



Circular material use rate (sdg_12_41)

ESMS Indicator Profile (ESMS-IP)
Compiling agency: Eurostat, the statistical
office of the European Union

Eurostat metadata

Reference metadata

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Eurostat Quality Profile

4.5. Source data	ESS
5.1. Frequency of dissemination	Every year
5.2. Timeliness	T+1 year
6.1. Reference area	All EU MS
6.2. Comparability - geographical	All EU MS
6.3. Coverage - Time	> 10 years
6.4. Comparability - over time	> 4 data points

Description of Eurostat quality grading system under the following [link](#).

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1. Contact Top	
1.1. Contact organisation	Eurostat, the statistical office of the European Union
1.2. Contact organisation unit	E2: Environmental statistics and accounts; sustainable development

1.5. Contact mail address	e-mail contact: ESTAT-SDG-MONITORING@ec.europa.eu
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2. Metadata update Top	
2.1. Metadata last certified	24/03/2023
2.2. Metadata last posted	02/05/2024
2.3. Metadata last update	08/04/2024

3. Relevance Top
<p>The indicator is part of the EU Sustainable Development Goals (SDG) indicator set. It is used to monitor progress towards SDG 12 on ensuring sustainable consumption and production patterns which is embedded in the European Commission's Priorities under the 'European Green Deal'.</p> <p>SDG 12 calls for a comprehensive set of actions from businesses, policy-makers, researchers and consumers to adapt to sustainable practices. It envisions sustainable production and consumption based on advanced technological capacity, resource efficiency and reduced global waste.</p> <p>The indicator can be considered as part of the global SDG indicator 11.6.1 "Proportion of urban solid waste regularly collected and with adequate final discharge out of total urban solid waste generated, by cities".</p> <p>Increasing the circularity of Europe's economy is a key priority of the new Industrial Strategy of the EU adopted in 2020 and one of the key elements of the European Green Deal.</p> <p>The European Commission adopted the circular economy action plan (CEAP) in March 2020. The EU's transition to a circular economy will reduce pressure on natural resources and will create sustainable growth and jobs. The new action plan announces initiatives along the entire life cycle of products. It targets how products are designed, promotes circular economy processes, encourages sustainable consumption, and aims to ensure that waste is prevented and the resources used are kept in the EU economy for as long as possible. Building on existing EU policies and legislation, the Circular Economy Package establishes a programme of action with measures covering the whole cycle from production and consumption to waste management. The Package includes commitments on ecodesign, waste prevention and reuse, clean material cycles and ambitious quantitative targets on increasing recycling and reducing landfilling, obligations to improve the separate collection of waste, as well as the promotion of efficient use of bio-based resources.</p> <p>The Sustainable Consumption and Production and Sustainable Industrial Policy (SCP/SIP) Action Plan includes a series of proposals on sustainable consumption and production that will contribute to improving the environmental performance of products and increase the demand for more sustainable goods and production technologies.</p> <p>The 8th Environment Action Programme (EAP) adopted in March 2022 aims to accelerate the transition to a climate-neutral, resource-efficient and regenerative economy, recognising that human wellbeing depends on healthy ecosystems. Among its priority objectives are achieving climate neutrality by 2050 and restoring biodiversity. This indicator is also included as a headline indicator and sets a target of doubling the ratio of circular material use by 2030 compared to 2020.</p>

4. Statistical Indicator Top
4.1. Data description

The indicator measures the share of material recovered and fed back into the economy - thus saving extraction of primary raw materials - in overall material use. The circular material use (CMU), also known as circularity rate is defined as the ratio of the circular use of materials to the overall material use.

The overall material use is measured by summing up the aggregate domestic material consumption (DMC) and the circular use of materials. DMC is defined in economy-wide material flow accounts. The circular use of materials is approximated by the amount of waste recycled in domestic recovery plants minus imported waste destined for recovery plus exported waste destined for recovery abroad.

A higher CMU rate value means more secondary materials are being substituted for primary raw materials, thus reducing the environmental impacts of extracting primary material.

4.2. Unit of measure

% of total material use

4.3. Reference Period

Calendar year.

4.4. Accuracy - overall

The indicator is produced according to the quality standards of European Statistics. Details on accuracy can be found in the metadata of the source datasets (see link to related metadata).

4.5. Source data

ESS

Data source: European Statistical System (ESS) ([ENV_AC_CUR](#))

Data provider: Eurostat, the statistical office of the European Union, based on data reported by the countries.

5. Frequency and Timeliness of dissemination

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5.1. Frequency of dissemination

Every year

Indicator is updated annually. Complete and updated ESS data release information can be accessed via [Eurostat release calendar](#).

5.2. Timeliness

T+1 year

New data points are disseminated within one year after the reference year.

6. Coverage and comparability

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6.1. Reference area

All EU MS

Data are presented for all EU Member States.

6.2. Comparability - geographical

All EU MS

Data are comparable between all EU Member States.

6.3. Coverage - Time

> 10 years

Presented time series starts in 2004 for the EU aggregate. Data for Member States and break down by materials start in 2010.

6.4. Comparability - over time

> 4 data points

Length of comparable time series without methodological break is longer than 4 data points.

7. Accessibility and clarity

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7.1. Dissemination format - Publications

Analysis of indicator is presented in Eurostat's annual monitoring report on Sustainable development in the EU (progress towards SDGs in the EU context).

7.2. Dissemination format - online database

see table [sdg_12_41](#)

7.3. Dissemination format - other

Eurostat dedicated section on SDGs: <http://ec.europa.eu/eurostat/web/sdi/overview>

8. Comment

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Annexes:

[Methodology for CMU rate calculation](#)

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[env_ac_cur_esms](#) - Circular material use rate

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