



## MODULE 2 From waste to resources

# European Environment Agency

**The road from landfilling to recycling:  
Common destination, different routes**



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Module 2 From waste to resources: government policies  
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## Three messages

- 1. Priority products/areas of opportunities:** Activities related to food and drink, housing and mobility in Europe cause majority of resource use and air emissions
- 2. From waste to resources:** Three groups of countries in Europe emerge based on their strategies for diverting municipal waste from landfill
- 3. Waste and climate change:** Better management of waste will also reduce future GHG emissions





# Message 1

The production-consumption activities related to **housing, food and drink** and **mobility** in Europe cause on average two thirds of environmental pressures, including

- greenhouse gas emissions
- material use

Source: EEA and ETC/RWM environmental accounts of selected EU countries (using NAMEA method)





**Food and drink:  
18% of GHG emissions  
23% of material use**



**One week's food of a family in the United Kingdom**

Source: „Hungry Planet: What The World Eats“, by Peter Menzel and Faith D'Aluisio



**Housing and infrastructure:  
24 % of GHG emissions  
32% of material use**





**Mobility:  
18 % of GHG emissions  
7% of material use**





## Message 2

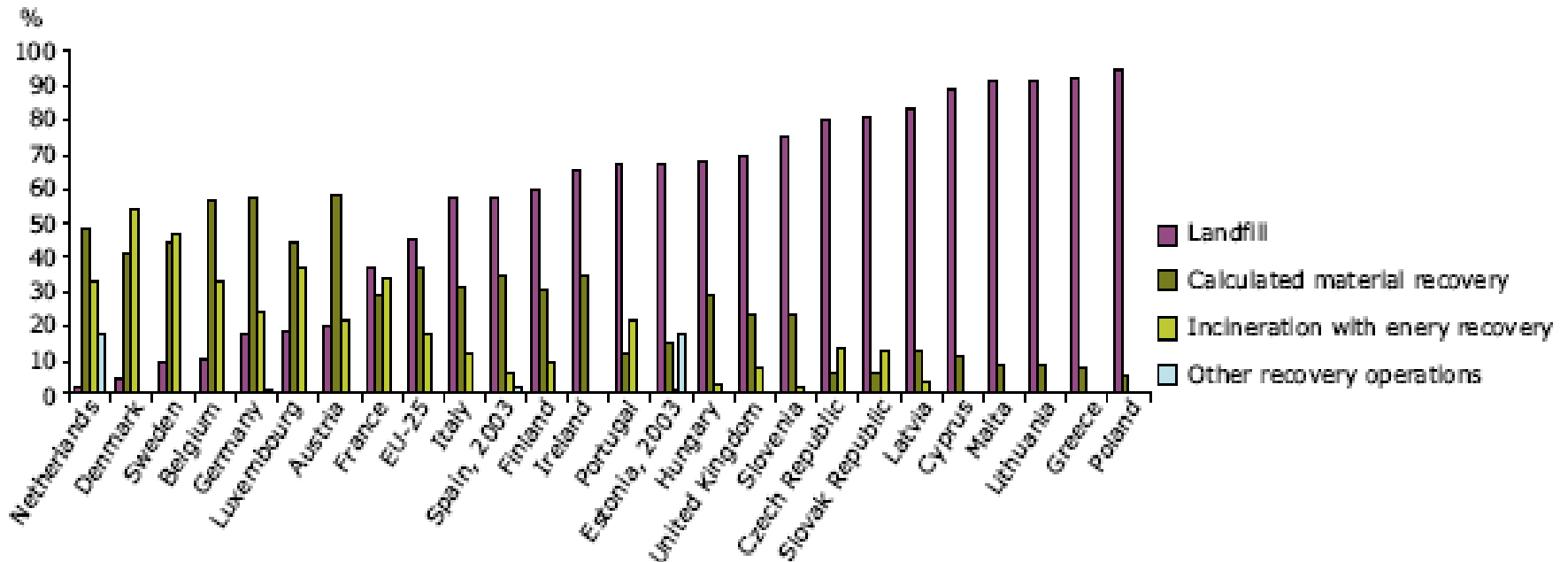
Three groups of countries in Europe emerge based on their strategies for diverting municipal waste from landfill







