

SOER 2020 and sustainability

State and Outlook for Europe's Environment Report 2020



FÖLDMŰVELÉSÜGYI
MINISZTERIUM

European
Environment
Agency



19 April 2018



Miklós Marton

SOER has a long history at the EEA

1995



SOER 1995

- report (151 pp) + summary
- addresses 5 EAP targets
- focus on **sectoral integration**

1996

1997

1998

1999



SOER 1999

- big report (446 pp) + summary
- addresses environmental **trends**
- focus on DPSIR, link between issues

2000

2001

2002

2003

2004

2005



SOER 2005

- bigger report (569 pp, Parts A, B & C)
- addresses air, water, land
- focus on **DPSIR**, core set of indicators

2006

2007

2008

2009

2010



SOER 2010

- several reports (Parts A, B, C + Synthesis)
- addresses 6EAP priority areas
- focus on **systemic challenges**

2011

2012

2013

2014

2015



SOER 2015

- several reports (A, B, C + Synthesis), largely web-based
- addresses 7EAP priority areas
- focus on the **need for systemic transitions**

2016

2017

2018

2019

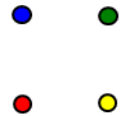
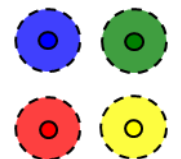

2020



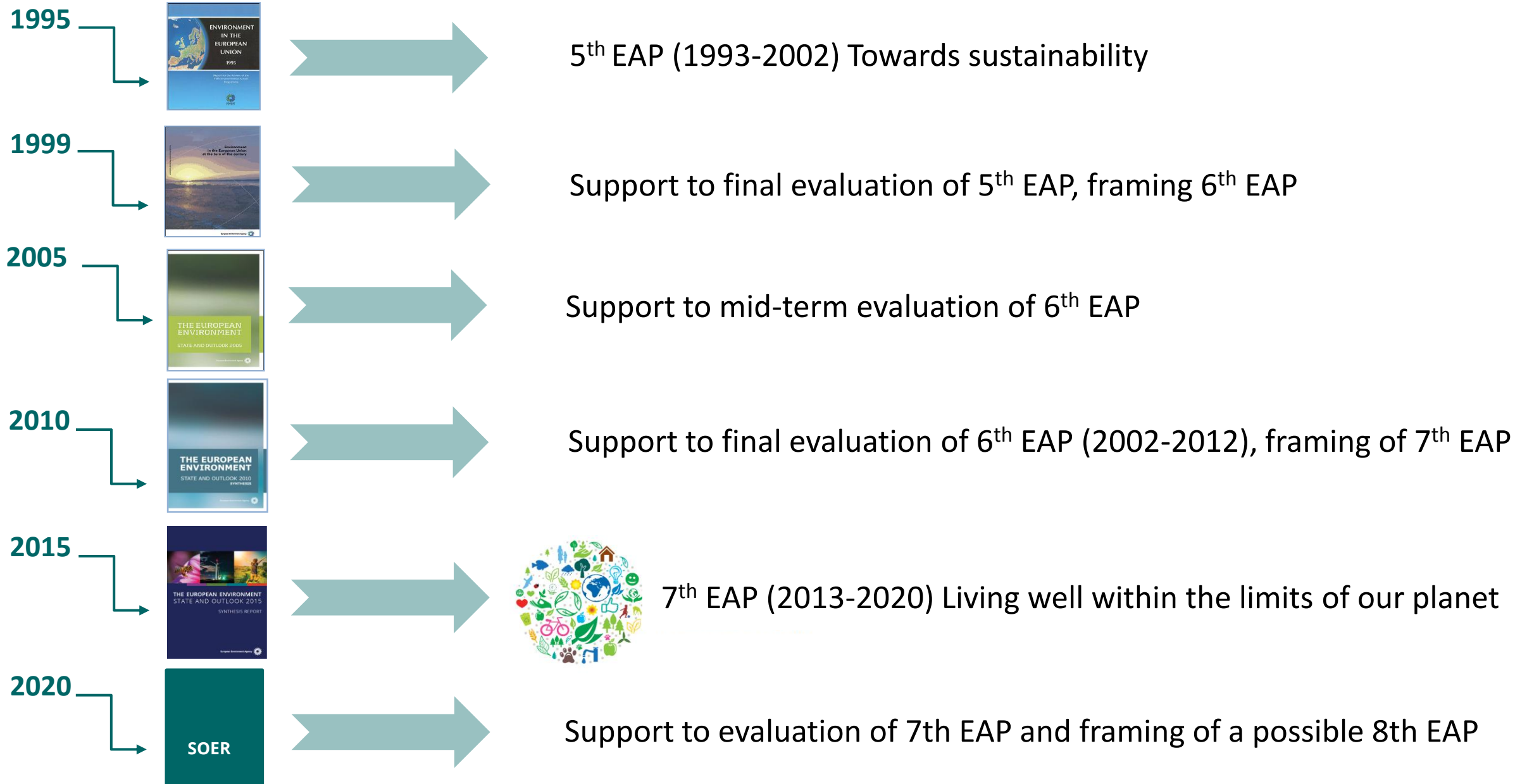
SOER 2020

- **integrated environmental assessment report (2019)**
- **stakeholder process (2019/2020) and Synthesis (2020)**
- focus on 7EAP priority areas, **sustainability prospects**

Evolving understanding of challenges and responses

Characterisation of key challenges	Key features	In the spotlight in	Policy approaches (examples)	Assessment approaches and tools (examples)
Specific 	linear cause-effect large (point) sources often local	1970s / 1980s (continuing today)	targeted policies and single-issue instruments	datasets, indicators
Diffuse 	cumulative causes multiple sources often regional	1980s / 1990s (continuing today)	policy integration and raising public awareness	DPSIR (driver, pressure, state, impact, response) data sets, indicators, environmental accounts, outlooks
Systemic 	systemic causes interlinked sources often global	1990s / 2000s (continuing today)	policy coherence and systemic approaches (e.g. green economy)	DPSIR, STEEP (social, technological, environmental, economic, political) indicators and accounts, systems analysis, foresight, stakeholder participation

SOER support to EU environmental policies



SOER 2020 overall structure

SOER 2020

Integrated Assessment (2019)

- State of Europe's environment in the context of drivers and policy responses
- Sustainability prospects from the globalised production-consumption systems perspective and transitions to long-term policy goals
- 300 pages, English only

Stakeholder contributions, consultations

Synthesis stakeholder interactions (2019-2020)

Synthesis (2020)

- Key findings of the Integrated Assessment
- Outcomes of the stakeholder interactions
- 50-60 pages, English + translations

Stakeholder consultations



Integrated assessment (300 pages)

Part 1. Setting the scene (30 p)

Presenting Europe's relevant policy frameworks and long-term sustainability goals as well as the European-global context and trends

Starting point is SOER 2015 conclusions

1: Describing the policy framework 2020–2030–2050 (environmental acquis, Biodiversity, 7th EAP, Paris Agreement, SDGs), with a focus on recent developments

2: Assessing global-European context and trends: megatrends, 'great acceleration', planetary boundaries, resilience and systemic risks

Development principles

1. Matching structure and evidence
2. Integrated assessment across all sections
3. Summary assessments developed where feasible
4. Three overarching integration foci:
 - **Environment:** natural capital
 - **Economy:** resource efficient, low carbon, circular & bio- economy
 - **People:** health, well-being, cities
5. Integration of country information (data and case studies)
6. Visibility of EEA-Eionet work in synergy with other EU work

Part 2. Environmental / climate trends (180 p)

Assessing progress to established EU environmental policy goals in the 2020–2030 timeframe (2050 for climate and biodiversity), including:

- Policy context
- Key trends (with country-level info) and outlooks
- Progress to targets
- Policy responses
- Thematic & sectoral summary assessments

3 – 12: Ten thematic assessments (framed by 7th EAP POs 1–3, as far as feasible)

- | | |
|---------------------------|------------------------|
| • Biodiversity and nature | • Air pollution |
| • Freshwater | • Noise pollution |
| • Marine | • Waste and resources |
| • Land and soil | • Chemicals pollution |
| • Climate change | • Industrial pollution |

13: Environmental pressures from sectors

complementing the thematic analysis and assessing progress across sectoral environmental policy targets

- | | |
|-------------|---------------------------|
| • Energy | • Agriculture |
| • Transport | • Forestry |
| • Industry | • Fisheries / aquaculture |

14: Sectors and the green economy (cross-sectoral, macro-economic assessment)

- Benefits for sectors for society (jobs, GVA)
- Role of sectoral policies in driving eco-innovation

15: Summary assessment and outlook (2020–2030), drawing on the thematic & sectoral assessments, addressing the 7th EAP objectives

Part 3. Sustainability prospects (80 p)

Assessing progress towards Europe's sustainability goals through a globalised production-consumption systems perspective, and exploring future challenges (2030 – 2050) and opportunities for systemic change

Intro: Sustainability through a systems lens

- Describing how a systems perspective helps to understand barriers to sustainability and long-term policy challenges

16: Production-consumption systems

- Production and consumption in Europe at a glance (global value chains, footprints, import dependency, critical materials, etc.)
- **Energy, food, mobility:** socio-economic outcomes, pressures, actors, interests, systemic characteristics (lock-ins, etc.)
- Interlinkages across systems and scales, including biophysical (resource nexus), socio-economic (fiscal, finance) and **urban** aspects

17: Sustainability challenges and opportunities

- Europe and the **SDGs:** trends and progress
- Implications of **global megatrends** (demographic, resources, technological, etc.) and associated uncertainties for achieving Europe's sustainability goals
- Synergies and trade-offs between SDGs: key implications for Europe and its long-term EU policy frameworks (CE, LCE, BE, CAP, Energy Union, etc.)

18: Summary assessment and sustainability prospects (2030–2050), drawing on the systems assessments and addressing long-term EU policy frameworks and the SDGs

19: Responding to sustainability challenges

- Evidence about effecting and governing transitions (systems innovation, visions and pathways, learning and **experimentation, cities and communities**, etc.) and ensuring resilience (adaptation, nature-based solutions, etc.)

