Delivering data and knowledge to achieve Europe's environment and climate ambitions

EEA-Eionet Strategy 2021-2030



European Environment Information and Observation Network European Environment Agency

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About EEA and Eionet

The European Environment Agency (EEA) is an agency of the European Union. Our task is to provide sound, independent information on the environment and climate. The regulation establishing the EEA was adopted by the European Union in 1990, and the Agency started operations in Copenhagen in 1994. The regulation also established the European environment information and observation network (Eionet). Eionet is a partnership network of the EEA and its member and cooperating countries. Eionet also includes the European Topic Centres - consortia of European organisations with expertise in specific environmental areas, supporting the EEA and the Eionet member countries.

To support policy making in Europe, we work closely with national and European institutions, in particular the European Commission, the European Parliament and the Council of the European Union.

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EEA-Eionet Strategy 2021-2030

This document presents the vision and strategic objectives that will be shaping the work of the European Environment Agency and European Environment Information and Observation Network in the coming decades. The work will be carried out under the five areas of work identified in the document. More detailed information on concrete activities will be provided in Single Programming Documents.





European Environment Agency and **European Environment Information** and Observation Network

Providing evidence-based knowledge on Europe's environment and climate

About us

The European Environment Agency (EEA) and European Environment Information and Observation Network (Eionet) have been providing data and information on Europe's environment and climate to European citizens and policy makers since 1994. Today our extensive network connects hundreds of institutions from 38 member and cooperating countries.

The knowledge base we have created together is broad, ranging from sharing near-real time air quality measurements from across Europe, to documenting greenhouse gas emissions trends and projections, providing satellite data on land cover, and delivering integrated assessments on the state of Europe's environment and climate.

What makes EEA-Eionet unique?

- · A network focused on adding value: Connecting institutions across Europe and delivering benchmarking, capacity building, streamlining as well as exchange of best practice.
- Data infrastructure: Innovative e-reporting infrastructure for national and international data flows, underpinned by quality assurance processes.
- Knowledge backed by data: Comprising assessments, indicators, and progress-to-target analyses, using the broadest and most up to date collection of data on environment and climate topics.
- Policy support: Established knowledge role based on working closely with policy makers across Europe and contributing to key global processes.
- Analytical expertise: Capacity to assess progress, prospects, drivers of change and potential policy responses, covering a wide range of environment and climate topics.

Responding to challenges ahead

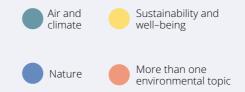
Building resilience requires ambitious policies supported by actionable knowledge

Over the coming decade, Europe will need to tackle unprecedented environmental and climate challenges, and at the same time stimulate a recovery from the economic and social impacts of the COVID-19 pandemic. The European Green Deal and associated green recovery stimulus measures show the ambitions the European Union and European countries have to meet these challenges by setting long-term goals, with concrete targets, and establishing new financial instruments.

