

Expanding the knowledge base for policy implementation and long-term transitions

Multiannual Work Programme 2014-2018

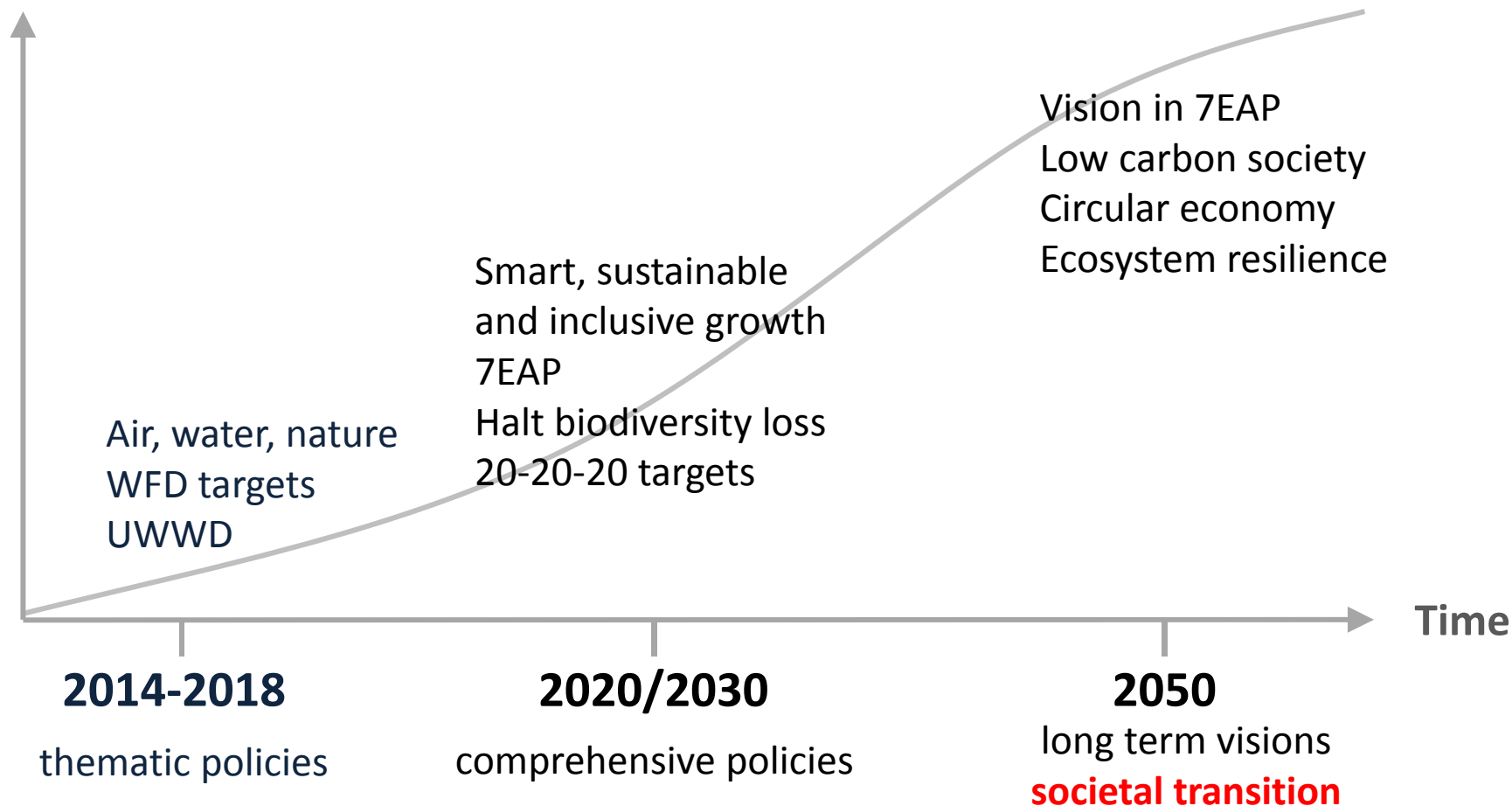
