### THE EUROPEAN ENVIRONMENT STATE AND OUTLOOK 2015



30 March 2015 – Interparliamentary Committee Meeting



European Environment Agency



SOER2015 / Introduction to SOER 2015

### The European Environment Agency



The European Environment Agency (EEA) is an agency of the European Union. The EEA aims to support sustainable development and to help achieve significant and measurable improvement in Europe's environment, through the provision of timely, targeted, relevant and reliable information to policymaking agents and the public.

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### SOER 2015

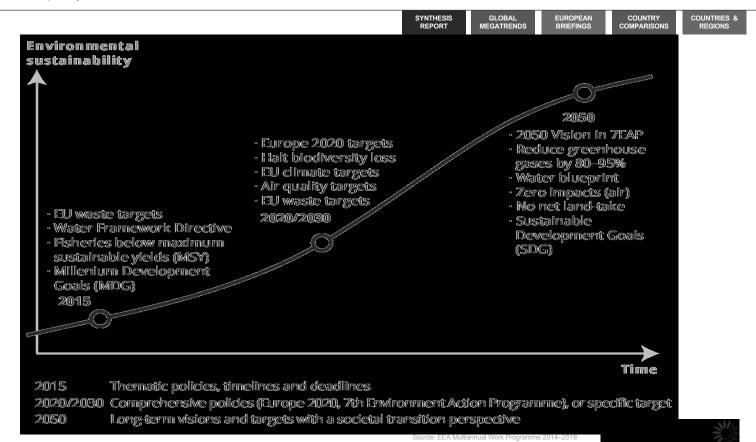
SYNTHESIS GLOBAL EUROPEAN COUNTRY COUNTRIES & REPORT MEGATRENDS BRIEFINGS COMPARISONS REGIONS

A comprehensive assessment of past trends and future outlooks and of opportunities to recalibrate policies, knowledge, investments and innovations in line with the long-term vision of the 7<sup>th</sup> EAP.

SOER 2015 Synthesis report						
SOER 2015 Assessment of global megatrends						
Global megatrends	European briefings	Cross-country comparisons	Countries and regions			
11 briefings	25 briefings	9 briefings	39+3 briefings			



#### The policy context has evolved over that time





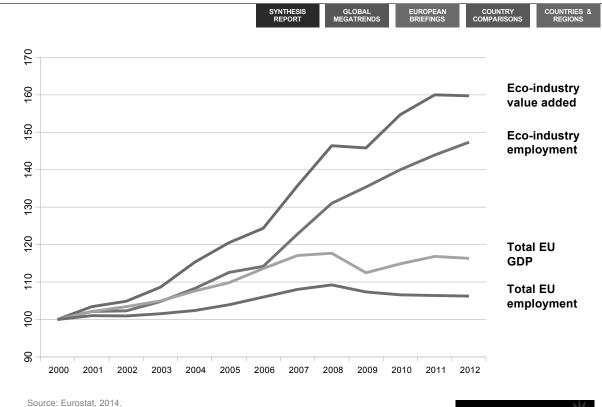
### Key messages from SOER 2015



- **Policies** have delivered substantial benefits for the environment, economy and people's well-being; major challenges remain
- Europe faces persistent and emerging challenges linked to production and consumption **systems**, and the rapidly changing **global** context
- Achieving the 2050 vision requires system **transitions**, driven by more ambitious actions on policy, knowledge, investments and innovation
- Doing so presents major **opportunities** to boost Europe's economy and employment and put Europe at the frontier of science and innovation



## Eco-industries have prospered despite the recession in Europe







### Thematic priority objective 1:

### Protecting, conserving and enhancing natural capital

	SYNTHESIS REPORT	GLOBAL MEGATREND	EUROPEAN BRIEFINGS		JNTRIES REGIONS
		t (5–10 ) trends	20+ years outlook	Progress to policy targets	
Terrestrial and freshwater biodiversity					
Land use and soil functions				No target	-
Ecological status of freshwater bodies				×	-
Water quality and nutrient loading					
Air pollution and its ecosystem impacts					-
Marine and coastal biodiversity				×	-
Climate change impacts on ecosystems				No target	-
	Improving t	rends dominat	e La	rgely on trac	L

