



Circular Economy Action Plan

For a cleaner and
more competitive
Europe

Monitoring progress towards the circular economy in the EU

EEA/Eionet/ETC Expert Workshop
Co-creation process on CE monitoring

7 May 2021

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DG Environment, European Commission

EU Monitoring framework for the Circular economy

Overview of the 10 indicators

1 EU self-sufficiency for raw materials

2 Green public procurement

3a-c Waste generation

4 Food waste

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

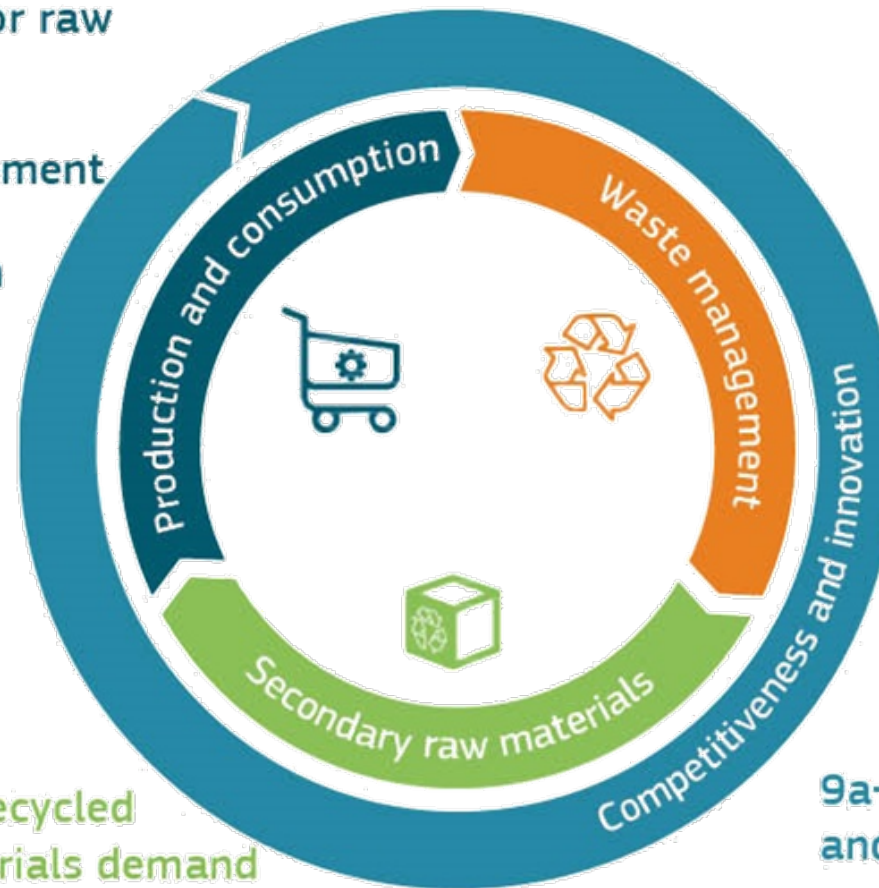
8 Trade in recyclable raw materials

5a-b Overall recycling rates

6a-f Recycling rates for specific waste streams

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

10 Patents



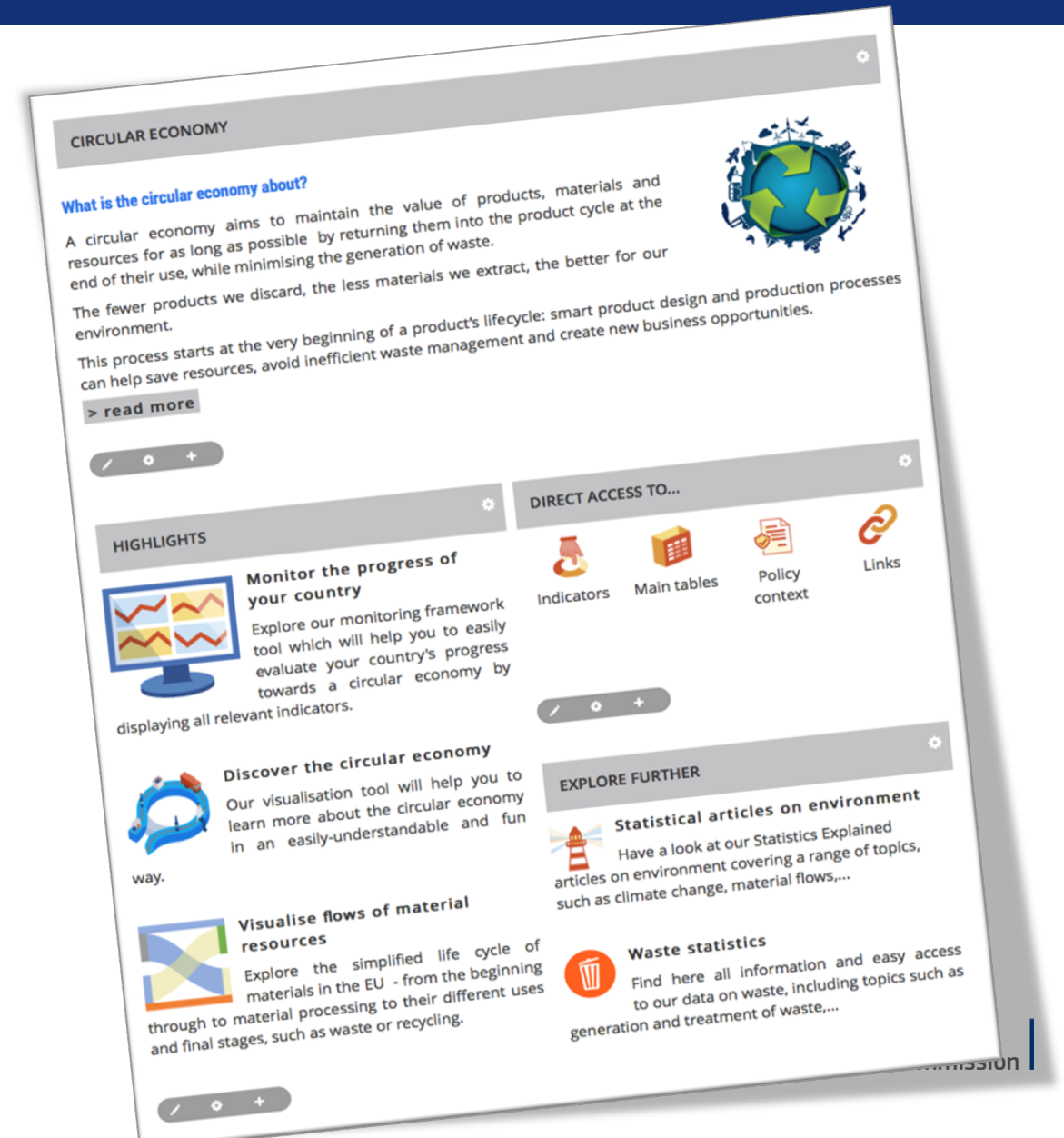
Circular economy in the EU

Communication

- ✓ Online database
- ✓ Indicators and trends
- ✓ Country Profiles
- ✓ Metadata
- ✓ Material flows diagram

