



# **Circular Economy & Social Economy**

**Waterford Council Staff & Waterford Institute of Technology**

**23rd March 2021**

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European Commission  
Environment Directorate General**

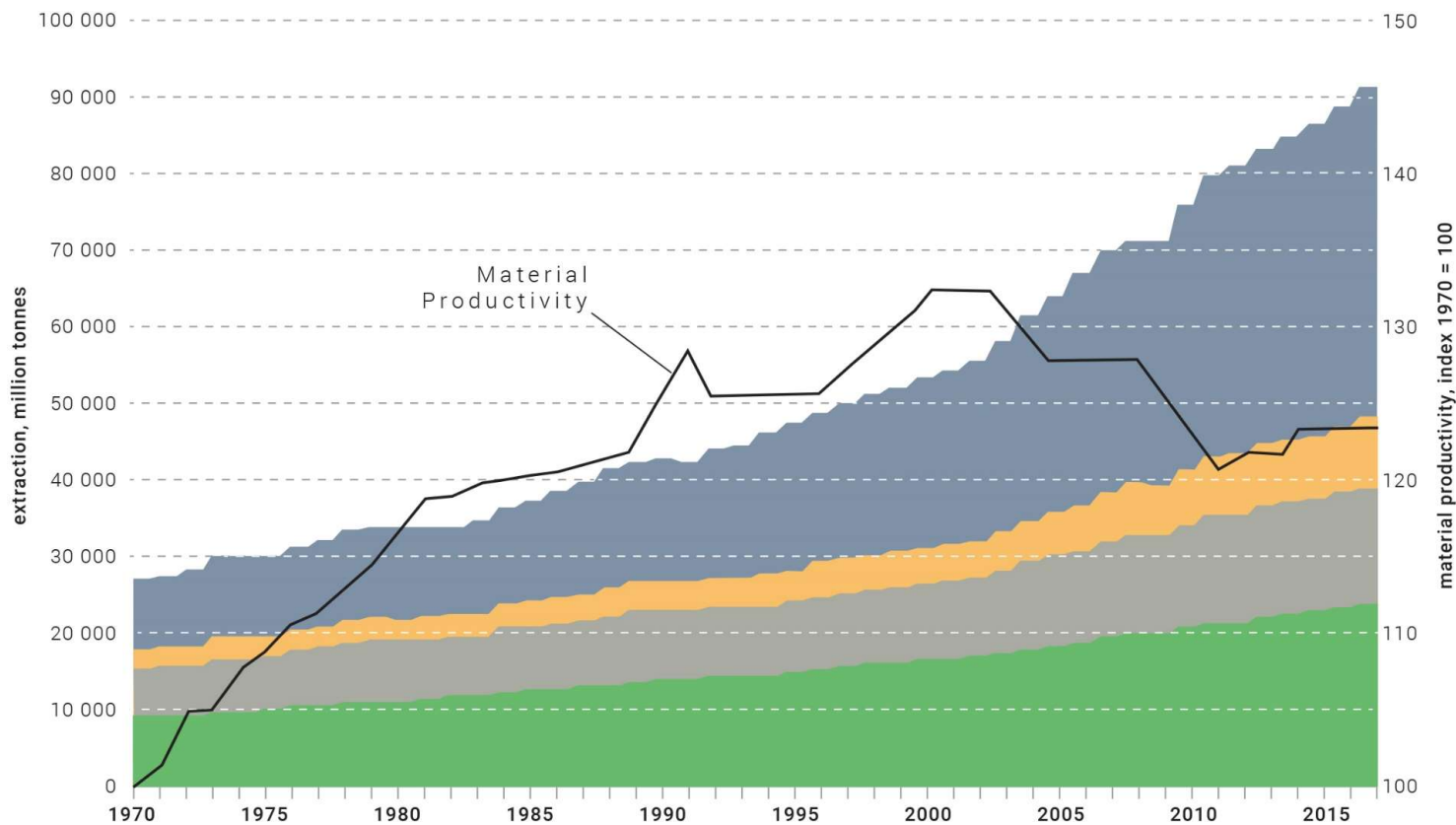
# The Macro-level Picture



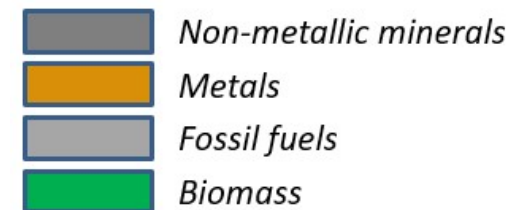
Source:



