L'environnement en Europe

Le rapport 2015 sur l'état de l'environnement et les perspectives (SOER 2015)



Sybille van den Hove

Séminaire Développement durable et économie de l'environnement Paris, 17 Mars 2015

European Environment Agency

The European Environment Agency

What?

The provision of relevant, reliable, targeted and timely information to policy-making agents and the public.

Why?

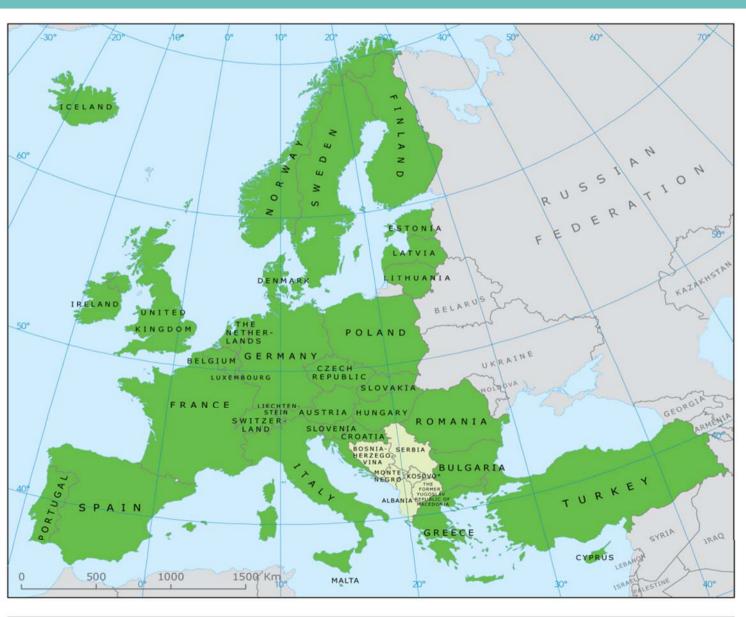
To help achieve significant and measurable improvements in Europe's environment and to support sustainable development.

Target groups

- European Commission, Parliament,
 Council
- EEA member countries.
- NGOs, business, media, advisory groups, scientists, debaters.
- the general public



EEA member and cooperating countries



- 28 EU Member States
- 5 additional member countries: Iceland, Liechtenstein, Norway, Switzerland and Turkey
- 6 cooperating countries in West Balkan





European environment information and observation network (Eionet)

- About 300 national institutions in 33 + 6 member countries
 - National focal points
 - National reference centres
 - European topic centres
 - Other institutions

L'environnement en Europe

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Vision of the 7th Environment Action Programme

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'In 2050, we live well, within the planet's ecological limits.

Our prosperity and healthy environment stem from an innovative, **circular economy** where nothing is wasted and where natural resources are managed sustainably, and **biodiversity** is protected, valued and restored in ways that enhance our society's **resilience**. Our **low-carbon** growth has long been decoupled from resource use, setting the pace for a global safe and sustainable society.'



 Not just an environmental vision, a vision for economic, social and ecological sustainability

Living well, within the limits of our planet

7th Environment Action Programme





Que propose SOER 2015?

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- Une évaluation intégrée de l'état, des tendances et des perspectives de l'environnement en Europe
- Une contextualistation mondiale
- Une base pour la mise en œuvre des politiques européennes de l'environnement entre 2015 et 2020
- Une analyse des possibilités de modification des politiques existantes (ainsi que les connaissances utilisées pour élaborer ces politiques)

... afin d'atteindre la vision de l'Union Européenne pour 2050



SOER 2015

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A comprehensive assessment of past trends and future outlooks and of opportunities to recalibrate policies, knowledge, investments and innovations in line with the long-term vision of the 7th Environment Action Programme (7EAP).

