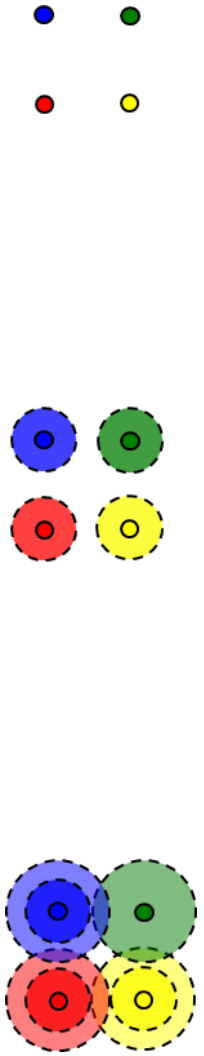
The EEA, knowledge for transitions and SOER 2020

Michael Asquith, PATHWAYS-SOER 2020 workshop, 20 November 2016

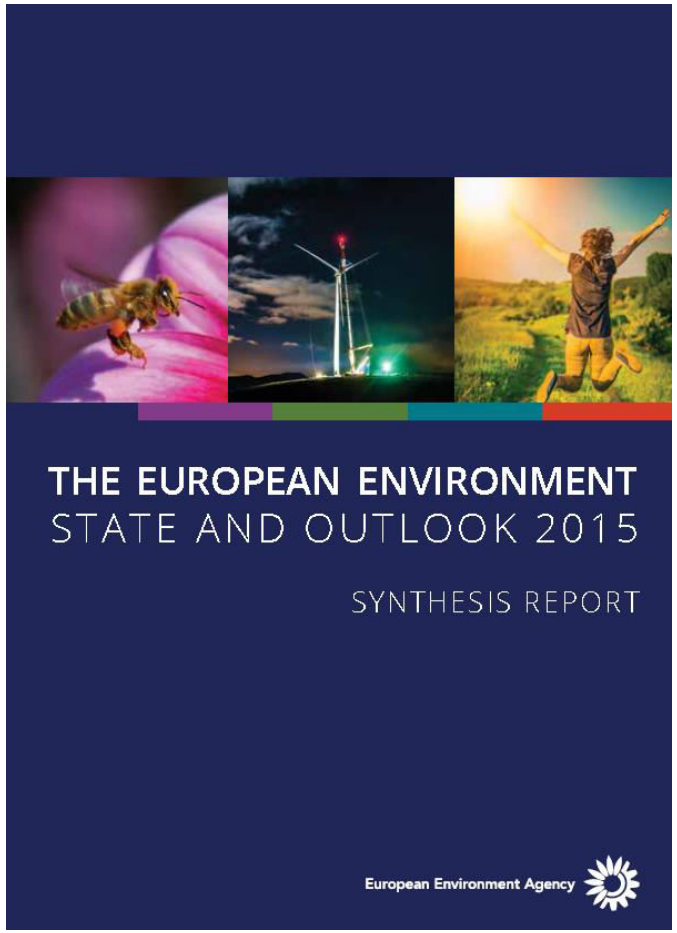
The EEA's SOERs both reflect and inform EU environmental policy

	Focus	Input to EU environmental policy
 **SOER 1995**	Addresses 5EAP targets, sectoral integration	Report for the mid-term review of the 5EAP (1993–2000)
 **SOER 1999**	Addresses environmental trends, interconnections	Input to the assessment of the 5EAP (1993–2000)
 **SOER 2005**	Addresses air, water, land, core indicators	Input to the mid-term review of the 6EAP (2002–2012)
 **SOER 2010**	Addresses 6EAP priorities, systemic challenges	Input to the final assessment of the 6EAP (2002–2012)
 **SOER 2015**	Addresses 7EAP priorities, need for transitions	Input to implementation of the 7EAP and a baseline for future reference



From specific to systemic understanding of Europe's environmental challenges

Key messages from SOER 2015



Based on a detailed analysis of the European environment's state, trends and outlook, SOER 2015 concluded that the outlook for Europe's environment in coming decades is worrying.