Global material extraction and material productivity, 1970 - 2017



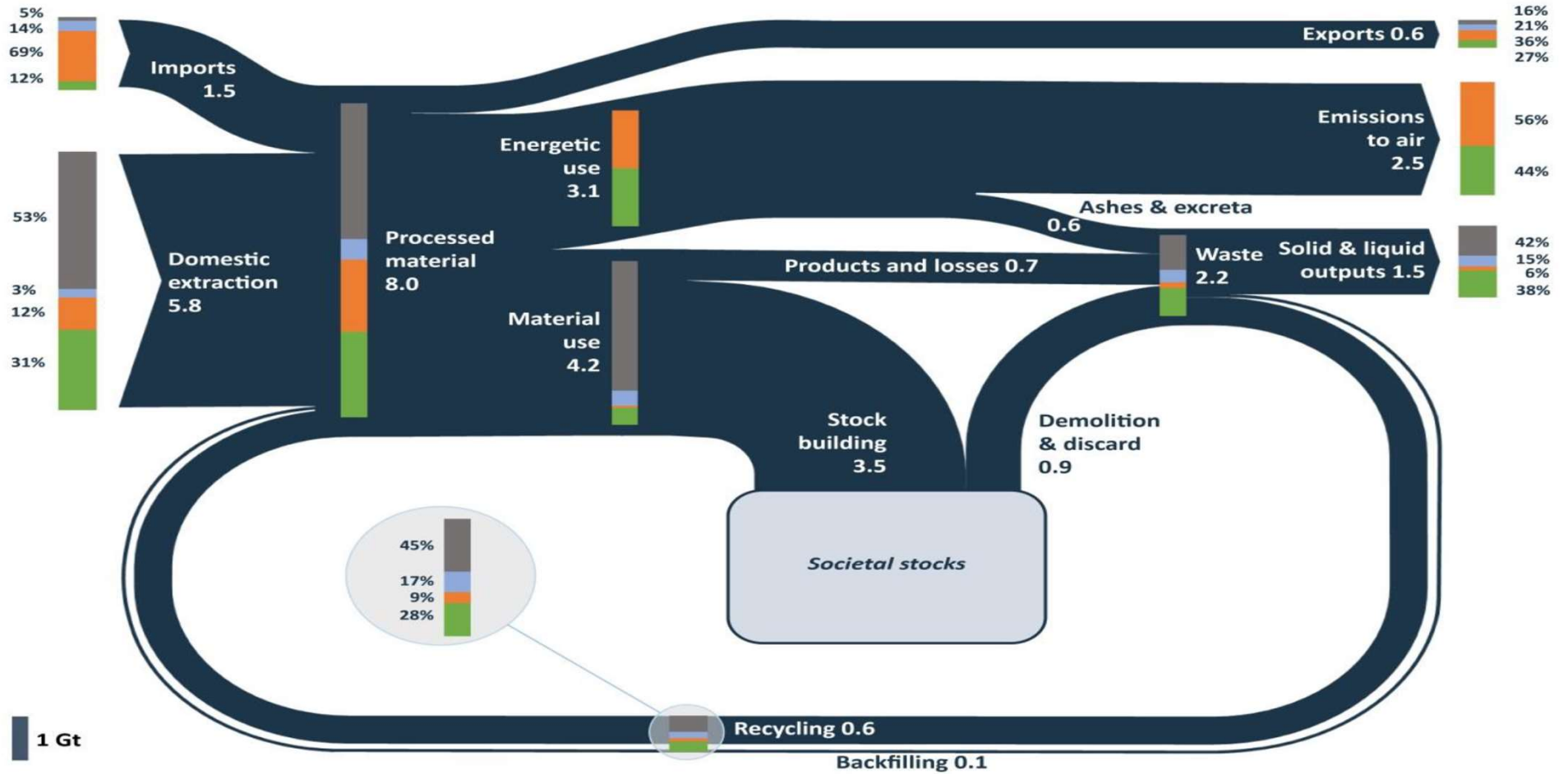
- *Global resource use has more than tripled since 1970*
- *Global material demand per capita grew from 7.4 tons in 1970 to 12.2 tons per capita in 2017*
- *Material productivity started to decline around 2000 and has stagnated in the recent years*



