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REGIONAL TRAINING ON THE PRODUCTION AND USE OF WASTE AND CIRCULAR ECONOMY STATISTICS AND INDICATORS

SESSION 3: MAIN CONCEPTS, TERMS, DEFINITIONS AND CLASSIFICATIONS IN WASTE STATISTICS

20-21 June 2024, Vienna International Centre (VIC), Vienna

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THE EU **WASTE STATISTICS REGULATION**: MAIN PURPOSE, CONTENT, LESSONS LEARNED

In this presentation:

- European Waste Legislation, overview
- Role of Eurostat and the European Statistical System
- Objectives of Regulation (EC) No 2150/2002 on Waste Statistics
- The datasets to be reported – the questionnaires
- Quality reporting and validation
- Dissemination and use of waste statistics
- Beyond the Waste Statistics Regulation – key waste streams
- Lessons learned …
- … challenges / latest developments in measuring Circular Economy (Link to Session 7)

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THE EU **WASTE STATISTICS REGULATION**: MAIN PURPOSE, CONTENT, LESSONS LEARNED

European Waste Legislation, overview

Waste Framework Directive

The Waste Framework Directive sets the basic concepts and definitions related to waste management, including definitions of waste, recycling and recovery

Targets

The Waste framework Directive sets targets for EU countries

Member States shall take the necessary measures to achieve them

End-of-waste criteria

Specify when certain waste ceases to be waste and becomes a product, or a secondary raw material

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THE EU **WASTE STATISTICS REGULATION**: MAIN PURPOSE, CONTENT, LESSONS LEARNED

Role of Eurostat and the European Statistical System (ESS)

Implementing the Statistical Law:

The European Statistical System (ESS) provides policy makers as well as the general public within the European Union with high quality statistics. A basic legal framework, taking the form of a Regulation on European statistics, ensures the efficient functioning of the ESS for that purpose

Regulation (EC) No 223/2009 of the European Parliament and of the Council of 11 March 2009 on European statistics.

Waste Statistics Regulation

Member States have to report statistical data every second year on

- waste generation
- waste treatment
- waste management facilities
- + quality reports

Commission Regulation (EU) No 849/2010 of 27 September 2010 amending Regulation (EC) No 2150/2002 of the European Parliament and of the Council on waste statistics

THE EU **WASTE STATISTICS REGULATION**: MAIN PURPOSE, CONTENT, LESSONS LEARNED

Objectives

- To produce regular Community statistics - every second year, from 2006 - on the generation and management of waste from businesses and private households
- Be the framework for the production and methodology development of EU statistics on the generation, recovery and disposal of waste
- The statistics serve for monitoring the implementation of EU environmental policies and shall allow for the calculation of reliable indicators, in particular for important indicators sets such as the Sustainable Development Goals indicators (SDGs), Resource Efficiency indicators and Circular Economy indicators
- Data generated once by the Waste Statistics Regulation shall be used to support other reporting obligations, at EU and International level
- The resulting statistics and indicators can be used by EU and International partners for policy reviews
- High quality standards and new methodology under development shall increase the usefulness and quality of waste- and circular economy statistics

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THE EU **WASTE**

A new manual

- 211 pages

https://ec.europa.eu/eurostat/web/products-manuals-and-guidelines/-/ks-gq-24-009

THE EU **WASTE STATISTICS REGULATION**: MAIN PURPOSE, CONTENT, LESSONS LEARNED

A new manual for waste statistics, published 16 May 2024

- 211 pages, 6 chapters, 6 annexes
- Key resource to produce waste statistics
- Focus is on harmonisation and quality to ensure that Countries produce high-quality, comparable data
- Primarily aimed at national experts in the field of waste statistics
- Covers terms and definitions and important classifications

- **NEW:** Addresses **challenges of monitoring the Circular Economy:**
  - How to improve the information on the material flows back to the economy?
  - Improve the link between data on generation and treatment =
  - "waste balance approach" …
  - … additional data needed for this purpose (e.g. data on imports and exports for treatment, data on pre-treatment of waste, …), to be collected by an additional questionnaire module *(voluntary)*

THE EU **WASTE STATISTICS REGULATION**: MAIN PURPOSE, CONTENT, LESSONS LEARNED

A new manu

- Addresses **c**
  - How to
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  - Improv
    "waste
  - … addit
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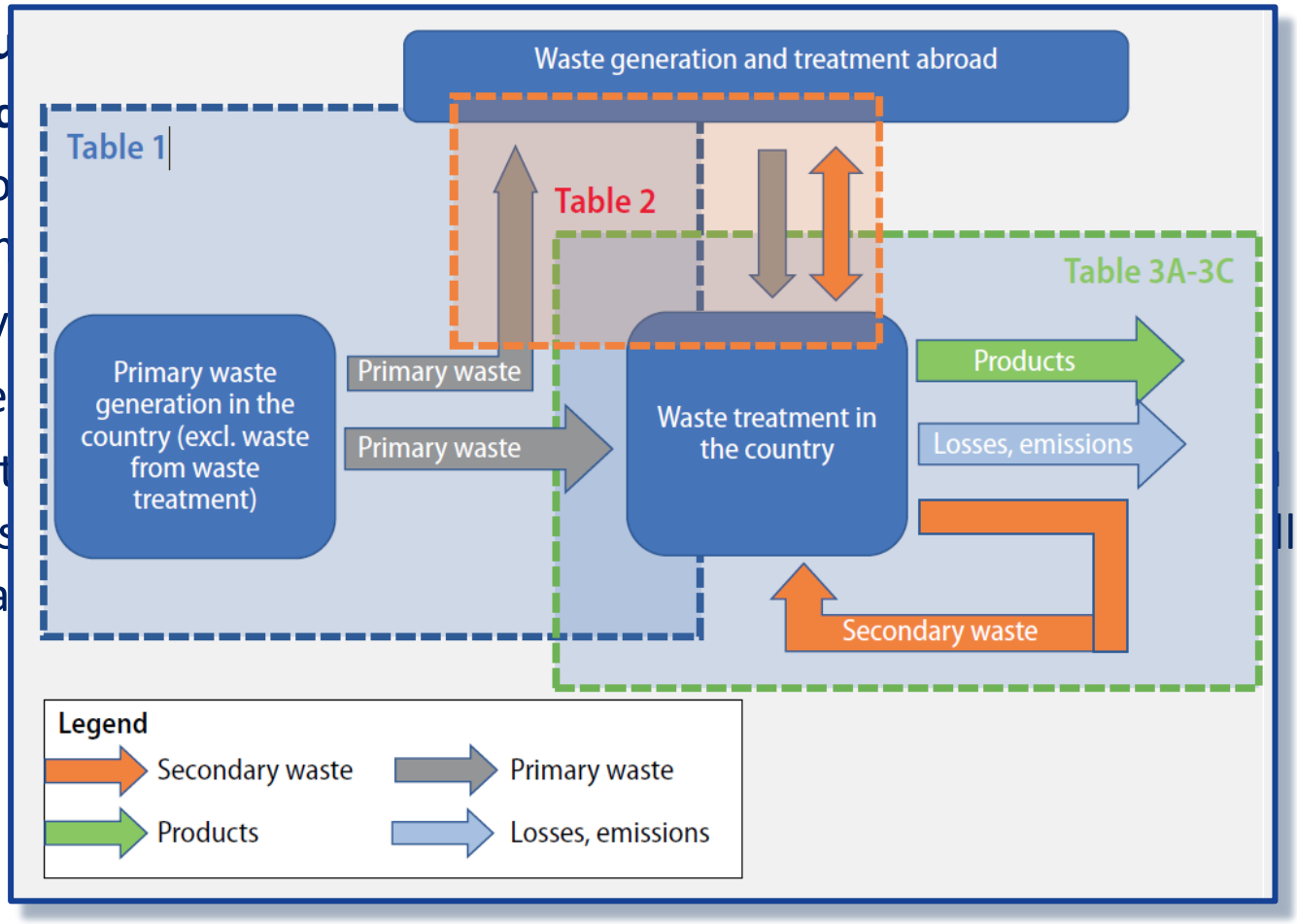
    by an a



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THE EU **WASTE STATISTICS REGULATION**: MAIN PURPOSE, CONTENT, LESSONS LEARNED

Data to be produced by Countries: Waste generation – Treatment – Treatment facilities

Set 1. Waste generation by waste category (EWC-STAT) and economic activities (NACE), tonnes/year

	activity item number			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	TA
Waste item	EWC-Stat Ver. 4																						
	Code	Description																					
1	01.1	Spent solvents																					
2	01.2	Acid, alkaline or saline wa																					
3	01.2	Acid, alkaline or saline wa																					
4	01.3	Used oils																					
5	01.4, 02, 03.1	Chemical wastes																					
6	01.4, 02, 03.1	Chemical wastes																					
7	03.2	Industrial effluent sludges																					
8	03.2	Industrial effluent sludges																					
9	03.3	Sludges and liquid wastes treatment																					
10	03.3	Sludges and liquid wastes treatment																					
11	05	Health care and biologica																					
12	05	Health care and biologica																					
13	06.1	Metallic wastes, ferrous																					
14	06.2	Metallic wastes, , non-fer																					
15	06.3	Metallic wastes, mixed fe ferrous																					
16	07.1	Glass wastes																					
17	07.1	Glass wastes																					
18	07.2	Paper and cardboard was																					
19	07.3	Rubber wastes																					
20	07.4	Plastic wastes																					
21	07.5	Wood wastes																					
22	07.5	Wood wastes																					
23	07.6	Textile wastes																					
24	07.7	Waste containing PCB																					
25	08 (excl. 08.1, 08.41)	Discarded equipment (ex vehicles, batteries/accum																					