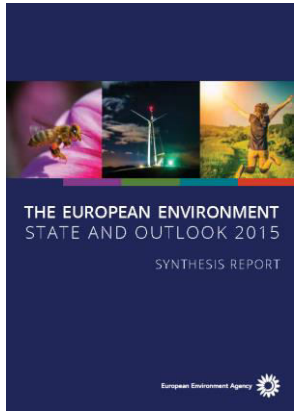
Achieving the EU's 2050 vision of 'living well within environmental limits' (EU, 2013a), will require that Europe achieves fundamental transitions in its core societal systems, in particular those related to food, energy, mobility and the built environment.

From understanding problems to identifying responses

Understanding systemic challenges and the need for transitions

Identifying knowledge, skills and governance approaches for transitions

2012 2013 2014



2016 2017 2018

SOER 2020

PROBLEM-FOCUSED

MORE SOLUTIONS-ORIENTED

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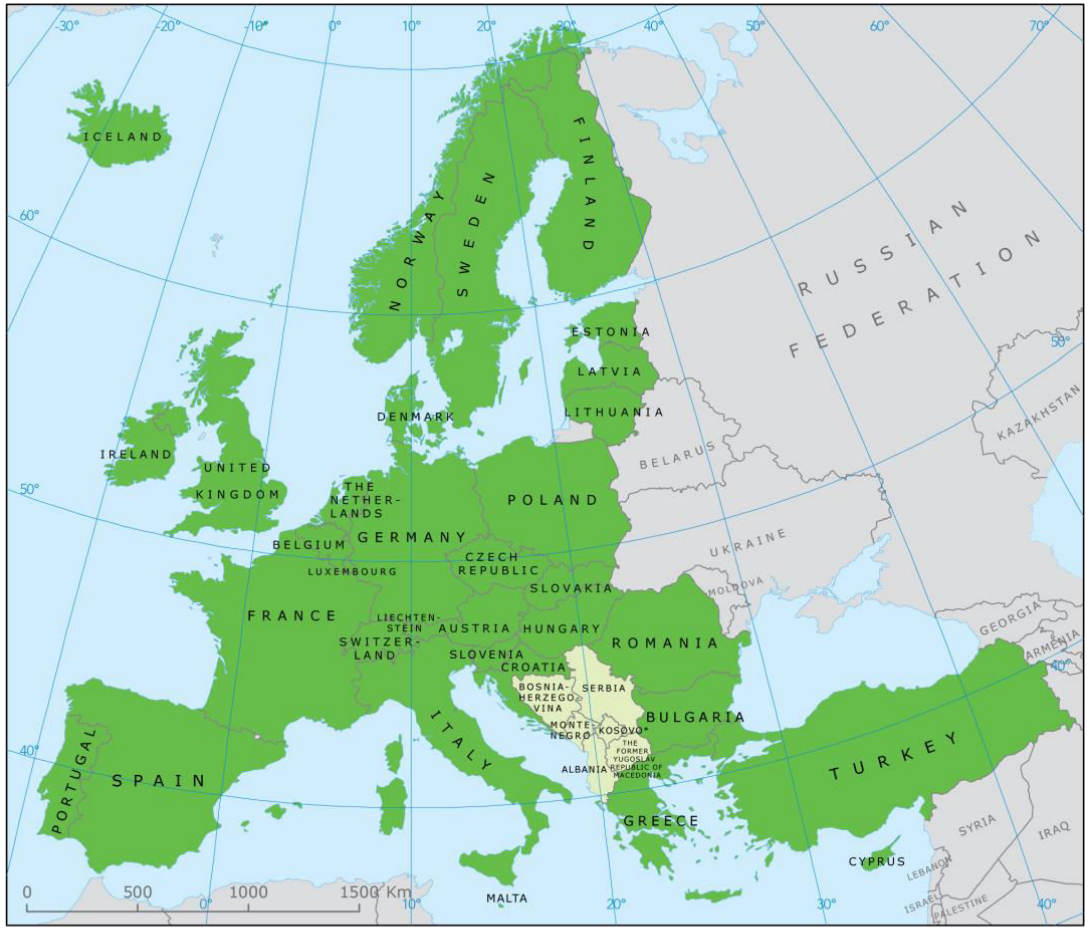
The EEA: a network organisation with direct links to policy

The European Environment Agency is an EU institution that operates at the interface of science and policy.

