



# Update on revised EU monitoring framework circular economy

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# Background

- Original EU monitoring framework circular economy dates from 2018
- Dashboard of 10 indicators organised in 4 dimensions
- 1 indicator based on SEEA: circular material use rate
- The European Commission announced in 2020 an update of the monitoring framework
- Eurostat close to publication of the revised monitoring framework
  - Delayed several times for non-technical reasons

# Revised monitoring framework

## 11 indicators in 5 dimensions

### Circular economy monitoring framework

#### 1 A-B MATERIAL CONSUMPTION

Material footprint and resource

#### 2 GREEN PUBLIC PROCUREMENT

Share of major public procurement that includes environmental requirements

#### 3 A-F WASTE GENERATION

Total waste generation, total waste generation (excluding major mineral waste) per GDP unit, municipal waste generation, food waste, generation of packaging waste and of plastic packaging waste

#### 6 A-B CONTRIBUTION OF RECYCLED MATERIALS TO RAW MATERIAL DEMAND

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

#### 7 A-C TRADE IN RECYCLABLE RAW MATERIALS

Imports, exports and intra EU trade of selected recyclable raw materials



#### 4 A-B OVERALL RECYCLING RATES

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

#### 5 A-C RECYCLING RATES FOR SPECIFIC WASTE STREAMS

Recycling rate of overall packaging waste, of plastic packaging waste and of WEEE separately collected

#### 8 A-C PRIVATE INVESTMENTS, JOBS AND VALUE ADDED RELATED TO CIRCULAR ECONOMY SECTORS

Private investments, number of persons employed and gross value added related to the circular economy

#### 9 INNOVATION

Patents on waste and recycling

#### 10 A-B GLOBAL SUSTAINABILITY

Consumption footprint and GHG emissions from production activities

#### 11 A-B RESILIENCE

Material import dependency and EU self-sufficiency for raw materials

Most – but not all – indicators are based on official statistics sourced by Eurostat

# Main changes in revised framework

- One new dimension on global sustainability and resilience
- New indicators:
  - Material footprint (raw material consumption) \*
  - Resource productivity \*
  - Greenhouse gas emissions from production activities \*
  - Material import dependency \*
  - Consumption footprint (based on LCA)

