

DELIVERING RESOURCE-EFFICIENT PRODUCTS

How Ecodesign can drive a circular economy in Europe



COBALT Closing Conference
Brussels, 23 March 2015

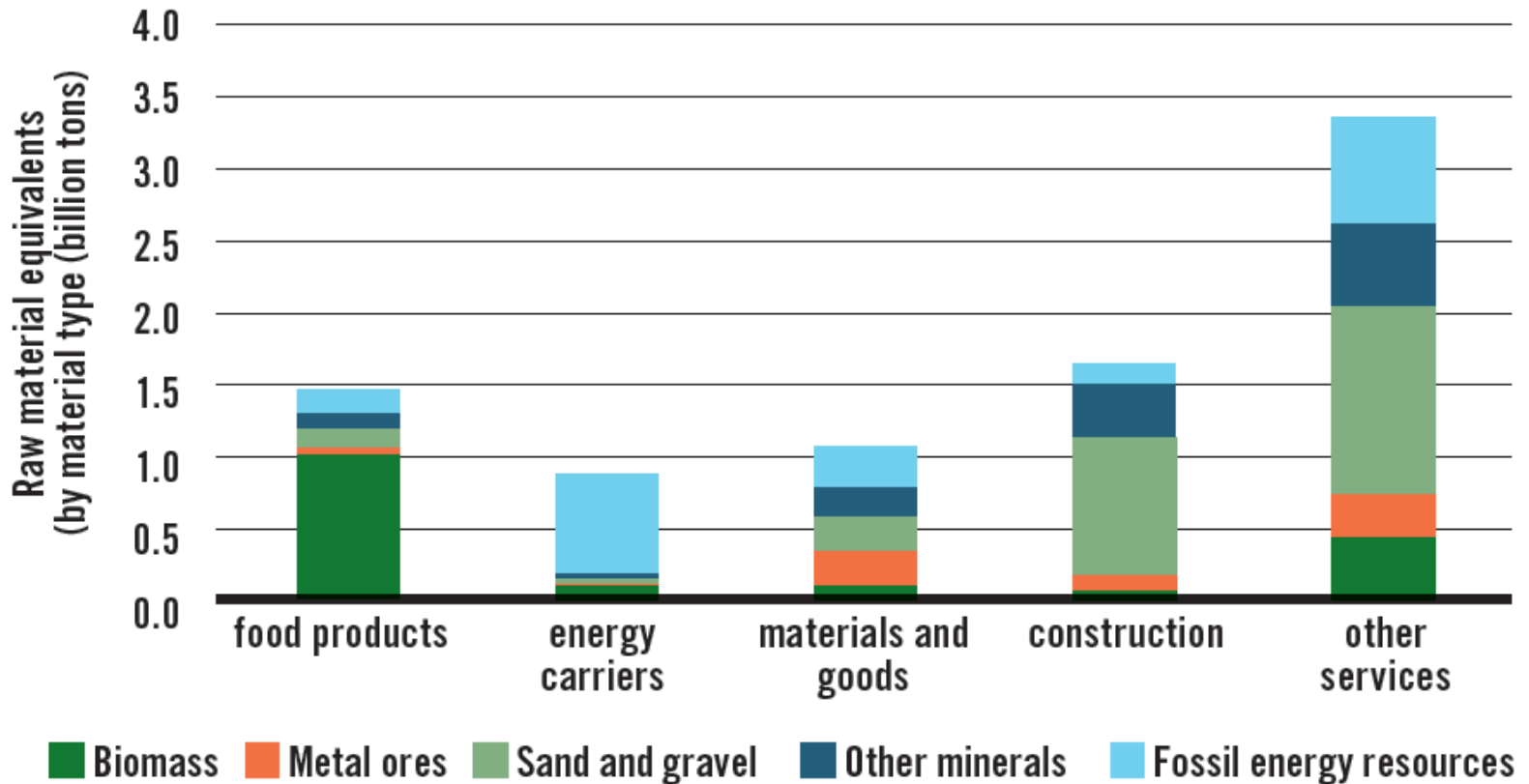
Which policy
approaches should the
EU take forward?

