



4th Meeting of the Expert Group on Environment Statistics

**Prague, 3-5 May 2017
Czech Statistical Office**

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European environment statistics

- **Eurostat - general & legal setup**
- **Water statistics**
- **Forestry and biodiversity**
- **Waste statistics**
 - **Co-operation**
 - **General waste statistics**
 - **Waste electrical and electronic equipment**

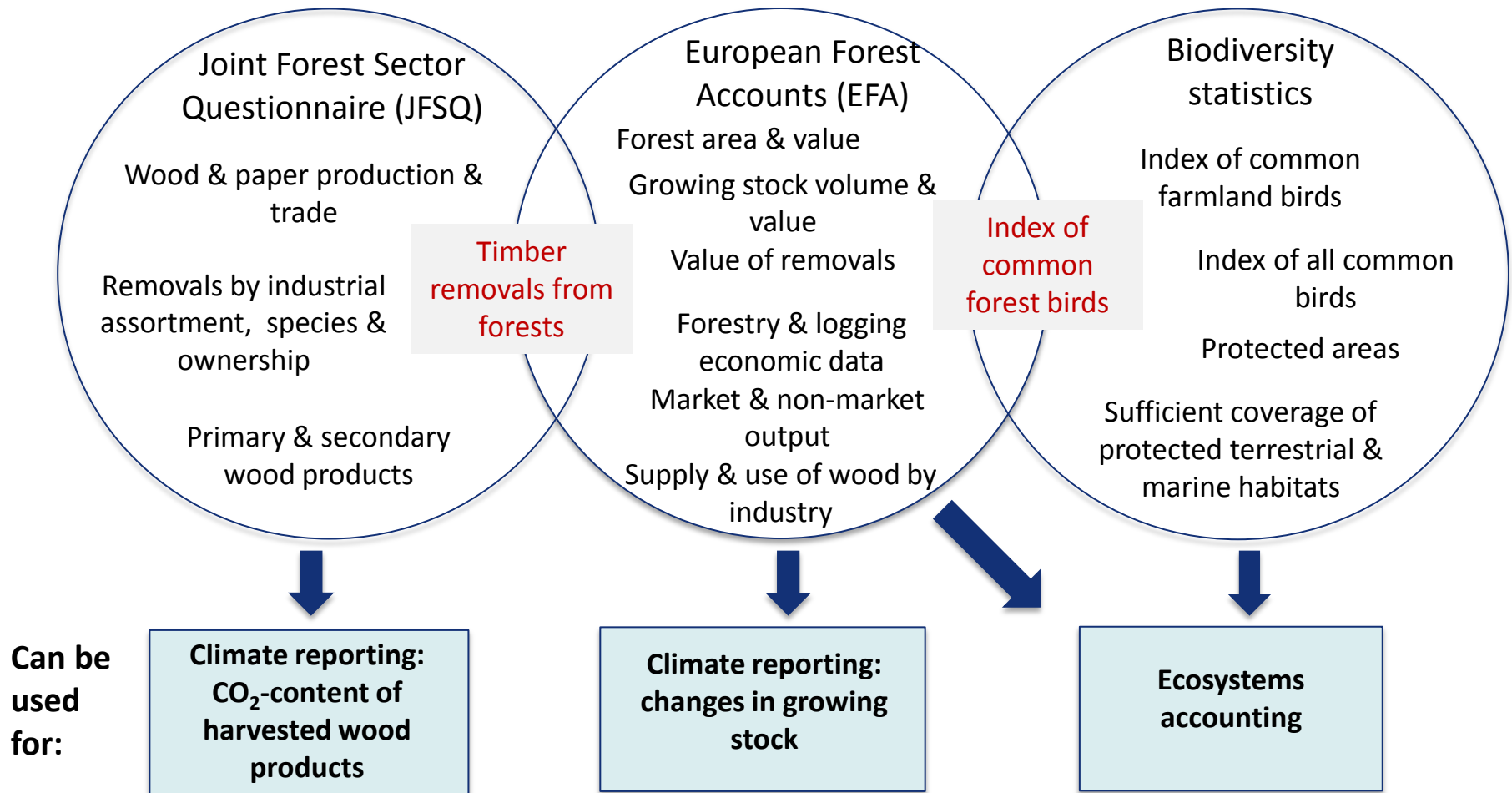
Eurostat – the general & legal setup

- **The Statistical Office of the European Union**
 - **A Directorate-General of the European Commission**
 - **Legal framework - „European Statistical Law“**
(Regulation EC 223/2009 of the European Parliament and of the Council, amended 2015)
 - Statistical governance and quality principles, production and dissemination of European statistics, statistical confidentiality
 - European Statistical System (ESS): NSI + all national authorities developing, producing and disseminating official statistics
 - **Statistical laws for various domains**
 - **e.g. Regulation 2150/2002/EC on waste statistics**
- ... and voluntary data collections

- **Data collection:** Biennial collection of yearly data jointly with OECD
- **Thematic coverage:**
 - **water resources**
 - **water abstraction** by source (surface water, groundwater) and purpose
 - other **sources of water** (reuse, desalination, non-fresh water, im- exports) and **losses**
 - **water use** by source (public water supply, self-supply) and user (economic activities)
 - connection rates to **public water supply**
 - connection rates to **wastewater treatment** by treatment type and level
 - generation and disposal of **sewage sludge**
 - generation and discharge of **pollution** by generator, treatment and pollutant
- **National** statistics (Joint Questionnaire IW): full set of 322 parameters
- **Regional** statistics (for WFD River basin districts): reduced set of 24 parameters on resources, abstraction and use

Biggest problem: data gaps due to voluntary nature of reporting

How our topics **inter-relate** and some of their uses



European waste statistics – cooperation

Main partner in European Union

- DG Environment ⇒ *Policy monitoring*
- European Environment Agency ⇒ *Policy assessment*
- DG ESTAT ⇒ *Data provider*

International coordination

- OECD
- United Nations (UNSD, UNEP, FAO, ...)

Data sets collected by Eurostat