# Use of landfilling, incineration and material recovery in 2004

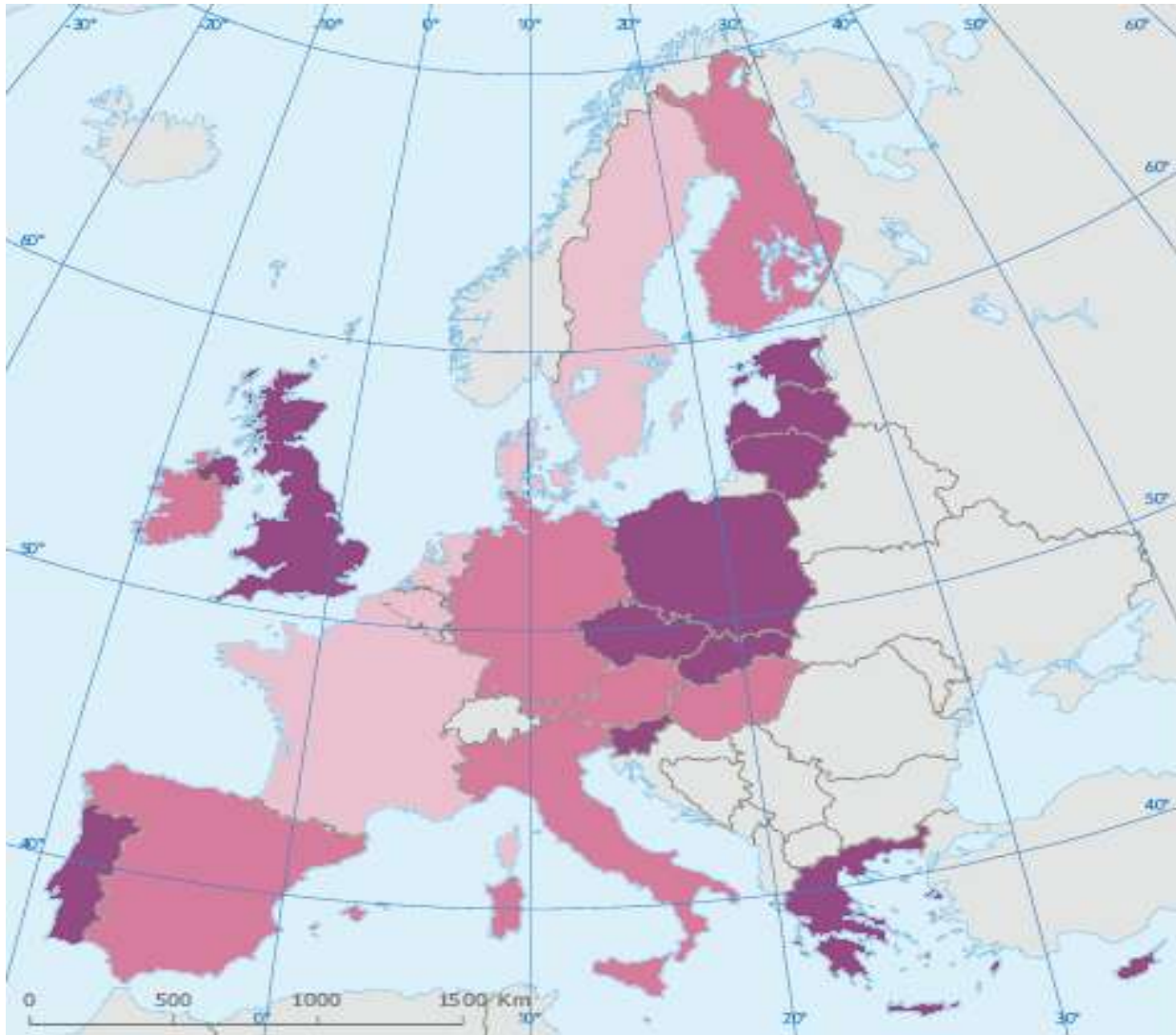


**Note:** To provide an estimate of material recovery, the above figure uses the residual of municipal waste generated minus municipal waste landfilled and incinerated (with minor adjustments). Thus defined, material recovery covers recycling, composting and other types of recovery operations (except incineration with energy recovery). The category 'other' covers sorting operations for the Netherlands, and differences between Eurostat data and national statistics for Germany, Spain and Estonia.