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(EEB)

EUROPEAN ENVIRONMENTAL BUREAU

EUROPE'S LARGEST FEDERATION OF
ENVIRONMENTAL CITIZENS' ORGANISATIONS

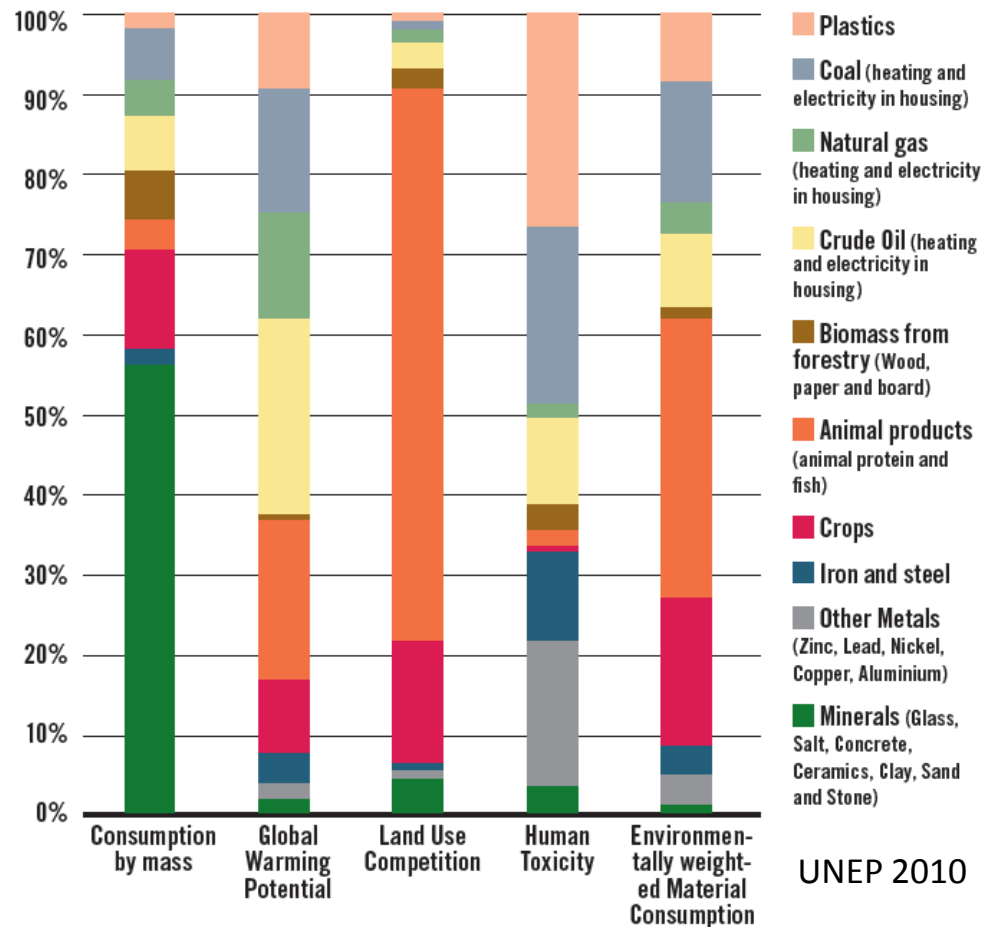
Products – A key part of resource efficiency strategies



