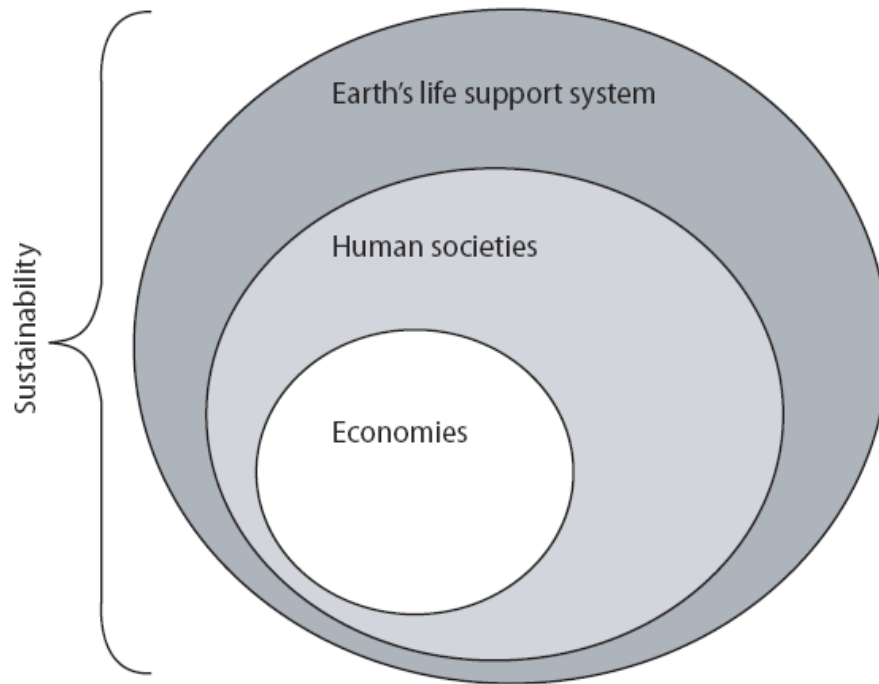


# European political perspectives for a sustainable phosphorus future

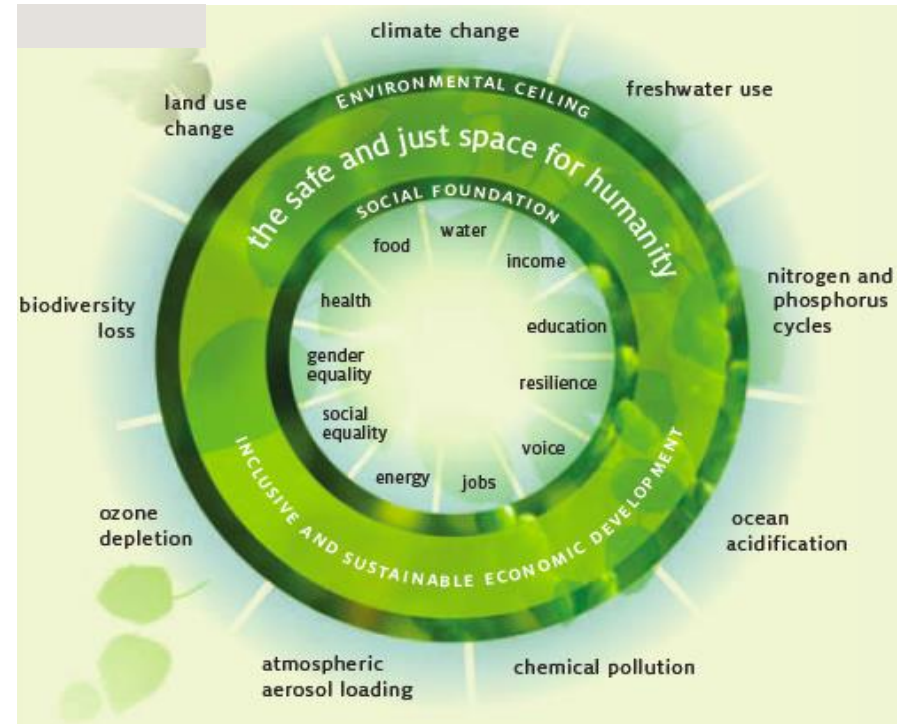
Sirpa Pietikäinen  
Member of the European Parliament  
2018