(\* ) indicators based on SEEA

# Adjustments in indicators

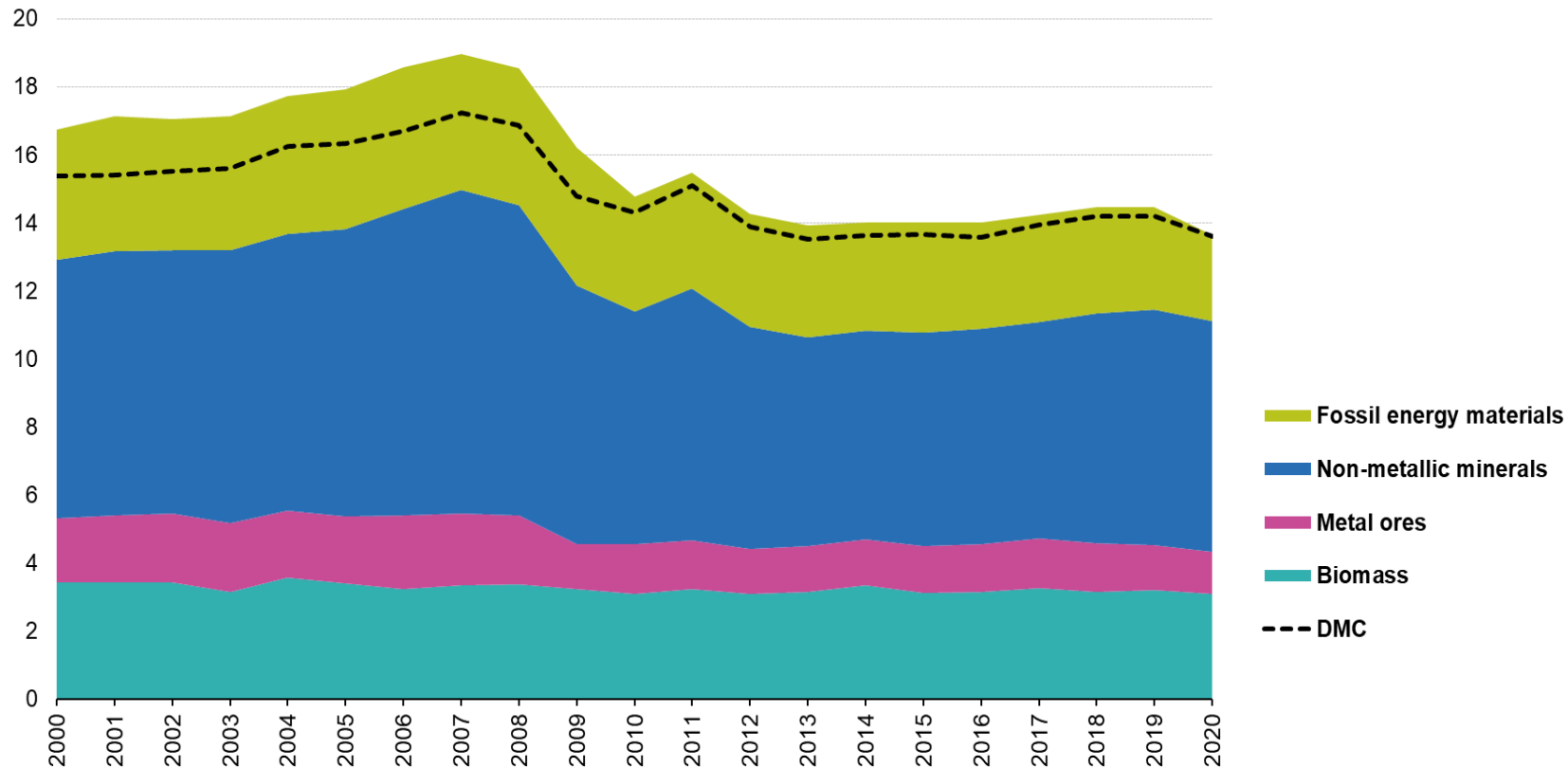
- Improved calculation method for indicators:
  - Private investments, jobs and gross value added related to circular economy sectors (new method gets closer to SEEA)
  - Recycling rate e-waste
  - Food waste (new data source)

## Old sub-indicators discontinued

- Recycling rates of specific streams: wooden packaging, biowaste
- Recovery rate construction and demolition waste