Set 2. Waste treatment by waste category (EWC-STAT) and treatment category, tonnes/year

	treatment item number				1	2	3a	3b	4	5
Waste item	Treatment categories → EWC-Stat Ver. 4		Hazardous	Dry	Energy recovery (R1)	Waste incineration (D10)	Recycling (R2 — R11)	Backfilling	Landfilling (D1, D5, D12)	Other disposal (D2, D3, D4, D6, D7)
	Code	Description								
1	01.1	Spent solvents	H							
2	01.2	Acid, alkaline or saline wastes								
3	01.2	Acid, alkaline or saline wastes	H							
4	01.3	Used oils	H							
5	01.4, 02, 03.1	Chemical wastes								
6	01.4, 02, 03.1	Chemical wastes	H							
7	03.2	Industrial effluent sludges		T						
8	03.2	Industrial effluent sludges	H	T						
9	03.3	Sludges and liquid wastes from waste treatment		T						
10	03.3	Sludges and liquid wastes from waste treatment	H	T						
11	05									
12	05									
13	06.1									
14	06.2									
15	06.3									
16	07.1									
17	07.1									
18	07.2									
19	07.3									
20	07.4									
21	07.5									
22	07.5									
23	07.6									
24	07.7									
25	08 (excl. 08.1, 08.41)									
26	08 (excl. 08.1, 08.41)									
27	08.1									
28	08.1									
29	08.41									
30	08.41									

Set 3. Number and capacity of recovery and disposal facilities (per NUTS 2 region) and population served by collection scheme (national)

treatment item number	1		2		3		4												
Treatment categories →	Energy recovery (R1)		Waste incineration (D10)		Recovery (R2 — R11)		Landfilling (D1, D5, D12)												Population served by collection
					3a	3b	landfills for haz. waste			landfills for non-haz waste			landfills for inert waste			landfills total		
Regions, NUTS 2 level	no. of facilities	capacity t/a	no. of facilities	capacity t/a	no. of facilities		no. of facilities	rest capacity m³	closed	no. of facilities	rest capacity m³	closed	no. of facilities	rest capacity m³	closed	no. of facilities	rest capacity m³	%
Region 1																		
Region 2																		
Region 3																		
...																		
....																		
...																		
National total																		

Shaded cells: No data required

THE EU **WASTE STATISTICS REGULATION**: MAIN PURPOSE, CONTENT, LESSONS LEARNED

To be produced by Countries: **Waste generation**

… by Economic activity: NACE classification

- Waste generation need to be broken down according to the source (businesses or households) that generated them. Waste generated by businesses is broken down by economic activity in **18 categories** based on the statistical classification of economic activities (**NACE Rev. 2**, Statistical Classification of Economic Activities in the European Community)
- Households are the **19**th **category**

NACE vs. ISIC:

- *"Categories of NACE are defined either to be identical to, or to form subsets of, single ISIC categories. The first level and the second level of ISIC Rev. 4 (sections and divisions) are identical to sections and divisions of NACE Rev. 2. The third and fourth levels (groups and classes) of ISIC Rev. 4 are subdivided in NACE Rev. 2 according to European requirements. Groups and classes of NACE Rev. 2 can always be aggregated into the groups and classes of ISIC Rev. 4 from which they were derived"*

THE EU **WASTE STATISTICS REGULATION**: MAIN PURPOSE, CONTENT, LESSONS LEARNED

To be produced by

Sources for waste ge
Annex I on waste ge

Item No	NACE Rev.2
Section A: Agriculture, fores	
1	01+02
Section B: Mining and quar	
2	04 to
Section C: Manufacturing	
3	10+11
4	13+14
5	16
6	17+1
7	19
8	20+21
9	23
10	24+2

Item No	NACE Rev.2 divisions	Code Description
11	26+27+28+29+30	Manufacture of computer, electronic and optical products + electrical equipment + machinery and equipment + motor vehicles, trailers and semi-trailers + other transport equipment
12	31+32+33	Manufacture of furniture + other manufacturing + repair and installation of machinery and equipment
Section D: Electricity, gas, steam and air conditioning supply		
13	34+35	Electricity, gas, steam and air conditioning supply
Section E: Water supply, sewerage, waste management and remediation activities		
14	36+37+39	Water collection, treatment and supply + Sewerage + Remediation activities and other waste management services
15	38	Waste collection, treatment and disposal activities; materials recovery
Section F: Construction		
16	41+42+43	Construction
Section G to U: Services activities		
17	Sections G - U Excluded 46.77	Wholesale and retail trade; Repair of motor vehicles, motor cycles + Transportation and storage + Accommodation and food service activities + Information and communication + Financial and insurance activities + Real estate activities + Professional, scientific and technical activities + Administrative and support service activities + Public administration and defence; compulsory social security + Education + Human health and social work activities + Arts, entertainment and recreation + Other service activities + Activities of households as employers; undifferentiated goods – and services –producing activities of households for own use + Activities of extraterritorial organisations and bodies
18	46.77	Wholesale of waste and scrap

THE EU **WASTE STATISTICS REGULATION**: MAIN PURPOSE, CONTENT, LESSONS LEARNED

To be produced by Countries: **Waste generation, by**

… **51 Waste categories** – on the basis of the Statistical European Waste Classification (EWC-Stat) *(for hazardous / non-hazardous waste)*

EWC-Stat vs. European List of Wastes:

- *"The Waste Statistics Regulation obliges Member States to report statistical data on waste generation and waste treatment according to the statistical waste nomenclature EWC-Stat. EWC-Stat is a mainly substance-oriented aggregation of the waste types defined in the European List of Wastes (LoW). The result is a 1:n-relationship between EWC-Stat and European List of Wastes which allows for the unambiguous conversion of the waste types classified according to the List of Wastes into the EWC-Stat waste categories"*

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THE EU **WASTE STATISTICS REGULATION**: MAIN PURPOSE, CONTENT, LESSONS LEARNED

To be produced by Countries: **Waste generation, by**

… 51 Waste categories – on the basis of the Statistical European Waste Classification (EWC-Sta

Waste item	EWC Code
1	01.1
2	01.2
3	01.2
4	01.3
5	01.4, 02, 03.1
6	01.4, 02, 03.1
7	03.2
8	03.2
9	03.3
10	03.3
11	05

Waste item		Activity item number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	TA
		NACE Rev. 2 →																				
12	05																					
13	06.1																					
14	06.2																					
15	06.3																					
16	07.1																					
17	07.1																					
18	07.2																					
19	07.3																					
20	07.4																					
21	07.5																					
22	07.5																					
23	07.6																					
24	07.7																					
25	08 (ex																					
26	08 (ex																					
27	08.1																					
28	08.1																					
29	08.41																					
30	08.41																					

Waste item	EWC-Stat Ver. 4 Code	EWC-Stat Ver. 4 Description	Hazardous	Dry	01_03	04_09	10_12	13_15	16	17_18	19	20_22	23	24_25	26_30	31_33	34_35	36+37+39	38	41_43	G-U excl. 46.77	46.77	HH	Total
31	09.1	Animal and mixed food waste																						
32																								
33																								
34																								
35																								
36																								
37																								
38																								
39																								
40																								
41																								
42																								
43																								
44																								
45																								
46																								
47	12.6	Soils	H																					
48	12.7	Dredging spoils		D																				
49	12.7	Dredging spoils	H	D																				

Waste item	EWC-Stat Ver. 4 Code	EWC-Stat Ver. 4 Description	Hazardous	Activity item number 1	2	3	4	5	6	7	8	9	10	11
		NACE Rev. 2 →		Dry	01_03	04_09	10_12	13_15	16	17_18	19	20_22	23	24_25	26_30
50	12.8, 13	Mineral waste from waste treatment and stabilised wastes													
51	12.8, 13	Mineral waste from waste treatment and stabilised wastes	H												
TN		Total, non-hazardous													
TH		Total, hazardous	H												
TT		Total, general													

THE EU **WASTE STATISTICS REGULATION**: MAIN PURPOSE, CONTENT, LESSONS LEARNED

To be produced by Countries: **Waste <u>treatment facilities</u> and their <u>capacity</u>**

… at **NUTS 2 level** – Regional breakdown

Treatment item number	1		2		3a	3b	4										
Treatment categories →	**Energy recovery (R1)**		**Waste incineration (D10)**		**Recovery (R2 – R11)**	**Backfilling**	**Landfilling (D1, D5, D12)**										
							Landfills for haz. waste			**Landfills for non-haz. waste**			**Landfills for inert waste**			**Landfills total**	
Regions, NUTS 2 level	**no. of facilities**	**capacity t/a**	**no. of facilities**	**capacity t/a**	**no. of facilities**	**no. of facilities**	**no. of facilities**	**rest capacity m³**	**closed**	**no. of facilities**	**rest capacity m³**	**closed**	**no. of facilities**	**rest capacity m³**	**closed**	**no. of facilities**	**rest capacity m³**
Region 1																	
Region 2																	
Region 3																	
…																	
…																	
…																	
National total																	

Shaded cells: No data required.

