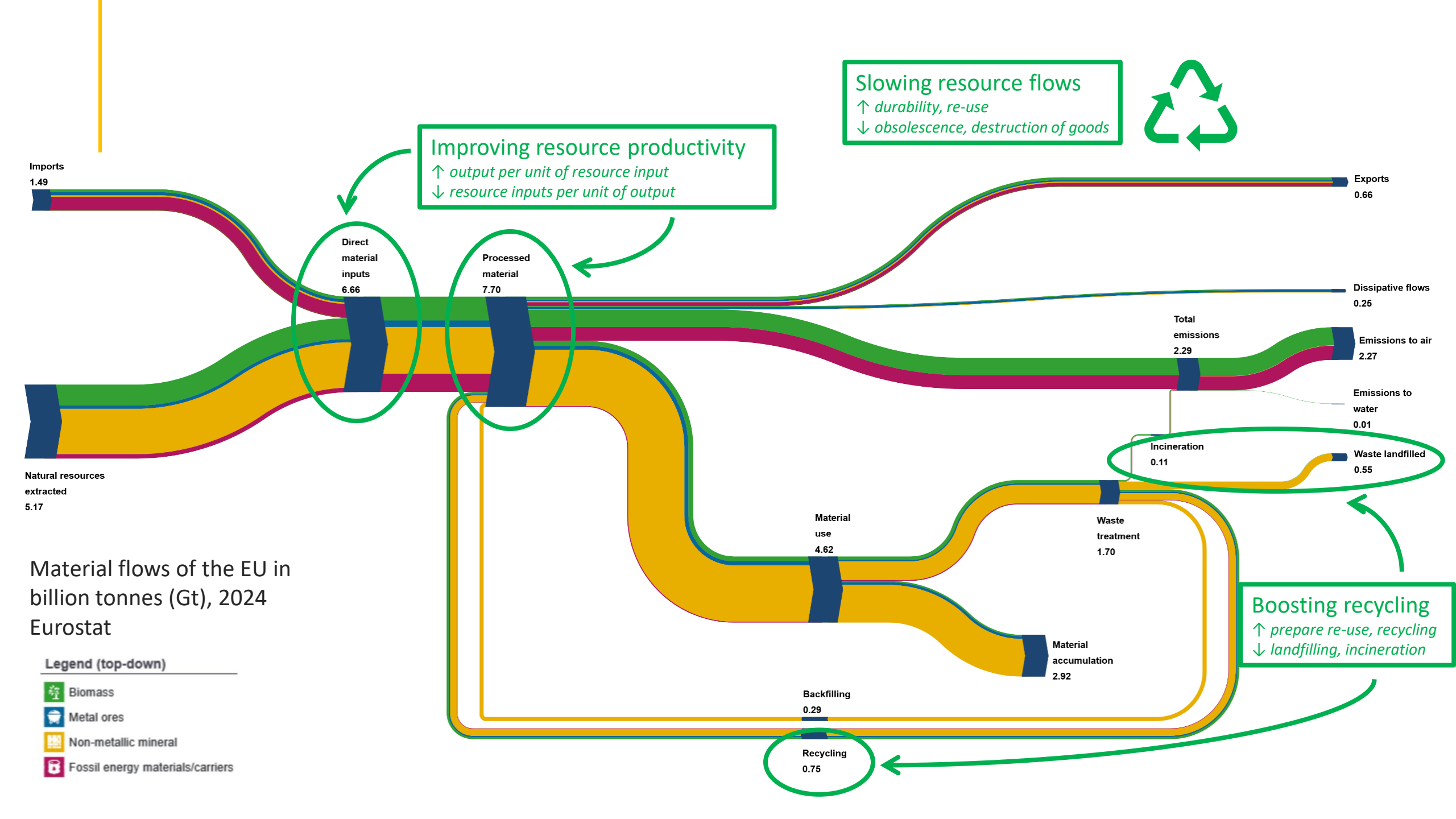
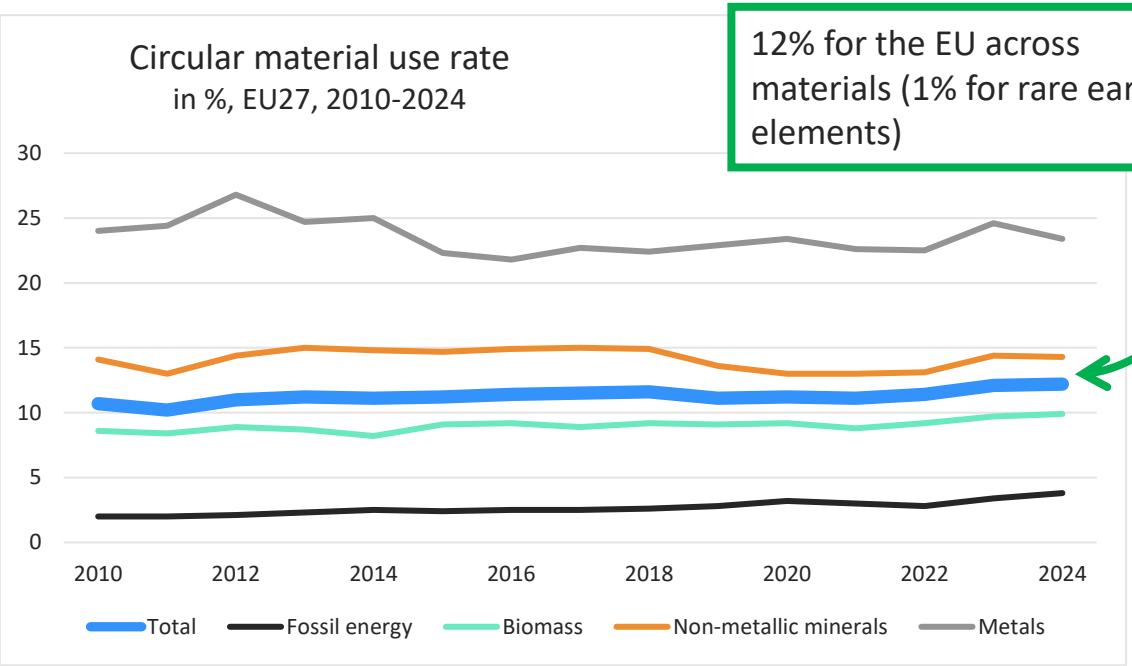