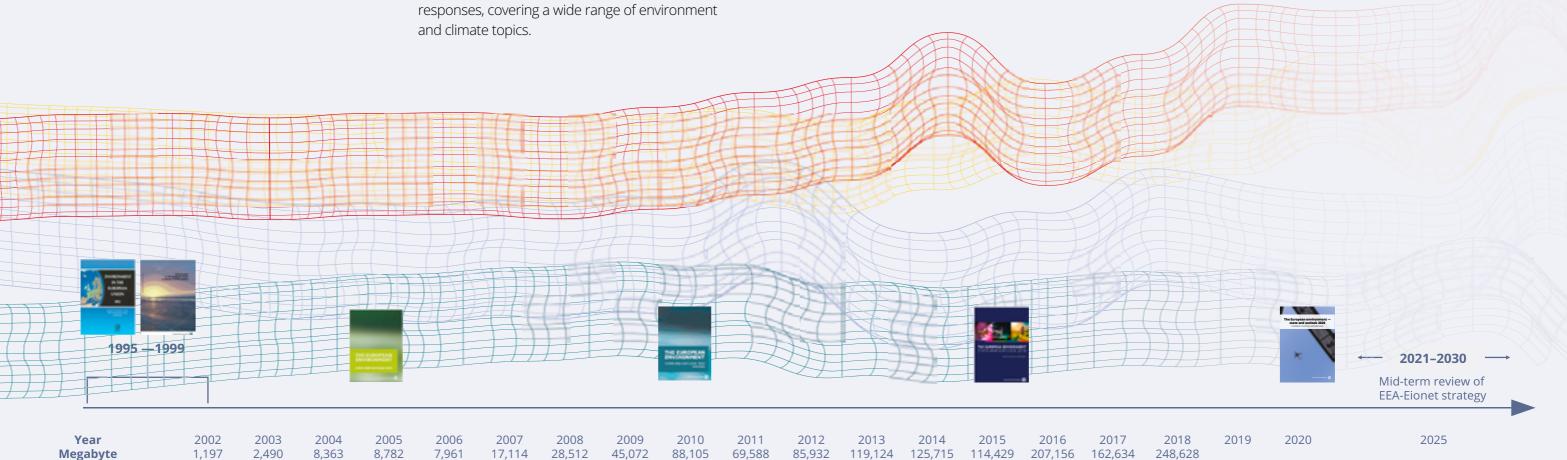
The EEA's 'Europe's environment — state and outlook report' (SOER 2020) called for systemic responses to the environment and climate challenges through actions on several fronts. Full implementation of existing environment and climate policies is essential to deliver significant improvements. Also, a full integration of sustainability objectives into socio-economic policies and measures will help achieve cost-effective and just transitions to sustainability. Moreover, Europe also needs to create the conditions for more sustainable lifestyles. This calls for more public awareness on the impacts of consumption as well as engagement by companies to support the required transitions. Many goals will not be achieved without coordinated, global efforts, so Europe will need to use its influence in its neighbourhood and at global level.

The choices made by policy makers, companies and citizens over the coming decade will determine when and how Europe will achieve its ambitions. The EEA-Eionet Strategy 2021-2030 will support those choices by delivering actionable knowledge on trends, prospects and solutions for a sustainable Europe.

The great data explosion

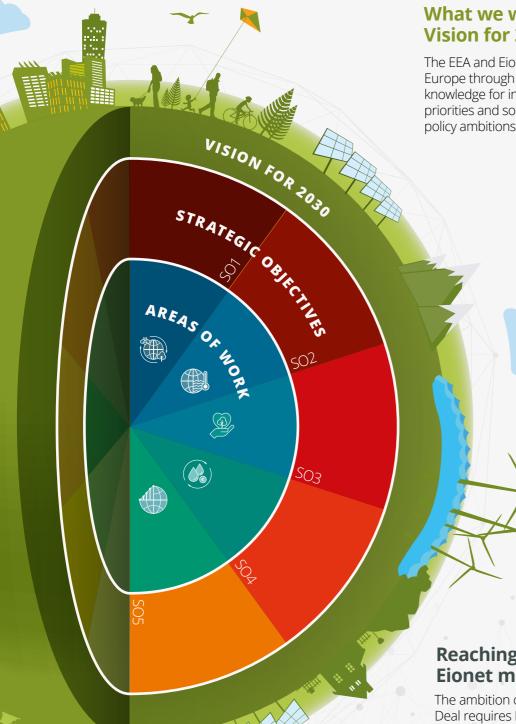


Taking 2002 as a starting point (launch of Reportnet), this visualisation shows consistent growth in data received on four environmental topics. Today we handle close to 250 times more data than in 2002.



EEA-Eionet Strategy 2021-2030

Delivering data and knowledge to achieve Europe's environment and climate ambitions



What we want to achieve: Vision for 2030

The EEA and Eionet will enable a sustainable Europe through trusted and actionable knowledge for informed decision-making on priorities and solutions, in line with Europe's policy ambitions.

