

# THE EUROPEAN ENVIRONMENT STATE AND OUTLOOK 2015



1 October 2015 – Science and the Environment Conference, Aarhus

Jock Martin

European Environment Agency



# What is the European environment – state and outlook 2015 (SOER 2015)?

SYNTHESIS  
REPORT

GLOBAL  
MEGATRENDS

EUROPEAN  
BRIEFINGS

COUNTRY  
COMPARISONS

COUNTRIES &  
REGIONS

A comprehensive assessment of past trends and future outlooks that informs EU policy implementation and reflects on opportunities to recalibrate EU policies and knowledge investments to meet the 2050 vision of the 7th Environment Action Programme.

## SOER 2015 Synthesis report

## SOER 2015 Assessment of global megatrends

### Global megatrends

11 briefings

### European briefings

25 briefings

### Cross-country comparisons

9 briefings

### Countries and regions

39+3 briefings



# Vision of the 7th Environment Action Programme

SYNTHESIS  
REPORT

GLOBAL  
MEGATRENDS

EUROPEAN  
BRIEFINGS

COUNTRY  
COMPARISONS

COUNTRIES &  
REGIONS

**‘In 2050, we live well, within the planet's ecological limits.**

Our prosperity and healthy environment stem from an innovative, **circular economy** where nothing is wasted and where natural resources are managed sustainably, and **biodiversity** is protected, valued and restored in ways that enhance our society's **resilience**. Our **low-carbon** growth has long been decoupled from resource use, setting the pace for a global safe and sustainable society.’

Source: 7th EU Environment Action Programme

# Explore SOER 2015 online: [eea.europa.eu/soer](http://eea.europa.eu/soer)

## SOER 2015 — The European environment — state and outlook 2015

A comprehensive assessment of the European environment's state, trends and prospects, in a global context.



Synthesis report



Global megatrends



European briefings



Cross-country  
comparisons



Countries  
and regions

The synthesis report informs future European environmental policy in general and its implementation between 2015 and 2020 in particular. It includes a reflection on the European environment in a global context, as well as chapters summarising the state of, trends in, and prospects for the environment in Europe.

- [Table of contents](#)
- [Foreword](#)
- [Executive summary](#)
- [1. The changing context of European environmental policy](#)
- [2. The European environment in a wider perspective](#)
- [3. Protecting, conserving and enhancing natural capital](#)
- [4. Resource efficiency and the low-carbon economy](#)
- [5. Safeguarding people from environmental risks to health](#)
- [6. Understanding the systemic challenges facing Europe](#)
- [7. Responding to systemic challenges: from vision to transition](#)
- [References and bibliography](#)

Synthesis report in several languages  

## Explore SOER 2015



 Presentation of key facts and figures.

 Online search among all figures.

### Key messages

◀ Waste — municipal solid waste generation and management: The large differences in performance indicate room for further improvement and actions to meet the 2020 target to recycle 50% of municipal waste. [See briefing](#) ▶

About SOER 2015

For journalists

Events

Feedback

Photos and videos



# Over time our understanding of environmental challenges has evolved

SYNTHESIS  
REPORTGLOBAL  
MEGATRENDSEUROPEAN  
BRIEFINGSCOUNTRY  
COMPARISONSCOUNTRIES &  
REGIONS

Characterisation	Specific	Diffuse	Systemic
<b>Key features</b>	Linear cause-effect; large (point) sources; often local	Cumulative causes; multiple sources; often regional	Systemic causes; interlinked sources; often global
<b>In the spotlight in</b>	1970s/1980s (and continuing today)	1980s/1990s (and continuing today)	1990s/2000s (and continuing today)
<b>Includes issues such as</b>	Pollution from power plants, urban wastewater	Agriculture pollution; Eutrophication	Climate change; Ecosystem degradation
<b>Dominant policy response</b>	Targeted policies, abatement technologies, single instruments	Policy integration, multiple instruments, raising public awareness	Strategies, visions, foresight, coherent policy packages