**Source:** Eurostat Structural Indicators on municipal waste generated, incinerated and landfilled, supplemented with national statistics: Statistisches Bundesamt (2006), Centraal Bureau voor de Statistiek (2007), Ministerio de Medio Ambiente (2005), EEIC (2005).



# Three groups of countries emerge



### Three country groupings defined by diversion strategy

-  1: incineration > 25 % & material recovery > 25 %
-  2: incineration < 25 % & material recovery > 25 %
-  3: incineration < 25 % & material recovery < 25 %
-  Outside data coverage

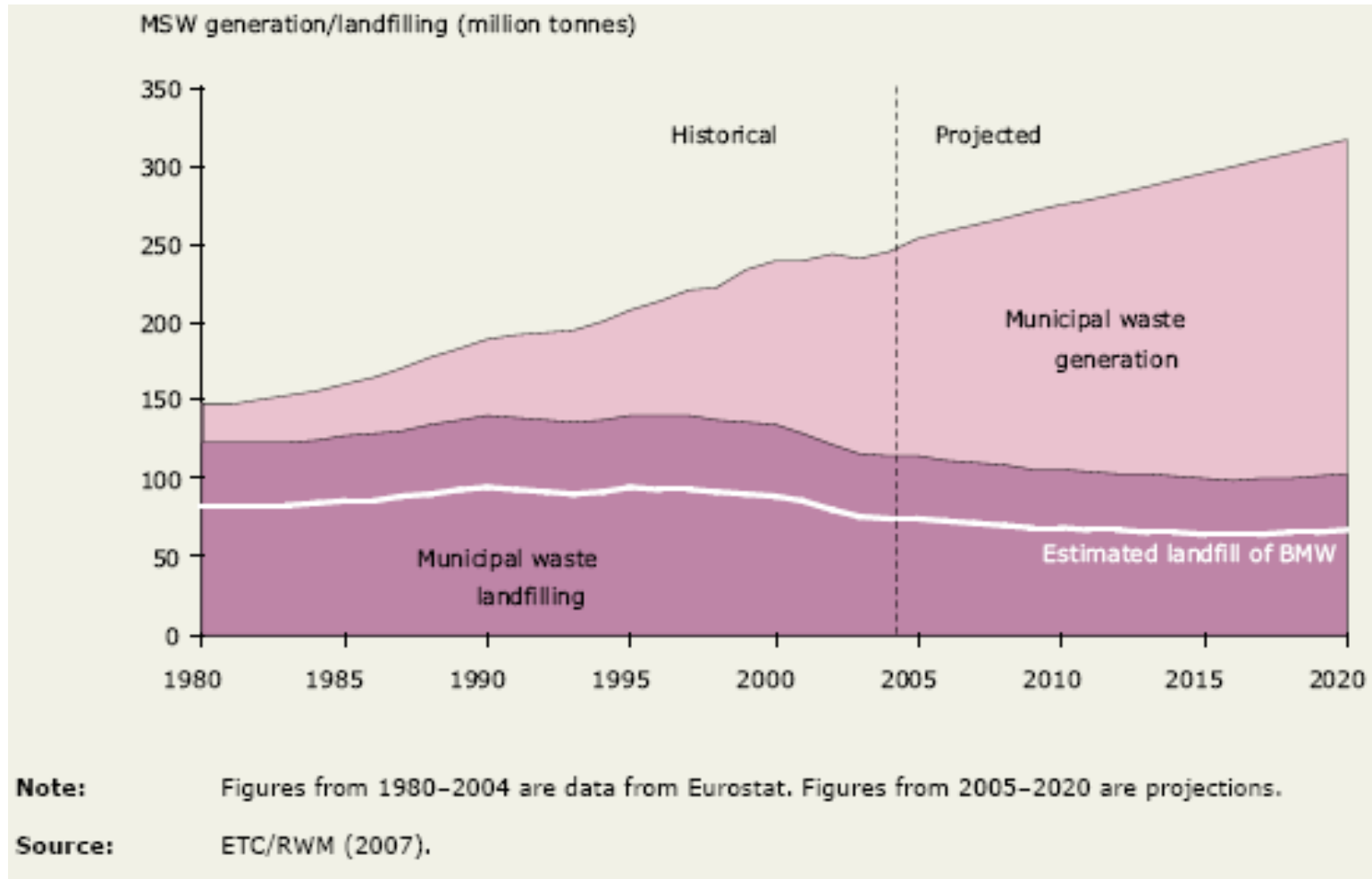
The road from landfill to recycling:  
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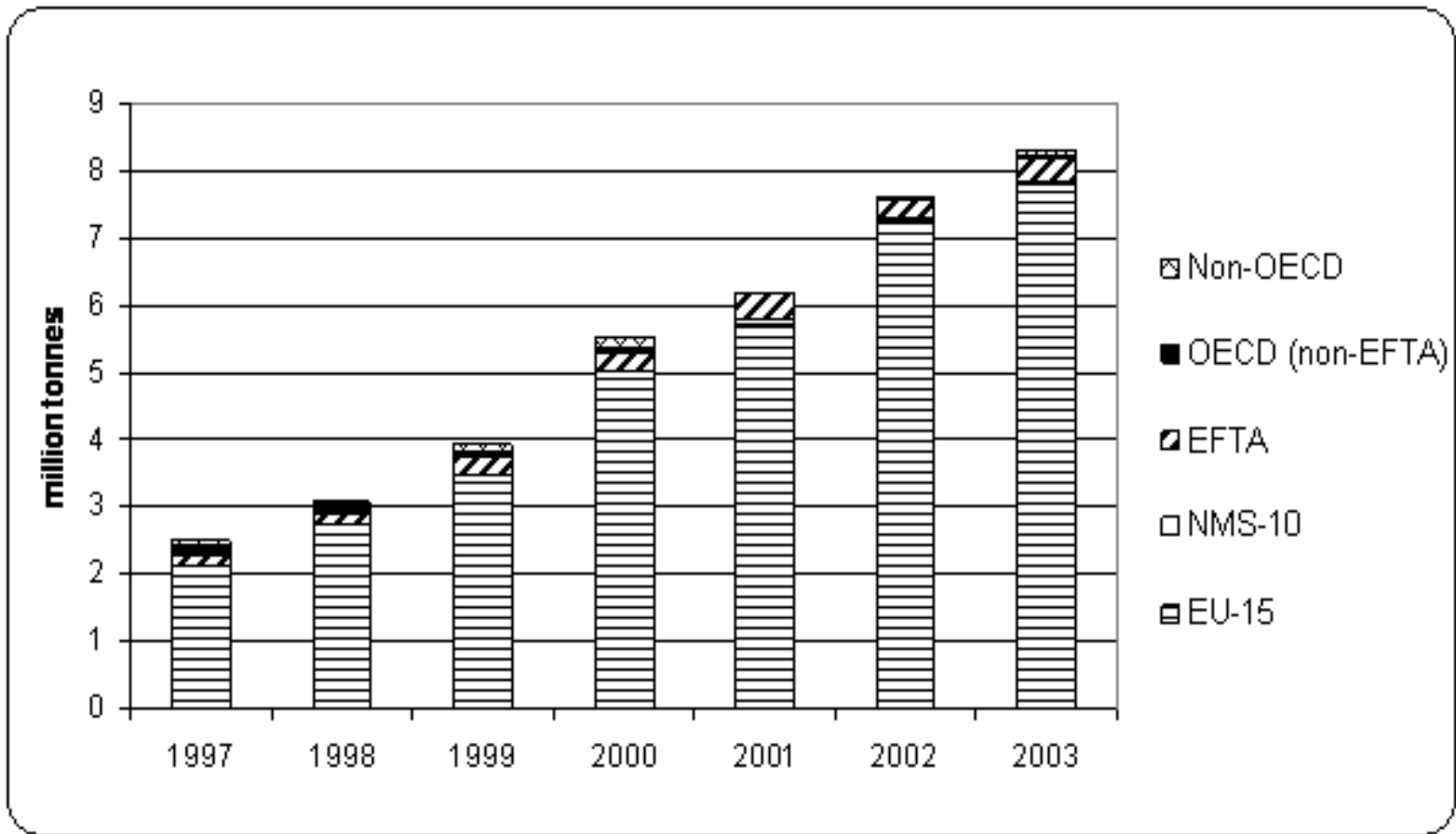