Part 4. Conclusions (10 p)

Delivering key messages and reflections that set up the Synthesis stakeholder process

Overall assessment of outcomes

Key messages:

- State and trends
- Outlook
- What works or not at different scales

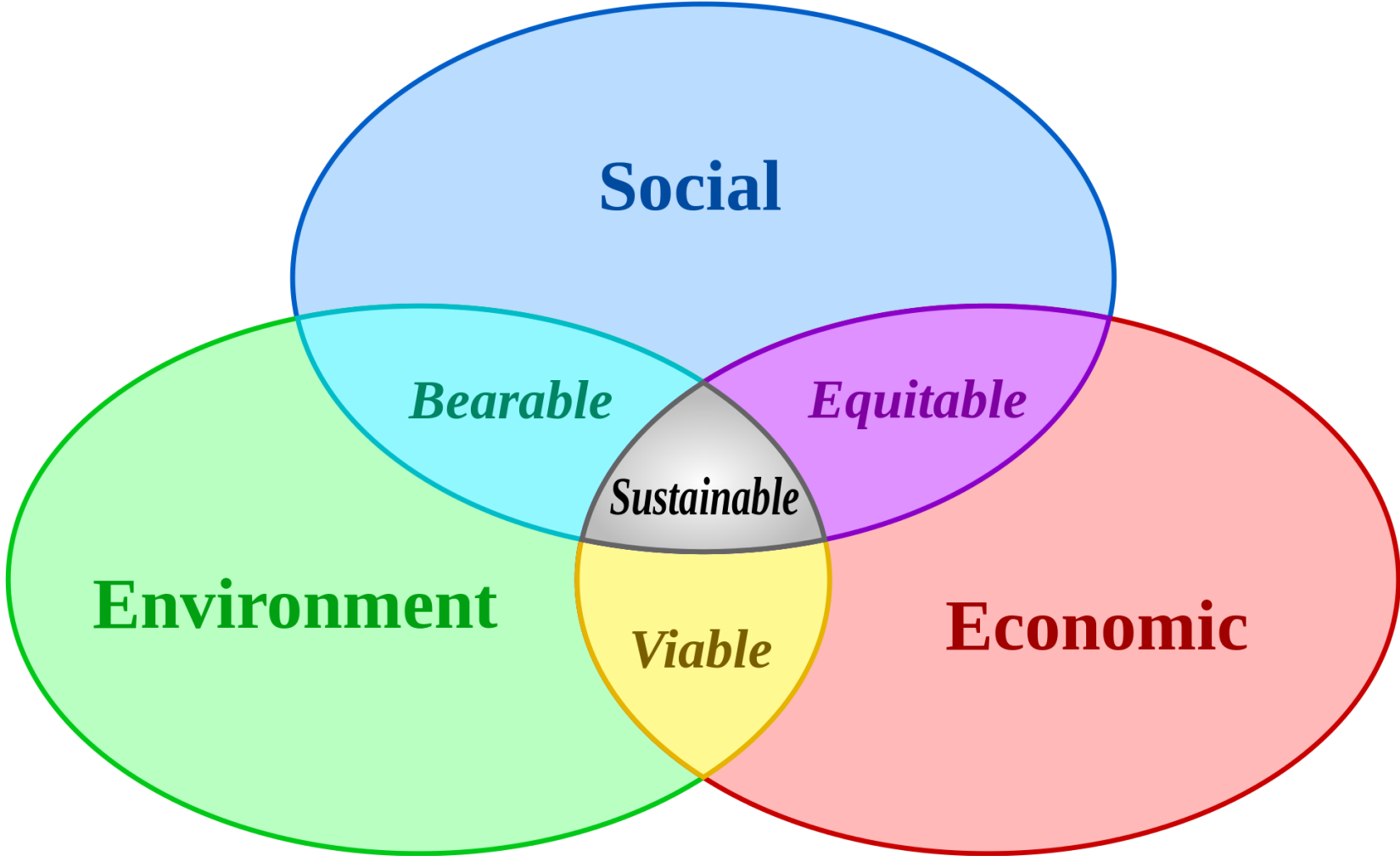
Short reflection on implications for progress towards Europe's sustainable future, policy development, investments and knowledge

- From 7th EAP to 8th EAP, framed by SDGs
- MFF 2021–2028 discussions
- Research and knowledge base

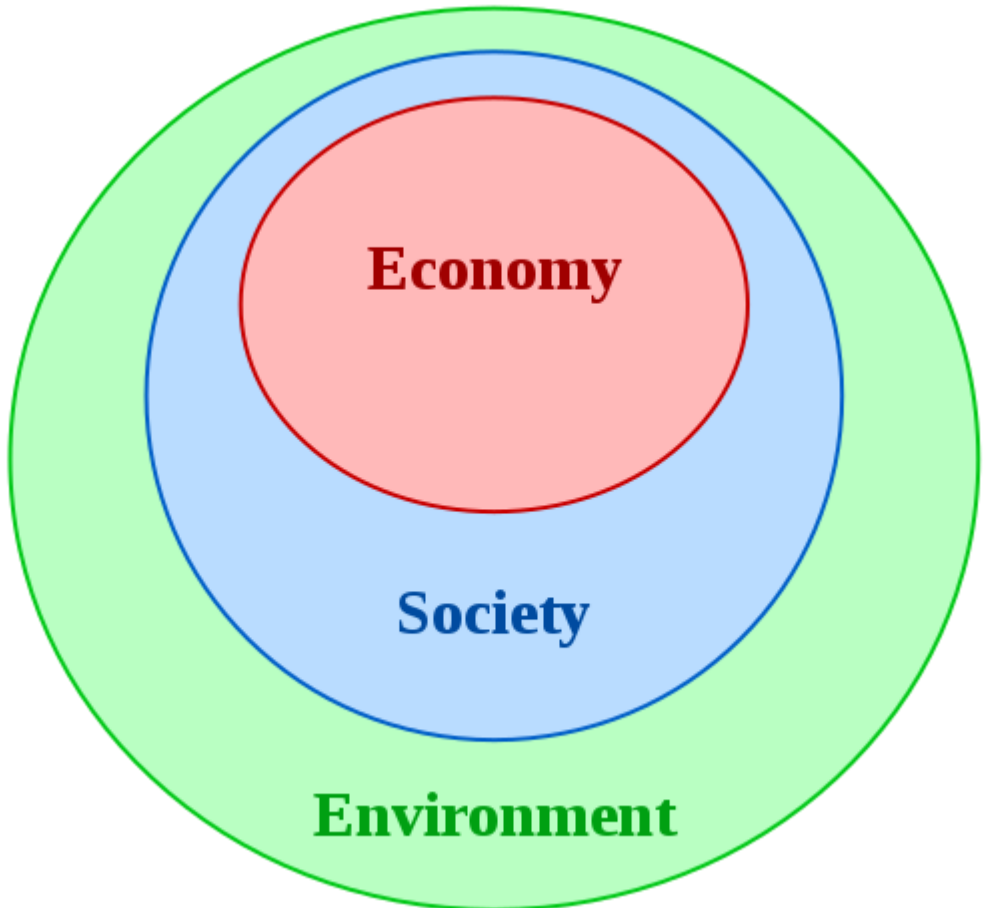
Executive summary (4 p)

- Overview of assessment structure and logic
- Key outcomes and messages from Parts 1 to 4

