7th pan-European environmental assessment fact sheet

under strict embargo until 13h CET/14h Cypriot time on 5 October 2022

Air quality

- Between 2009 and 2018, 41 European countries recorded a 13% reduction in premature deaths due to long-term exposure to fine particulate matter ($PM_{2.5}$). Yet $PM_{2.5}$ concentration continued to exceed the 2005 World Health Organization air quality guideline of 10 µg/m^3 — 10 millionths of a gram per cubic metre of air — and the subsequent stricter 2021 limit of 5 µg/m^3 across the entire region.

- Premature deaths due to long-term exposure to Nitrogen oxides (NO_x) have fallen by 54%. However, the number of premature deaths due to ground-level ozone exposure increased in this period by an estimated 24%, possibly caused by higher mean temperatures.

GHG emissions

- While all countries in the pan-European region have committed to reducing greenhouse gas emissions, net emissions are still rising. Reductions, mostly achieved in the western part of Europe (2014–2019), are offset by the increase in emissions in the rest of the region

- National commitments under the Paris Agreement have been renewed with more ambitious targets by 35 countries in the region. However, some countries still do not have firm, quantifiable commitments or mechanisms to monitor progress towards them, resulting in significant data gaps.

- The use of renewables increased in 29 countries in 2013-2017, but the region still largely relies on fossil fuels – accounting for some 78% of total final energy consumption. The share of renewables in the energy mix is rising more slowly than overall energy consumption in the region.

- Governments should eliminate or reform harmful subsidies and incentives (all countries in the region continue to implement fossil fuel subsidies), and develop effective incentives to deepen decarbonization by shifting promotion of investments towards renewable energy.

- On top of committing to increased reductions and the means to monitor implementation, the assessment also calls on countries to ensure 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

Water

- The region's river basins, lakes and aquifers are subject to multiple stresses, and climate change is delivering additional challenges for freshwater quantity and quality such as floods, droughts, water-borne diseases and biodiversity changes in aquatic ecosystems.
- Pollution and urban and industrial wastewater discharges remain significant and persistent organic contaminants are of public health concern. Together with reinforced measures to conserve water, improve efficiency of its use (such as through precision agriculture in irrigated crop production) and to harness nature-based solutions for water retention basins, the potential of non-conventional water sources such as recycled water should be explored.

- Financing of water-related projects under the international climate agenda has been limited and setting up bankable projects has proven difficult. This points to the need for clear legal frameworks. Water resources management is more efficient at the basin level, and international cooperation on transboundary rivers, lakes and aquifers is required for effective environmental protection and benefits-sharing – an approach facilitated by the UN Water Convention.

Land and marine ecosystems

- Only a minority of the habitats assessed at the European Union level have a good conservation status, and the overall picture is likely to be similar in the remainder of the region.

- Protected areas in the pan-European region have almost tripled over the past 30 years and an overall increase in forest area in the UNECE region of 33.5 million has been observed. Governments should ensure that trends in forest areas remain positive and take additional measures to safeguard the remaining primary and intact forests and their ecological functionality.

- Land continues to be taken for urban and infrastructure development, but the rate of land take has decreased in most European Environment Agency member countries and reversed in Eastern Europe. To address soil erosion and degradation, governments should provide better guidance to farmers on using soil conservation methods, which could play an important role in carbon sequestration, water regulation, biodiversity and raising soil productivity.

- The Mediterranean Sea and the Black Sea remain highly overfished, whereas signs of recovery of fish stocks can be observed in the North-East Atlantic Ocean and the Baltic Sea. Marine pollution, from both land-based (e.g. nutrients, plastic and chemicals) and sea-based (e.g. plastic and oil) sources, continues to be an urgent problem in most sea regions.

- While marine protected areas have grown in area by 66% and terrestrial ones by 22% over the past five years, overall biodiversity loss continues to occur. Governments should eliminate or reform subsidies and incentives for products and activities that lead to biodiversity loss, and develop incentives to mainstream biodiversity conservation across sectors and policies.

- Governments in the region should furthermore help to fulfil the goal of protecting at least 30% of Earth's land and marine surface areas by 2030, in accordance with a global movement championed by the High Ambition Coalition for Nature and People.

Circular economy

- Even where a strong political commitment for a circular economy exists, such as in the European Union and other Western European countries, the amount of waste generated continues to grow. Recycling rates differ significantly among countries and are particularly low in Eastern Europe and Central Asia. Municipal waste recycling rates above 45% exist only in a few EU countries and Switzerland. E-waste collection and recycling are highly deficient across all subregions.

- In response, the assessment urges governments to step up waste prevention in production and consumption and repair, refurbishment and remanufacturing, including through financial incentives such as tax relief. A pan-European e-waste management partnership would enable the recovery of valuable resources.

- Governments should strengthen their systems for the management of waste and chemicals, which are also of key economic importance, including for the green economy. To support this, governments should strive for full implementation of multilateral environmental agreements, including the Protocol on Pollutant Release and Transfer Registers to the Aarhus Convention.

- Over the past half-century, the extraction of minerals has tripled globally, with the extraction and processing of natural resources accounting for over 90% of biodiversity loss and water stress and about 50% of climate change impacts. Governments in the region should adopt a circular – or resource efficient – economy approach and strengthen management of raw materials, including for example through the application of the UN Framework Classification for Resources and the UN Resource Management System.

Disaster resilience

- About 65% of the region's population is covered by local disaster risk reduction strategies. Only 15 countries in the region reported that all their local authorities are implementing such strategies under SDG target 13.1; while 23 countries – which jointly represent a quarter of the region's population – do not report on that target.

Green finance

- Environmental tax revenues and government expenditure on environmental protection have increased since 2000, closely following GDP growth, in all countries with available data.

- As a share of GDP, public spending on environmental protection (with a maximum of around 0.8%) is much lower than environmental tax revenues, implying that revenues from environmental taxes are not earmarked for reducing environmental damage.

- Governments should favour the 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, and the income generated should be primarily used to finance environmental protection public expenditures.

Sustainable infrastructure

- Sustainable infrastructure investment has been recognized as one of the ways of achieving the greatest positive impact in the post-COVID pandemic recovery. However, most countries in the region have yet to develop mechanisms to incorporate sustainability considerations (such as climate risk) and externality accounting (e.g., the cost of pollution, ecosystem services, or biodiversity protection) into the cost-benefit analysis of large infrastructure projects, since this analysis is not a legal requirement in many states.

- The assessment calls on governments to make use of existing tools to promote sustainable infrastructure development, including the UNECE Protocol on Strategic Environmental Assessment and the UNEP International Good Practice Principles for Sustainable Infrastructure.

Education

- The environmental governance system in the pan-European region remains fragmented in terms of applied policies, institutions, the harmonization of legislation and participation in multilateral environmental agreements.

- Gaps also remain in the implementation of good environmental governance, including in relation to public participation, transparency, responsiveness, effectiveness and efficiency.

- Among solutions, the assessment points to further capitalising on the potential of Education for Sustainable Development (ESD) to endow populations with capacities to play an active role in environmental governance.

- The assessment also notes that while, according to the Final review report on the establishment of the Shared Environmental Information System, such national systems have been successfully

established in all countries in Europe and Central Asia, they vary in form and use, and remaining gaps need to be addressed.

- These include compliance with all principles and pillars of the Shared Environmental Information System and the full production and sharing of all data flows associated with the UNECE environmental indicators.