THE EU **WASTE STATISTICS REGULATION**: MAIN PURPOSE, CONTENT, LESSONS LEARNED

To be produced by Countries: Summary of reporting dimensions

	Waste Generation	Waste treatment	Treatment infrastructure and collection
Data Set	1 GEN	2 TRT	3 FAC
	Generation of waste	Treatment of waste	Number and capacity of disposal and recovery operations
Sectors	19 items – 18 economic activities (NACE) – 1 sector 'households'	6 items – Incineration – Energy recovery – Recycling – Backfilling – Landfilling – Other forms of disposal	5 items – Incineration – Energy recovery – Recycling (2) – Backfilling (2) – Landfilling (3)
No. of waste categories (EWC-Stat)	51	51	NA
Reporting units (1)	tonnes	tonnes	tonnes/year m^3
Geographical level	National	National	NUTS 2

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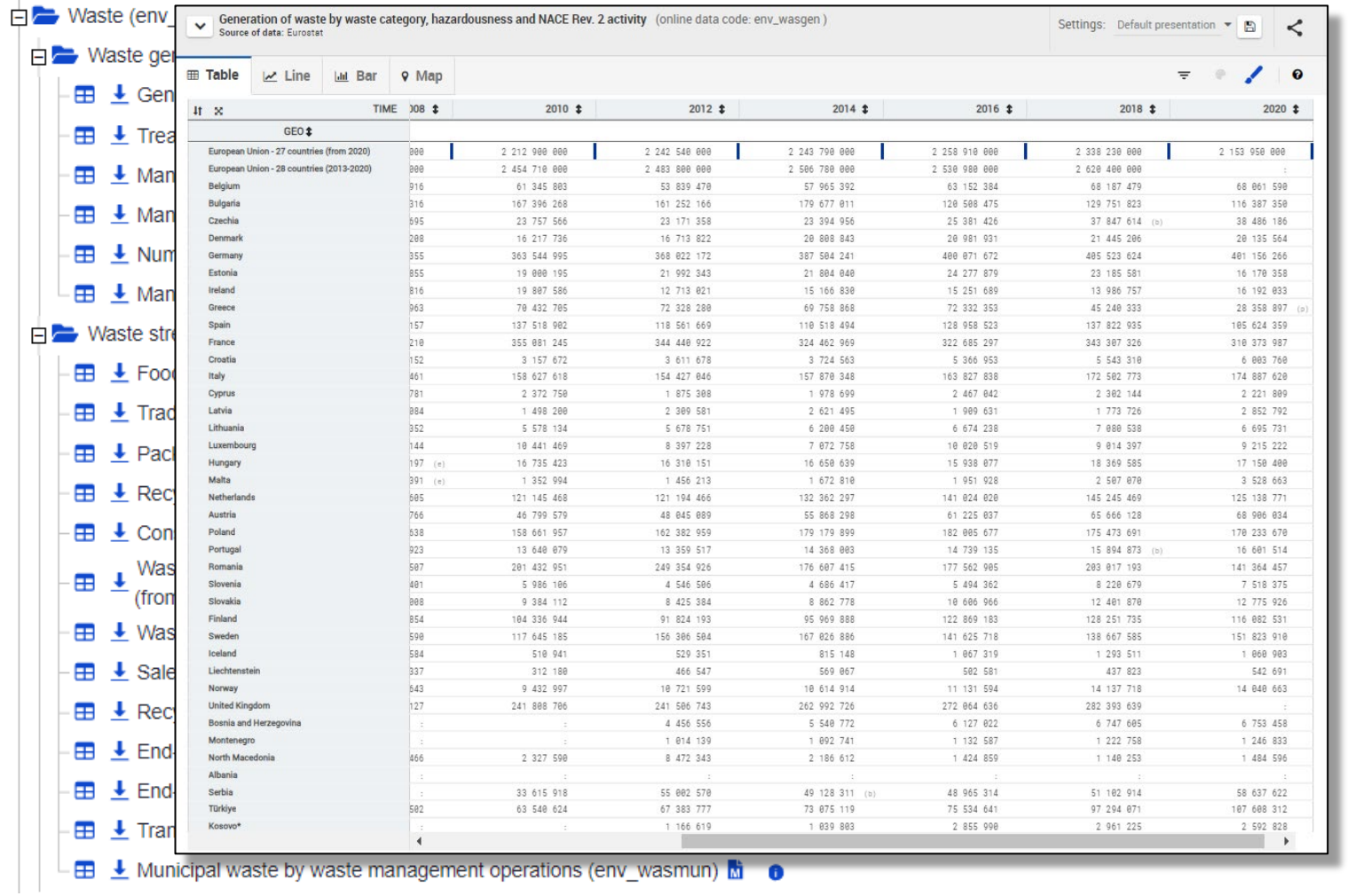
Dissemination of the results – Statistics and indicators – database



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THE EU **WASTE STATISTICS REGULATION**: MAIN PURPOSE, CONTENT, LESSONS LEARNED

Dissemination of the results – Statistics and indicators – database

- 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 management operations (env_wastrt)
    - Management of waste excluding major mineral waste, by waste management operations (env_wasoper)
    - Management of waste excluding major mineral waste, by waste management operations and waste flow (env_wasflow)
    - Number and capacity of recovery and disposal facilities by NUTS 2 regions (env_wasfac)
    - Management of waste by waste management operations and type of material - Sankey diagram data (env_wassd)
  - Waste streams (env_wasst)
    - Food waste and food waste prevention by NACE Rev. 2 activity - tonnes of fresh mass (env_wasfw)
    - Trade in waste by type of material and partner (env_wastrdmp)
    - Packaging waste by waste management operations (env_waspac)
    - Recycling rates of packaging waste for monitoring compliance with policy targets, by type of packaging (env_waspacr)
    - Consumption of lightweight plastic carrier bags by their wall thickness (env_waspcb)
    - Waste electrical and electronic equipment (WEEE) by waste management operations - open scope, 6 product categories (from 2018 onwards) (env_waseleeos)
    - Waste electrical and electronic equipment (WEEE) by waste management 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 management 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 management operations (env_wasship)
    - Municipal waste by waste management operations (env_wasmun)

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Dissemination of the results – Statistics and indicators – database

- Waste (env_was)
  - Waste generation and treatment (env_wasgt)
    - Generation of waste by waste category, hazardousness and NACE Rev. 2 activity (env_wasgen)

Users download the data from here, in various formats:

European Commission *"Policy-"* Directorates-General

European Commission

Environment, Internal Market – Industry – Entrepreneurship and SMEs, Research and Innovation, […]

European Environment Agency

European Environment Agency

Eionet

Joint Research Centre – JRC

UNSD, UNECE

OECD

- Transboundary shipments of notified waste by partner, hazardousness and waste management operations (env_wasship)
- Municipal waste by waste management operations (env_wasmun)

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Dissemination of the results –

News releases

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NEWS ARTICLES | 14 November 2023

EU's circular material use rate slightly up in 2022

In 2022, the EU's circular material use rate (referred to as the circularity rate; the share of used material resources which came from recycled waste materials) reached 11.5%, meaning that 11.5% of material resources used in the EU came from recycled waste materials.

This information comes from data on circular material use rate published by Eurostat today. The article presents a handful of findings from the more detailed Statistics Explained article.

Compared with 2021, the circularity rate increased by 0.1 percentage points (pp). Between 2010 and 2022, the rate increased by 0.8 pp from 10.7% to 11.5%, however, the highest shares were observed in 2018 and 2020: 11.6%.

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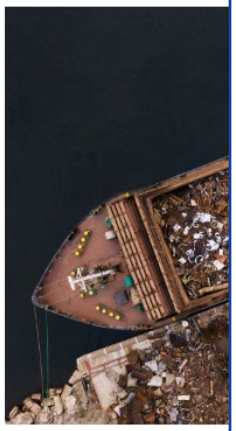
NEWS ARTICLES | 22 May 2024

Exports in recyclable



In 2023, exports of recyclab
other secondary raw materi
million tonnes.

Export volume in recyclable
74% (+16.7 million tonnes).