Europe's environment and climate policy ambitions

Tackling environment and climate challenges is the defining task of our times. To achieve a sustainable future, policy initiatives, including the European Green Deal, call for action under the following headings:

- Halt biodiversity loss and restore ecosystems
- · Achieve net zero emissions of greenhouse gases in 2050 and climate resilience
- · Achieve a zero-pollution ambition for a toxic-free environment
- · Achieve resource efficiency in a circular economy
- · Mainstream sustainability in all EU policies

How we will work: Strategic Objectives

Supporting policy implementation and sustainability transitions

Produce evidence-based knowledge to support policy implementation and development of new initiatives to accelerate and scale up the transition to sustainability.

)2 Providing unley input to for sustainability challenges Providing timely input to solutions

Deliver targeted inputs to inform policy and public discussions, by organising and communicating knowledge on responses, including innovative solutions to societal challenges.

SO3 Building stronger networks and partnerships

Strengthen our network through more active engagement at the country level and work with other leading organisations in order to facilitate the sharing of knowledge and expertise.

What we will do: Areas of work

We will deliver actionable knowledge across five areas of work. Europe's production sectors (including agriculture, forestry, fisheries, and industry) as well as production systems and consumption (energy, mobility, food, and buildings) will be addressed through these interlinked work areas:



Biodiversity and ecosystems

Faced with continued biodiversity loss and ecosystem degradation, Europe seeks to bring nature back in our lives. We will monitor this transition and support the implementation and evaluation of actions in this area, including the development of nature-based solutions.



Climate change mitigation and adaptation

Climate change is happening now and will continue in the decades to come. Europe aims to achieve climate neutrality by 2050 and become more resilient and less vulnerable to climate change. We will monitor this transition and support the development, implementation and evaluation of policies and measures in this area.



Human health and the environment

We will assess the impacts on human health caused by environmental pollutants and Europe's changing climate, and improve our understanding of the social and demographic factors that affect the exposure and vulnerability of Europe's citizens. We will support Europe's zero pollution ambitions and the implementation of related European and national actions.

Reaching beyond Eionet members

The ambition of the European Green Deal requires Europe to work globally, with its neighbours and partners. We will mobilise expertise and resources in support of these ambitions particularly in the countries of the Western Balkans and in Europe's immediate neighbourhood.

We will play a central role in supporting environment and climate actions under these key European policies and in the implementation of the 8th Environment Action Programme.

We will likewise support global efforts, including the 2030 Agenda for Sustainable Development and the Sustainable Development Goals.

Making full use of the potential of data, technology and digitalisation

Embrace digitalisation, including new technologies, big data, artificial intelligence and earth observation that will complement and potentially replace established information sources to better support decision making.

Resourcing our shared ambitions

Develop structures, expertise and capacity across our network to meet evolving knowledge needs, securing and diversifying the resources needed to achieve our joint vision.



Circular economy and resource use

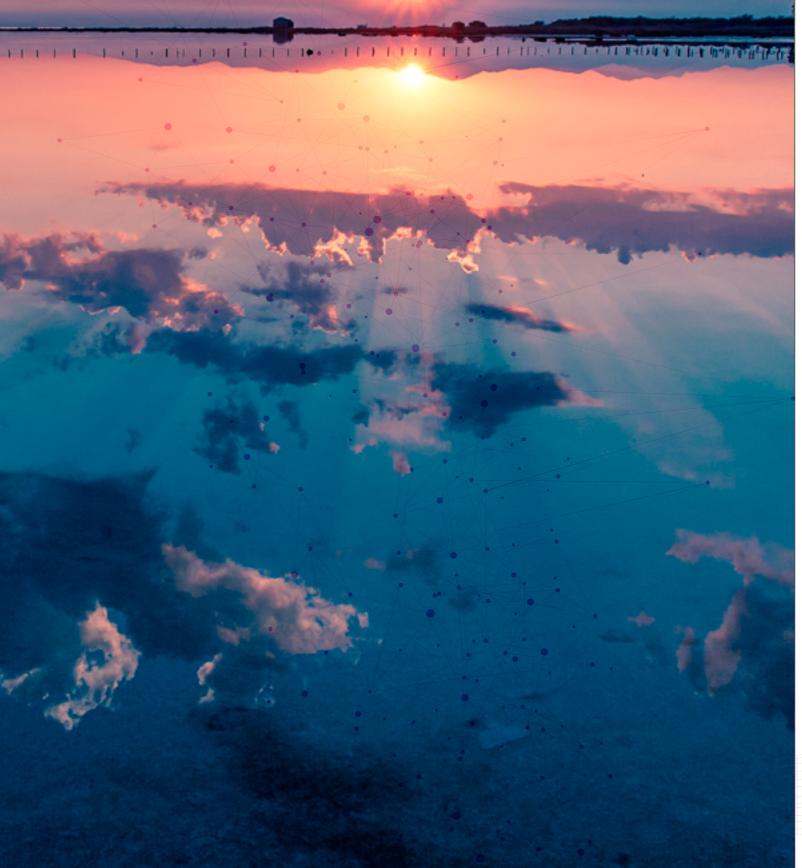
We will monitor progress of Europe's transition towards a circular economy, and the environment and climate benefits delivered. We will assess Europe's efforts towards reducing the impacts caused by our society's consumption and production of raw materials, products, services and waste.



