#### **European Environment Agency**

### Towards a recycling society



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#### Overview

1. EU Waste Policy

2. Waste Indicators (generation and recycling)

3. EEA and ETC/SCP Activities on Waste



# 6th Environmental Action Programme of the EU

Decouple waste generation from economic growth and from environmental degradation

Substantially reduce waste generation

Reduce hazardousness of waste Encourage recycling and recovery

The long-term goal is for the EU to become a recycling society, that seeks to avoid waste and uses waste as a resource.

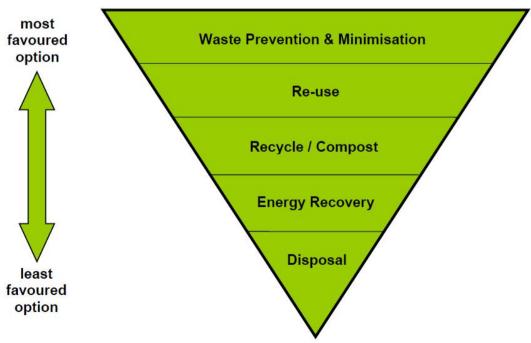
(Thematic Strategy on prevention and recycling of waste, 2005)



#### Waste Framework Directive

 Sets a "hierarchy" of waste management options: prevention is the preferred option, followed by reuse, recycling and other forms of recovery - with safe disposal as the last option.

The Waste Hierarchy



#### Waste Framework Directive

- New recycling targets to be achieved by EU member states by 2020, including recycling rates of 50% for household and similar wastes (at least paper, plastic, meal and glass) and 70% for construction and demolition waste.
- Provisions on waste prevention: obligation for MS to develop national 'waste prevention programs' and a commitment from the EC to report on prevention and set waste prevention objectives.

#### Other Targets

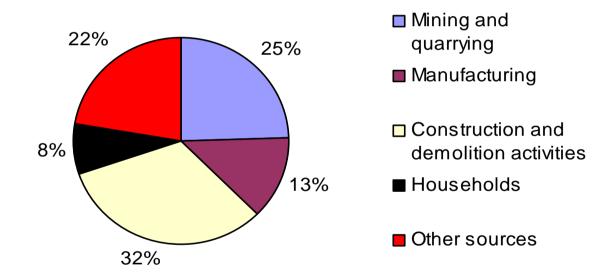
	Year	Recovery targets	Recycling targets	Collection targets
Packaging waste	2008	60%	55%	
	2006	85% incl. Reuse	80% incl. reuse	100%
End-of-Life Vehicles	2015	95% incl. Reuse	85% incl. reuse	100%
Waste Electrical and Electronic Equipment	2006	70 – 80 % (differs acc. to WEEE categories)	50 – 80 % incl. reuse (differs acc. to WEEE categories)	Min. 4 kg per inhabitant per year
	2012			25%
Batteries	2016			45%
Batteries, lead acid and accumulators	2011		50 – 75% efficiency (different targets for different battery types)	
Tyres	2006	Zero landfill of tyres		
Landfill of biodegradable municipal waste	2006	Reduction to 75% of the amount generated in 1995		
	2009	Reduction to 50% of the amount generated in 1995		
	2016	Reduction to 35% of the amount generated in 1995		

