

## Sustainability: a super-wicked problem



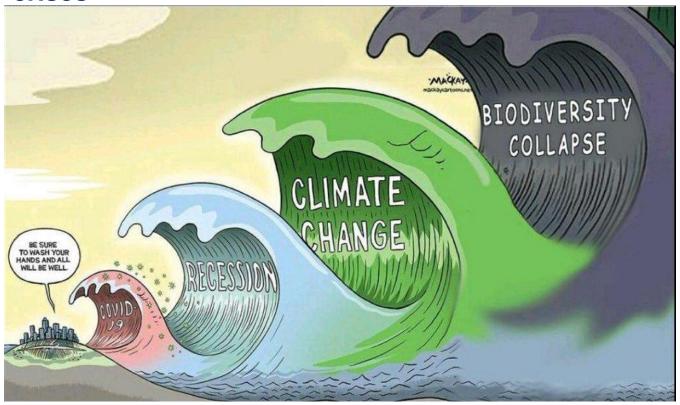
Narratives for change: about the series | European Environment Agency's home page (europa.eu)



# Volatility, uncertainty, complexity, ambiguity = accelerating, systemic risks

Multiple interconnected social, economic and environmental

crises



Governance in complexity - Sustainability governance under highly uncertain and complex conditions — European Environment Agency (europa.eu)

#### VUCA World

Complexity

Multiple key

decision factors

Volatility Rate of change

Ambiguity
Lack of clarity
about meaning

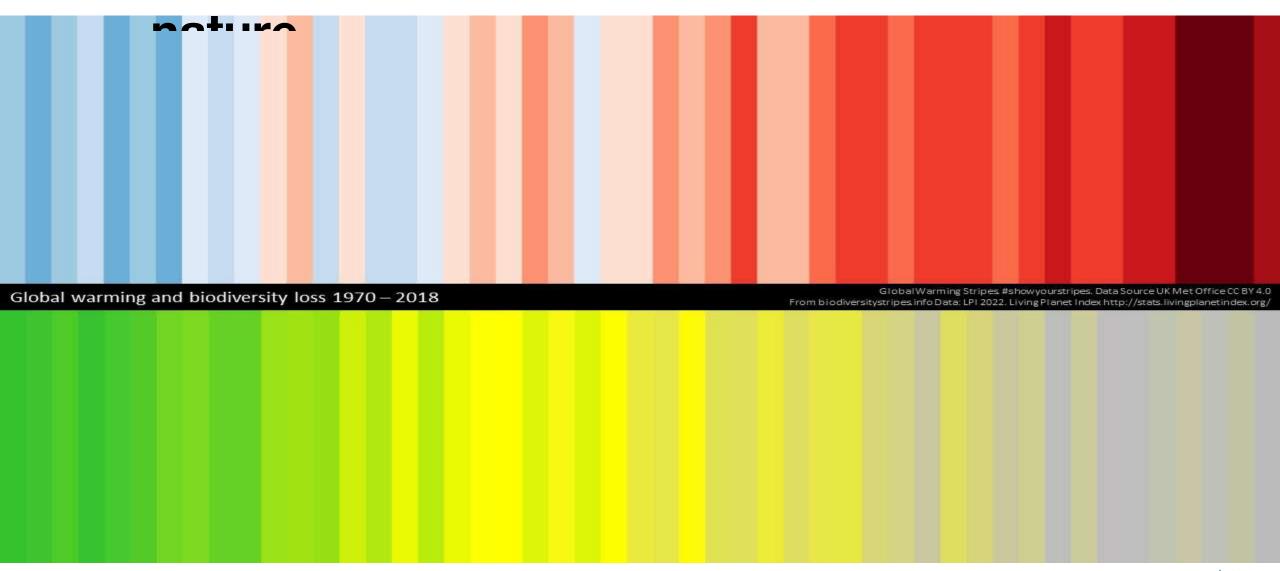
of an event

Unclear about the present

How much do you know about the situation?



