Working Group on Environmental Monitoring and Assessment

Twenty-third session, Geneva and online, 11-12 April 2022

Agenda Item 5: Regular pan-European environmental assessment supported by the Shared Environmental Information System

Presentation of draft key findings, policy messages and way forward from the pan-European environmental assessment to be forwarded to the Ninth Environment for Europe Ministerial Conference







Background



Draft Summary for policymakers and

the full draft pan-European environmental assessment with key messages and policy recommendations available at the meeting webpage

https://unece.org/info/events/event/363942

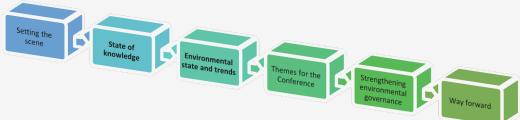
The drafts were made available for review with members of the Committee on Environmental Policy, Working Group, various organizations & experts with a deadline for commenting of 15 March 2022





Key messages and policy recommendations available for all main thematic sections of the assessment covering areas of:

- Air quality
- Greenhouse gas emissions
- Decarbonization
- Fresh water quantity and quality
- Fresh water financing
- IWRM & transboundary water cooperation
- Ecosystems
- Protected areas
- Land use & soil



- Marine protection
- Waste management
- Chemicals
- Minerals
- Disaster risk reduction
- Finance
- Sustainable infrastructure
- Sustainable tourism & circular economy
- Environmental governance
- Monitoring & information management



Seventh pan-European environmental assessment reports: Progress has been achieved in environmental protection in certain areas, but

Significant shortcomings remain and pose a threat to the health of both people and the environment in the pan-European region



Governments in the pan-European region should:

- Develop additional technical and organizational measures to achieve target 3.9 of the Sustainable Development Goals, especially for PM_{2.5} and ground-level ozone. (sharpening and application of BAT to prevent emissions of particulate matter, NO_x and hydrocarbons by industry and emission reduction from traffic (by implementing Euro-6 and Euro-7 measures)).
- Update ambient air quality standards to align them with WHO guidelines.
- Contribute to adequate replenishment of the Multilateral Fund for the Implementation of the Montreal Protocol to accelerate the phasing out of hydrochlorofluorocarbons globally.

AIR QUALITY

Countries in the pan-European region are expanding policies to tackle air pollution. Some progress has been achieved, but increased effort is needed.







Overview on status and trends for selected indicators for air quality

Indicator	European Union	Western Europe	Central Asia	Eastern Europe	South- Eastern Europe	Pan-European region
Ambient PM _{2.5} (mg/m ³ in 2016)	8	8	8	8	8	8
	(13)	(11)	(25)	(12)	(35)	(16)
Emissions of SOx, NOx and PM2.5 (2015–2019)	777	777	\rightarrow A \rightarrow	עעע	עעע	7 7→



Governments in the pan-European region should:

- Establish the conditions for medium- and long-term sustainable mobilization of funds for climate action, both by accelerating the use of available regional and global funds and mechanisms and by creating national financial instruments.
- Eliminate or reform harmful subsidies and incentives, and develop effective positive incentives to deepen decarbonization, by shifting promotion of investments towards renewable energy.

GREENHOUSE GAS EMISSIONS

All pan-European countries commit to reduce greenhouse gas (GHG) emissions, but net emissions in the region are still rising.



DECARBONIZATION

Decarbonization is becoming a strong narrative across the pan-European region, but action lags behind.

Overview on status and trends for the selected indicator on greenhouse gas emissions

Indicator	European Union	Western Europe	Central Asia	Eastern Europe	South-Eastern Europe	Pan- European region
GHG emissions (2014–2019) (percentage change)	7	7	_	7	7	7
(percentage change)	(-4.3)	(-10.8)		(+2)	(+10.2)	(-1.2)

Overview on status and trends for the selected indicator on renewable energy share

Indicator	European Union	Western Europe	Central Asia	Eastern Europe	South-Eastern Europe	Pan-European region
Renewable energy share in total energy consumption (2014–	\rightarrow	7	7	\rightarrow	\rightarrow	\rightarrow
2018) (latest rate, percentage)	(18)	(18)	(4)	(4)	(14)	(13)



Governments in the pan-European region should:

- Whenever fresh waters and aquatic ecosystems are at risk, apply the best available technology (water conservation measures, measures for resource protection & efficient water use, incl. digitalization & precision agriculture, NbS etc.)
- Pursue economic sustainability in water resources management and innovative financing mechanisms. (for example, fair water pricing, ecological payments, cost recovery and incentives) & ensure a clear legal framework.