#### Facts and indicators: Where are we?

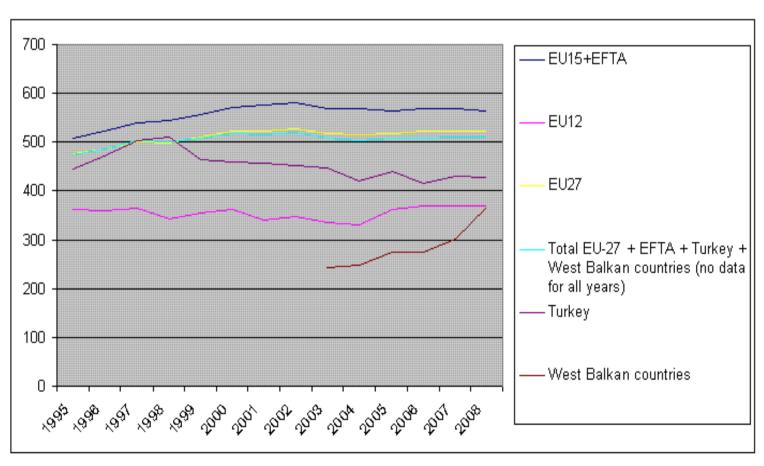
- Total waste generation in the EU 27: 3 billion tonnes (2006)
- Waste <u>generation</u> per capita: 6 tonnes
- Total municipal waste generation in the EU 27: 260 million tonnes (2008)
- Municipal waste generation per capita: 524 kg
- Total hazardous waste generation: 88 million tonnes (2006)
- In 2008, 40% of the total municipal waste was sent to <u>landfills</u>. In 1995, it was 62%. At the same time, more waste has been <u>recycled and composted</u>: 16% in 1995 and 39% in 2008.
- In 2007, 59 % of all packaging waste in the EU-27 was recycled and 14 % energy-recovered



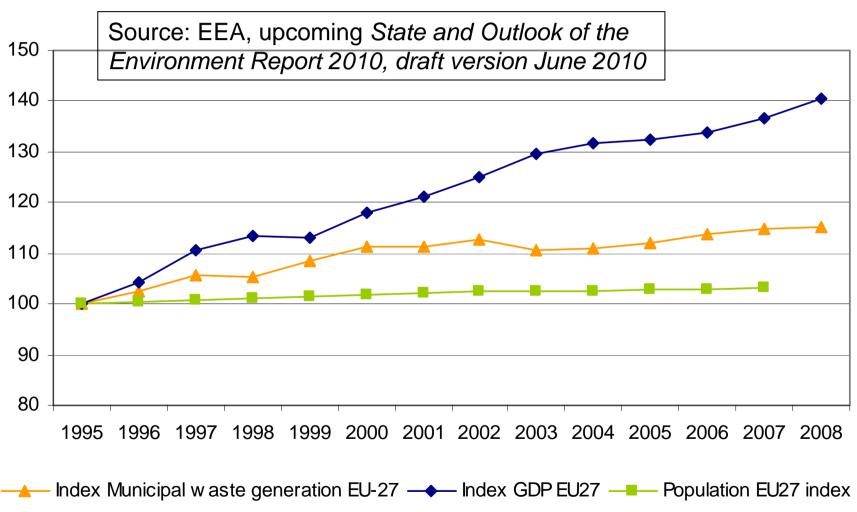
# Total waste <u>generation</u>, by source



