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From necessity to strength: resource-conscious business practices

Strategies for resource demand reduction

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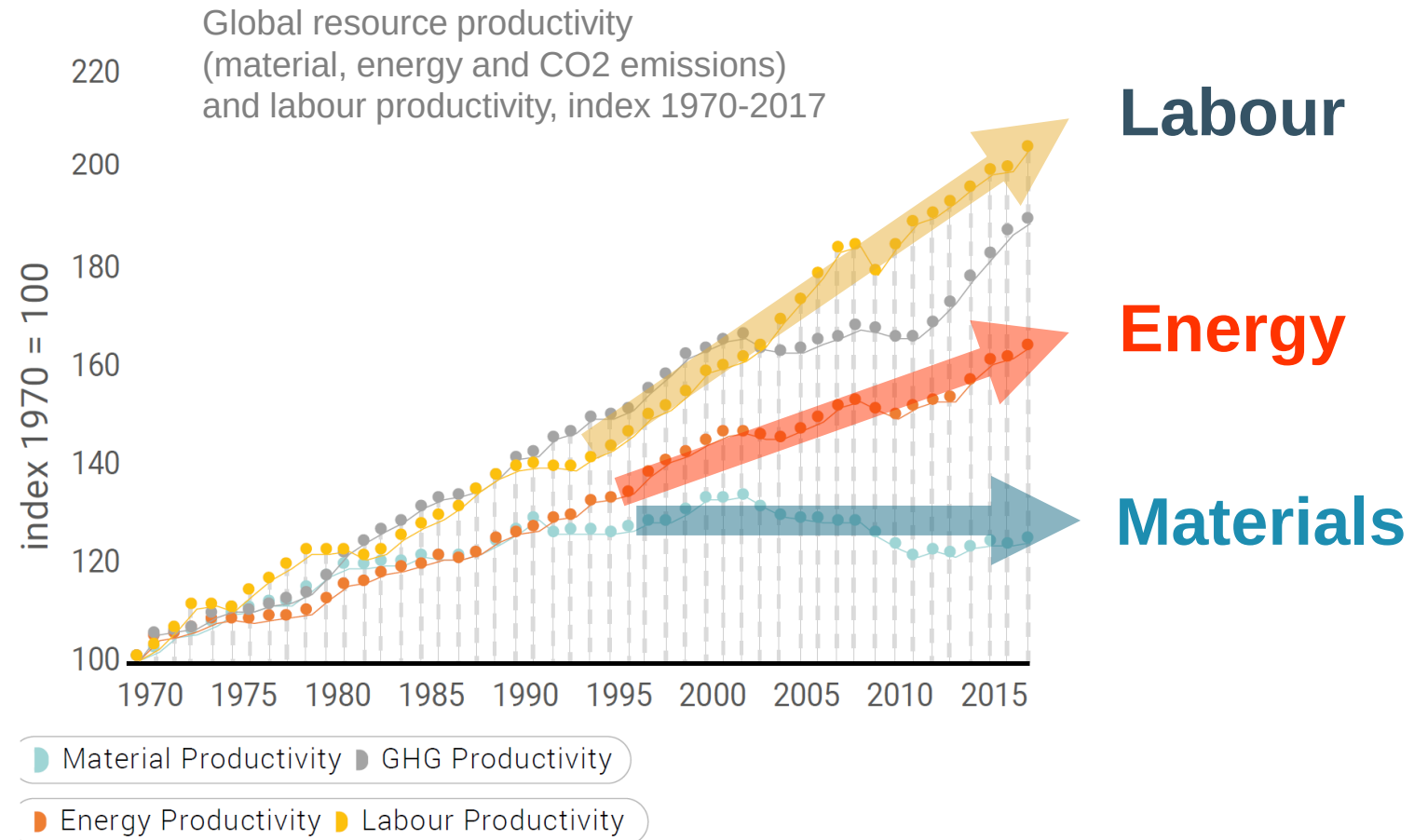
Resource challenges

