



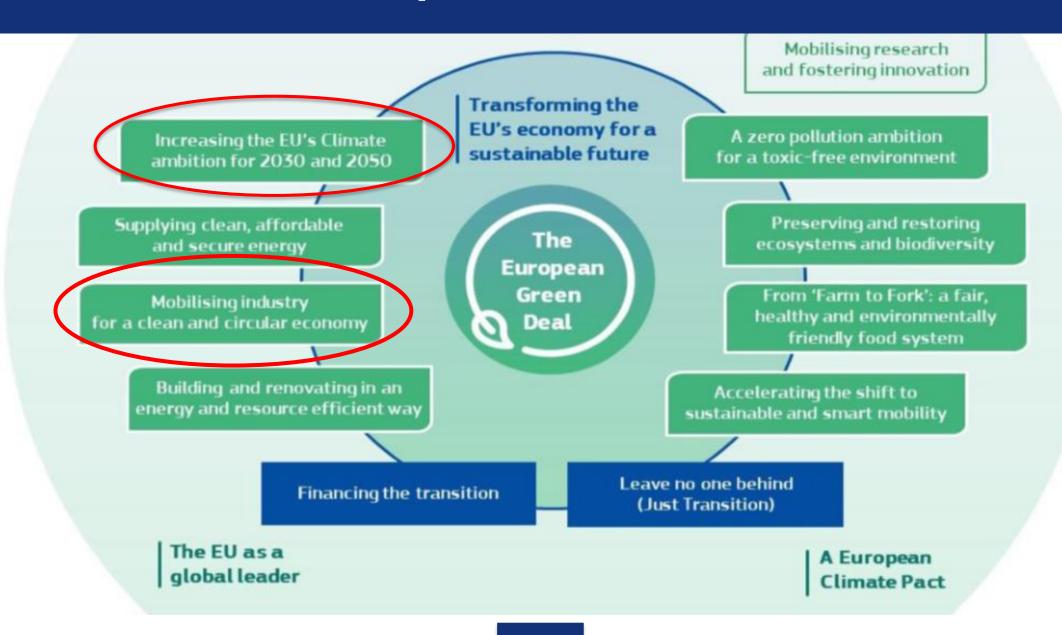
A circular economy at the heart of climate action:

... how materials connect the dots in the EU Green Deal

6th July 2020

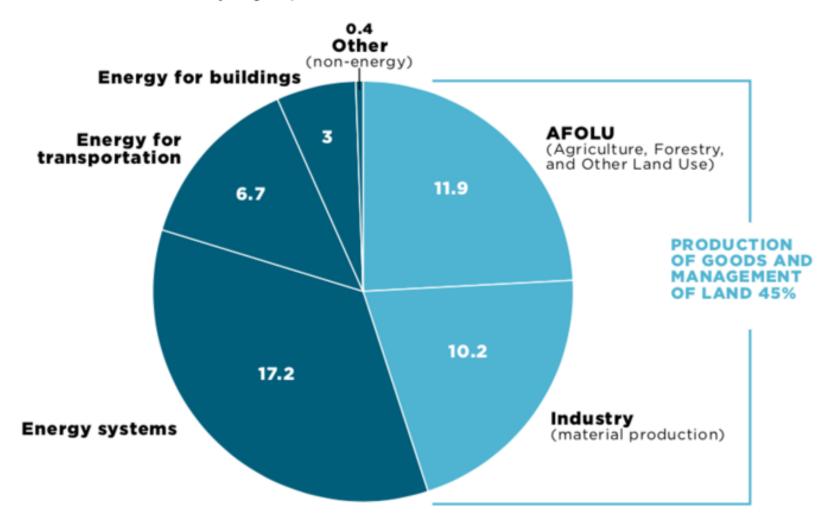
William NEALE
Adviser on Circular Economy & Green Growth
European Commission
Environment Directorate General