Indicator	Proportion of population using safely managed drinking water or sanitation services percentage								
	European Union	Western Europe	Central Asia	Eastern Europe	South-Eastern Europe	Pan-European region			
Drinking water, 2016–2020 (latest	7	\rightarrow	7	7	7	7			
rate, percentage)	(97.8)	(99.3)	(69.6)	(79.9)	(78)	(90.4)			
Sanitation, 2016-	7	7		7	7	7			
2020 (latest rate, percentage)	(90.5)	(95.9)		(61.5)	(70)	(81.4)			

FRESH-WATER QUANTITY AND QUALITY

Water quantity has an asymmetric space and time distribution in the pan-European region and climate change is delivering additional challenges

Anthropogenic pressures amplify water asymmetry by constraining fresh-water quality and aquatic biodiversity.

FRESH WATER - FINANCING

Financing of water-related projects under the international climate agenda has been limited and setting up bankable projects is difficult. Financing models are highly susceptible to technical and governance insufficiencies and have been restrained by local and regional crises during the past decade.











Governments in the pan-European region should:

- Pursue IWRM, involving a balance between human water needs and water's availability for nature.
- Pursue co-management towards environmental protection and benefit-sharing within an efficient and resilient transboundary cooperation framework in the basins.

Overview on status and trends for the selected indicator on transboundary basin area with an operational arrangement

	Percentage of transboundary basin area with an operational arrangement (2020)								
	European Union	Western Europe	Central Asia	Eastern Europe	South-Eastern Europe	Pan-European region			
For rivers and lakes	89	84	91	55	80	83			
For aquifers	90	59		73	51	43			

IWRM & TRANSBOUNDARY WATER COOPERATION

Increasing water resources management challenges indicate that fragmented governance practices are unlikely to succeed in the long term.

Transboundary management of shared rivers, lakes and aquifers remains a challenge.











Governments in the pan-European region should:

- Establish conditions for medium- & long-term sustainable mobilization of funds for biodiversity & other environmental components both by accelerating use of regional & global funds & by creating national financial instruments.
- Eliminate or reform subsidies & incentives for products & activities that lead to biodiversity loss, & develop effective positive incentives to mainstream biodiversity conservation across sectors & policies
- Ensure that trends in forest area remain positive & take additional measures to safeguard remaining primary & intact forests & their ecological functionality.
- Consolidate & improve the extended protected area network through investment in management effectiveness, ecological representativeness & connectivity
- Enhance efforts to achieve the target of conservation of 10 per cent of coastal and marine areas in whole pan-European area.

ECOSYSTEMS & BIODIVERSITY

The status of ecosystems remains a cause for concern, with no evidence of a clear positive trend.

There are significant variations in the proportion of sustainable fish stocks.

Land continues to be taken for infrastructure development.

PROTECTED AREAS

The protected area estate in the pan-European region has almost tripled, and the overall forest area in the ECE region has increased by 33.5 million ha over the past 30 years.











Governments in the pan-European region should:

- Provide better guidance to farmers on using soil conservation methods in areas of degraded (eroded) soils.
 Policies should also maintain a judicious balance between soil organic carbon accumulation for higher crop productivity and soil organic carbon storage for climate change mitigation.
- Measures should also address the conversion of natural to agricultural ecosystems and the degradation of habitat quality due to biodiversity-unfriendly agricultural practices.
- Take measures to reduce land take further and consistently.