Resource supply challenges



1. Strongly growing demand
2. Geopolitics
3. Environmental and social impact
4. Resource productivity

Resource productivity



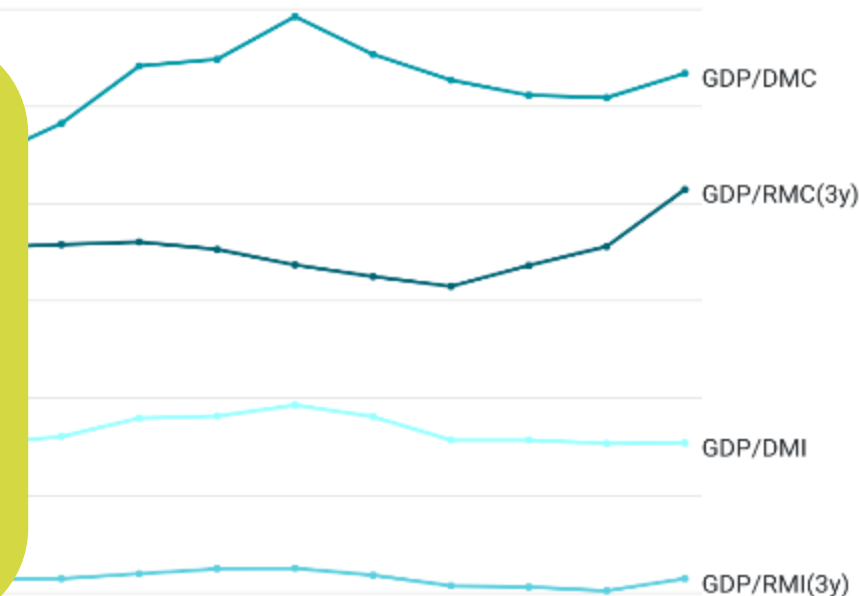
Resource productivity Belgium/Flanders



Circular Economy
Monitor
Flanders

Material productivity in the Flemish economy

1.6 €/kg



Will be updated, launch 20/11/'26! 📌



0.2

0.0

2010

2012

2014

2016

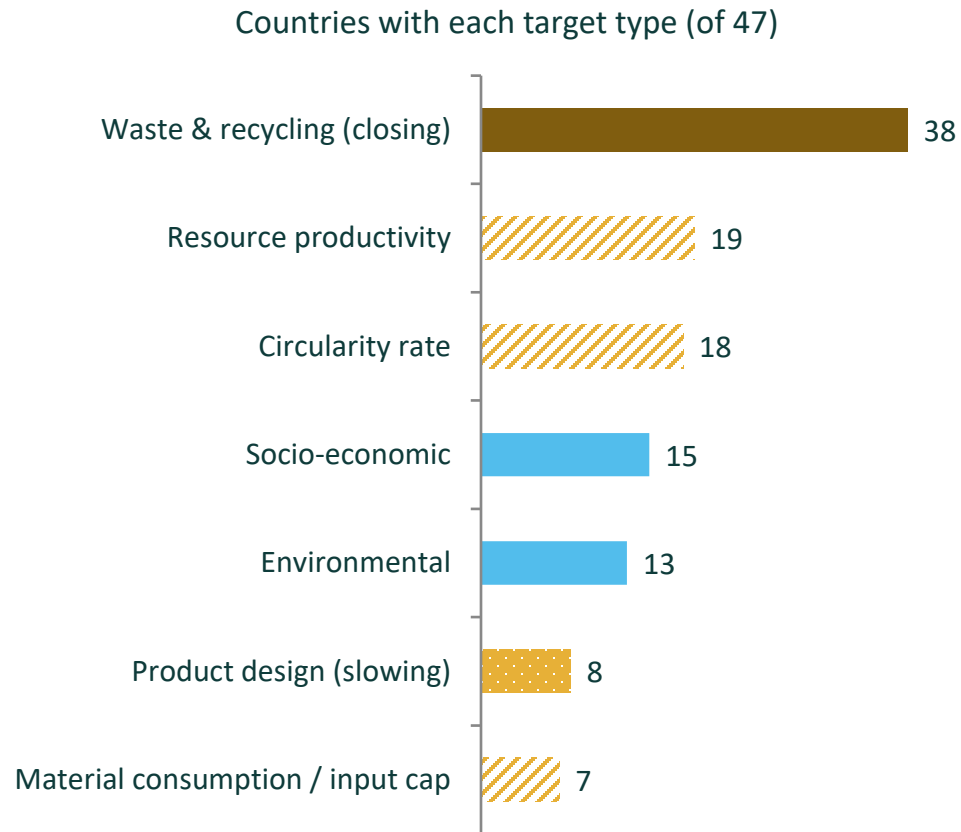
2018

2020

CE monitor Flanders
cemonitor.be

What can we do?