# Planet Earth since 1970: More heat, less

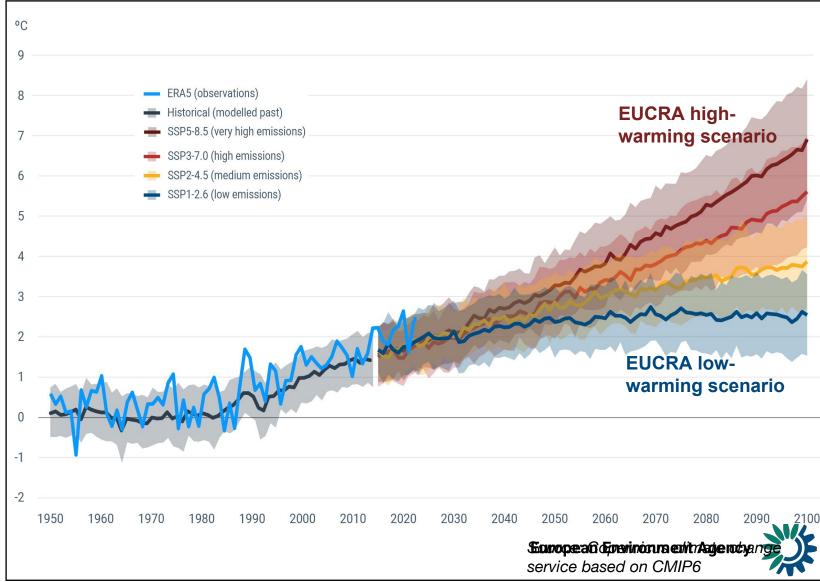


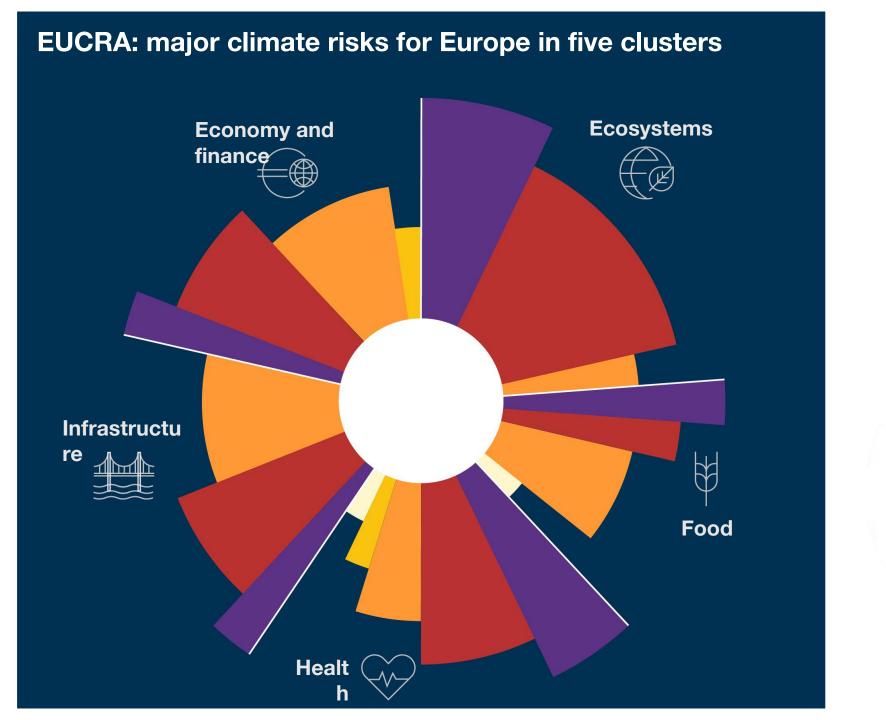
# ©David McNew via Getty





# 2024: another year of extreme weather and increasing climate risks?







- Urgent action needed
- More action needed
- Further investigation
- Sustain current action
- Watching brief

