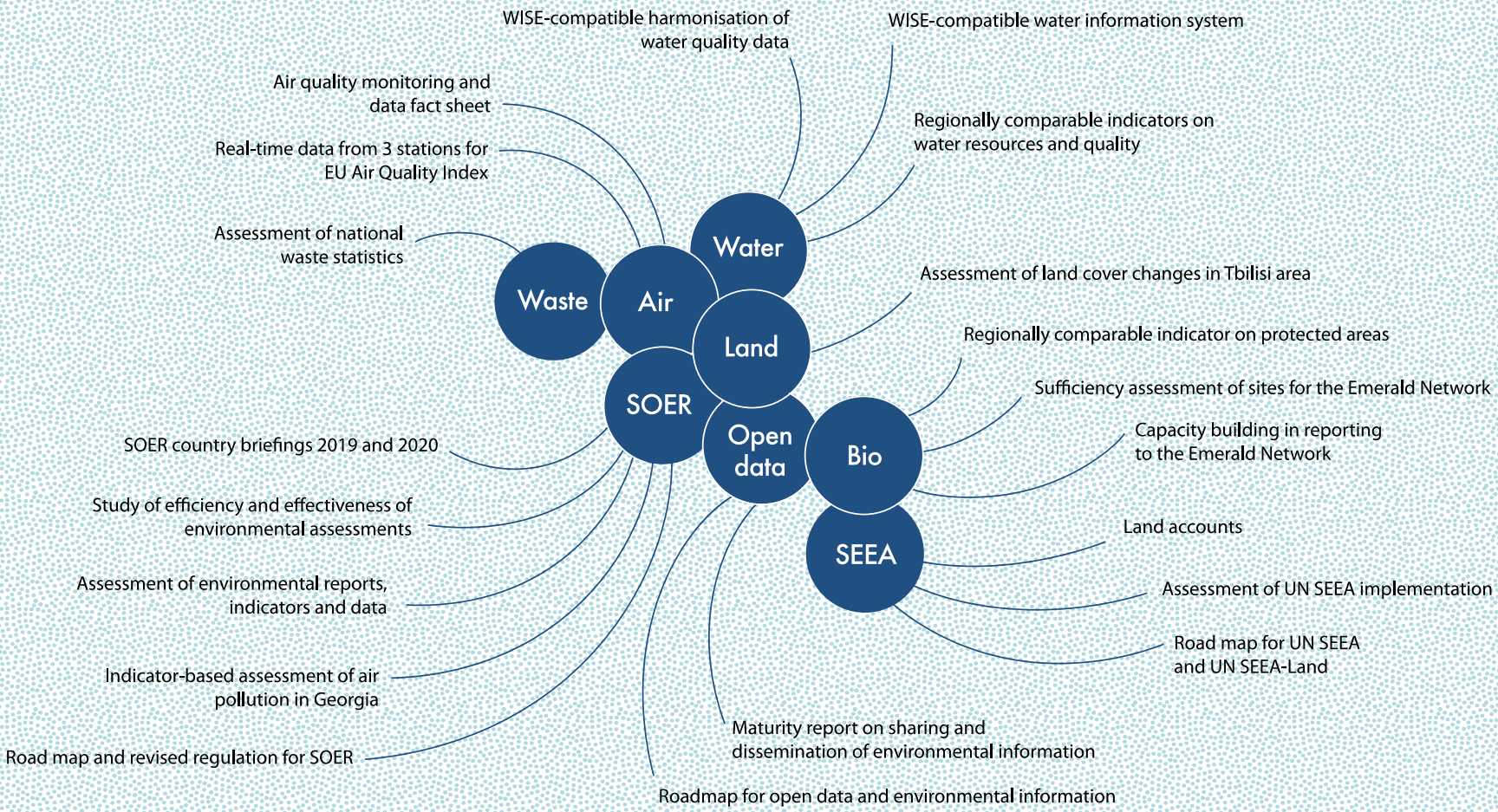
BELARUS

SEIS project results

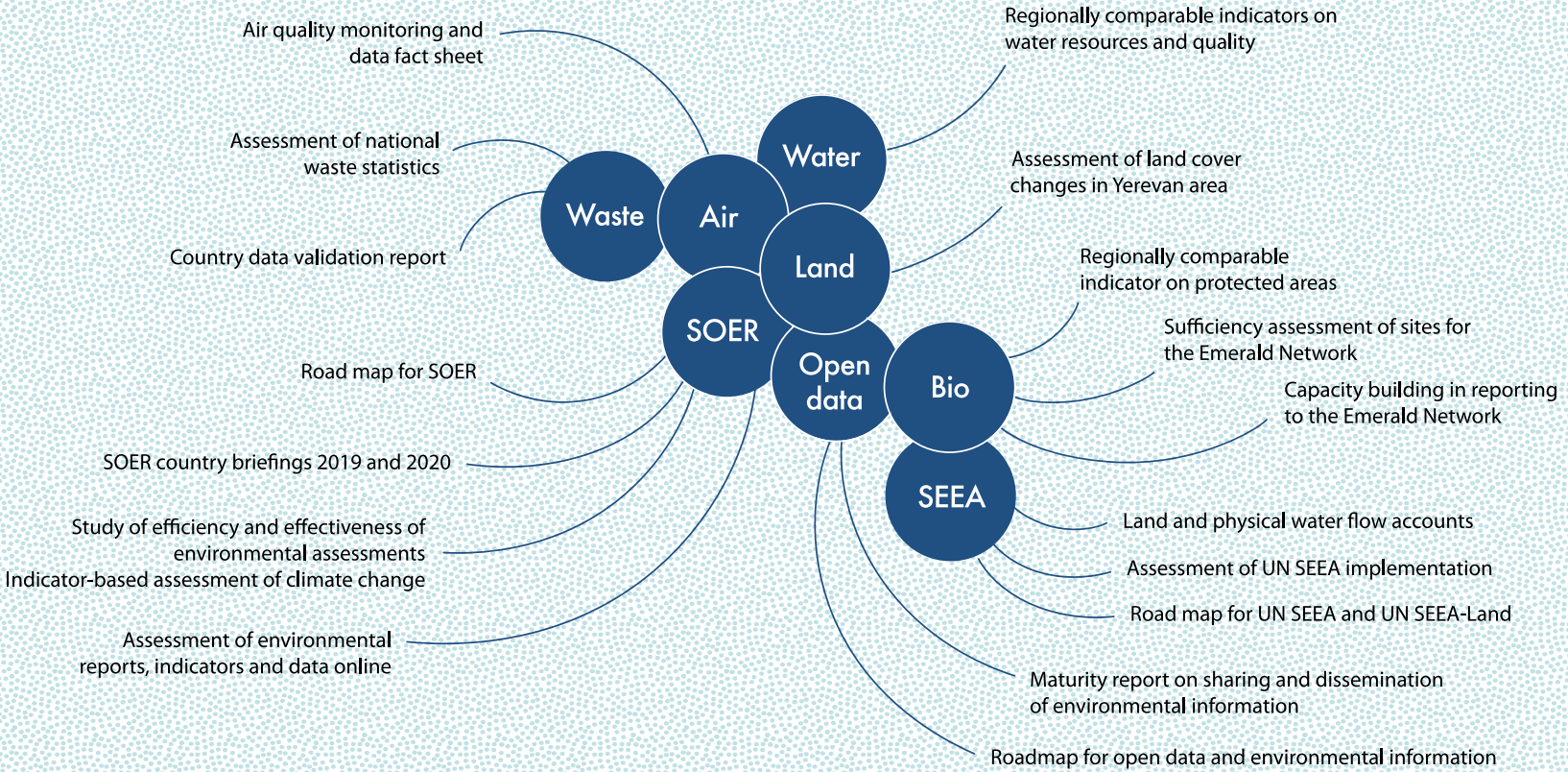