# CIRCULAR ECONOMY...



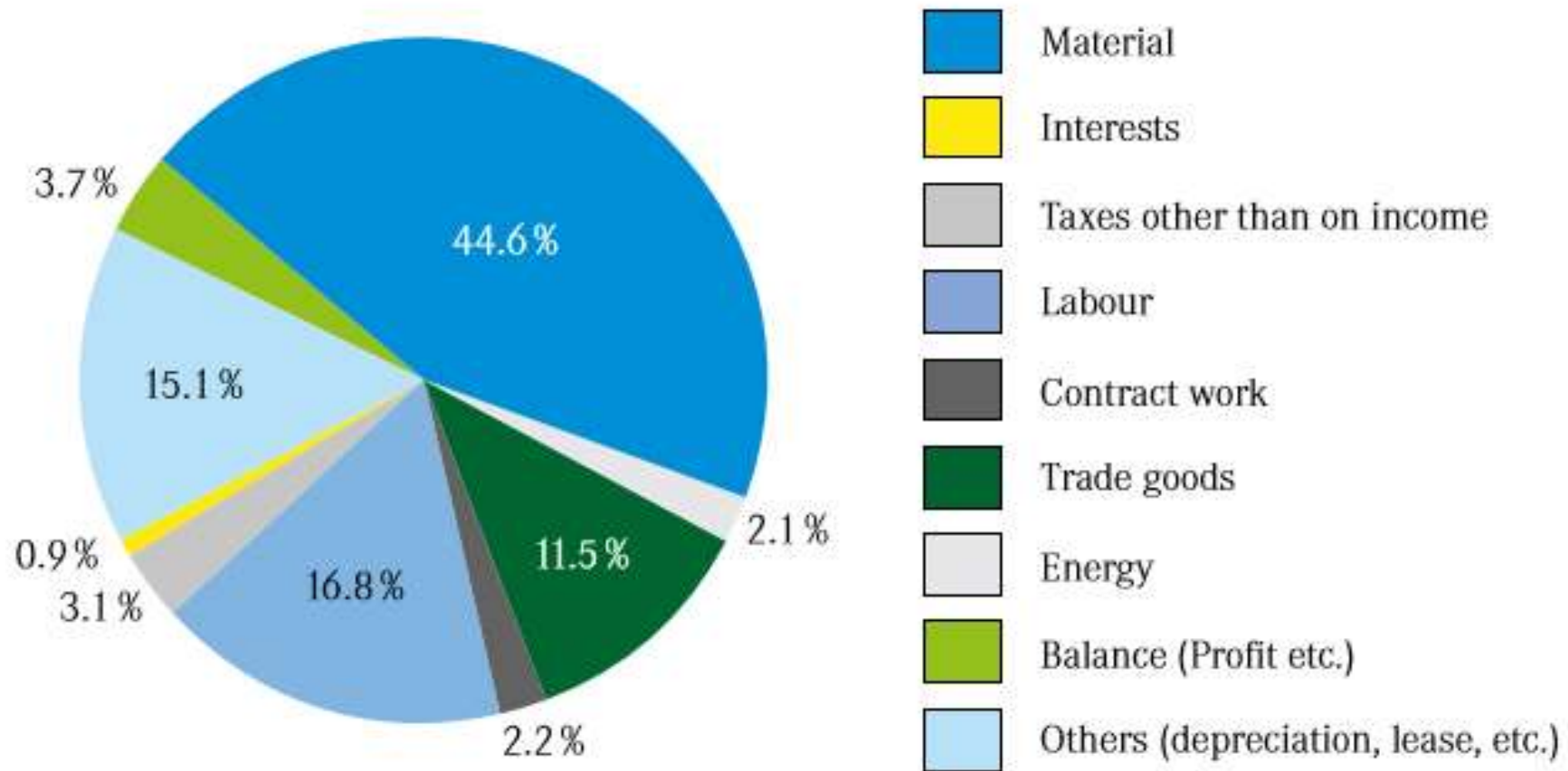
# KEEPING VALUE IN



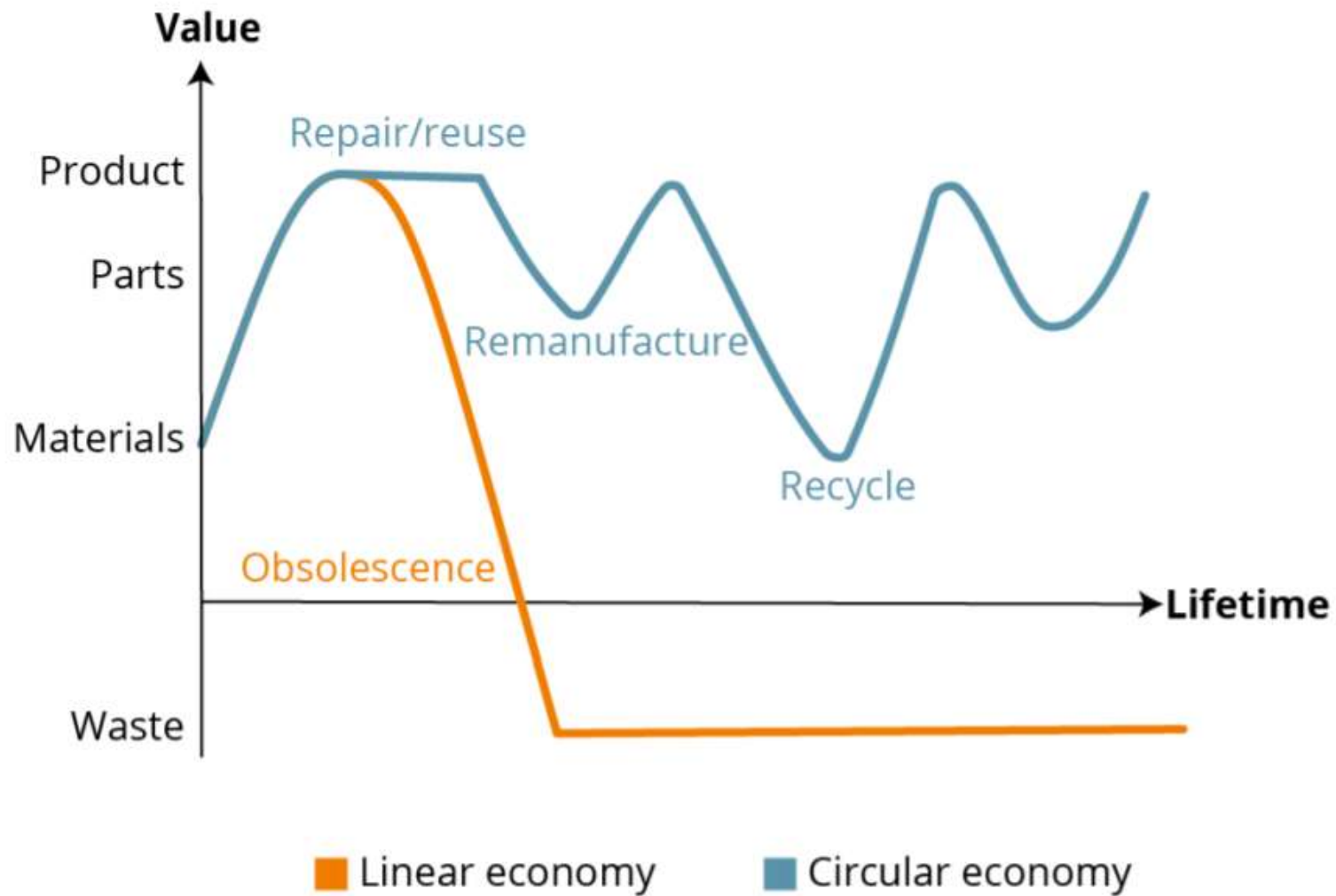
Material flows true to scale in Gt/year (billion tons/year) in 2014