Overall  
summary table



# Assessment of past trends and future outlooks

SYNTHESIS  
REPORT

GLOBAL  
MEGATRENDS

EUROPEAN  
BRIEFINGS

COUNTRY  
COMPARISONS

COUNTRIES &  
REGIONS

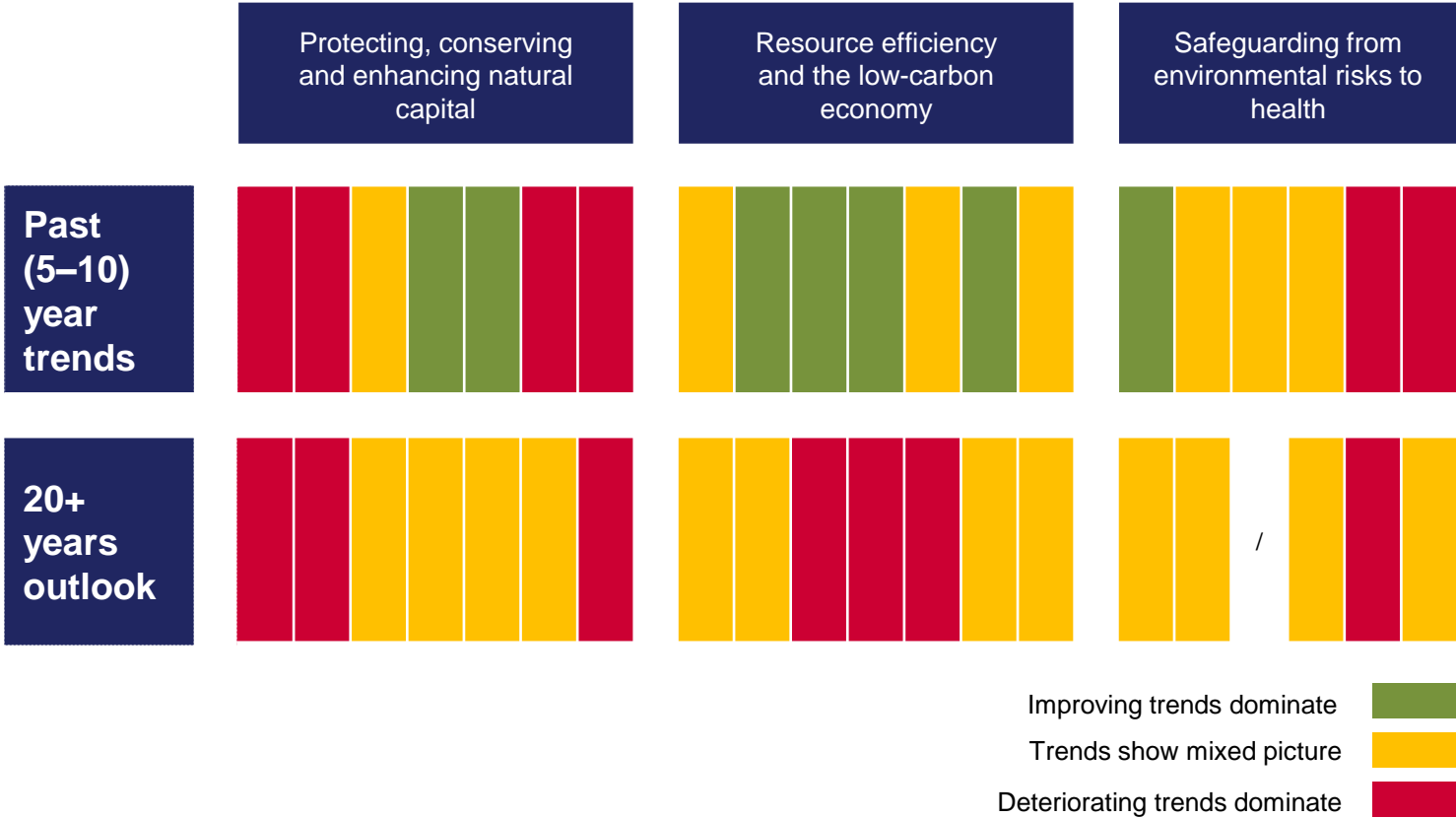
The SOER 2015 Synthesis report addresses the three thematic priority objectives of the 7<sup>th</sup> EAP:

1. Protecting, conserving and enhancing natural capital
2. Resource efficiency and the low-carbon economy
3. Safeguarding from environmental risks to health

Two overall patterns emerge:

- Resource efficiency improvements have been notable but have not translated into increased ecosystem and social resilience
- The long-term outlook is often less positive than recent trends

# The overall picture: Efficiency improvements have not secured long-term ecosystem and social resilience



Source: EEA. SOER 2015 Synthesis report.

# Understanding past trends and future outlooks

SYNTHESIS  
REPORT

GLOBAL  
MEGATRENDS

EUROPEAN  
BRIEFINGS

COUNTRY  
COMPARISONS

COUNTRIES &  
REGIONS

Two major factors explain the uneven progress and prospects:

## **The changing global context**

- Competition for resources
- Pressures from outside Europe
- Planetary boundaries

## **Systemic characteristics of environmental challenges**

- Complexity
- Uncertainty
- Environmental, social and economic interdependencies



# Looking ahead: Systemic challenges require systemic solutions

SYNTHESIS  
REPORT

GLOBAL  
MEGATRENDS

EUROPEAN  
BRIEFINGS

COUNTRY  
COMPARISONS

COUNTRIES &  
REGIONS

Not just incremental



Source: Tesla

but fundamental transitions in food, energy, mobility, urban, finance and fiscal systems  
through profound changes in dominant practices, policies and knowledge.