# Examples indicators based on SEEA: Material footprints

Based on economy-wide material flow accounts

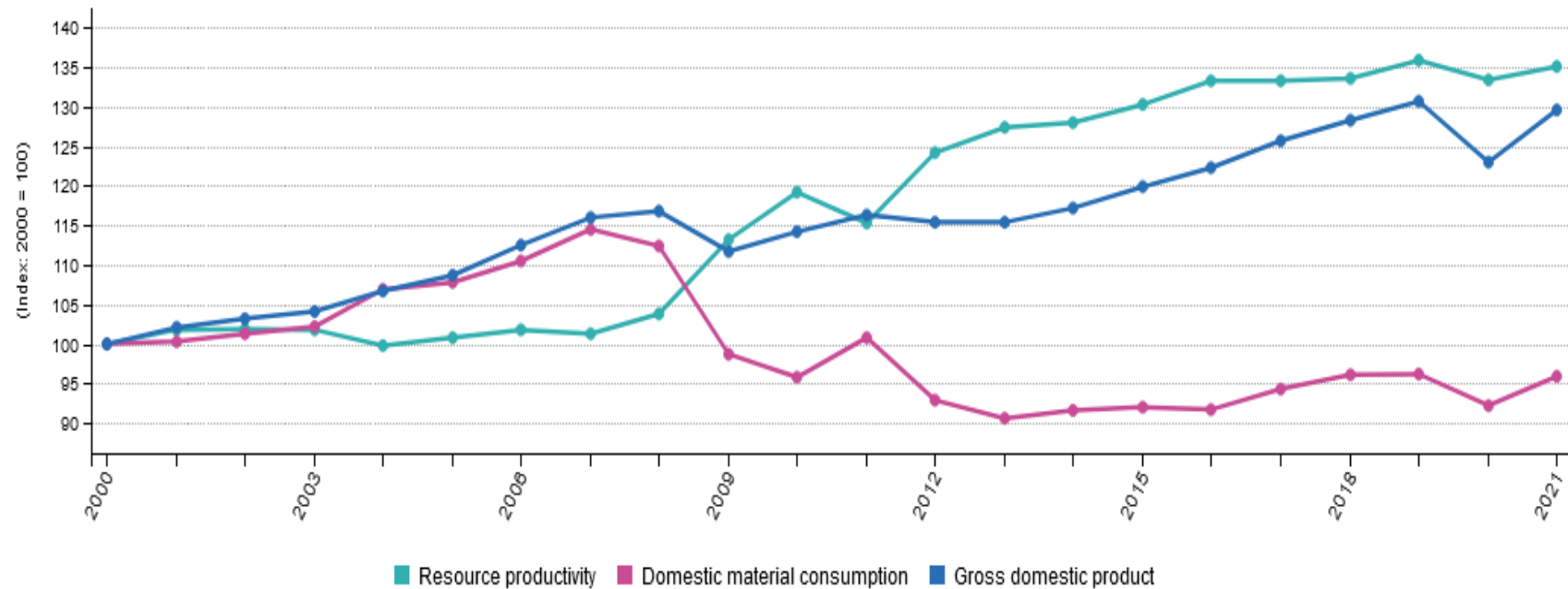


Source: Eurostat (online data codes: env\_ac\_mfa, env\_ac\_rme)

