



# Knowledge, skills and governance approaches for systemic (circular) transitions

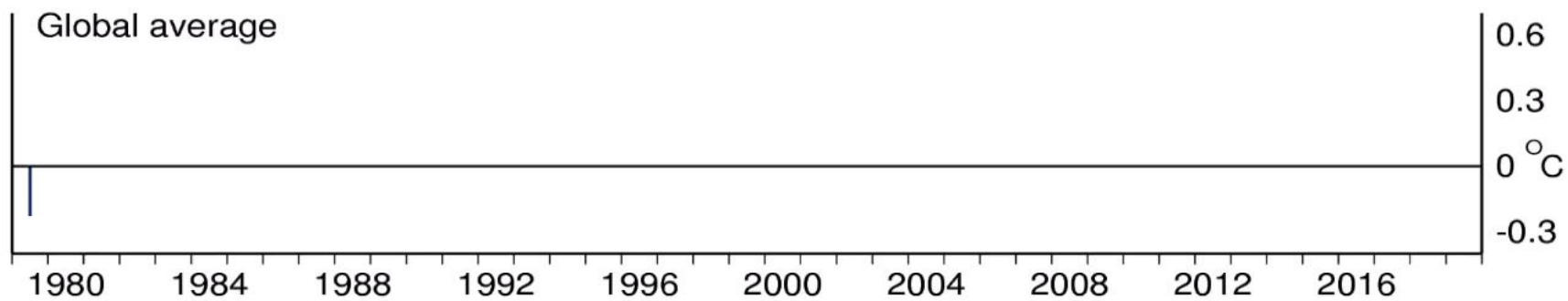
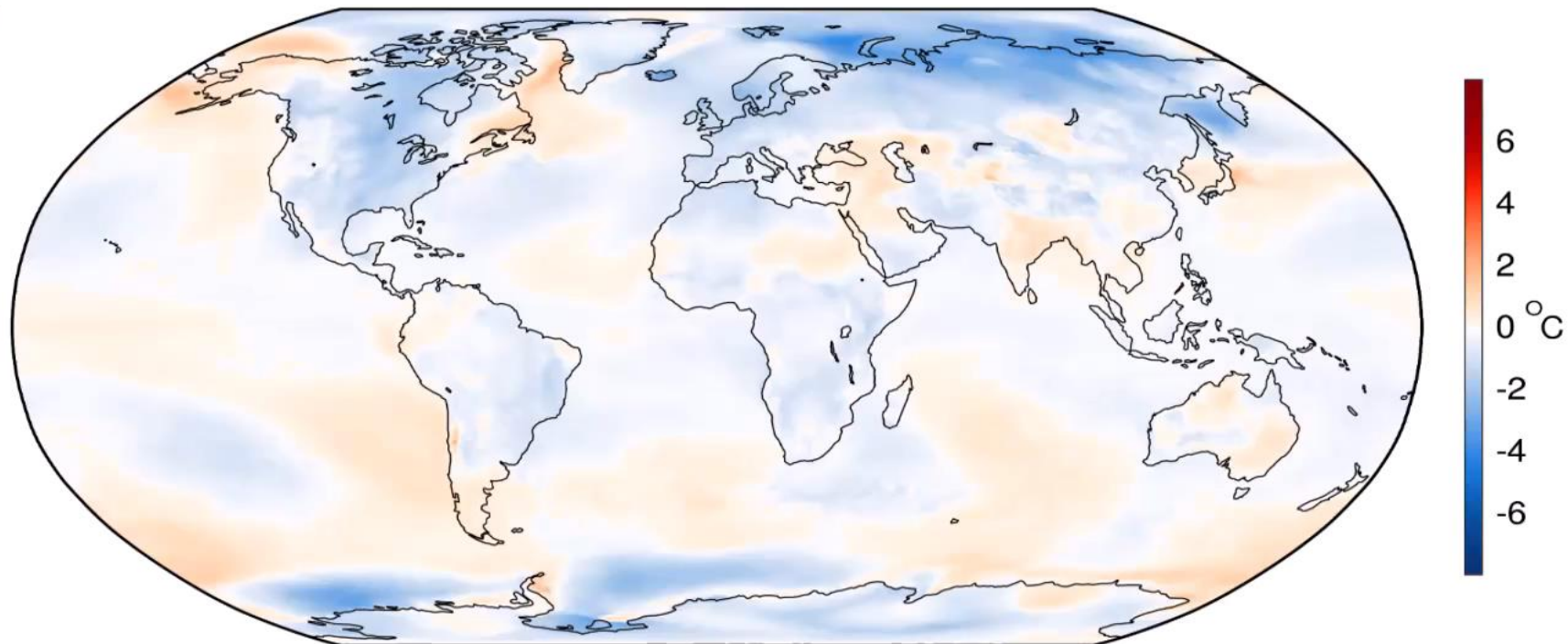
Hans Bruyninckx, Executive Director, European Environment Agency