# What does it all mean for the knowledge base?

SYNTHESIS  
REPORT

GLOBAL  
MEGATRENDS

EUROPEAN  
BRIEFINGS

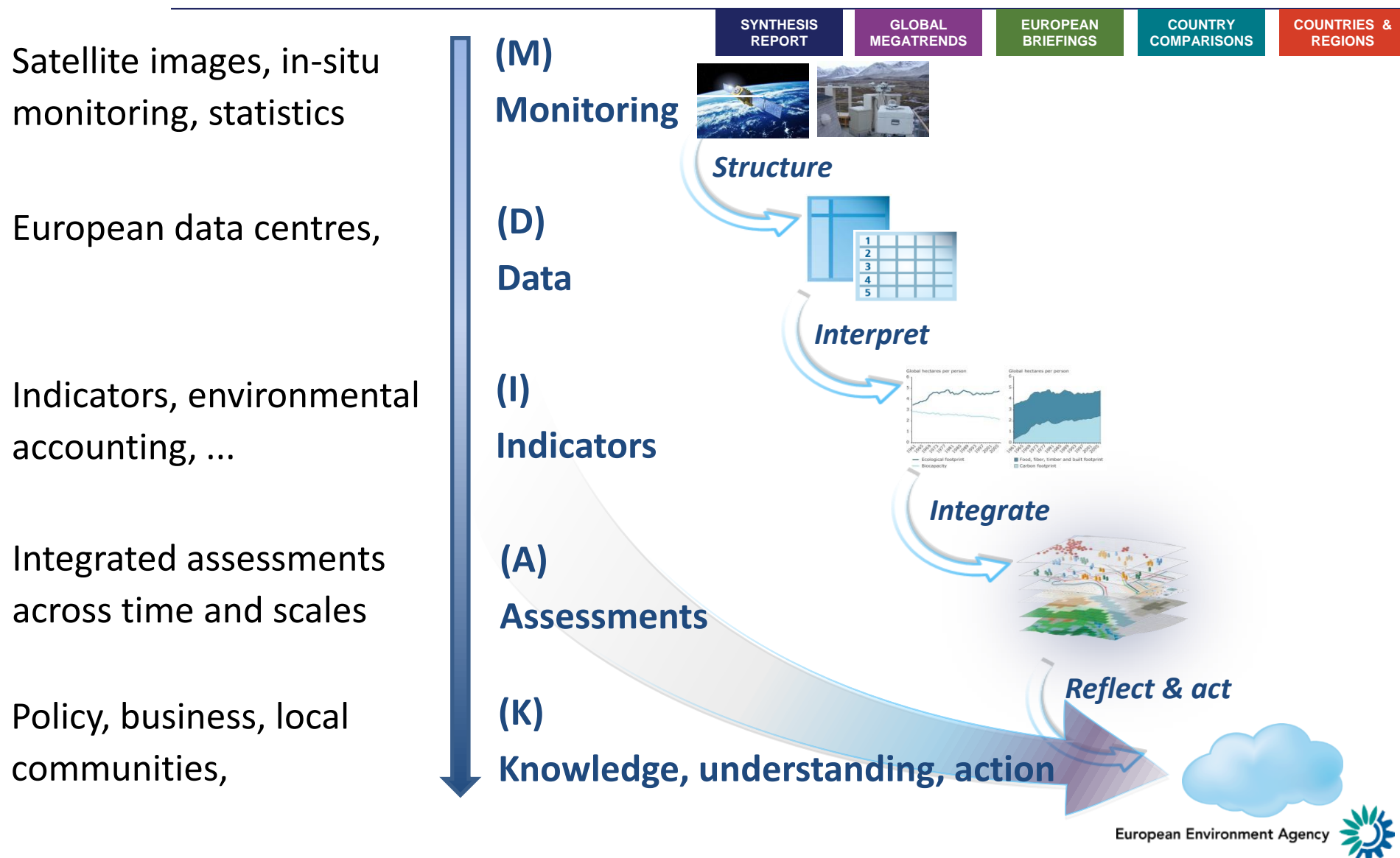
COUNTRY  
COMPARISONS

COUNTRIES &  
REGIONS

- Further integrated monitoring and spatial data assimilation – satellites, in-situ, statistics
- More use of « unconventional » data - citizen science, BIG data - to support policy
- Improved indicators on environment – economy - social interactions (ref. UN SDGs)
- More research investments towards insights on long-term, systemic risks and opportunities
- More emphasis on solution-oriented knowledge than the problem-focused base of today