### Municipal Waste Generation CSI-16 Kg/capita

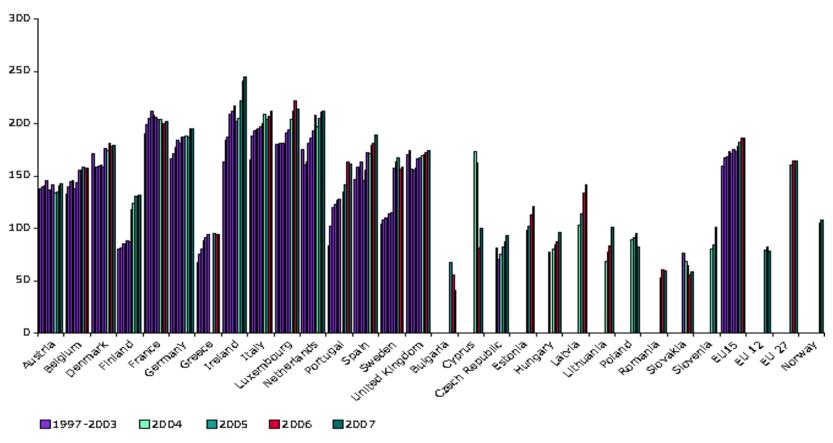


### Municipal waste is increasing



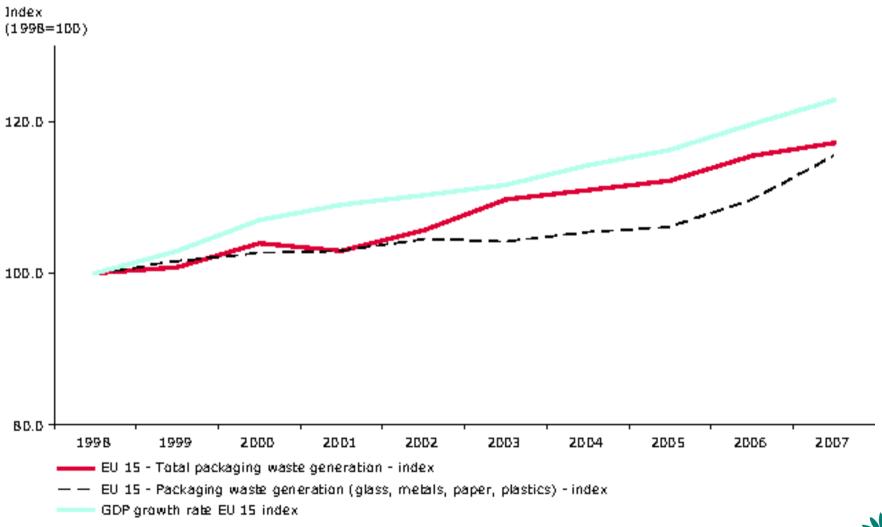


### Generation of Packaging Waste CSI-17





### Packaging waste is increasing

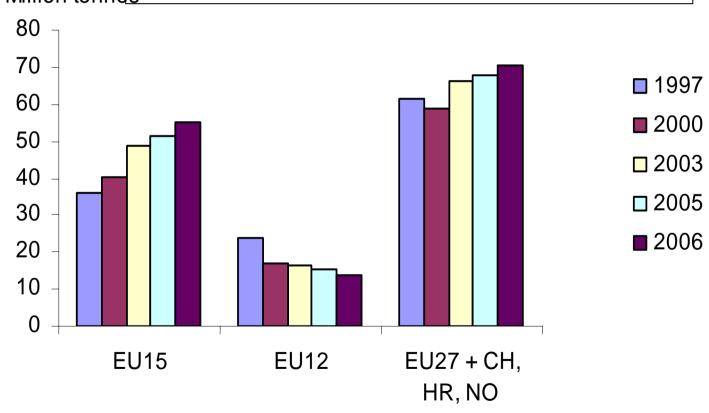


Source: EEA, Core Set Indicator 17 on packaging waste



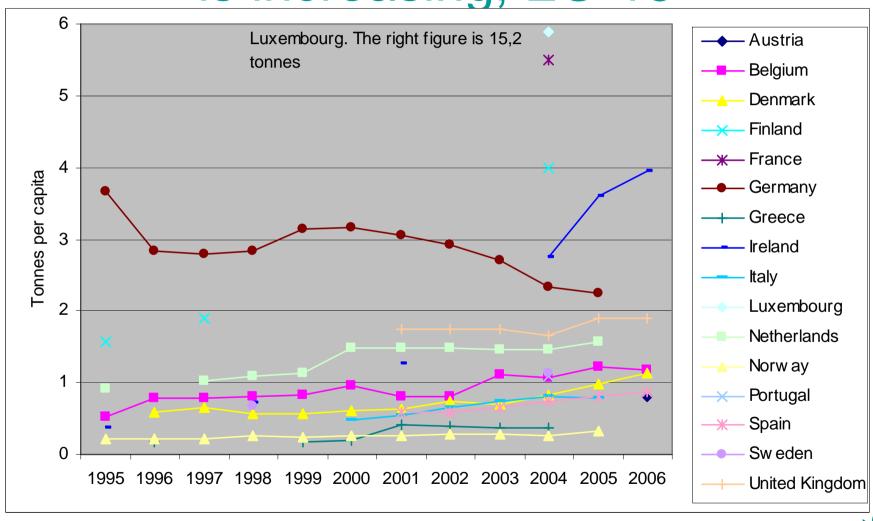
#### Hazardous waste is increasing

Source: EEA, upcoming State and Outlook of the Million tonnes Environment Report 2010, draft version June 2010