Overview on status and trends for selected indicators on land and soil

Indicator	European Union	Western Europe	Central Asia	Eastern Europe	South- Eastern Europe	Pan- European region
Land take rate (in 2012–2018, percentage)	7 (3)	3 (9.06)	7 (0.15)	7 © (-0.23)	3 (0.15)	7 (8)

LAND USE AND SOIL

Land use and landuse change dynamics in the pan-European region continue to be mainly driven by agriculture.







Governments in the pan-European region should:

- Take urgent action to reduce key pressures to halt and reverse the degradation of coastal waters, marine ecosystems and seas.
- Increase efforts to complement inventories of the number of items of beach and marine litter with information on composition and sources of litter to be able to design more effective measures.

Indicator	Baltic Sea	Black Sea	Mediterranean Sea	North-East Atlantic
Number of items on beach per 100 m of shoreline, median (2014–2019)	78	652	428	105
Percentage of assessed marine fish stocks of good environmental status (2018)	13	0	0	44

MARINE PROTECTION

Marine pollution, from both land-based (for example, nutrients, plastic and chemicals) and seabased (for example, plastic and oil) sources, continues to be an urgent problem in most sea regions.





Governments in the pan-European region should:

- Support waste prevention in production & consumption & repair, refurbishment & remanufacturing, incl. through financial incentives such as tax relief, in order to reduce waste & improve resource efficiency.
- Equip public administrations with a skilled work force, ready to engage with all sectors of society, & increase broad access to reliable and detailed information.
- Establish a resource-oriented, pan-European e-waste management partnership aimed at effective collection & sound handling of recyclables to enable resource recovery.
- Strengthen waste & chemicals management systems & strive to further advance full & coherent implementation of MEAs incl. the Protocol on PRTRs.

Indicator	European Union	Western Europe	Central Asia	Eastern Europe	South- Eastern Europe	Pan- European region
E-waste generation per capita (kg in 2019)	7 (3)	7 (23)	' (7)	⅓ ⊗ (10)	½ (9.9)	→ 🙁 (15)

WASTE MANAGEMENT

While the waste management hierarchy assigns highest priority to waste prevention, waste generation continues to rise across the region.

Recycling rates differ significantly among the countries.

E-waste collection and recycling are highly deficient across all subregions; the recovery rates are low.

CHEMICALS

Chemicals play a vital role in the economy and are essential in paving the way towards a green economy, but it remains difficult to capture what is our full exposure to hazardous chemicals.

Chemicals and waste management are at the heart of many solutions to the current challenges that countries face in their transition to a net zero greenhouse gas emission and sustainable economy.







Governments in the pan-European region should:

• Should adopt a circular – or resource efficient – economy approach and strengthen management of raw materials.

Overview on status and trends for the selected indicator on material footprint

Indicator	European Union	Western Europe	Central Asia	Eastern Europe	South -Eastern Europe	Pan-European region
Material footprint, tons per capita, trend since 2000 (2017)	(23.3)	(24.6)	\(\) (10.4)	\(\) (9.8)	\(\) (16.2)	(18.5)

MINERALS

Minerals too are critical for the transition to a net zero GHG emission and sustainable economy, in particular those used in electric and electronic gear and batteries.









Governments in the pan-European region should:

 Strengthen awareness of climate hazards, especially among poorer communities, & establish conditions to report regularly on Sustainable Development Goal target 13.1 and under the Sendai Framework for Disaster Risk Reduction 2015–2030

Indicator	European Union	Western Europe	Central Asia	Eastern Europe	South- Eastern Europe	Pan- European region
Countries having local disaster risk reduction strategies	→ ©	7 😐	7 😊	7 1 😐	→ 🕾	7 😐
Countries reporting under SDG target 13.1	<u> </u>	8	=	<u>=</u>		

DISASTER RISK REDUCTION

About 65 per cent of the population in the pan-European region is covered by local disaster risk reduction strategies.