The EEA has c. 200 staff, while its network ‘Eionet’ comprises more than 1000 experts and 350 institutions in 39 European countries.

The EEA gathers data and information from across Europe and translates them into assessments and knowledge to inform policy and decision-making.



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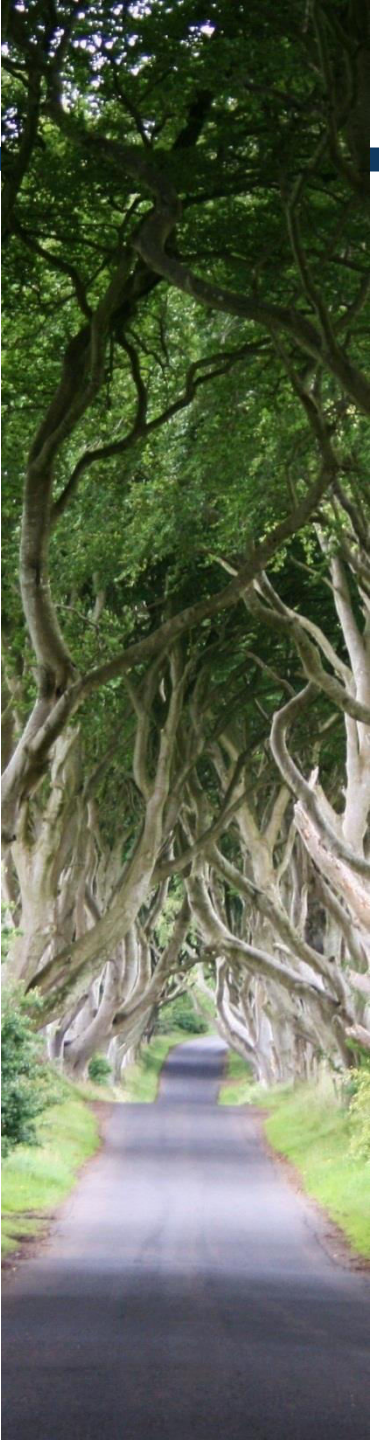
Possible roles for the EEA in supporting transitions

- Convener of actors from the different research and governance communities, to facilitate integration and co-creation of different forms of knowledge
- Translator both across disciplines and from complex academic theory into the language of policy
- Networker, helping link local innovations, or 'scaling up' local practices to higher institutional or policy levels
- Analyst of specific aspects of systems of particular importance for transition processes



EEA work on transitions in 2016

Engaging with transitions and transformations communities, e.g.

- STRN, Transformations 2015, Future Earth, etc.
- PATHWAYS workshop at the EEA in February
- EEA Scientific Committee seminar on knowledge for transitions

Reports and analysis addressing

- Global context (e.g. megatrends and planetary boundaries)
- Transitions theory and concepts
- Specific socio-technical and socio-ecological systems
- Local initiatives and practice-based knowledge