Helsinki, 1 October 2019

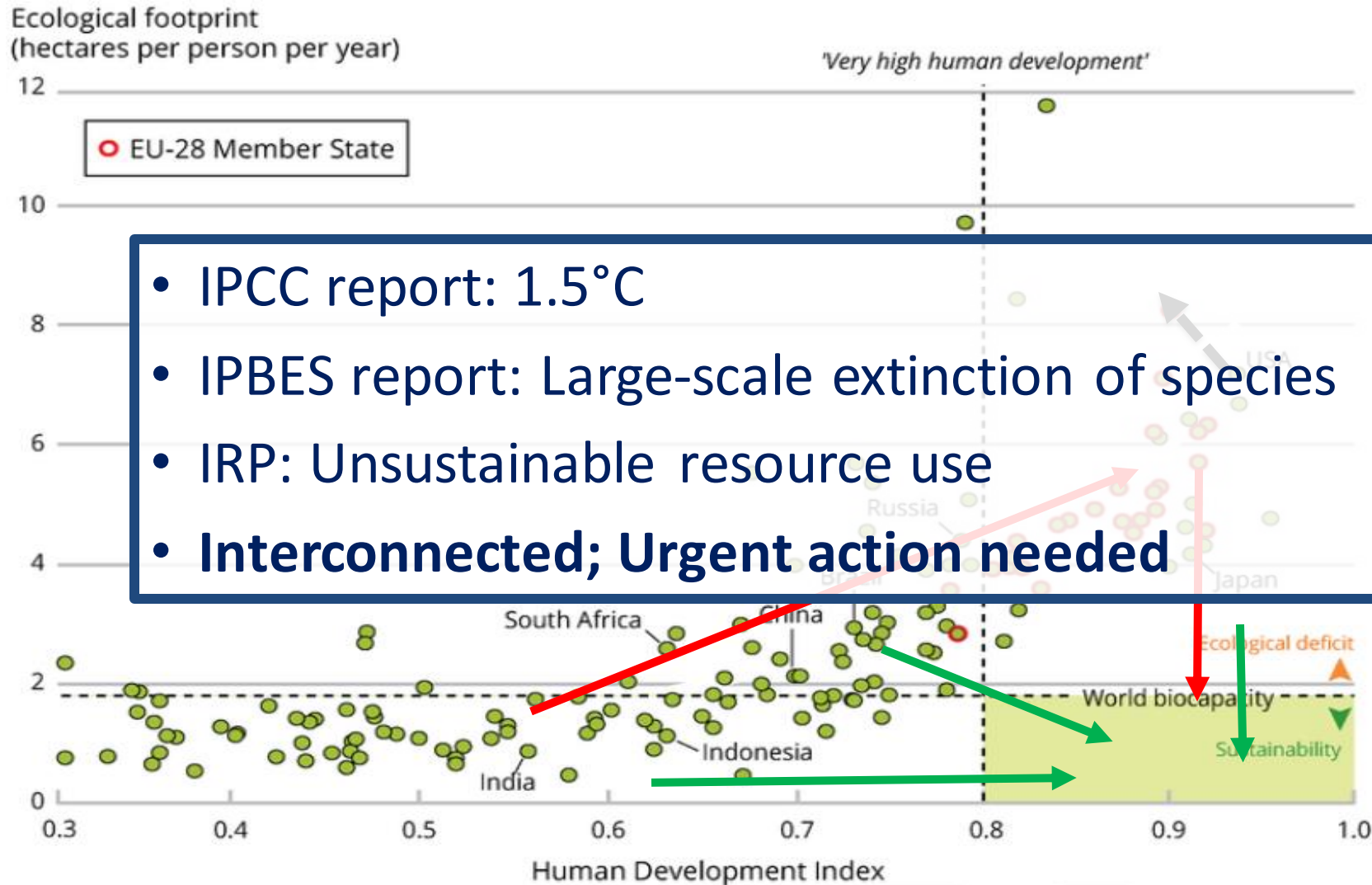




## Monthly surface air temperature variation relative to 1981-2010 average



# Challenge of 21st century: 10 billion people, 1 planet



Water, forests,  
oceans,  
biodiversity  
climate, resources

## Within limits of the planet

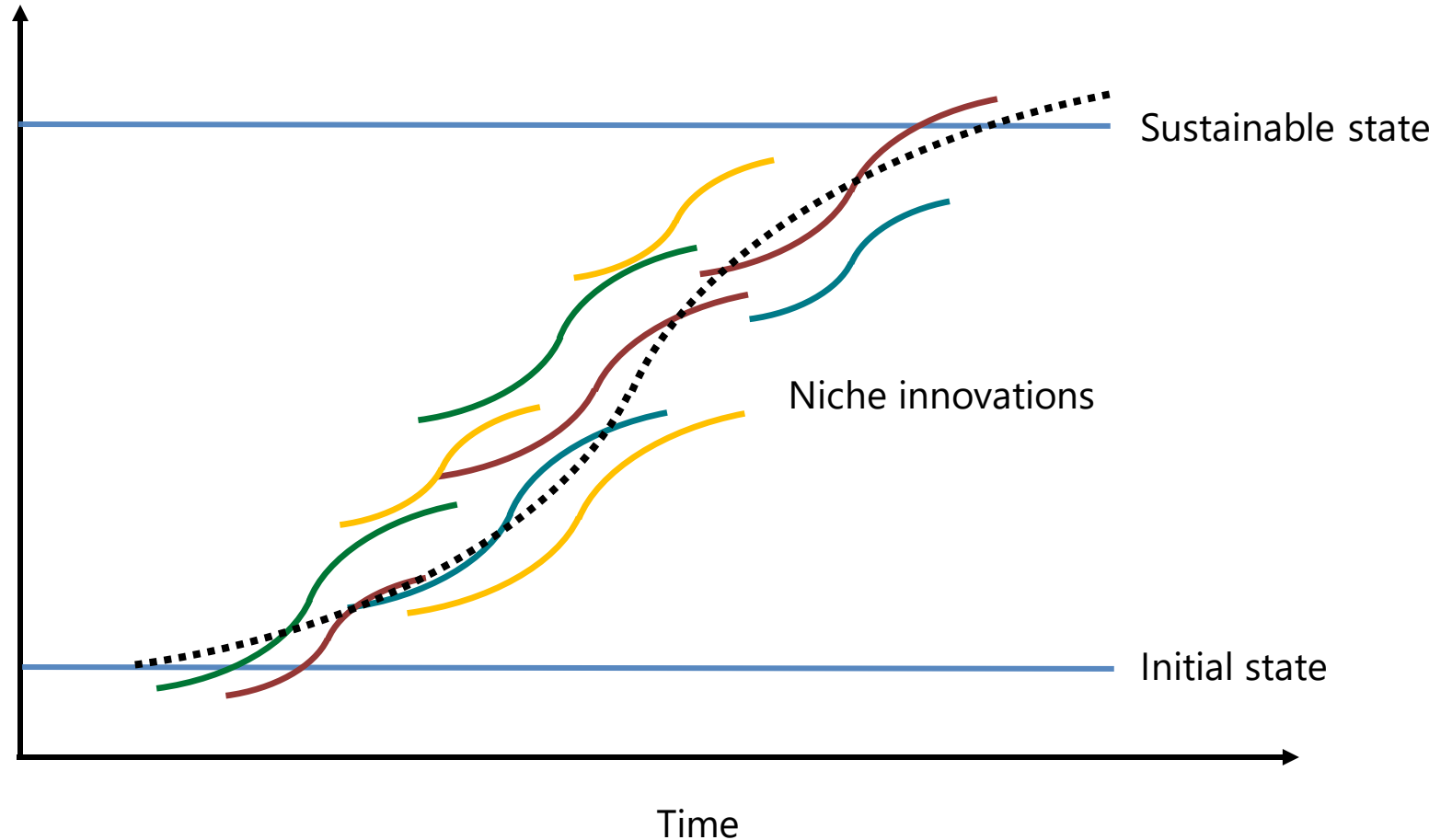
## Education, health, food, housing, safety