Governments in the pan-European region should:

- Favour development of green finance and consider spending on environmental protection in the wider context of environmental and public finance. Environmental taxes should be used to decrease different kinds of pollution
- Use subsidies only when really necessary, as they always distort markets & increase public sector deficit.
- Periodically reconsider environmental subsidized finance in the light of the "polluter pays" principle & envisage green bonds
- National environmental policies across the pan-European region should aim at phasing out harmful subsidies &transitioning towards greener energy sources guickly.

	<u> </u>			<u> </u>		<u> </u>
Indicator	European Union	Western Europe	Central Asia	Eastern Europe	South- Eastern Europe	Pan- European region
Government environmental						
protection expenditures, as	7	7	7	7	7	7
percentage of GDP, 2015–2019 (latest rate, percentage)	(0.73)	(0.67)	(0.17)	(0.22)	(0.45)	(0.58)

FINANCE

In all countries across the pan-European region for which data are available, environmental tax revenues and government expenditures on environmental protection, closely following GDP growth, have increased since 2000.

However, in terms of percentage of GDP, public expenditure for environmental protection is much lower than environmental tax revenues, implying that revenues from environmental taxes are not necessarily earmarked for reducing environmental damage.



Governments in the pan-European region should:

- Participate in a pan-European effort to create a common understanding of what sustainable infrastructure means & define a common strategy to quantify progress across nations.
- Use of existing tools to promote sustainable infrastructure development, incl. ECE Protocol on SEA, & devote additional resources to achieving institutional & technical capacity necessary for planning, design, execution, operation & decommissioning of sustainable infrastructure projects.
- Deploy economic and financial incentives in the short & medium terms – to support the implementation by the private sector of nature-based solutions.
- Establish favourable conditions to implement a life cycle approach and circular economy strategies.

SUSTAINABLE INFRASTRUCTURE

Sustainable infrastructure investment has been recognized as one of the most impactful strategies to build back better in the post-COVID recovery.









Governments in the pan-European region should:

- Increase efforts together with entrepreneurs to apply circular economy principles across the tourism value chain, and promote knowledge creation and the sharing of good practices.
- Direct investment in the wake of the pandemic and in preparation of recovery plans might include the promotion of domestic and nearby country tourism, with the scaling-up of international, longdistance rail infrastructure, and electric charging infrastructure in tourism destinations, facilitating the transition towards renewable energy use by accommodation.
- Work together to promote tighter product loops, which are easier to make circular, and establish incentives to promote resource efficiency and sustainable consumption.
- Select a number of specific key-impact tourism indicators to be included in ECE statistical databases. Indicators for circular economy in tourism should be aligned with those being developed for the monitoring of sustainable development in tourism and be compatible with Sustainable Development Goals.

SUSTAINABLE TOURISM AND CIRCULAR ECONOMY

A pan-European circular tourism economy will be more resilient to and better equipped to cope with future crises, be they economic, health-related, or derived from the environmental challenges that the region faces.













Governments in the pan-European region should:

- Governments, the private sector, academia and citizens must work together to achieve the Sustainable Development Goals
- Explore new partnerships on topics such as circular economy, sustainable infrastructure, resource efficiency and waste management.
- Consider joining multilateral environmental agreements
- Redirect finance to areas in support of a just transition & ensure public participation in planning & implementation, gender is mainstreamed & public access to reliable and timely information is guaranteed.
- Enhance science-policy linkages &rapid deployment of innovative solutions, while investing in digitalization.

ENVIRONMENTAL GOVERNANCE

The environmental governance system in the pan-European region remains partly fragmented & needs to be further strengthened.



Overview on status and trends for selected indicators on environmental governance

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Indicator	European Union	Western Europe	Central Asia	Eastern Europe	South- Eastern Europe	Pan-European region
Percentage of 12 MEAs to which countries are party	93	47	40	68	81	76



Governments in the pan-European region among others should:

- Bring policy and science together to develop and implement appropriate and standardized pan-European methods and systems for monitoring
- Employ the Revised ECE Environmental Indicators & in line with SEIS principles & pillars & adopt indicators to cover emerging policymaking themes of importance
- Invest in monitoring & data collection and information processing incl. for air pollution emissions, number of items of beach and marine litter, chemicals and waste impact-oriented monitoring, data-collection systems on environmental financing, water etc.
- Select some specific key-impact tourism indicators to be included in ECE statistical databases.
- Assist countries to fully implement the Shared Environmental Information System's pillars and principles