SOER 2015 Synthesis report SOER 2015 Assessment of global megatrends						
11 briefings	25 briefings	9 briefings	39+3 briefings			



Global megatrends

- Setting the scene
- Diverging global population trends
- Towards a more urban world
- Changing disease burdens and risks of pandemics
- Accelerating technological change
- Continued economic growth?
- An increasingly multipolar world

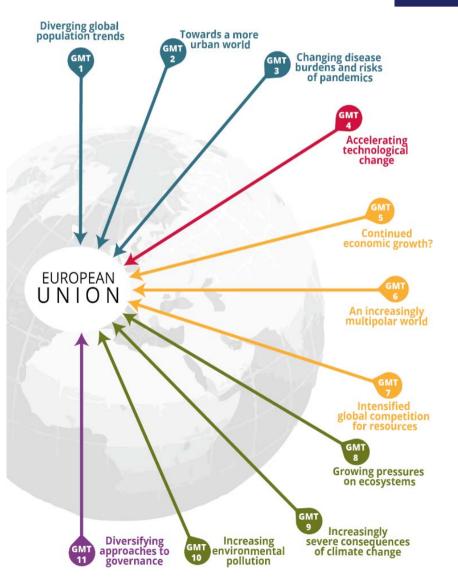
- Intensified global competition for resources
- Growing pressures on ecosystems
- Increasingly severe consequences of climate change
- Increasing environmental pollution
- Diversifying approaches to governance

Global Megatrends

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- Global megatrends are largescale, high impact and often interdependent social, economic, political, environmental or technological changes.
- Europe is bound to the rest of the world through multiple systems. This means that global megatrends will significantly affect Europe's ecological and societal resilience and its response options.

Synthesis report

Part 1: Setting the scene

Sets out the evolving context for European environmental policy, and the global megatrends that directly and indirectly affect Europe's environment.

Part 2: Assessing European trends

Provides summary assessments of the trends and outlook for 20 environmental issues, grouped under the three priority thematic objectives of the 7th Environment Action Programme.

Part 3: Looking ahead

Reflects on the overall picture of the European environment's state and outlook. Signals opportunities to adjust environmental policy to support the transition to a more sustainable society.





Setting the scene – evolution of environmental challenges

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Characterisation	Specific	Specific Diffuse		
Key features	Linear cause-effect; large (point) sources; often local	Cumulative causes; multiple sources; often regional	Systemic causes; interlinked sources; often global	
In the spotlight in	1970s/1980s (and continuing today)	1980s/1990s (and continuing today)	1990s/2000s (and continuing today)	
Includes issues such as	Forest damage due to acid rain; urban wastewater	Transport emissions; eutrophication	Climate change; biodiversity loss	
Dominant policy response	Targeted policies and single-issue instruments	Policy integration and raising public awareness	Coherent policy packages and other systemic approaches	

- We struggle with addressing long-term systemic challenges
- Integrated environmental assessments need to evolve too





Key messages from SOER 2015

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- **Policies** have delivered substantial benefits for the environment, economy and people's well-being; major challenges remain
- Europe faces persistent and emerging challenges linked to production and consumption **systems**, and the rapidly changing **global** context
- Achieving the 2050 vision requires system transitions, driven by more ambitious actions on policy, knowledge, investments and innovation
- Doing so presents major opportunities to boost Europe's economy and employment and put Europe at the frontier of science and innovation