## Good life

# Systemic change involves multiple innovations

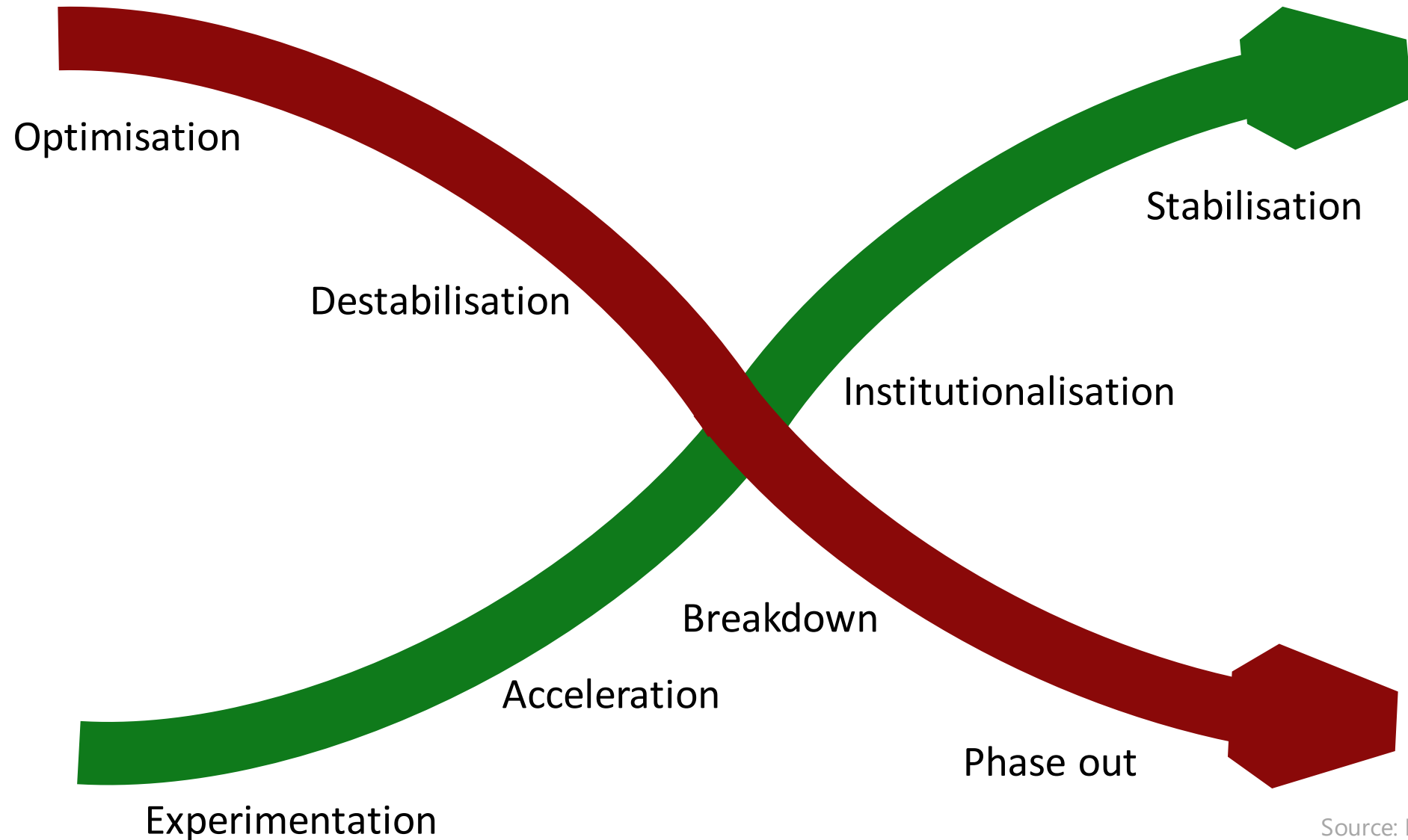


Environmental  
performance



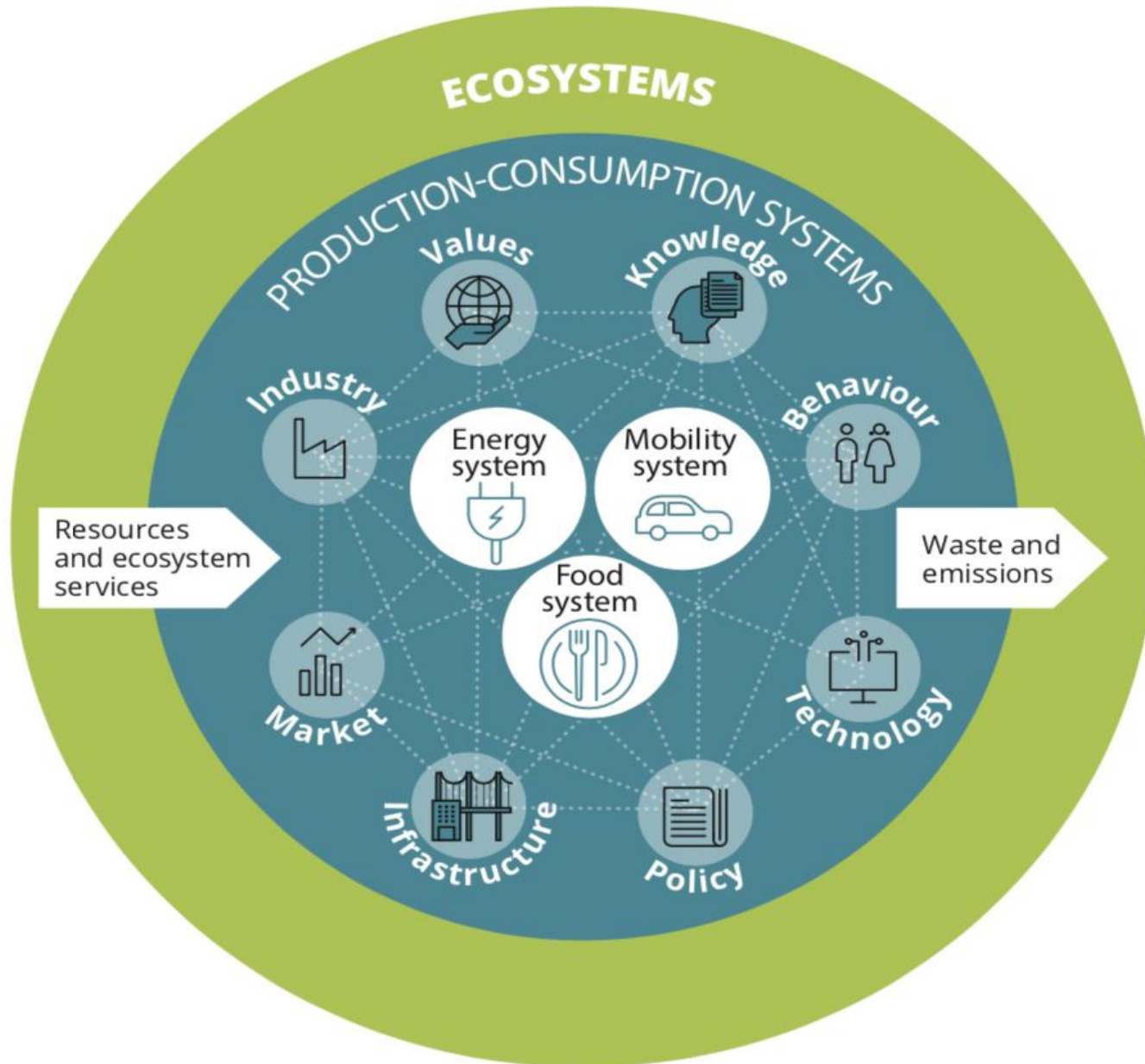
Source: Loorbach

# Systemic change is disruptive: the 'x-curve'





