



The EU monitoring framework for the CIRCULAR ECONOMY

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CIRCULAR ECONOMY

Closing the loop

CIRCULAR ECONOMY

Circular Economy - policy

- *The European Commission adopted an ambitious 'Circular Economy Package'.*
- *An EU Action Plan for the circular economy establishes a concrete programme of actions outlining measures that cover the entire product life cycle: from production and consumption to waste management and the market for secondary raw materials.*

Circular Economy - monitoring

- *EUROPEAN PARLIAMENT: (...) calling upon the Commission to develop indicators on resource efficiency to track progress towards circular economy (...)(EP Resolution of 9 July 2015)*
- *EUROPEAN COMMISSION: (...) the Commission will (...) propose a simple and effective monitoring framework for the circular economy (...) (Circular Economy Action Plan, 2 December 2015)*
- *EU COUNCIL: (...) the need for a **monitoring framework to strengthen and assess the progress towards CE**, while minimising the administrative burden (...)(Environment Council conclusions of 20 June 2016)*

Approach

- **10 individual indicators**
- *In 4 main groups*
 - **production/consumption;**
 - **waste management;**
 - **secondary raw materials,**
 - **competitiveness/innovation**
- **Covering the entire loop**
- **Capturing main CE elements**
 - **products/services lifecycle;**
 - priority areas/sectors; impact on competitiveness/innovation/jobs**
- **Presented on a website, continuously updated**

What the indicators measure

1 EU self-sufficiency for raw materials

The share of a selection of key materials (including critical raw materials) used in the EU that are produced within the EU

2 Green public procurement

The share of major public procurements in the EU that include environmental requirements

3a-c Waste generation

Generation of municipal waste per capita; total waste generation (excluding major mineral waste) per GDP unit and in relation to domestic material consumption

4 Food waste

Amount of food waste generated

7a-b Contribution of recycled materials to raw materials demand

Secondary raw materials' share of overall materials demand - for specific materials and for the whole economy

8 Trade in recyclable raw materials

Imports and exports of selected recyclable raw materials



5a-b Overall recycling rates

Recycling rate of municipal waste and of all waste except major mineral waste

6a-f Recycling rates for specific waste streams

Recycling rate of overall packaging waste, plastic packaging, wood packaging, waste electrical and electronic equipment, recycled biowaste per capita and recovery rate of construction and demolition waste

9a-c Private investments, jobs and gross value added

Private investments, number of persons employed and gross value added in the circular economy sectors

