Economic Commission for Europe

Committee on Environmental Policy

Special session

Geneva, 9-12 May 2022

Item 3(c) of the provisional agenda

The Ninth Environment for Europe Ministerial Conference: Pan-European environmental assessment

Information paper No.13 28 April 2022

Final review report on the establishment of the Shared Environmental Information System

Summary of key messages and recommendations

Note by the secretariat and the Working Group on Environmental Monitoring and Assessment

Summary

At the Seventh Environment for Europe Ministerial Conference (Nur-Sultan, 21–23 September 2011), ministers requested that a Shared Environmental Information System be developed to underpin a regular environmental assessment process across the pan-European region (ECE/ASTANA.CONF/2011/2/Add.1, para. 14).

At the Eighth Environment for Europe Ministerial Conference (Batumi, Georgia, 8–10 June 2016), ministers invited countries to further develop their national information systems to have the Shared Environmental Information System in place by 2021 (ECE/BATUMI.CONF/2016/2/Add.1, para. 10).

At its twenty-fifth session (Geneva, 13–15 November 2019), the United Nations Economic Commission for Europe (ECE) Committee on Environmental Policy invited the Working Group on Environmental Monitoring and Assessment to oversee the preparation of a final review report on the establishment of the Shared Environmental Information System in Europe and Central Asia for consideration by the Committee, with a view to its subsequent forwarding to the next Environment for Europe Ministerial Conference as an information document (ECE/CEP/2019/15, para. 37 (j)).

At its twenty-seventh session (Geneva, 3–5 November 2021), the Committee welcomed the final review report on establishment of the Shared Environmental Information System (ECE/CEP/AC.10/2021/6) and forwarded it to the Ninth Environment for Europe Ministerial Conference. The Committee also requested the secretariat to provide a summary of key messages and recommendations at the front of the report.

The Working Group at its twenty-fourth session (Geneva, 11–12 April 2022), discussed and approved additional key messages and recommendations related to the Shared Environmental Information System including from the pan-European environmental assessment.

This document summarizes the key messages and recommendations, that will be forwarded to the Ninth Environment for Europe Ministerial Conference together with the final review report.

A. Key messages

- 1. The main messages that the Working Group on Environmental Monitoring and Assessment wishes to convey to Ministers at the Ninth Environment for Europe Ministerial Conference are set out below.
- 2. Overall, a Shared Environmental Information System has been successfully established in Europe and Central Asia.
- 3. All United Nations Economic Commission for Europe (ECE) member States have, to varying degrees, made progress regarding the establishment of a national system during the past years and in making environmental information available and accessible.
- 4. National Shared Environmental Information Systems vary in form and regularity regarding their updates and content, and gaps remain for all principles and pillars of the Shared Environmental Information System that need to be addressed.
- 5. Availability and access to information and knowledge to support Government decision-makers, industry and the public taking impact-oriented choices is improving but continues to be challenging in some sectors more than in others.
- 6. Challenges remain for measuring progress towards policy targets in the pan-European region including for emerging policy developments such as circular economy or sustainable infrastructure as revealed during the development of the seventh pan-European environmental assessment.
- 7. The seventh pan-European environmental assessment reveals various data gaps across the region in almost all areas, with data available for some countries but not others, or no recent data available. Data for some indicators needed for the assessment are not routinely collected, in particular for emerging policies including the two conference themes.
- 8. The System is not a static instrument and will need to evolve over time into fully integrated and open data systems based on the System's principles and adapt to future developments in order to inform policies and the public holistically, including through applying the ECE revised indicators and other relevant indicator frameworks.
- 9. Future digitalization of environmental data and use of new technologies will be key.
- 10. Countries still need assistance to fully implement all pillars and principles of the System for full production and sharing of all data flows associated with the ECE environmental indicators.
- 11. It is important that countries understand the Shared Environmental Information System as part of their regular internal environmental monitoring process. Such an approach will effectively guide any future developments and ensure that quantifiable progress can be made in the system.
- 12. Further reviews of implementation of the Shared Environmental Information System would help to address gaps and, by doing so, ensure that it supports regular assessments and reporting also in the future.