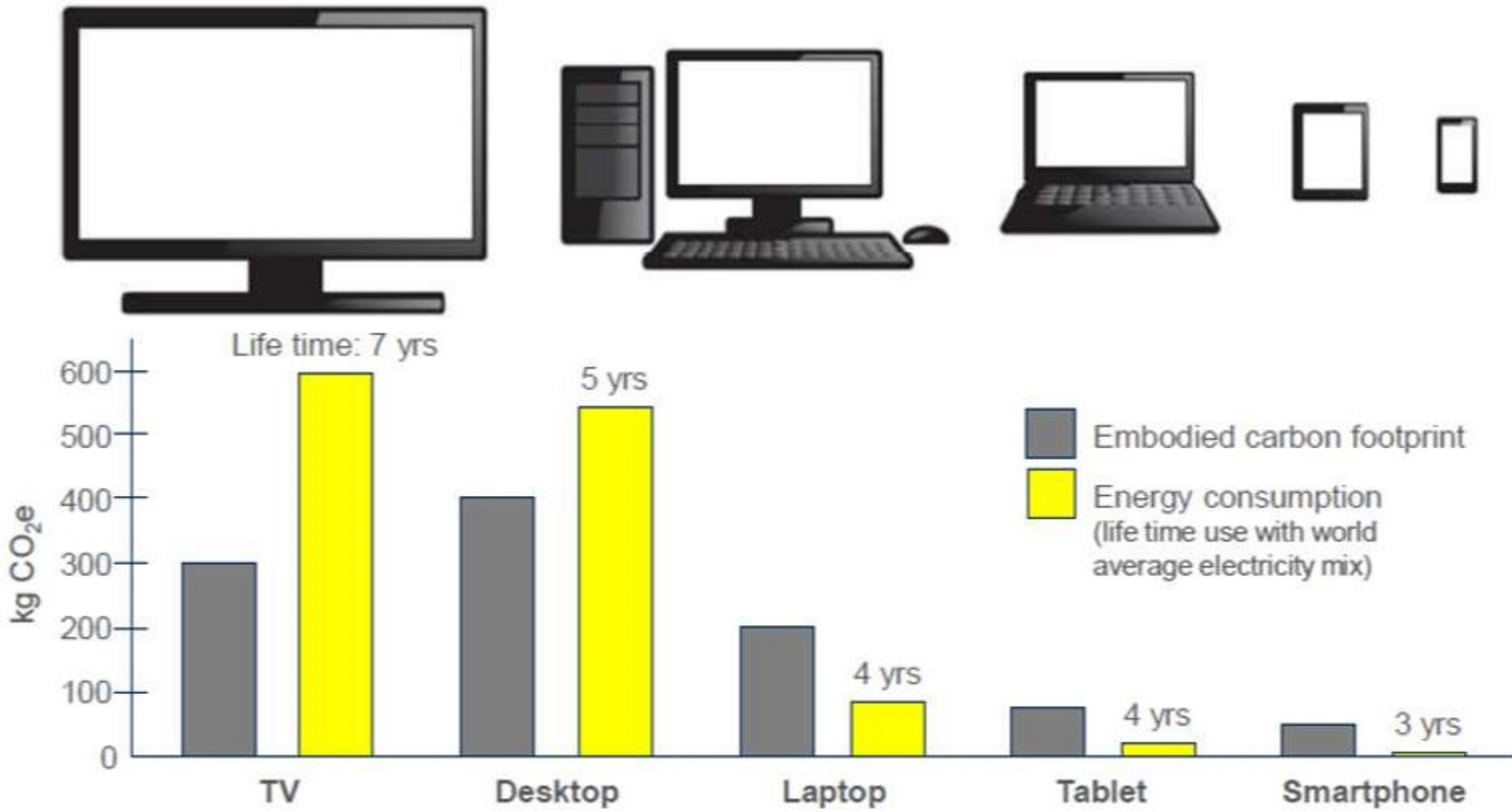
Note: Numbers may not sum up to total due to rounding.