What targets are there?



Recycling dominates; demand reduction is nearly absent

11

countries: waste targets alone

22

combine waste and resource use

5

include both environmental and socio-economic targets

Gap

- Reuse and repair: almost never standalone targets
- Reuse: 8 kg per person vs 25–30 t material use
- Consumption targets: 7 countries
- Well-being and health: none

Source: Férauge, S., Pauwels, M., Reich, R., Morseletto, P., Van Acker, K., Alaerts, L. (2026) An Outlook of Worldwide Circular Economy Targets: Scope, Metrics, and Portfolio Patterns, RCR 2026

What can we do?

1. More mining in Europe?
2. More imports of raw materials?
3. Recycle more?
4. Material innovations and Demand reduction?

} Circular Economy

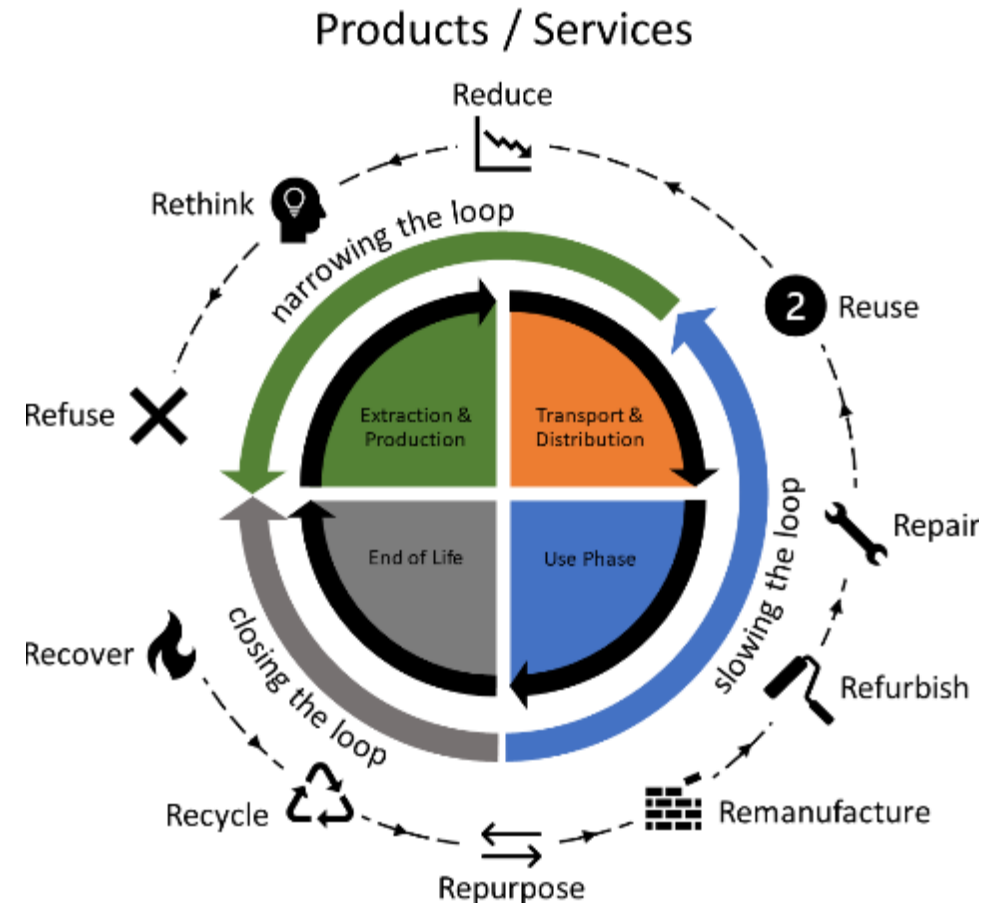


3. and 4. Circular Economy

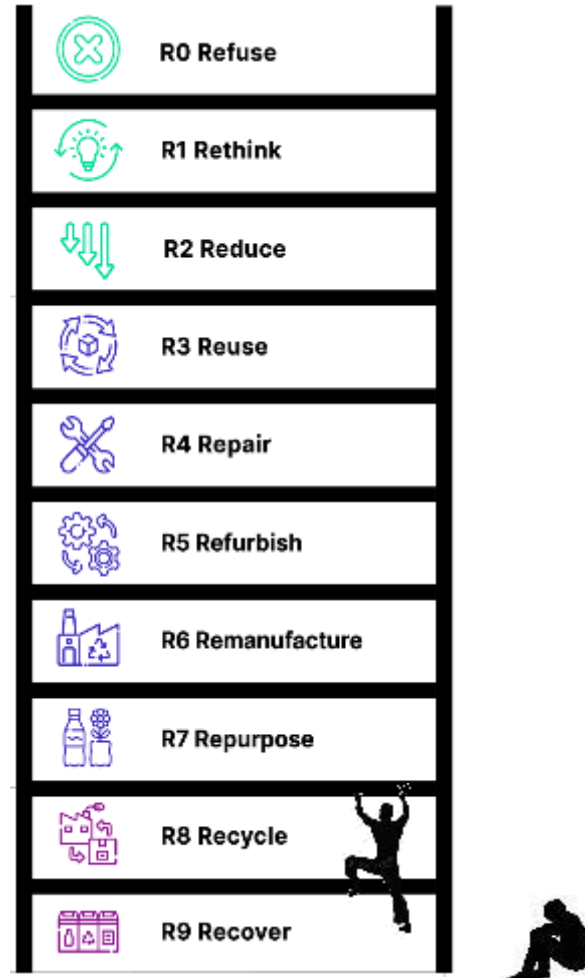
A circular economy is an economy where:

- The **value of materials** in the economy is maximised and maintained for as long as possible
- The **input of materials** and their consumption, in particular virgin materials, is **minimised**
- The generation of **waste** is minimised and **negative environmental impacts reduced** throughout the **life-cycle of materials**

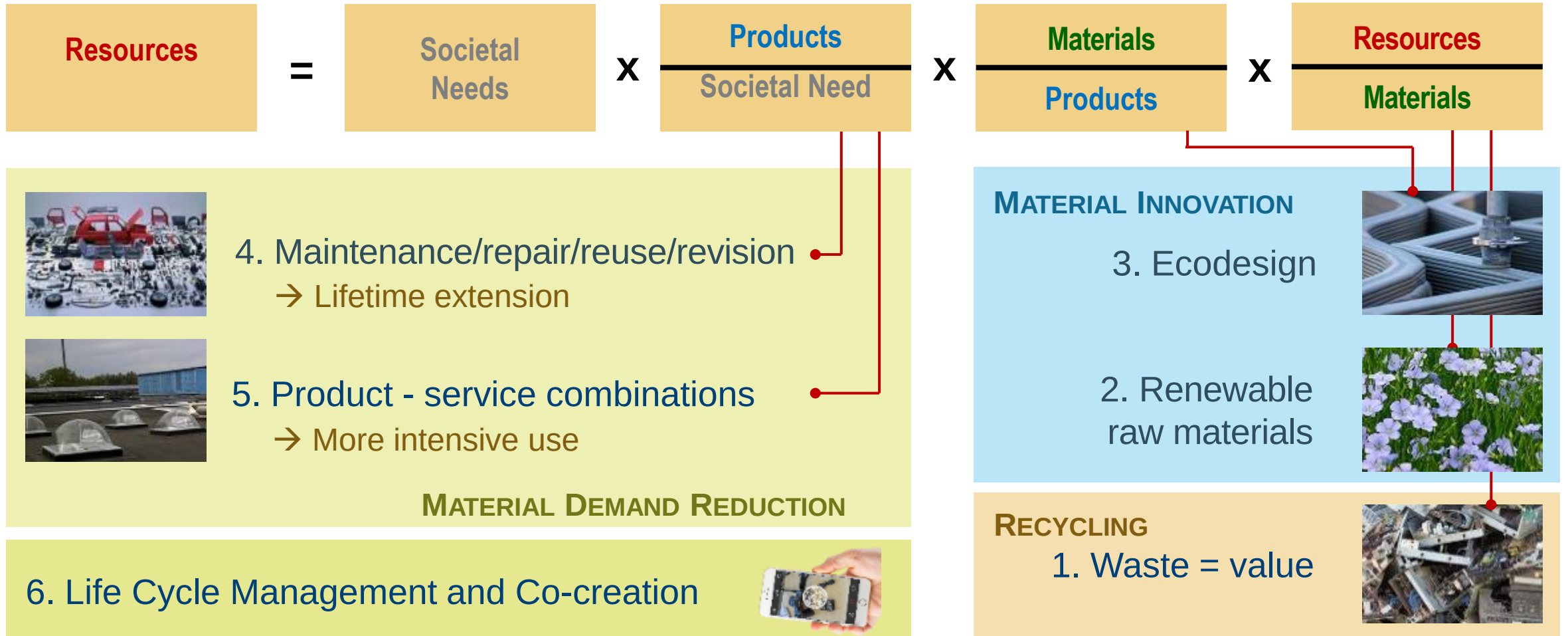
(OECD, UN – under construction)