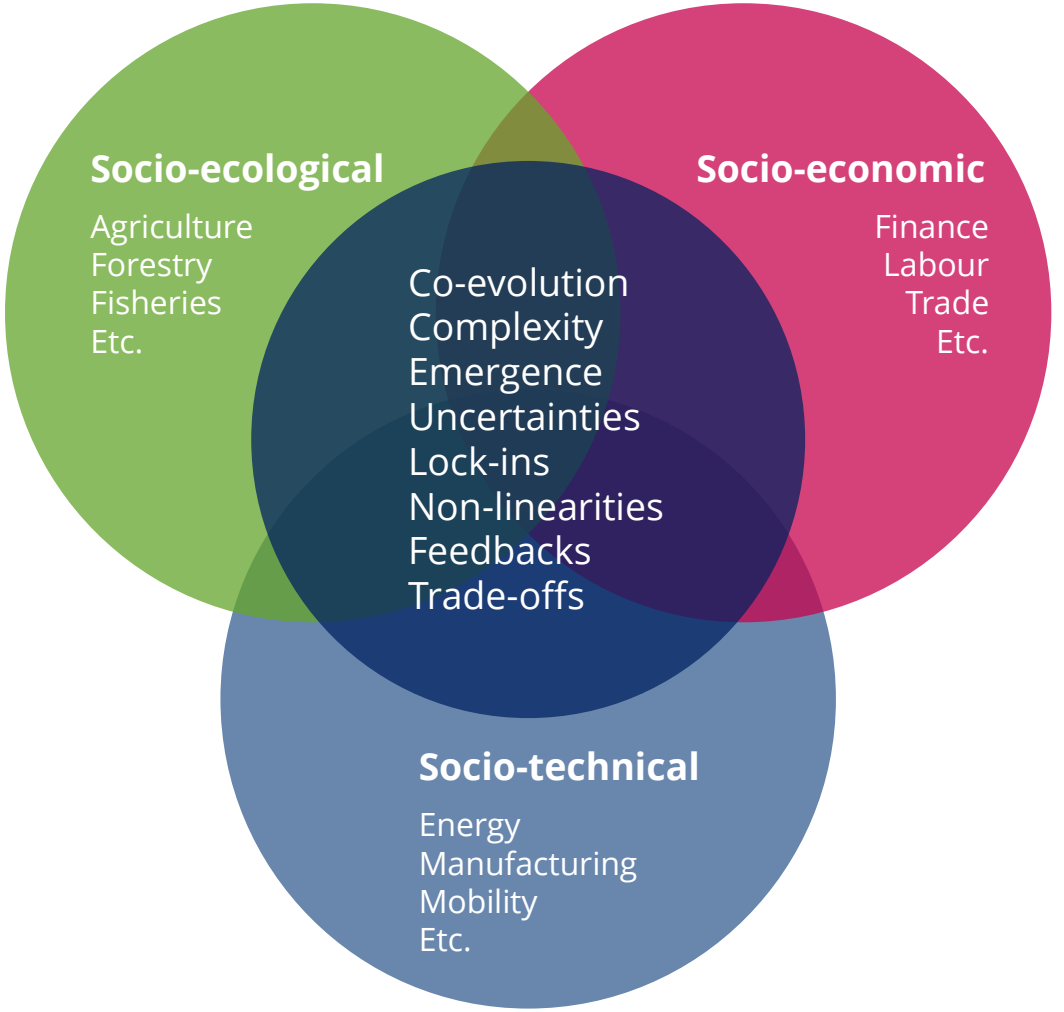
Transitions knowledge base report

Presents five perspectives on systemic change, how they fit together and what they offer in terms of knowledge for transitions:

- Socio-technical
- Socio-ecological
- Socio-economic
- Integrated assessment modelling
- Practice-based approaches

Next steps

- Technical report and seminar: spring 2017
- EEA report: early 2018



Source: Loorbach (2015)

Analysing specific systems and aspects of transitions

- Energy system lock-ins
- Seafood and food system reports
- Transitions in the mobility system
- Horizon scanning: risks from new technologies and practices
- Trade-offs and distributional impacts of systemic change
- Etc.