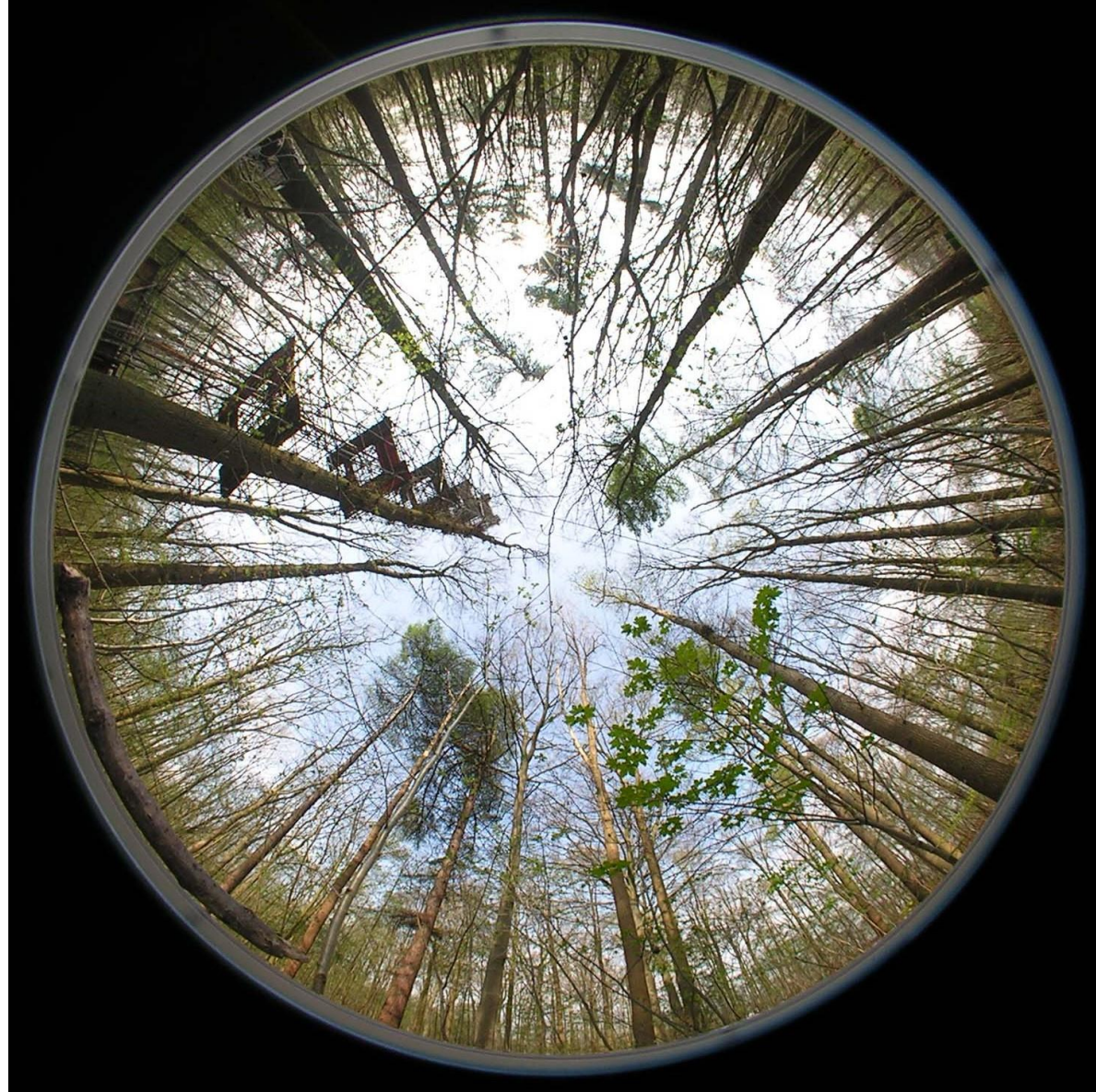
# Key systems driving persistent sustainability problems



In a **circular, low carbon economy**:

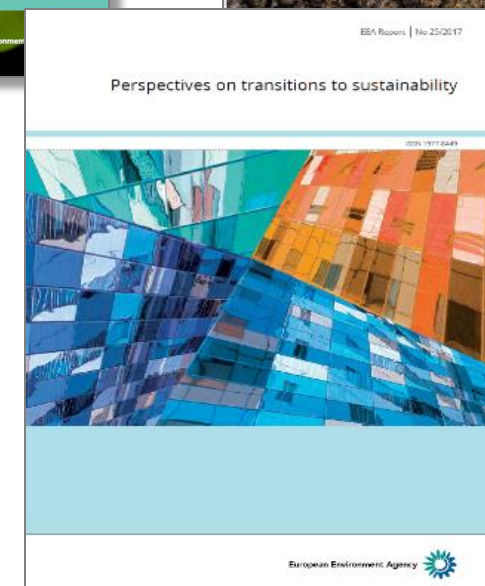
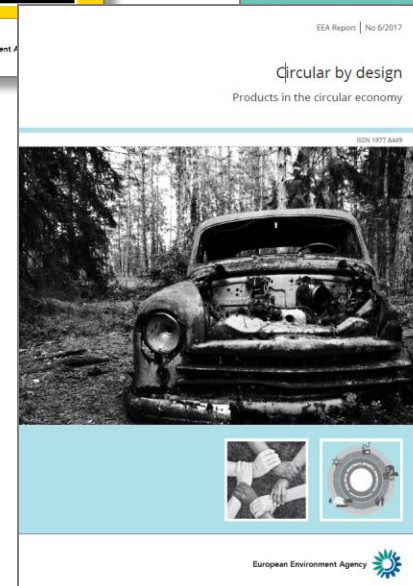