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Municipal

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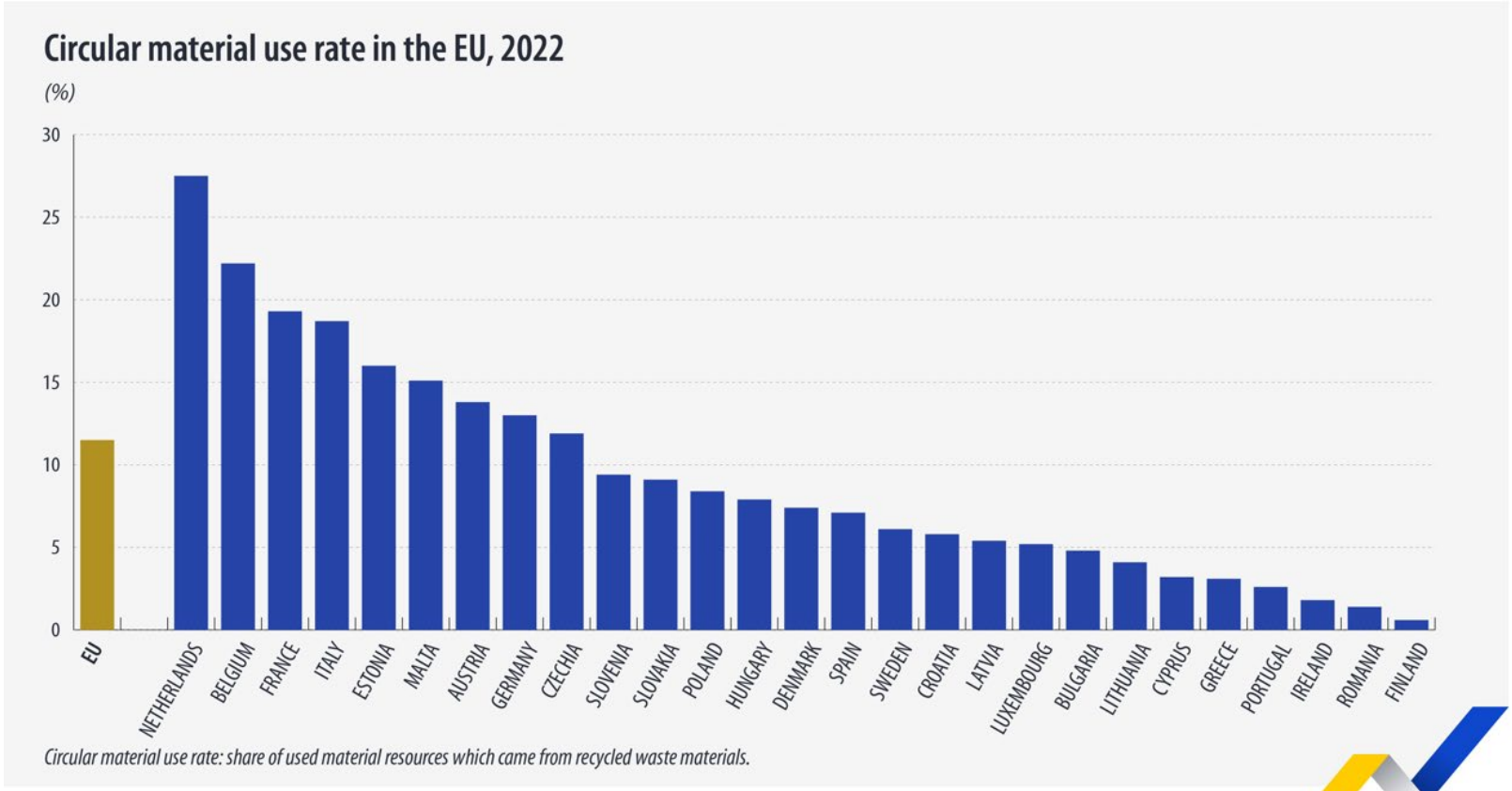
Dissemination of the results – Statistics and indicators

Circular Material Use Rate, by country in 2022



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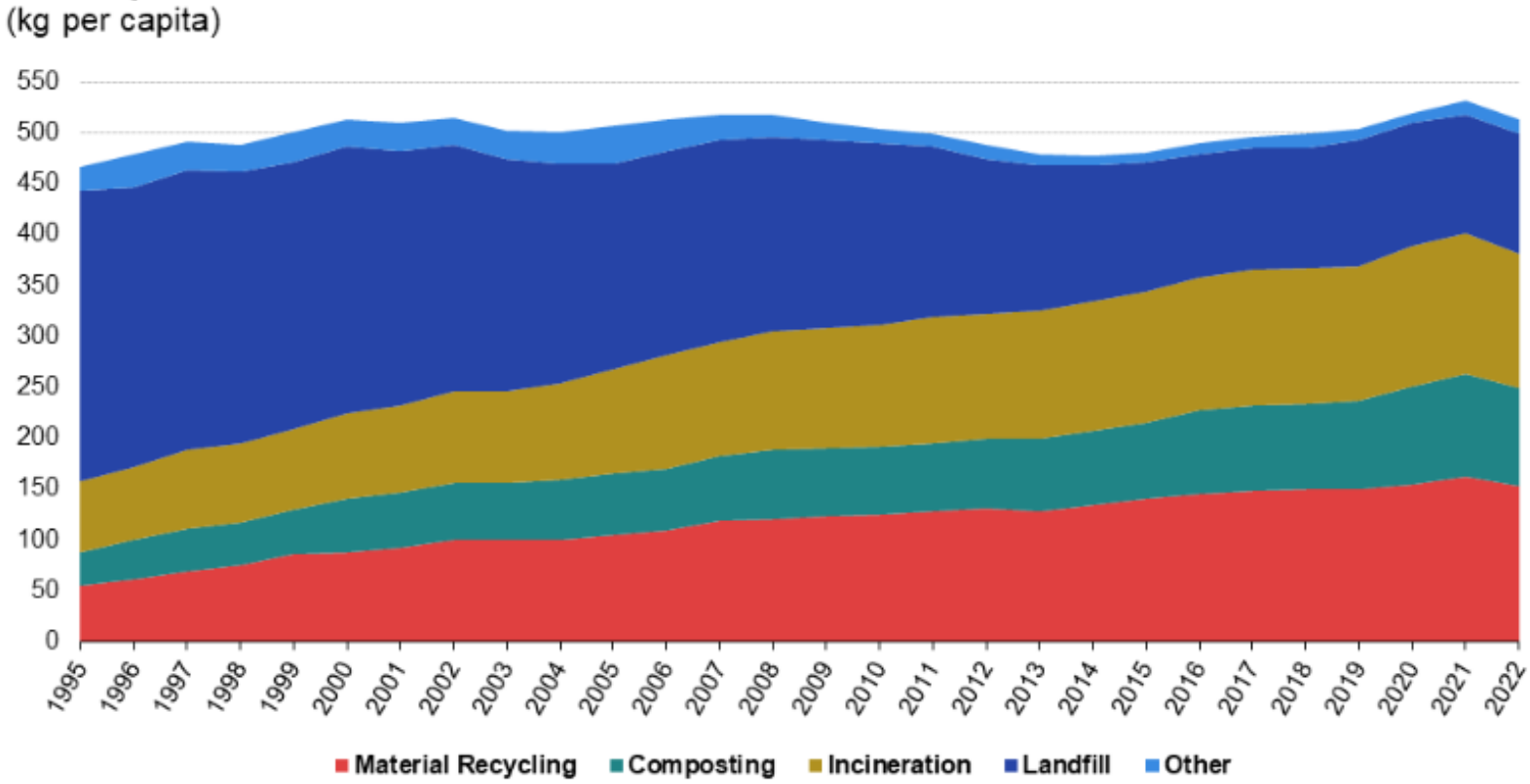
THE EU **WASTE STATISTICS REGULATION**: MAIN PURPOSE, CONTENT, LESSONS LEARNED

Dissemination of the results – Statistics and indicators

Municipal waste treatment, EU 1995 -2022



Note: estimated by Eurostat.
Source: Eurostat (online data code: env_wasmun)

eurostat

THE EU **WASTE STATISTICS REGULATION**: MAIN PURPOSE, CONTENT, LESSONS LEARNED

Role(s) of Eurostat – manage reporting obligations to the European Commission

Beyond the Waste Statistics Regulation – key waste streams:

- **Waste shipment across borders** – annual reporting under the Waste Shipments Regulation ((EU)2024/1157) *(implements the Basel Convention in the EU)*
- Waste Framework Directive (2008/98/EC) requires reporting on:
  - **Construction and demolition waste: (generated, re-use, recycling, backfilling, material recovery, …)**
  - **Waste oils: (generation, regeneration, recovery, disposal, …)**
  - **Food waste: (generation by source, prevention, management)**
- **Municipal waste:**
  - **Joint Questionnaire** of **OECD and Eurostat:** Annual reporting
  - **Landfilling, incineration, material recovery of municipal waste** (Landfill Directive 1999/31/EC)
  - **Generation, collection, recycling, re-use and recovery of municipal waste** (Waste Framework Directive 2008/98/EC)