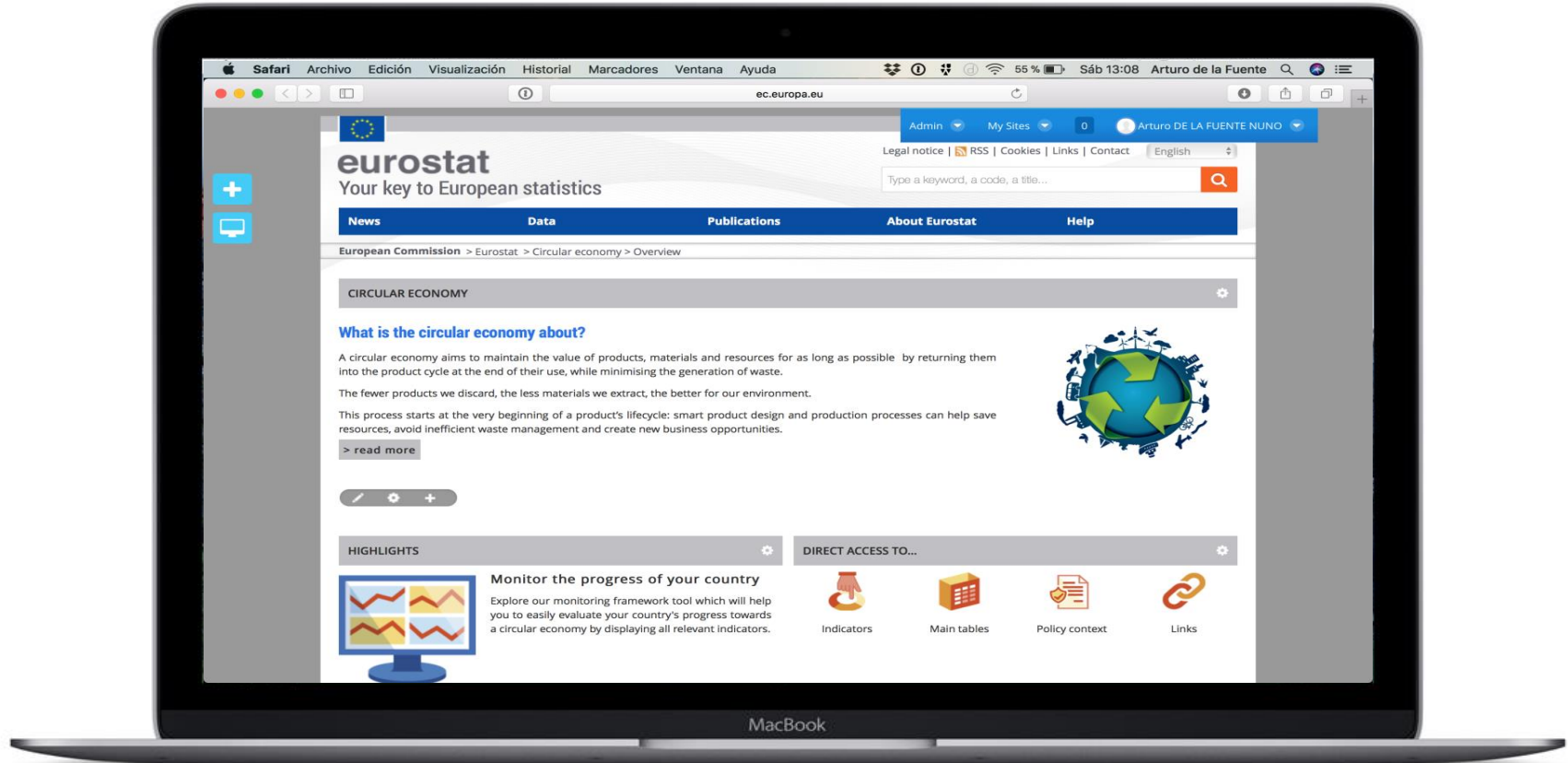
10 Patents

Number of patents related to waste management and recycling

Eurostat's role...

- *involved in the selection of indicators*
- *produce most of the indicators (in the European Statistical System)*
- *provide easy access to the indicators and other relevant data for citizens and policy makers*
- *=> website*

<http://ec.europa.eu/eurostat/web/circular-economy>





What is the circular economy about?

A circular economy aims to maintain the value of products, materials and resources for as long as possible by returning them into the product cycle at the end of their use, while minimising the generation of waste.

The fewer products we discard, the less materials we extract, the better for our environment.

This process starts at the very beginning of a product's lifecycle: smart product design and production processes can help save resources, avoid inefficient waste management and create new business opportunities.

[> read more](#)



HIGHLIGHTS



Monitor the progress of your country

Explore our monitoring framework tool which will help you to easily evaluate your country's progress towards a circular economy by displaying all relevant indicators.



Discover the circular economy

Our visualisation tool will help you to learn more about the circular economy in an easily-understandable and fun way.



Visualise flows of material resources

Explore the simplified life cycle of materials in the EU - from the beginning through to material processing to their different uses and final stages, such as waste or recycling.



DIRECT ACCESS TO...



Indicators



Main tables



Policy context



Links



EXPLORE FURTHER



Statistical articles on environment

Have a look at our Statistics Explained articles on environment covering a range of topics, such as climate change, material flows,...



Waste statistics

Find here all information and easy access to our data on waste, including topics such as generation and treatment of waste,...



Choose a country:

 **European Union** ▼

CIRCULAR ECONOMY INDICATORS

▼ Expand All

▲ Collapse All



Production and consumption ▼



Waste Management ▼



Secondary raw materials ▼



Competitiveness, innovation, economics ▼



Access the profile for every EU Member States by choosing a country from the dropdown list. Click on each dimension (or on the arrow) to expand/collapse the list of all indicators belonging to this dimension.

Choose a country:

CIRCULAR ECONOMY INDICATORS

Expand All

Collapse All



Production and consumption

Indicator	Value	Trend
EU self-sufficiency for raw materials (percentage)	36.4 [2016]	N/A
Green public procurement	N/A	N/A
Waste generation		
Generation of municipal waste (per capita)	476 [2015]	
Generation of waste excluding major mineral wastes, per GDP unit	66 [2014]	
Generation of waste excluding major mineral wastes, per domestic material consumption	12.9 [2014]	

Generation of municipal waste (per capita) ✕

Definition

The amount of municipal waste generated (in mass unit) consists of waste collected by or on behalf of municipal authorities and disposed of through the waste management system. It consists to a large extent of waste generated by households, though similar wastes from sources such as commerce, offices and public institutions may be included.