## Cost Structure in Manufacturing (DE)

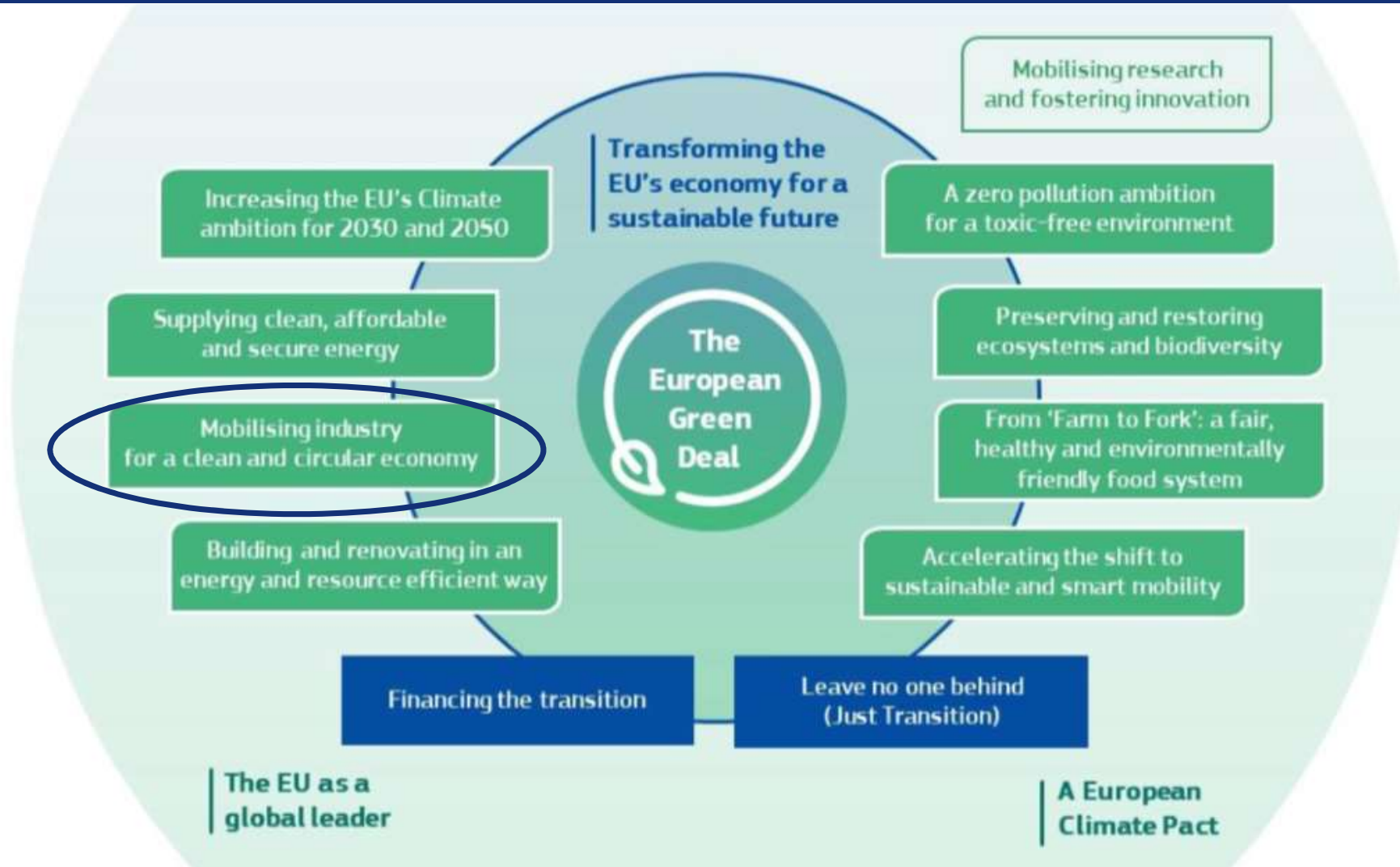








# European Green Deal



# Circular Economy Action Plan 2020

## Structural overview



### Sustainable Product Policy

- *Designing sustainable products*
- *Empowering consumers and public buyers*
- *Circularity in production processes*



### Key Product Value Chains

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



### Less Waste, More Value

- *Enhanced waste policy (waste prevention, circularity)*
- *Enhancing circularity in a toxic-free environment*
- *Creating EU market for secondary raw materials*
- *Addressing waste exports from the EU*



### Crosscutting Actions

- *Circularity as a prerequisite for climate neutrality*
- *Getting the economics right*
- *Driving the transition through research, innovation and digitalisation*