Trends show mixed picture

Deteriorating trends dominate

Partially on track



### Thematic priority objective 2: Resource efficiency and the low-carbon economy

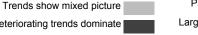
	SYNTHESIS GLOBAL EUROPEAN COUNTRY COUNTRIE REPORT MEGATRENDS BRIEFINGS COMPARISONS REGION				
		Past (5–10 year) trends	20+ years outlook	Progress to policy targets	
Material resource efficiency and material use				No target	
Waste management					
Greenhouse gas emissions and climate change mitigation				× / ×	
Energy consumption and fossil fuel use				$\checkmark$	
Transport demand and related environmental impacts					
Industrial pollution to air, soil and water					
Water use and water quantity stress				×	

Improving trends dominate

Deteriorating trends dominate

Largely on trac Partially on track Largely not on track





### Thematic priority objective 3: Safeguarding from environmental risks to health

	SYNTHESIS GLOBAL EUROPEAN COUNTRY REPORT MEGATRENDS BRIEFINGS COMPARISONS REGI			
		Past (5–10 year) trends	20+ years outlook	Progress to policy targets
Water pollution and related environmental health risks				☑ / □
Air pollution and related environmental health risks				
Noise pollution (especially in urban areas)			1	
Urban systems and grey infrastructure				No target
Climate change and related environmental health risks				No target
Chemicals and related environmental health risks				

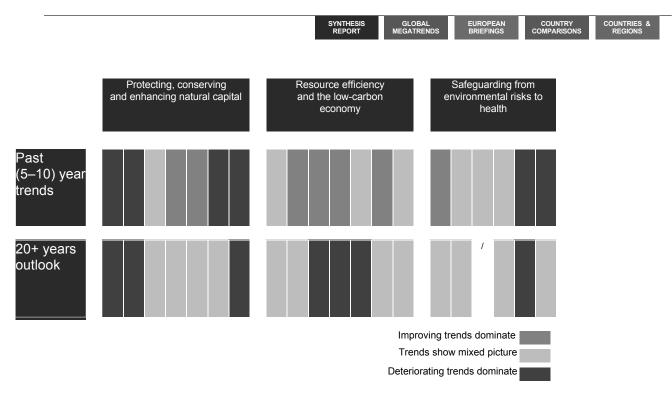
 Improving trends dominate
 Largely on track

 Trends show mixed picture
 Partially on track

 Deteriorating trends dominate
 Largely not on track



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





# Cross-country comparisons

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riculture – organic farming

of selected pollutants

indiversity – protected areas

ergy – energy consumption and share of renewable energy

-shwater quality – nutrients in rivers \*\*\*igating climate change – greenhouse gas emissions

Source efficiency – material resource efficiency and productivity

ansport – passenger transport demand and modal split

and management

European Environment Agency



SOER2015 / Cross-country comparisons/ Energy — energy consumption and share of renewable energy

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## Energy — energy consumption and share of renewable energy



- There was a small overall increase in gross inland **energy consumption** (GIEC) from 1990 to 2012, however national trends varied significantly with consumption increasing in 20 and decreasing in 13 countries.
- From 1990 to 2012 there was an increase in the share of **renewable energy** in GIEC in 32 out of 34 countries.
- There has been progress in **energy efficiency** policy but there is significant variation in the level of ambition and coherence of policy measures amongst countries.

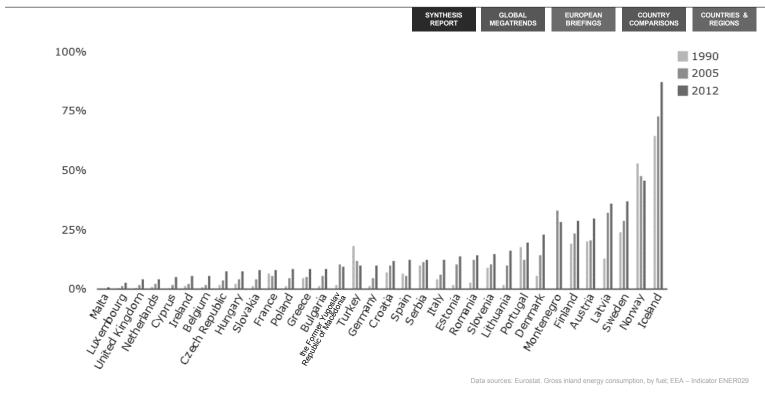
Related content

Energy Urban sy consumption & and grey fossil fuel use infrastruct





SOER2015 / Cross-country comparisons/ Energy - energy consumption and share of renewable energy