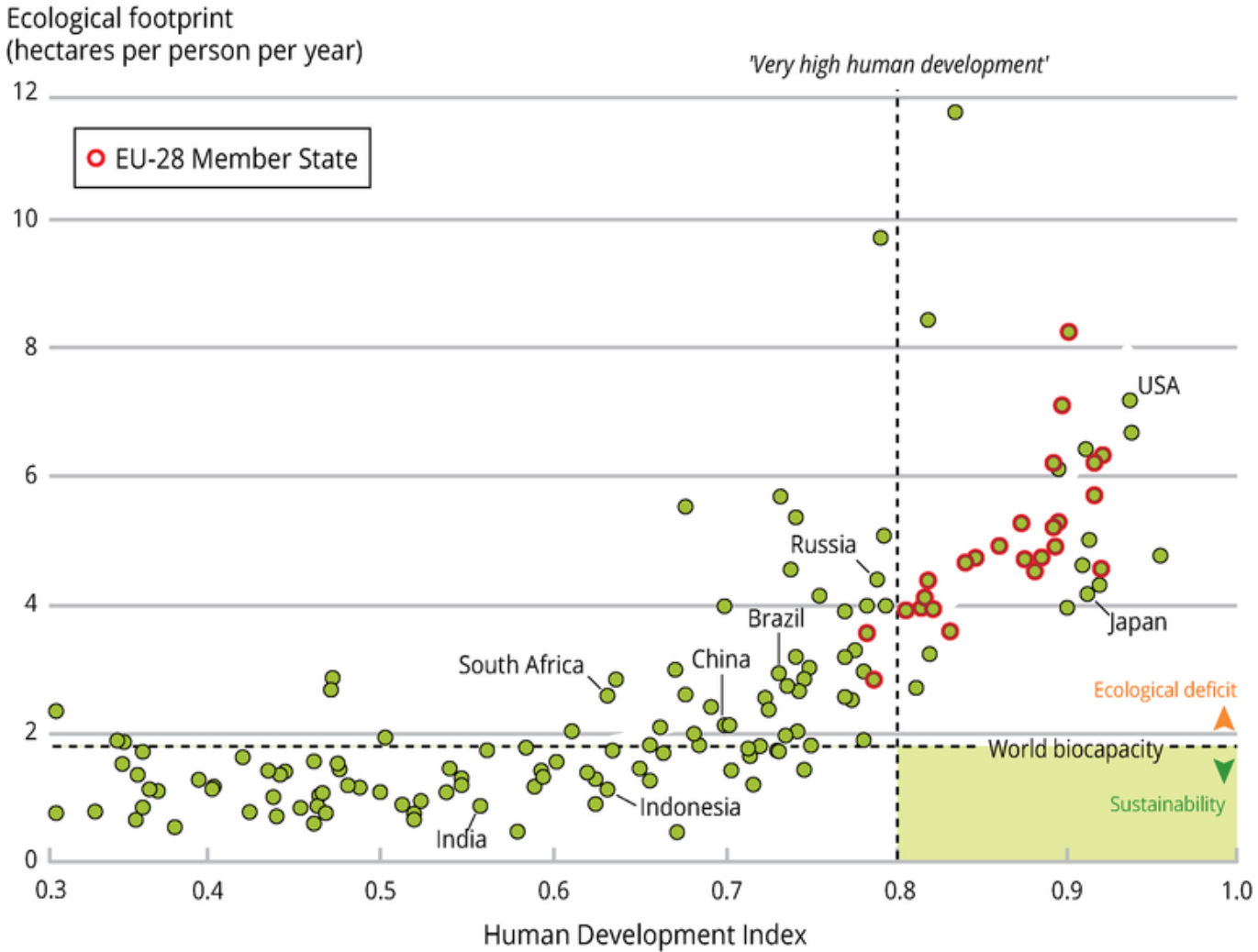
Sustainability prospects



Sustainability prospects



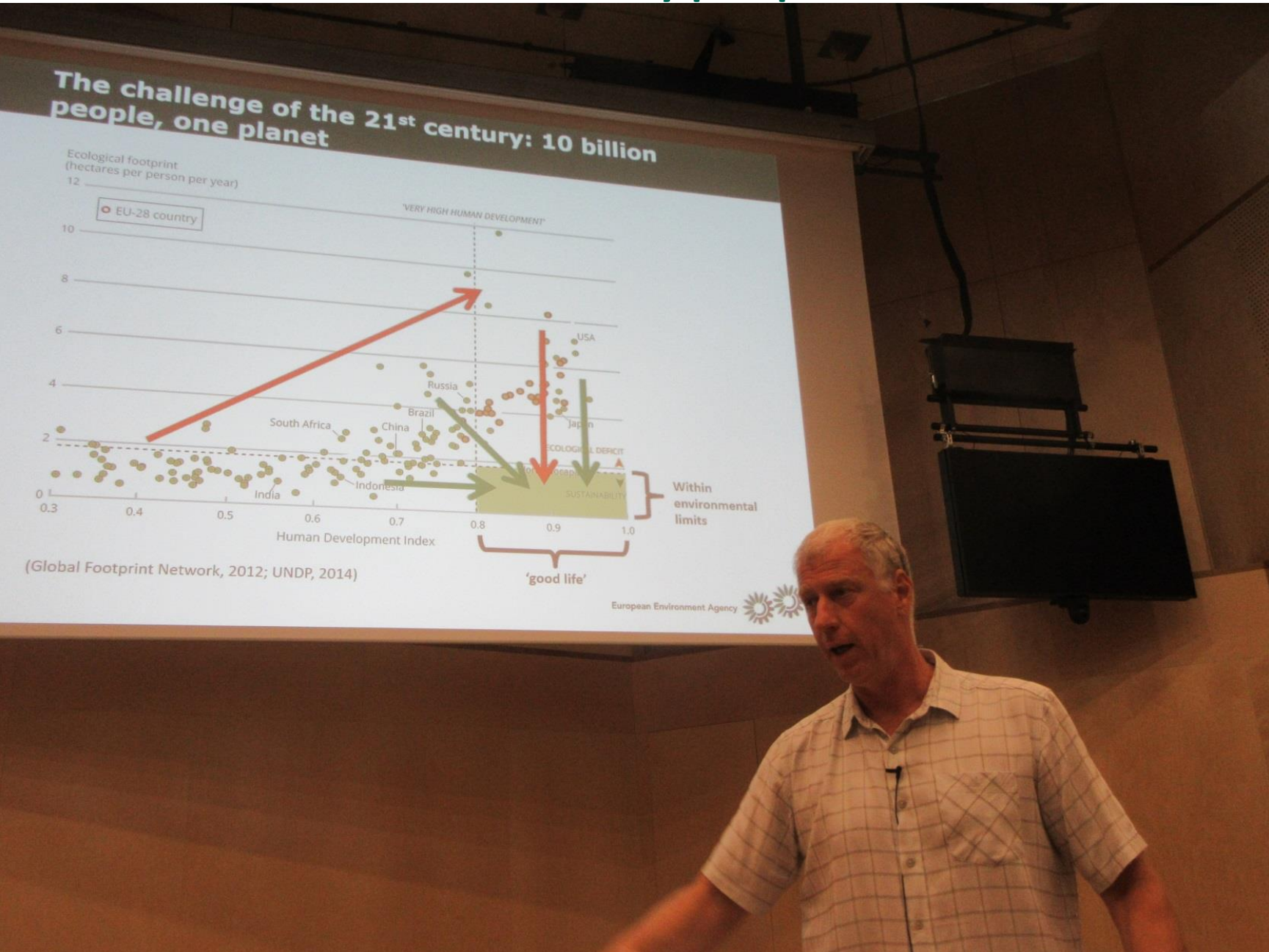
Sustainability prospects



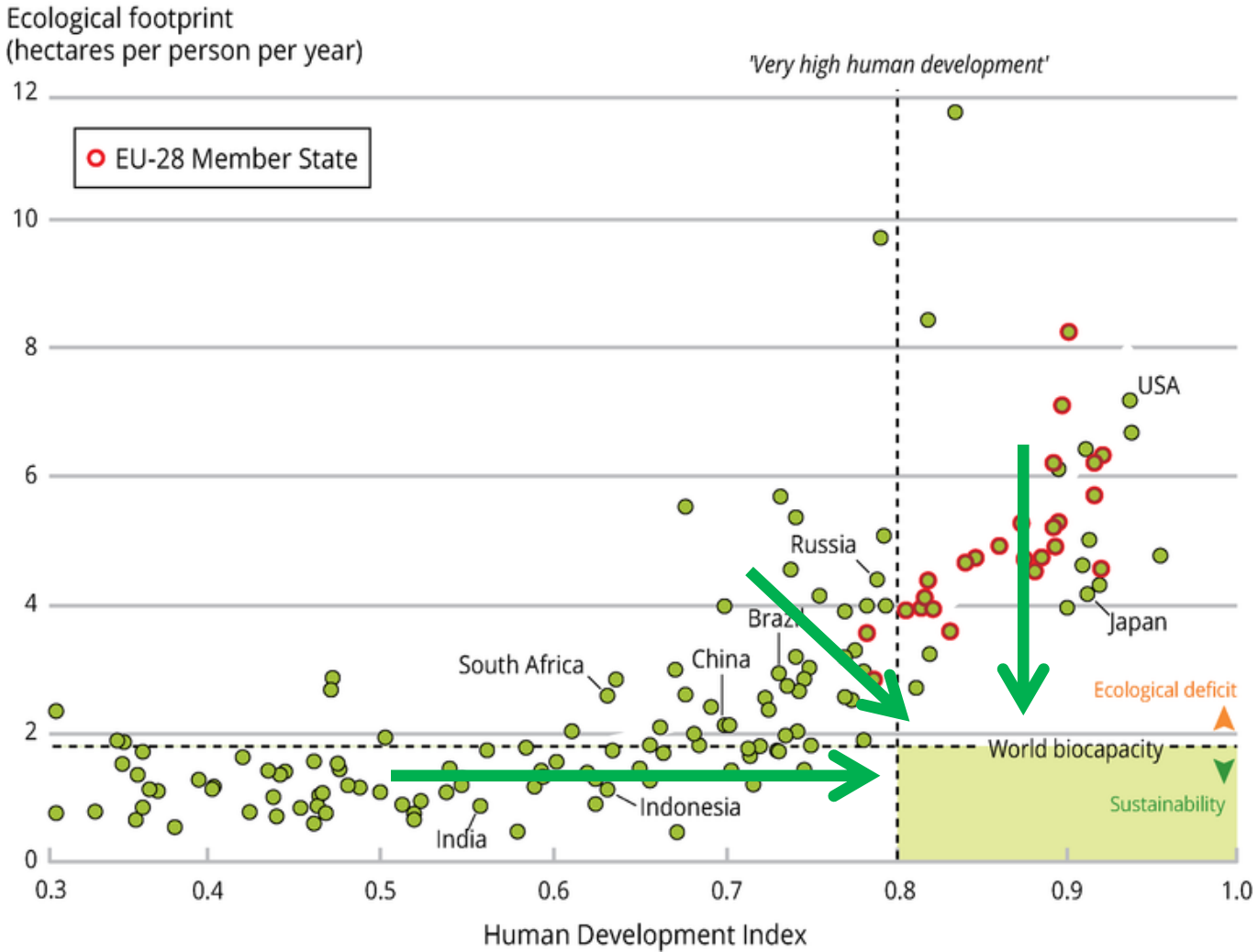
Sustainability prospects



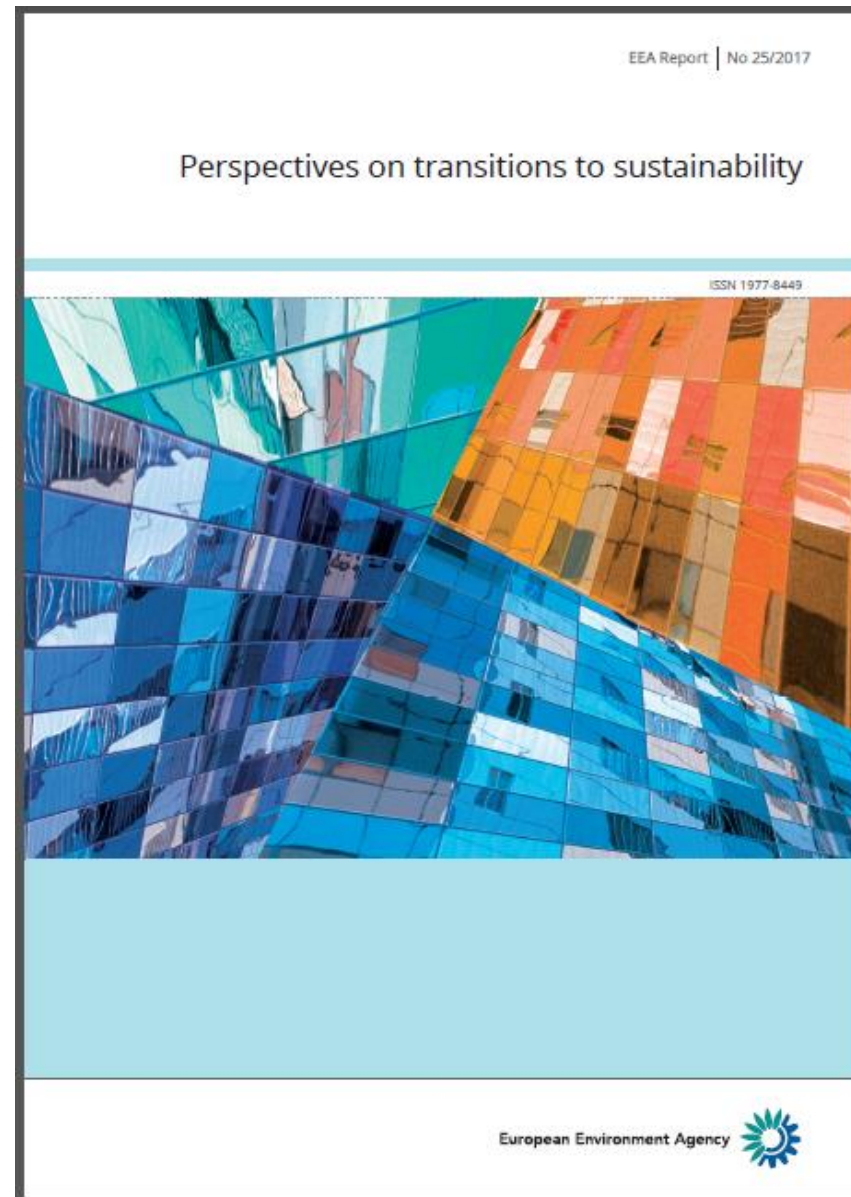
Sustainability prospects



Sustainability prospects



Sustainability prospects



Sustainability prospects

1. Transformations in **socio-ecological** systems

Socio-ecological system

can be described as a coherent system characterised by interconnections, mutual dependencies and dynamic relationships between **humans** and the **environment**.

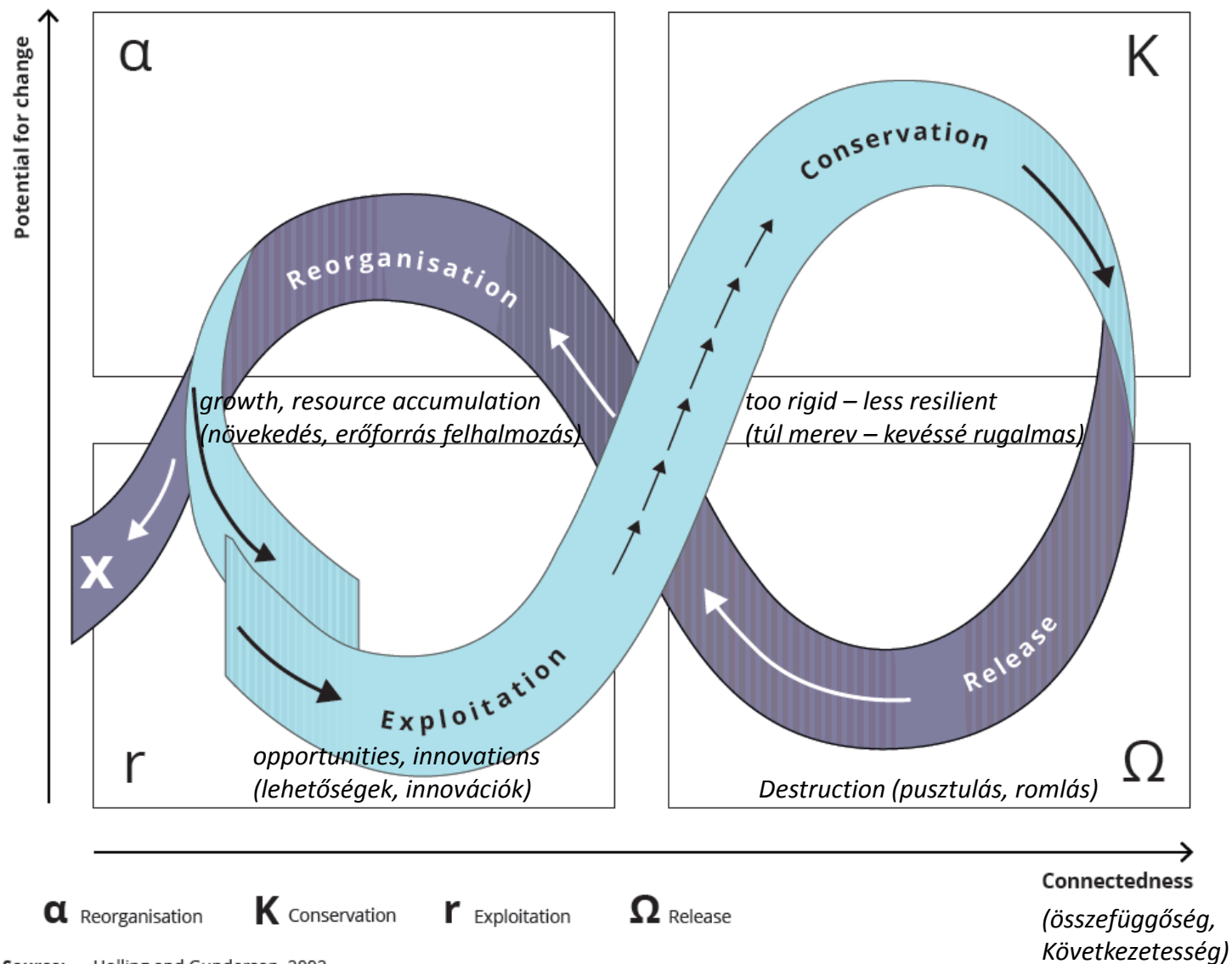


Key words:

- Global responsibility
- Transformation extends beyond disciplinary boundaries

