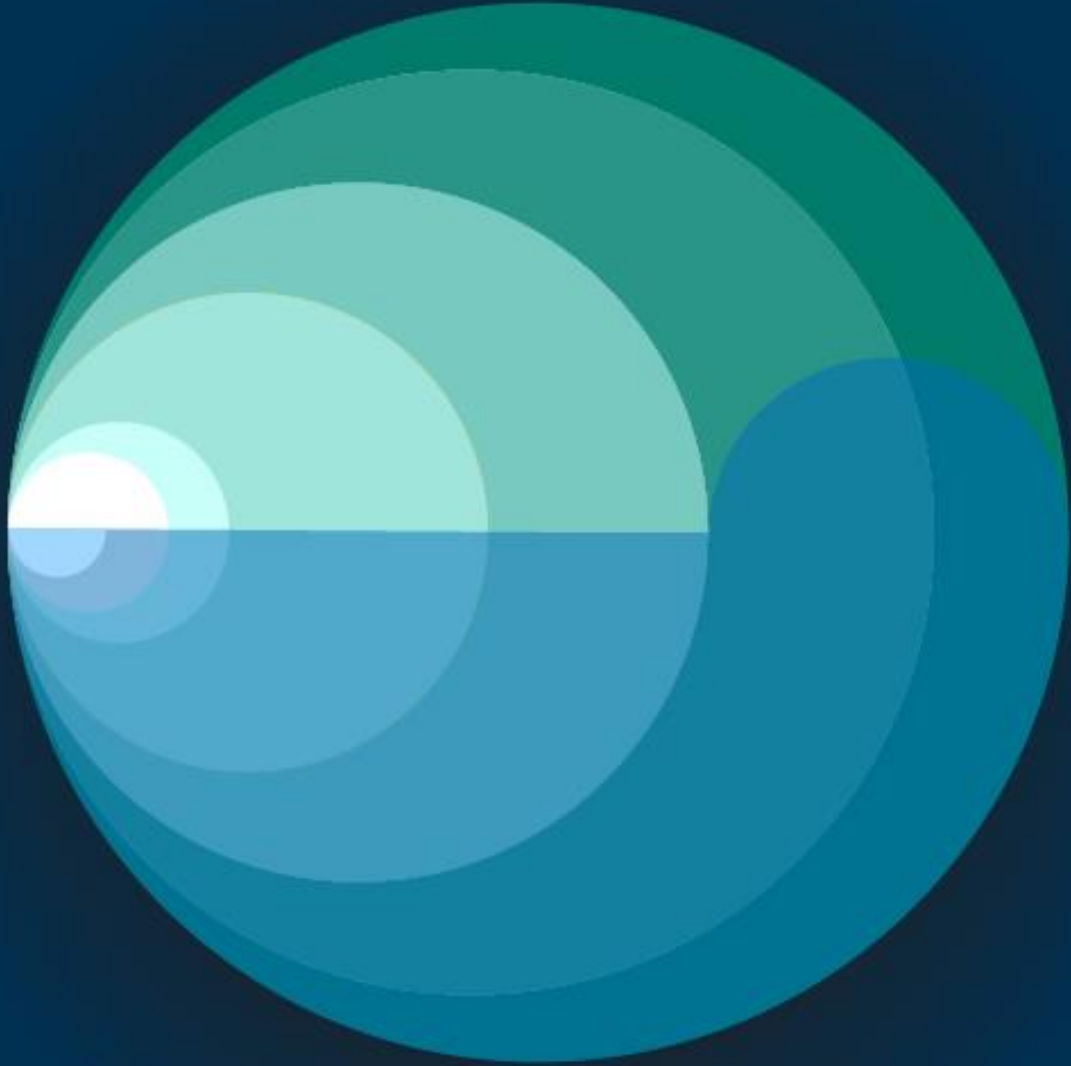




Insights from the European Environment Agency

Almut Reichel | 14 June 2024





‘Accelerating the circular economy in Europe’ State and Outlook 2024

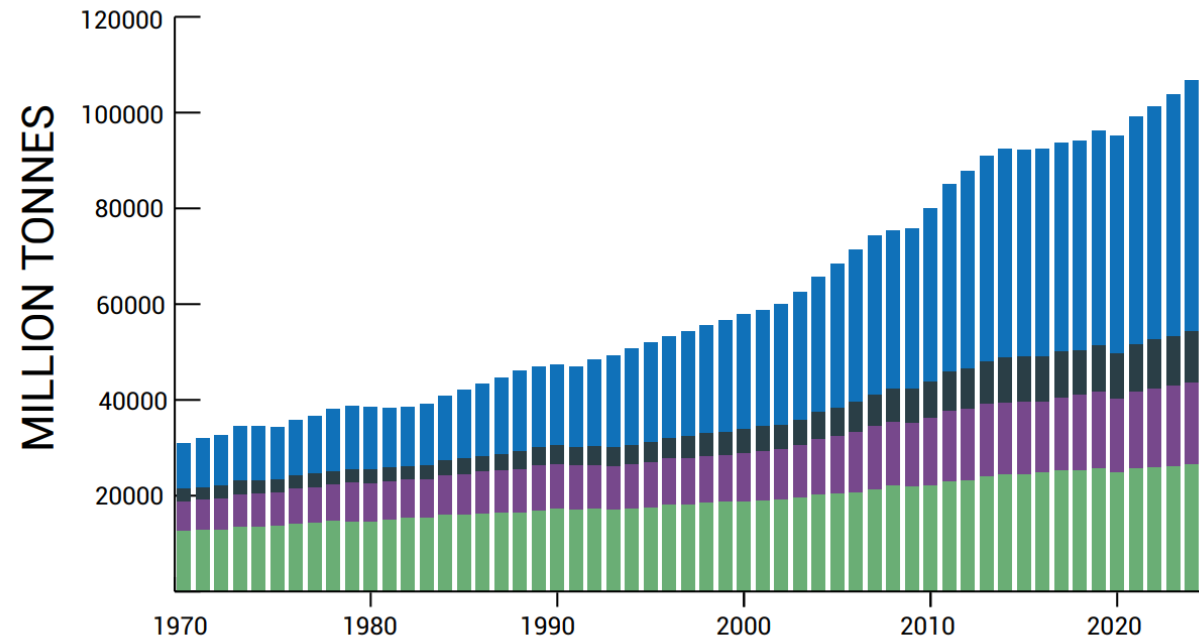


Resource use as key driver of environmental impacts

The **International Resource Panel (2024)** estimates that resource extraction and processing accounts for:

- > **55%** of greenhouse gas emissions
- > **> 90%** of total global biodiversity loss and water stress
- > **50%** of total PM pollution