Percentage share of renewable energies in gross inland energy consumption in 34 European countries

**Related content** 

Energy consumption & fossil fuel use	Urban systems and grey infrastructure	Energy



SOER2015 / Cross-country comparisons/ Resource efficiency – material resource efficiency and productivity GO TO ONLINE BRIEFING

## Resource efficiency — material resource efficiency and productivity



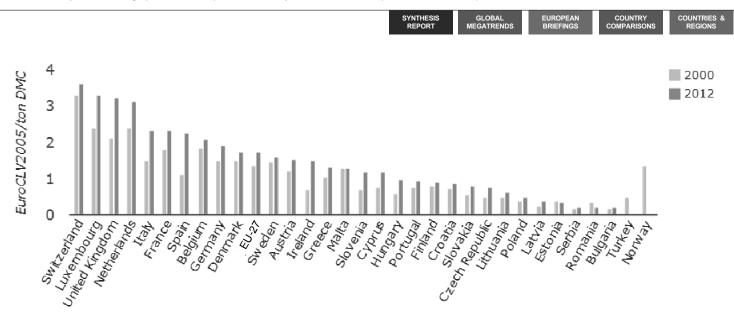
- Per capita consumption of material resources increased between 2000 and 2012 in 13 countries and decreased in 19.
- Significant increases were primarily due to large-scale infrastructure investments, with the largest declines related to the economic crisis and a collapse in construction activities.
- Four countries have consistently been the most resource-efficient economies.







SOER2015 / Cross-country comparisons/ Resource efficiency - material resource efficient and productivity



Resource productivity (GDP/DMC) in 32 European countries (2000 and 2012)

Note: A time series was available for 32 countries but for four countries the full 2000-2012 time series was not available (2000 not available for Serbia so 2001 is shown; 2011 shown for Switzerland and latest data available for Norway was 2008 and Turkey was 2010). For the calculation of resource productivity Eurostat uses the GDP in units of Euros in chain-linked volumes to the reference year 2005 at 2005 exchange rates (code: EUR\_CLV05\_KG). Data sources: Eurostat. Resource productivity





SOER2015 / Cross-country comparisons/ Waste — municipal solid waste generation

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### Waste — municipal solid waste generation



- Generation of municipal waste per capita has declined slightly from 2004 to 2012, but it is clearly better managed now than ten years ago.
- The number of countries recycling and composting more than 30 % of municipal waste increased from 11 to 17 out of 34.
- The large differences in performance indicate room for further improvement and actions to meet the 2020 target to recycle 50 % of municipal waste.

Related content



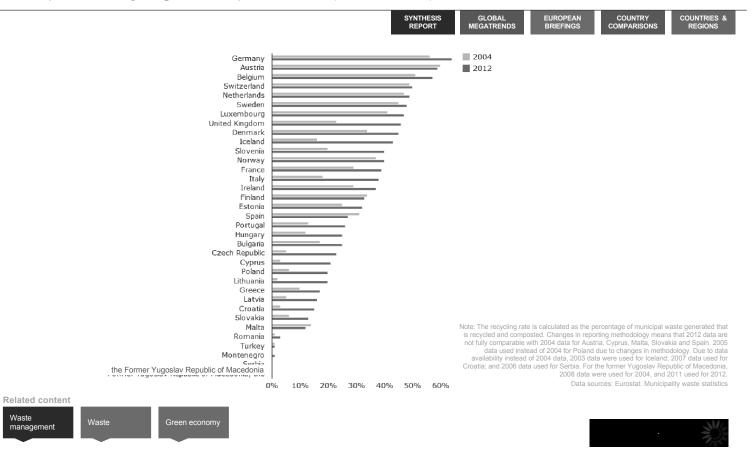
Waste





SOER2015 / Cross-country comparisons/ Waste - municipal solid waste generation

Municipal waste **recycling** in 35 European countries (2004 and 2012)