Aarhus, 3 October 2013

Dr Hans Bruyninckx
Executive Director, European Environment Agency



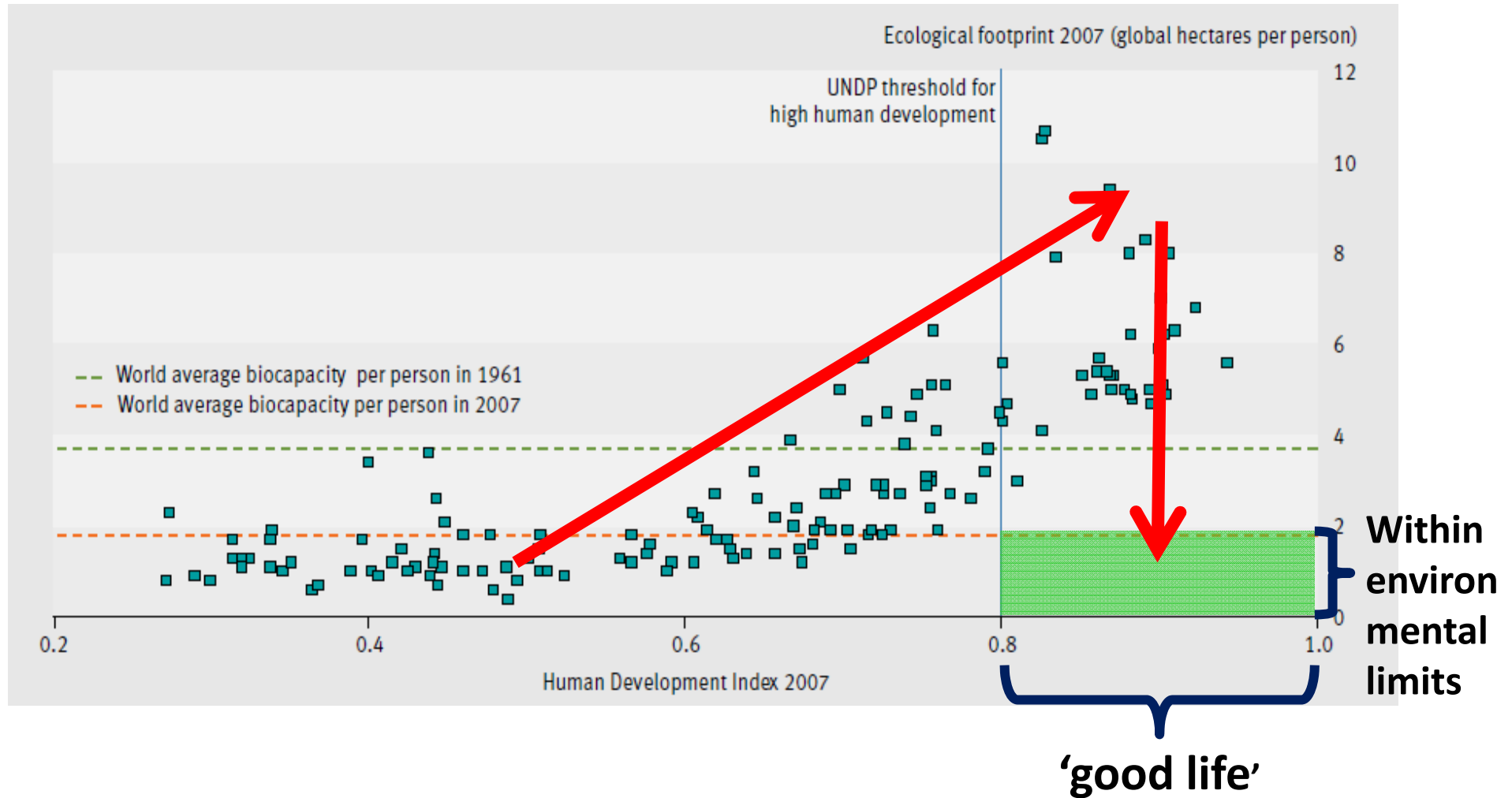