THE EU **WASTE STATISTICS REGULATION**: MAIN PURPOSE, CONTENT, LESSONS LEARNED

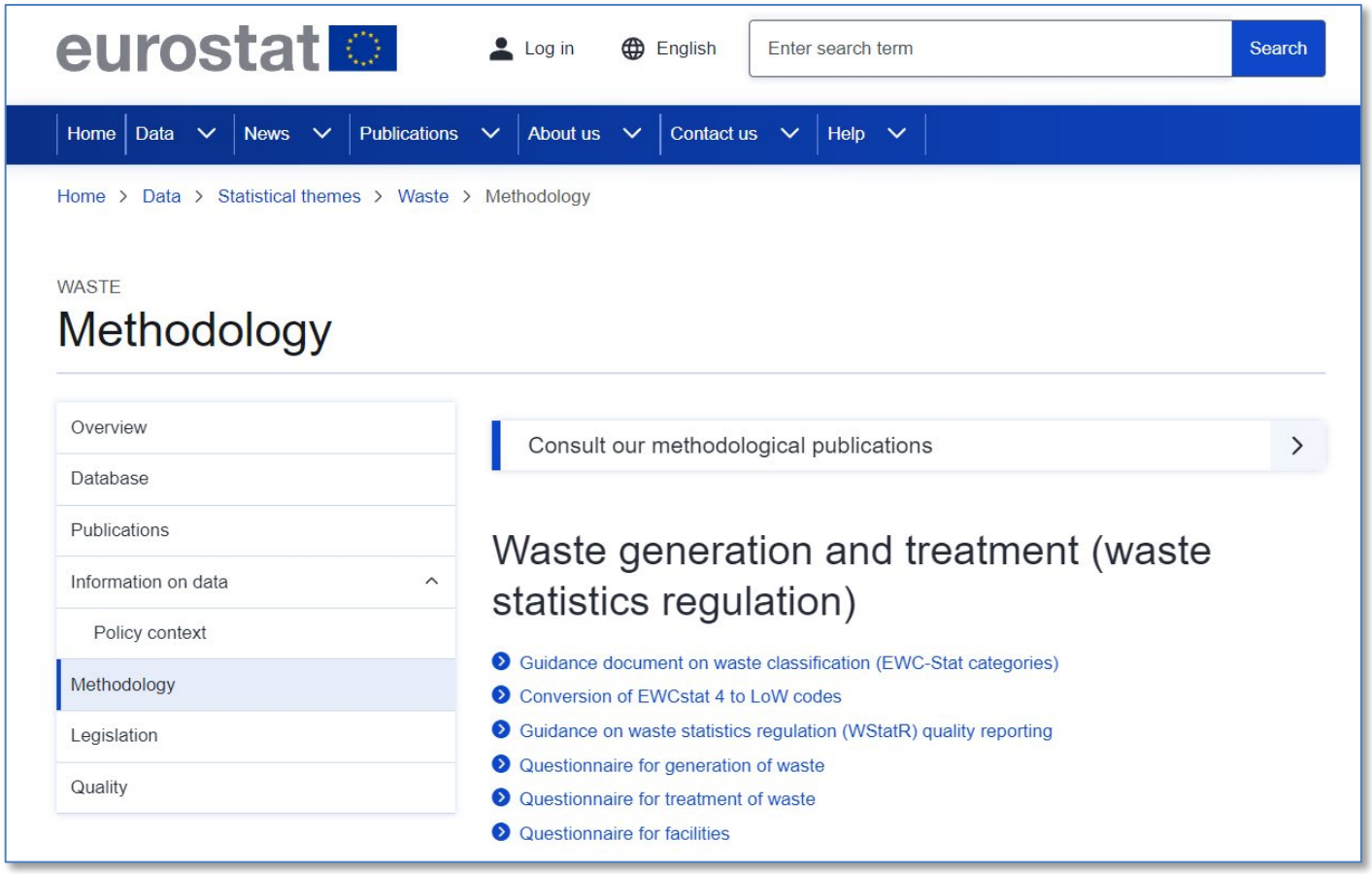
Role(s) of Eurostat – manage reporting obligations to the European Commission

Beyond the Waste Statistics Regulation – key waste streams: *(contd.)*

- **Waste electrical and electronic equipment (WEEE)**:
  EEE placed on the market, WEEE generated, collected, recycled, by EEE product …
  (Directive 2012/19/EU E-waste recycling rate)
- **Batteries: Batteries and accumulators placed on the market, collected, recycled**
  (Regulation (EU) 2023/1542)
- **Packaging and packaging waste: Packaging waste by material, recycling, repair, reusable packaging. Consumption of lightweight plastic carrier bags**
  (Directive 94/62/EC)
- **End-of-Life Vehicles: Materials from de-pollution, shredding, re-use, recovery, recycling**
  (Directive 2000/53/EC)
- *Upcoming:* **Textiles waste**

THE EU **WASTE STATISTICS REGULATION**: MAIN PURPOSE, CONTENT, LESSONS LEARNED

Role(s) of Eurostat – develop and publish guidance for reporting



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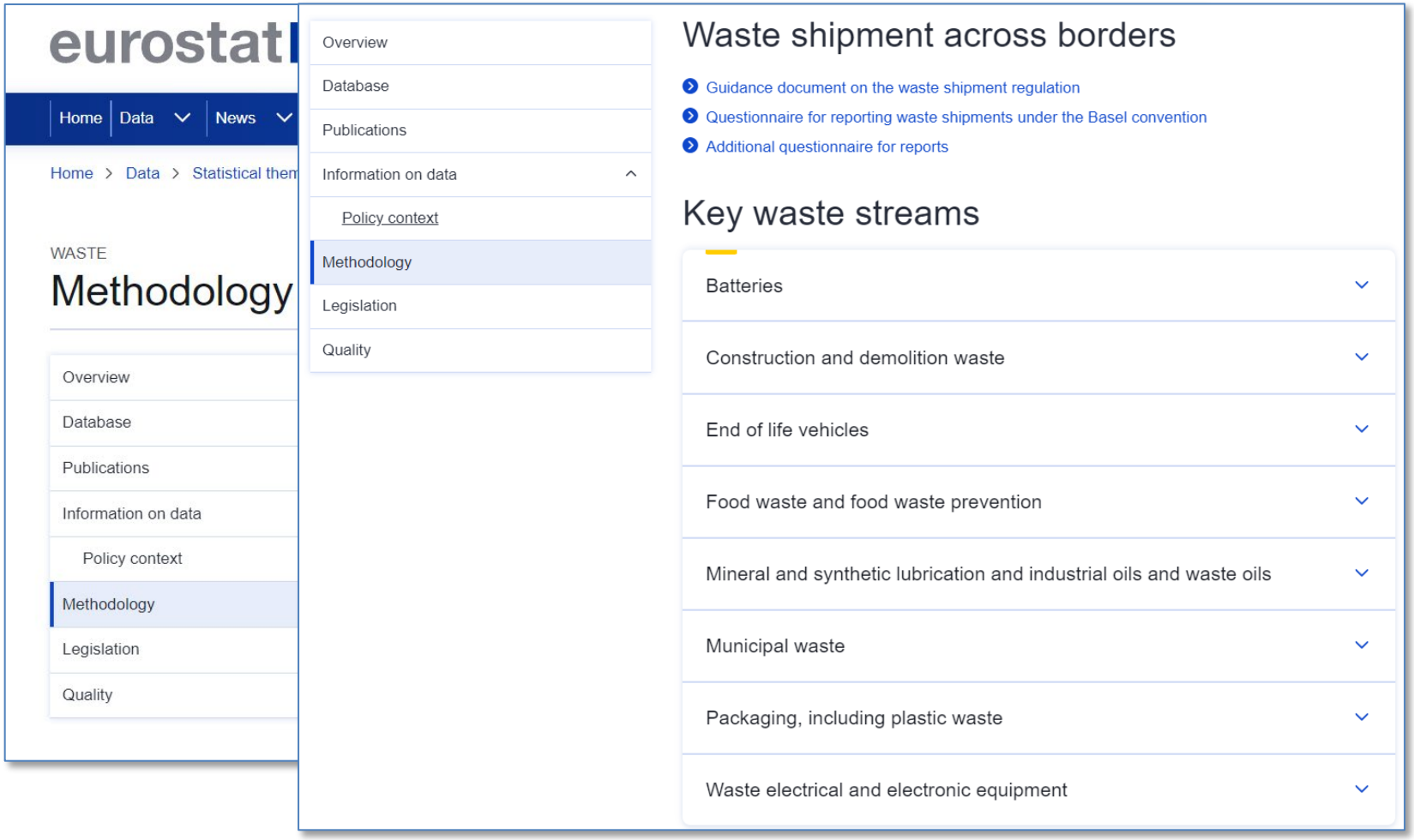
Role(s) of Eurostat – develop and publish guidance for reporting