SOER2015 / Cross-country comparisons/ Mitigating climate change — greenhouse gas emissions

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## Mitigating climate change — greenhouse gas emissions

- SYNTHESIS GLOBAL EUROPEAN COUNTRY COUNTRIES & REPORT MEGATRENDS BRIEFINGS COMPARISONS REGIONS
- Almost all European countries with an individual greenhouse gas limitation or reduction target under the Kyoto Protocol are on track towards achieving their targets.
- The majority of European Union member states expect to meet their individual emission targets for the non-trading sectors under the Effort Sharing Decision.
- However, for 14 countries, additional measures are needed to bring emissions below the annual targets from 2013 to 2020.

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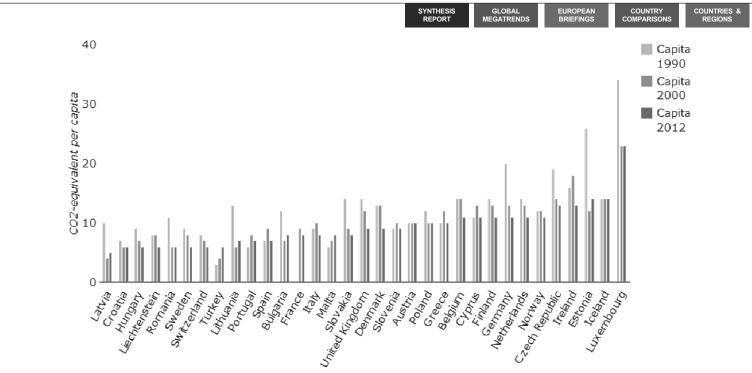
GHG emissions & CC mitigation

n & Mitigating climate change



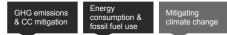
SOER2015 / Cross-country comparisons/ Mitigating climate change – greenhouse gas emissions

Greenhouse gas emissions per capita in EEA countries (1990, 2000 and 2012)



Data sources: EEA. National emissions reported to the UNFCCC and to the EU Greenhouse Gas Monitoring Mechanism; Eurostat. Population on 1 January by age and sex.

Related content







### Looking ahead: Innovation



- Technological, economic, and social innovations can support long-term transitions to a green economy
- This requires upscaling niche innovations
- Publicly funded research has fostered many of the most important and commercially successful innovations



### Looking ahead: Investing today for the long term



- European investment needs are substantial and today's choices will have long-term implications
- Key criteria for future investments in a green economy:
  - decarbonisation of society
  - circular economy jobs
  - ecosystem services and planetary limits
  - human health and well-being
- Shifting taxation and phasing out environmentally harmful subsidies can stimulate investment and innovation in this direction



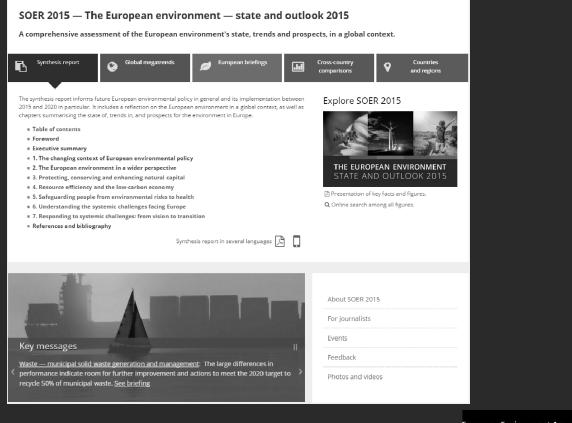
### Looking ahead: Living well within the limits of the planet by 2050



- Achieving the 2050 vision is possible but it depends on our actions and investments today.
- Systemic change must deliver decent employment, opportunities and fairness, as well as respecting environmental limits.
- SOER 2015 illustrates the success of European policy. We should be confident in entering a new stage of environmental governance.



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