Sustainability prospects

1. Transformations in socio-ecological systems



Source: Holling and Gunderson, 2002.

Resource: <http://eionet.kormany.hu/download/3/ac/12000/TH-AL-17-025-EN-N.pdf>

Sustainability prospects

1. Transformations in **socio-ecological** systems

„...a key question is whether or not society can collectively avoid the **creative destruction (kreatív pusztulás)** /release phase (Ω) at a global level (associated with exceeding planetary boundaries) And instead allow some parts of socio-ecological systems to collapse and move into a state of renewal (α).”

Sustainability prospects

2. Socio-technical transitions to sustainability



Unleaded fuel



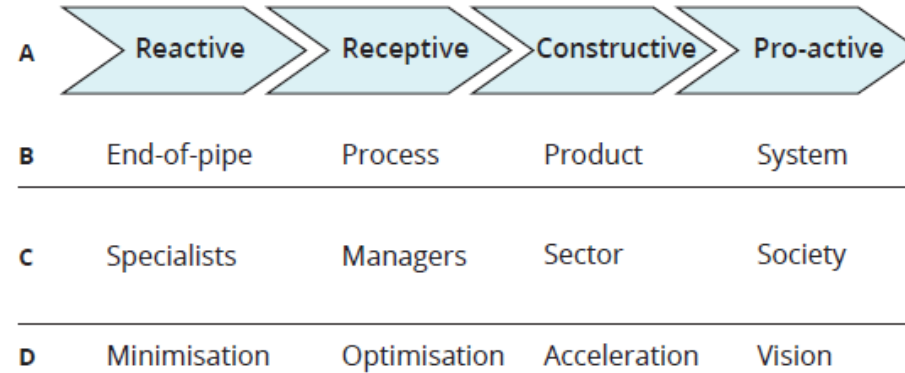
Slow steam



Solar boats



...Necessity of shipping?