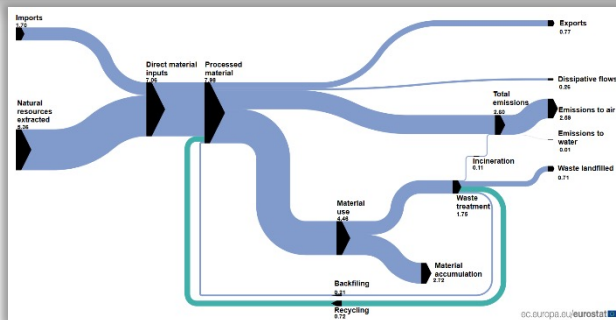
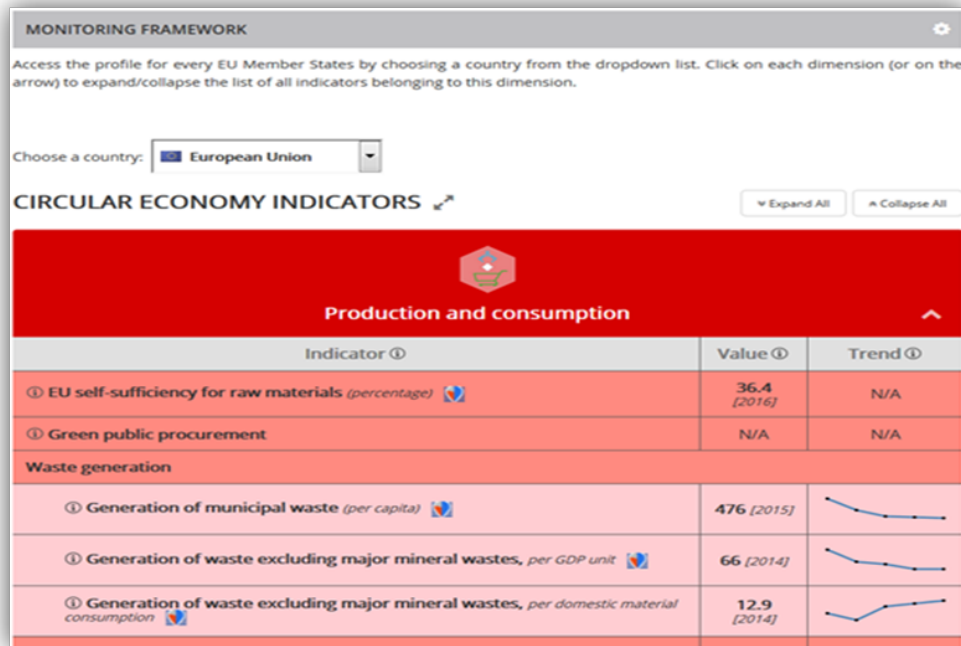
Eurostat:

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



EU Monitoring framework for the Circular economy

Web pages eurostat



Recycling rate of municipal waste

The recycling rate, expressed in percentage, is the tonnage recycled from municipal waste ... [more](#)

Code: cei_wm011

geo	time	2011	2012	2013	2014	2015
EU (28 countries)		39.6 ^s	41.5 ^s	42.2 ^s	43.7 ^s	45.0 ^s
EU (27 countries)		39.8 ^s	41.7 ^s	42.4 ^s	43.9 ^s	45.2 ^s
Belgium		54.3	53.1	52.7	53.2	53.4
Bulgaria		26.2	25.0	28.5	23.1	29.4
Czech Republic		17.0 ^e	23.2 ^e	24.2 ^e	25.4 ^e	29.7 ^e
				43.2	45.1	46.3
				63.8	65.6	66.1 ^e
				17.9	31.3	28.3

Source of Data: Eurostat

Circular material use rate (cei_srm030)

Indicator Profile (ESMS)
Data tables: [cei_srm030](#)
Compiling agency: Eurostat, the statistical office of the European Union

Eurostat metadata		Eurostat Quality Profile	
Reference metadata		4.5. Source data	
1. Contact		ESS	
2. Metadata update		5.1. Frequency of dissemination	
3. Relevance		Every 2 years	
4. Statistical Indicator		5.2. Timeliness	
5. Frequency and Timeliness of dissemination		T-2 years	
6. Coverage and comparability		6.1. Reference area	
7. Accessibility and clarity		All EU MS	
8. Comment		6.2. Comparability - geographical	
Related Metadata		All EU MS	
Annexes (including footnotes)		6.3. Coverage - Time	
		> 10 years	
		6.4. Comparability - over time	
		> 4 data points	

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

For any question on data and metadata, please contact: [EUROPEAN STATISTICAL DATA SUPPORT](#)

[Download](#)

1. Contact	
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	2920 Luxembourg LUXEMBOURG

2. Metadata update	
2.1. Metadata last certified	28/11/2017
2.2. Metadata last posted	28/11/2017
2.3. Metadata last update	28/11/2017