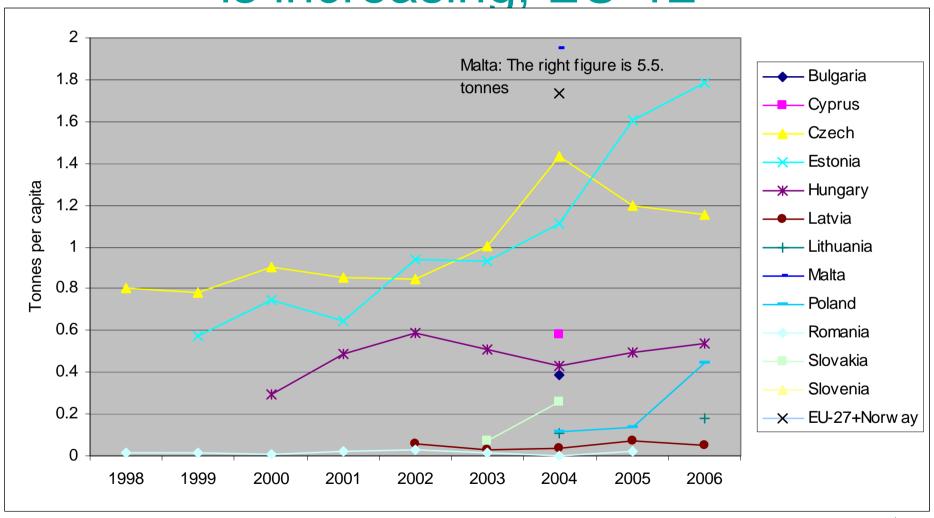
## Construction and demolition waste is increasing, EU-15



Source: ETC/SCP, based on national data



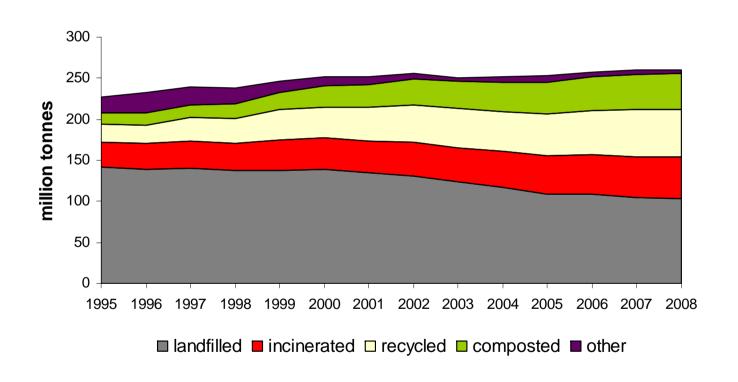
## Construction and demolition waste is increasing, EU-12



Source: ETC/SCP, based on national data



### Management of municipal waste 1995-2008



# The Landfill Directive's diversion targets

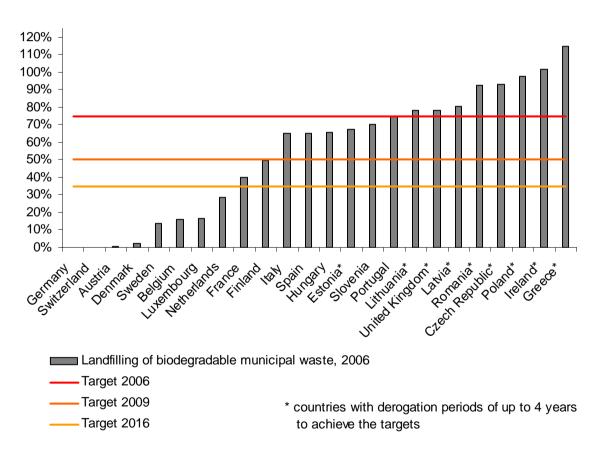
- EU Landfill Directive targets: Reduce biodegradable municipal waste going to landfill
  - to 75 % by 2006
  - to 50 % by 2009
  - to 35 % by 2016