Schoer, Weinzettel, Kovanda,
Giegrich, Lauwigi (2012) for EU27



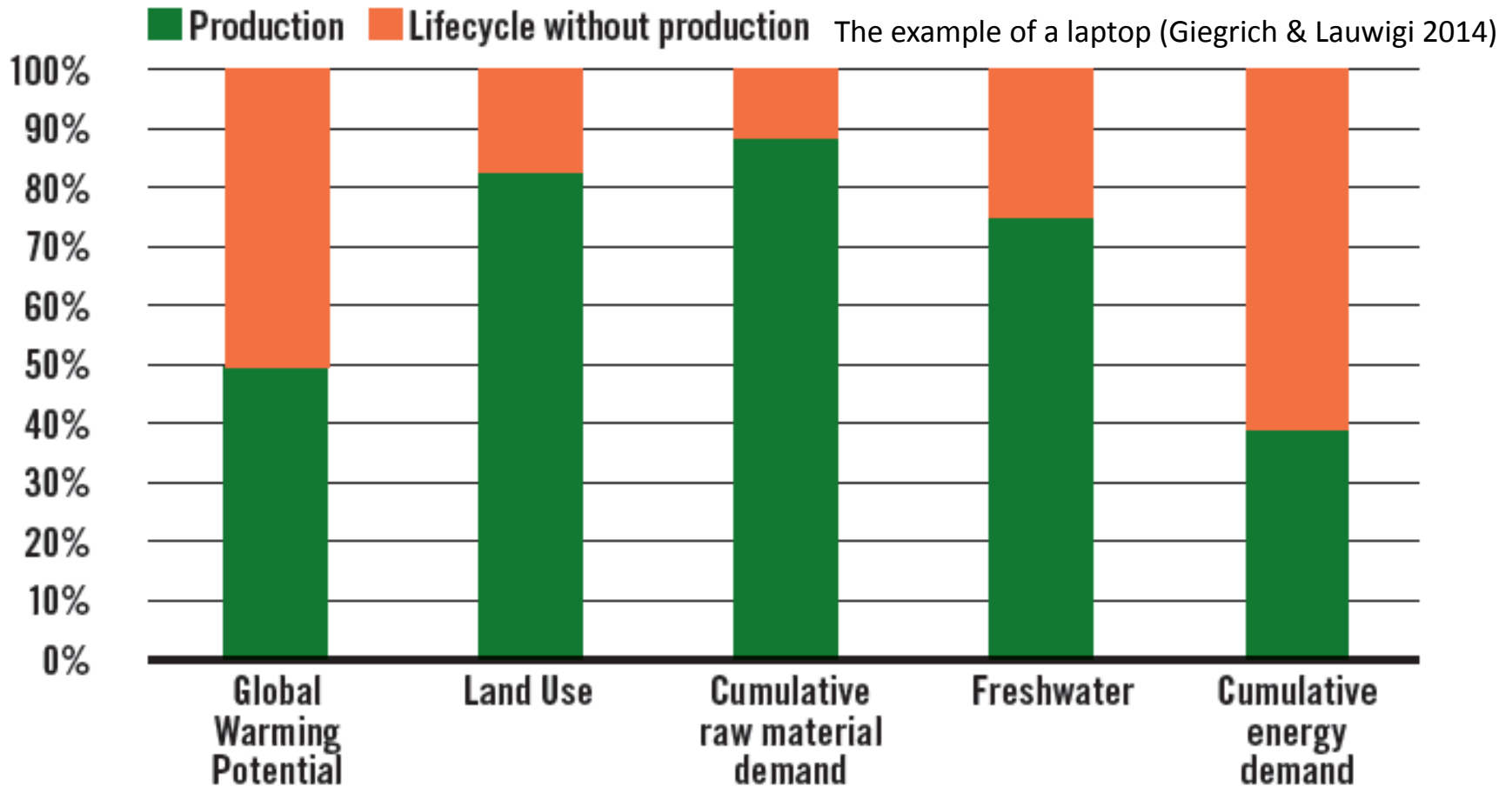
Different measurements for environmental impacts of resource use