# Paradigm change

Old: industrial, cartesian,  
thinking in silos

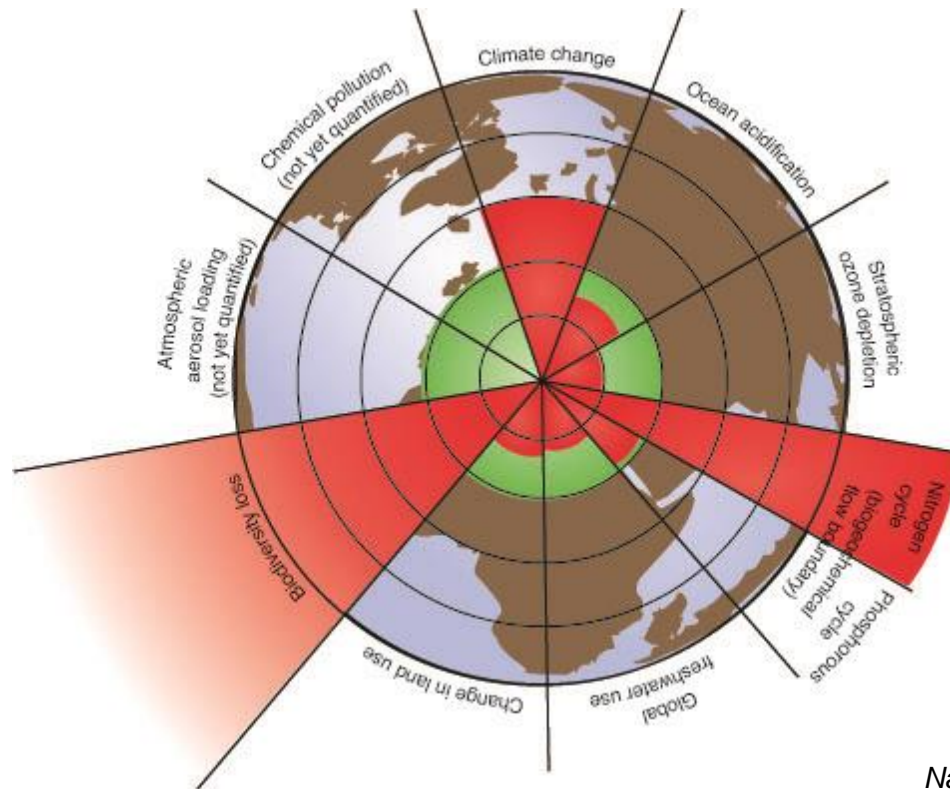


New: holistic



Rockström&Wijkman: Bankrupting  
Nature (2012)

# Safe living environment?



- Safe environment: green parts
- Red marks the parts where we have already surpassed our planet's carrying capacity
  - Biodiversity loss
  - Climate change
  - Phosphorus cycles

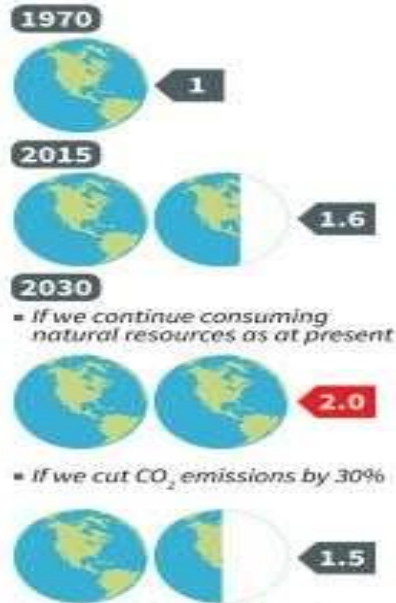
Nature, 24.9.2009

# We only have one planet

## Earth Overshoot Day

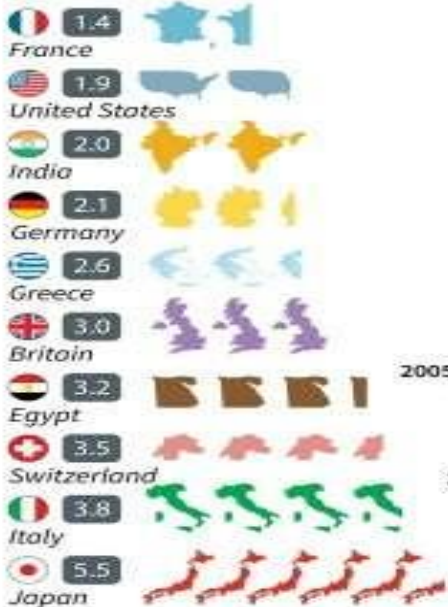
The date when humanity's use of natural resources in a given year (ecological footprint) exceeds what the Earth can regenerate in that year