<p>Waste statistics</p>	<p>Municipal waste</p>	<p>End-of-life vehicles</p> <p>Packaging waste</p> <p>WEEE (waste electrical and electronic equipment)</p> <p>Waste shipments</p> <p>Batteries</p> <p>Recycling targets (waste framework directive) on household waste and construction & demolition waste</p>
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*based on
Regulation
2150/2002/EC*

*based on
OECD/Eurostat joint
questionnaire*

*based on legislation
on behalf of
DG Environment*

Waste
statistics

Municipal
waste
statistics

Shared Environmental Information System project with EaP countries (Armenia, Azerbaijan, Belarus, Georgia, Moldova, Ukraine)

- carrying out a pilot data collection using the UNSD questionnaire on waste, slightly adjusted
- identify support actions that could be undertaken under the project, based on a review of the completed UNSD/UNEP questionnaire on waste,
- Output: factsheets describing the waste statistics situation in the country, with a view to identify data quality issues

Waste
statistics

Municipal
waste
statistics

Common data collection based on OECD/Eurostat joint questionnaire and part of OECD annual quality assurance

- Using the same webforms for municipal waste
- A core set of variables with a more detailed set by OECD
- Agreement on data validation approach
- Agreement on the allocation of WStatR data for OECD framework

Waste Statistics Regulation 2150/2002/EC

Objectives

- The Regulation on waste statistics creates the framework for the production of EU statistics on the generation, recovery and disposal of waste

... the details are in the Annexes

Annex I on waste generation

Annex II on waste recovery and disposal

Annex III on the waste statistical nomenclature

Waste Statistics Regulation – Annex I

Waste generation

- Breakdown by economic activity and households (based on NACE Rev2, largely equivalent to ISIC)
- Breakdown by waste type (EWC-Stat Rev 4, aggregating the waste codes of the European list of waste into material oriented waste categories)

Reporting structure – waste generation (Annex I)

Data set 1

Waste	NACE	haz	01-02/ A	03 / B	04 - 13 / C	14 / D	...	20 / EP_HH	Total
01.1 - Spent solvents		haz							
02 - Chemical preparation wastes		haz							
03.1 - Chemical deposits/residues		nhaz							
....									
05 - Health care /biological wastes		haz							
06 - Metallic wastes		haz							
07.1 - Glass wastes		haz							
07.2 - Paper / cardboard wastes		nhaz							
07.3 - Rubber wastes		nhaz							
07.4 - Plastic wastes		nhaz							
08 - Discarded equipment		nhaz							
08.1 - Discarded vehicles		haz							
...		haz							12
Total Waste									