Global material extraction and processing



Biomass



Fossil fuels



Metals

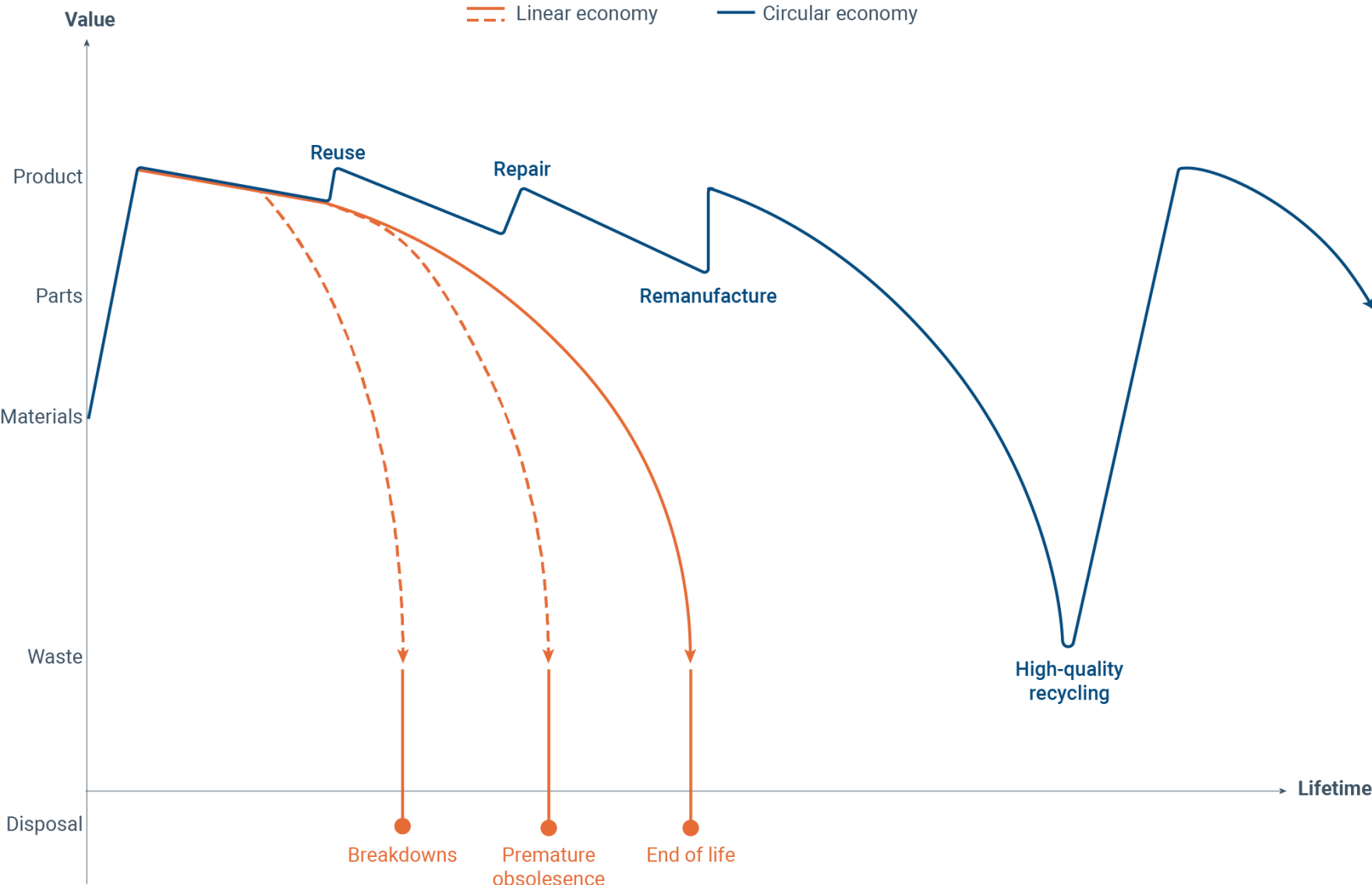


Non-metallic minerals

Source: IRP, Global Resources Outlook 2024 Summary for Policymakers

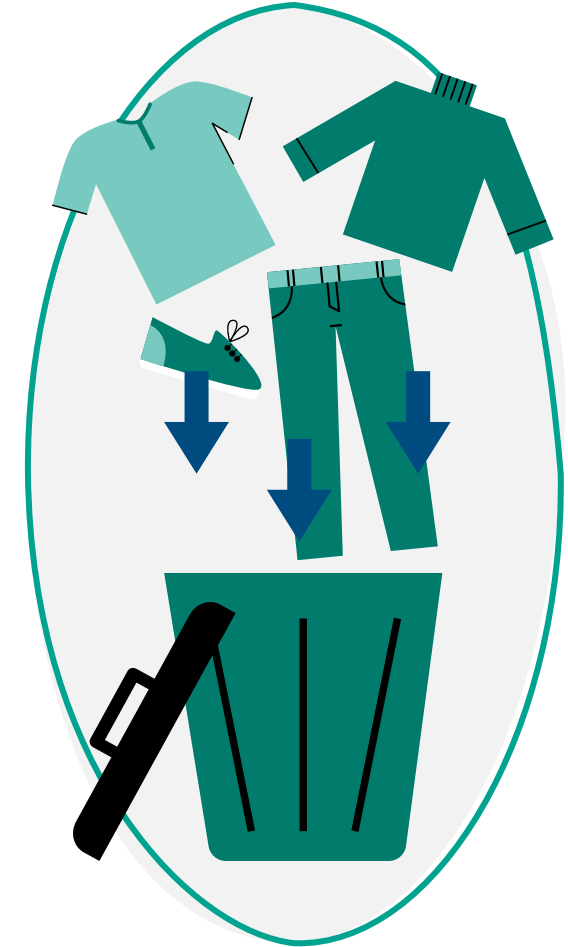


An effective circular economy: retaining high value, for longer



Example of a wasteful system: Destruction of unsold and returned textiles

