Update on revised EU monitoring framework for the 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

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

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

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_mme)
Resource productivity
Based on economy-wide material flow accounts

Note: GDP in chained volumes, reference year 2015

Source datasets: env_ac_rp (resource productivity), env_ac_mfa (UMC) and nama_10_gdp (GDP)
Circular material use rate

Based on economy-wide material flow accounts

Source: Eurostat (online data code: env_ac_curn)
Greenhouse gas emissions production activities

Based on air emissions accounts

Source: Eurostat (online data code: chg_gsr011)

European Commission
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)
Sankey diagram material flows
To know more:

- EU monitoring framework circular economy

https://ec.europa.eu/eurostat/web/circular-economy
Thank you
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