GEORGIA

SEIS project results



REPUBLIC OF MOLDOVA



SEIS project results

UKRAINE

SEIS project results

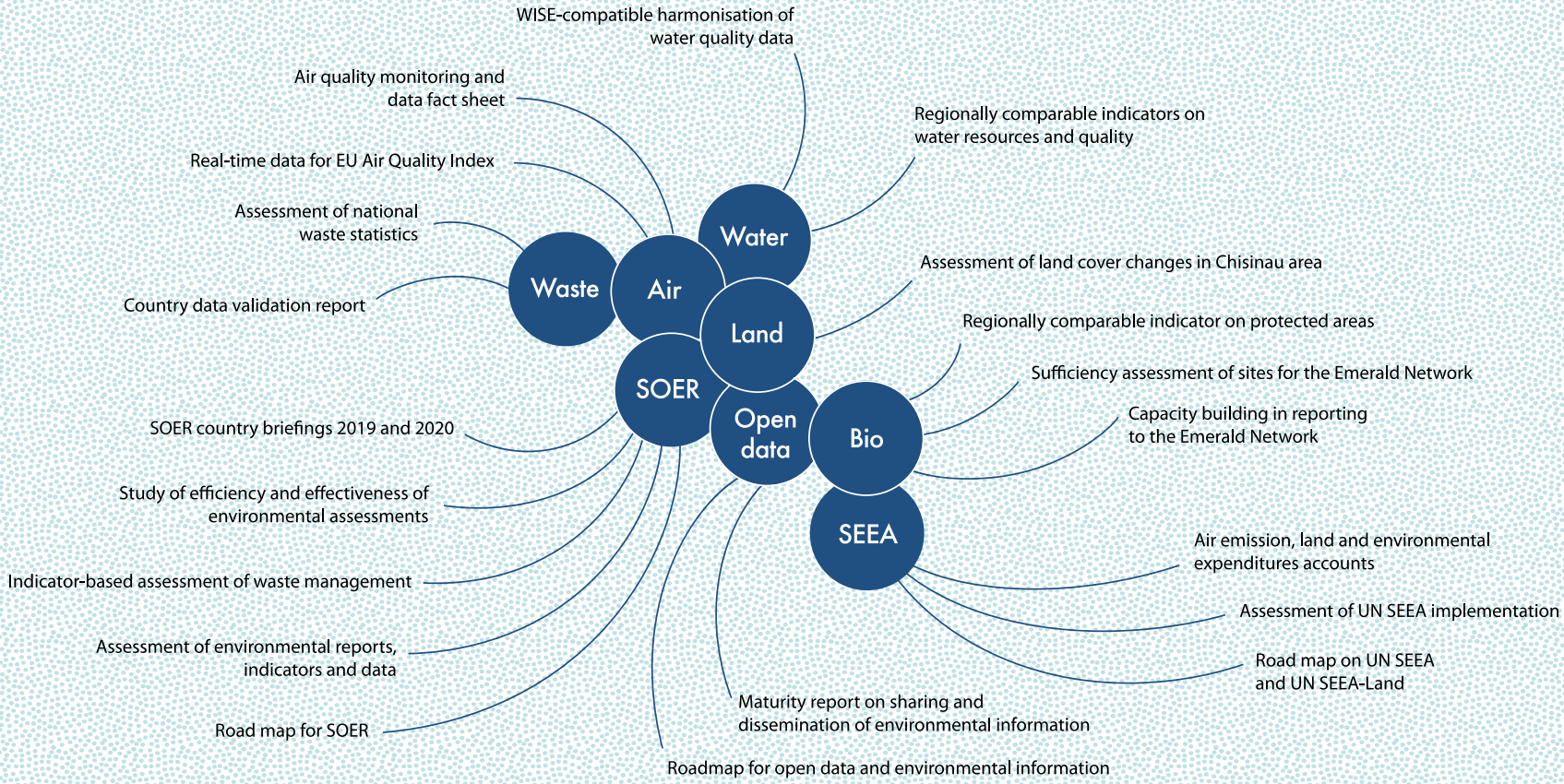
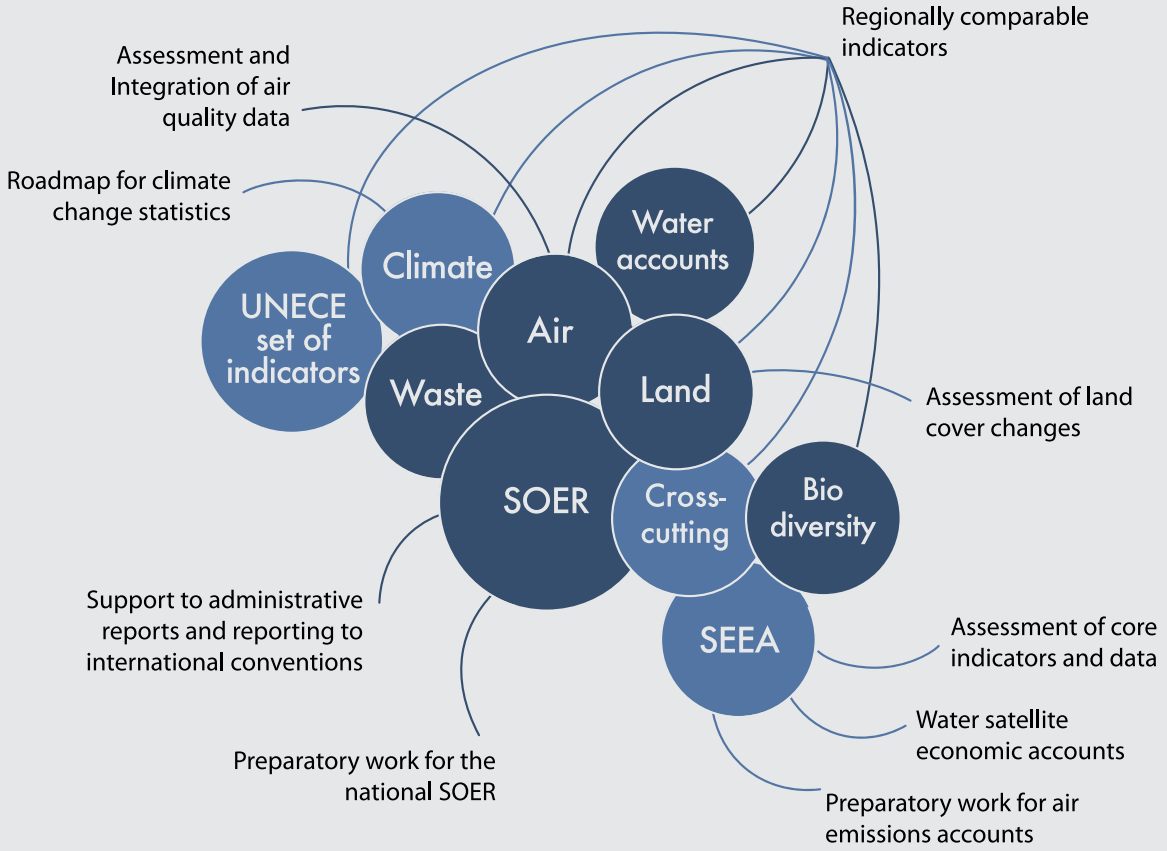