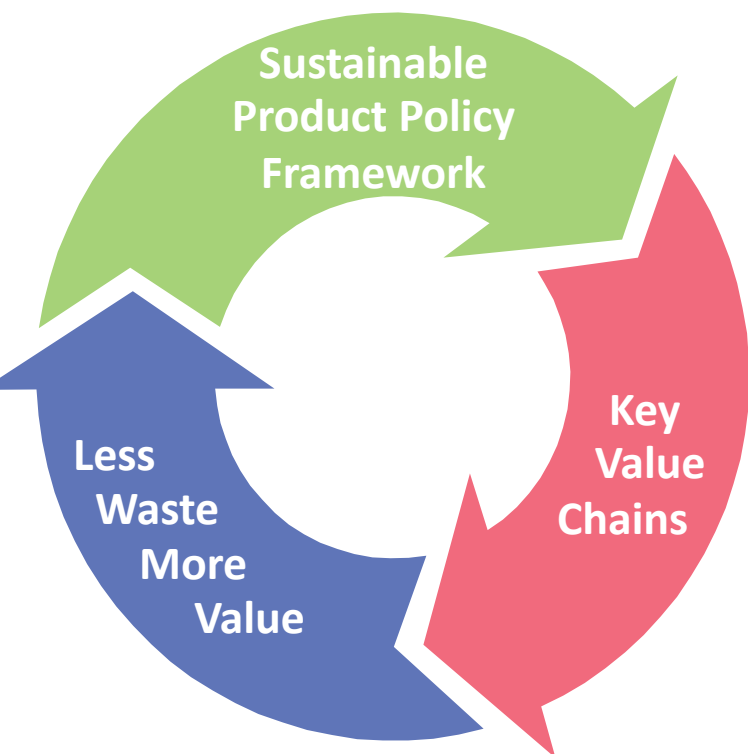
Monitoring progress on Circular economy in the EU

Policy context



- EU COUNCIL: (...) improve the proposed indicators or consider developing new ones in order to cover the full life cycle of products and services (...) (Environment Council conclusions of June 2018)
- ECONOMIC AND SOCIAL COMMITTEE: (...) missing a number of relevant indicators on eco-design, new business models, emissions data (...) (Opinion of July 2018)
- ENVI COMMITTEE OF EUROPEAN PARLIAMENT: (...) identified indicators focus primarily on waste generation (...); the introduction of indicators that measure the success in reducing harmful substances in the circular economy (...) (Draft Motion for Resolution of September 2018)
- EUROPEAN COMMISSION: (...) will update the monitoring framework for the circular economy (...) (Circular Economy Action Plan, 16 March 2020)

A new Circular Economy Action Plan – March 2020



Make sustainable products the norm in the EU
Empower consumers and public buyers
Sustainable production processes

Electronics and ICT
Batteries and vehicles
Packaging
Plastics
Textiles
Construction and buildings
Food, water and nutrients

Reduce Waste
Reduce Waste Exports
Boost market for high quality and safe secondary raw materials

Making circular economy work for people, regions and cities

Circular economy as a requisite for climate neutrality

Getting the Economics Right

Financial Markets

Investments and R&I

Global Level Playing Field

Monitoring

Actions on Monitoring progress



Monitoring
Framework for the
Circular Economy

“ revision of the monitoring framework for a circular economy to add new indicators (interlinkages between circularity, climate neutrality and the zero pollution ambition)”



Indicators on
resource use

“ development of indicators on resource use, including consumption and material footprints to account for material consumption and environmental impacts associated to our production and consumption”

Circular Economy Action Plan 2020 – monitoring



Inter - Institutional debate

- ECONOMIC AND SOCIAL COMMITTEE: (...) move more quickly on the concept of measuring the wealth of an area, using new criteria, i.e. going beyond GDP (...) (Opinion of July 2020)
- COMMITTEE OF THE REGIONS: (...) imperative to decouple growth and resource use (...), reduction of CO2 along product life cycles (...) (Opinion of October 2020)
- EU COUNCIL: (...) improve the indicators or consider developing new ones in order to better cover, along the full value-chain, the life cycle of products and services, and the uptake of new and circular business models and approaches to manage resource consumption (...) (Environment Council conclusions of December 2020)
- EUROPEAN PARLIAMENT: (...) Urges the Commission to introduce by 2021 harmonised, comparable and uniform circularity indicators, consisting of material footprint and consumption footprint indicators, as well as a number of sub-indicators on resource efficiency and ecosystem services (...) (Own Initiative Report of February 2020)

Better monitoring circular economy



Improving the EU monitoring framework by 2021

1. Linking to priorities of the new circular economy action plan
2. Considering the opinions from other EU institutions and stakeholders
3. Bellagio declaration
4. Contribution to monitor the 8th Environment Action Programme