European Green Deal





Global GHG emissions Billion tonnes of CO₂e per year, 2010

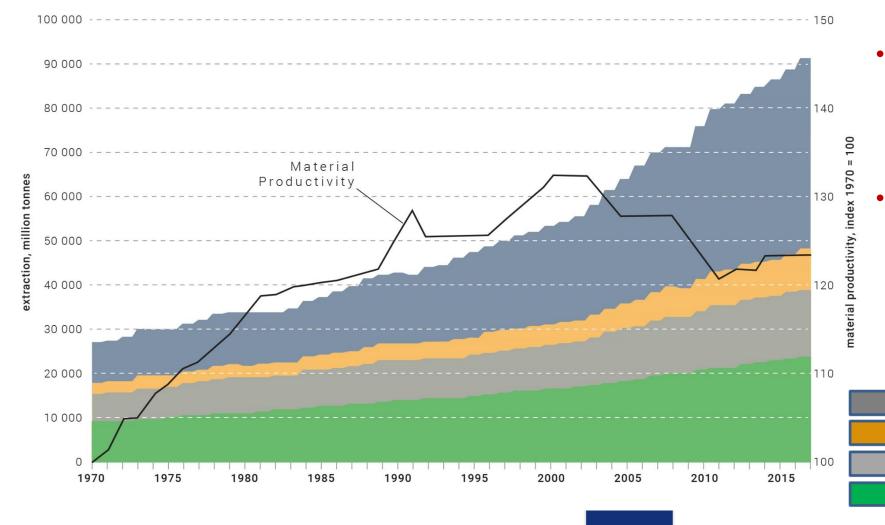


The Macro/global Picture





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

Non-metallic minerals

Metals

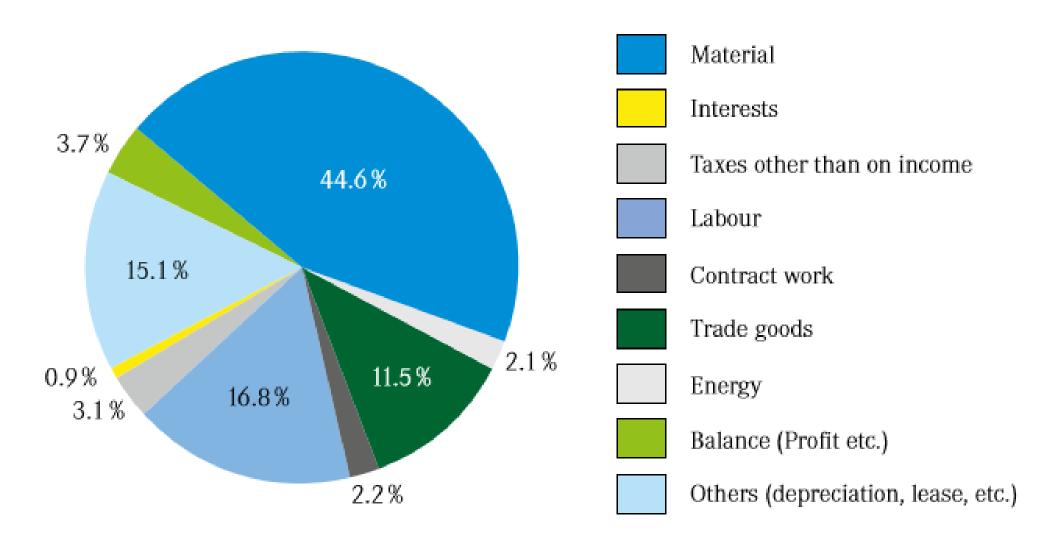
Fossil fuels

Biomass

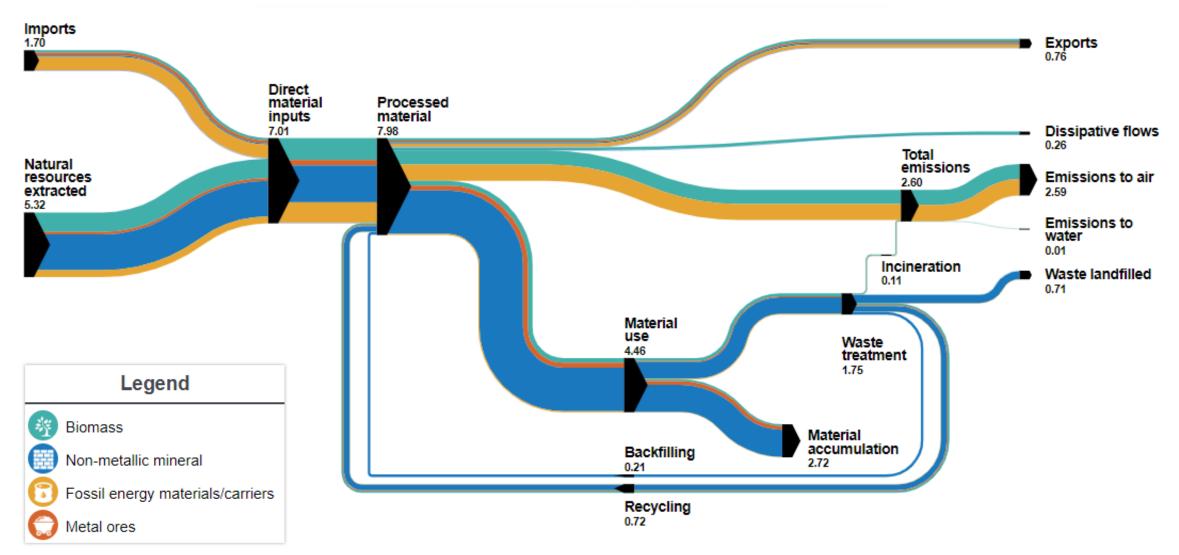
The Micro-level Picture



Cost Structure in Manufacturing (DE)

