

Monitoring the EU transition to the Circular Economy

ECOS Response to call for evidence on the revision of the Circular Economy Monitoring Framework

May 30, 2022

Overview

ECOS welcomes the European Commission's initiative to revise the Circular Economy (CE) Monitoring Framework to better measure the progress of the European Union (EU) towards a circular economy.

In particular, **we support the initiative to add consumption and material footprint indicators**. We welcome the work by the JRC on [consumption footprint](#) and believe it is a great headline indicator for the CE monitoring framework. Accounting for embodied (cradle to grave) emissions in all sectors of the economy is essential to understanding the true impact of EU material use and consumption. Without accounting for embodied emissions, the EU runs the risk of ignoring its impacts outside its borders and therefore wrongly shifting the responsibility of EU consumption to third countries. Footprint indicators are a suitable tool to measure embodied emissions as they quantify emissions from a life cycle perspective and therefore should become the preferred method when assessing progress towards environmental goals.

The revision of the CE monitoring framework provides an opportunity to raise two main issues:

1. **The effectiveness of the CE monitoring framework as a tool to track progress towards the circular economy.** As it stands, the CE monitoring framework is a collection of indicators. ECOS calls for the framework to be turned into a useful tool to assess progress against a **concrete set of CE objectives and binding targets**. This means articulating the objectives the Circular Economy Action Plan (CEAP) wants to achieve, linking the objectives to robust indicators, and including binding targets with key milestones over time. Specifically, the EU must establish binding targets for the reduction in the use of resources and generation of waste at both EU and national levels,
2. **The inclusion of objectives and indicators to monitor chemical use, renewable resource consumption, and product life-extension strategies.** The existing framework does not measure the progress of key objectives of the CEAP, namely: "enhancing circularity in the toxic-free

environment”, “supporting sustainable and circular bio-based sector”, and “designing sustainable products by enhancing their durability, reusability, upgradability, and reparability”. ECOS calls for the inclusion of metrics to track progress against *all* the key objectives in the CEAP. In the section below, we have identified suitable existing indicators to address this gap without placing additional administrative burdens on the Member States and therefore urge the Commission to incorporate them into the revised framework.

Issue #1: The effectiveness of the CE monitoring framework as a tool to track progress toward the circular economy

The purpose of any monitoring framework is to provide information to assess the progress towards specific objectives. The objectives are essential as they illustrate what success looks like, thus indicators and targets must be designed and based on objectives. **The current CE monitoring framework lacks objectives and targets, meaning it is not a monitoring framework but a repository of indicators.** To turn the current framework into an effective monitoring tool, ECOS recommends three revisions:

- a) **Reorganize the framework’s thematic areas.** The current thematic areas (production and consumption, waste management, secondary raw materials, and competitiveness and innovation) do not reflect the key areas of work of the CE nor the EU flagship CEAP policies such as Ecodesign for Sustainable Products Initiative (ESRP). As they stand, the thematic areas provide the erroneous idea that CE is about recycling and waste management rather than about waste reduction and sustainable consumption. Moreover, the current thematic areas undermine all the work the EU is doing around sustainable product design and consumer empowerment.

Therefore, ECOS recommends recategorizing the thematic areas to properly reflect the CEAP in the following way:

Current thematic areas	Proposed thematic areas
1. Production and consumption	1. Raw materials
2. Waste management	2. Sustainable production
3. Secondary raw materials	3. Sustainable consumption
4. Competitiveness and innovation	4. End of life
	5. CE Enablers

Moreover, we recommend following the example of the [Bioeconomy Monitoring Framework](#) and creating two different dashboards. One dashboard to track CE goals by monitoring the headline indicators, which should include (at least) [the EU consumption footprint against planetary boundaries](#), and [raw material consumption](#). The second dashboard should track the progress towards the objectives of each of the thematic areas.

- b) **Define objectives for each thematic area.** ECOS calls for the inclusion of clear and measurable objectives that articulate the goals of the CEAP as a foundational step to select targets and indicators for the monitoring framework. We propose the following objectives:

Thematic area	Proposed objective
Dashboard 1 - CE goals	
Circular economy goals	Production and consumption patterns in the EU are sustainable and within planetary boundaries
Dashboard 2 – CE thematic areas	
Raw Materials	Use of regenerative and secondary raw resources is prioritized

Production	Products are designed for circularity
Consumption	Product lifetimes are maximized
End of life	Waste is converted into high-quality resources
CE Enablers	Key enabling activities are implemented

- c) **Establish targets and milestones to transition to a circular economy.** In its current form, the monitoring framework does not drive action. Clear and ambitious targets are needed so that concrete actions can be taken. As called by [the European Parliament](#), we urge the EU to propose **science-based binding EU mid-term and long-term targets for the reduction in the use of primary raw materials, material consumption, and environmental impacts** and for setting the EU targets through a back-casting approach to ensure that policy objectives are on a credible path to achieve a toxic-free and fully circular economy within planetary boundaries by 2050 at the latest.