The developing policy framework

Sustainability



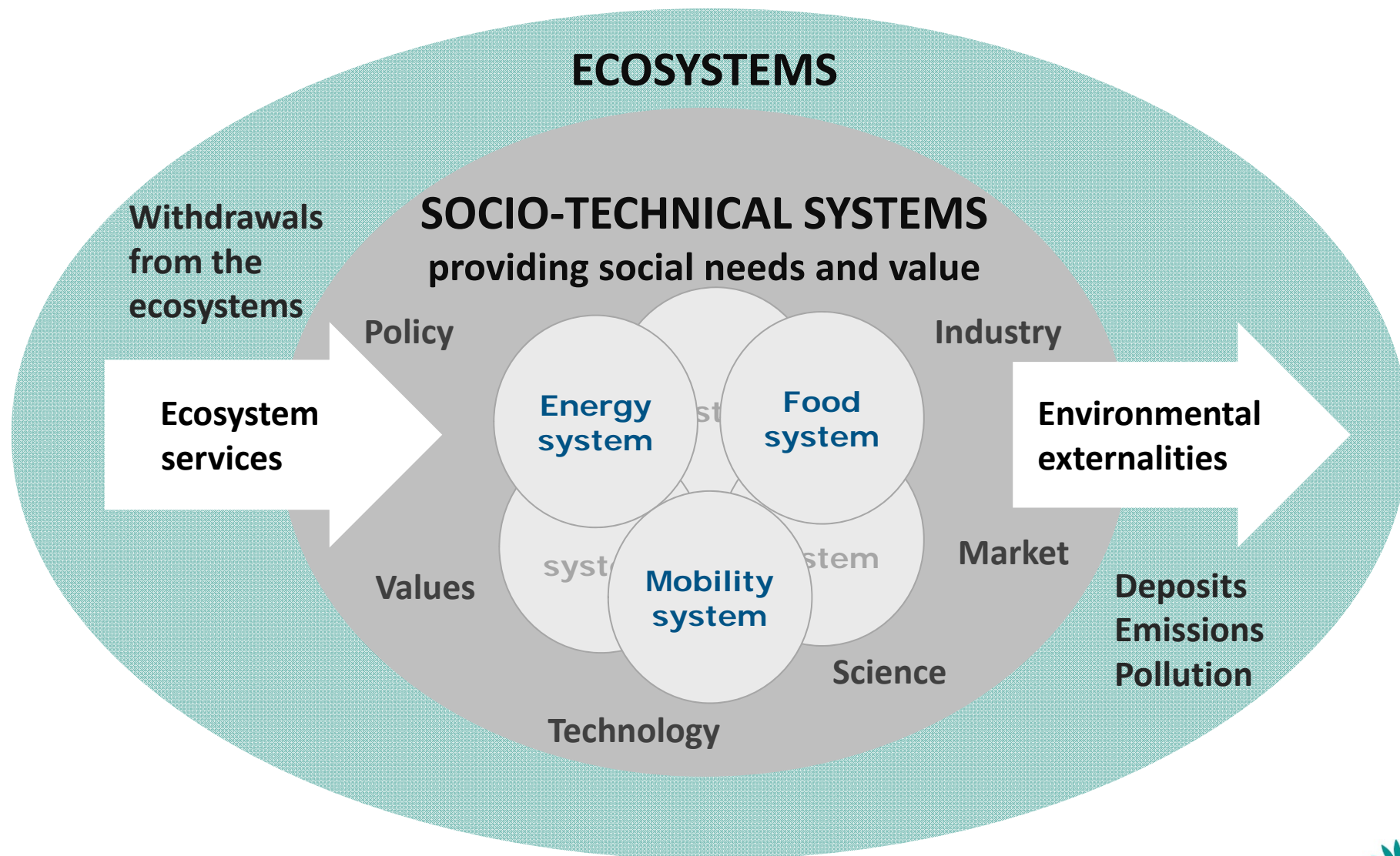


The twin challenge