Slowing resource flows
↑ durability, re-use
↓ obsolescence, destruction of goods
Improving resource productivity
↑ output per unit of resource input
↓ resource inputs per unit of output
Imports
1.49
Direct material inputs
6.66
Processed material
7.70
Exports
0.66
Dissipative flows
0.25
Total emissions
2.29
Emissions to air
2.27
Emissions to water
0.01
Incineration
0.11
Waste landfilled
0.55
Natural resources extracted
5.17
Material use
4.62
Waste treatment
1.70
Material accumulation
2.92
Backfilling
0.29
Recycling
0.75
Boosting recycling
↑ prepare re-use, recycling
↓ landfilling, incineration
Material flows of the EU in billion tonnes (Gt), 2024
Eurostat
Legend (top-down)
Biomass
Metal ores
Non-metallic mineral
Fossil energy materials/carriers

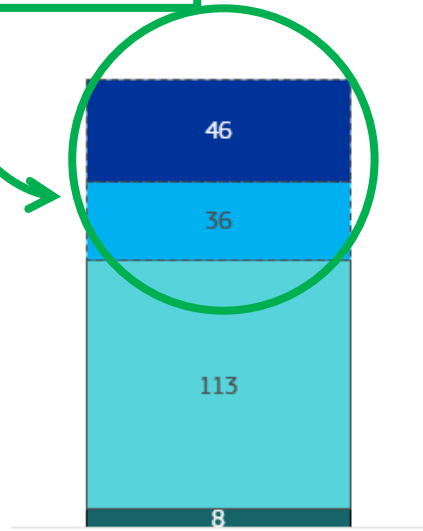
Insufficient progress towards an EU circular economy



12% for the EU across materials (1% for rare earth elements)