By waste categories (51) =

36 haz and non-haz,

3 haz, 12 non-haz

By source =

18 economic activities

+ Households

Waste Statistics Regulation – Annex II

Waste recovery and disposal

- by waste category
(EWC-Stat Rev 4, aggregating the waste categories of the European List of Waste)
- by treatment operation
(aggregating disposal and recovery operations of Annex I and Annex II – Waste Framework Directive)
- Waste treatment infrastructure

Reporting structure – waste treatment (Annex II)

Data set 2

Description	H a z	Incineration		Recovery	Landfilling	Land treatment
		(R1)	(D10)	(R2 - R11)	(D1, D5, D12)	(D2-D4, D6, D7)
01.1 - Spent solvents	H					
02 - Chemical preparation wastes	H					
03.1 - Chemical deposits/residues						
....						
05 - Health care /biological wastes						
06 - Metallic wastes						
07.1 - Glass wastes						
07.2 - Paper / cardboard wastes						
07.3 - Rubber wastes						
07.4 - Plastic wastes						
08 - Discarded equipment						
08.1 - Discarded vehicles						
...						
Total						

By waste categories (51) =

36 haz and non-haz,

3 haz, 12 non-haz

By type of treatment (5)

Feedback on data delivery to countries within 2 months – short and standardised

1. Completeness of data sets
2. Completeness of the quality report
3. Timeliness
4. Proper application of definitions and classifications
5. Sound statistical methods
6. Other observations (missing flag, estimation flag etc.)

Within the WStatR data sets:

- ⇒ Comparison with previous years (significant changes)
- ⇒ Comparison across countries (outliers)
- ⇒ Generation vs. treatment vs. treatment capacity

Dialogue with Member States:

- ⇒ Requests to countries for clarification and /or revision
- ⇒ (retrospective) Data revisions
- ⇒ Improvement of validation routines
- ⇒ Documentation of validation



ENVIRONMENTAL DATA CENTRE ON WASTE

DATABASE

- + Overview
- News
- Data
 - Main tables
 - DATABASE**
 - Legislation
 - Publications
- Methodology
 - Links
- + Waste generation and management
- Transboundary waste shipments
- + Key Waste streams
- Indicators
 - Municipal waste generation and treatment, by treatment method
 - Generation of waste excluding major mineral wastes
 - Generation of hazardous waste, by economic activity
 - Management of waste excluding major mineral wastes
 - Recycling rate of e-waste
- + Waste related topics
- + Reporting