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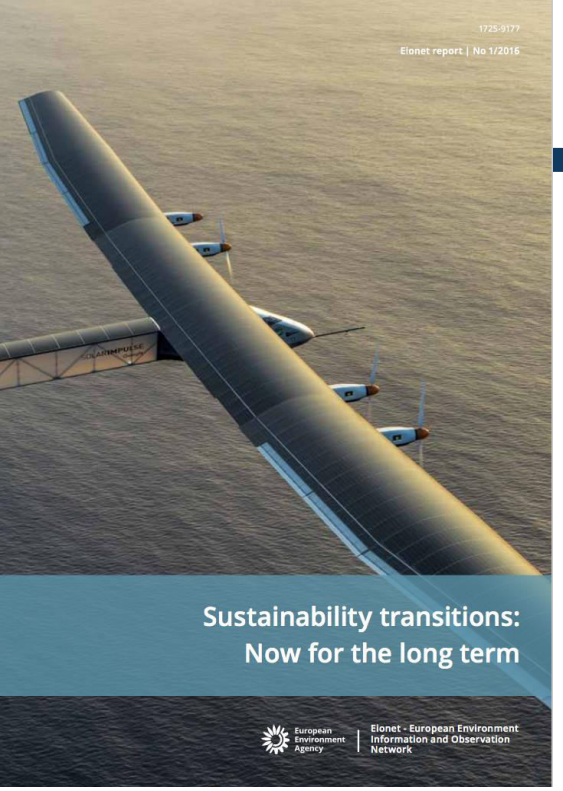


Eionet transitions report

- Shared learning process: engaging Eionet as we build towards SOER 2020
- Explaining and illustrating complex concepts
- Engaging and inspiring with empirical examples

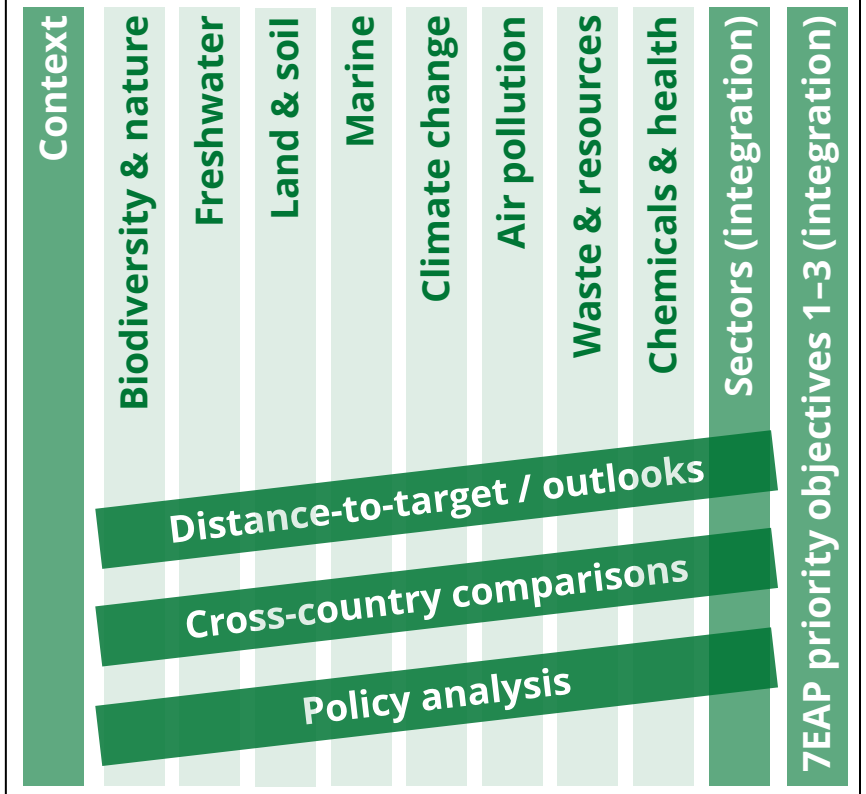
But gathering and analysing practice-based knowledge in a scientifically rigorous way is resource intensive.

Understanding impacts, scaling, networking, etc. could well require tapping into existing knowledge and networks (e.g. ARTS, PATHWAYS, TESS, ICLEI, etc.)