Issue #2: Inclusion of indicators to monitor chemical use, renewable resource consumption, and product life-extension

ECOS is confident that through existing indicators, the monitoring framework can be revised to become a useful and action-driving tool for the EU to transition to a circular economy. The table presented below outlines ECOS recommendations for existing indicators that can be used to monitor progress towards the CE goals and each of the objectives and thematic areas proposed above.

We would like to highlight the critical importance of ensuring the CE monitoring framework measures **chemical use reduction, sustainable use of renewable resources, and implementation of life-maximizing circularity strategies**.

Chemical use reduction. Eliminating the use of toxic substances from the materials and products placed in the EU market is essential to the successful transition to the circular economy. A toxic-free environment is a key principle of the CE and one acknowledged in the CEAP for a simple reason: non-contaminated materials are easier to reuse and remanufacture, thus non-toxic products can have longer lifetimes. Moreover, noncontaminated renewable materials can be safely returned to the biosphere, whereas contaminated materials cannot.

ECOS urges the EU to ensure indicators to track the use of hazardous substances in materials and products are included in the CE monitoring framework, and to establish a binding target for a toxic-free economy. Based on existing indicators, ECOS recommends using the [Eurostat consumption of chemicals by hazardoussness](#) to assess the aggregate consumption of chemicals in the EU.

Sustainable use of renewable resources. Transitioning to a circular economy calls for the reduction of both non-renewable and renewable resources. However, in the effort to limit the use of non-renewable resources there is the risk to increase the unsustainable use of primary renewable resources. To stay within planetary boundaries, we need to see an increase in the use of secondary raw materials and a reduction in the use of primary raw materials (whether they be renewable or non-renewable). We urge the EU to include indicators to track the use of both **renewable and non-renewable materials**.

Furthermore, when it comes to secondary raw material use, we urge the EU to go beyond measuring the use of recycled content in new products and instead develop methodologies that measure **cascading use of materials**. Measuring cascading use of materials would enable us to understand how many times materials are used in different sectors before they are considered waste. This is a key measure to understanding true circularity. The revision of the CE monitoring framework represents the perfect



opportunity to start a discussion on the data that is missing, yet essential, to ensure the EU is on a credible path to achieving a toxic-free and fully circular economy within planetary boundaries.

Based on existing EU-level indicators, ECOS recommends adding the following indicators to the CE monitoring framework:

- **Total biomass consumed for materials** (source: [JRC 3.4.a.3](#))
- **Cascading factor of wood resources** (source: [JRC 3.1.c.1](#))
- **Environmental impacts based on product-based LCA and basket of representative products of the bioeconomy** (JRC 3.3.a.2 Bioeconomy Monitoring Framework)

Product life-extension strategies. Key areas of work under the CEAP involve designing products for durability, reusability, upgradability, and reparability. There are currently no indicators to track progress against work aimed at extending the life of products. Therefore, ECOS calls for the inclusion of the following indicators to address this important omission:

- **Percent of products and services with type 1 ecolabels in the EU market** (source: [EU Ecolabel](#))
- **Product durability and reparability legislation implemented**
- **Average commercial guarantee per product group**
- **Total reuse per product category (in tonnes)** (source: [Implementing act on measuring reuse](#))
- **Consumer engagement with alternatives to buying new products** (source: [Eurobarometer data](#))



Table 1. Proposed objectives and indicators for the revised CE Monitoring Framework

Circular Economy Thematic Areas	Objective	Proposed indicators (source) Green = data available; Yellow = under development, Red = data unavailable * Indicator currently in the CE Monitoring Framework	
Circular Economy Goals	Production and consumption patterns in the EU are sustainable		EU Consumption footprint 1) per area of consumption and 2) against planetary boundaries (JRC Consumption Footprint Platform)
			Raw material consumption (Eurostat SDG1221)
Raw Materials	Regenerative and secondary resources are prioritized		Consumption of chemicals by hazardousness (Eurostat sdg1210)
			Total biomass consumed for materials (JRC 3.4.a.3)
			Cascading factor of wood resources (JRC 3.1.c.1)
			Circular material use rate (Eurostat cei-srm030) *
Sustainable Production	Products are designed for circularity		Environmental impacts based on product-based LCA and basket of representative products of the bioeconomy (JRC 3.3.a.2 Bioeconomy Monitoring Framework)
			Percent of products and services with type 1 ecolabels in the EU market (EU Ecolabel)
			Product durability and repairability legislation implemented
Sustainable Consumption	Product lifetimes are maximized		Total reuse per product category (in tonnes) (Implementing act on measuring reuse)
			Average commercial guarantee per product group
			Jobs and gross value added from repair and reuse sectors (Eurostat cei-cie010) *
			Consumer engagement with alternatives to buying new products (Eurobarometer data)
End of life	Waste is converted into high-quality resource		Waste and food waste generation (Eurostat ceirpc031, pc032 & pc033) *

CE Enablers	Key enabling activities are implemented		Recovery of specific waste streams (<u>packaging, e-waste, biowaste, construction</u>) *
			Jobs and gross value added from recycling sectors (<u>Eurostat cei-cie010</u>) *
			Green public procurement (Eurostat) *
			Number of EPR schemes
			Private investment in repair, resuse and recycle sectors (<u>Eurostat cei-cie010</u>) *