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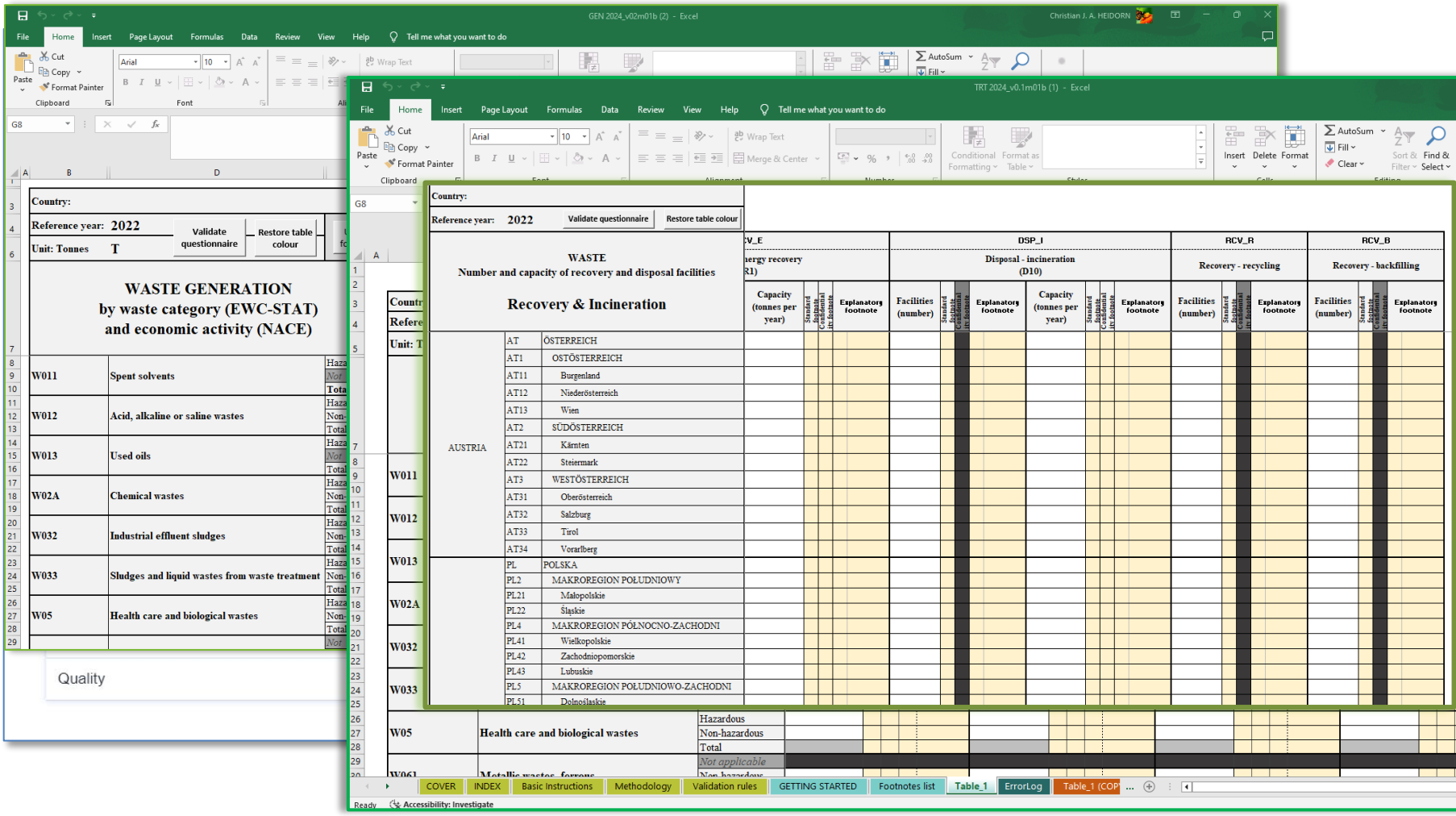
Role(s) of Eurostat – access to the questionnaires



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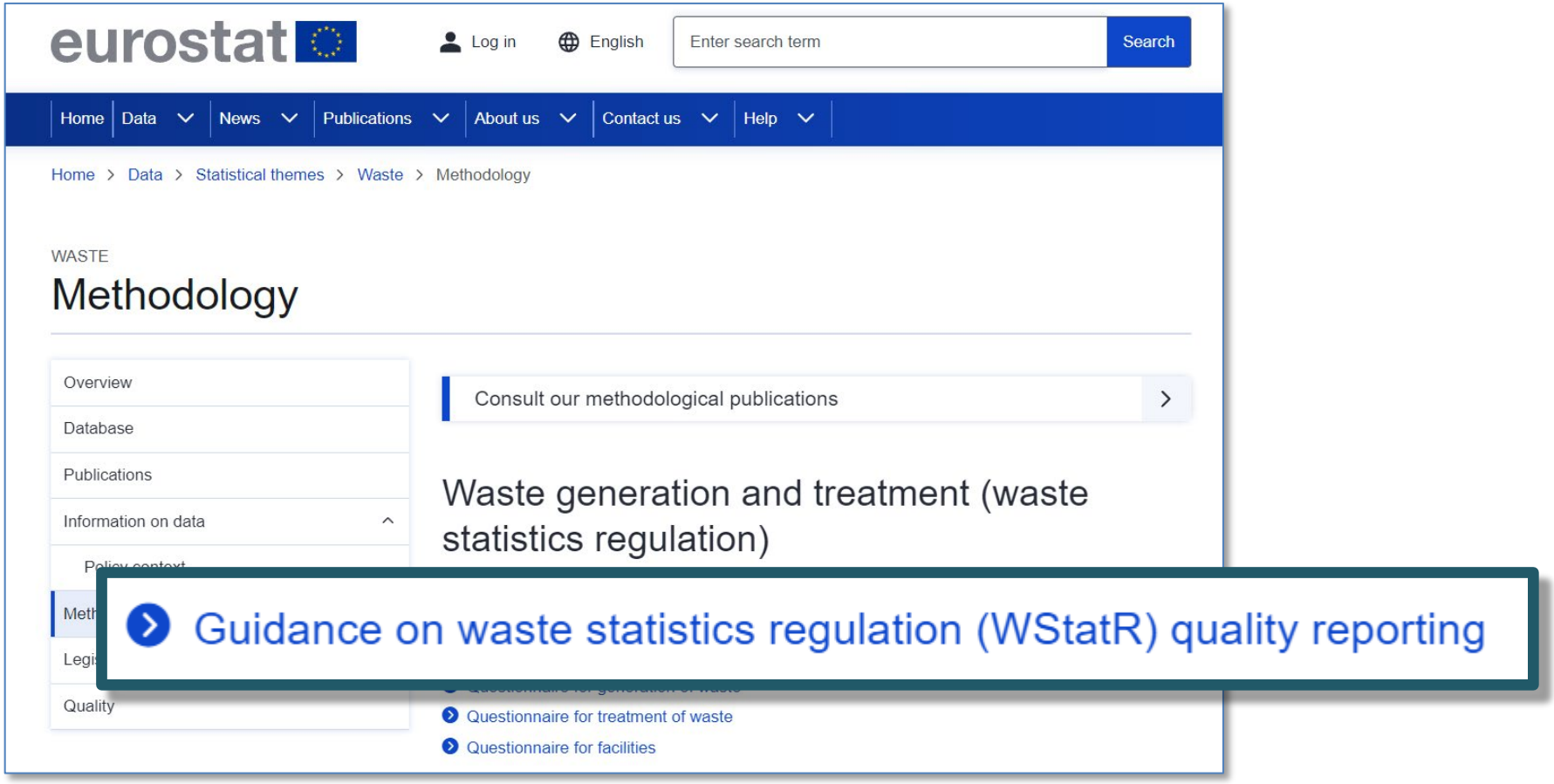
THE EU **WASTE STATISTICS REGULATION**: MAIN PURPOSE, CONTENT, LESSONS LEARNED

Quality reports



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Quality re

Guidance on WStatR quality reporting in ESS-MH

ESS-MH, the European Statistical System Metadata Handler, is the web-based tool for editing and submitting statistical quality reports to Eurostat. The underlying structure implements the ESQRS (ESS Standard Quality Report Structure), which is a general SDMX standard for quality reports.

In short, ESS-MH is intended to replace the Word templates for quality reporting that were used before. According to Regulation (EC) No 223/2009 of the European Parliament and of the Council of 11 March 2009 on Europea
established as the standard
in SDMX-ML format (SDMX
because it creates an SDM

The old template for the q
transfer of metadata into t
time. Please, do not use th

Using ESS-MH requires an
transmission and/or access

How to access ESS-MH

To start ESS-MH, log in at h

After your ECAS authentica

WASTE_ESQRS_A_XX_201

where XX is the county cod
case. If you used already th
been pre-filled with the co
edit and update the report

Structure of the report

The focus in the quality rep
accuracy, timeliness etc.) a

For your orientation, a deta
WStatR quality report temp
with a detailed description

One constraint to ESS-MH
be easily transferred into t
with five worksheets taken
structure. The corresponde

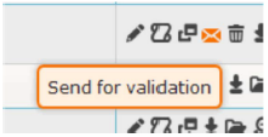
Annex to ESS-MH repo
Annex 1: Description of me waste generation

Annex 2: Waste generation in the economy - sample survey	Table 4
Annex 3: Waste Generation in the economy on the basis of information on waste treatment	Table 5
Annex 4: Waste generation in the economy on the basis of models or other methods	Table 6
Annex 5: Determination methods for waste generated by households	Table 8

You can add the annexes to the quality report in ESS-MH by clicking on tab "3 – Annexes" in ESS-MH and then selecting the file(s) to attach to your report.

Submitting the quality report

When you have finished editing the quality report, please save it first and then click on "Send for validation" in the list of metadata files.