SOER 2020: proposed structure and building blocks

Part 3: SYNTHESIS = 1 + 2 + stakeholders

Part 1: SOE ASSESSMENT



Part 2: SYSTEMS ASSESSMENT

SUSTAINABILITY GOALS AND CHALLENGES

7EAP 2050 vision	Green, circular, low-carbon economy
	Natural capital, green infrastructure
	Well-being, SDGs
Global context	Global megatrends
	Planetary boundaries

UNDERSTANDING SYSTEMS

Core social-ecological-economic systems: food, energy, mobility, urban, water, land, fiscal, finance, etc.	Environmental impacts
	Lock-ins, feedbacks, trade-offs
	Systemic risks
	System interactions

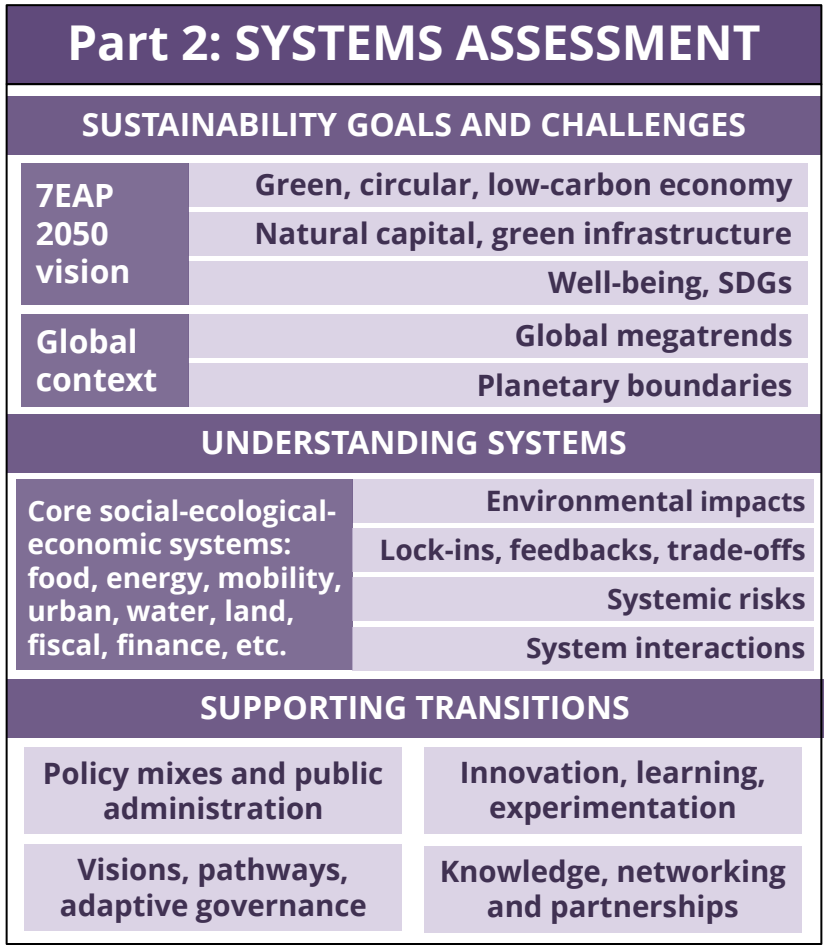
SUPPORTING TRANSITIONS

Policy mixes and public administration	Innovation, learning, experimentation
Visions, pathways, adaptive governance	Knowledge, networking and partnerships

Part 2 responds to the challenges identified in SOER 2015

"The systemic nature of the problems and dynamics identified here necessitates systemic solutions."

SOER 2015 Synthesis



Why do we need change?

Long-term sustainability goals and the changing global context

What do we need to change?

Understanding core societal systems and barriers to transformation

How can we achieve needed change?

Initiatives, policies, knowledge and governance approaches to support transitions

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What can PATHWAYS, ARTS and TESS tell us?

- Environmental and socio-economic characteristics of the key systems (e.g. ecosystem impacts, systemic risks, emerging issues, scale of needed change)
- Obstacles and opportunities for change (e.g. lock-ins, feedbacks, trade-offs, burden-shifting; leverage points, tensions, cracks)
- Promoting experimentation and innovation, and enabling systemic change (e.g. quantification of systemic impacts of local initiatives; factors enabling innovation, learning and upscaling)
- Evidence of opportunities for policymakers to overcome barriers and support systemic transitions (to be expanded on in the next session)

In considering these questions it will be useful to distinguish system-specific lessons from more general insights