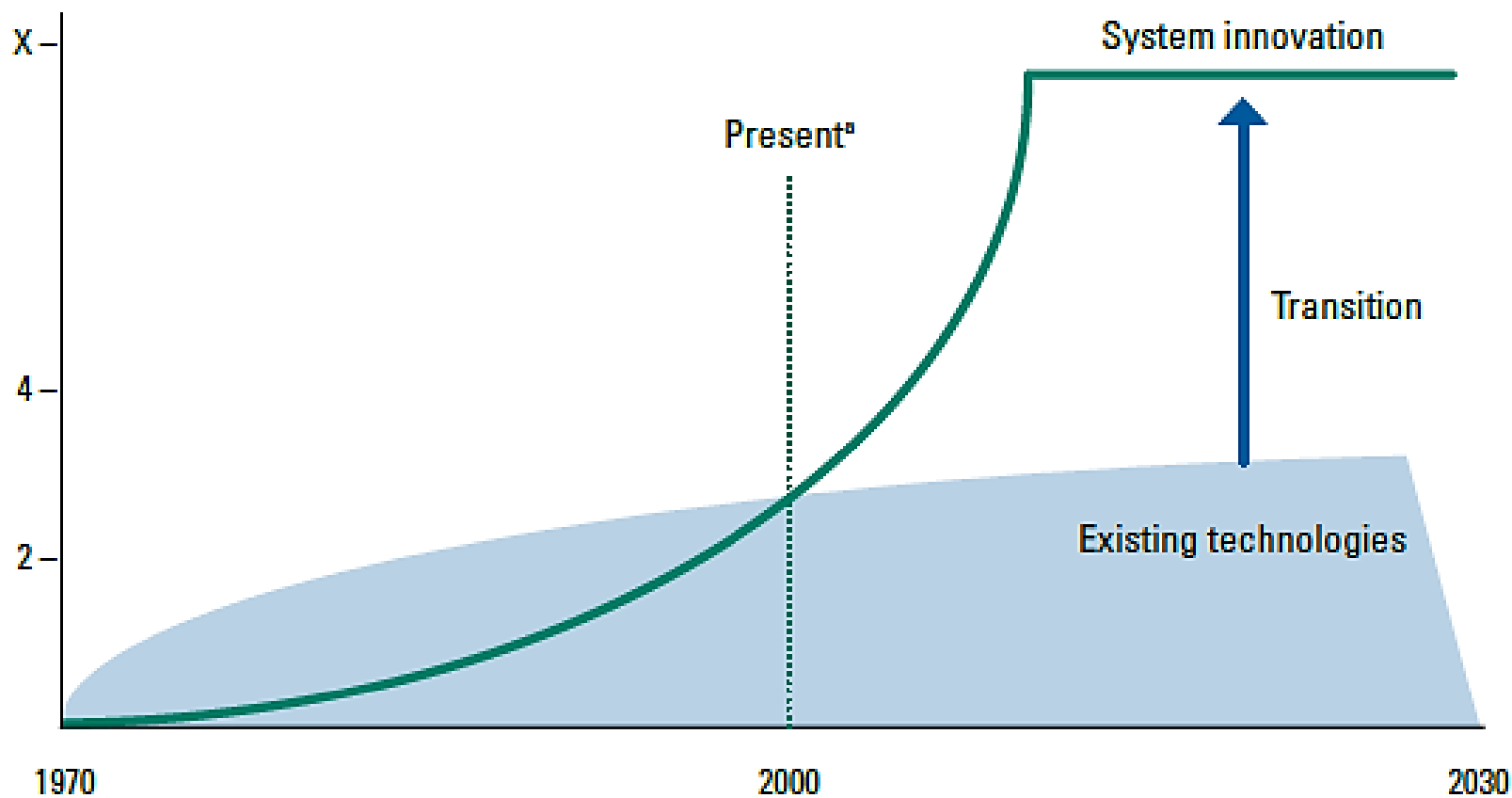
Living within ecological limits





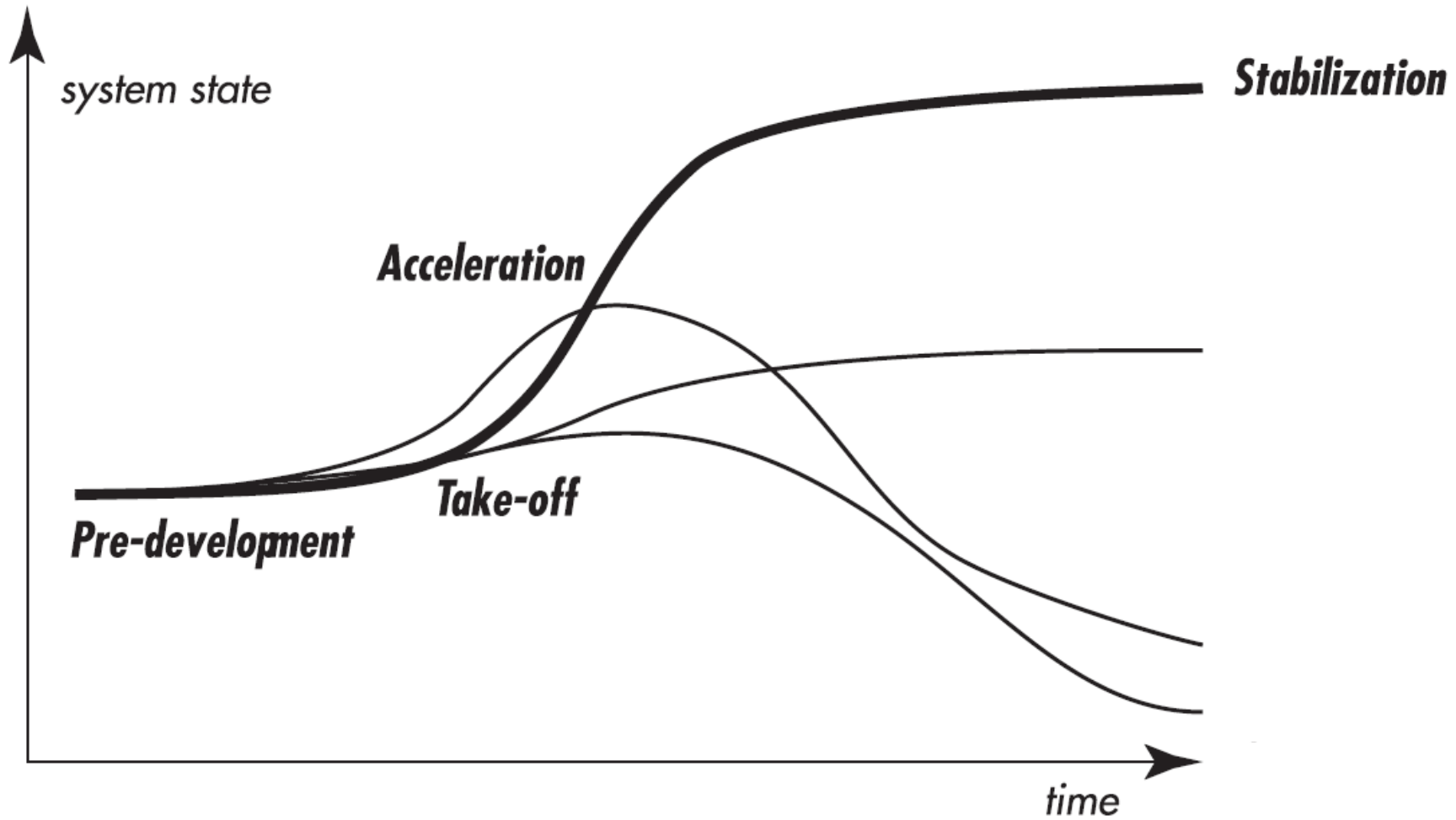
From efficiency gains to system innovation

