

EU Indicators on waste

UNECE Joint Task Force on
Environment Indicators

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Karin Blumenthal

Eurostat

Indicators on waste

- Waste indicators used in the European Union:
 - Municipal waste generation
 - Municipal waste treatment (further breakdown)
 - *Generation and recycling of packaging waste*
 - Non-mineral waste generation

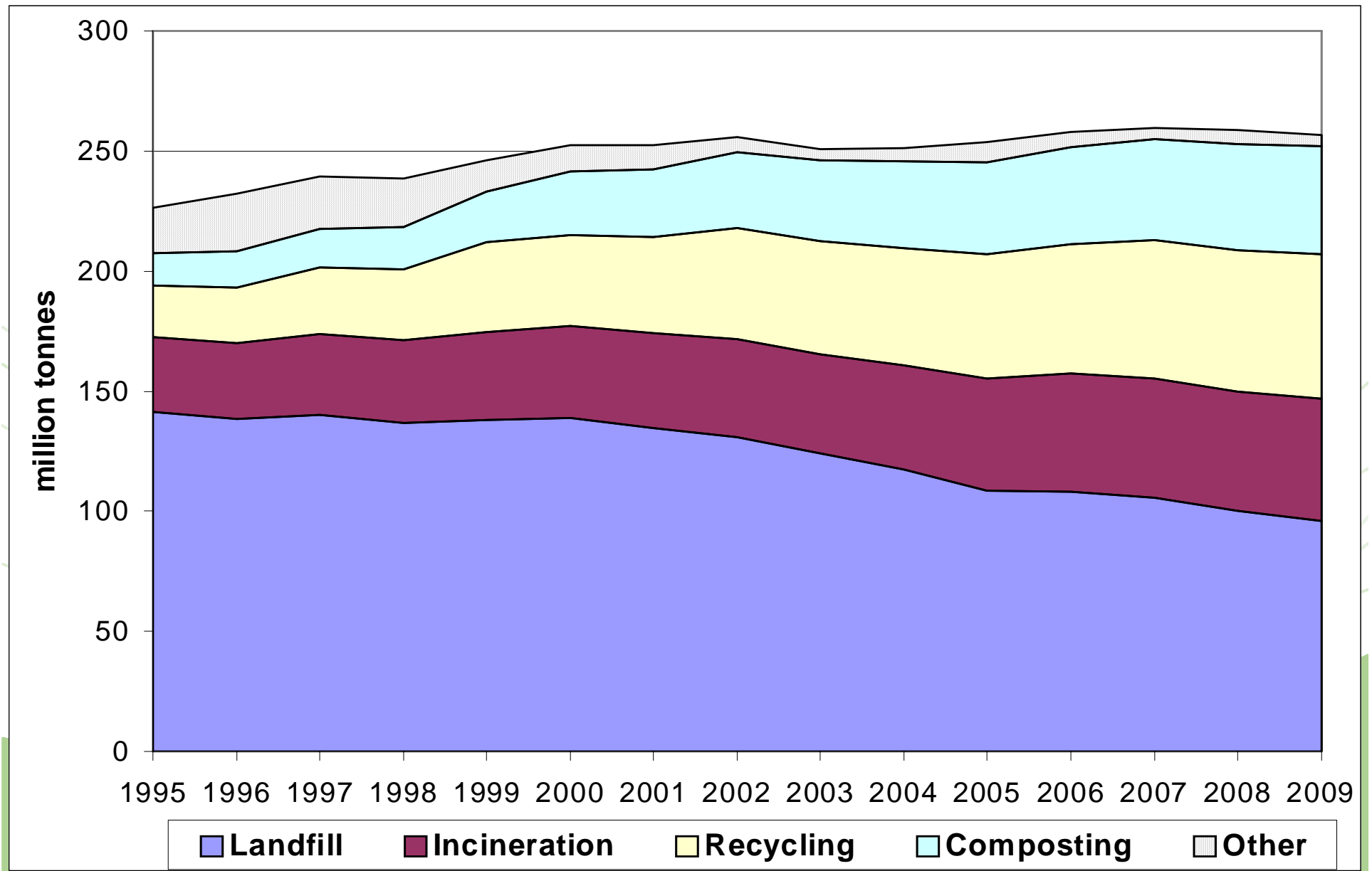
- Outlook