A Response phase

B Focus of attention

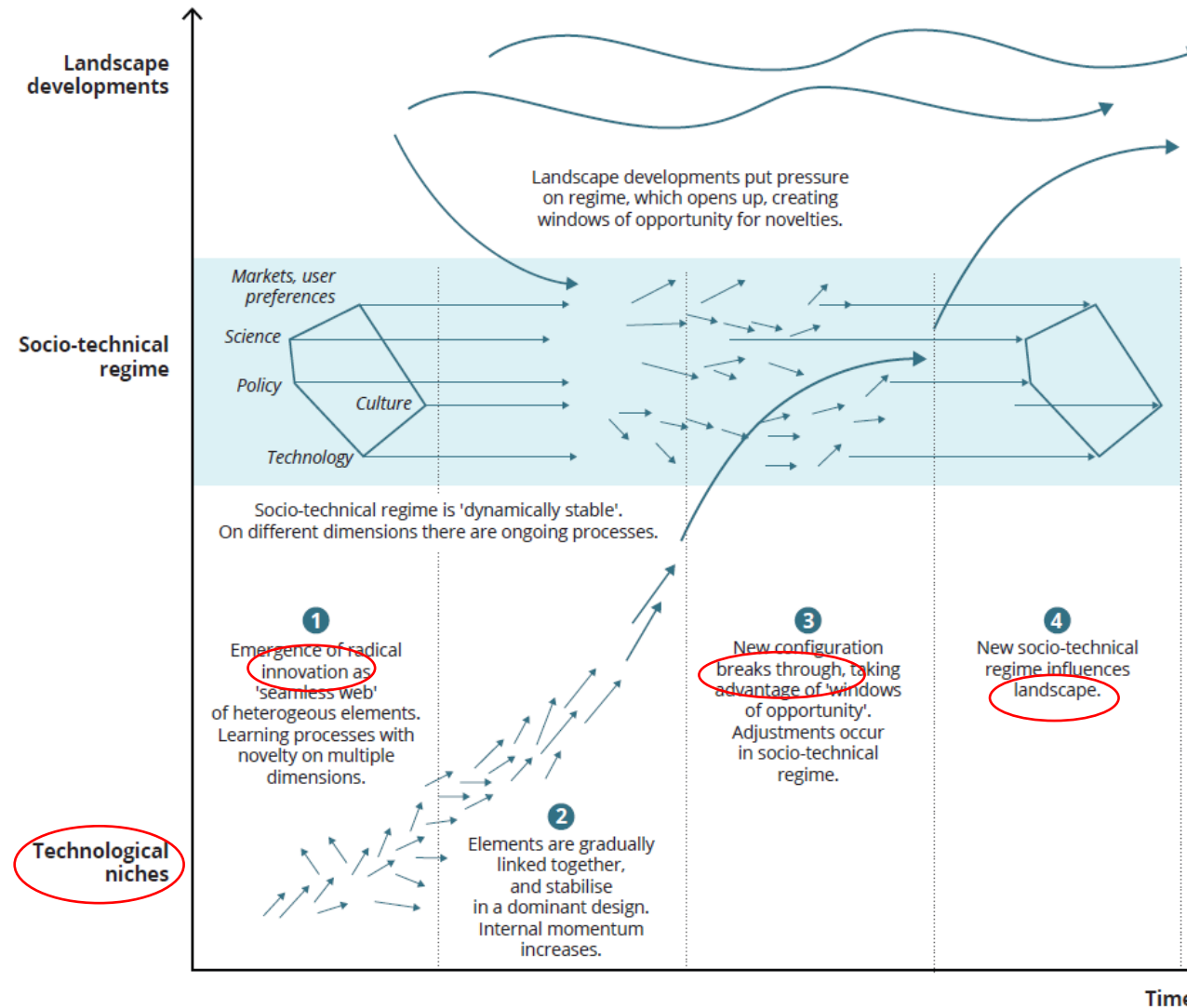
C Main actors

D Driving philosophy

Phases and orientations in environmental policies

Sustainability prospects

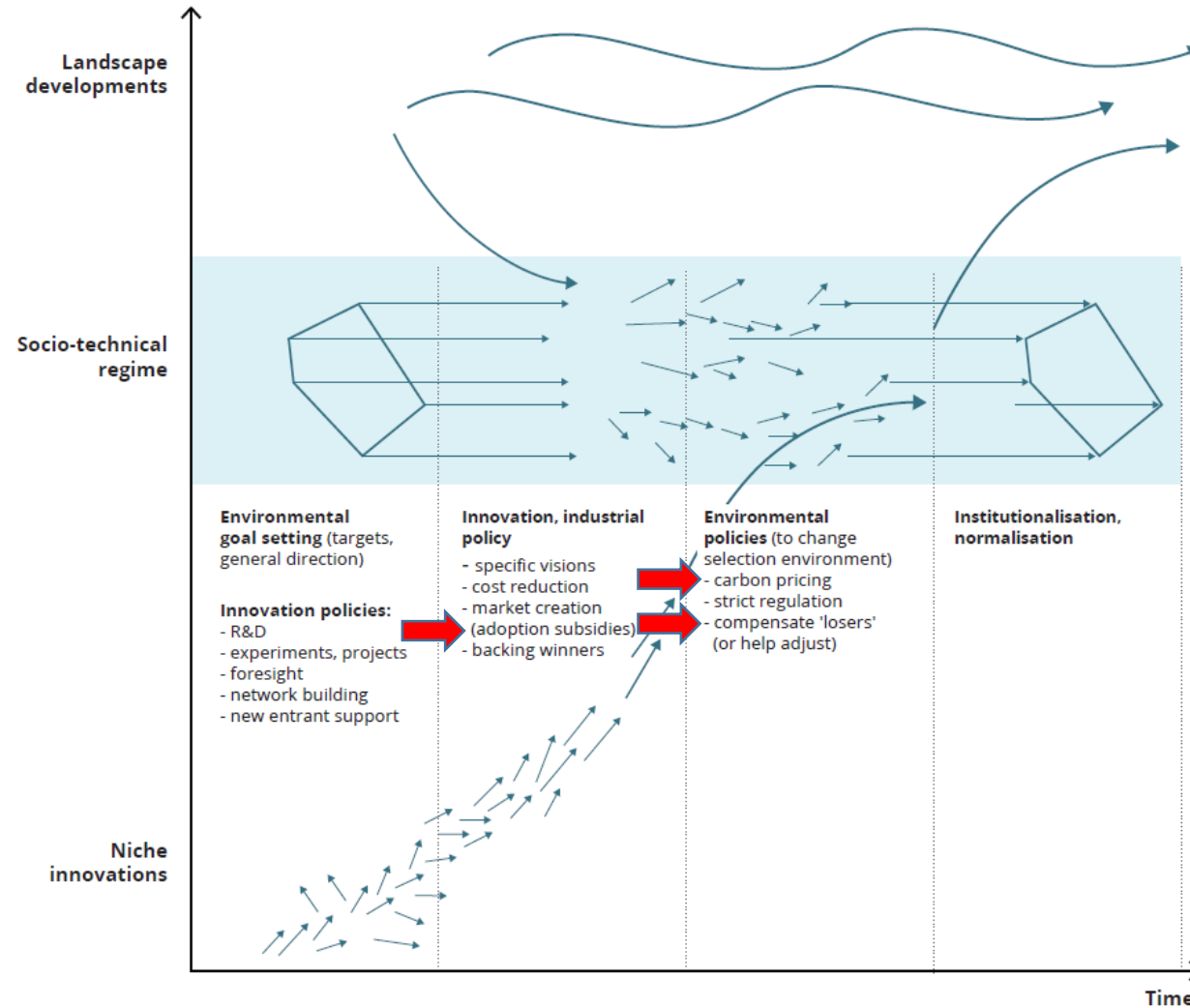
2. Socio-technical transitions to sustainability



Multi-level perspective on socio-technical transitions

Sustainability prospects

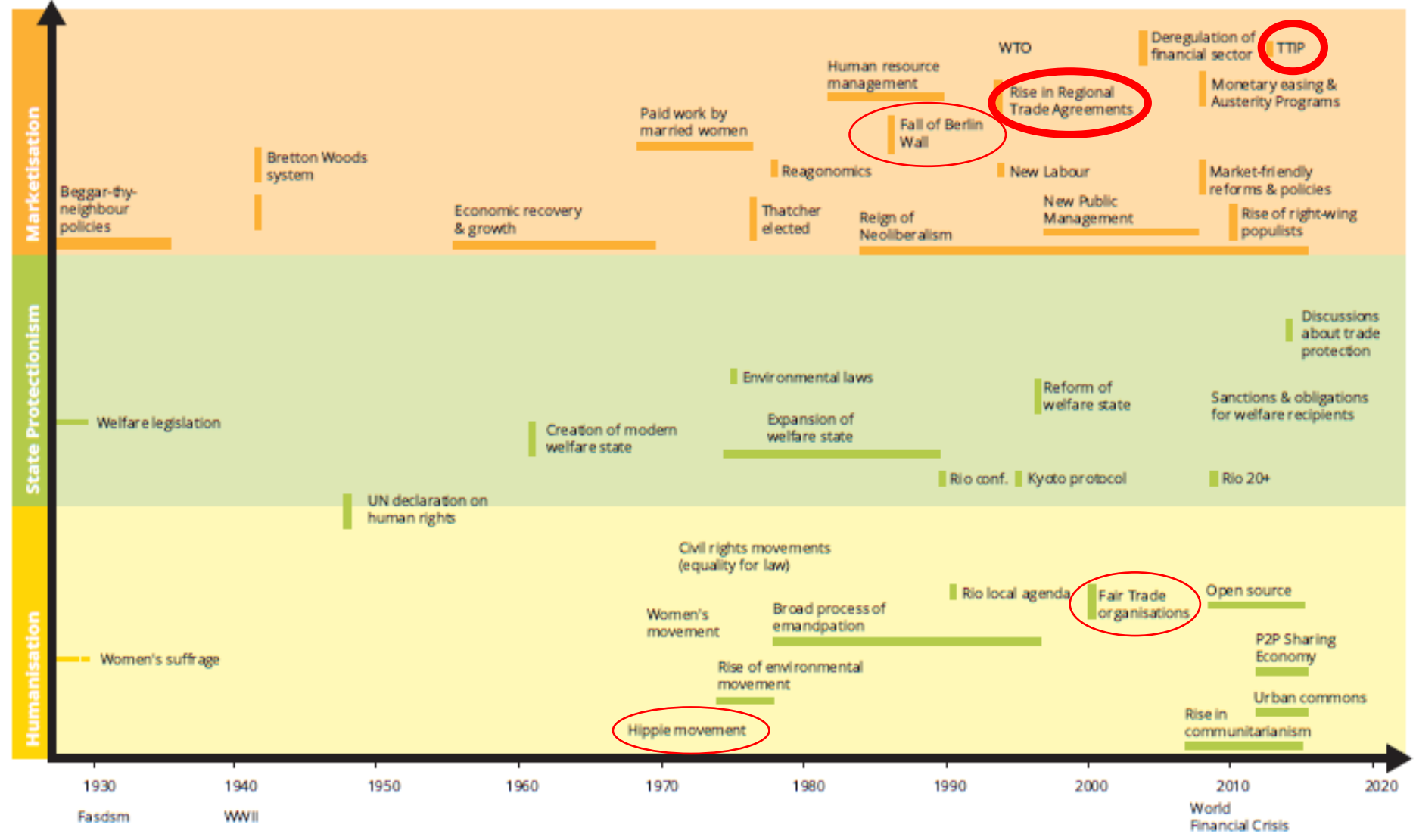
2. Socio-technical transitions to sustainability