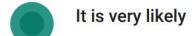


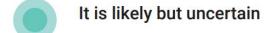


# **EU Policy Response:** 8<sup>th</sup> **EAP progress report**

#### Methodology key

#### Will the targets be met by 2030?







It is very unlikely

? It is unclear

New Political Guidelines



# Reconfiguring energy, food, mobility, urban and industrial systems







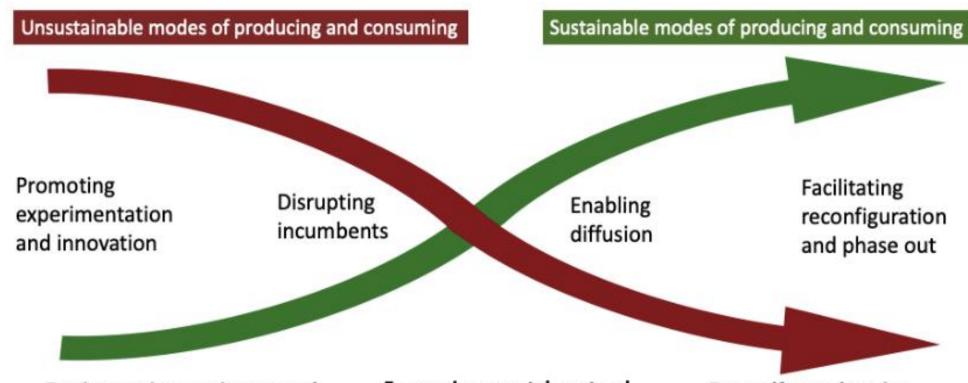


<u>Europe's sustainability transitions outlook — European Environment Agency</u>

(europa.eu)

European Environment Agency

# Innovative solutions to drive system transitions



# E.g. innovation, environmental policies:

- Strict regulation
- R&D, demonstration
- Promoting experiments
- Missions
- Network building

# E.g. environmental, sectoral, industrial, fiscal policies:

- Carbon pricing
- Removing harmful subsidies
- · Market creation
- Adoption subsidies
- Backing winners

# E.g. welfare, education, employment, regional policies:

- · Phase-out measures
- Compensating losers
- Offsetting inequities
- Retraining
- Regional assistance



#### Hard truths: trade-offs between sustainability outcomes





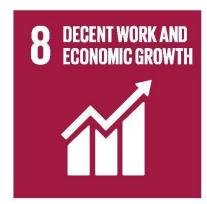
































## State and Outlook of Europe's Environment

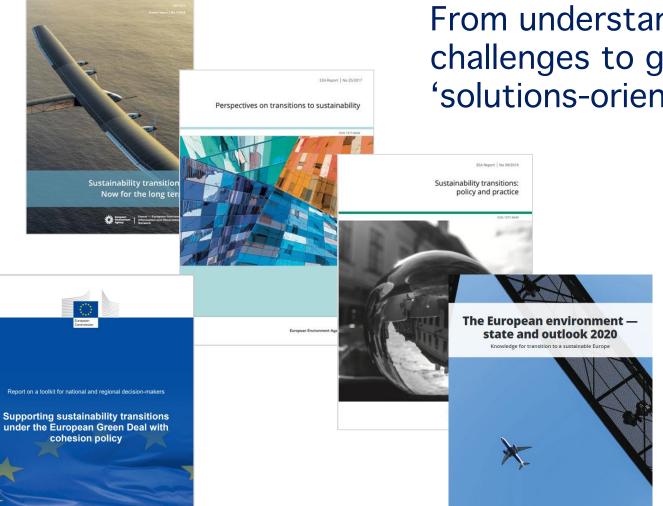












From understanding systemic challenges to generating 'solutions-oriented' knowledge

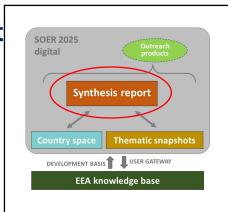


State and Outlook of Europe's Environment 2025

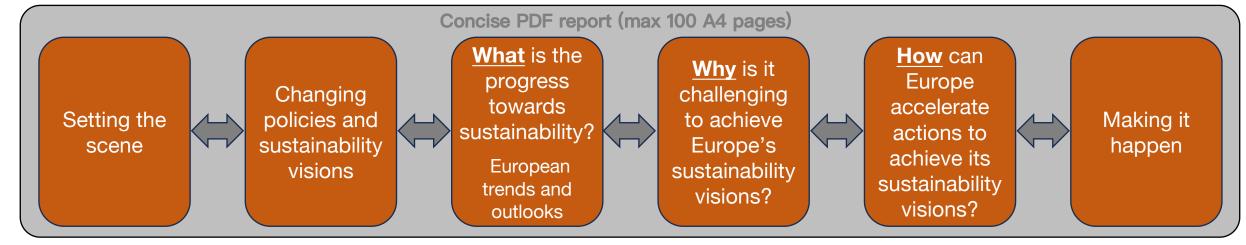
#### SOER 2025 synthesis report – objectives and scope