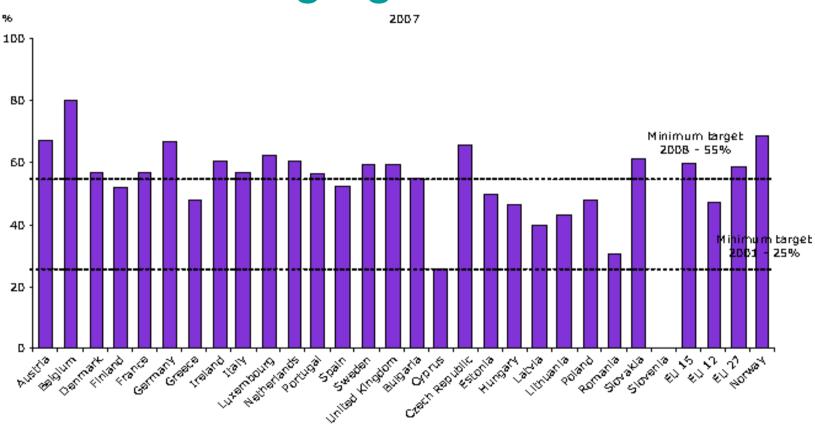
of the total amount generated in 1995



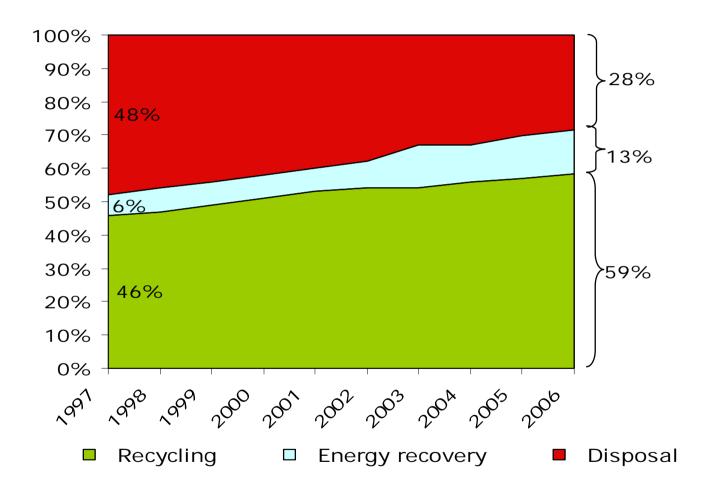
### Biodegradable municipal waste landfilled in 2006