Indicators on waste

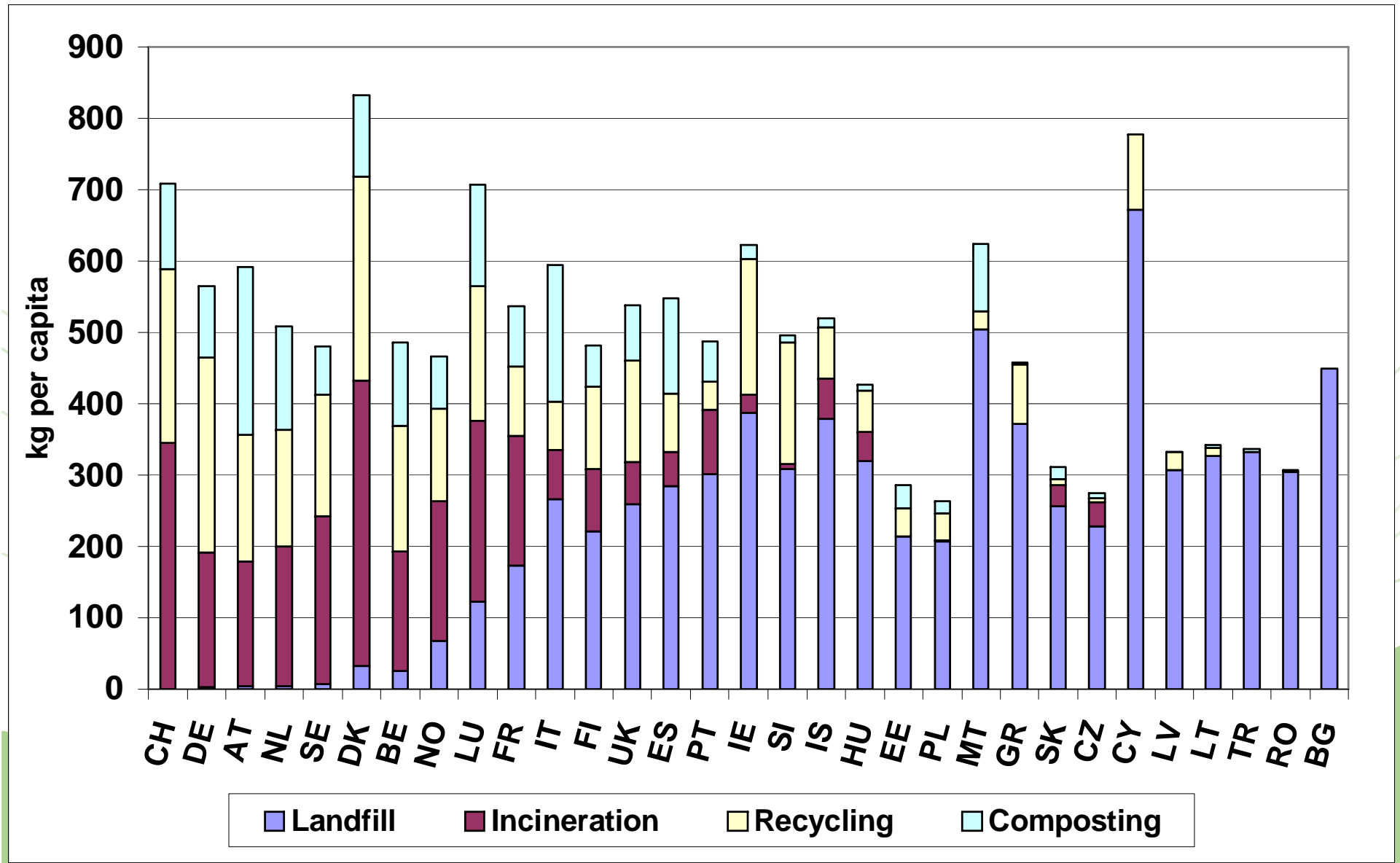
■ Municipal waste:

- Municipal waste generation
- Municipal waste treatment
 - *Incineration (with and without energy recovery)*
 - *Recycling (excluding composting)*
 - *composting*
 - *Landfilling*
- *Expressed in kg per capita and year*

Treatment of municipal waste 1995 – 2009, EU 27 (Mio. tonnes)



Treatment of municipal waste 2009 by countries (kg/capita)