B. Recommendations

13. Based on the key findings and results of the final review report on the establishment of a Shared Environmental Information System in Europe and Central Asia and findings of the seventh pan-European environmental assessment, the Working Group recommends that countries address remaining gaps in the establishment of the Shared Environmental Information System, covering relevant pillars, thematic categories and data flows.

Infrastructure pillar

- 14. In addition, in relation to infrastructure, Governments should:
- (a) Improve national legislation and close legislative gaps still existing for monitoring and reporting related to certain environmental themes;

- (b) Enhance digitalization of environmental data, thus supporting several member States' efforts in implementing their digital agendas and implementation of digital environmental information systems in line with Shared Environmental Information System principles to further enhance the availability and accessibility of high-quality environmental data;
- (c) Enhance the use of new technologies in environmental monitoring and production of environmental data (such as big data, the Internet of Things and artificial intelligence);
- (d) Ensure that sufficient financial resources are allocated to the establishment, operation and maintenance of environmental monitoring and information systems through national budgets and/or international support;
- (e) Invest in data collection and information processing as knowledge is instrumental for decision-making including for water policy design (for example, water accounts, ecosystem assessment and indicators). Continuous improvement of monitoring and communication technologies is considered for example a top priority in terms of a water information system for the pan-European region.

Content pillar

- 15. In relation to content, Governments should:
- (a) Align the Shared Environmental Information System with the revised ECE environmental indicators to enhance their policy relevance;
- (b) Regularly revise relevant indicators and data flows to inform the latest policies and to support decision-making related to the 2030 Agenda for Sustainable Development, a green and circular economy and other global policies;
- (c) Continue to work on the integration and harmonization of environmental data flows in line with the principles of the Shared Environmental Information System;
- (d) Better align data collection processes with national policy contexts and targets and improve the use of available data flows and related indicators in the production of environmental assessments and reports including for the pan-European environmental assessment;
- (e) Improve the use of relevant environmental assessments and reports to measure progress against policy targets and objectives and improve policymaking;
- (f) Bring policy and science together for developing appropriate and standardized methods and systems for monitoring and information management, including through application of new technologies, to fill data gaps and improve decision-making;
- (g) Promote use of appropriate and standardized methods, particularly for monitoring air pollution emissions, and public availability of monitoring data, while strengthening cooperation and national investment to fill monitoring gaps;
- (h) Enhance regular data production and timely availability and publication of information online in accordance with the System's principles;
- (i) Increase efforts to complement inventories of beach and marine litter with information on composition and sources of litter;
- (j) Establish a region-wide chemicals and waste impact-oriented monitoring scheme;
- (k) Improve data collection systems on environmental financing, for example on environmental expenditures (which entities spend money on the environment, how much, with what objectives and who finances these expenditures);
- (l) Develop a common definition of sustainable infrastructure to allow reporting on and quantifying of progress across countries and subregions;

(m) Select some specific key-impact tourism indicators to be included in ECE statistical databases and align them with those being developed for the monitoring of sustainable development in tourism and be compatible with the Sustainable Development Goals.

Cooperation pillar

- 16. Finally, in relation to cooperation, Governments should:
- (a) Establish or improve institutional arrangements for regular production and sharing of data between various institutions at the national level, including for the monitoring of the Sustainable Development Goals and a green and circular economy;
- (b) Environmental authorities are encouraged to work closely with their corresponding national statistical agencies and other relevant institutions to integrate and share information;
- (c) The Working Group also recommends that ECE, the United Nations Environment Programme and the European Environment Agency continue their long-standing and effective cooperation in support of the establishment of the Shared Environmental Information System in Europe and Central Asia. These organizations should also actively support countries in regular reviews of environmental information systems and their digitalization efforts;
- 17. These recommendations may need to be revised in the future based on future reviews that may be conducted by countries.

4