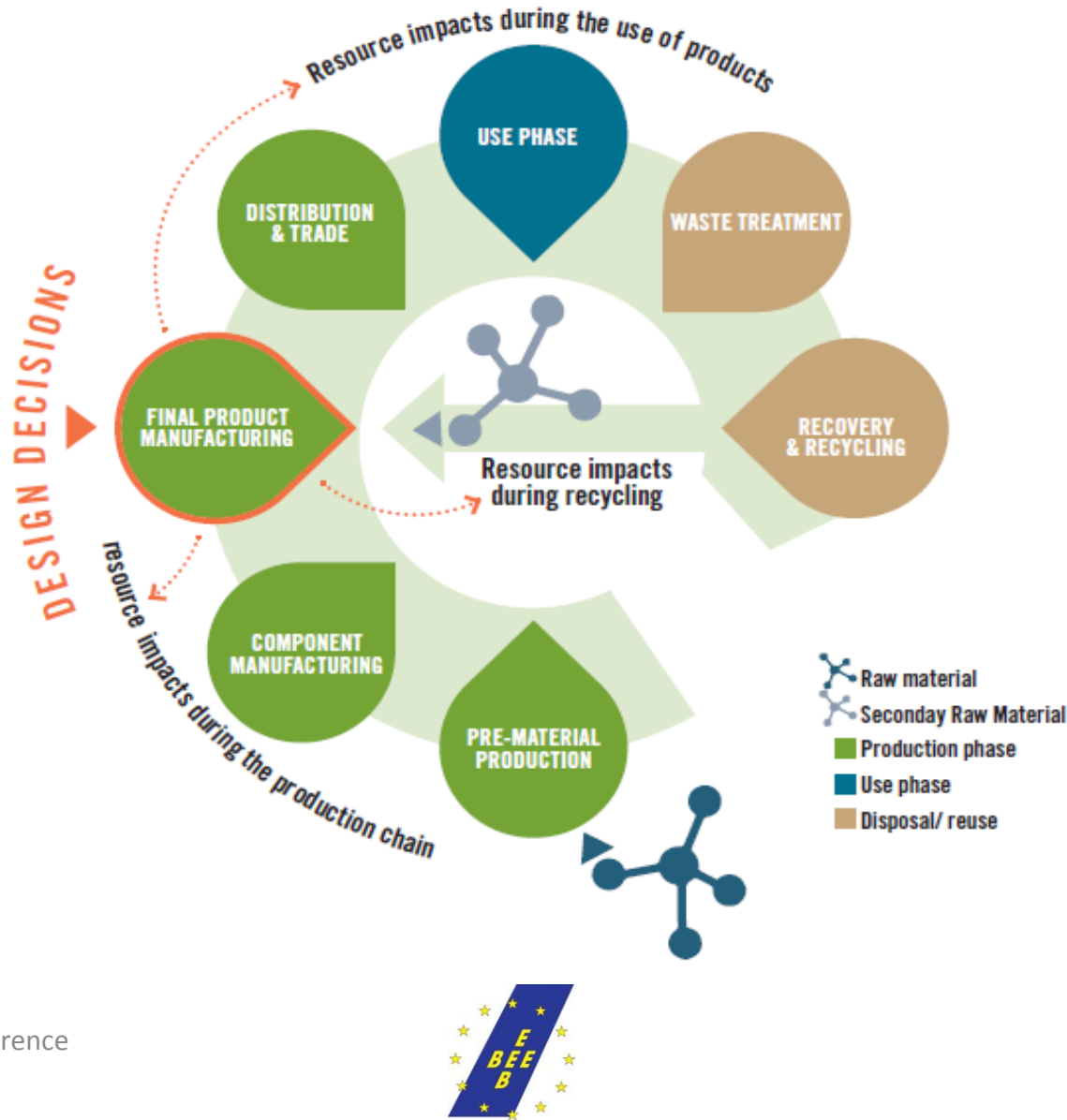
UNEP 2010



Use embedded greenhouse gas emissions as a proxy for resource use



How design influences resource impacts



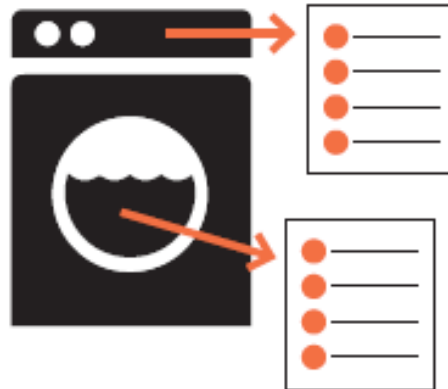
From product properties...