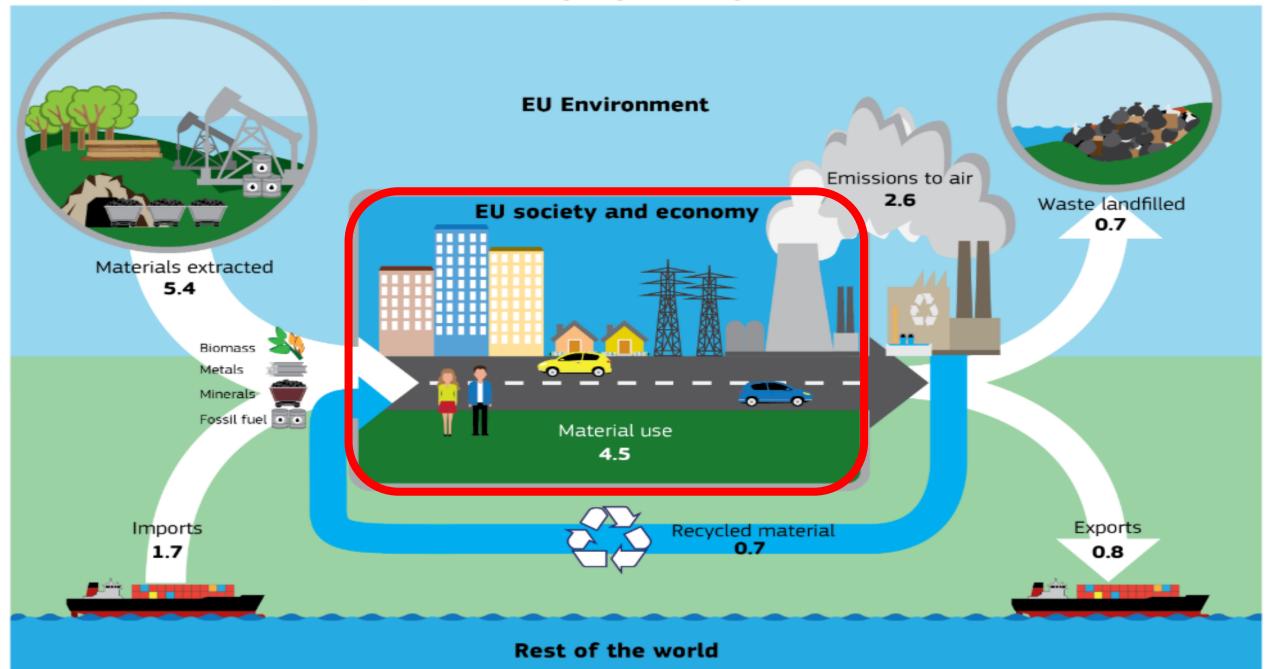






https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Material flows in the circular economy

Material flows in EU, 2017, billion tonnes per year (Gt/year)