Photo: Gustavo Espindola | Unsplash

Data, indicators and assessments

Project results



Indicators and assessments

In the framework of the ENI SEIS II project, the EEA continued to support the EaP countries in better organising their environmental statistics data and in developing environmental indicators. This allowed analysts to use the data and indicators in the regular environmental assessments processes and improved the countries' reporting capacity against various national and international commitments. More concretely, the project aimed to strengthen the fulfilment of international commitments on indicator- and assessment-based reporting –– on the SDGs and UN and UNECE conventions, for example –– and in parallel to streamline activities, connect networks and reduce the reporting burden of the countries. And all these activities have been developed with the SEIS principles in mind!

The EEA's knowledge and expertise, complemented by best practices available among Eionet partners, were mobilised to assess the EaP country reporting needs and obligations and the available expertise in producing regular state of environment reports and other thematic assessments. The team followed up by providing each EaP partner country tailor-made methodological support in line with current European practices, methods and tools. Regional capacity-building workshops and dedicated country visits have been organised while specific training programmes have been developed in the context of the EEA Academy ENI Summer Schools.

The project assisted the production of state of the environment reports in Georgia ([10]) , Belarus and Ukraine, and helped launch the preparatory process in Armenia, Azerbaijan and the Republic of Moldova. These developments will further contribute to meeting various reporting obligations of the countries in the years to come. A review of the availability and online accessibility of regional environmental indicators and environmental assessment reports in the six EaP countries was carried out annually. The aim was to monitor progress in terms of accessibility and public use and reuse of these key products.

Among other tangible outputs of this component were guidelines ([11]) and templates ([12]). for the preparation of state of the environment reports, country briefings on the current state of the environment reporting complemented by a regional brochure on the environment, as well as short thematic leaflets for policy-makers and the public ([13]). But more importantly, at the end of this journey each country had a trained team of experts to continue the work and a set of modern tools to work with.