DESIGN DECISIONS

PRODUCT PROPERTIES, E.G.

- Type of materials used
- Amount of materials used
- Production process (as far as defined by design)
- Hazardous substances in materials (as far as defined by design)

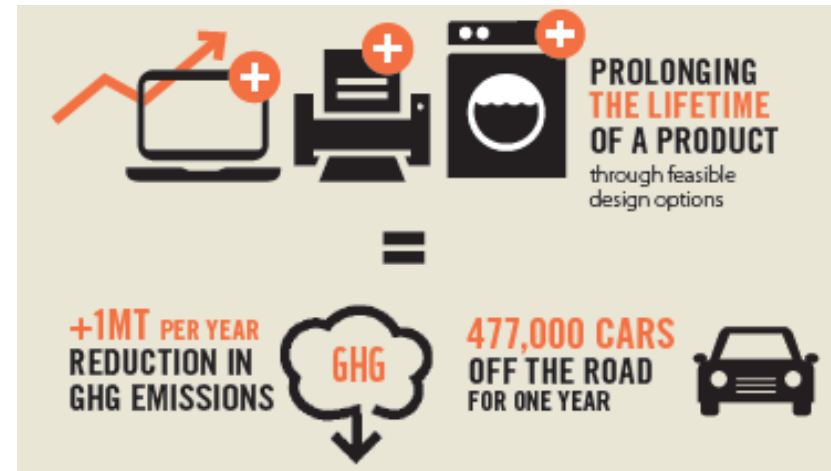
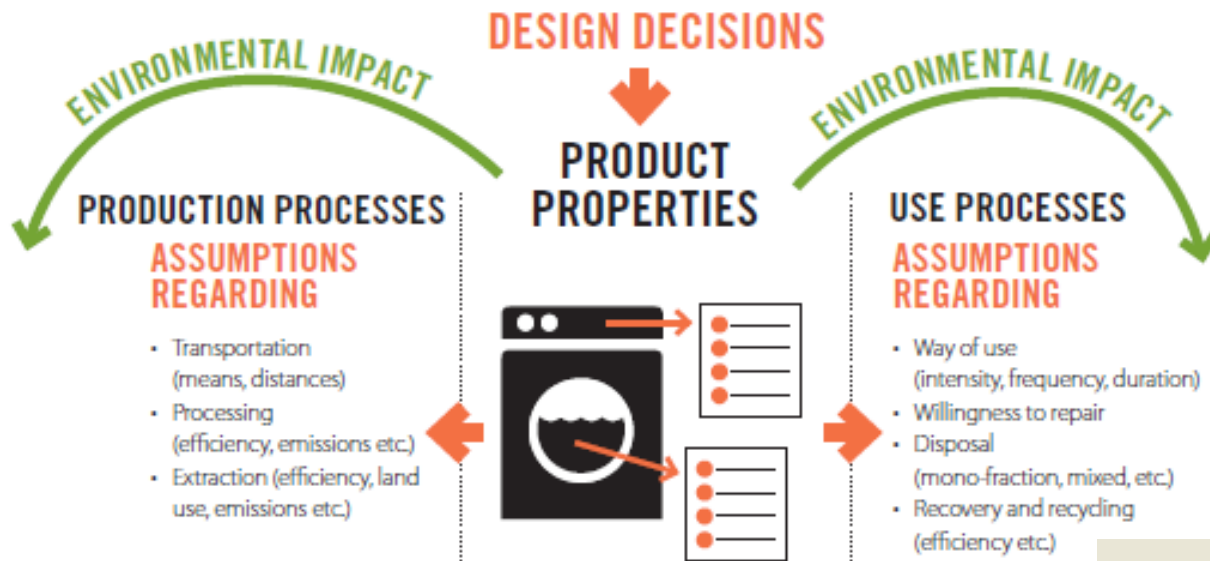
DESIGN SPECIFICATIONS