Municipal waste – observations

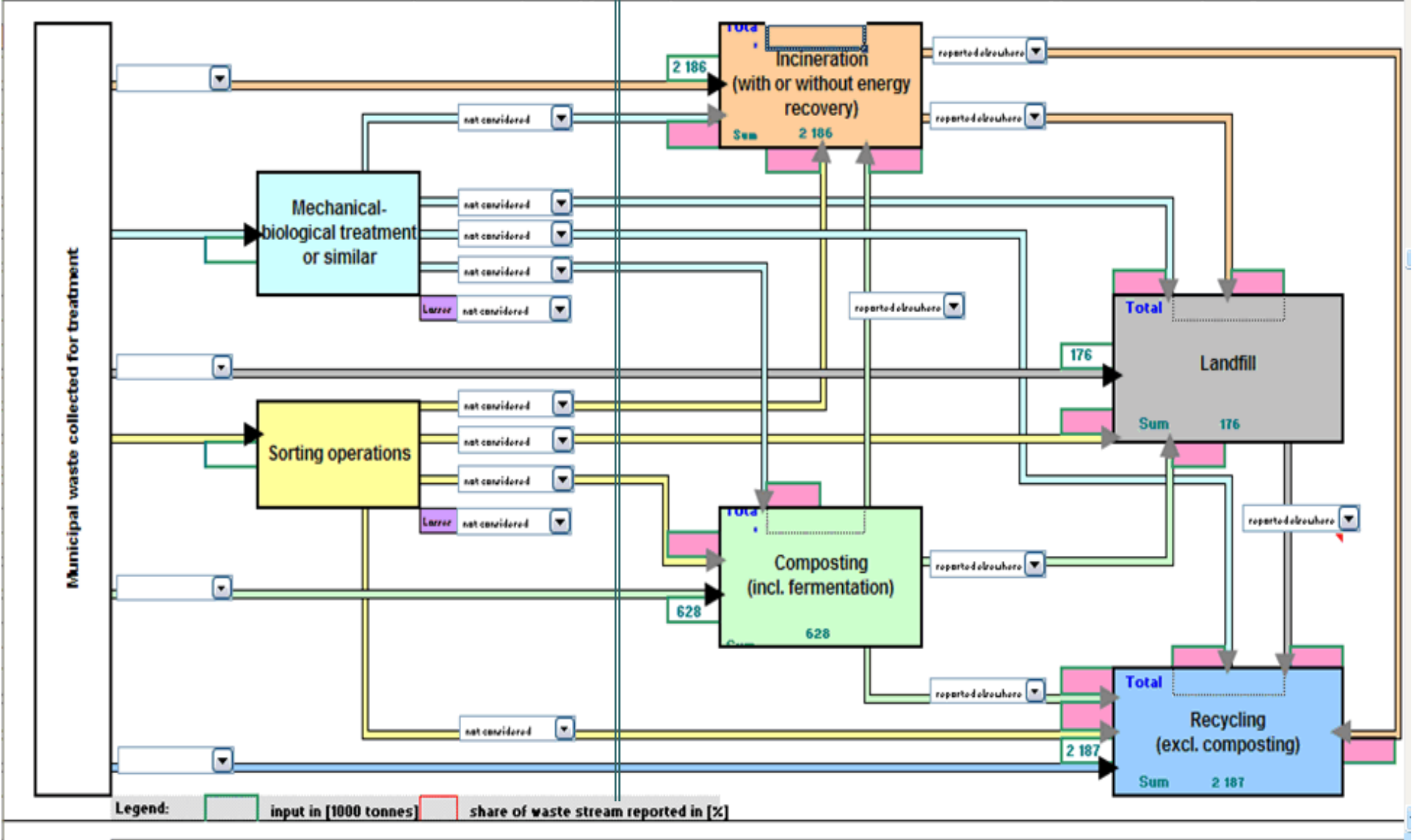
- Comparability across countries still limited
 - coverage of materials and sources
 - commercial waste; packaging waste
- Import and export of municipal waste
 - subtract from / add to figures or not?
- Exclusion of secondary waste, but what to observe?
 - first or last treatment step?
 - how to deal with MBT and sorting?
 - what is current practice?