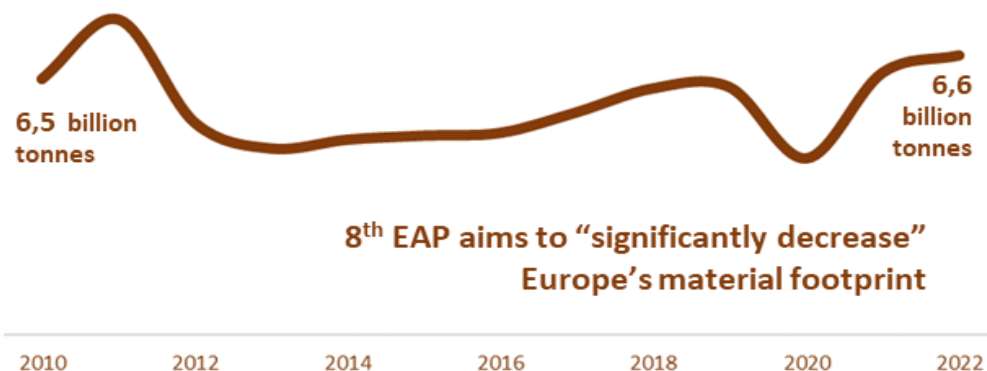
- › **4-9%** of all textile products put on the market in Europe are **destroyed before use**
- › **22-43%** of all **returned** clothing bought **online**, ends up **destroyed**
- › With the EU policy decision to introduce a ban on destruction of textiles and footwear, **producers must find solutions to sell all products**