System of environmental economic accounting

The UN Statistical Commission adopted the System of Environmental Economic Accounting (SEEA) as a framework for integrated information to support evidence-based policy-making ([14]).

An EEA study ([15]). under the project identified the need for capacity development in environmental accounting and modelling, GIS applications, scenario analysis and forecasting. Two self-assessments ([16]). conducted by the project indicated that the priority areas for applications are the environmental accounts of land, air emissions, water, and environmental protection expenditures. To meet these needs, the EEA and partners provided training and methodological support for national experts in the priority areas, as well as in other thematic areas for potential future development.

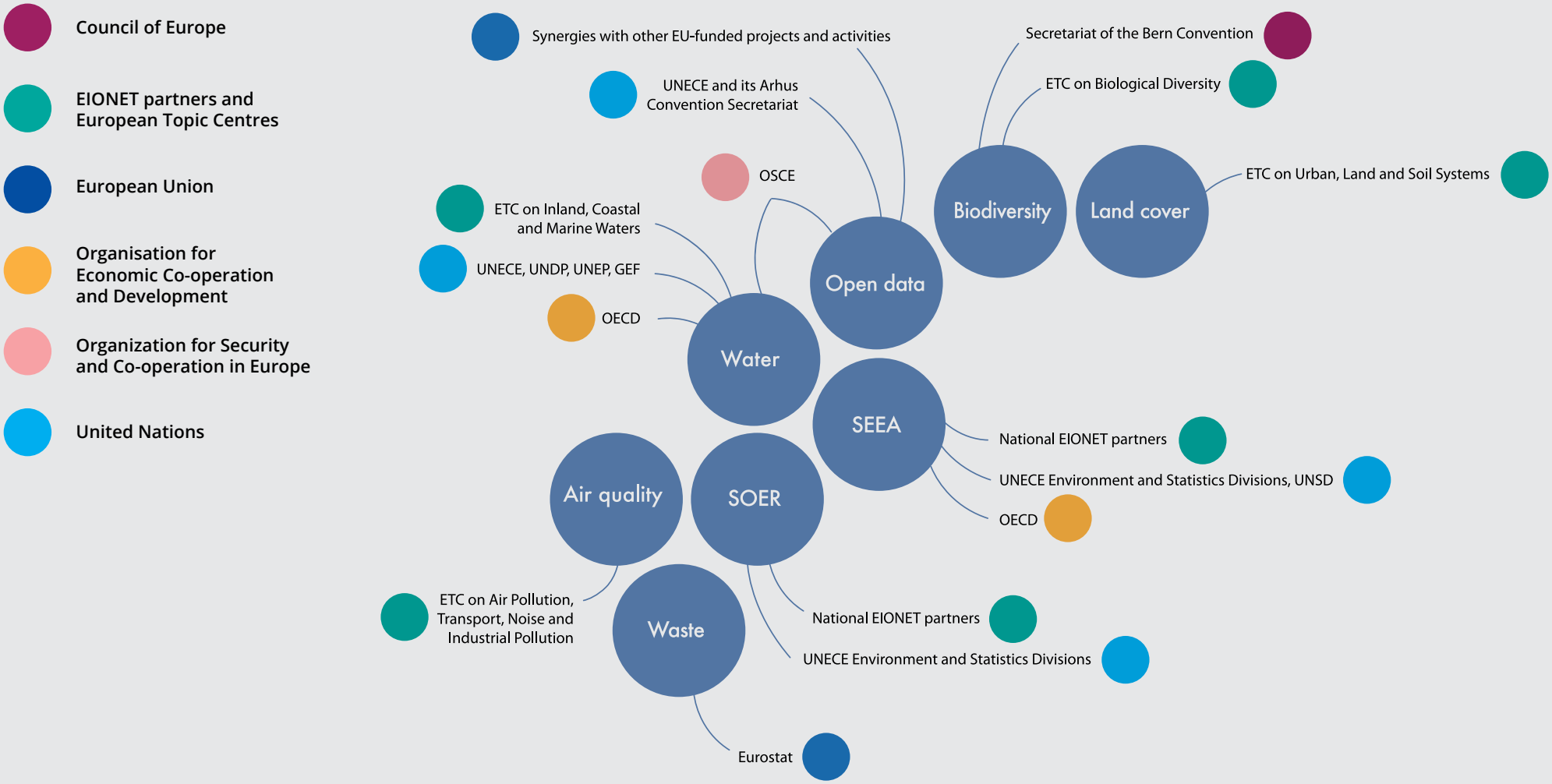
The project results include the development of six land cover accounts and land cover change accounts ([17]), a regional UN SEEA road map (xviii), and six national UN SEEA road maps ([18]) and six national UN SEEA road maps ([19]) on land accounts. The following environmental accounts are now regularly produced and published online as scientific evidence for the relevant policy-making:

- water emissions, supply and use table for water in Armenia;
- energy assets, supply and use tables for energy (in physical units), land accounts and water accounts in Azerbaijan;
- water supply and use (in physical units) in Belarus;
- material flow accounts in Georgia;
- land accounts in Republic of Moldova;
- air emissions, land accounts and environmental protection expenditure accounts in Ukraine.

Cooperation and networking

National experts led the implementation of project activities together with experts from the EU, Eionet and international organisations as shown below.

The Eionet network model was introduced in thematic activities across the three pillars of SEIS: content, cooperation and infrastructure.



Access to environmental information

Improving access and sharing of environmental information is the ultimate scope of implementing the SEIS principles and is one of the key objectives of the UNECE Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus Convention). This goal was the main thread in designing a dedicated component that assesses the status of e-governance and open data readiness in the EaP countries in the field of environment. Similar assessments of the maturity status and progress on open data and e-government for the Member States take place every year in the EU. Gradually aligning the EaP countries with this process was another objective of this project component.

The EEA, together with the Aarhus convention Secretariat, worked with each EaP country –– in fact with experts across various domains from environmental, IT and sectoral activities –– to design a stepwise implementation road map in line with EU and international developments. This process was further refined in dialogue with each country to produce a realistic, national tailor-made road map to guide each EaP country in the further implementation of e-governance and open-data initiatives. The work was complemented by a good practices report harvesting a selection of examples on open data and access to environmental information across countries, organisations and topics and, a source of inspiration and a tool to use in the implementation process.

As a result of this interactive process the countries now have an assessment of the current status on open data and e-government, particularly for the environmental domain, and a way forward towards the implementation of future actions. A team of cross-cutting experts is now available and engaged to assist the process, and the implementation could benefit highly from their knowledge and expertise. Access to information remains high on the political agenda for the coming years and this activity managed to raise awareness on the topic, on the environmental information, and most importantly on the role of the general public and other stakeholders in driving the change towards a sustainable future.

Communication and visibility

The communication and visibility actions organised at both the national and regional levels followed each step of the project implementation and each of the topics addressed. Promoting and disseminating the project results, the challenges and the prospects for future actions to experts and other stakeholders in each EaP country were key to the success of the project and the national engagement. Moreover, a recent EEA publication assessing the efficiency and effectiveness of environmental assessments in the EaP countries identified the need to further enhance effective communication skills and, consequently, to put in place necessary actions.

Responding to this challenge, the EEA assisted in the development and strengthening of national capacities to communicate various environmental issues effectively and to maintain high visibility of the project activities and products. Jointly with Eionet experts, the EEA delivered two regional capacity-building workshops to equip participants with the tools and knowledge on how to effectively communicate with the general public and policy-makers and to further develop communication networks. The training packages included hands-on exercises and real-time simulations of crisis situations and press conferences.

Working closely with various national partners, the ENI SEIS II project managed to develop and implement regional and national communication and visibility plans aiming to facilitate the dissemination of the project results. A monthly newsletter kept the general public and national networks informed on the latest developments in the region, even beyond the project scope, while the dedicated project website ([20]) summarised all the activities and results achieved. It is an open invitation to learn and use more of the results achieved in future activities and projects.

Regional meetings and training workshops

Over the four years of implementation, the EEA and its partners organised about 200 events on project topics at the national and the regional levels.