eurostat 

# Resource productivity

Based on economy-wide material flow accounts

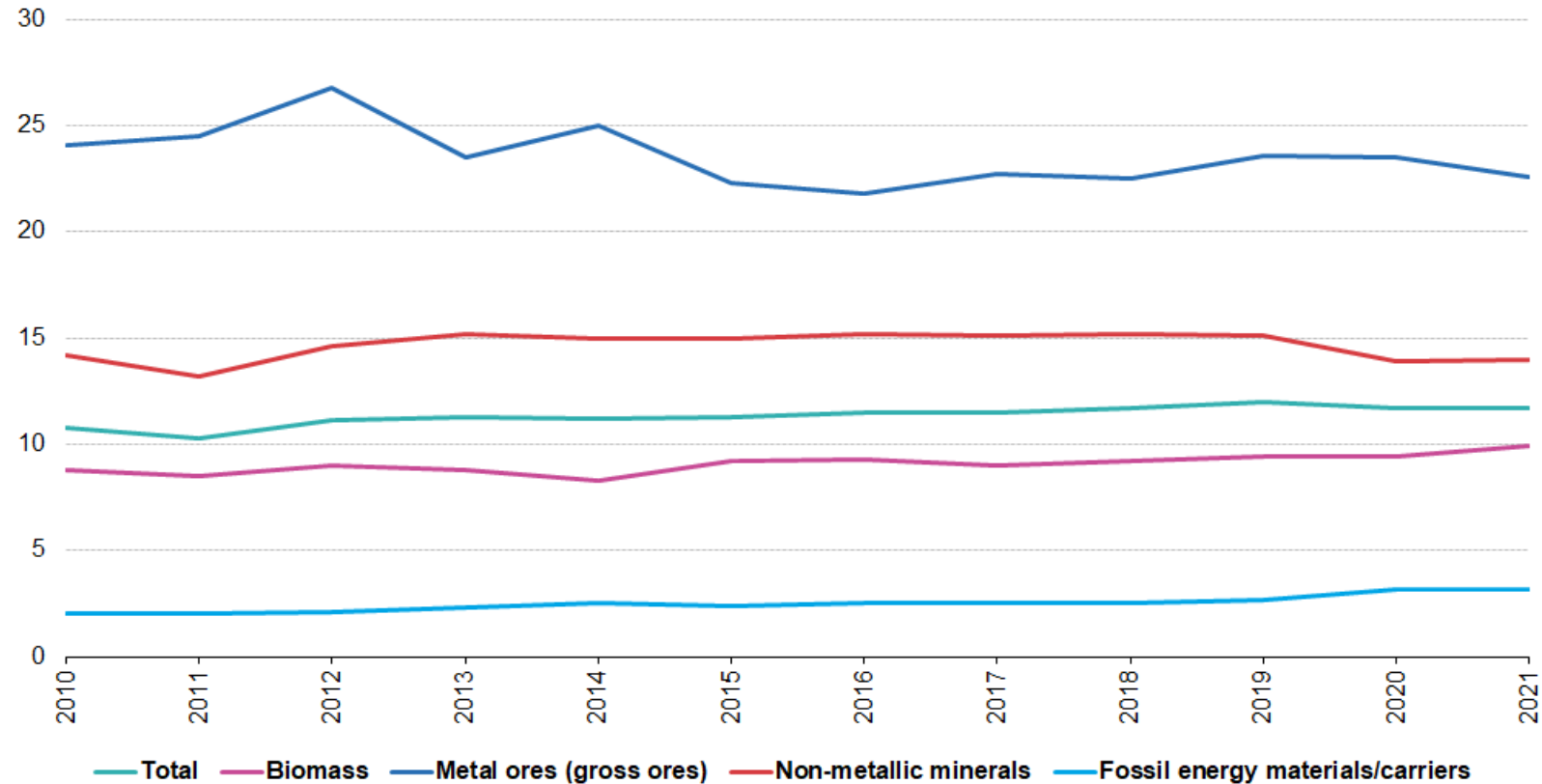


Note: GDP in chain-linked volumes, reference year 2015

Source datasets: [env\\_ac\\_rp](#) (resource productivity), [env\\_ac\\_mfa](#) (DMC) and [nama\\_10\\_gdp](#) (GDP)