- A concise, integrated narrative that connects the dots and focusses on responses and solutions.
- An assessment on sustainability in the context of environment and climate and socio-economic and geopolitical change, anchored in the EU's visions 2050 for a sustainable Europe.

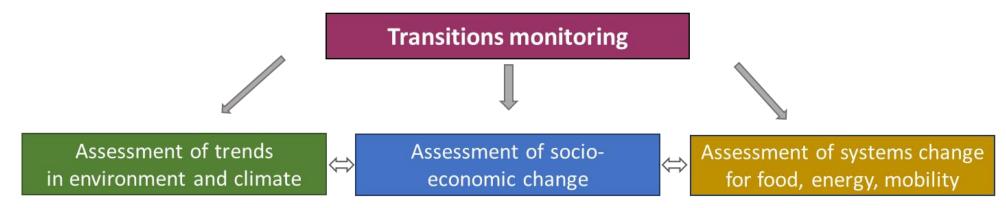


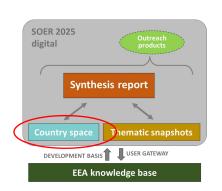
#### **Scope** (agreed structure)



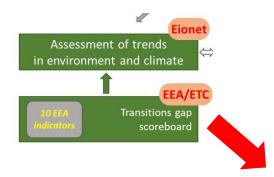
### Transitions Monitoring - SOER 2025 country space

- Assessments for each country about its transition towards sustainability (transitions monitoring), for the 32 EEA member countries and 6 cooperating countries
  - Supported by two indicator dashboards composed of established EEA indicators and ESTAT indicators
  - Co-developed between the EEA and its network of environment and climate experts at national level (Eionet)





## Transitions Monitoring indicators chosen for dashboards





#### **Biodiversity and ecosystems**

- Area under organic farming
- Terrestrial protected areas

#### Climate change

- LULUCF emissions
- GHG emissions
- Climate-related economic losses

#### **Clean energy transition**

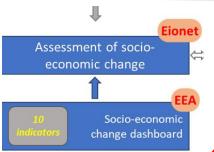
- Share of renewable energy in energy consumption
- Energy consumption

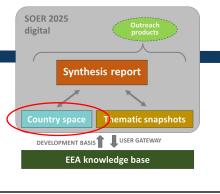
#### Resource use and circular economy

- Total waste generation
- Circular material use rate

#### **Environment and human health**

Health impacts of exposure to fine particulate matter in Europe







Established EEA or ESTAT indicators

#### **Economic dimension (5 indicators)**

- Environmental protection expenditure
- Fossil fuel subsidies
- Gross value added of the EGSS sector
- Eco-innovation index
- Share of environmental taxes in total tax revenue

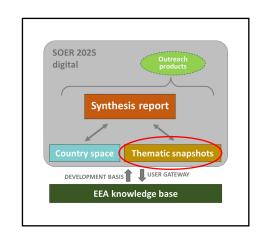
#### **Social dimension (5 indicators)**

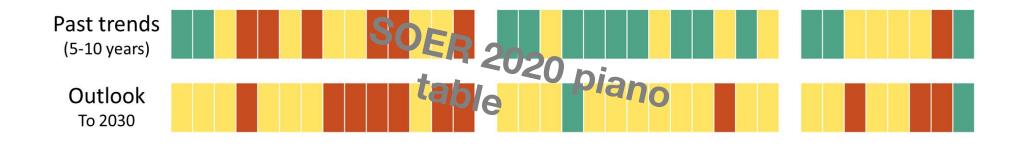
- Energy poverty
- Gini coefficient of equivalised disposable income
- Employment in the EGSS
- Public expenditure on tertiary education
- Consumption footprint European Environment Agence