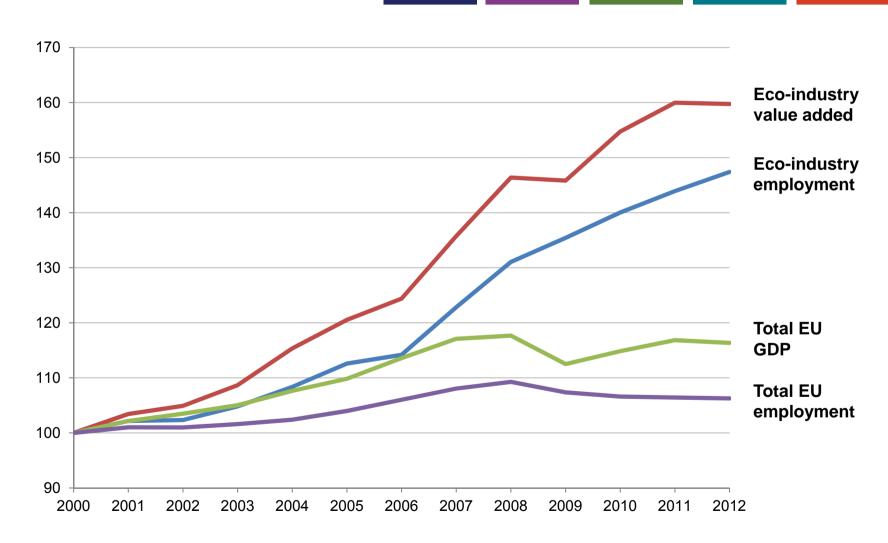




Eco-industries have prospered despite the recession in Europe

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Source: Eurostat, 2014.





Assessing past trends and future outlooks

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The Synthesis report addresses the three thematic priority objectives of the 7th EAP:

- to protect, conserve and enhance the Union's natural capital;
- 2. to turn the Union into a resource-efficient, green and competitive low-carbon economy;
- to safeguard the Union's citizens from environment-related pressures and risks to health and well-being;

Two overall patterns emerge:

- Resource efficiency improvements have been notable but have not translated into increased ecosystem and social resilience
- The long-term outlook is often less positive than recent trends

7EAP Thematic priority objective 1: Protecting, conserving and enhancing natural capital

REPORT MEGATRENDS BRIEFINGS COMPARISONS REGIONS Past (5-10 Progress to 20+ years outlook vear) trends policy targets Terrestrial and freshwater biodiversity Land use and soil functions No target **Ecological status of freshwater bodies** X Water quality and nutrient loading Air pollution and its ecosystem impacts X Marine and coastal biodiversity Climate change impacts on ecosystems No target Largely on track Improving trends dominate Partially on track Trends show mixed picture Largely not on track Deteriorating trends dominate

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Source: EEA. SOER 2015 Synthesis report.

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7EAP Thematic priority objective 2: Resource efficiency and the low-carbon economy

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	Past (5–10 year) trends	20+ years outlook	Progress to policy targets
Material resource efficiency and material use			No target
Waste management			
Greenhouse gas emissions and climate change mitigation			√ / ×
Energy consumption and fossil fuel use			V
Transport demand and related environmental impacts			
Industrial pollution to air, soil and water			
Water use and water quantity stress			×
	Improving trends dominate Largely on track Trends show mixed picture Partially on track		argely on track
			artially on track
	Deteriorating trends domi	nate Larg	ely not on track 🔀

Source: EEA. SOER 2015 Synthesis report.



7EAP Thematic priority objective 3: Safeguarding from environmental risks to health

REPORT MEGATRENDS BRIEFINGS COMPARISONS REGIONS Past (5-10 Progress to 20+ years outlook policy targets year) trends Water pollution and related environmental health risks Air pollution and related environmental health risks Noise pollution (especially in urban areas) **Urban systems and grey infrastructure** No target Climate change and related environmental health risks No target **/** 🗷 Chemicals and related environmental health risks Largely on track Improving trends dominate Partially on track Trends show mixed picture Largely not on track Deteriorating trends dominate

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Source: EEA. SOER 2015 Synthesis report.

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The overall picture:

Efficiency improvements have not secured long-term resilience

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Source: EEA. SOER 2015 Synthesis report.





Understanding past trends and future outlooks

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Two major factors explain the uneven progress and prospects:

The changing global context

- Competition for resources
- Pressures from outside Europe
- Planetary boundaries

Systemic characteristics of environmental challenges

- Complexity (mutliple causes and effects / interdependencies between drivers, impacts and drivers and impacts)
- Difficult to delineate issues (cut accross sectors, scales, boundaries)
- Uncertainty
- Environmental, social and economic interdependencies