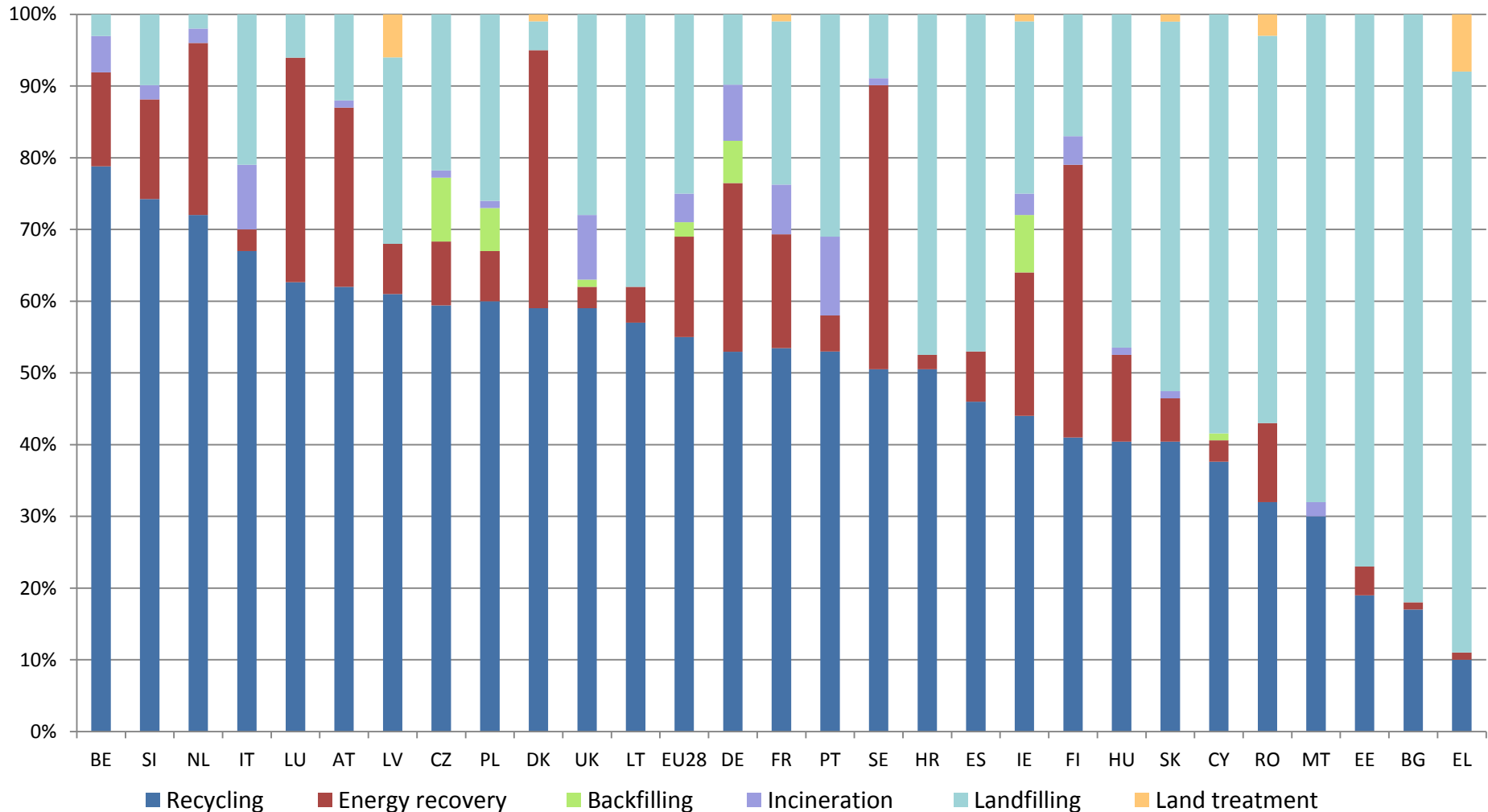
- Waste (env_was)
 - Waste generation and treatment (env_wasgt)
 - Generation of waste by waste category, hazardousness and NACE Rev. 2 activity (env_wasgen)
 - Treatment of waste by waste category, hazardousness and waste operations (env_wastrt)
 - Waste excluding major mineral wastes, by waste operations and hazardousness (env_wasmin)
 - Management of waste excluding major mineral waste, by waste operations - pilot project data (env_wasoper)
 - Management of waste excluding major mineral waste, by waste operations and waste flow - pilot project data (env_wasflow)
 - Number and capacity of recovery and disposal facilities by NUTS 2 regions (env_wasfac)
 - Waste streams (env_wasst)
 - Packaging waste by waste operations and waste flow (env_waspac)
 - Waste electrical and electronic equipment (WEEE) by waste operations (env_waselee)
 - Sales and collection of portable batteries and accumulators (env_waspb)
 - Recycling of batteries and accumulators (env_wasbat)
 - End-of-life vehicles by waste operations - detailed data (env_waselv)
 - End-of-life vehicles - reuse, recycling and recovery, totals (env_waselvt)
 - Transboundary shipments of notified waste by partner, hazardousness and waste operations (env_wasship)
 - Municipal waste by waste operations (env_wasmun)
 - Municipal waste by NUTS 2 regions - pilot project data (env_rwas_gen)
 - Coverage rate of municipal waste collection by NUTS 2 regions - pilot project data (env_rwas_cov)



- EWC_STAT_4, European Waste Classification for Statistics, version 4
- NACE Rev.2 - Statistical classification of economic activities
- NUTS - (Nomenclature of Territorial Units for Statistics), by country



Treatment of waste excl. major mineral waste in EU Member States by type of treatment, 2014



EU Directive 2012/19/EU on waste from electrical and electronic equipment (WEEE)