Shifting mix of policy instruments during socio-technical transitions

Sustainability prospects

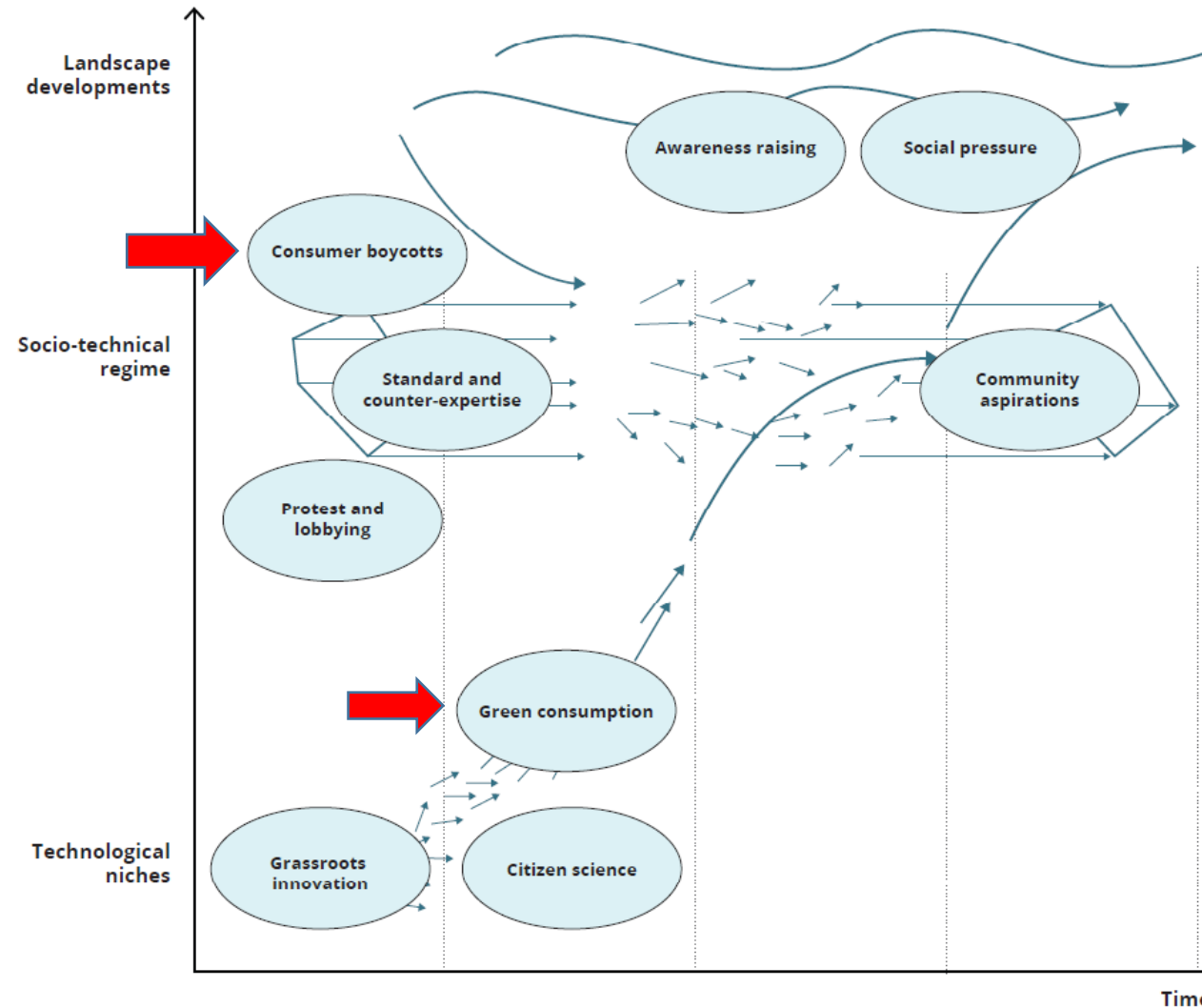
3. Socio-economic transformations: insights for sustainability



Historical dynamics of marketization, state protectionism and humanisation

Sustainability prospects

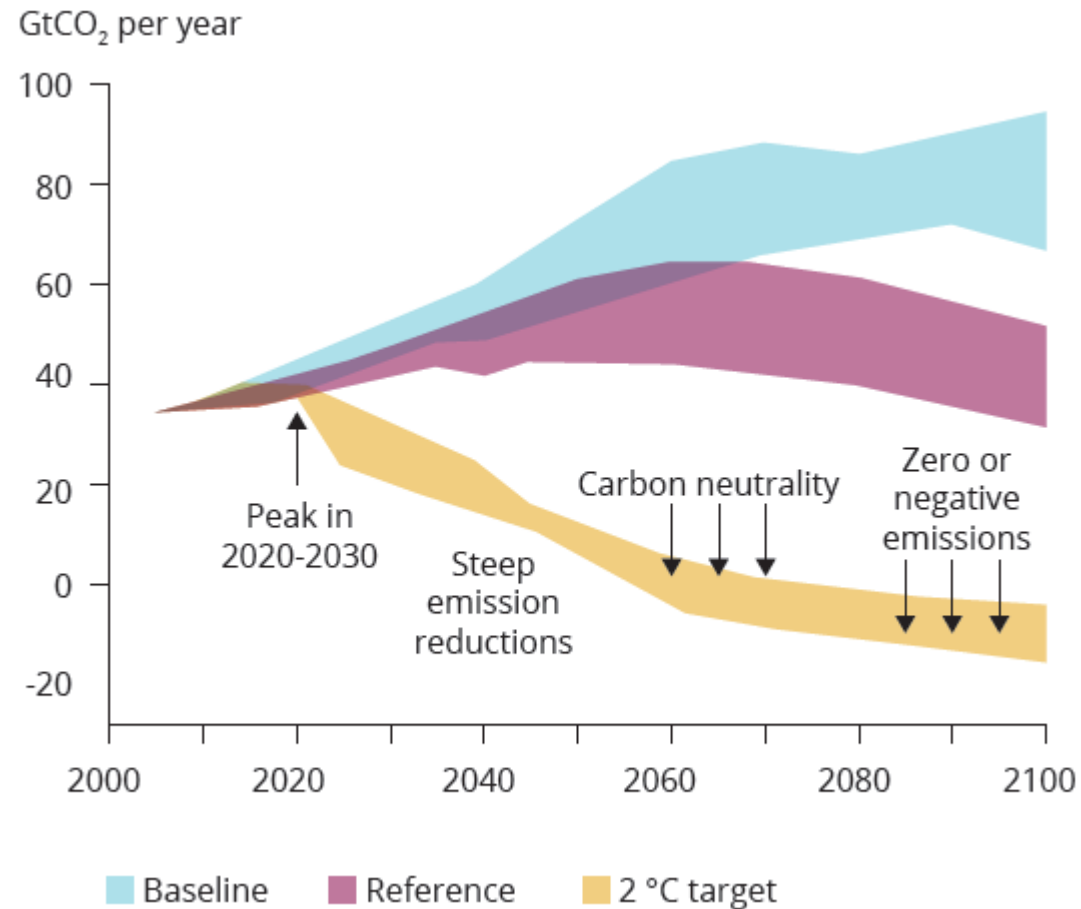
4. Action-oriented perspectives on transitions and system innovation



Mapping civil society activity in sustainable electricity transitions

Sustainability prospects

5. Integrated assessment modelling approaches to analysing systemic change

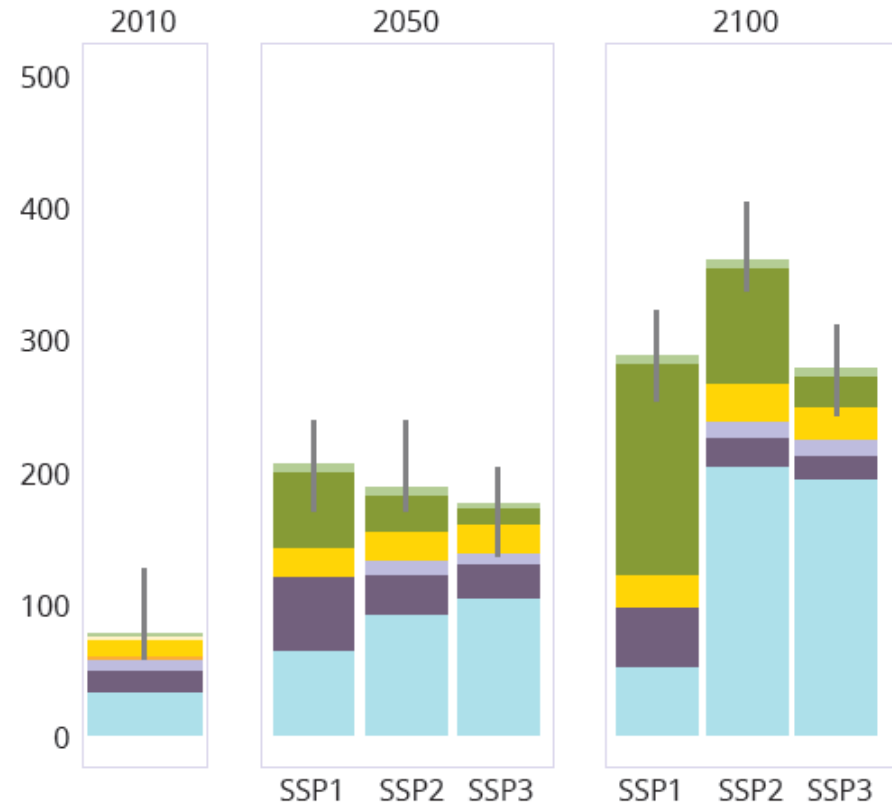


Phases of transitions

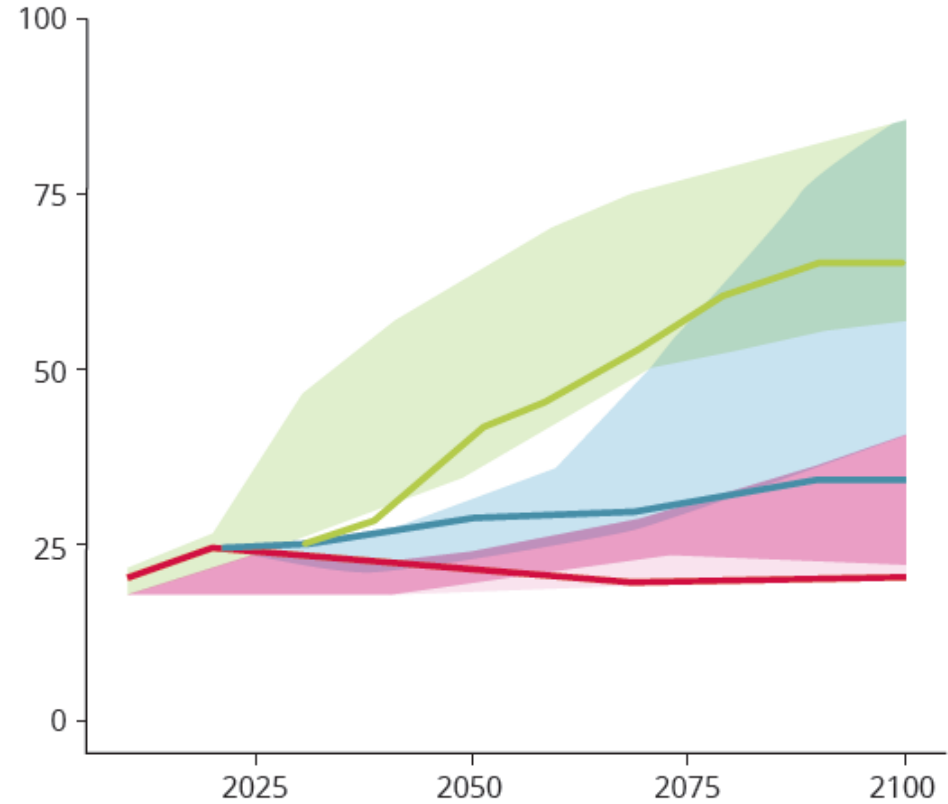
Sustainability prospects

5. Integrated assessment modelling approaches to analysing systemic change

Secondary Energy (EJ/yr)