Sustainability trends, prospects and responses

We can achieve our ambitious goals by stimulating fundamental changes in the lifestyles and consumption and production patterns that drive unsustainable trends. We will assess trends and prospects across environmental priorities, sectors, systems and policies, and engage stakeholders on the innovations and other responses needed to achieve the European Green Deal.

VISION



EEA-Eionet vision for 2030

Enable a sustainable Europe through trusted and actionable knowledge for informed decision-making on environment and climate priorities and solutions

A shared vision for a sustainable Europe

Our vision is to enable a sustainable Europe through trusted and actionable knowledge for informed decision-making on environment and climate priorities and solutions, in line with Europe's policy ambitions.

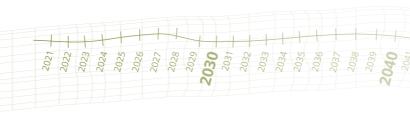
The EEA and Eionet will together constitute the leading network for policy-relevant environment and climate knowledge at European Union and country levels.

Our mission

Our mission is to assess data and information, to provide relevant and timely insights on progress towards environment and climate sustainability goals and desired societal transitions, and to ensure continuous monitoring for full implementation of relevant environment and climate policies.

We recognise that Europe's ambitious environment and climate goals will be achieved through a series of decisions and inter-linked choices at different levels - European, regional, national and local - and will necessitate our working with key partners and other organisations. In carrying out our work programmes, we will work in close cooperation with other knowledge providers.

To achieve greater impact, we will further focus on targeted and timely communication to ensure wide uptake by decision makers and the public.





STRATEGIC OBJECTIVE

Supporting policy implementation and sustainability transitions

Produce evidence-based knowledge to support the implementation of policies and development of new policies to accelerate and scale up the transition to sustainability

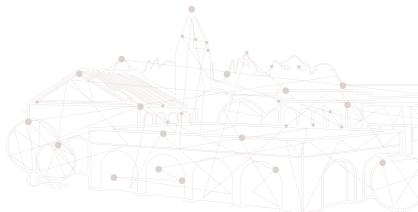
Our knowledge, based on latest scientific findings and quality-assured data, will help Europe — the European Union, its Member States and other EEA member and cooperating countries — achieve their policy goals, including those identified in the European Green Deal, the 8th Environment Action Programme and global commitments.

The European Environment Agency and European Environment Information and Observation Network will:

- Produce knowledge to facilitate policy implementation and inform the development of new initiatives that can accelerate and scale up the transition to sustainability
- Further develop and use our broad range of high-quality datasets with long time-series supporting a wide range of environment and climate policies
- Ensure we use the best available science through engagement of the EEA Scientific Committee and the wider scientific community
- Develop and share knowledge on key sustainability challenges and solutions across the systems of energy, mobility, food and the built environment
- · Address the wider challenges and opportunities of sustainability transitions at both the European and country level, including enablers of change such as the finance sector and cities
- Strengthen our capacity to contribute to the evaluation of policies and measures.