MBT = mechanical biological treatment

Municipal waste – questionnaire to reporting countries

pre-treatment ← → final treatment

2 Which of the relevant streams for treatment of municipal waste are reported by your country, and what are the amounts? If the amounts reflect only part of the streams, please give an estimation of



Preliminary results - municipal waste survey

- Mechanical biological treatment is major problem for reporting
- Export and import of municipal waste is mainly an issue for small countries
- Some countries include only waste codes from Chapter 20 (of the List of Waste)
=> in this case packaging waste is excluded
- Recycling efficiency is an issue for the future

Indicator based on waste statistics (2150/2002/EC)

■ **Priorities:**

- Indicator on non-mineral waste generation
- Indicator on generation of hazardous waste
- Other indicators – to be developed
 - recycling of waste
 - landfilling of waste

Indicator on waste generation: basic considerations

- The indicator should allow to monitor the development of waste generation in general in the EU 27 and across countries.
- Basic problems:
 - Generated waste total dominated by mineral wastes (share of mineral waste: 65% in 2008)
- Conceptual questions:
 - Exclusion of mineral wastes?
 - Exclusion of specific sectors (mining; construction)?
 - Reference value: Population (kg/cap,a) or Gross Value Added (kg/1000 EUR)

Indicator on non-mineral waste generation

■ Exclusion of mineral wastes:

- Huge amounts in combination with the high fluctuation would hide general trends in waste generation in the rest of the economy
 - Generated mainly in the construction sector (50%) and in the mining sector (40%)
 - Limited data quality and comparability in the concerned sectors
 - For a considerable share prevention is not the main environmental objective
- ➔ Gain in accuracy / interpretability is assumed to outweigh the limited indicator coverage of 35 % of the total.

Non-mineral waste indicator: Definition (1)

- The indicator presents:
 - the amount of non-mineral waste generated
 - expressed in kg / capita, year
- The indicator covers:
 - hazardous and non-hazardous wastes,
 - including secondary waste
 - excluding mineral waste
 - waste from all economic sectors and from households

Non-mineral waste indicator: Definition (2)

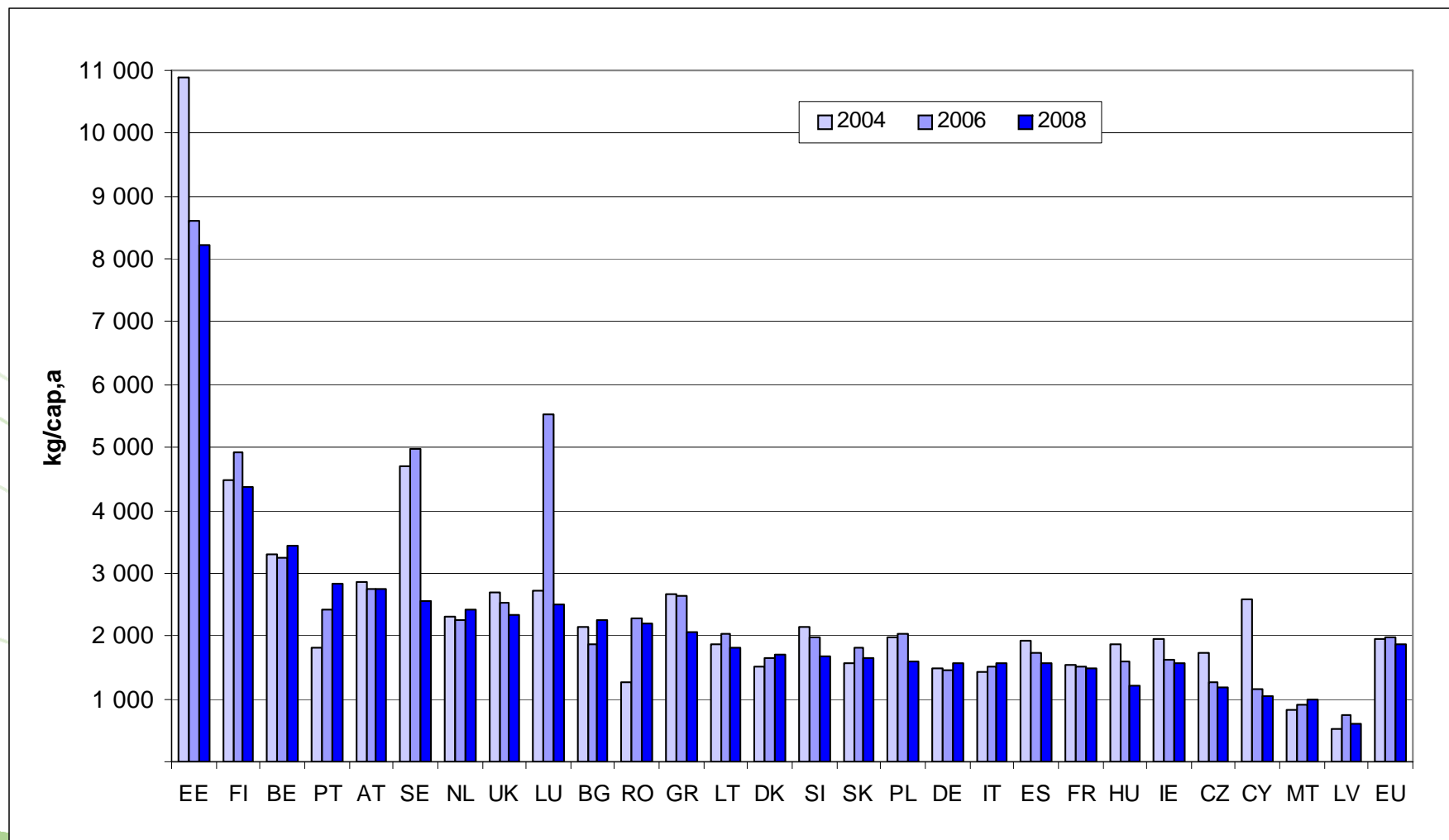
- Excluded EWC-Stat categories:
 - mineral wastes, hz/nhz (EWC-Stat 12.1 – 12.3, 12.5)
 - contaminated soils/polluted dredging spoils, hz (12.6)
 - dredging spoils, nhz (11.3)