# Key product value chains



**Food, water & nutrients**



**Electronics and ICT**



**Batteries & vehicles**



**Construction & buildings**



**Textiles**



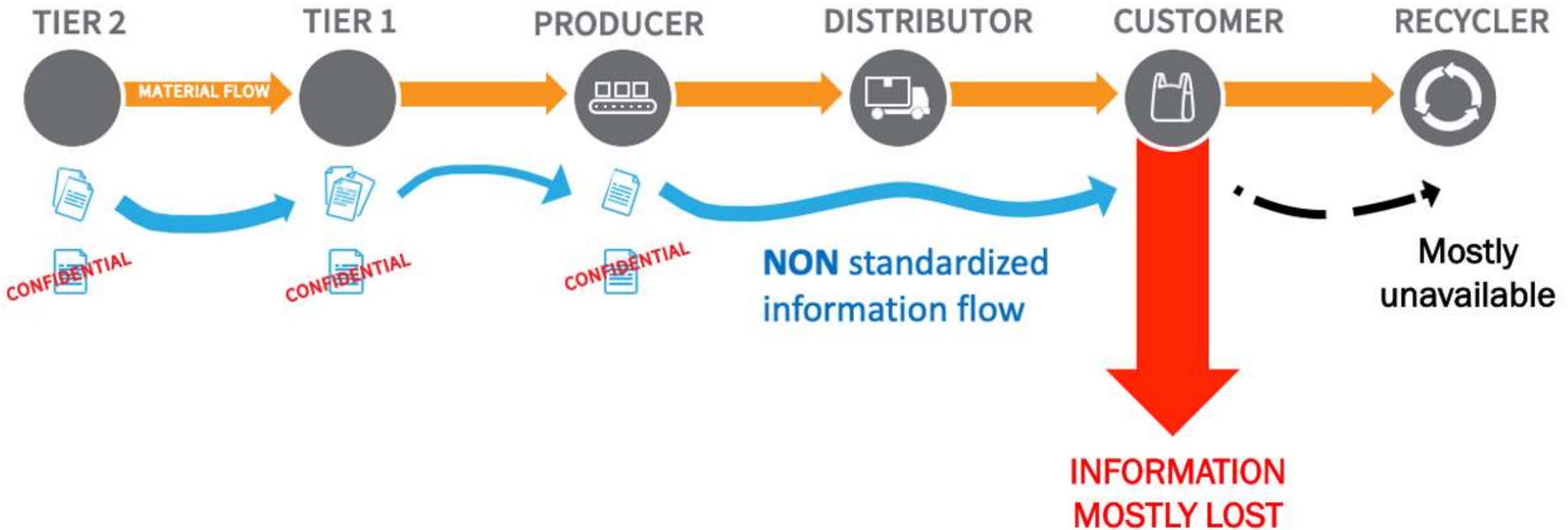
**Plastics**



**Packaging**



## Information flow in a linear economy





“Research on the circular economy can be highly technical and often concerned with material flows above people flows”



Walter Stahel



# SUSTAINABLE DEVELOPMENT GOALS

17 GOALS TO TRANSFORM OUR WORLD





GETTING WASTED

# Hope for circular economy jobs could be a waste

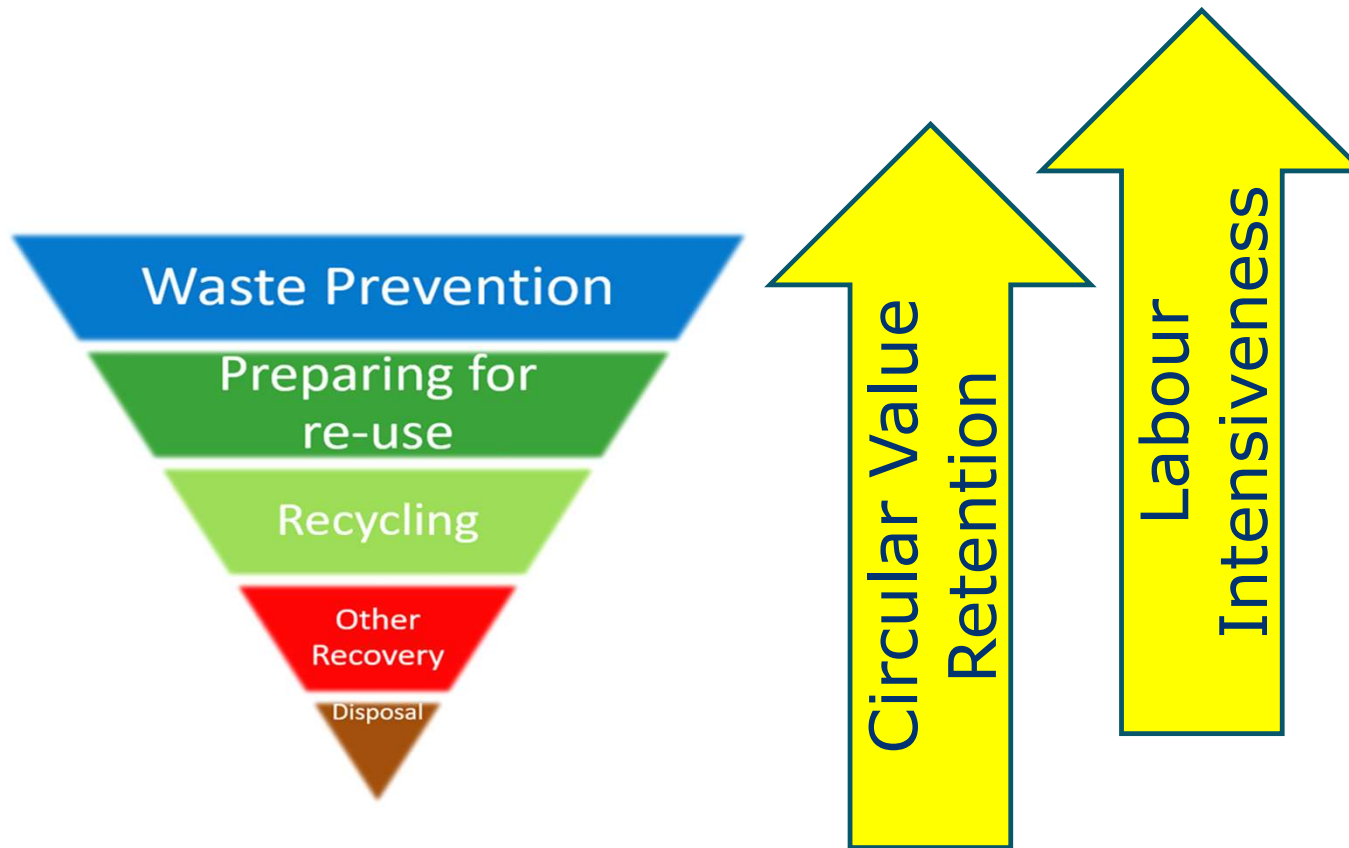
EU optimism over job creation potential of circular economy policies appears overblown.