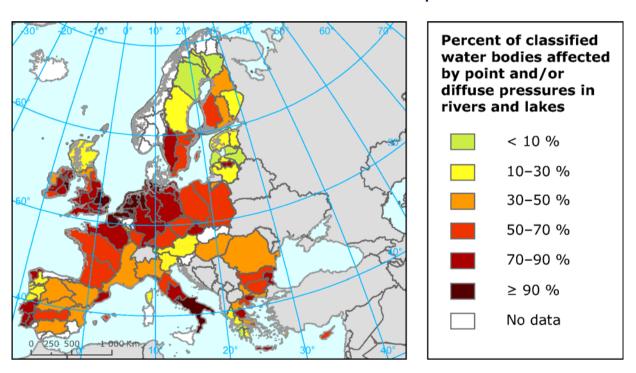


Understanding past trends and future outlooks: Natural capital

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- Long time-lags between reduced pressures and positive changes
- Pressures on ecosystems remain considerable
- External trends can counteract the positive effects of local efforts



Pourcentage des masses d'eau classées touchées par des pressions de pollution de sources ponctuelles et/ou diffuses dans les rivières et les lacs

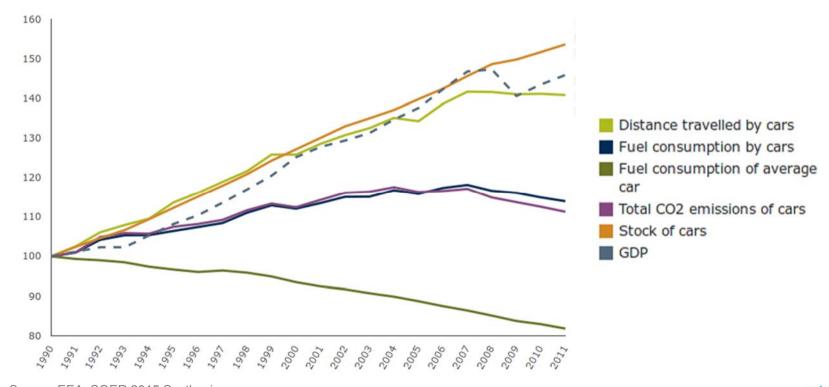


Understanding past trends and future outlooks: Resource efficiency and the low-carbon economy

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- Production-consumption systems support livelihoods, creating lock-ins
- Globalisation of production and consumption constrains EU influence
- More efficient production lowers costs, incentivising more consumption



Source: EEA, SOER 2015 Synthesis.



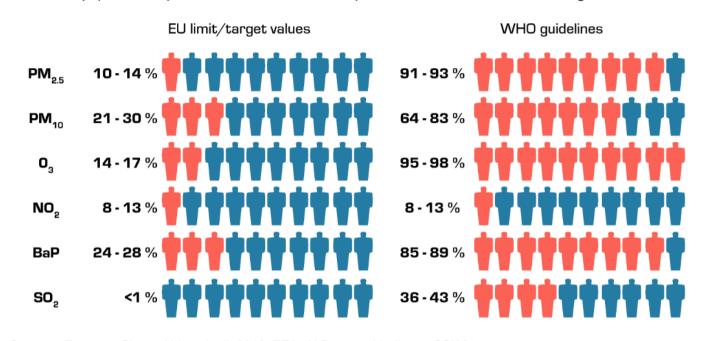


Understanding past trends and future outlooks: Safeguarding from environmental risks to health

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EU urban population exposed to harmful levels of air pollution in 2010 - 2012, according to:



Sources: Eurostat, Gisco - Urban Audit 2012; EEA, AirBase and Indicator CSI004.

- Impacts resulting from climate change are expected to worsen
- Changing exposures, urbanisation and ageing increase vulnerability
- Good urban design delivers benefits to health and well-being