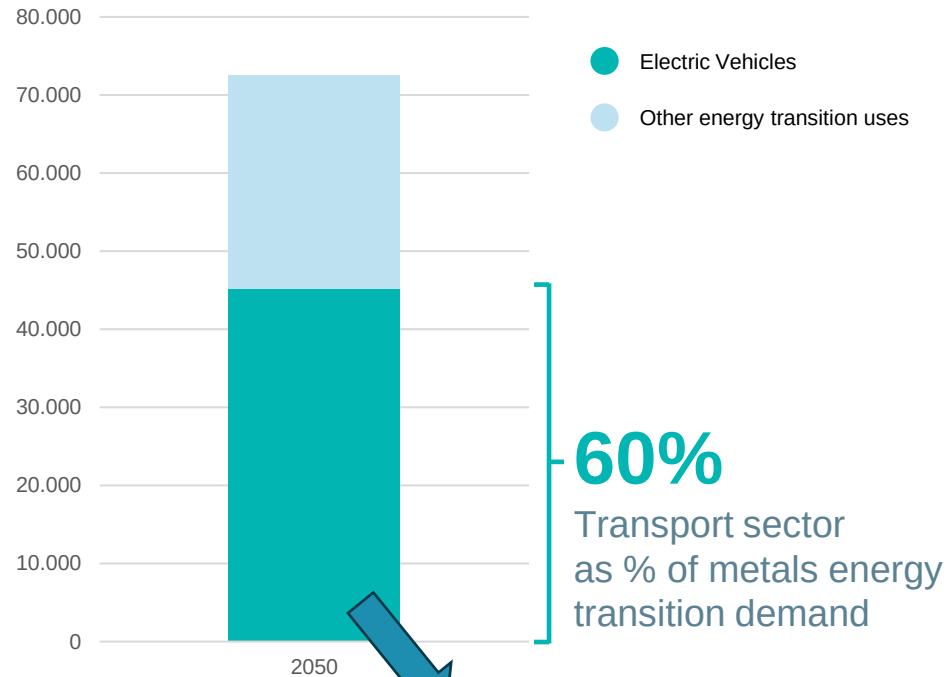
Circular economy strategies