MONITORING AND INFORMATION MANAGEMENT

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

Way Forward



A. Strengthening of policies and their implementation and up-scaling of actions

- Promotion of participation in multilateral environmental agreements and harmonization of polices and legislation
- Acceleration of the implementation of the Pan-European Strategic Framework for Greening the Economy
- Development and adoption of common and coherent policies in the pan-European region for emerging topics, including circular economy and sustainable infrastructure
- Strengthening of mechanisms for monitoring the effectiveness of policies and legislation, including at the international level

ENABLING
CONDITIONS FOR A
SUCCESSFUL
TRANSITION TO A
GREEN AND
CIRCULAR
ECONOMY AND
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THE REGION

Way Forward



- B. Investing in a just transition and redirecting finance, notably to sustainable infrastructure, a circular economy and nature-based solutions
- Investing in and reorienting finance to support a just transition
- Acceleration of the implementation of the Pan-European Strategic Framework for Greening the Economy
- Strengthening of participation and access to information
- Investing in capacity development and education for sustainable development

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Way Forward



- C. Strengthening the science-policy interaction and the use of technology and innovation
- Enhancing the use of technology and innovation in support of system thinking
- Benefiting from existing knowledge and potential new sources
- D. Development and strengthening of partnership initiatives and cooperation at regional and subregional levels
- Strengthening of existing partnerships to address regional challenges
- Development of new partnerships for emerging policy themes

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Draft Ministerial Declaration Elements from the assessment



- We recognize the important role that sustainable infrastructure plays in the green economy transition.... We also recognize the need for a common understanding of sustainable and safe infrastructure and of how to quantify progress across countries
- We also recognize that applying principles of circular economy to sustainable tourism through multi-stakeholder cooperation and effective public participation is critical for building back better the tourism sector...
- More broadly, we will foster a circular economy, favour a life cycle approach and support
 waste prevention in production and consumption, through repair, refurbishment and
 remanufacturing, and using financial incentives.
- We recognize the crucial importance of reliable, up-to-date, quality data and statistics for facing both current and emerging needs and challenges.

Draft Ministerial Declaration Elements from the assessment



- We acknowledge the importance of regular, indicator-based environmental assessments and confirm our commitment to keep the pan-European region under regular review in support of sustainable development and the transition to a circular and green economy. We take note of the key findings of the seventh pan-European assessment, produced by UNECE and UNEP, and the urgent need in particular to:
 - Pursue integrated water resources management and transboundary water cooperation.
 - Mainstream biodiversity conservation across sectors and policies.
 - Reverse the degradation of coastal waters, marine ecosystems and seas, and enhance efforts to achieve the target of conservation of 10 per cent of coastal and marine areas across the region.
 - Reduce land take further and consistently, avoid degradation of habitat quality due to biodiversity-unfriendly agricultural practices, and increase efforts for soil conservation.
 - Establish a resource-oriented, pan-European e-waste management partnership, and increase broad access to reliable, detailed information on chemicals and waste to achieve their sound management.
 .../...

Draft Ministerial Declaration Elements from the assessment



- .../...
- Devote additional resources to achieving the institutional and technical capacity necessary for the planning, design, execution, operation and decommissioning of sustainable infrastructure projects.
- Develop and implement appropriate and standardized pan-European methods and systems for monitoring and information management, employ the revised UNECE Guidelines for the Application of Environmental Indicators, and adopt indicators to cover important emerging policymaking themes.
- Select key-impact tourism indicators to be included in UNECE statistical databases.
- We also commend the general establishment of SEIS across the region to support
 a regular process of environmental assessment and invite countries to continue
 their efforts to implement all pillars of SEIS, address any remaining gaps and
 make environmental information publicly available and accessible in support of
 sustainable development and the transition to a circular and green economy.

Pan-European environmental assessment



Questions or Comments?

Thank you!