- The indicator includes (although partly or completely mineral):
 - combustion wastes, hz/nhz (12.4)
 - solidified, stabilised and vitrified wastes, hz/nhz (13)

Non-mineral waste indicator: Limitations

- Impact of economic development and structure is not reflected by the indicator
 - ⇒ must be considered when interpreting the development
- Indicator includes secondary waste
 - ⇒ progress in (pre-)treatment of waste may result in increase of the indicator
- For some countries, significant amounts of hazardous waste are not covered because of the exclusion of mineral waste (e.g. contaminated soils in Germany)

Non-mineral waste generation 2004 - 2008





Non-mineral waste generation (kg per person)

Compiling agency: Eurostat, the statistical office of the European Union

Eurostat metadata

Reference metadata

- [1. Contact](#)
- [2. Metadata update](#)
- [3. Statistical presentation](#)
- [4. Unit of measure](#)
- [5. Reference period](#)
- [6. Institutional mandate](#)
- [7. Confidentiality](#)
- [8. Release policy](#)
- [9. Frequency of dissemination](#)
- [10. Dissemination format](#)
- [11. Accessibility of documentation](#)
- [12. Quality management](#)
- [13. Relevance](#)
- [14. Accuracy and reliability](#)
- [15. Timeliness and punctuality](#)
- [16. Comparability](#)
- [17. Coherence](#)
- [18. Cost and burden](#)
- [19. Data revision](#)
- [20. Statistical processing](#)
- [21. Comment](#)

For any question on data and metadata, please contact: [EUROPEAN STATISTICAL DATA SUPPORT](#)

1. Contact

[Top](#)

1.1. Contact organisation	Eurostat, the statistical office of the European Union
1.2. Contact organisation unit	Unit E.3: Environment and forestry statistics