# Projected generation and landfilling of municipal waste





# Shipment of notified waste from the EU-15 countries to EU-15, NMS-10, EFTA, OECD and non-OECD countries



Source, ETC/RWM, 2008



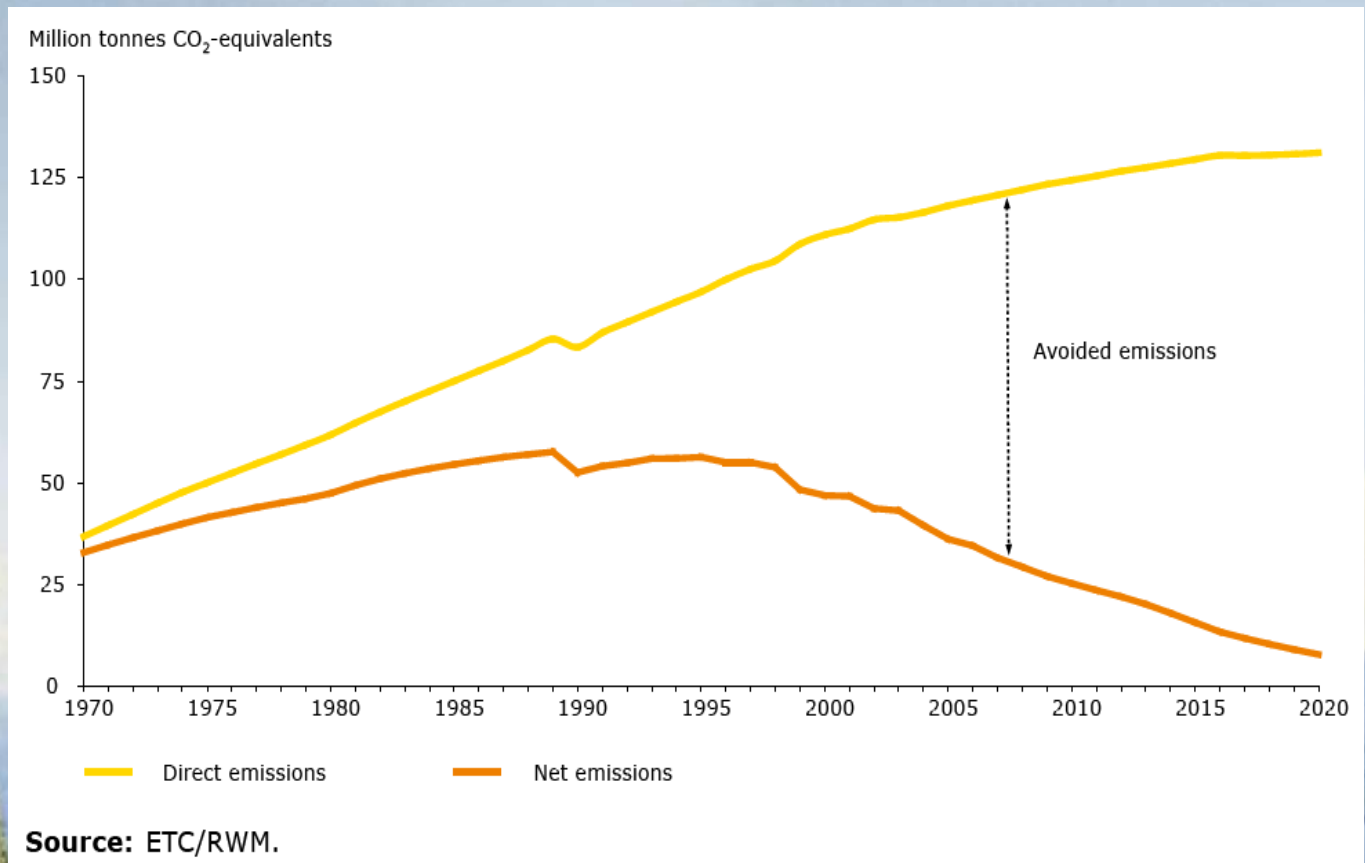




## Message 3

Better management of waste will also reduce future greenhouse gas emissions

# Trends and projections of greenhouse gas emissions from management of municipal waste in Europe





# European Environment Agency

**Thank you very much  
for your attention**



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