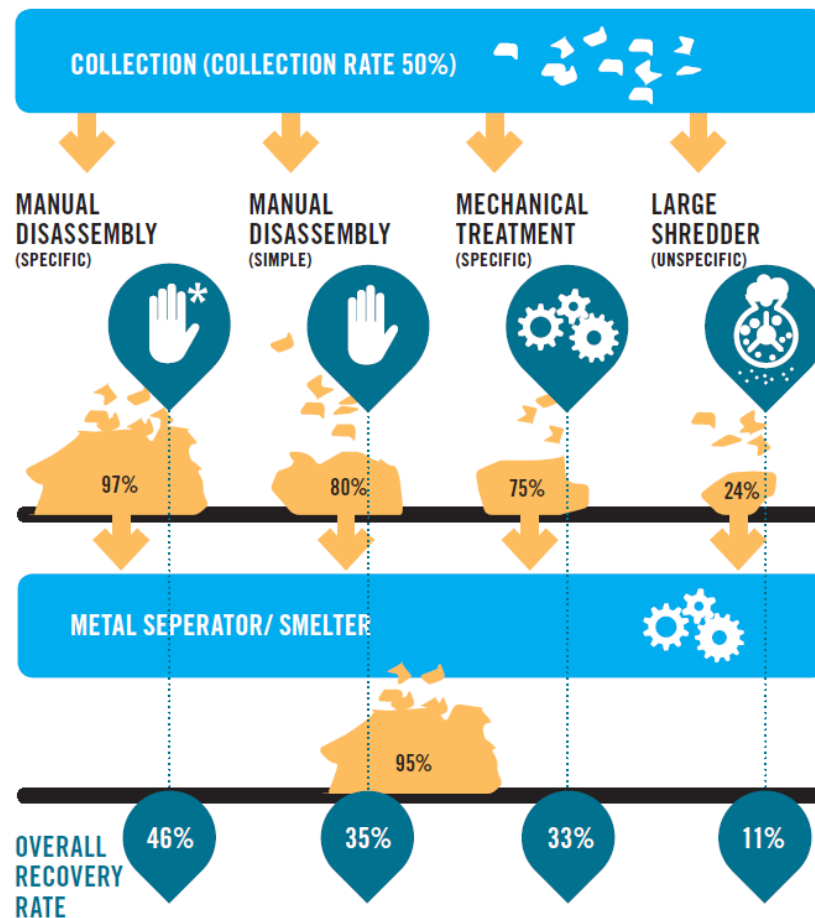
PRODUCT PROPERTIES, E.G.

- Energy use (in certain modes of use)
- Available functionalities
- Use of other consumables (in certain modes of use)
- Distribution and assembly of different materials within the product