# Generation and Recycling of Packaging Waste CSI-17



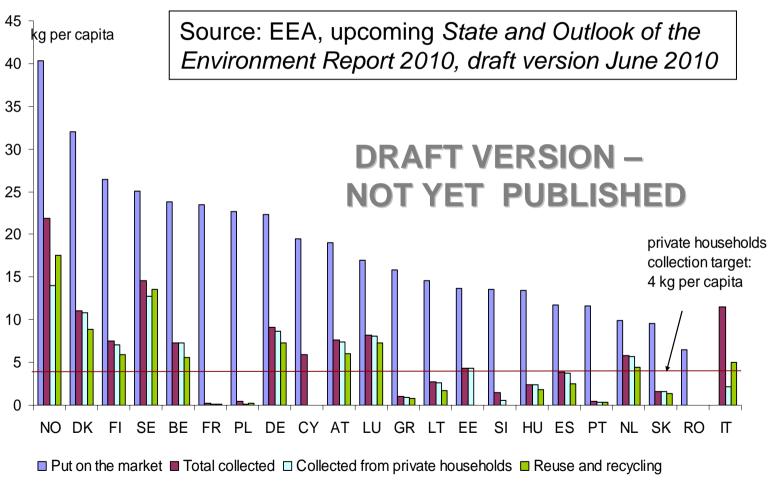
#### Packaging waste management, EU-15



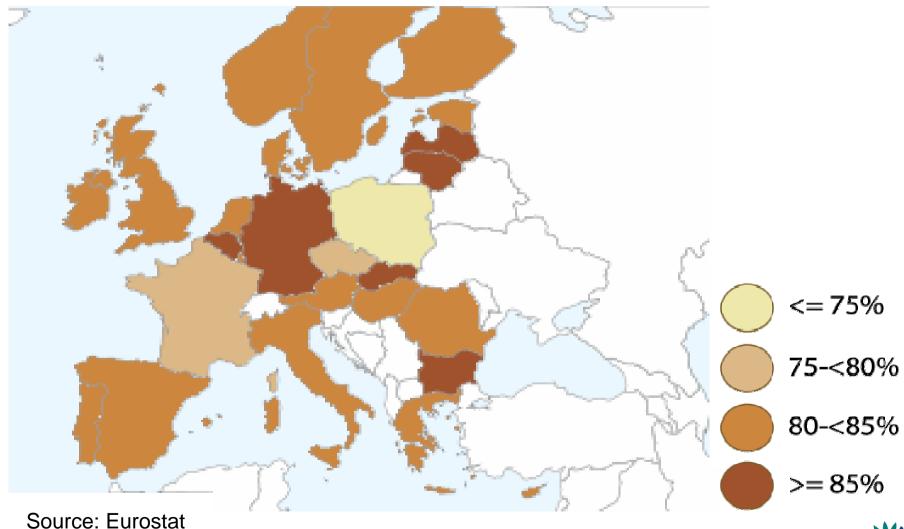
Source: EEA CSI-17



#### WEEE

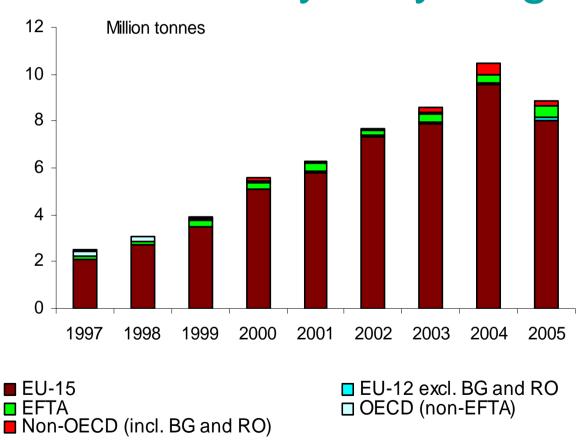


### Recycling of end-of-life vehicles





# Transboundary shipments of waste are increasing: mostly for recovery/recycling





#### Main conclusion

- Most flows (total and per capita) are increasing
  - Some are decoupling from GDP

#### **HOWEVER**

- Management is improving (lower impacts)
- Increasing recyling/recovery (quantity and rates)
  - Not yet enough in some case, great inter-country differences

#### CONCLUSION

 We are moving towards a 'recycling society', not yet towards a 'prevention society'



#### For discussion

- How can we reduce waste generation? (prevention)
- How much of the resources we use can be covered by recycled materials? (<u>substitution</u>)
- Environmental benefits of recycling is linked to the quality of recycling (materials and processes) (<u>innovation</u>)
- Illegal export for some wastes poses a threat to the environment and to the recycling markets (<u>institutions</u>)

### Recent EEA-ETC/SCP Reports and Publications on Waste (2009)

- The European Recycling Map (ETC/SCP)
- Diverting waste from Landfill
- Waste without borders in the EU
- Transboundary Shipment of Waste Data Report (ETC/SCP)
- EU as recycling society. Present recycling levels of Municipal Waste and C&D Waste in the EU (ETC/SCP)
- http://www.eea.europa.eu/publications
- http://scp.eionet.europa.eu/publications



#### Diverting waste from landfill



#### Contents:

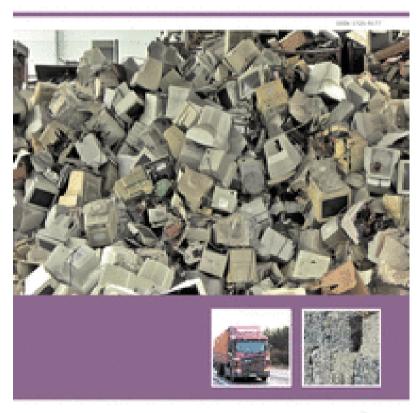
- Analyses the effectiveness of national policies on diverting total municipal waste and biodegredable waste from landfill.
- Which instruments work well, which don't, and why?
- Is Europe on track to meet the targets? (Landfill directive)

#### Waste without borders in the EU

ESA Report | No L/2009

Waste without borders in the EU?