Circularity in Europe: state of play

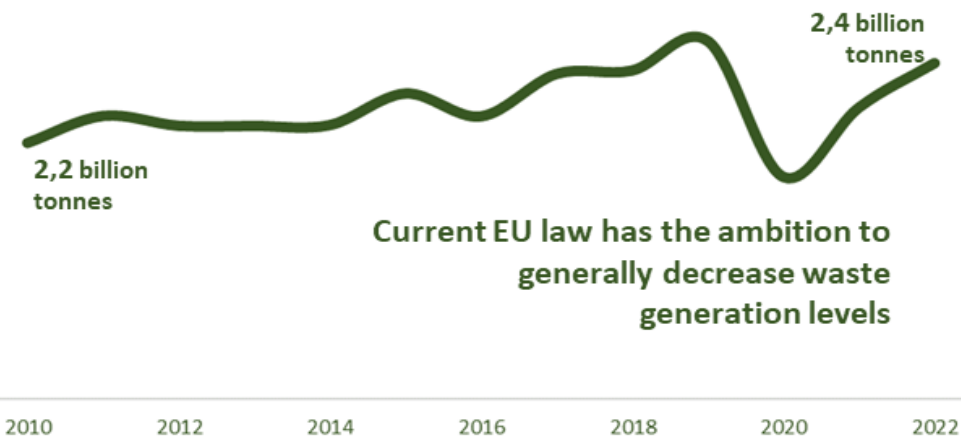
1

Material footprint, EU27



2

Generation of waste, EU27



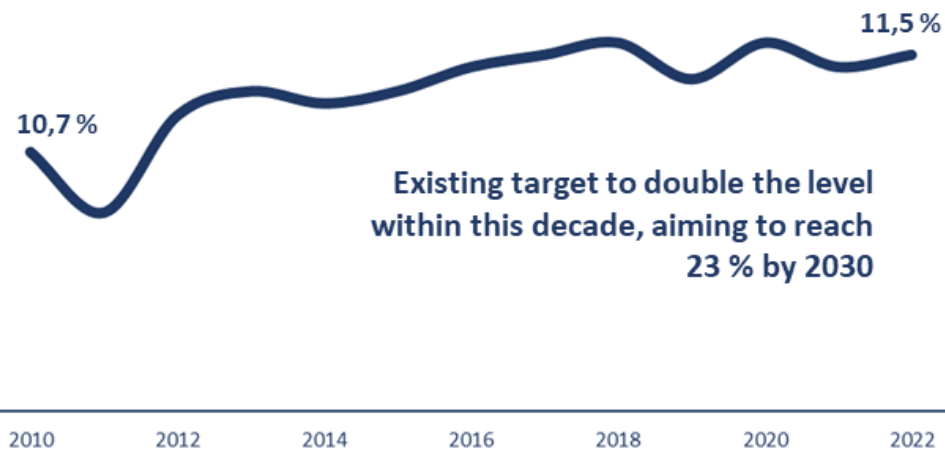
3

Overall recycling levels of waste, EU27



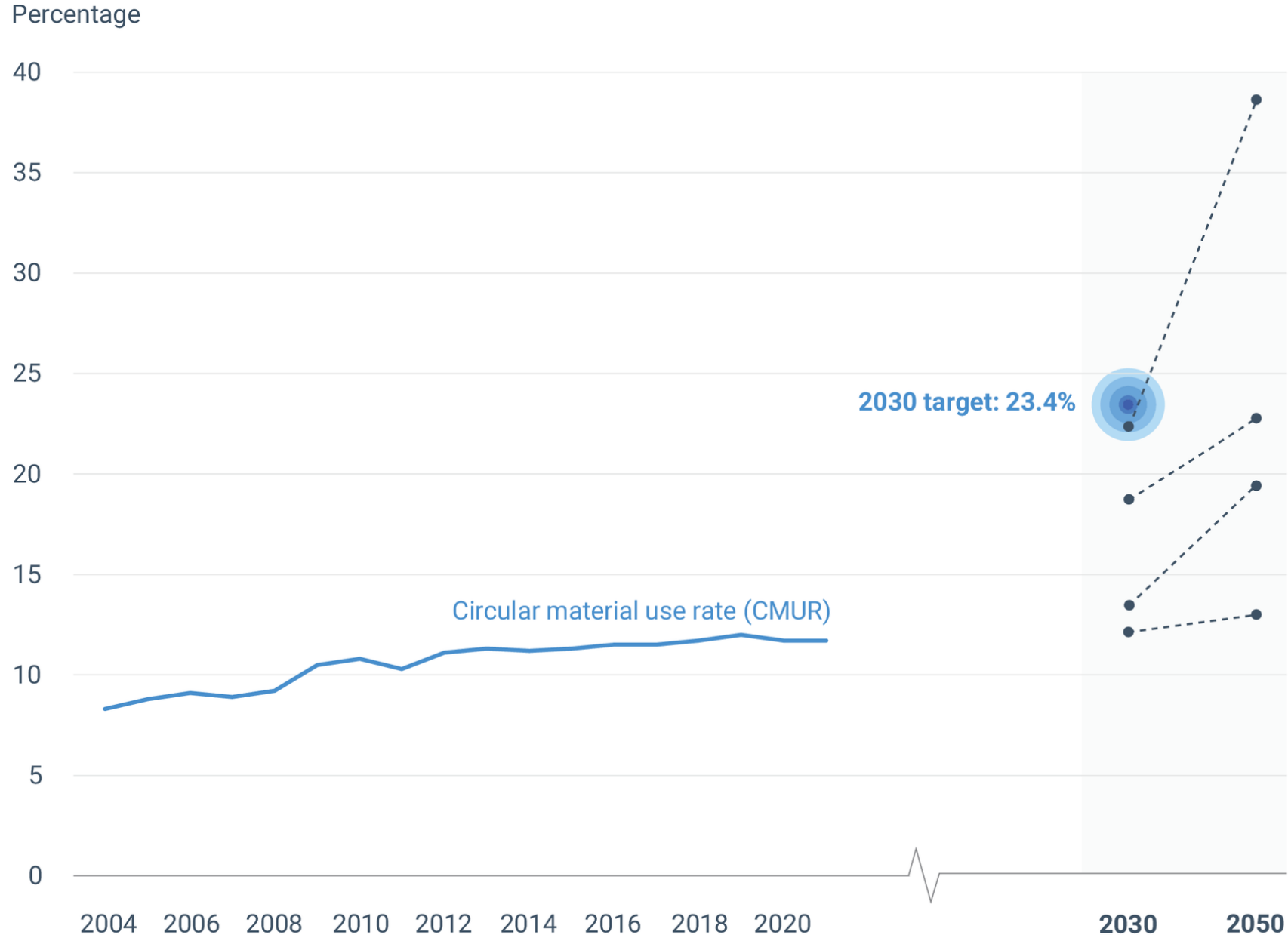
4

Use of circular materials, EU27




Recycling is not enough to double the CMUR

Source: EEA briefing [How far is Europe from reaching its ambition to double the circular use of materials?](#)



Scenario 1+2+3




Scenario 1

Enhancing recycling

The share of waste that is recycled increases from 40% in 2020 to 70% in 2030 and 90% in 2050.

Scenario 2




Scenario 1

Improving material efficiency and reducing material consumption