Supporting other initiatives on circular economy metrics

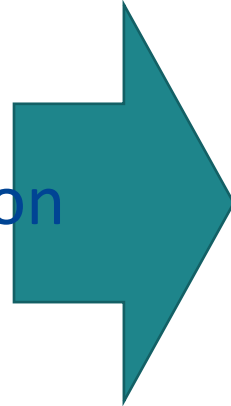
- For cities (EU Urban partnership on circular economy, OECD)
- For regions (SCREEN)
- For nations
- For business
- For SDGs (global and EU indicators)
- PACE initiative on CE metrics



Monitoring progress on Circular economy 2.0

Current 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
- Also presented on a **website**, continuously updated



New approach

- **12** individual indicators
- In **5** main groups
 - production/consumption;
 - waste management;
 - secondary raw materials;
 - competitiveness and innovation;
 - global sustainability and resilience
- Covering the **entire loop**, more balance
- **Holistic view**
- **Website**

EU Monitoring framework for the Circular economy

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

3 a-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

5a-b Overall recycling rates

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

6 g 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

7 a-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

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

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

10 Patents

Number of patents related to waste management and recycling



EU Monitoring framework for the Circular economy 2.0

What the newly proposed indicators measure

1 Material consumption

- 1a Domestic material consumption (DMC)
- 1b Material Footprint (Raw Material Consumption - RMC)
- 1c Resource productivity (GDP/DMC or RMC)
- 1d Consumption of toxic chemicals

3 d-e Waste generation

- 3d Total waste generation per capita
- 3e Packaging waste generation per capita

6 g Recycling rates for specific waste streams

- 6g Recycling rate for key product value chains (e.g. textile, batteries)*

10 Innovation

- 10b Eco-innovation index

Global sustainability and resilience

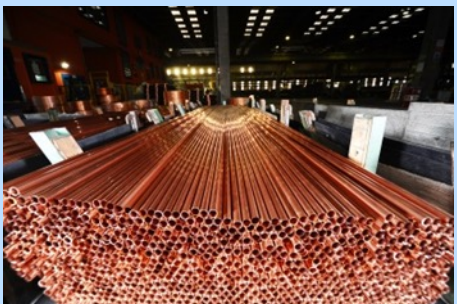
- 11a Consumption footprint
- 11b Contribution to climate neutrality and zero pollution *
- 12b Material import dependency

* Placeholder: data availability to be confirmed

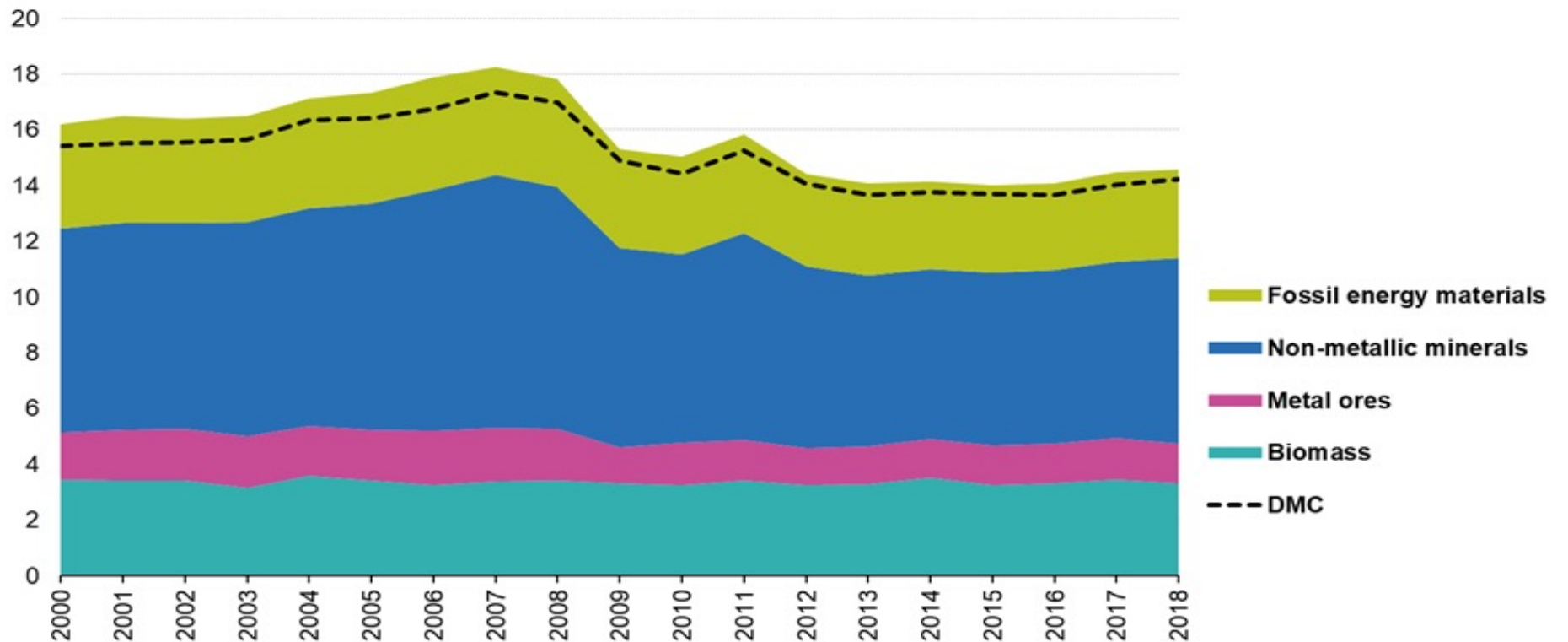
Possible new indicators for the Circular economy