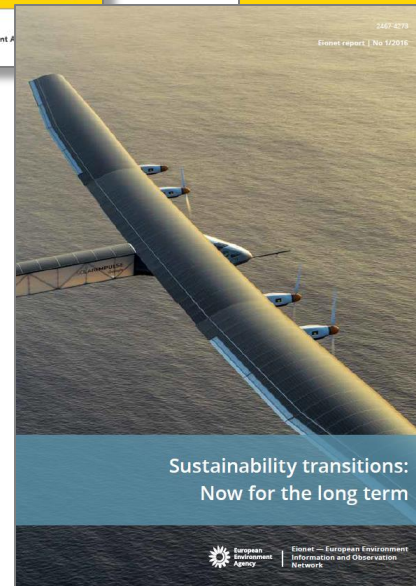
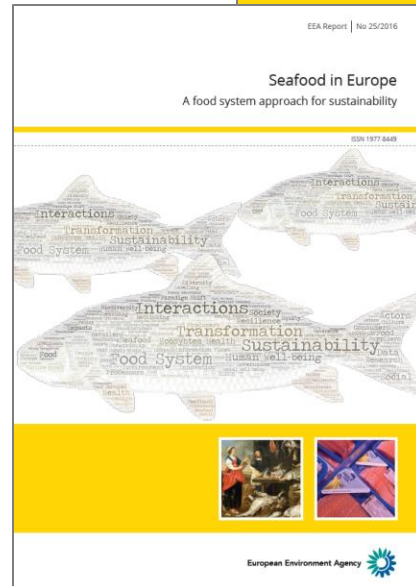
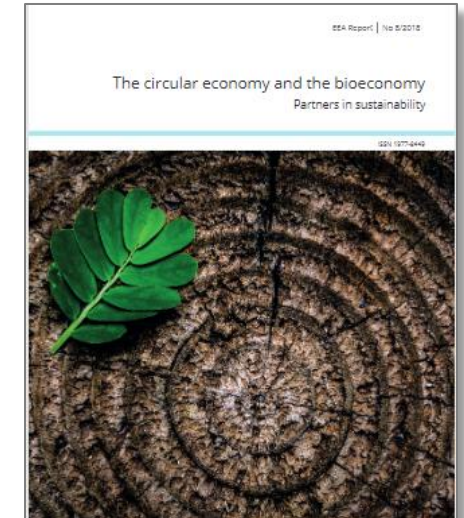
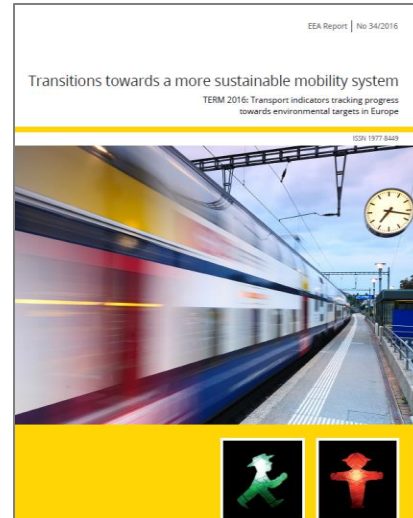
- Maximum value extracted from resources
- Resource extraction, emissions and waste are minimised