Domestic material consumption decreases by 15% by 2030 and 45% by 2050, compared with the 2020 level.

Scenario 3



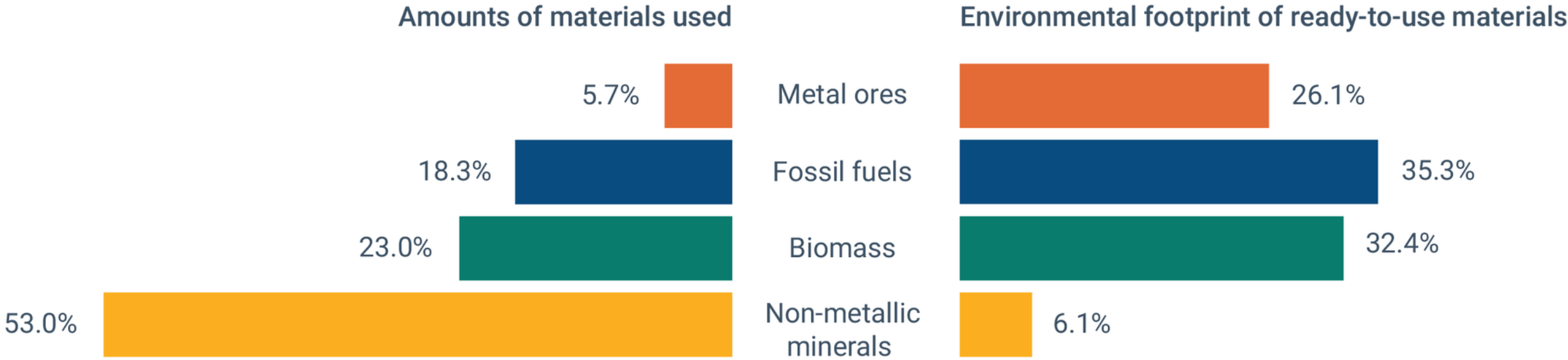
Scenario 3

Reducing the use of fossil fuels (climate change mitigation)

The use of fossil fuels decreases by 34% by 2030 and 83% by 2050, compared with the 2020 level, following the assumptions in the impact assessment accompanying the 'Fit for 55' policy package (EC, 2020c).

The type of material matters more than the amount

Amount and environmental footprint of materials consumed in the EU-27, 2019



Source: EEA briefing [How far is Europe from reaching its ambition to double the circular use of materials?](#)

Where do we need to know more?