Help

If you are looking for help on ESS-MH in general, please consult the document "ESS-MH User Guide.pdf". Eurostat also offers webinars on how to use ESS-MH. For further information you can contact ESTAT-metadata@ec.europa.eu.

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THE EU **WASTE STATISTICS REGULATION**: MAIN PURPOSE, CONTENT, LESSONS LEARNED

Quality reporting – consult chapter 4 of the waste statistics manual

4

The quality report

4.1. Legal basis and content of the quality report

In order to take advantage of the sources available at national level and take proper account of differences in (economic) structure, the Member States are left to decide which methods of data collection are most suitable. However, this is not conducive to the drawing up of harmonised waste statistics. The quality report, which each Member State is expected to submit together with the data, seeks to supply the information necessary for assessing the quality of statistics at both national and Community level. In many Member States, different parties are involved in the collection of data. The Member States must decide themselves which organisation will coordinate the submission of the quality report.

The quality reports to be submitted, however, have to be structured according to the ESS Standard for Quality Reports Structure (see chapter 3.2). This structure differs from that laid down in the abovementioned regulation. For this reason, the numbering of all elements described according to the new structure is mentioned throughout this document.

Many elements are set out in the aforementioned Commission Regulation and in this manual. Depending on the methods used in each Member State, various elements will not apply or will be less relevant. Please select the elements which apply to your Member State and adjust them where necessary and indicate "not applicable" or "not relevant" to the elements which are not applicable or not relevant in your country, as appropriate. Although

The content of the quality report for waste statistics is laid down in Commission Regulation (EC) No 1445/2005. The Regulation contains an Annex where the contents are described in detail in two Parts. Part I of the quality report presents a general description of the data and gives an overview of the methods applied. Part II of the report follows the standard elements used to define quality in the European Statistical System. This chapter is strictly structured according to the order in which the contents are described in the Regulation or refers to the numbering of the elements within the Annex of the Regulation.

of which are NACE categories) and non-hazardous waste generated by enterprises. The key variable hazardous waste generated by households is added for completeness and symmetry; it is not particularly important in itself.

For the treatment of waste, the key variables consist of "hazardous"/"non-hazardous" combined with four waste treatment operations (the two disposal operations are combined).

The quality report 4

of the quality report is ured according to the order of the contents as described in the Annex of Regulation 1445/2005.

Explanation
/ASTE_WSTARSI_A_XX_2022_0000
here XX is the country code, indicate your country's quality report for a reference ear, 2022 in this case.
Part I: Description of the data
) Country name and reference year.
) Description of data sets submitted; the transmission format defines the three ata sets which must be submitted. The description should be quite general at this tage and should refer to any derogations which apply to the submission of (parts f the) data sets.
) Transmission date.
ame of the contact person/coordinator in the Member State and contact details hone number and e-mail address, institution and function).
escription of the parties involved/sources used in the collection of data. How do e parties and sources relate to the domains of the Waste Statistics Regulation? /hat is the legal basis of the data source? How is continuity assessed? (see able 36)
he tables in Section 4.3 may be helpful with a view to describing the methods in a ystematic way:
) **Table 38** on classifications used **(WSTARSI 3.2.1)**
) **Table 37 (WSTARSI 3.1.2.) and Table 39 to Table 41 on** waste generation by usinesses **(WSTARSI 3.1.3., 3.1.4. , 3.1.5.)**
ade to the data collected through the Joint Questionnaire. Also, changes xpected in the next reference year should be reported, again with an assessment f the impact on data quality.
able 46 where the amounts in wet matter have to be provided for the waste ategories W032, W033, W11 and W127, which are delivered in dry matter in the ubmitted data files.
this section, the countries are asked to provide the results of their own data alidation, either based on the standard validation rules (see chapter 6.1) or by their wn approach.

The quality report 4

rden

Time required for response	Measures taken to minimise the burden
20 minutes/per unit (national average)	Improved online reporting for KOSTRA.
300 minutes/unit	
80 minutes/unit	Data reported to the Norwegian Environment Agency are gathered and prefilled in the questionnaires. Only about 1300 got a form to fill out from Statistics Norway. The rest had already reported to the Norwegian Environment Agency.

Guidance on waste statistics regulation (WStatR) quality reporting

THE EU **WASTE STATISTICS REGULATION**: MAIN PURPOSE, CONTENT, LESSONS LEARNED

Data validation – consult chapter 6 of the waste statistics manual

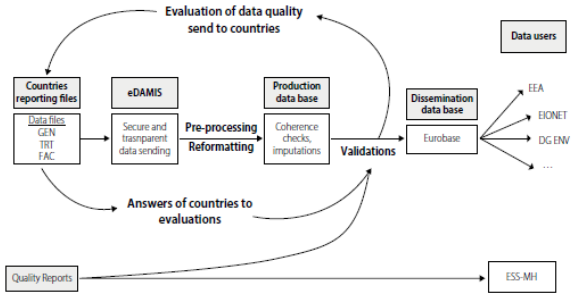
6

Quality control and dissemination of results

This chapter deals with the control of data quality and the dissemination of data. Figure 12 presents the main steps that occur between data reception and dissemination by Eurostat.

FIGURE 12

Schematic presentation of the structure of the chapter



The first part of this chapter explains the standard validation rules which the countries are encouraged to apply during their preparation of the data, and the results of which could be presented in the quality report. The second part describes, how data are pre-processed, reformatted, uploaded in the production data base, validated and exported to the dissemination data base. The third part of this chapter deals with the dissemination of the results.

rules

The standard validation rules are adjusted regularly and in consultation with the countries on the basis of the experience gained. Information on the standard validation rules is available at CircaBC (6)

6.2. Quality control: data collection, validation and feedback

6.2.3 Validation and feedback to reporting countries

- **Immediate validation**, processed in the questionnaire
- **Quick validation** and evaluation report
- **In-depth validation**, e.g. cross-checks with other reporting obligations, coherence tests, plausibility tests [...]

THE EU **WASTE STATISTICS REGULATION**: MAIN PURPOSE, CONTENT, LESSONS LEARNED

Lessons learned – Challenges ahead

With the Waste Statistics Regulation the EU has a reliable tool at hand to measure trends in waste generation and how waste is managed. Complemented with data on key waste streams waste statistics provide essential information to understand how our economies can become more circular, *however …*

- Monitoring the Circular Economy still requires better information about the material flows back to the economy
- The link between data on waste generation and waste treatment needs to be improved ("balancing principle")
- Important indicators require annual data, therefore Eurostat will carry out interpolations for the years between the reference years

- Focus will be set on data quality and timeliness of priority waste flows *(as potential secondary raw materials)*: Metal, glass, paper, plastics, wood
  and the mixed waste categories from which these materials are separated

THE EU **WASTE STATISTICS REGULATION**: MAIN PURPOSE, CONTENT, LESSONS LEARNED

Lessons learned – Challenges ahead *(contd.)*

- Waste exported for treatment and/or imported from treatment abroad: Trade statistics alone is not sufficient or not available
- Better information is needed on pre-treatment operations, outputs of the existing treatment operations (e.g. incineration) and better distinction between primary and secondary wastes
- Material losses in the course of waste treatment and other "complex waste streams" (Sludges and liquid wastes -"dry or wet", agricultural waste) should be better understood
- Different reporting practices on "heavy waste streams" (such as mineral waste) hamper comparison. Example: Attribution of construction and demolition waste to "recycling on site" or to "backfilling"?