Production and consumption

Material footprint by material category



Raw material consumption (RMC) by main material categories, EU-27, 2000-2018
(tonnes per capita)



Source: Eurostat (online data codes: env_ac_mfa, env_ac_rme)

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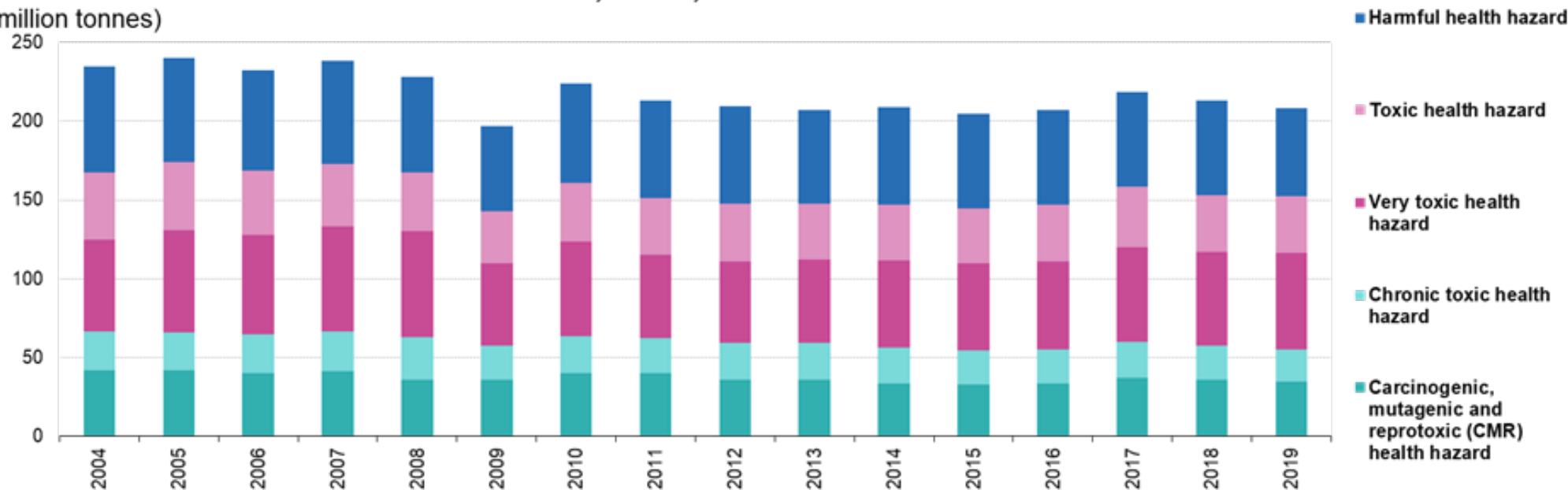
Possible new indicators for the Circular economy

Production
and
consumption

Consumption
of toxic
chemicals

Production of chemicals hazardous to health, EU-27, 2004–19

(million tonnes)



Note: The different classes of chemicals are ranked according to their toxicity from the most dangerous (bottom class) up to the least dangerous (top class).