Renewable share (%)



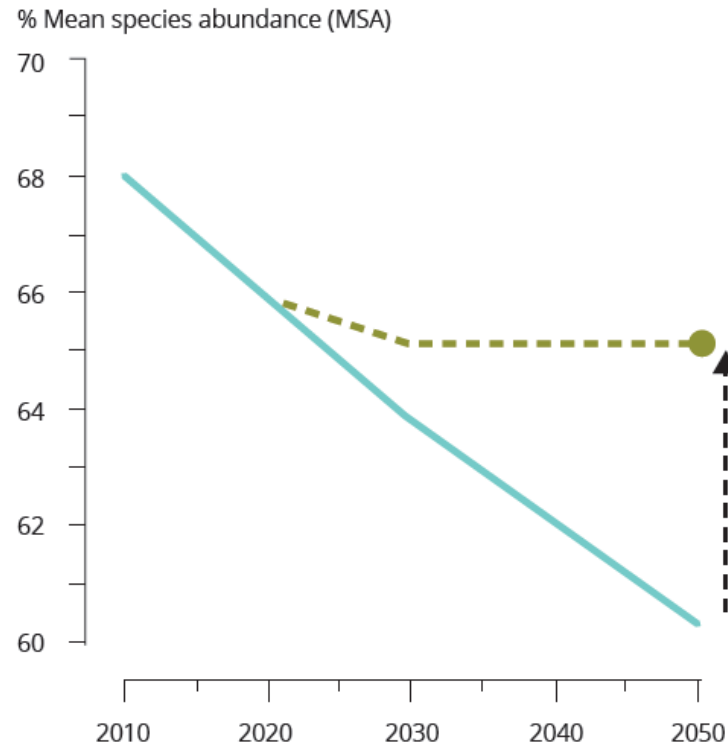
Coal Gas Nuclear Biomass Hydro Solar wind Other

SSP1 SSP2 SSP3

Power system development and proportion of renewable energy

Sustainability prospects

5. Integrated assessment modelling approaches to analysing systemic change

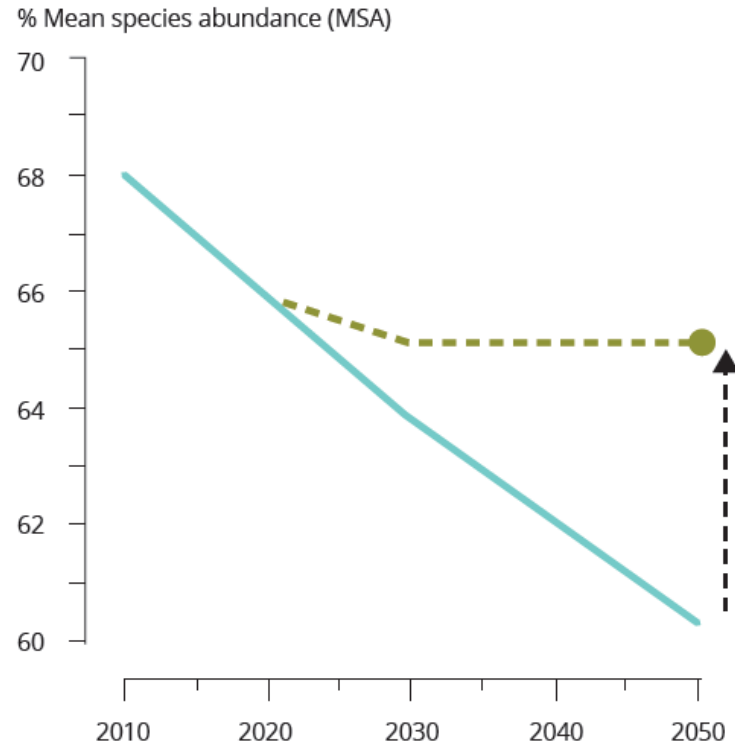


- Trend scenario
- Goal
- - - Derivation of 2050 goal
- ↑ Policy gap

Global biodiversity

Sustainability prospects

5. Integrated assessment modelling approaches to analysing systemic change



- Trend scenario
- Goal
- - - Derivation of 2050 goal

↑ Policy gap

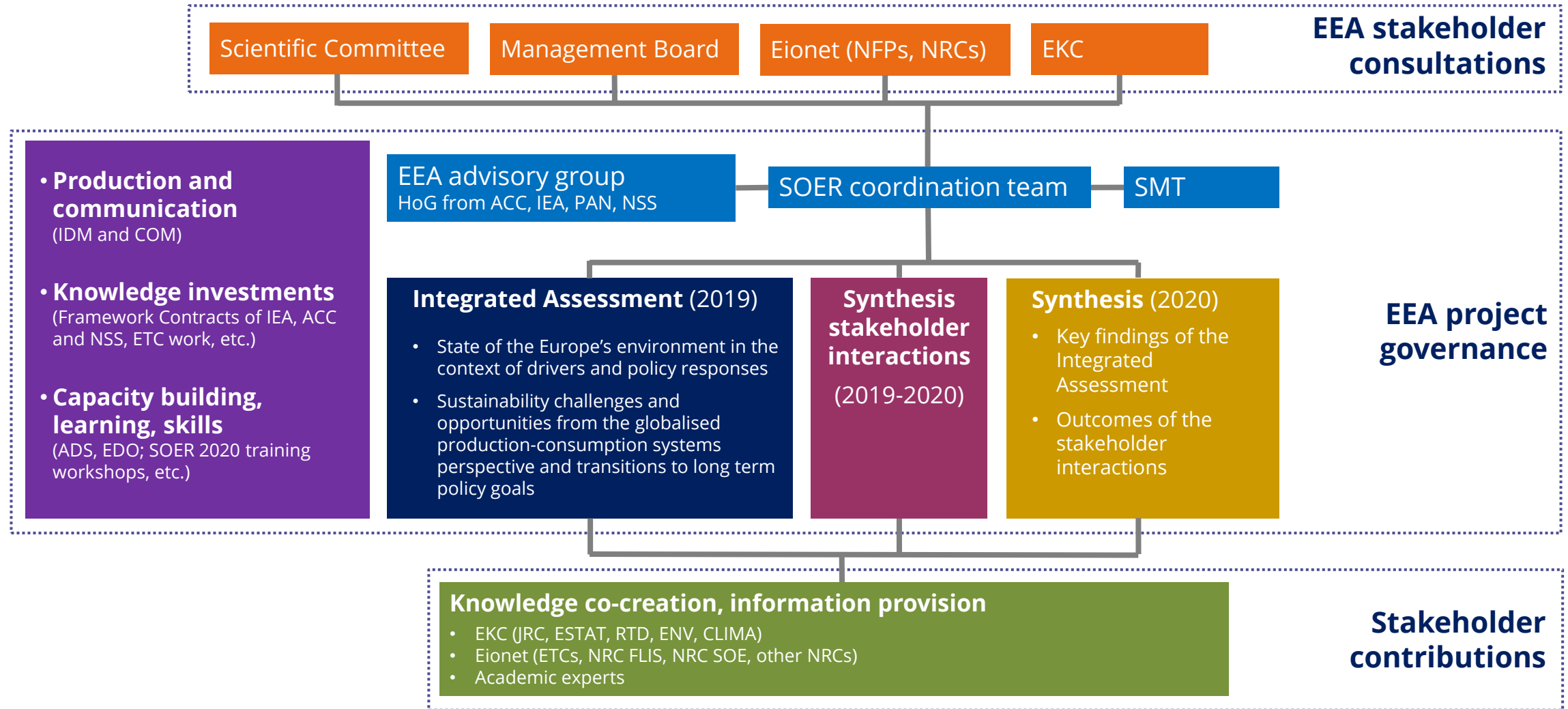
8th Environmental Action Programme, 2020?...