# Circular material use rate

Based on economy-wide material flow accounts



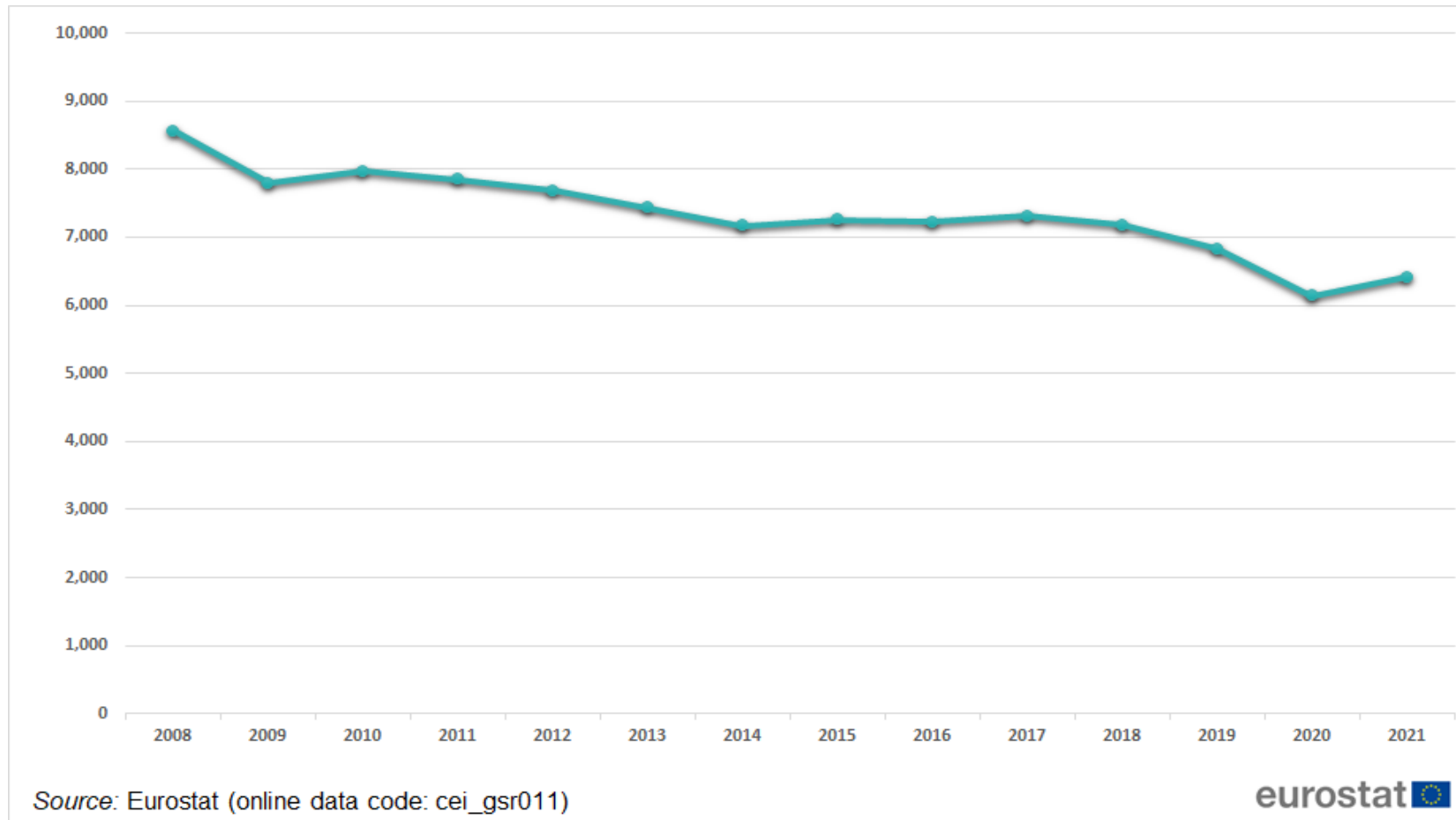
Source: Eurostat (online data code: env\_ac\_cum)