...to environmental impacts

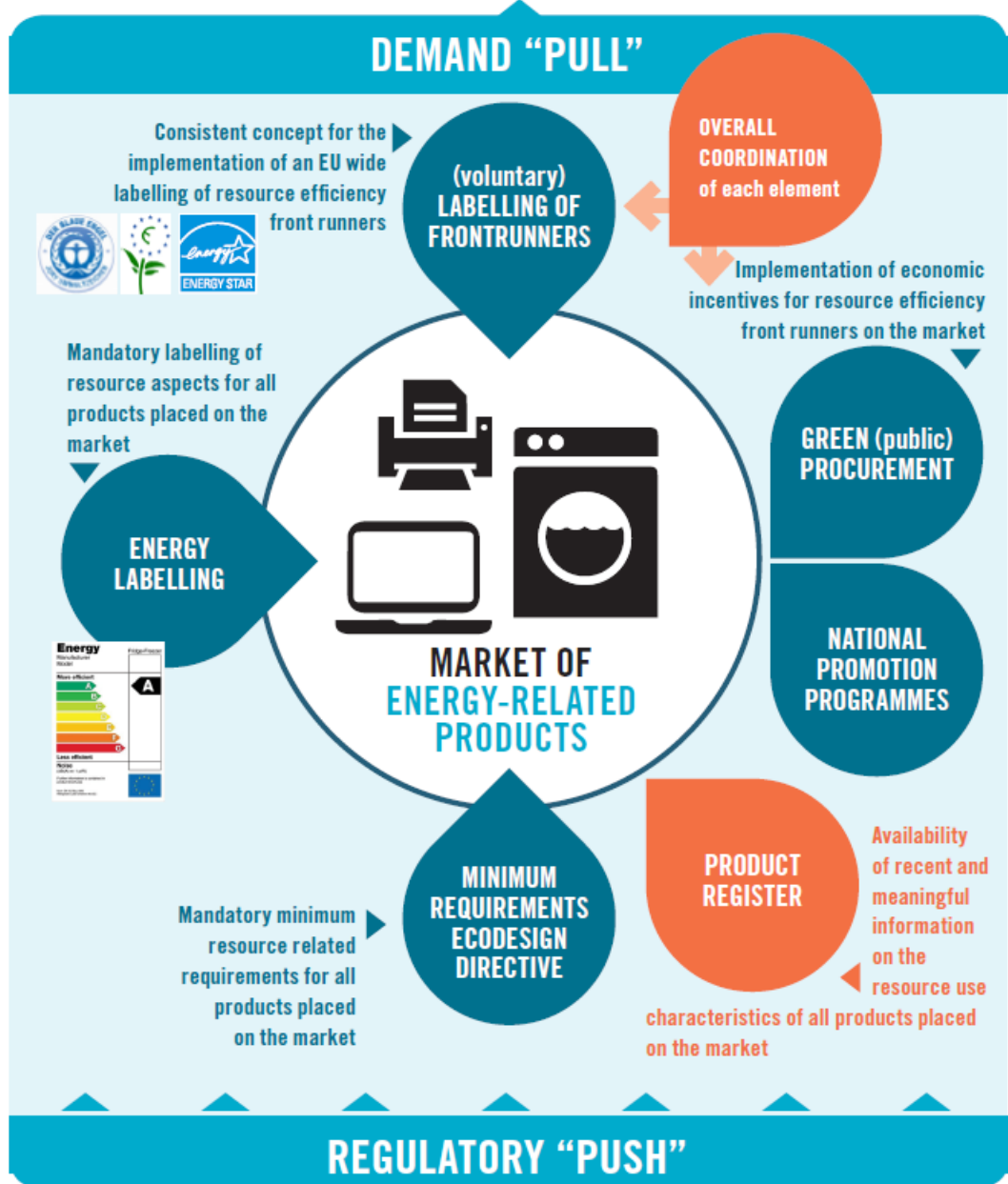


Better alignment of product design with waste treatment processes



Influence of different pre-treatment steps on the overall recovery of gold from circuit boards (Sander 2012)

The EU framework for product policy



Approaches to overcome current challenges

HOW TO CUT RESOURCE USE WITH ECODESIGN



**BETTER
REPAIRABILITY
AND DURABILITY**
of products

+



**HIGHER
RECYCLABILITY**
of materials

+



**REMOVAL
OF HAZARDOUS
SUBSTANCES**

Provision of information to consumers, downstream users and recyclers

- Share of secondary materials used
- Resource efficient use and details on the product's use of consumables
- Technical life time of the product under normalised conditions
- Disassembly and repair instructions in a standard format
- Access to troubleshooting and diagnostic tools
- Availability of repair/ service tools and spare parts
- Content of problematic/ hazardous substances or precious/ recyclable materials in certain components
- Adequate end-of-life treatment and recycling of products (including how certain components can be easily separated)



Thank you for your attention

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