Supporting the mainstreaming environment and climate knowledge in economic, spatial planning and social cohesion policies — including deeper insights in Europe-global dynamics and their implications for policy implementation across Europe — is a priority for this strategy.

During 2021-2030, we will also support relevant EU policy processes such as the European Semester and the Environmental Policy Implementation Review with improved knowledge on, for example, key trends and indicators, cost-effective implementation practices and the potential for upscaling social innovations to achieve sustainability goals.





STRATEGIC OBJECTIVE

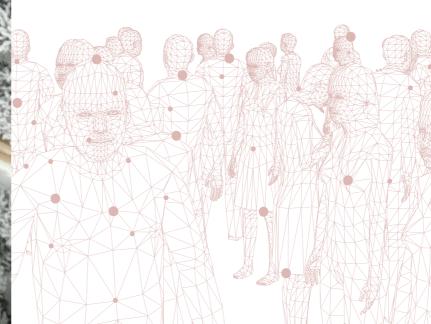
Providing timely input to solutions for sustainability challenges

Deliver targeted inputs to inform policy and public discussions, by organising and communicating knowledge on responses, including innovative solutions to societal challenges

The impact and influence of EEA-Eionet knowledge will depend on our ability and capacity to bring it to relevant public and policy debates at the right time and in the right format. To do so, we will:

- Increase our capacity to monitor and identify emerging issues and to quickly mobilise relevant knowledge held within our network and by other partners
- Strengthen our capacity to provide immediate response to knowledge requests by policy makers
- Share innovative solutions implemented at different governance levels in European countries
- Develop and deliver our knowledge to policy makers and the public in formats most suitable to their needs in order to facilitate wider uptake and use in decision making
- Continuously develop in communication approaches, channels and tools in order to ensure that our knowledge is understandable, available and reachable by all, while strengthening our capacity to actively engage with citizens.

Researchers, practitioners, decision-makers, funding bodies, cities and civil society organisations will work together through active participation in transition processes.





Building stronger networks and partnerships

Strengthen our network through more active engagement at the country level and work with other leading organisations in order to facilitate the sharing of knowledge and expertise

The EEA and Eionet, bring together hundreds of organisations — European institutions, public authorities and research institutions from across Europe. Our network embraces all EU Member States, countries engaged in the EU accession process as well as a number of non-EU member countries.

We form a unique knowledge network, connecting robust data, analytical and scientific expertise to European, and in some cases to global, policy processes. This allows us to carry out integrated assessments, covering the widest range of topics backed by solid data and expertise.

To deliver the knowledge Europe needs to achieve its sustainability goals, we will:

- Transform into a more flexible and innovative knowledge network, connecting better the strong country-level expertise to the European level
- Foster more active engagement at the country level, through activities involving a diverse set of authorities, organisations and the public
- Join efforts with other leading networks, such as the Environmental Protection Agencies Network, reporting and scientific networks and associations
- Identify and work with the knowledge community at the European level to ensure the full use of the research and innovation investments in Europe
- Identify emerging knowledge gaps and explore collaborative actions with relevant partners, including EU agencies such as the European Chemicals Agency, European Food Safety Authority and European Centre for Disease Prevention and Control, to help address them
- Further strengthen the collaboration with international institutions in key regional and global processes, including United Nations bodies and Conventions, on reporting obligations and topics of shared interest.



STRATEGIC OBJECTIVE

Making full use of the potential of data, technology and digitalisation

Support the implementation and further development of Europe's policy agenda, embracing the European data strategy and digital agenda, the potential of big data, artificial intelligence and earth observation for improved information delivery

Digital technologies, data from new sources and earth observation, and computing capabilities have been developing at an unprecedented pace in the last decade. These developments present new possibilities as well as new challenges. New data streams at multiple spatial levels are increasingly being incorporated with established sources of data, connected to socio-economic variables and linked with near-real time data from satellite and *in-situ* observations.