Improvement in eco-efficiency
Factor



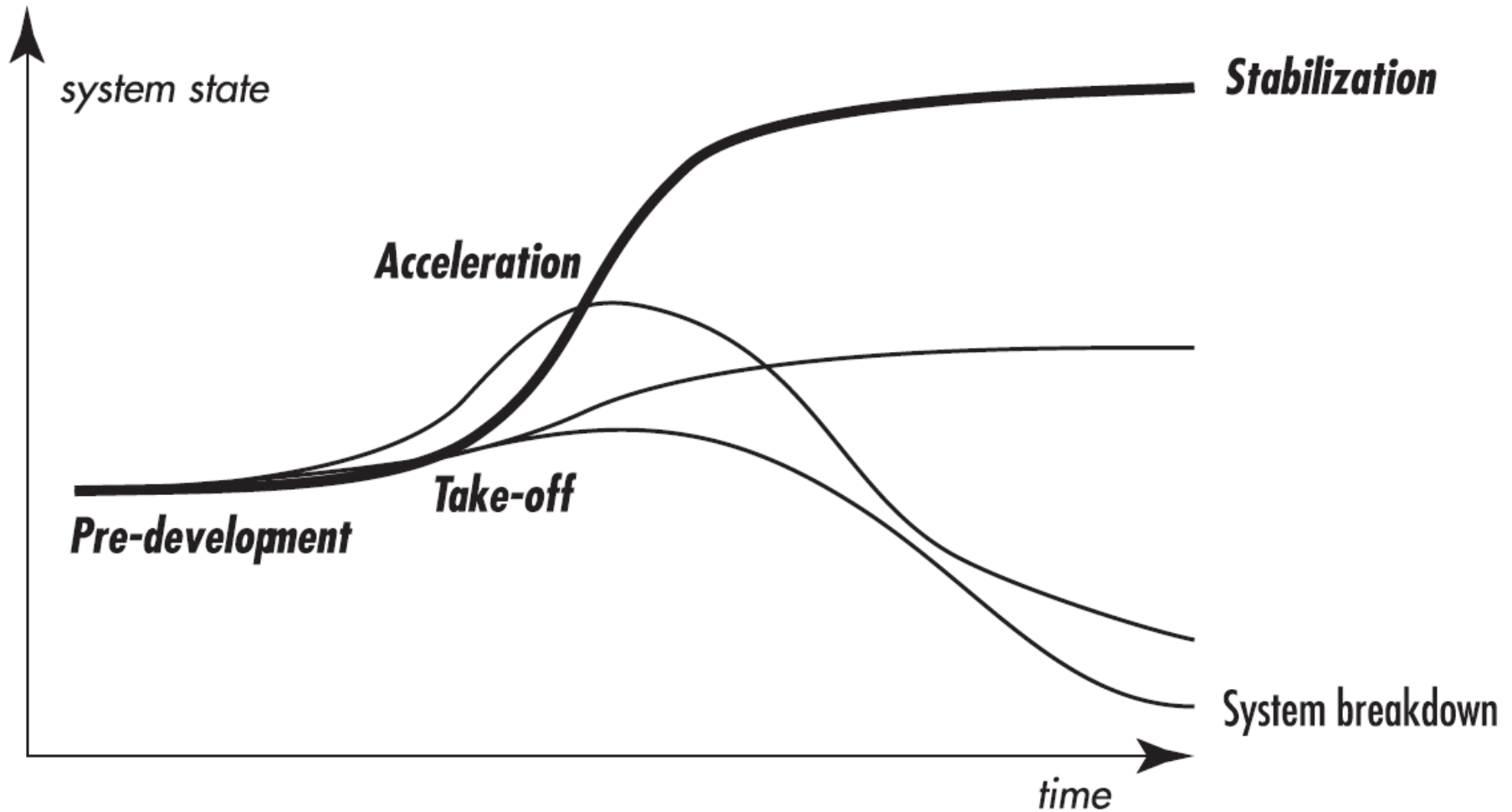
Source: UNEP (2011)