Systemic challenges require systemic solutions

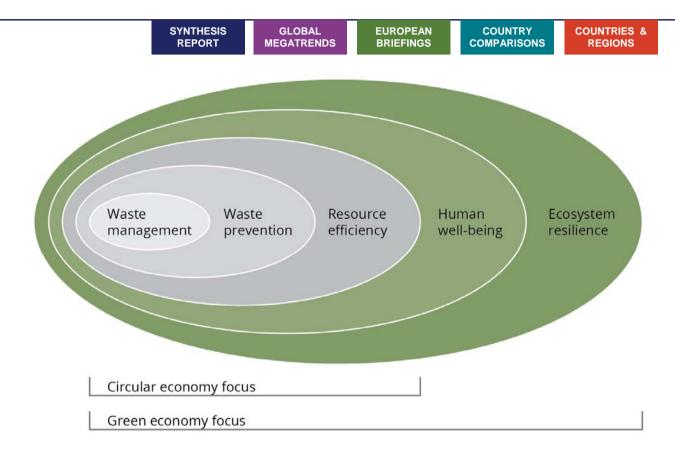
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- Not just incremental efficiency gains
- but fundamental transitions in key 'systems' (food, water, energy, materials, mobility, housing, ... but also production, consumption, governance, institutions, finance, taxes....)
 - ⇒ profound changes in dominant practices, policies and thinking.
- Achieving long-term visions and objectives crucially depends on short- and medium-term actions and investments
 - ⇒ thinking and acting across spatial and temporal scales

Systemic challenges require systemic solutions: example

Example: Green economy as an integrating framework for a broad range of policies



- Goes further than circular economy, beyond waste and material resources to how the use of water, energy, land and biodiversity should be managed towards more human wellbeing and ecosystem resilience.
- Also addresses wider economic and social aspects, such as competitiveness and social inequalities regarding exposure to environmental pressures.



Looking ahead – towards transition

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Moving from visions and ambitions to credible and feasible transition pathways involves:

- Investing for the future and avoiding investments that lock society into unsustainable patterns of production and consumption.
- Filling gaps and improving the knowledge base
- Harness synergies across policy, investment and research activities in support of the transition to sustainability (EU's 7th EAP, Multiannual Financial Framework 2014–2020, the Europe 2020 Strategy and Horizon 2020).
- ◆ Elargir le champ des possibilités, ouvrir de nouvelles voies, soutenir et intensifier (upscale) innovations pour la durabilité
- ♦ Innovations technologiques, mais aussi sociales, institutionnelles, organisationnelles, comportementales, culturelles,...







Looking ahead – expanding the knowledge base

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- To support better policy implementation and integration, investment choices and long-term transitions
- Key knowledge gaps:
 - systems science;
 - complex environmental change and systemic risks;
 - how Europe's environment is affected by global megatrends;
 - feasible transitions in production & consumption systems;
 - relationships between economic development, ecosystem resilience, resource efficiency, environmental change and human well-being;
 - emerging issues, foresights, forward-looking approaches.







Looking ahead – expanding the knowledge base (2)

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- Developing integrated environmental-economic accounting and indicators will support both policy making and investment decisions.
- Widening the use of foresight methods to enhance strategic planning.
- Strengthening science-policy-society interfaces and citizen engagement as important components of transition.





Implications: rôles pour la science

Contribution de connaissances scientifiques pour la définition, la mise en œuvre et l'évaluation de politiques structurant la transition

- Identification, compréhension et évaluation des problèmes et risques
- Identification des tendances
- Veille sur problèmes émergents
- Identification et analyse de solutions potentielles
- Identification et évaluation d'exemple concrets de transition systémique
- Proposition d'indicateurs de suivi
- Contribution à l'analyse des politiques et actions mises en œuvre
- Inspirer, motiver l'action

Compléter des connaissances des problèmes par des connaissances prospectives et des propositions de solutions pour le long-terme