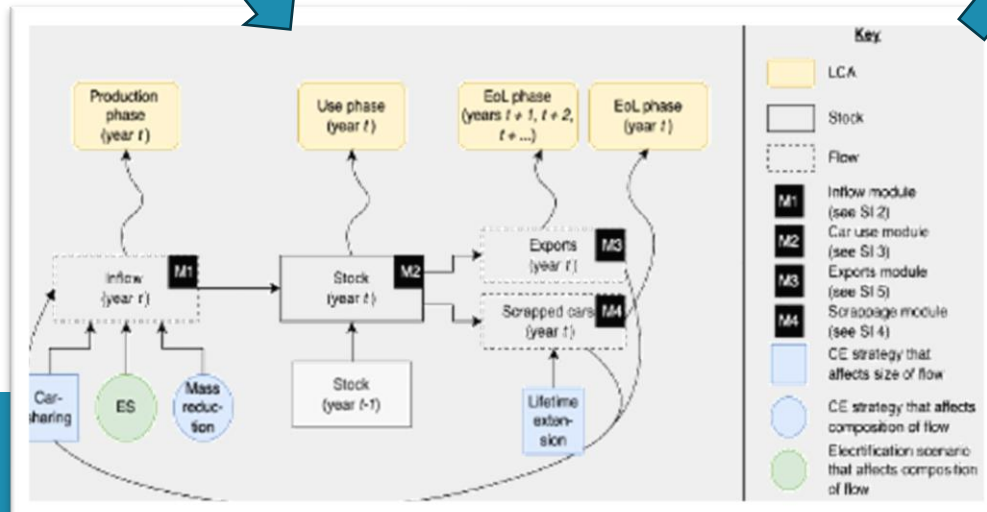
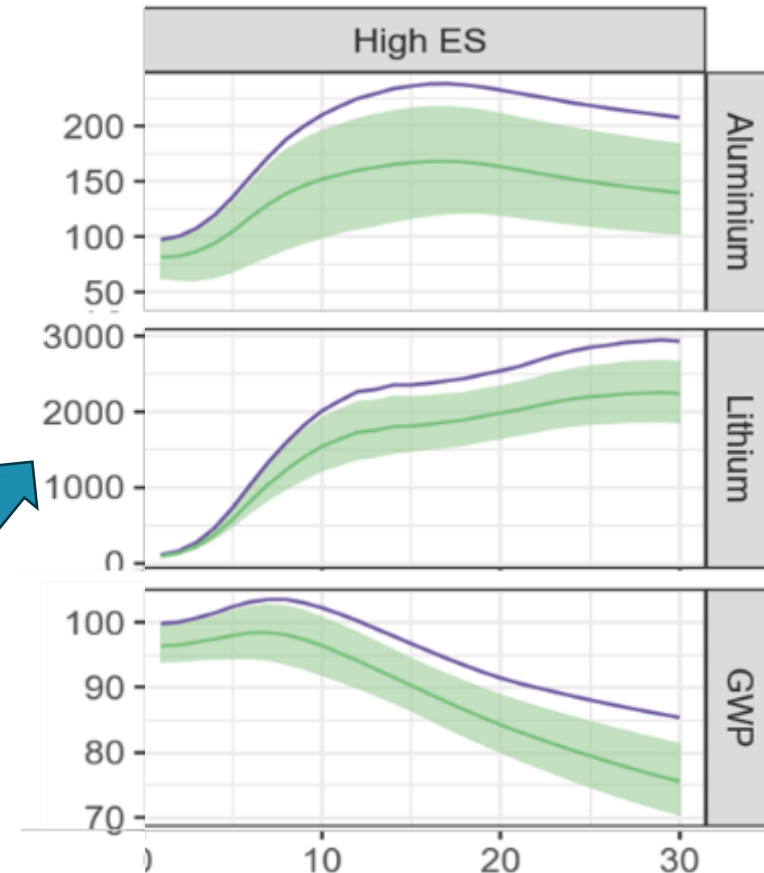
Circular economy strategies