eurostat 



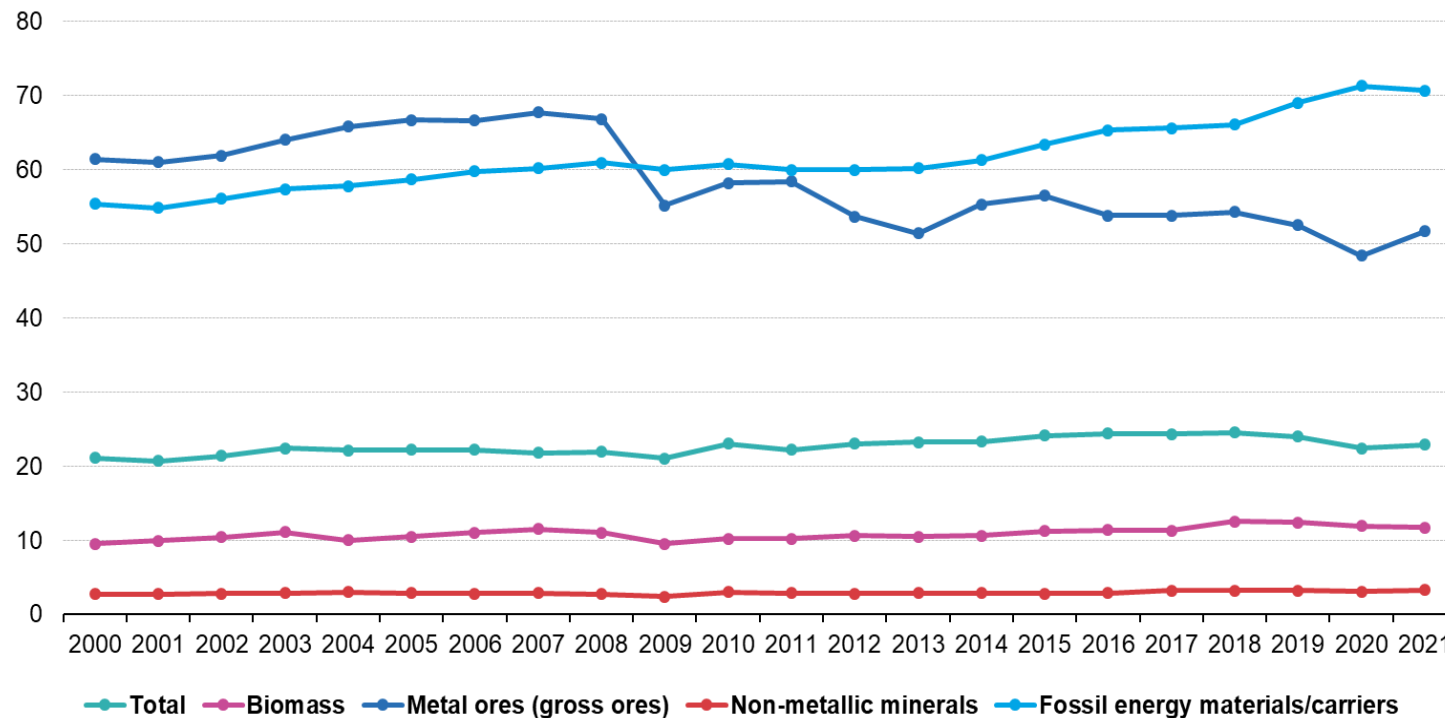
# Greenhouse gas emissions production activities

Based on air emissions accounts



# Material import dependency

Based on economy-wide material flow accounts



Note:

2020 and 2021 values are provisional estimates

Source: Eurostat (online data code: env\_ac\_mid)