THE EU **WASTE STATISTICS REGULATION**: MAIN PURPOSE, CONTENT, LESSONS LEARNED

Lessons learned – Challenges ahead *(contd.)*

- Waste expor
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- Better inform
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  understood
- Different rep
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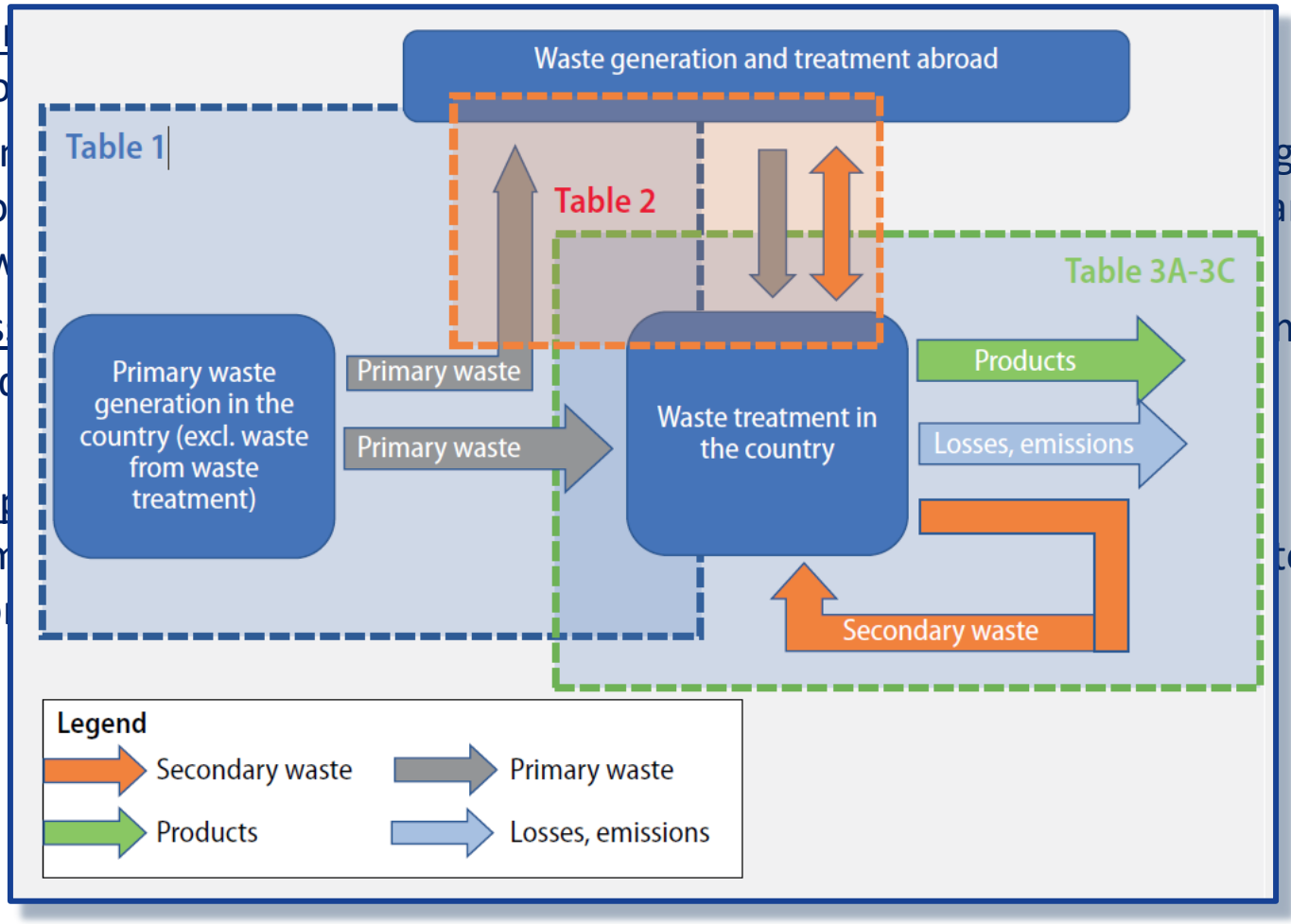

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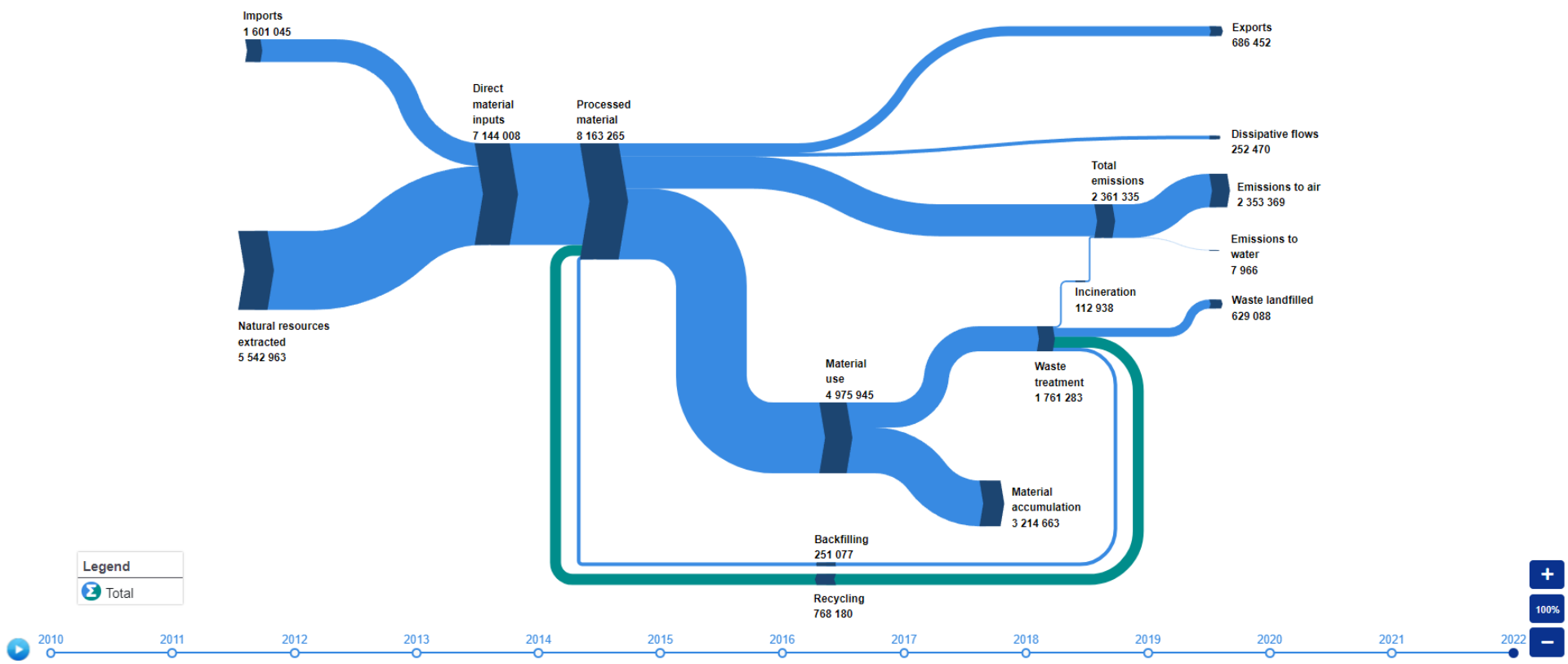
Material flow diagram

eurostat

European Union - year 2022
Thousand tonnes



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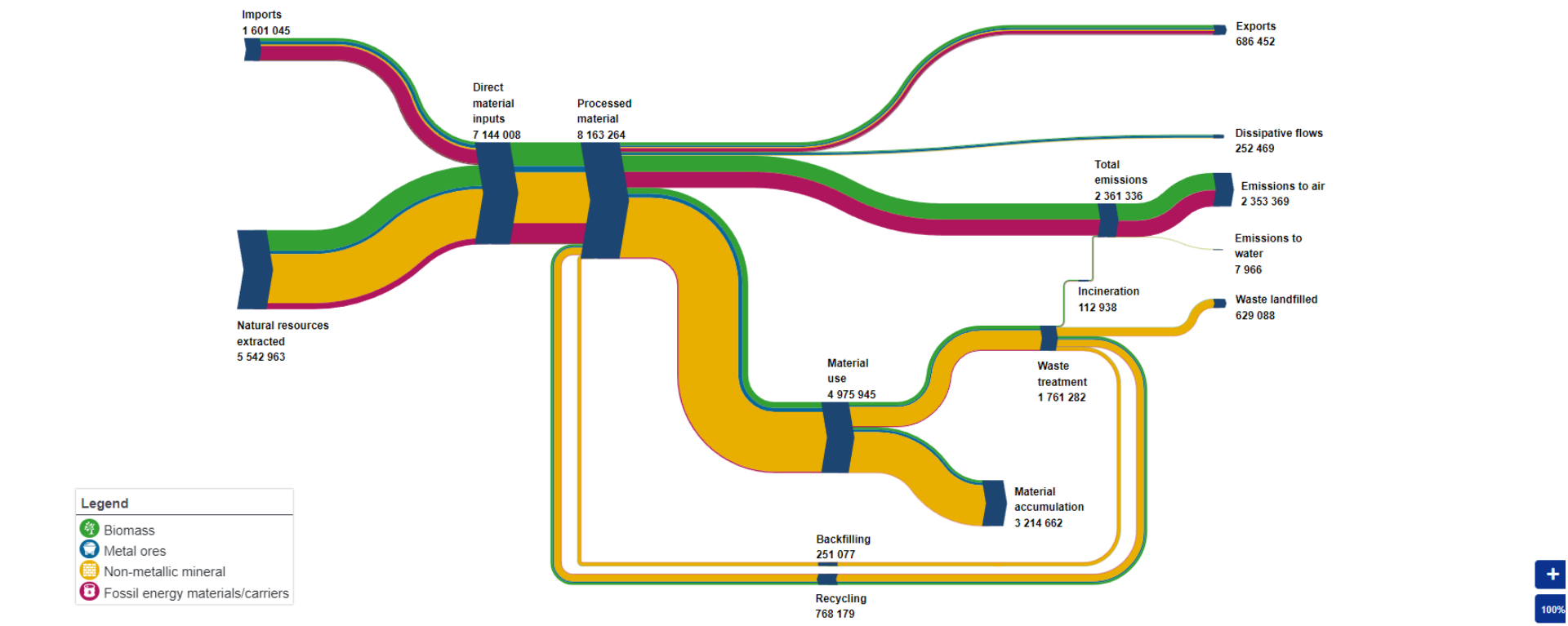

REGIONAL TRAINING ON THE PRODUCTION AND USE OF WASTE AND CIRCULAR ECONOMY STATISTICS AND INDICATORS

Thank you !

Working Group on Environmental Monitoring and Assessment

wgemasec@un.org

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