Global biodiversity

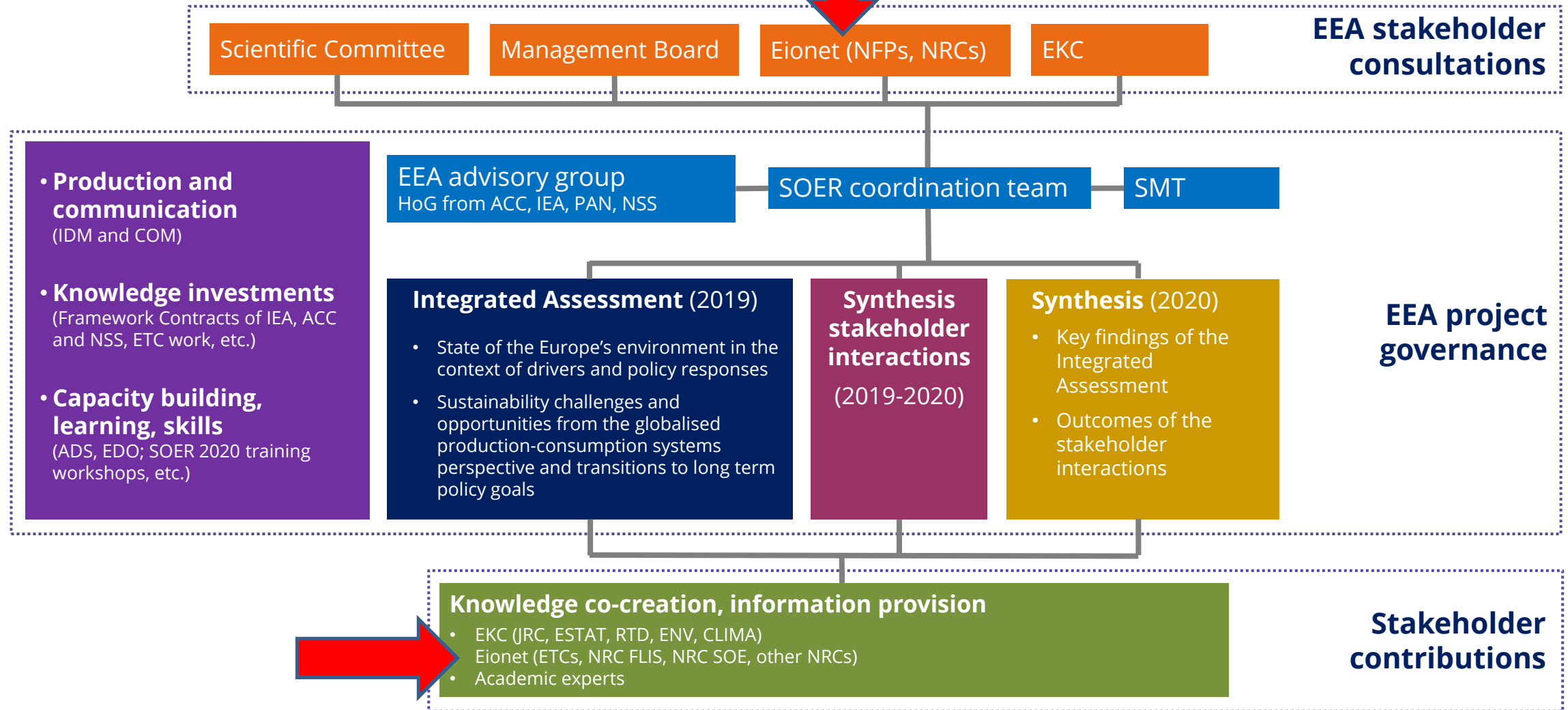
SOER 2020 – time line and milestones



SOER 2020 overall governance structure



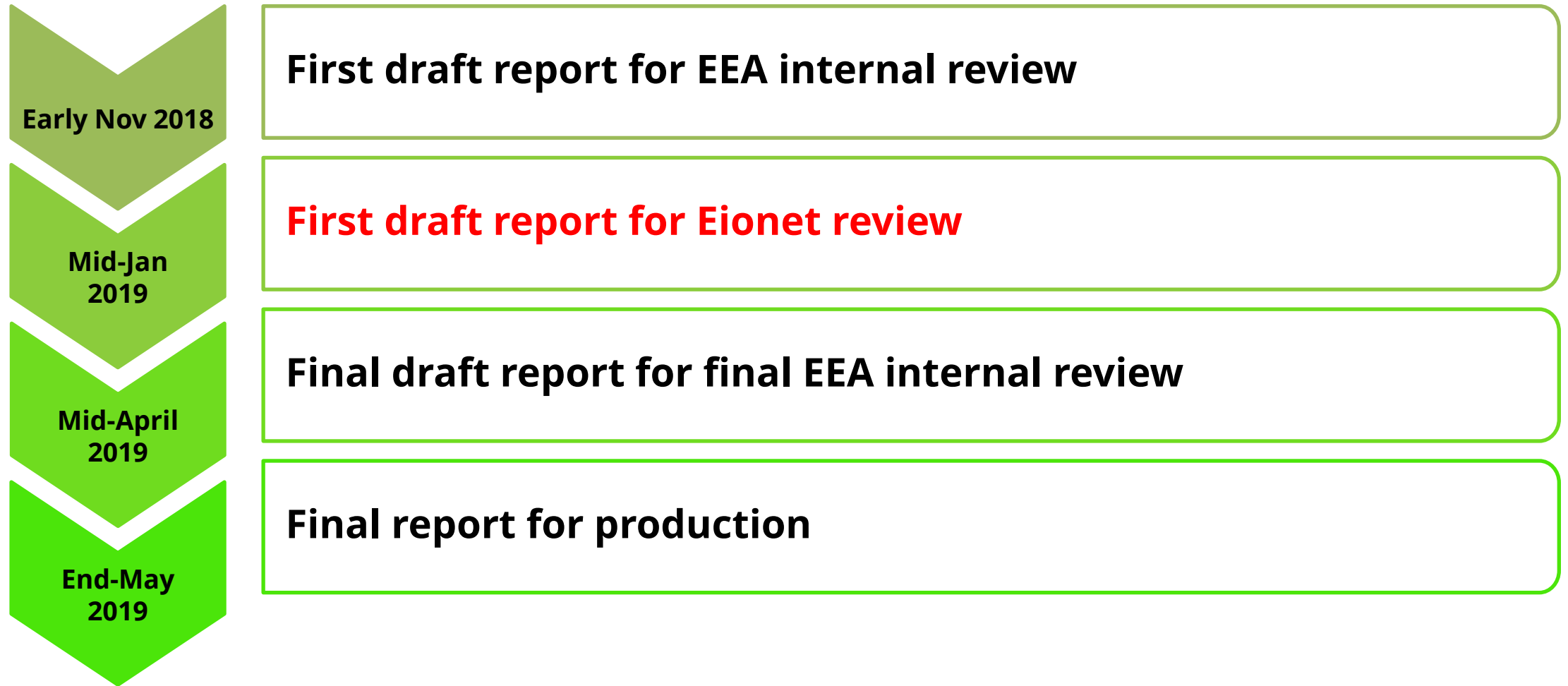
SOER 2020 overall governance structure



Overall schedule

		Setting the scene	Environmental / climate trends	Sustainability prospects	Conclusions	
2018		Whole report	PART 1	PART 2	PART 3	Part 4
Jan	01 to 15		Planning, content development	Developing annotated outlines	Planning, content development	
	16 to 31					
Feb	01 to 15				Developing annotated outlines	
	16 to 28					
Mar	01 to 15				Developing annotated outlines	
	16 to 31					
Apr	01 to 15		Developing annotated outlines			
	16 to 30					
May	01 to 15					Content planning
	16 to 31					
Jun	01 to 15			Developing first drafts		Developing annotated outline
	16 to 30					
Jul	01 to 15					
	16 to 31					
Aug	01 to 15		Developing first drafts		Developing first drafts	
	16 to 31					
Sep	01 to 15					Developing first draft
	16 to 30					
Oct	01 to 15			Cross-reading first drafts	Cross-reading first drafts	
	16 to 31			Revision of first drafts	Revision of first drafts	
Nov	01 to 15					
	16 to 30		SMT & EEA AG consultation			

Milestones for content development



Early Nov 2018

First draft report for EEA internal review

Mid-Jan
2019

First draft report for Eionet review

Mid-April
2019

Final draft report for final EEA internal review

End-May
2019

Final report for production

Text boxes

valuation will not fully include the intrinsic value of nature or the cultural and spiritual services that it provides.

Box 3.1 Structure of Chapter 3

Assessing trends in natural capital is a comprehensive undertaking, and SOER 2010 highlighted the need for dedicated management of natural capital as a means of integrating environmental priorities and the many sectoral interests that depend upon them. This chapter focuses on ecosystems, and complements the focus on the resources component of natural capital in Chapter 4. The sections within this chapter attempt to assess ecosystem capital by addressing three dimensions:


- trends in the state of — and prospects for — biodiversity, ecosystems, and their services, with a focus on biodiversity, land, soils, freshwater and marine ecosystems (Sections 3.3 to 3.5, 3.8);
- trends in the impacts of pressures on ecosystems and their services, with a focus on climate change as well as on the emission of nutrients and pollutants to the air and water (Sections 3.6 to 3.9);
- reflections on the scope for long-term, interconnected ecosystem-based management approaches (Section 3.10).

3.2 European policy aims to protect, conserve and enhance natural capital

The European Union and its Member States — as well as many neighbouring countries in Europe — have introduced a substantial amount of legislation to protect, conserve and enhance ecosystems and their services (Table 3.1). A wide range of European policies affect and benefit from natural capital. These include the Common Agricultural Policy, Common Fisheries Policy, cohesion policy, and rural development policies. The ultimate objective of these policies may not be protection of natural capital. Nevertheless, legislation to tackle climate change, chemicals, industrial emissions and waste helps to ease the pressures on soil, ecosystems, species, and habitats as well as reducing nutrient releases (EU, 2013).

National case study: Planting seeds of change in Hungary

- Growing local, sustainable food
 - Keeping agriculture GMO-free
 - Preserving a culture, one fruit species at a time
 - Promoting local, sustainable food: The “National Park Product” trademark
 - Bigger isn’t always better: The short food supply chain programme
- Community-building and education
 - Building communities by cultivating gardens
 - Ecology and education among the trees: Forest schools
 - Connecting to crops through schoolyard gardens



What seeds of change are you planting in your country?

Innovation for sustainability
ISI INNOVA

Fotó verseny: küld be a legjobb vizes képed



1. A víz és mi

Isszuk, fürdünk benne és főzünk vele. Az árvizek vagy az aszályok egész városokat érintenek. Mit jelent a víz Neked?

2. Víz és természet

Folyók, tavak és tengerek nem csak segítik a földi életet, de maguk is otthont adnak számos állatnak és növénynek. Az óceánok kulcs szerepet játszanak a bolygó éghajlatának kiegyensúlyozásában. El tudod kapni mindazt a látható és láthatatlan hasznot, amit a vizek jelentenek? Vajon a tiszta vizek veszélyben vannak?

3. Víz és gazdaság

A víz alapvető a mezőgazdaságban, az áramellátásban és sok termék létrehozásában. A folyók és a tengerek a legfőbb kereskedelmi útvonalak – összekötnek országokat és kultúrákat. Miért fontos a víz a gazdaságunkban? Hogyan hat a gazdaság a vizekre?



Thank you for your attention!
Köszönöm a figyelmet!