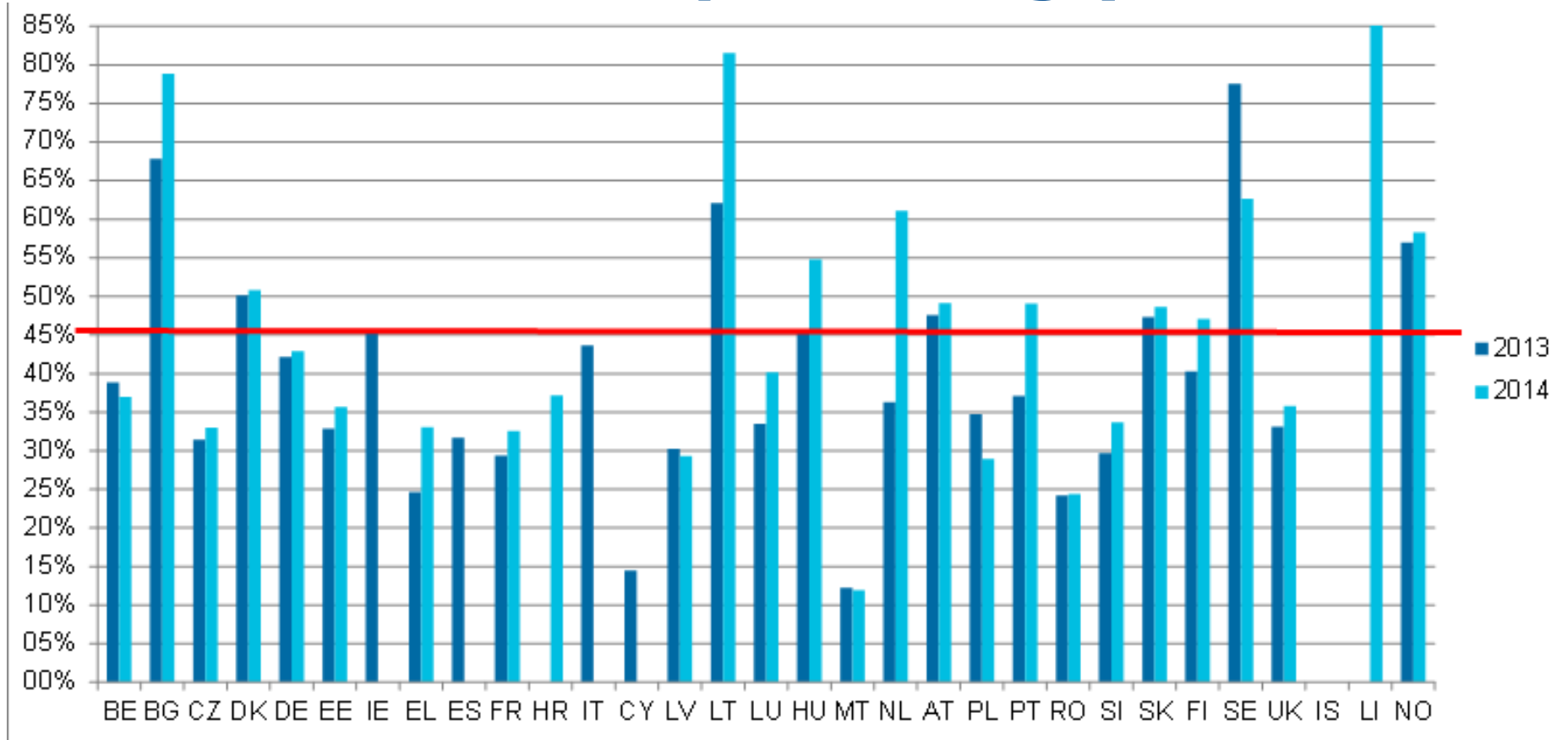
Objective

- Improve the environmental management of WEEE

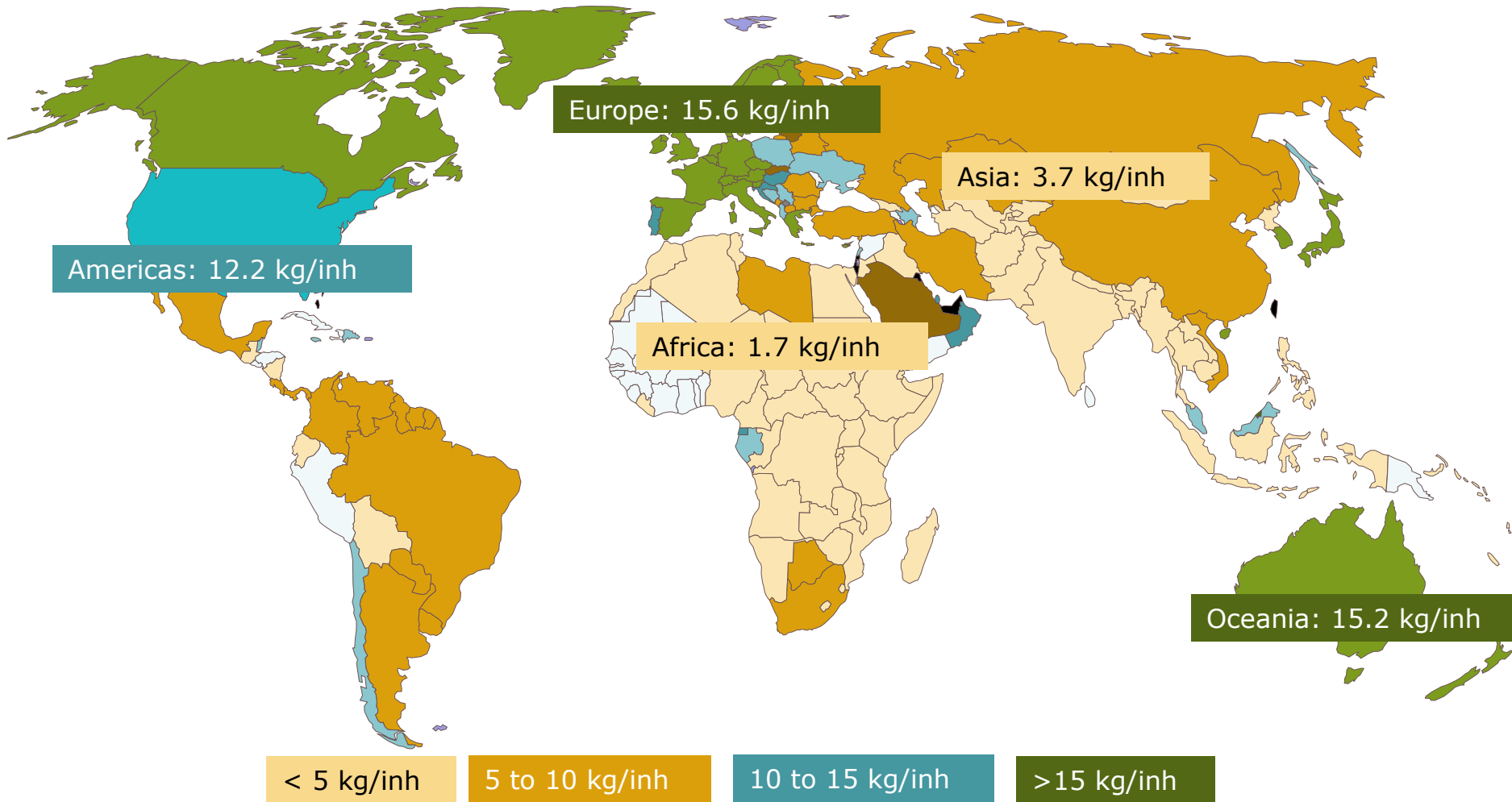
Requirements

- Set up systems to increase the collection rates and to ensure the proper treatment of WEEE
- Cover all electrical and electronic equipment grouped in 10 categories (6 categories from 2018)
- Recycling targets per WEEE category
- Collection target (4 kg/cap from HH, increasing from 2016 to 2019, from 45% to 65% of the average weight of EEE placed on the market)