eurostat 

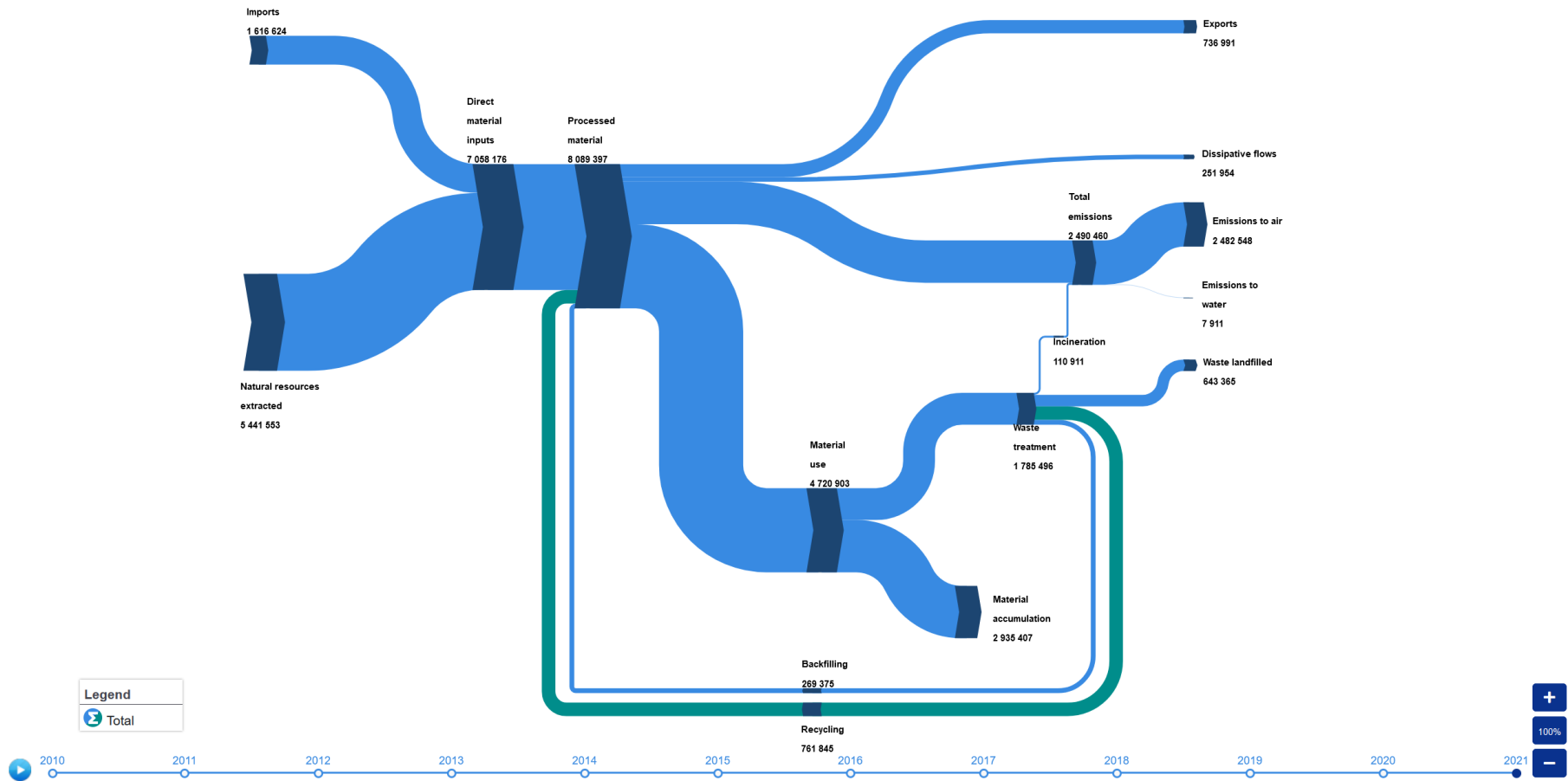
# Sankey diagram material flows

## Material flow diagram

European Union - year 2021  
Thousand tonnes

eurostat 



# To know more:

- EU monitoring framework circular economy

The screenshot shows the Eurostat website interface. At the top, there is a navigation bar with the Eurostat logo, a search bar, and links for 'Log in', 'EN English', and 'Search'. Below the navigation bar, there is a breadcrumb trail: 'Home > Data > Statistical themes > Circular economy > Overview'. The main heading is 'Circular economy - Overview'. Underneath, there is an 'INTRODUCTION' section with the sub-heading 'What is the circular economy about?'. The text explains that 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. It also mentions that this process starts at the very beginning of a product's lifecycle, involving smart product design and production processes. A circular icon with arrows and various symbols is positioned to the right of the text. Below the introduction, there are three 'HIGHLIGHTS' sections: 'Monitor the progress of your country', 'Visualise flows of material resources', and 'Discover statistics for the Green Deal'. To the right of these highlights, there is a 'DIRECT ACCESS TO...' section with icons for 'Information on indicators', 'Tables', 'Publications', 'Policy context', and 'Links'. At the bottom, there is an 'EXPLORE FURTHER' section with icons and text for 'Sustainable development goals' and 'Waste statistics'.

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

# Thank you

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