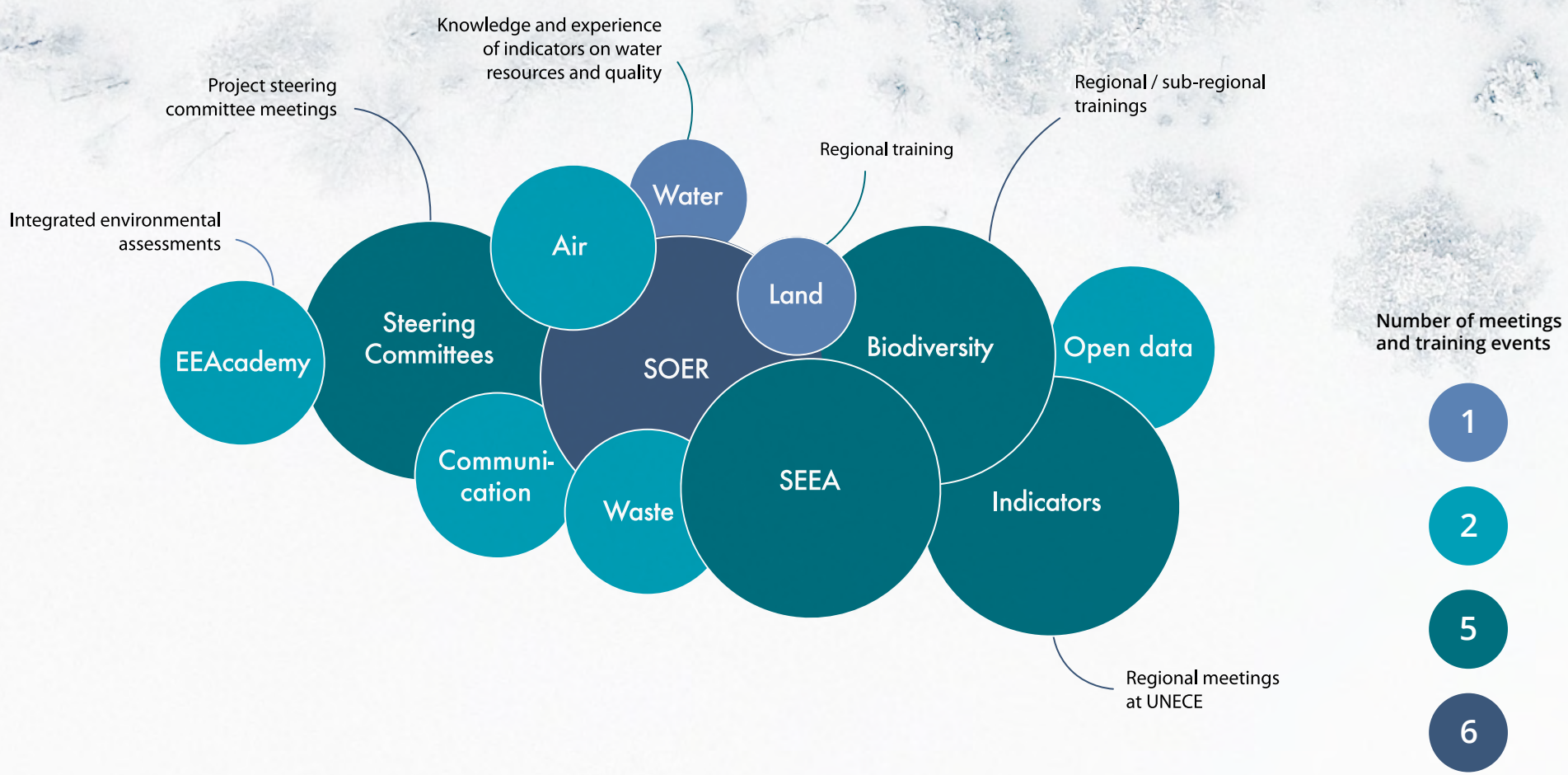


Photo: Gabriel Alenius | Unsplash

The way ahead

The gradual implementation of SEIS across the pan-European region, with joint efforts at the national, cross-border and regional levels has been an enriching and multi-faceted experience that was highly appreciated by colleagues across the board. The close collaboration of a multitude of experts, networks and stakeholders across thematic areas resulted in closer partnerships and valuable sharing of knowledge, good practices, methodologies and tools.