4. Demand reduction



- Innovation: Mass reduction
- Intensified use: Car sharing
- Lifetime extension



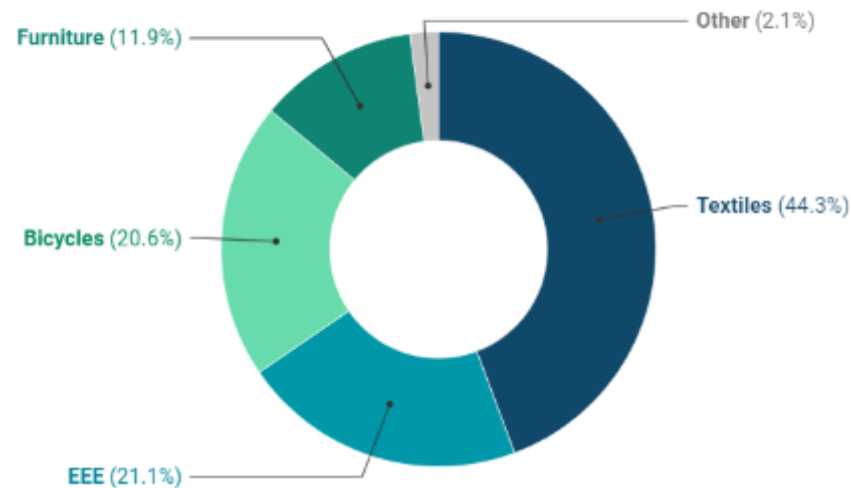
Cumulative impact of baseline and CE scenarios – Donald Chapman, PhD

4. Demand reduction

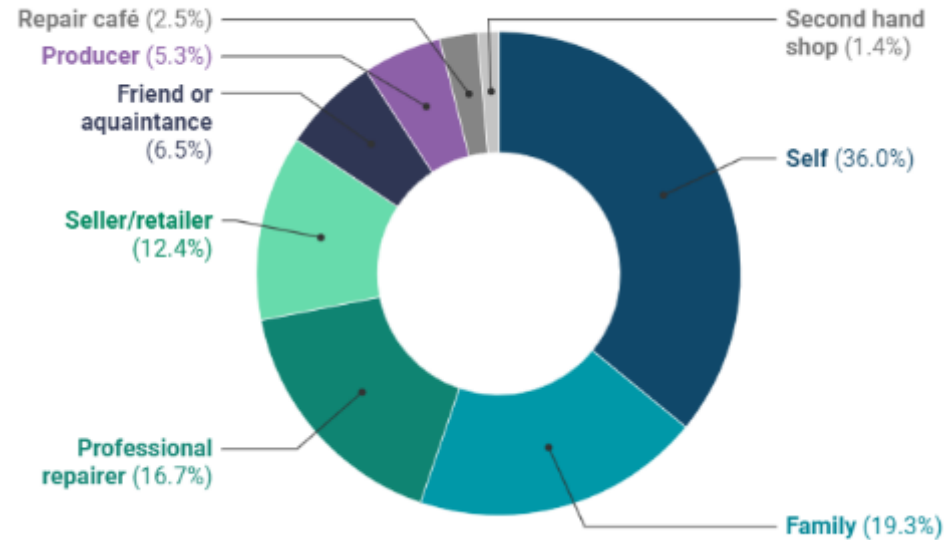
Lifetime extension, e.g. repair, second hand, ...



Repaired goods



Repair channels



±10 miljoen pieces repaired in 2023 in Flanders

4. Demand reduction – potential for textiles



										
	tops	bottoms	one-piece	outers	night	total	dormant	pre-owned	essential	
average:	116	44	16	12	11	199	27%	5%	58%	
women:	128	49	30	13	15	235	27%	6%	57%	
men:	103	38	0	10	6	158	28%	3%	59%	
Excluded:	       							n=314		n=142

Source: Vermeyen, V. (2026). Wardrobes Inside Out - Mapping Clothing Use To Enable a Sustainable Apparel Transition, PhD thesis
 Vermeyen, V., Van de Poel, K., Van Acker, K., Dewitte, S., & Germeys, F. (2026). How much is enough? Operationalizing perceived clothing sufficiency through wardrobe studies. Sustainable Production and Consumption.

What is in common for all demand reduction strategies?

- Demand reduction strategies/CE is about **value chains**
 - Intensive collaboration between value chain stakeholders, sharing of the benefits
 - A digital backbone is needed to facilitate circular value chains and business models
 - Knowing consumer needs and potential
- **Design phase** of products, services and value chains is crucial:
 - CE and environmental impacts have to be included from the beginning in the design of products and businesses
 - Capacities and infrastructure
- Investors need **de-risking** of CE innovations and business models
AND Governments/society need relevant **monitoring, modelling and impact assessments** for decision support

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Sustainability Assessments of Materials and Circular Economy
Research Group



Policy Research Centre Circular Economy



KU Leuven Institute for Sustainable Metals and Minerals