Expecting this data revolution and digitalisation to continue over the coming decade, and in order to improve our data and knowledge work, we will:

- Intensify data sharing, automation and streamlining of monitoring and reporting across our network
- Make all our data findable, interoperable, accessible and reusable as the leading European environment data centre
- Exploit the full potential of Copernicus data and information services, citizen science, big data and artificial intelligence
- Improve the timeliness, comparability, granularity and integration of data, including the potential for benchmarking
- Ensure continuous data driven innovation with a focus on advancing in data mining, analytics, geographical information systems, data visualisations and modelling for regular updates of indicators
- Facilitate exchange of expertise, technical support and streamlining needed for better implementation of existing policies
- Explore and, where relevant, assess the interlinkages between digitalisation and environmental and social sustainability.

STRATEGIC 5 OBJECTIVE

Resourcing our shared ambitions

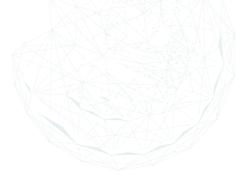
Develop structures, expertise and capacity across our network to meet diverse and evolving knowledge needs, securing and diversifying the resources needed to achieve our joint vision

Continuous developments in knowledge, technology, communication and management practices require organisations and networks to adapt and innovate existing structures and tools and to invest in new areas.

To be at the forefront of such developments and to achieve our shared ambitions, we will:

- Attract top talent and invest in our staff to develop and maintain the competencies and expertise needed to deliver on this vision
- Ensure a managed diversification of the EEA's financial resource base, while safeguarding the institutional role and independence of the Agency
- Seek the necessary funding to use the full potential of Copernicus data through strong networking with other key actors who link the increasing data flows to policy makers
- Broaden EEA and Eionet participation in relevant EU research projects, thereby strengthening our role at the interface of science and policy
- Explore funding opportunities through EU financial instruments to enable our network to facilitate policy implementation where needed, and support communities of practice
- Strengthen capacities in the member and cooperating countries to ensure that our network can respond to changing needs and demands
- · Support the development of expert capacities and knowledge innovations in our network through structured mechanisms, such as the EEAcademy
- · Support knowledge expertise and requirements linked to full implementation of EU environment and climate policies and legislation in the Western Balkans.

Achieving sustainability transitions will require that all policy areas and levels of governments operate together to drive society-wide changes and actions. This implies coherent contributions from diverse policy domains, ranging from research and innovation, economy, industry, competition and trade, to employment, education and welfare.



[•] Areas of work

Each of the five strategic objectives will be delivered through all of our areas of work.

The EEA and Eionet will play a key role in supporting environment and climate actions under European policies, the European Green Deal and in the implementation of the 8th EAP in particular, as well as Europe's global commitments.

We will prioritise understanding of interlinkages within and between these work areas. Production sectors (agriculture, forestry, fisheries, industry) as well as production systems and consumption (energy, mobility, food, buildings) will be addressed, including analyses across these sectors and systems.

Biodiversity and ecosystems

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We will inform and evaluate actions aimed at protecting biodiversity and at restoring ecosystems for their sustainable use to meet people's needs. We will support data-based monitoring, reporting and evaluation activities, under the EU Biodiversity Strategy to 2030 in particular, by:

- Contributing to monitoring and observation systems that improve data flows on the state of and pressures on biodiversity, changes in marine, water and terrestrial ecosystems
- Furthering our understanding of the cumulative impacts of invasive alien species, pollution, climate change and intensive use and over exploitation of natural resources biodiversity and ecosystems
- Strengthening our assessment of the core systemic drivers that impact biodiversity and ecosystems
- Improving the use of ecological and economic analytics and modelling, enabling our assessment work to better support ecosystem-based management practices
- Supporting approaches to nature-based solutions, with a focus on the protection, restoration and sustainable management of vital ecosystems, also in the context of actions on climate change mitigation and adaptation as well as bio-economy

• Enhancing our support to effective and coherent implementation of interlinked EU strategies under the European Green Deal, such as Farm-to-Fork and Zero Pollution, and their associated policies, while continuing our work on the mainstreaming of biodiversity in all economic sectors and nature-dependent systems, such as food.