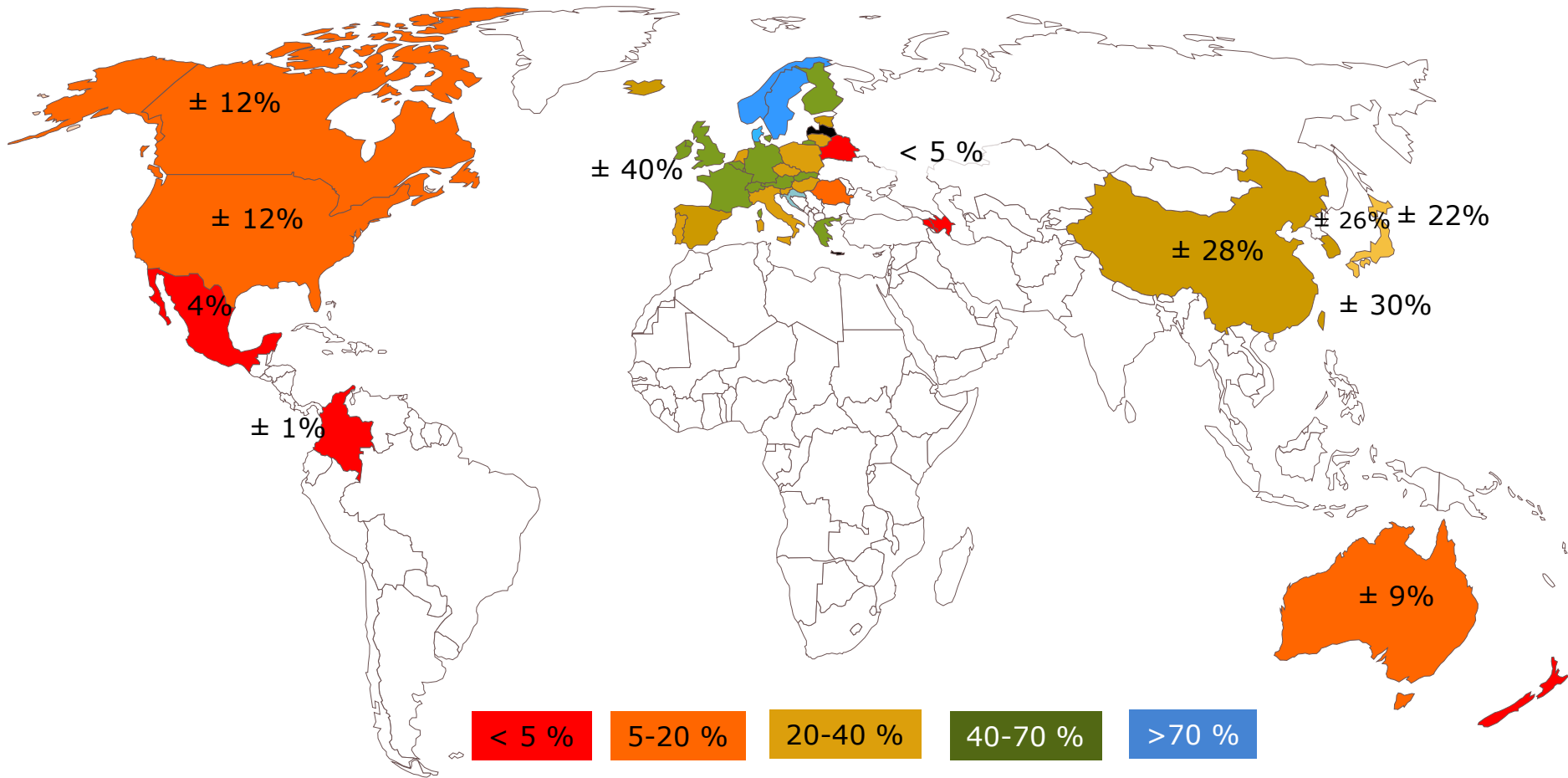
Total collection rate compared to PoM for the 3 preceding years



E-scrap generation in 2014 (WEEE)



Reported collection rates of e-scrap



Literature study + data collections with EU, UNECE and OECD.