Value retention strategies



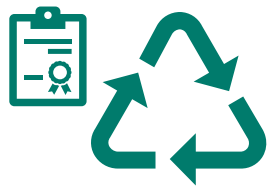
Clean material cycles



Ecodesign uptake



Circular consumption



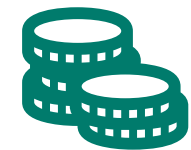
Quality of recycling



Uptake of circular business models



Waste prevention



Enabling framework





Before Use

- 1 Accelerate the uptake of **circular design**
- 2 Stimulate circular **public and corporate procurement**
- 3 Shift from income tax towards **tax on extracted raw materials**
- 4 Leverage the concept of **sufficiency** to limit unnecessary demand and supply



Accelerating the circular transition | During Use



During Use

- 1 Establish a **reuse action** programme at EU level
- 2 Build capacity and demand for **longer product lifespans**
- 3 Encourage consumers to **extend product lifespans**, rather than buying new





After Use

- 1 Develop criteria and a hierarchy to **categorise recycling quality**
- 2 Introduce temporary supports and catalysts to **kickstart secondary raw material** markets
- 3 Apply and strengthen **extended producer responsibility schemes** for more products



The example of textile waste in Europe



- › **16 kg/cap** of textile waste generated in the EU
 - 4.4 kg/cap collected separately for reuse and recycling
 - 11.6 kg/cap in mixed household waste



- › **Separate collection** is mandatory in **> half of EU Member States**, but mainly targeting the reusable fraction
- › Need **more sorting and recycling capacities** - risk of collected textile waste ending up in disposal or export
- › Harmonizing **definitions and mandatory reporting**, essential for data quality, and for setting future targets and monitoring progress





Cross-cutting

1

Introduce binding, quantitative **circular economy targets**, specifically on resource use

2

Continue **awareness raising, education, financing** and **building skills** for a circular economy



Just transition to a circular economy



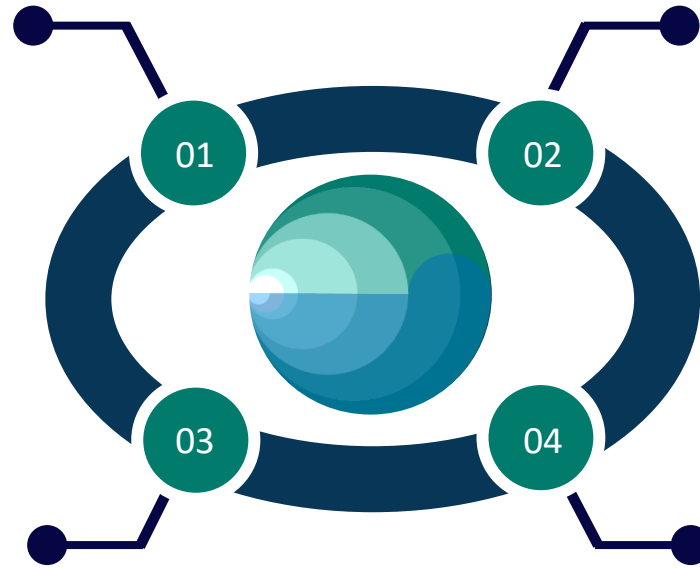
- › Circular economy systems **are not inherently socially beneficial** just because they are circular.
- › A successful circular transition requires **full societal engagement** but there is currently limited analysis of social equity, inclusion and accessibility issues.
- › The **impact of transitioning to a circular economy** on communities and livelihoods in the global south must be considered to avoid exacerbating existing inequalities.



Overall key messages

Considering the inherent impact of resource extraction and processing, and the impossibility of 100% circularity, it is crucial to prioritise the **reduction of resource use**.

Large-scale success of a circular economy relies heavily on **returning substantial quantities of high-quality secondary raw materials** to productive use.