# Knowledge management at the EEA





# A monitoring challenge: integration of satellite images, in-situ data and statistics

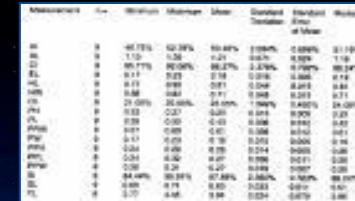
## SYNTHESIS REPORT

## GLOBAL MEGATRENDS

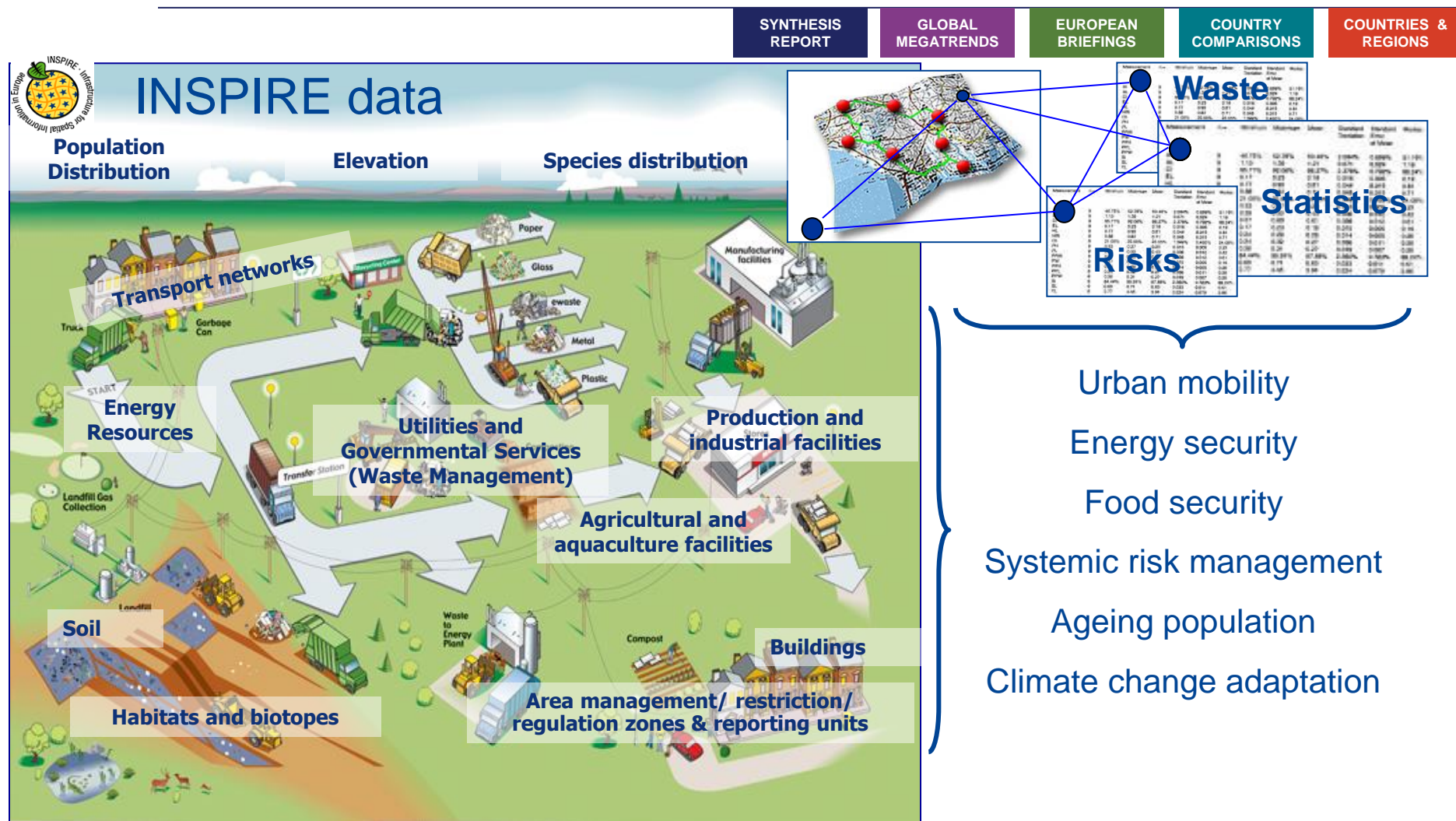
**EUROPEAN  
BRIEFINGS**

## COUNTRY COMPARISONS

## COUNTRIES & REGIONS



# Data challenge: cross-sector operability, integrated modelling, communicating uncertainties





# Assessment challenge: indicator framework to measure progress towards living well within the limits of the planet

SYNTHESIS  
REPORT

GLOBAL  
MEGATRENDS

EUROPEAN  
BRIEFINGS

COUNTRY  
COMPARISONS

COUNTRIES &  
REGIONS

Resources/capital	Green economy dimension			
	Efficiency	Resilience	Well-being	Equity
Economic resources				
Manufactured resources				
Natural resources				
Human resources				
Social resources				



# And finally...a quote about knowledge and wisdom

SYNTHESIS  
REPORT

GLOBAL  
MEGATRENDS

EUROPEAN  
BRIEFINGS

COUNTRY  
COMPARISONS

COUNTRIES &  
REGIONS