Multi-phase trajectory



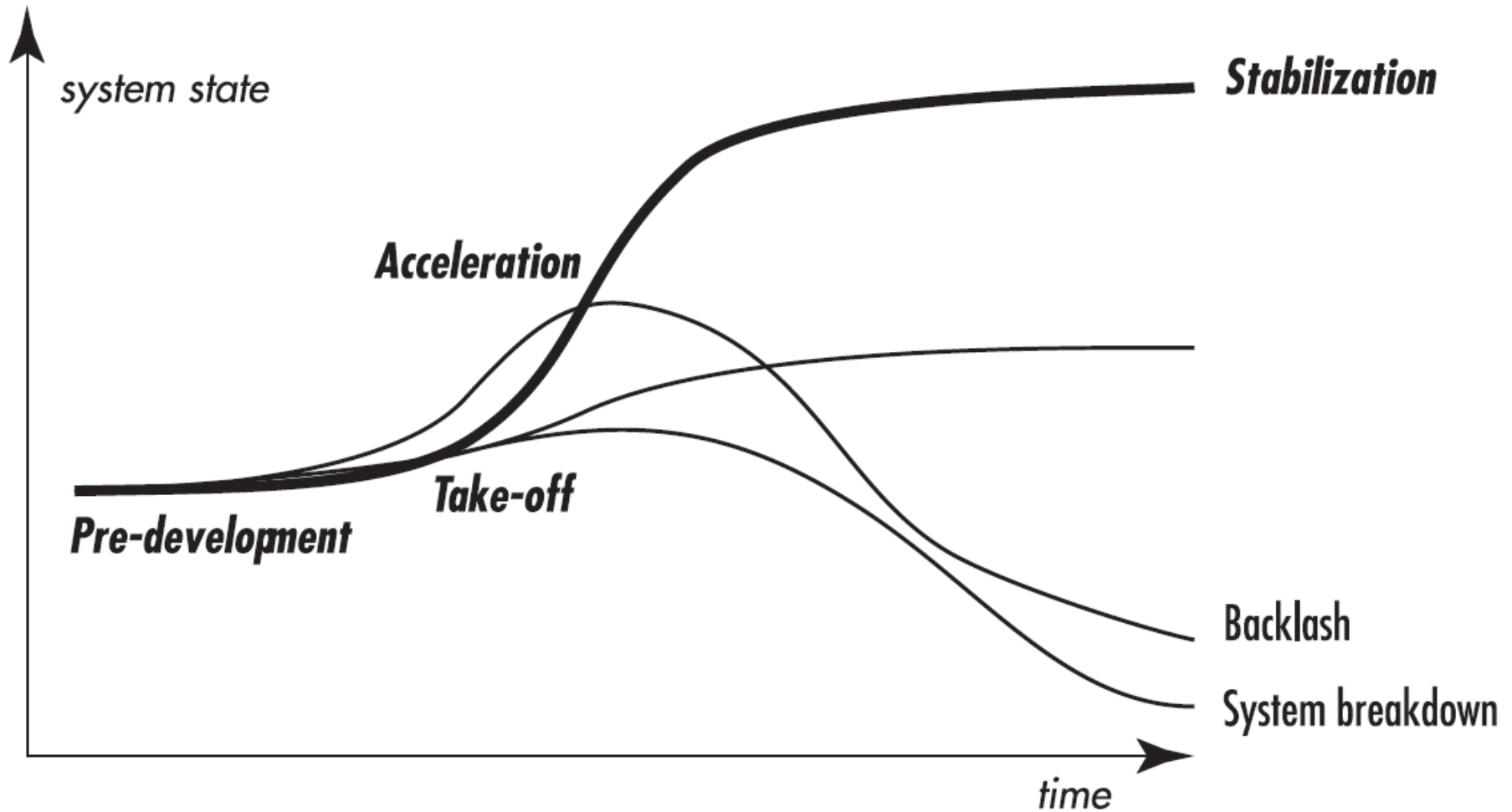
Source: van der Brugge & de Haan (2005)