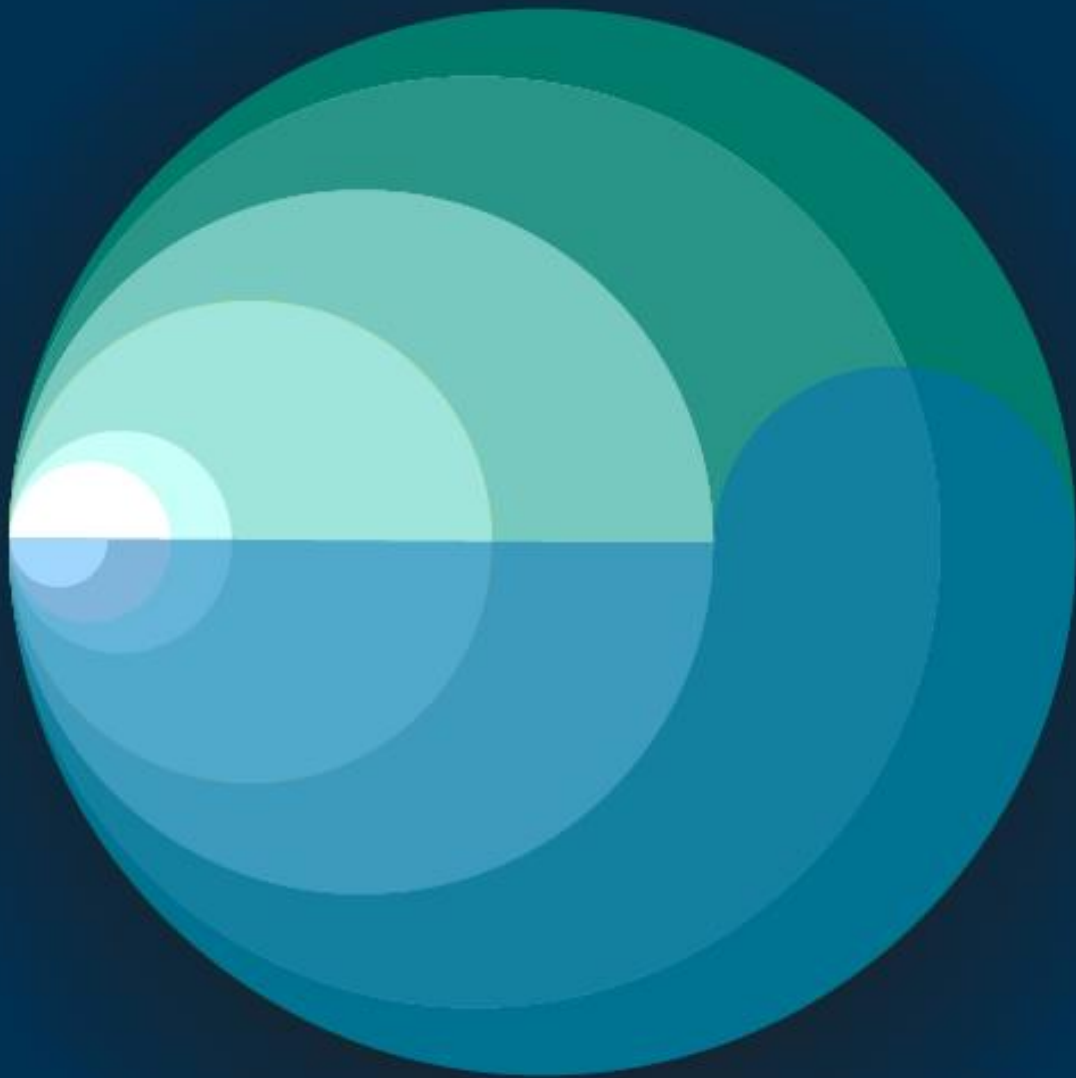


Maximising the utility of existing products

requires significantly more intensity of use per product and much longer product lifetimes.

Europe alone cannot curb unsustainable resource use at planetary scale, therefore, a **robust global governance framework** on resource use and circular economy will be essential.





Links to recent EEA publications:

- › [Accelerating the circular economy in Europe - State and outlook 2024](#)
- › [Capturing the climate change mitigation benefits of circular economy and waste sector policies and measures](#)
- › [The destruction of returned and unsold textiles in Europe's circular economy](#)
- › [Management of used and waste textiles in Europe's circular economy](#)
- › [How far is Europe from reaching its ambition to double the circular use of materials?](#)
- › [Circularity Metrics Lab](#)



European Environment Agency



Thank you!

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