▲ Number of Earths needed to sustain human activity



Source: Global Footprint Network

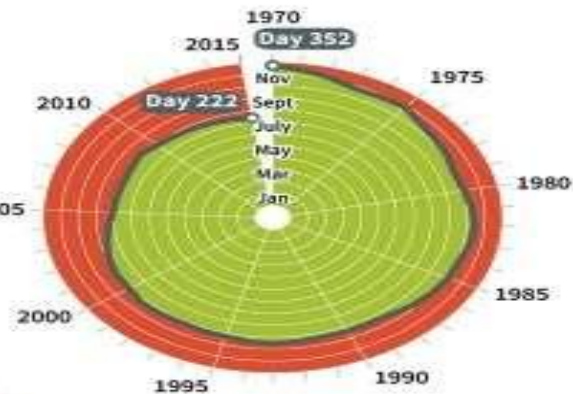
▲ Consuming more than they can generate (selected countries)



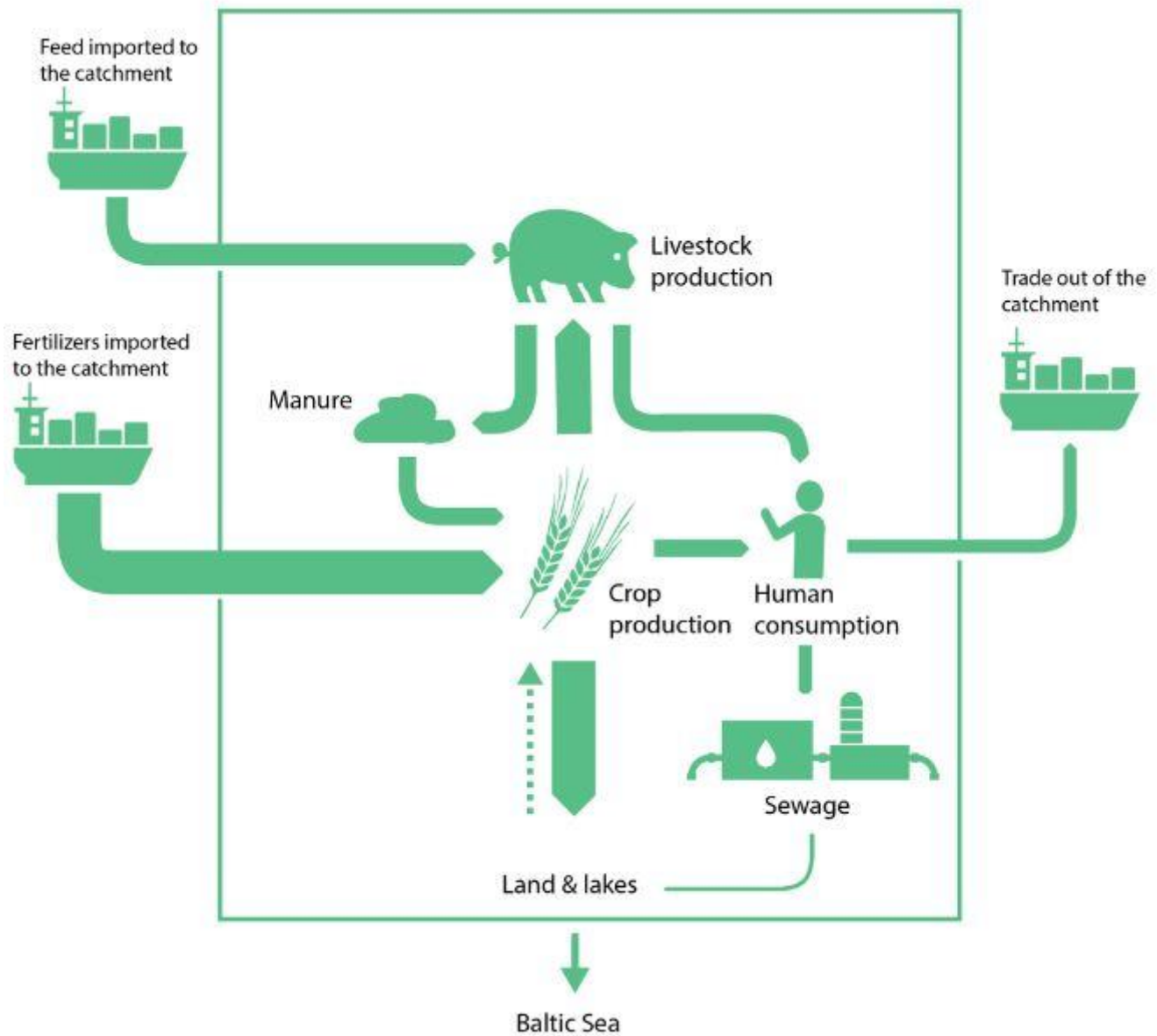
▲ Overshoot Day happens earlier each year