# Circular transitions: knowledge to action





# EEA knowledge on transitions and the circular economy





# SOER 2020: Integrated knowledge on circular economy



Identifies need for more solutions-oriented knowledge



Presents knowledge, skills and governance approaches for sustainability transitions

# New circular economy report published today

## Examining:

- Circularity in Europe: what do we know?
- Enabling systemic change
- Governance for transitions
- Monitoring circularity in the 21 th century

## Download the report:

<https://www.eea.europa.eu/publications/circular-economy-in-europe-insights/>





# Designing products and systems that change behaviours

## Probably negative

Increasingly  
complex products



## Probably positive

Modular design

Sharing economy

Product services



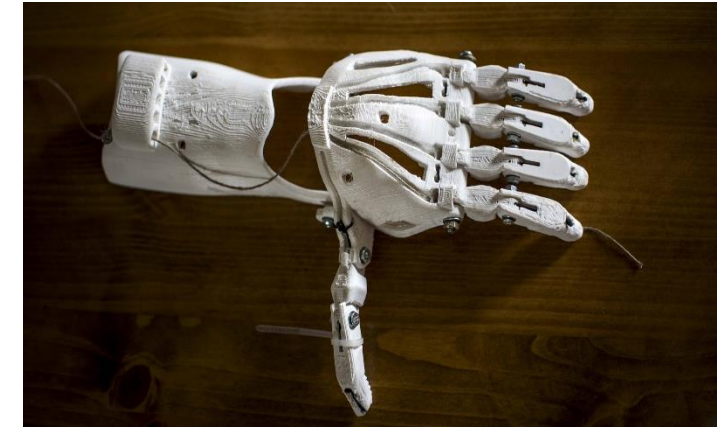
## Still unclear

Home delivery  
systems

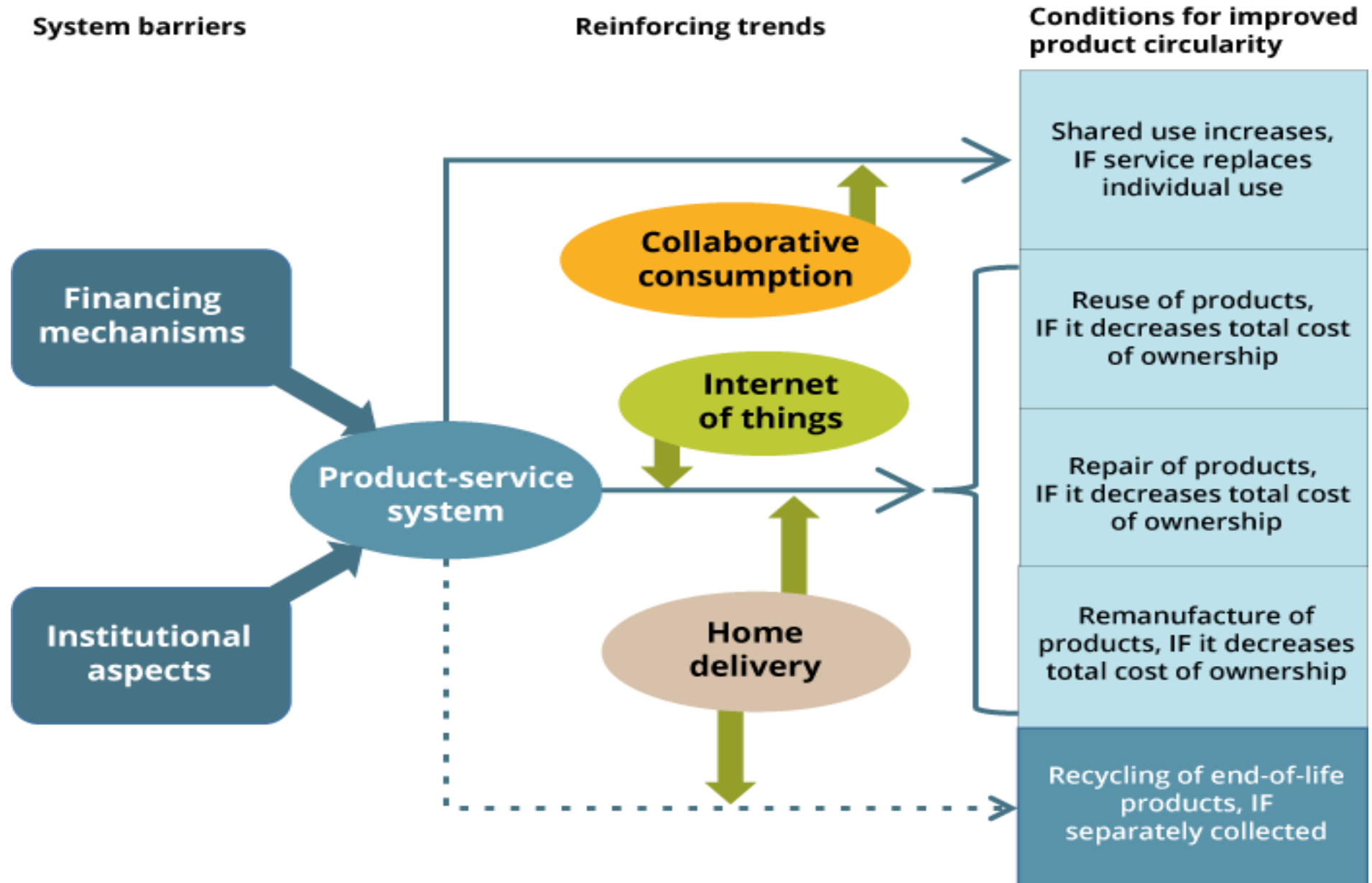
Internet of things

3D printing

Markets for  
recycling

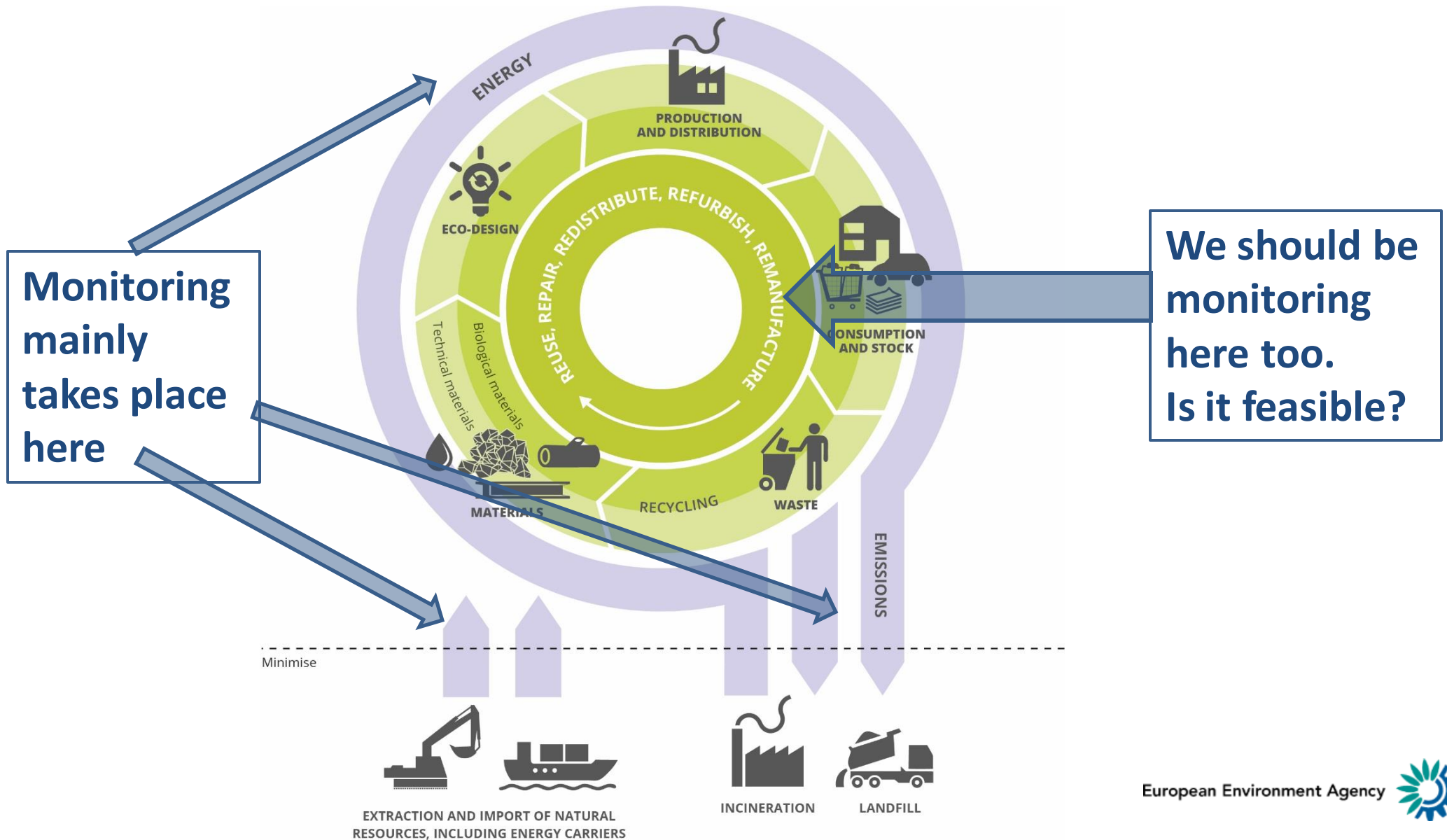


# Enabling product circularity: the big “IF”

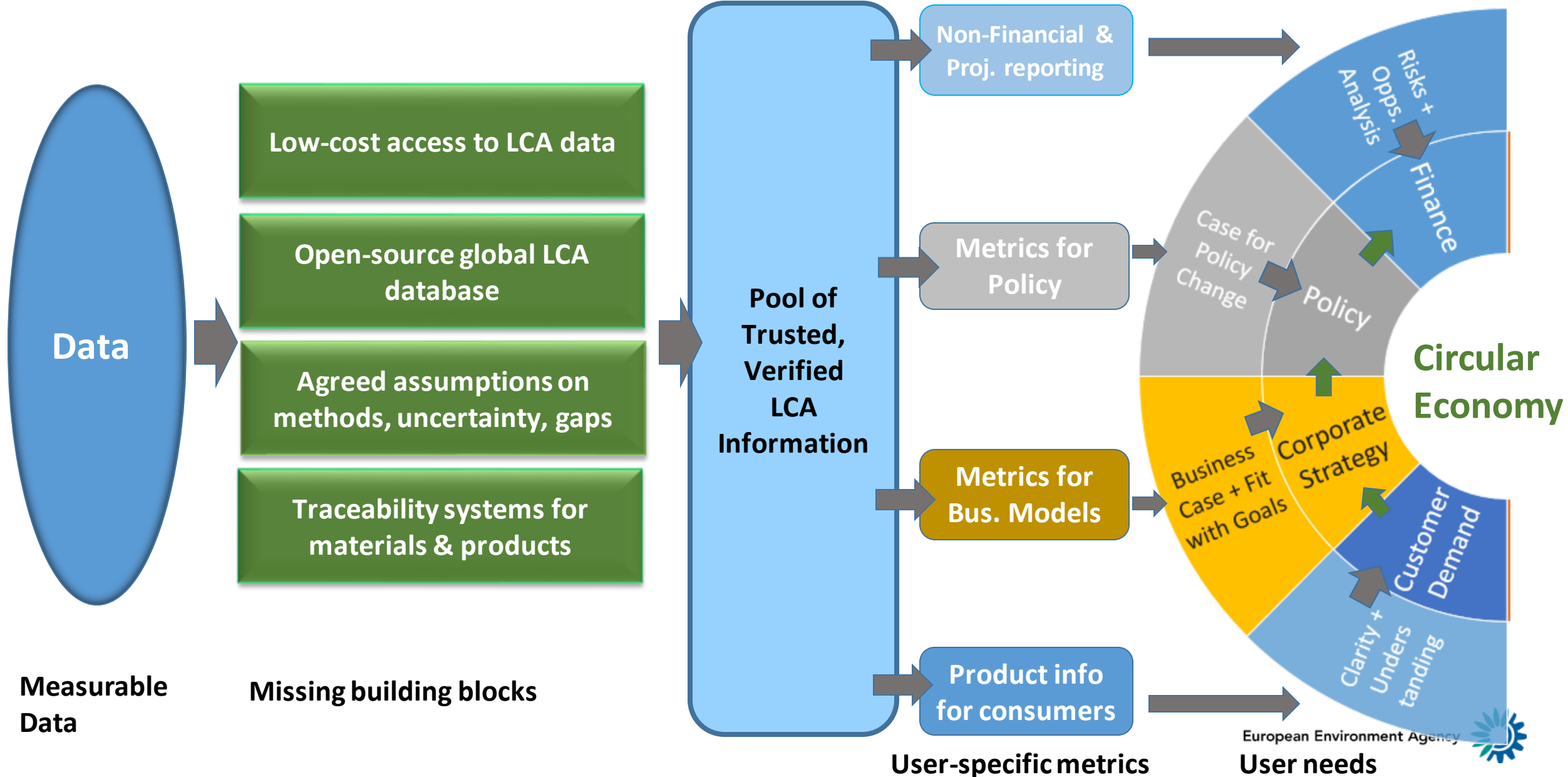