Relevance

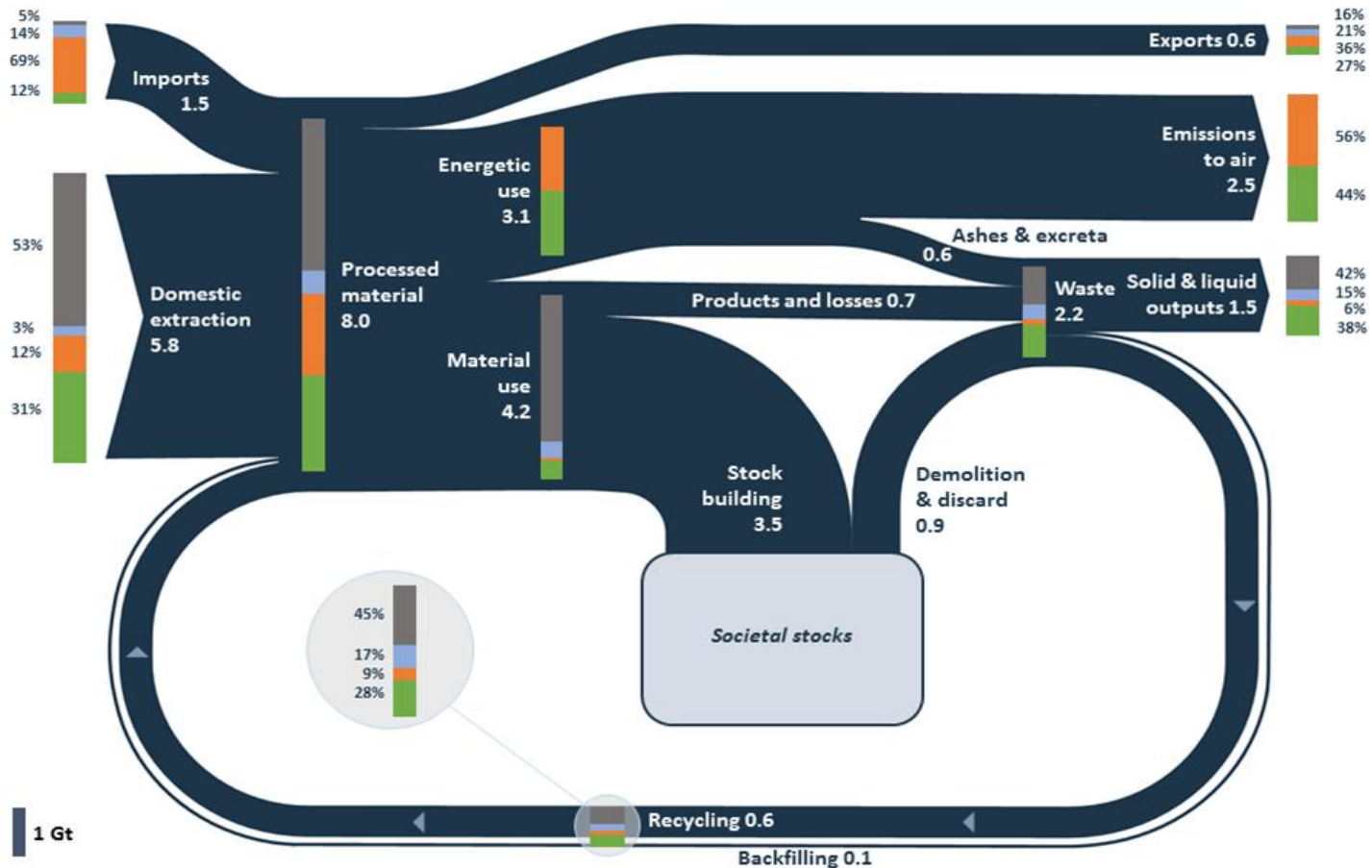
This indicator focuses on municipal waste. Even though municipal waste only represents about 10% of the total waste generated or about 30% of the generated amount of waste excluding major mineral waste, following up on its evolution can give a good indication of changing consumption patterns and of Member States' waste prevention performance and where citizens' actions and involvement is most relevant.

Source

Eurostat, Municipal waste by waste operations (*env_wasmun*), collected via a subset of the OECD/Eurostat Joint Questionnaire, section waste (see *guidance document on municipal waste*). Data are provided under a so-called gentlemen's agreement.

Material Flows in the EU

Source: Andreas Mayer et al., (forthcoming): Monitoring the circular economy in the EU28 - A mass-balanced assessment of economy wide material flows, waste and emissions from official statistics. In: Journal of Industrial Ecology



Material flows true to scale in Gt/year (billion tons/year) in 2014

Legend: Non-metallic minerals (grey), Metal ores (blue), Fossil energy materials/carriers (orange), Biomass (green)

Note: May not sum up to total due to rounding.

Thank you!

- *Questions?*