Multi-phase trajectory



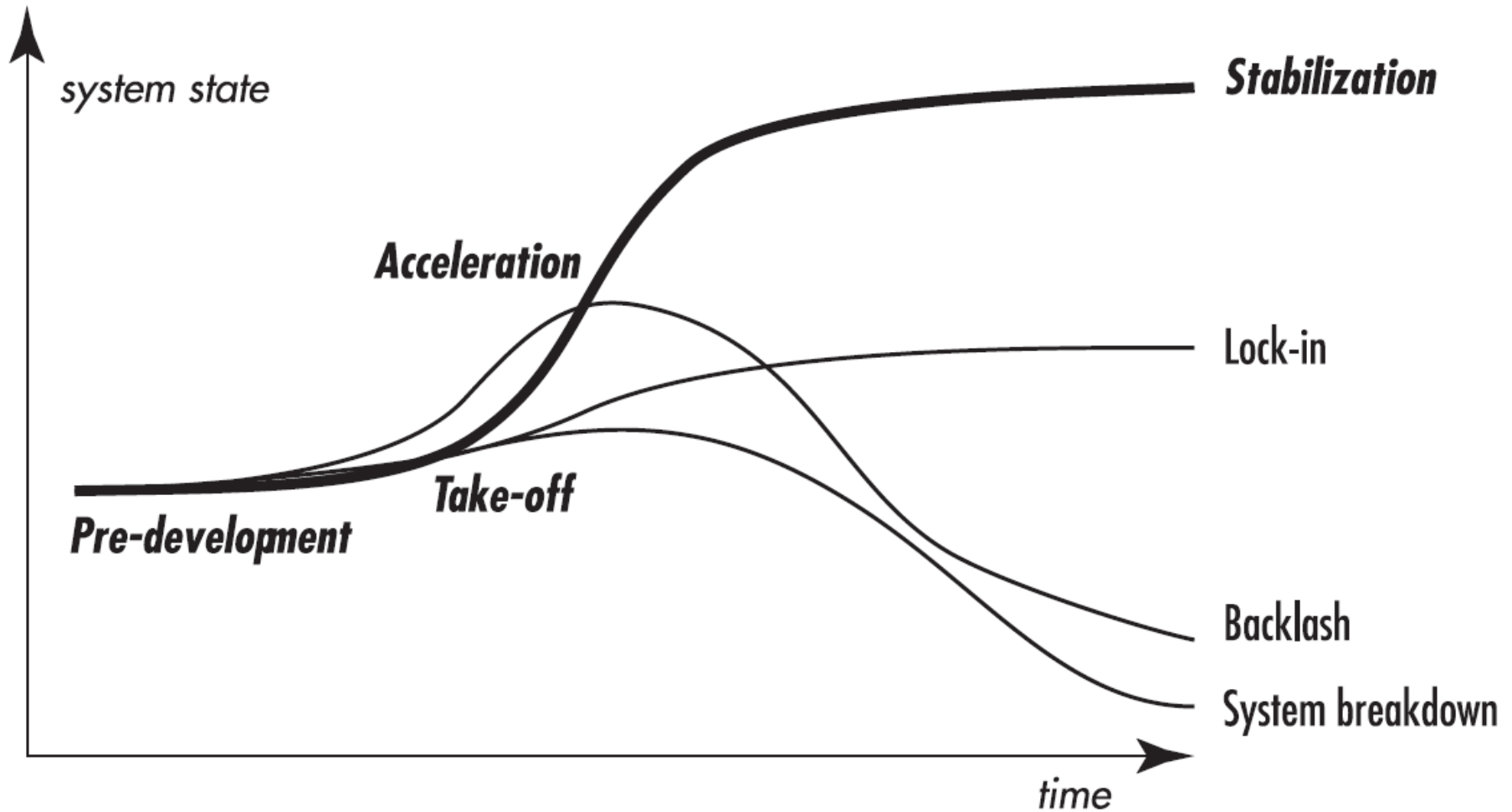
Source: van der Brugge & de Haan 2005

Multi-phase trajectory



Source: van der Brugge & de Haan (2005)

Multi-phase trajectory



Source: van der Brugge & de Haan (2005)

Not about efficiency gains ...



... or even technology shifts



Copyright: Tesla



Informing policy implementation - 1



Air pollution,
transport and noise



Industrial
Pollution



Climate change
mitigation and energy



Climate change impacts,
vulnerability and
adaptation



Marine and
maritime, fisheries
and coastal



Water management,
resources and
ecosystems



Biodiversity,
ecosystems,
agriculture and
forests



Urban, land use
and soil



Waste and
material resources

Goal - Improve content, accessibility and use of European-level environmental information.

Achieve by 2018 - Measurable uptake of EEA findings, and the timely and reliable delivery of outputs.





Assessing systemic challenges –2



Resource-efficient
economy and the
environment



Megatrends and
transitions



Environment, human
health and well-being



Sustainability assessments
and state of the
environment reporting

Goal - To be a centre of knowledge creation, exchange and use on long term systemic challenges and societal transitions

Achieve by 2018 - Prompt delivery of SOER2015 and annual indicator reports, and measurable recognition in the 7EAP evaluation process.