Source: Eurostat

Annual investment gap of €82 billion



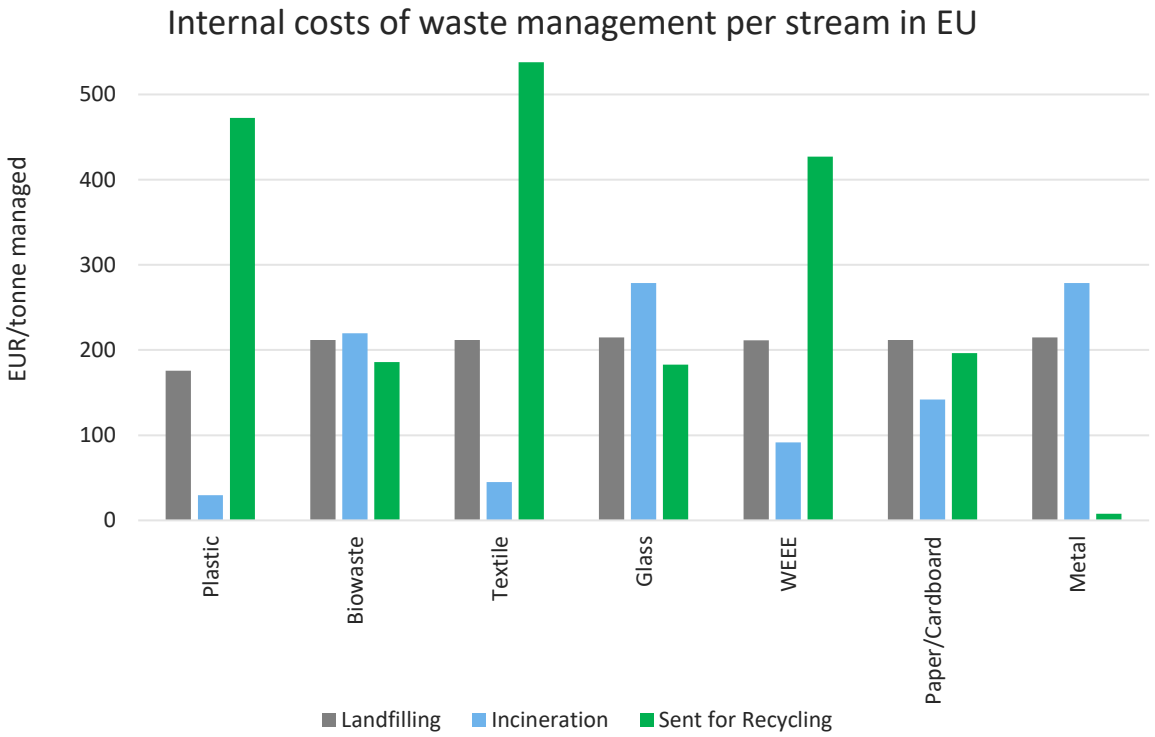
Circular economy and waste

- Compliance gap
- Gap from additional ENV plans and strategies
- Private investments (companies' expenditure)
- Public investments (MFF, MS public expenditure and EIB)

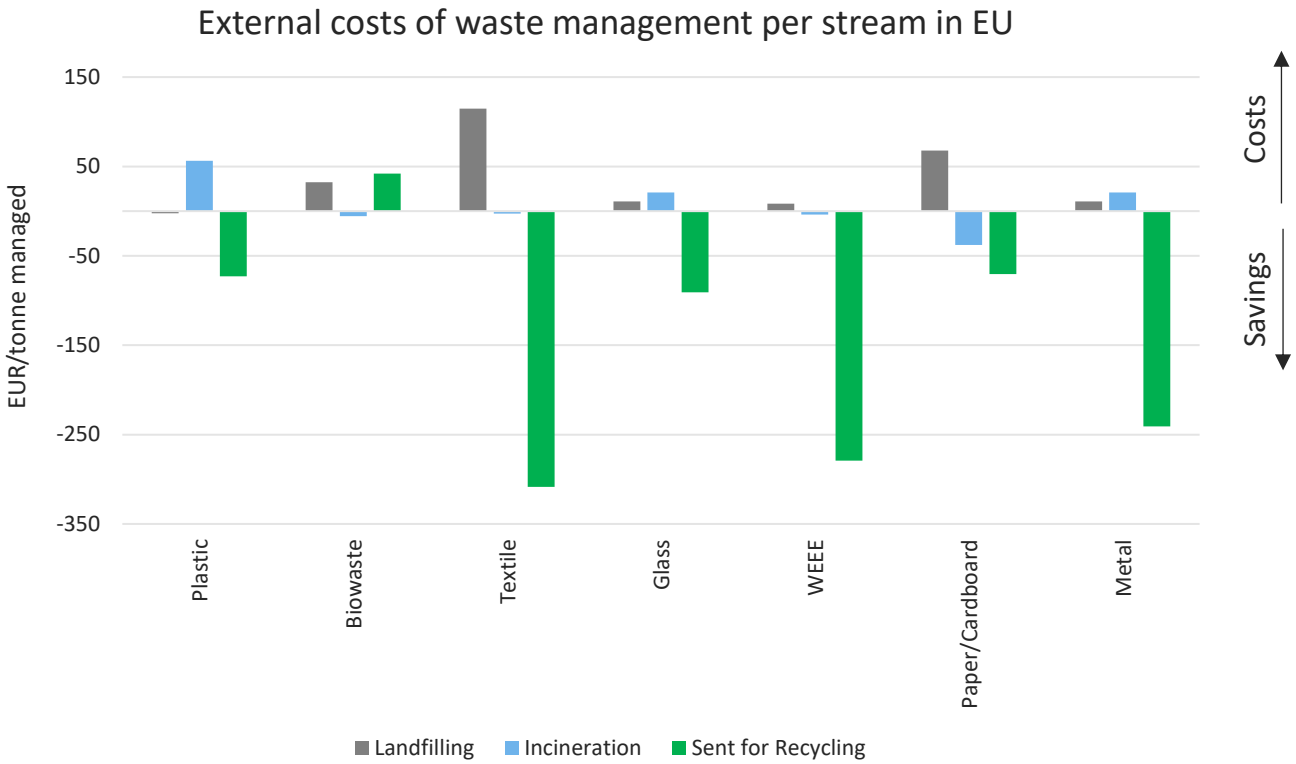
Source: DG Environment and EIB

European Commission

The economics of waste management



Internal Cost = OPEX + CAPEX + Taxes - revenues



External costs = monetised environmental impact (CO2: 100 EUR/t)
Assumes current EU average recycling performances

Source: JRC internal calculations

European Commission

Making the business case for secondary raw materials requires overcoming structural barriers

Fragmentation of the Single Market resulting in lost business opportunities and high costs

Uneven playing field leading to insufficient capture and recovery of valuable raw materials

Consumer behaviour may need to be nudged to align with the circular economy

Secondary raw material markets not realising their potential due to supply/demand side issues

Lack of investor confidence in secondary raw material markets leading to an investment gap

European Commission