# Circular economy monitoring currently not fit for purpose



# Data and metrics for the Circular Economy: knowledge to action





# Reflecting on the core of the system?



#SusFinEU

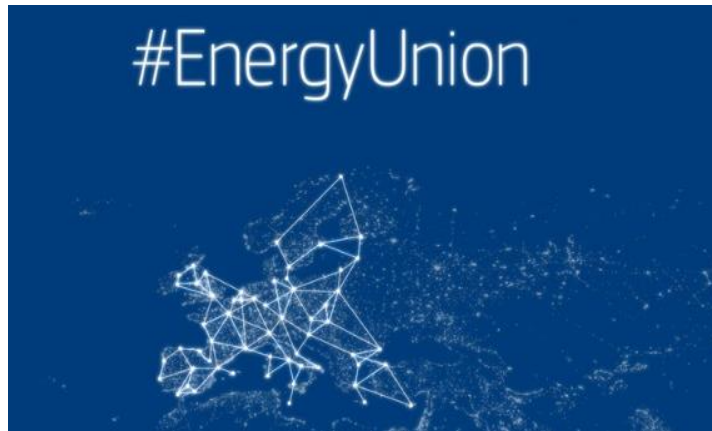
## Sustainable finance



# EU policy frameworks begin to address systemic challenges



- Focus on systems, not sectors
- Emphasis on economic transformation
- Long-term targets (2030, 2050 +)
- Not only environment , also competitiveness, fair access, earnings, jobs, society
- Multiple stakeholders and platforms







# Thank you

Hans Bruyninckx, Executive Director, European Environment Agency

Helsinki, 1 October 2019