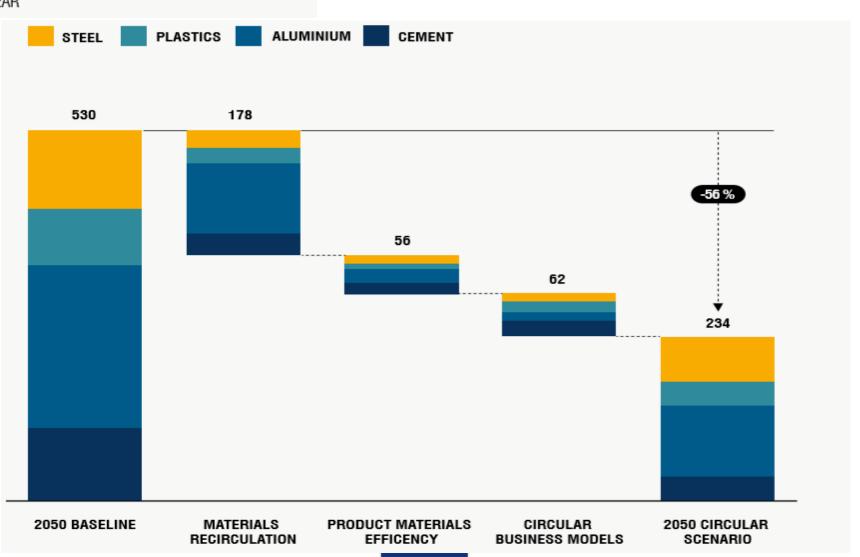


CIRCULAR OPPORTUNITIES CAN CUT 2050 EMISSIONS FROM STEEL, PLASTICS, ALUMINIUM AND CEMENT BY 56%

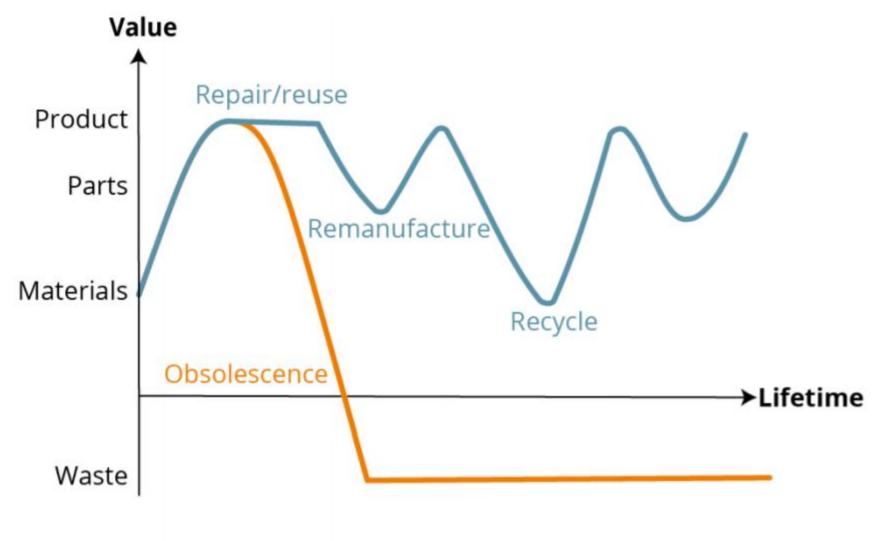
European Commission

EU EMISSIONS REDUCTIONS POTENTIAL FROM A MORE CIRCULAR ECONOMY, 2050

Mt of Carbon Dioxide Per Year



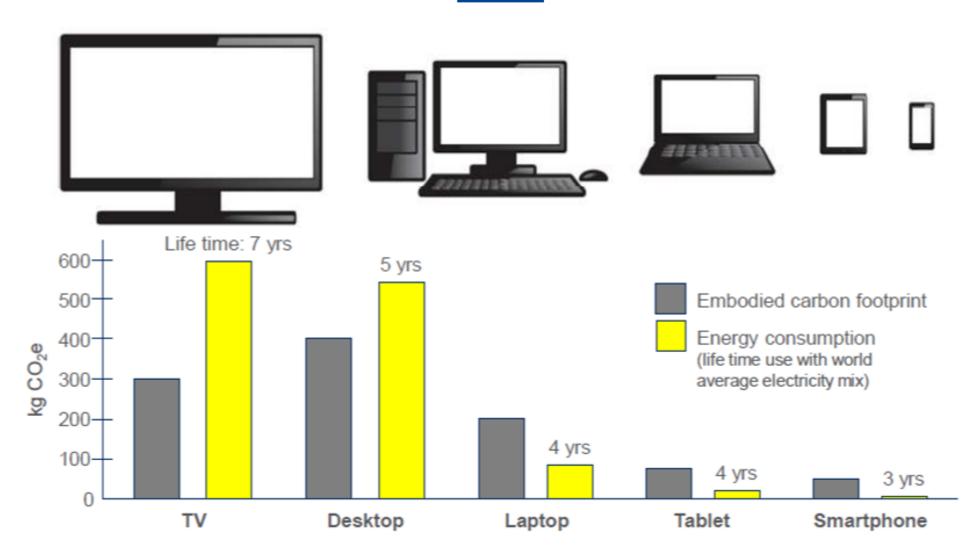


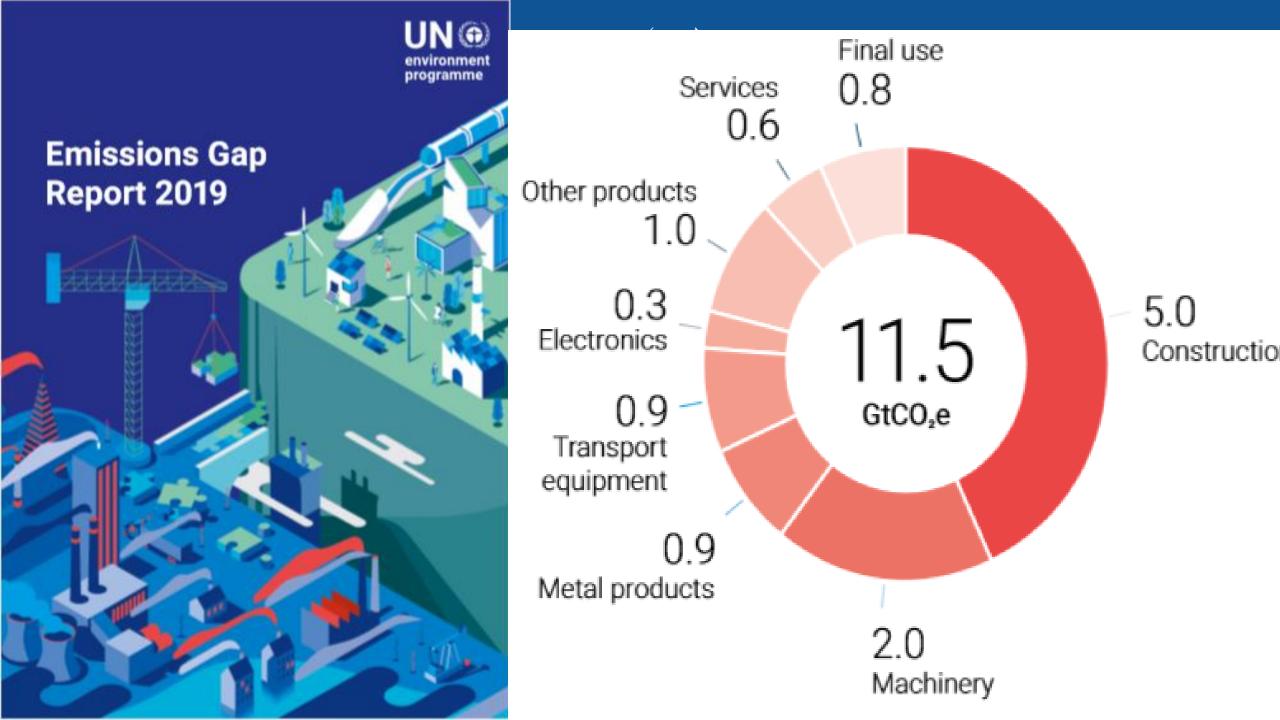