To ensure the sustainability of the results, EEA used the valuable experience from the Eionet and international partners and promoted strong ownership and further implementation of the project outcomes by each of the EaP partner countries.

In the context of the European Commission's highly ambitious European Green Deal, tackling the current environmental and climate change challenges, driving the transition towards greening the economies and setting an example for the international community remain high on the political agenda. The post-2020 period provides an excellent opportunity to scale up environmental cooperation with the Eastern Partnership region.

The EEA engagement with the Eastern Partnership countries under the ENI SEIS II East project was an essential part of the EU support to environmental cooperation in the region and strongly contributed to achieving the EaP deliverables for 2020. The outcomes of the present cooperation represent solid building blocks for the future and enhanced synergies should be permanently ensured with present and upcoming EU and international programmes and activities. With a new EEA/Eionet strategy for the 2021-2030 period ready to be implemented, the EEA remains committed to further cooperating with the EaP region and other European partners, based on EU external policy and the assistance and cooperation mechanisms available.

Photo: Vruyr Martirosyan | Unsplash

Abbreviations

CIRAD	French Agricultural Research Centre for International Development
CLC	Corine Land Cover
EaP	Eastern Partnership
EEA	European Environment Agency
Eionet	European Environment Information and Observation Network
EMEP	Cooperative Programme for Monitoring and Evaluation of the Long-range Transmission of Air Pollutants in Europe
ENI	European Neighbourhood Instrument
EU	European Union
Eurostat	Statistical office of the European Union
IUCN	International Union for Conservation of Nature
PRTR	Pollutant Release and Transfer Register
SEEA	System of Environmental Economic Accounting
SEIS	Shared Environmental Information System
SOER	State of the Environment Report
SDG	Sustainable Development Goal
UNECE	United Nations Economic Commission for Europe

Notes and links

1) The first phase cooperation on SEIS was implemented by EEA in the 2010-2015 period under the EU-funded European Neighbourhood Partnership Instrument (ENPI).

2) https://www.eionet.europa.eu

3) All of the countries except Belarus benefited from the support of the national SEIS assistants.

4) https://eni-seis.eionet.europa.eu/east

5) https://www.eea.europa.eu/themes/air/air-quality-index/index

6) https://www.eea.europa.eu/themes/biodiversity/europe-protected-areas/protected-areas-in-the-eastern

7) https://land.copernicus.eu/pan-european/GHSL/eni-clc-pilot

8) https://www.eea.europa.eu/publications/regional-water-report

9) https://eni-seis.eionet.europa.eu/east/areas-of-work/data/Annex2CountryFactsheetChecklistFeb2018.pdf

10) https://eni-seis.eionet.europa.eu/east/areas-of-work/communication/newsletter/december-2020-georgia-publishes-state-of-the-environment-from-2014-to-2017

11) https://eni-seis.eionet.europa.eu/east/governance/project-documents/methodological-paper_interactive-tool

12) https://eni-seis.eionet.europa.eu/east/governance/project-documents/template-of-the-state-of-the-environment-report-in-the-slovak-republic/

13) https://eni-seis.eionet.europa.eu/east/areas-of-work/Indicators%20and%20Assessments

14) SEEA is a framework that integrates economic and environmental data to provide a more comprehensive and multipurpose view of the interrelation between the economy and the environment.

15) https://eni-seis.eionet.europa.eu/east/governance/project-documents/evaluation-of-recent-national-enivronmental-assessments-synthesis-eng

16) https://eni-seis.eionet.europa.eu/east/governance/project-documents/assessment-of-self-assessments-of-the-seea-progress-in-the-eastern-partnership-countries

17) https://eni-seis.eionet.europa.eu/east/areas-of-work/seea-progress/explore-further/report-on-environmental-accounting-and-hands-on-data-for-indicator-production-on-integrated-approach-october-2019

18) https://eni-seis.eionet.europa.eu/east/governance/project-documents/assessment-of-self-assessments-of-the-seea-progress-in-the-eastern-partnership-countries

19) https://eni-seis.eionet.europa.eu/east/areas-of-work/seea-progress/explore-further/report-on-environmental-accounting-and-hands-on-data-for-indicator-production-on-integrated-approach-october-2019

20) https://eni-seis.eionet.europa.eu/east

Photo: © Anatol Kliashchuk

European Environment Agency