#### SOER 2025 thematic snapshots

- Concise, digital and comparable online overview of key trends in environment and climate in Europe
- Short key messages and summary assessment covering:
  - past trends,
  - outlook to 2030/50,
  - prospects of meeting policy targets,
  - robustness assessment
- Eg, state of Europes Biodiversity, financing the transition, air pollution impacts on human health

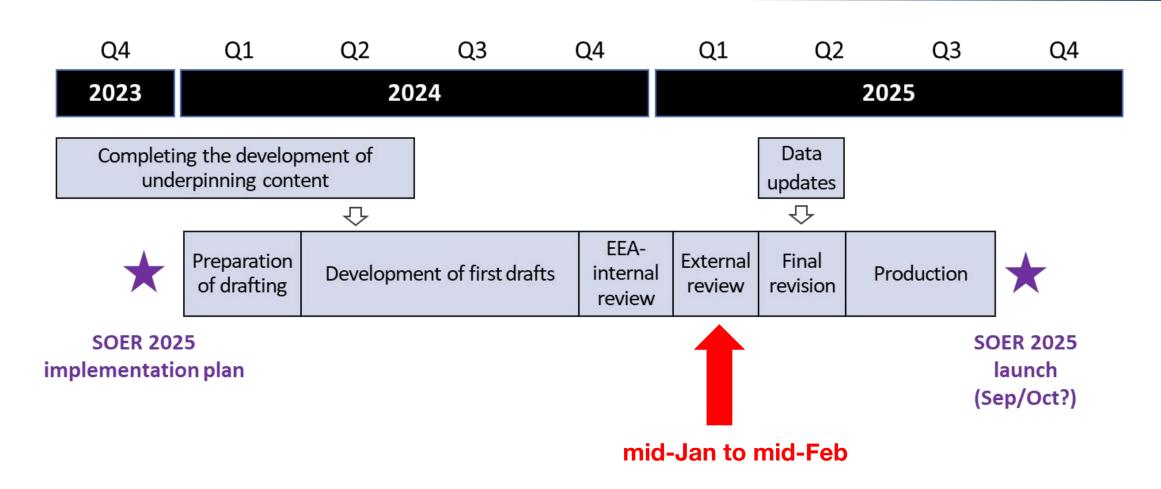




## Thematic snapshots – preliminary definition (by EEA work area)

Work Area 1	Work Area 2	Work Area 3	Work Area 4	Work Area 5
1 State of Europe's biodiversity – terrestrial, freshwater + marine	1 Reducing greenhouse gas emissions	1 Emissions of pollutants to air	1 Safe and sustainable by design and production	1 Transformative innovation
2 Pollution of ecosystems  – terrestrial, freshwater + marine	2 Improving mobility system sustainability	2 Air pollution and impacts on human health	2 Longer and better use of products	2 Green employment
3 Protected areas – terrestrial + marine	3 Achieving energy system transition	3 Environmental noise and impacts on human health	3 Lowering material- intensive consumption	3 Market-based instruments for transitions
4 Water and climate impacts	4 Removing CO2 from the atmosphere	4 Water pollution and human health	4 Waste as a resource	4 Justice in transitions
5 Ecosystems and climate impacts	5 Reducing ozone depleting substances	5 Chemical pollution and human health	5 Circular use of materials	5 Financing the transition
6 Land use/land take	6 Managing climate risks to the economy	6 Environmental health inequalities	6 Circular economy financing and governance	
7 Soil degradation	7 Managing climate risks to society		7 Benefits of a circular economy	SOER 2025 digital Outreach products
8 Biodiversity financing	8 Climate action financing		8 Consumption footprint	Synthesis report
	9 Governance of climate change mitigation and adaptation			Country space Thematic snapshots  DEVELOPMENT BASIS USER GATEWAY  EEA knowledge base

#### The timeline towards SOER 2025



!! This timeline applies to all three key SOER 2025 outputs (i.e. synthesis report, thematic snapshots, country space) !!



