

Raw material consumption (RMC) (sdg_12_21)

ESMS Indicator Profile (ESMS-IP)

Compiling agency: Eurostat, the statistical
office of the European Union

Eurostat metadata
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Eurostat Quality Profile	
4.5. Source data	Eurostat
5.1. Frequency of dissemination	Every year
5.2. Timeliness	T+2 years
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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information on how to participate.

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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	09/03/2023
2.2. Metadata last posted	30/04/2024
2.3. Metadata last update	04/04/2024

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>SDG 8, among other things, calls for promoting labour rights and safe and secure working environments</p> <p>The indicator can be considered as similar to the global SDG indicator 8.4.1 and 12.2.1 element "Material footprint".</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.</p> <p>The Circular Economy Action Plan adopted in 2020 aims to double the EU's circular material use rate in the coming decade to support the achievement of climate neutrality by 2050, to decouple economic growth from resource use and waste generation and to keep resource consumption within ecological boundaries. In March 2022, the European Commission adopted a package on Circular Economy measures to make sustainable products the norm in the EU and boost circular business models.</p>

4. Statistical Indicator Top
4.1. Data description
<p>The material footprint, also referred to as raw material consumption (RMC), represents the global demand for the extraction of materials (minerals, metal ore, biomass, fossil energy materials) induced by consumption of goods and services within a geographical reference area. Data for material footprints stem from material flow accounts, which model the flows of natural resources from the environment into the economy. They include domestic extraction of materials measured in tonnes of gross material (for example, gross ore or gross harvest) as well as imports and exports measured by estimates of the raw material equivalents of the products traded (domestic and abroad extraction required to produce the traded products). RMC thus shows the amount of extraction needed to produce the goods demanded by final users in the geographical reference area, irrespective of where in the world the material extraction took place.</p> <p>For further methodological explanations: see also Economy-wide material flow accounts handbook paras. 99ff.</p>
4.2. Unit of measure

Thousand tonnes and tonnes per capita
4.3. Reference Period
Calendar year
4.4. Accuracy - overall
The model-based estimates of material flow accounts in raw material equivalents (RME) are produced according to the quality standards of European Statistics. The aggregate EU economy is estimated with an EU level hybrid input-output model. Country level estimates are obtained with the country RME model or with a country-specific model. Eurostat country level estimates are calculated with the Python country RME tool. This implies that assumptions and modelling techniques are determining the results. Further details on accuracy can be found in the metadata of the source datasets (see link to related metadata).
4.5. Source data
Eurostat Data source: Eurostat (ENV_AC_RME) Data provider: Eurostat, the statistical office of the European Union, based on country level estimates reported by the countries and Eurostat estimates.

5. Frequency and Timeliness of dissemination Top
5.1. Frequency of dissemination
Every year The indicator is updated annually. Complete and updated ESS data release information can be accessed via Eurostat release calendar .
5.2. Timeliness
T+2 years New data points are disseminated within 2 years after the reference year.

6. Coverage and comparability Top
6.1. Reference area
All EU MS Data are presented for all EU Member States plus Switzerland.
6.2. Comparability - geographical
All EU MS The estimation models to obtain the EU and country-level estimates produced by Eurostat have harmonized methodologies. The same applies to the data reported by countries utilising Eurostat's country RME tool. On the other hand, there are countries reporting using their own estimation models. This can potentially hamper comparability across countries.
6.3. Coverage - Time
> 10 years Presented time series (including EU aggregates) starts in 2000.
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_21](#)

7.3. Dissemination format - other

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

8. Comment

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[env_ac_rme_esms](#) - Material footprints

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