Knowledge creation, sharing and use –3



Networking and
partnerships



Technical systems
development



Monitoring, data and
information management



Communication, outreach
and user analysis



Copernicus operational
services



Capacity building in
West Balkan and European
neighbourhood countries

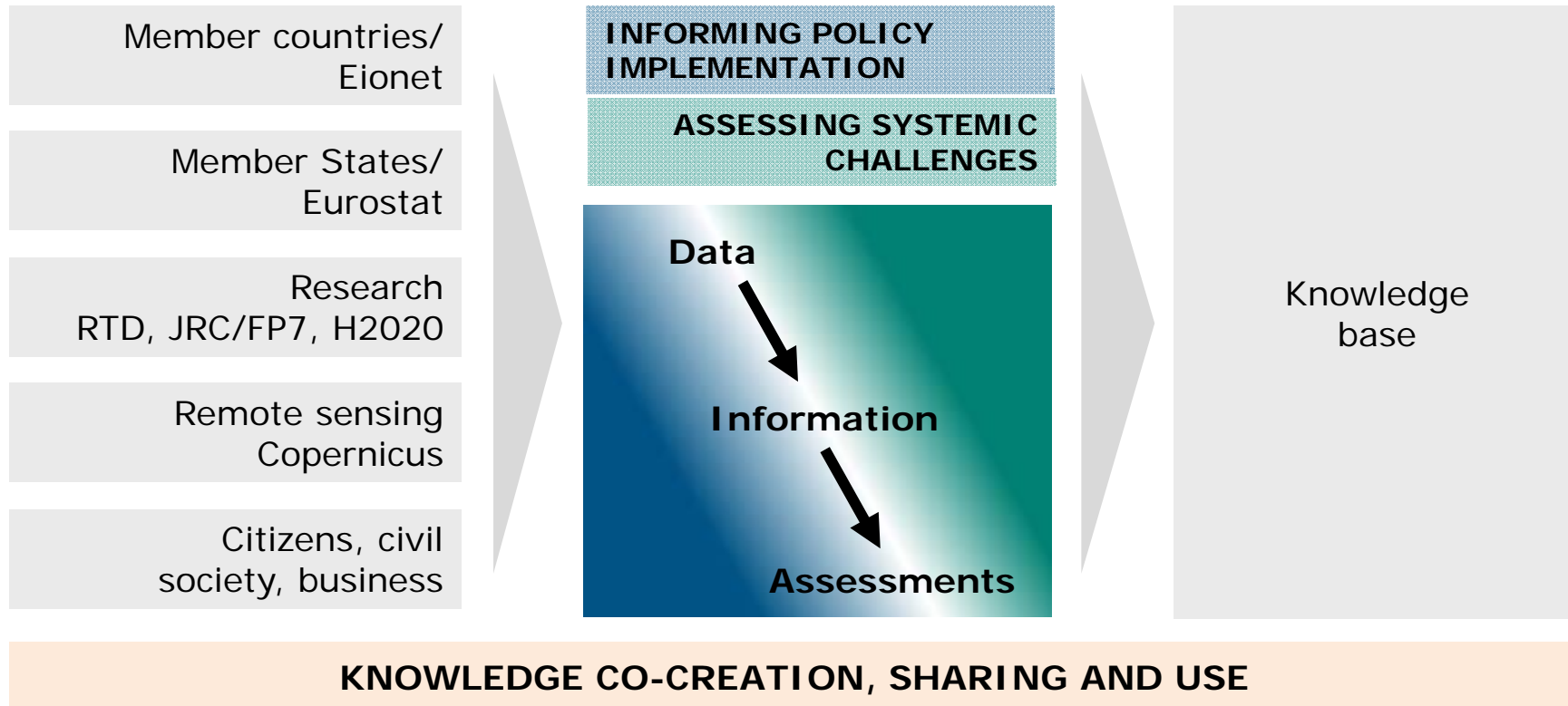
Goal - To be the authoritative information node and hub within networks of knowledge co-creation, sharing and use.

Achieve by 2018 - Metrics to measure the active participation of EIONET; online availability of data information products and services; and impacts of communication efforts.





Core processes



M → D → I → A → K



Scientific/knowledge challenges

- Developing systemic knowledge
 - Complexity
 - Uncertainty
 - Long time frames (and yet, sense of urgency)
 - Emerging issues
- How?
 - Conscious knowledge (co-)creation policy
 - Stronger 'sharing' component needed
 - Scientific committee as link with scientific community
 - Close interaction with DGENV, DGCLIMA, DGR, JRC, ESTAT,
...
 - Connecting to citizens
 - EEAcademy idea



Conclusions

- Thinking in terms of long term societal transitions will require knowledge development based on fundamental and applied science at the systemic level
- This may require a transition in (parts of) the 'knowledge system'
- Crucial issues that need to be addressed include complexity and uncertainty; involving citizens; global connections