Linear economy

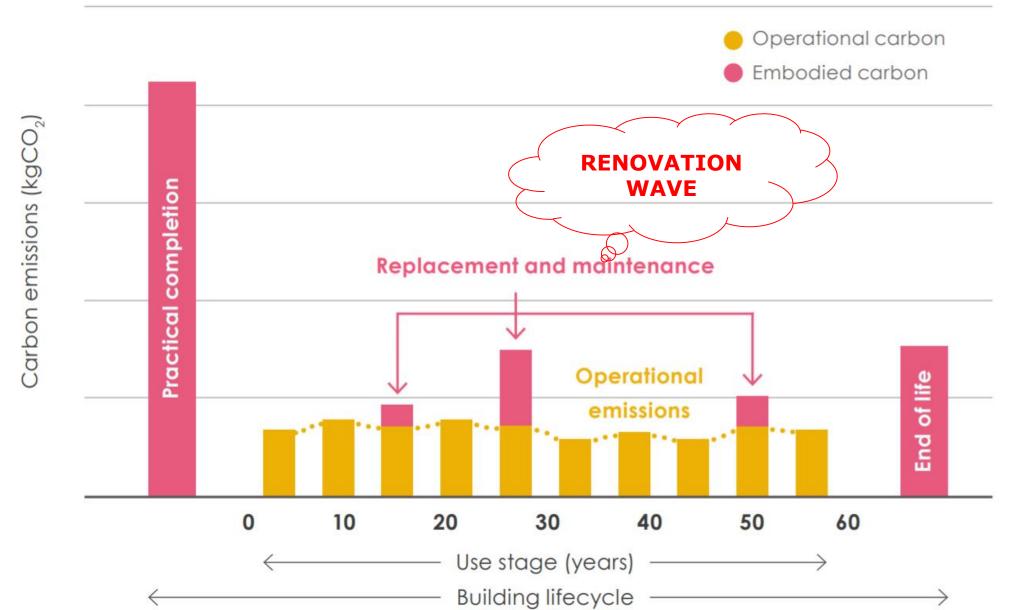
Circular economy











Circular Economy Action Plan 2020 Structural overview





- Key Product Value Chains
- Less Waste, More Value
- Crosscutting Actions

- Designing sustainable products
- Empowering consumers and public buyers
- Circularity in production processes
- Electronics and ICT; Batteries and vehicles;
- Packaging; Plastics; Textiles;
- Construction and buildings; Food, water and nutrients
- 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
- Circularity as a prerequisite for climate neutrality
- Getting the economics right
- Driving the transition through research, innovation and digitalisation





Thank you



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