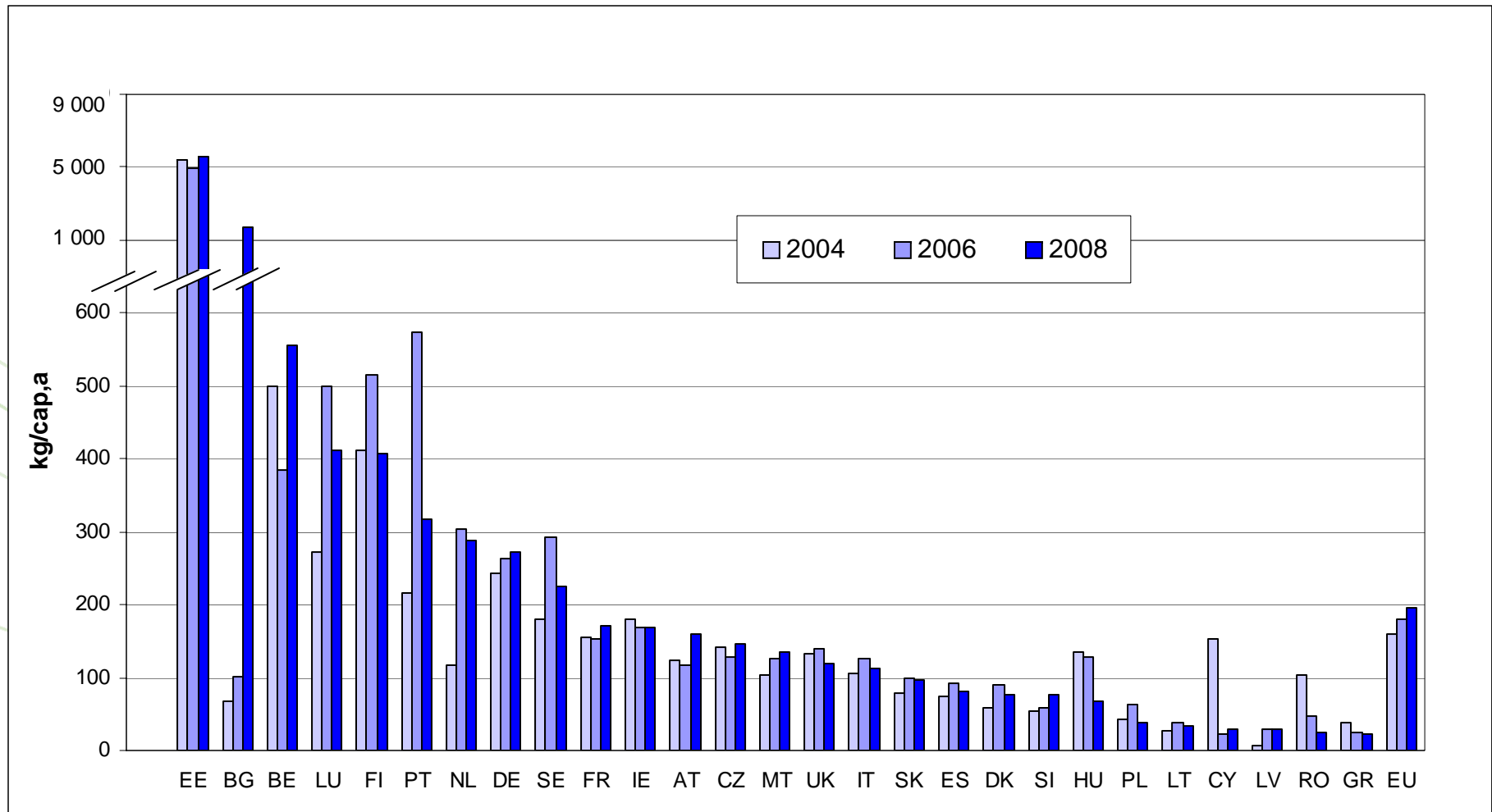
Hazardous waste indicator: Definition

- The indicator presents:
 - the amount of hazardous waste generated
 - expressed in kg / capita, year
- The indicator covers:
 - all hazardous wastes covered by the WStatR, including secondary waste
 - waste from all economic sectors and from households

Hazardous waste indicator: Limitations

- Impact of economic development and structure is not reflected by the indicator
 - ⇒ must be considered when interpreting the development
- Indicator includes secondary waste
 - ⇒ progress in (pre-)treatment of waste may result in increase of the indicator
- Interpretation is still hampered by data quality and breaks due to methodological changes

Hazardous waste generation 2004 - 2006



Indicators to be developed

■ Recycling of waste

Methodological problems to be considered:

⇒ *Relation between waste generation and waste treatment*

⇒ *How to deal with imports and exports*

■ Landfilling of waste

⇒ More promising

⇒ No decision is taken yet

Thank you for your attention

More information is available on the
Data centre waste website:

<http://ec.europa.eu/eurostat/waste>

Karin.Blumenthal@ec.europa.eu