■ Days before overshoot is reached  
■ Days living over budget

In 2015, we used up the planet's annual resources by the 222<sup>nd</sup> day of the year (Aug 13)

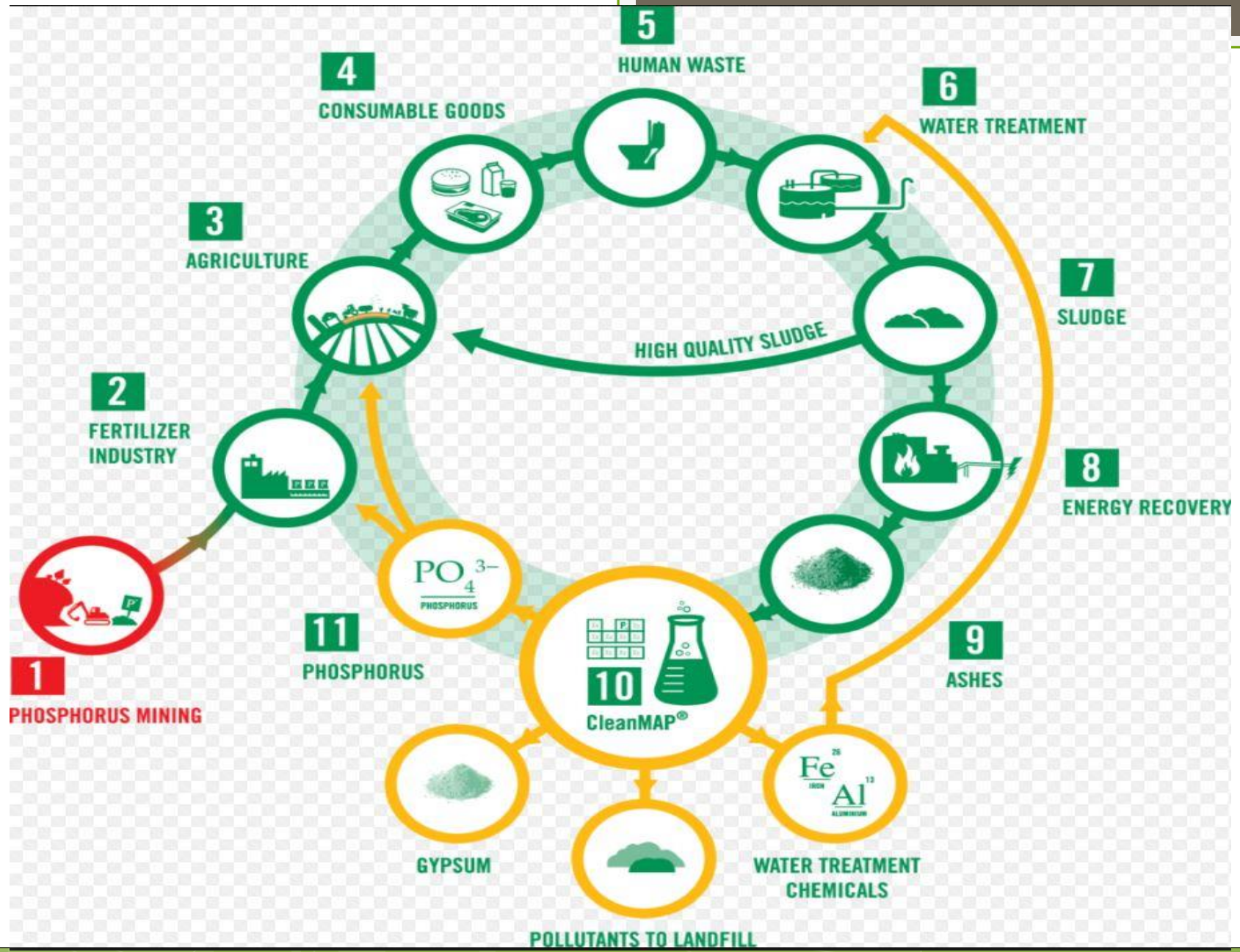


AFP

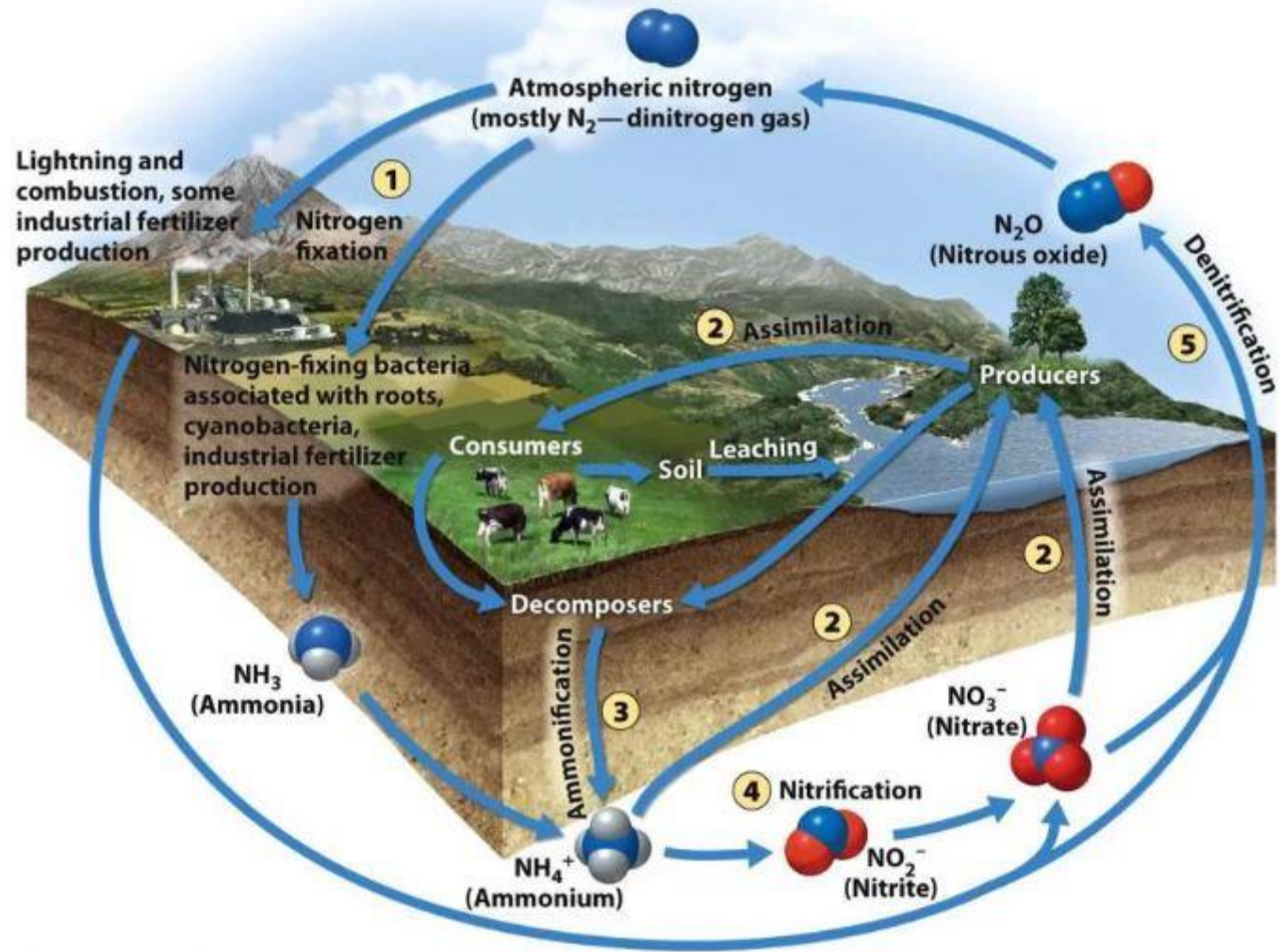








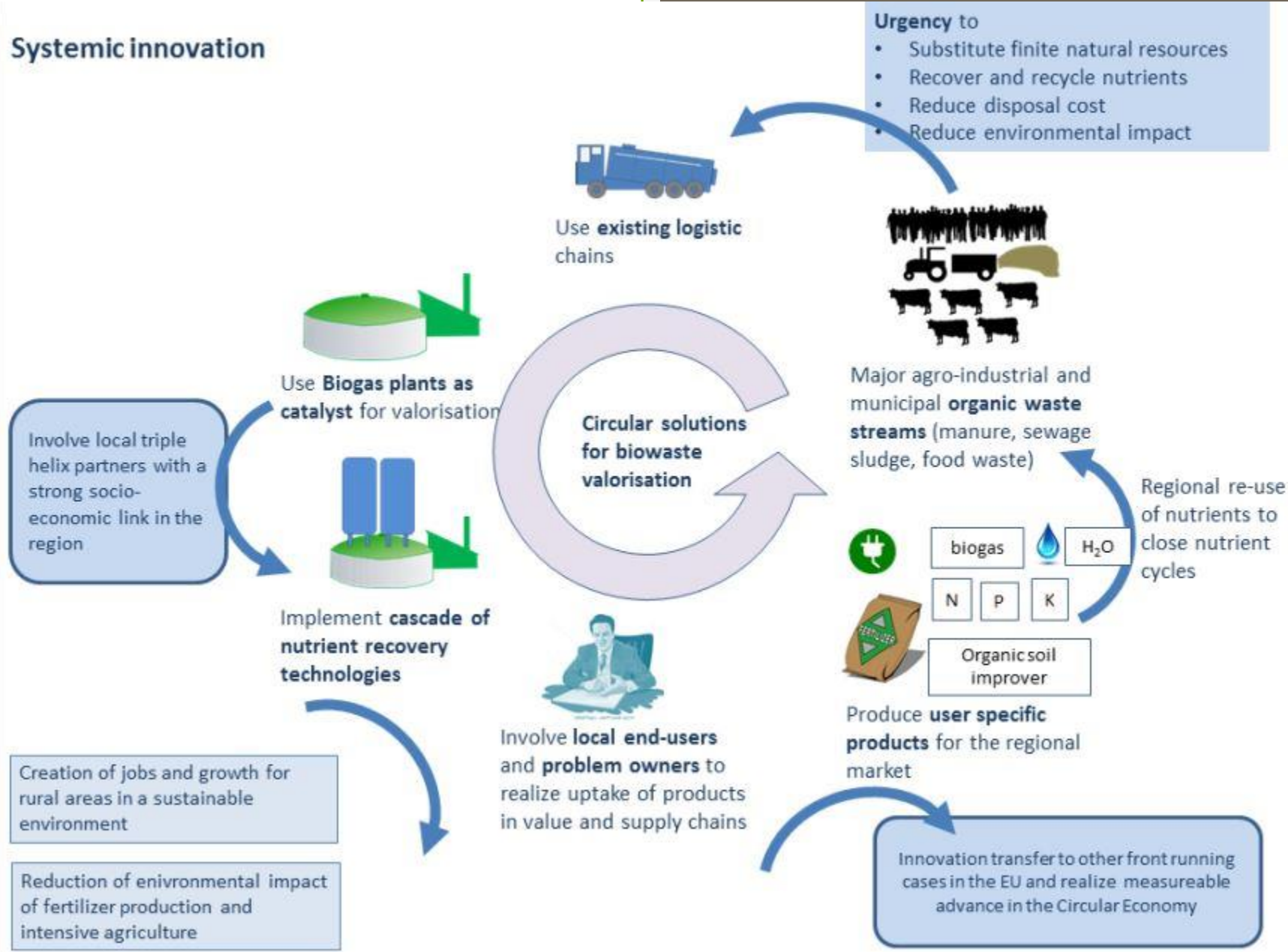




**Figure 3.12 part 1**  
*Environmental Science*  
 © 2012 W. H. Freeman and Company



# Systemic innovation



# Conservation agriculture and no-tilling

A means to achieve agriculture's environmental targets in:

- water conservation
- climate
- soil protection
- energy
- biodiversity
- sustainable development
- greening
- use of fertilisers
- profitability of farming

European Conservation Agriculture Federation  
<http://www.ecaf.org/>

# Thank you!

- For more information and to sign up for a monthly newsletter (in Finnish) please see [www.sirpapietikainen.eu](http://www.sirpapietikainen.eu).
- In case of any questions or comments, email me at [sirpa.pietikainen@ep.europa.eu](mailto:sirpa.pietikainen@ep.europa.eu)

A handwritten signature in black ink, appearing to read 'Sirpa', is positioned in the lower right area of the slide.