By PAOLA TAMMA AND GINGER HERVEY | 4/4/18, 11:00 AM CET | Updated 4/11/18, 8:39 AM CET

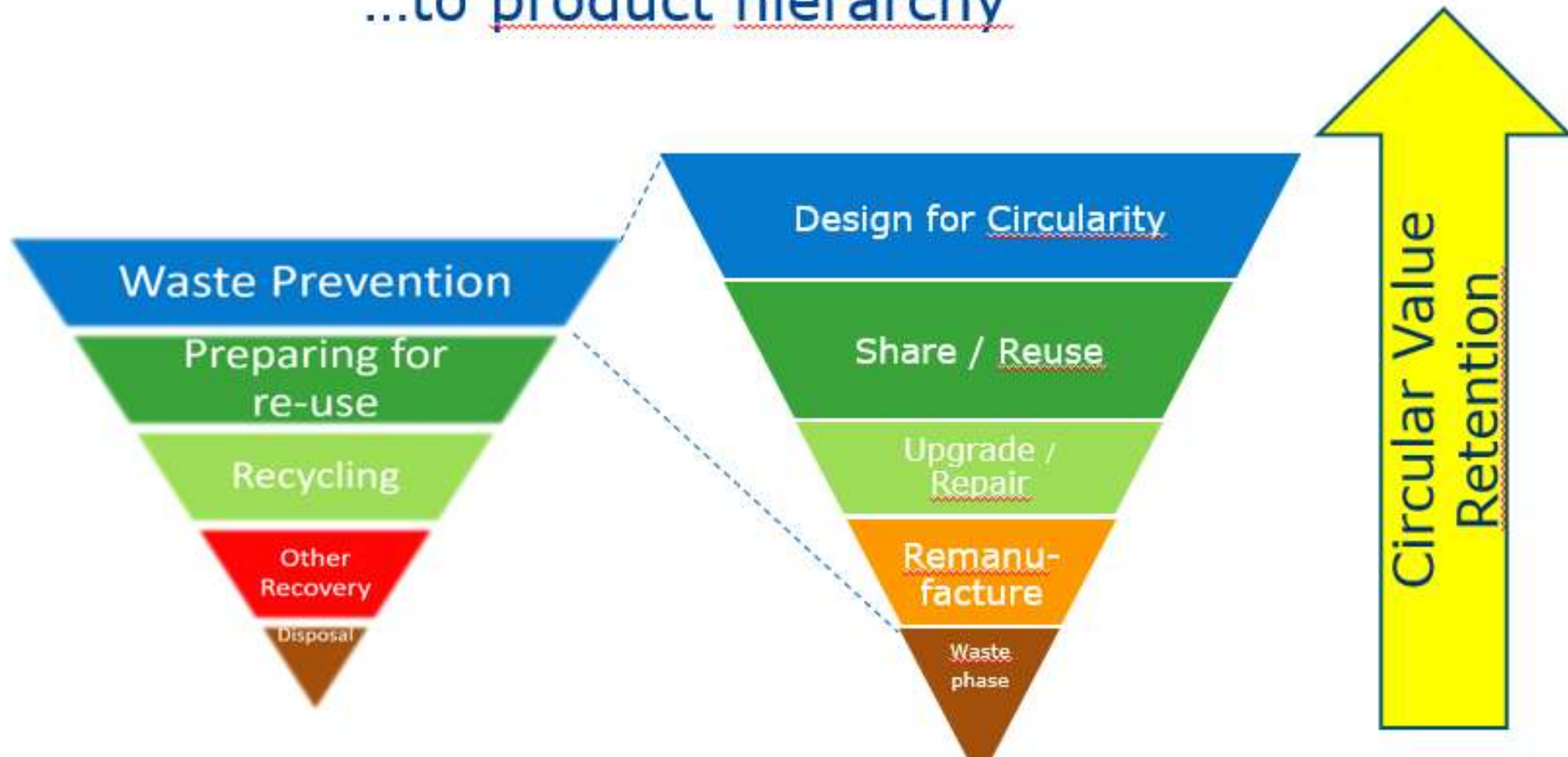
Politico; 4th April 2018

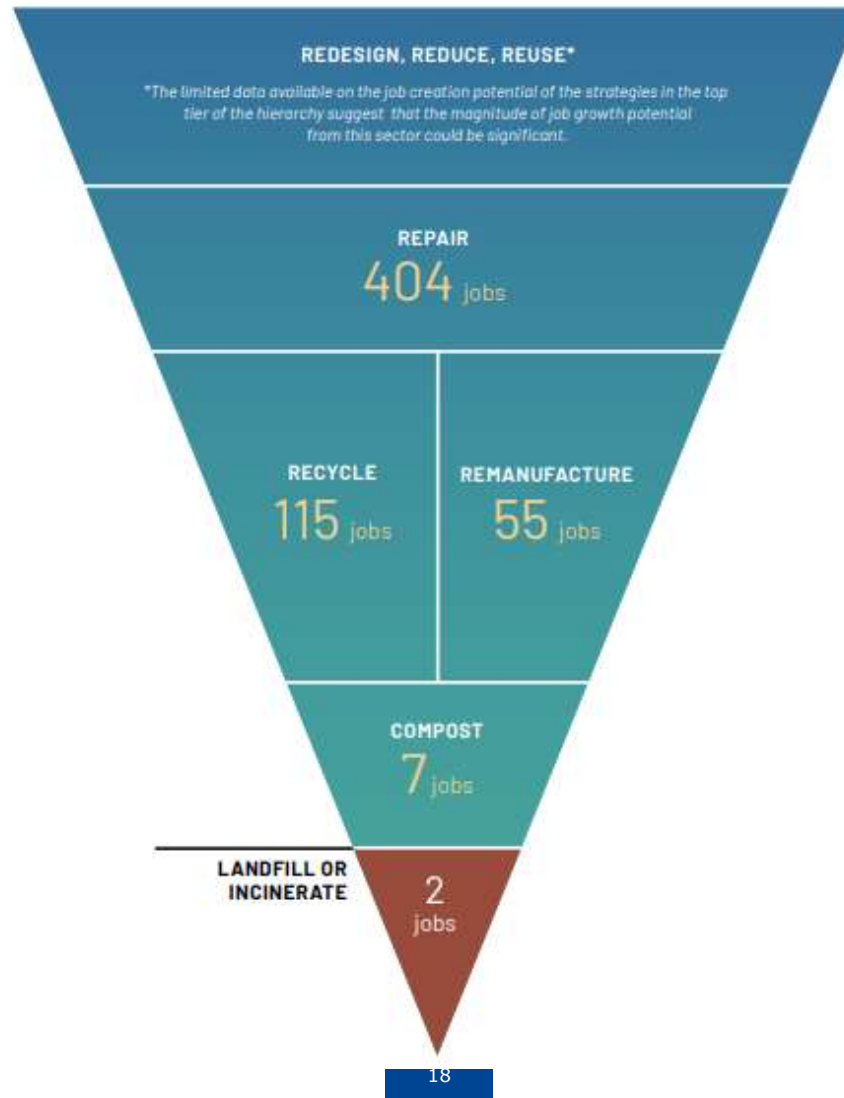


# Waste Hierarchy



## ...to product hierarchy





Source: Zero Waste and Economic Recovery: Gaia

# Skill levels



## Potential skill needs by circular economy activity

Activity	Low skilled	Skilled	Professional
Closed loop recycling	4 icons	4 icons	1 icon
Open loop recycling	4 icons	2 icons	1 icon
Servitisation	3 icons	3 icons	3 icons
Remanufacturing	2 icons	5 icons	2 icons
Reuse	4 icons	2 icons	1 icon
Biorefining	1 icon	4 icons	4 icons

Source: WRAP, « Employment and the Circular Economy » (2015)



## In a World where...

<i>We do not need cars</i>	...	<i>We need mobility</i>
<i>We do not need light bulbs</i>	...	<i>We need light</i>
<i>We do not need chairs</i>	...	<i>We need to sit</i>
<i>We do not need refrigerators</i>	...	<i>We need chilled and healthy food</i>
<i>We do not need CDs</i>	...	<i>We want to listen to the music</i>
<i>We do not need pesticides</i>	...	<i>We want healthy plants</i>



# Stakeholder engagement

#CEstakeholderEU

## European Circular Economy Stakeholder Platform

A joint initiative by the European Commission and the European Economic and Social Committee



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**Submit your own good practices, knowledge, strategies and voluntary commitments!**

Link to website: <http://circulareconomy.europa.eu/platform/>

# Thank you



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