Source: Eurostat (online data code: env_chmhaz)

eurostat



European
Commission

Possible new indicators for the Circular economy

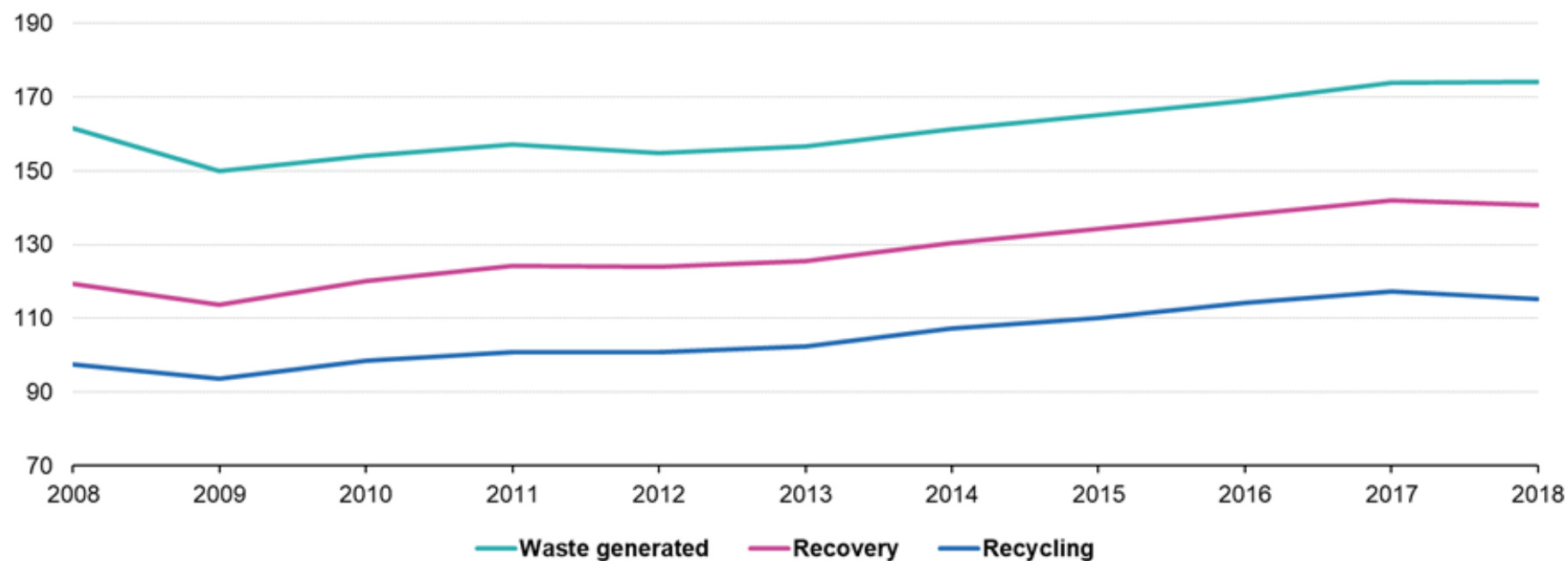
Production and consumption

Generation of packaging waste



© istockphoto/Jaroslav Frank

Packaging waste generated, recovered and recycled, EU-27, 2008-2018
(kg per capita)



Note: Eurostat estimates between 2008 and 2011 as well as 2018. The y-axis is cut.