Transboundary shipments of waste



#### Contents:

- Regulations for waste shipments
- Shipments of notified waste
- Illegal shipments
- Conclusions better reporting needed





#### Ongoing Projects (2010)

- Transboundary Shipment of Waste
- Recycling and Green economy in the EU
- <u>Factsheets on waste policies</u> Preparation of country factsheets
- Eionet workshop on waste



#### Transboundary shipments of waste

- What are the drivers behind waste shipments?
- What are the environmental impacts resulting from waste shipments?
- Developing a methodology for estimating the environmental impacts and drivers of the transboundary waste shipments.
- Application of the methodology on selected waste streams.
- Giving an input to the ongoing debate about the transboundary shipment of waste



#### Recycling and the Green Economy

- Defining the coherence between recycling and the green economy
- Documenting the current value and importance of selected recyclable waste streams for the economy
- Documenting how much of the input of selected resources used in the EU can be potentially be provided by recycling of the selected waste streams.
- Analyzing the recycling potential of different economic sectors and their significant economic, environmental and social impacts.



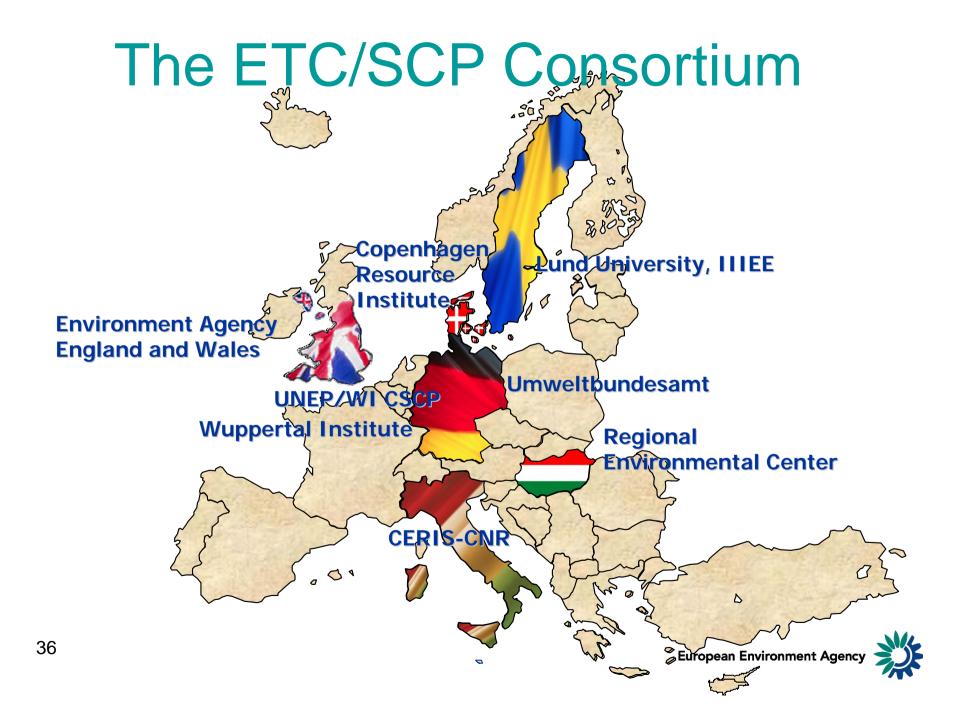
#### Fact sheets on waste policies

- Published in 2010
   <a href="http://scp.eionet.europa.eu/facts/factsheets\_waste/200">http://scp.eionet.europa.eu/facts/factsheets\_waste/200</a>
  9\_edition
- General facts
- National waste legislation
- National waste management plan
- Waste prevention
- Construction and demolition waste
- Biodegradable municipal waste
- Bibliography
- Links to national websites



#### Eionet workshop on waste

- 10-11 November 2010, Berlin.
- Focus on waste prevention.
- Production, consumption, wholesale, retail phases.
- Facilitating the exchange of best practices in waste prevention. (38 countries including Serbia)



#### **European Environment Agency**

Thank you for your attention



www.eea.europa.eu

ETC/SCP: http://scp.eionet.europa.eu/