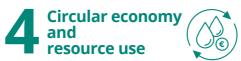
We will monitor Europe's progress towards climate neutrality and climate resilience, and support the development, implementation and evaluation of relevant policies and accompanying measures, in the context of Europe's broader sustainability objectives, by:

- Collecting, quality-checking, compiling and reporting relevant data and information on greenhouse gas emissions as well as climate change impacts, vulnerability and adaptation in Europe
- Analysing and assessing these data against European and national mitigation and adaptation objectives and commitments
- Monitoring the implementation and effects of national climate-related policies and accompanying measures targeting sectors such as energy, transport, buildings, agriculture, forestry and other land use
- Identifying synergies and trade-offs of climate mitigation and adaptation policies with other environmental issues, such as biodiversity, air pollution, freshwater and marine environment
- Developing knowledge on solutions to address environmental and sustainability challenges in the energy and mobility systems.



We will assess the health impacts caused by air, soil and water pollution, noise, chemicals and the changing climate in Europe. We will support Europe's zero pollution ambitions, and the development, implementation and evaluation of relevant European and national actions by:

- Evaluating the exposure and health impacts of citizens exposed to environmental pollution, chemicals and Europe's changing climate
- Assessing the benefits to health and well-being that can be delivered by a cleaner environment and healthy ecosystems, and conversely identifying emerging risks and health impacts linked to ecosystem degradation
- Supporting the timely reporting, processing, and dissemination of thematic data and information reported under relevant legislation and the monitoring of progress towards Europe's policy objectives
- Identifying the impacts that environmental pressures from Europe's socio-economic sectors and systems have on health, and the benefits that mitigation actions and policies may deliver.
- Further highlighting the role that social factors, including social inequalities and individual behaviours, can play in influencing both exposure and vulnerability to environmental stressors, in line with just transition principles of the European Green Deal.



We will assess progress of Europe's transition towards a circular economy and our knowledge of the environment and climate pressures caused by Europe's production and consumption of raw materials, products, services, and waste. We will support implementation of the Circular Economy Action Plan, and related European and national policies by:

- · Assessing progress of Europe's transition from a linear to a circular economy, with emphasis on key product value chains and innovative services and business models
- Highlighting opportunities to improve circularity including recycling and reuse of secondary raw materials, uptake of safe and sustainable by design principles, eco-innovation and good practices, and identifying the barriers towards greater circularity,
- Monitoring of progress towards Europe's policy objectives on waste prevention and sustainable management of waste
- · Evaluating the impacts on the environment and climate of Europe's consumption and production systems from European and global perspectives with a focus on resource-intensive sectors, as well as the interlinkages between the circular economy, decarbonisation initiatives and the bio-economy.



Sustainability trends, prospects and responses

We will inform discussions on sustainability challenges and transitions by assessing the synergies and trade-offs inherent to balancing simultaneously environment, economic and social objectives by:

- Assessing trends and prospects for sustainability in Europe and globally across environment and climate priorities, sectors, systems and policies in support to the 2025 and 2030 Europe's environment — state and outlook reports
- Supporting indicator-based monitoring frameworks that inform progress across EU policy priorities, notably 8th EAP, Environmental Implementation Review, European Green Deal
- · Contributing to monitoring and assessing, with countries, progress across environment and climate priorities, against UN Agenda 2030 and Sustainable Development Goals
- Assessing interdependence between socio-economic-environmental-governance dimensions of sustainability, including drivers of change, positive synergies and negative externalities
- Engaging with key partners in EU relevant strategic foresight and stakeholder processes to gather insights and actionable knowledge on pathways for transitions to sustainability
- Supporting development of knowledge on systems transitions such as synergies, risks, innovations, policy integration and policy coherence — with emphasis on cities and the finance sector.
- Assessing how sustainable finance can stimulate efforts to achieve sustainability within the framework of post-pandemic recovery plans and a changing macroeconomic context.

Circular economy

and resource use







European Environment Information and Observation Network

European Environment Agency