Source: Kees Baldé, UNU, E-waste statistics 2016

Luxembourg

- Compare with other countries
- View over time

Romania: 1.548 kg/capita
 Croatia: 2.122 kg/capita
 Latvia: 2.388 kg/capita
 Cyprus: 2.595 kg/capita (estimated)

Malta: 2.858 kg/capita
 Estonia: 3.041 kg/capita
 Greece: 3.360 kg/capita
 Italy: 3.473 kg/capita

Slovenia: 3.884 kg/capita
 Slovakia: 3.924 kg/capita

Poland: 4.303 kg/capita
 Spain: 4.328 kg/capita

Bulgaria: 4.668 kg/capita
 Portugal: 4.737 kg/capita

Czech Republic: 4.780 kg/capita
 Hungary: 4.845 kg/capita

Iceland: 4.970 kg/capita
 Lithuania: 5.204 kg/capita

Netherlands: 6.549 kg/capita
 France: 6.924 kg/capita

Ireland: 7.229 kg/capita
 United Kingdom: 7.403 kg/capita

Germany: 7.649 kg/capita
 Liechtenstein: 7.850 kg/capita

Austria: 8.964 kg/capita
 Luxembourg: 9.470 kg/capita

Finland: 9.783 kg/capita
 Belgium: 10.336 kg/capita

Denmark: 12.617 kg/capita

Waste Electrical and Electronic Equipment (WEEE) Collection rate from households, Kilograms per capita



Luxembourg

- Compare with other countries
- View over time

2006: 8.083 kg/capita

2007: 8.440 kg/capita

2008: 8.517 kg/capita

2009: 9.511 kg/capita

2010: 9.364 kg/capita

2011: 9.556 kg/capita

2012: 9.379 kg/capita

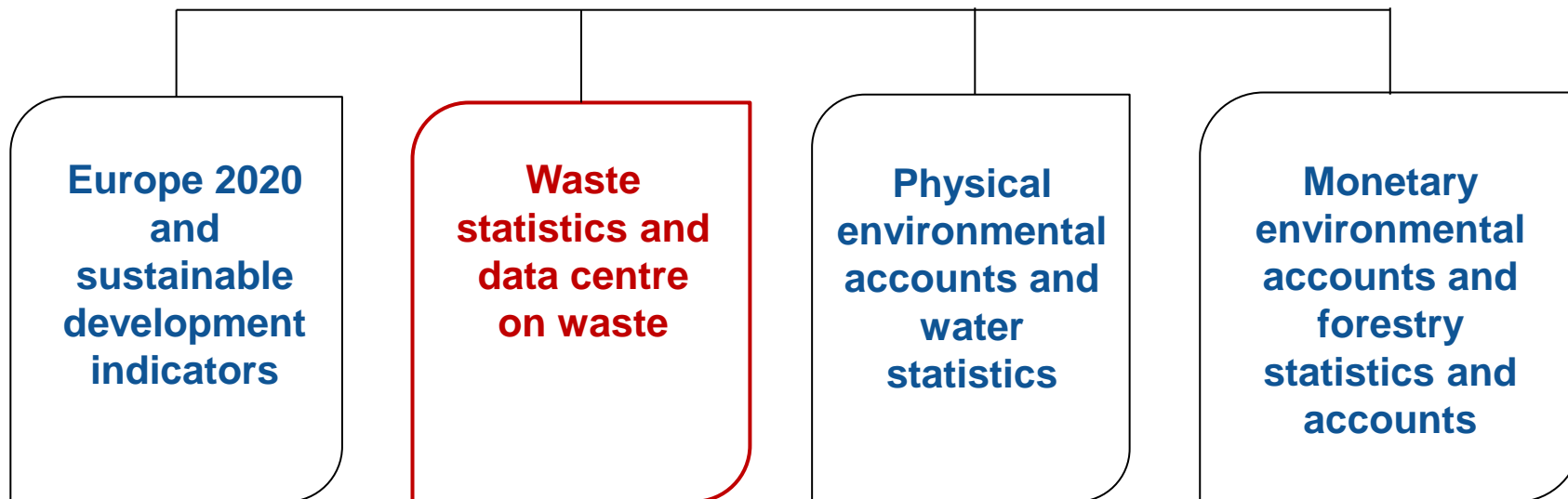
2013: 9.470 kg/capita

2014: 9.843 kg/capita

8.000 - 17.313

Data not available

Unit E.2 – Environmental statistics and accounts; sustainable development





Thank you for your attention

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With support from

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Marilise.wolf.crowther@ec.europa.eu – forest statistics

More information on waste is available on:

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