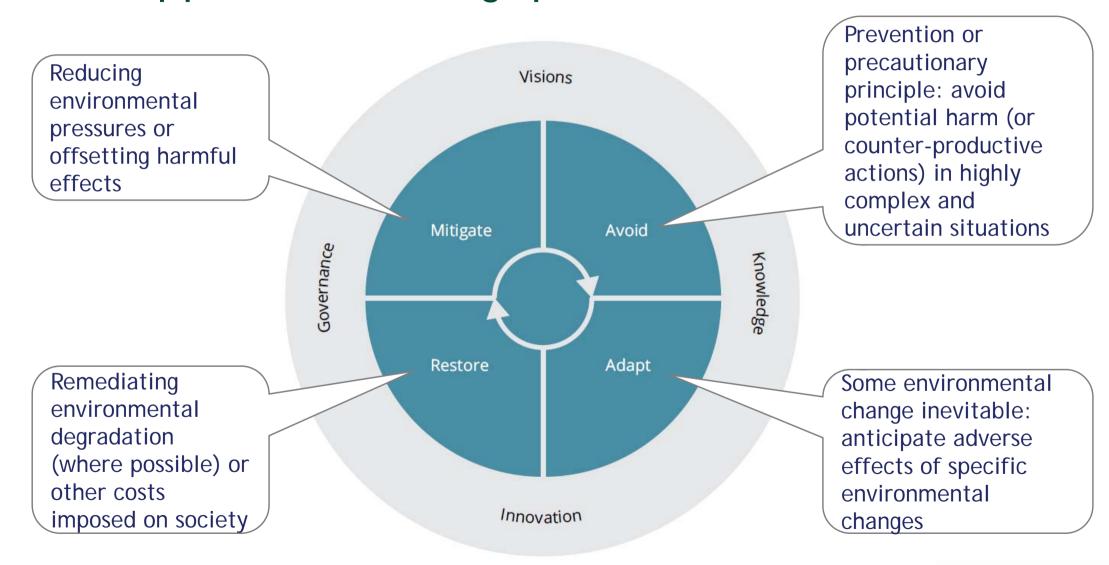
⇒ Depuis 'lanceuse d'alertes' jusqu'à 'ouvreuse de voies'

Implications: Nature des connaissances

- La nature systémique des problèmes et les dynamiques identifiées appellent des solutions systémiques
- Et un besoin de transformer nos façons de faire de la recherche
 - Briser les silos disciplinaires
 - Atteindre des compréhensions plus 'holistiques' des systèmes socioécologiques complexes
 - Développer une capacité et de véritables approches inter- et transdisciplinaires
 - Améliorer nos façons de traiter l'incertitude, les indéterminations et l'ignorance
 - S'ouvrir à d'autres formes de connaissances (traditionnelle, culturelle, institutionnelle, éthique, politique, ...)
 - Améliorer les interfaces science-politique-société

Interfacing Biodiversity and Policy
WWW.Spiral-project.eu

Approches stratégiques de la transformation



Source: EEA SOER 2015 Synthesis European Environment Agency

MEDIAN

Atténuer- Eviter - Adapter - Restaurer

- Approches complémentaires, interdépendantes et perméables
- Chacune dépend de différent types de connaissances et de différentes formes de gouvernance et crée des besoins spécifiques en matière d'innovation.
- Il existe un potentiel de transformation dans chacune et dans leur combinaison
- ⇒ Question: Sur quelles valeurs, quelles connaissances et quelles interfaces science-politique fondons-nous nos actions dans ces différentes catégories?
- Considérer ces approches conjointement, tant pout les politiques existantes que pour la création de politiques futures
- ⇒ Question: Que devons-nous transformer dans nos approches stratégiques pour une considération conjointe?





Key messages

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- Environmental drivers, trends and impacts are increasingly globalised: a variety of long-term megatrends today affect Europe's environment, consumption patterns and living standards.
- Policies are working. However, the level of ambition of existing environmental policy may be inadequate to achieve Europe's longterm environmental goals.
- Recalibrating existing policy approaches can make an essential contribution to such transitions along four key approaches: mitigating; adapting; avoiding and restoring.
- Neither environmental policies alone nor economic and technologydriven efficiency gains will be sufficient to achieve the 2050 vision.

Related content







Key messages

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- Living well within ecological limits requires fundamental transitions in the systems of production and consumption that are the root cause of environmental and climate pressures.
- Achieving this commitment is (still) possible but calls for a greater sense of urgency and more courageous actions.
- Such transitions require profound changes in dominant institutions, practices, technologies, policies, lifestyles and thinking.

Related content





Merci

And thanks to the EEA team and EIONET for the hard and important work!



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