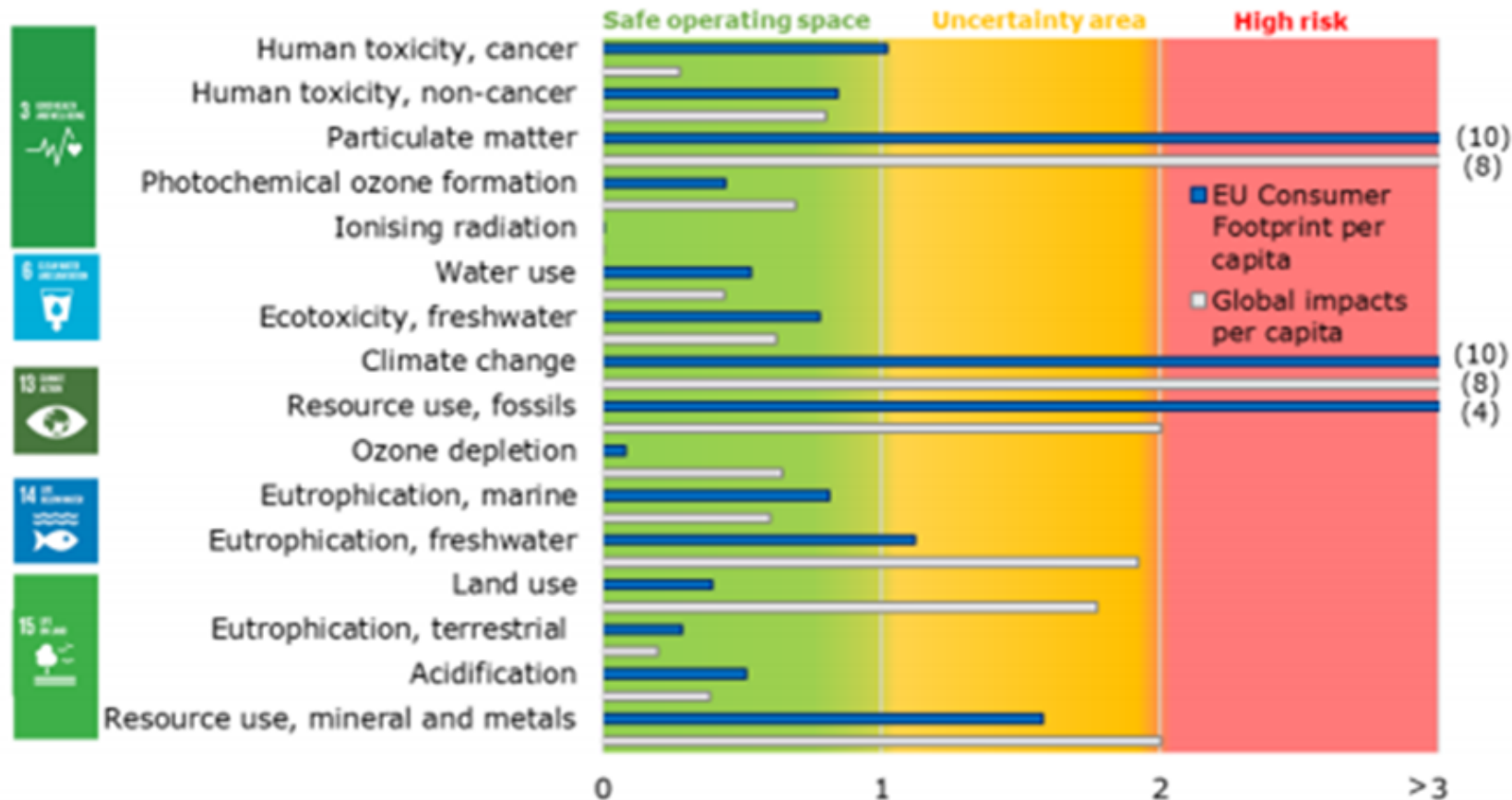
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Possible new indicators for the Circular economy

Global sustainability and resilience

Consumption footprint

Figure 40. EU Consumer Footprint per capita, compared to global (whole world) impact per capita and Planetary Boundaries



Number in brackets refer to the extent to which impacts are overcoming Planetary Boundaries

WHAT NEXT?



Tentative timeline



Discussion in the Commission

Consultation of Member States
and stakeholders

Revised version and adoption

EKC (February 2021)

Commission services (March)

**WG on Environmental accounts
(May)**

Joint WG SPC / IPP (June)

**Others (WG RMS, EEA/Eionet/ETC,
ECESP)**

Commission services, ISC (Autumn)

**Commission adoption and website
update (by end 2021)**

Thank you

More here:

https://ec.europa.eu/environment/circular-economy/index_en.htm



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