European Social Partners' project on Circular Economy
Final conference

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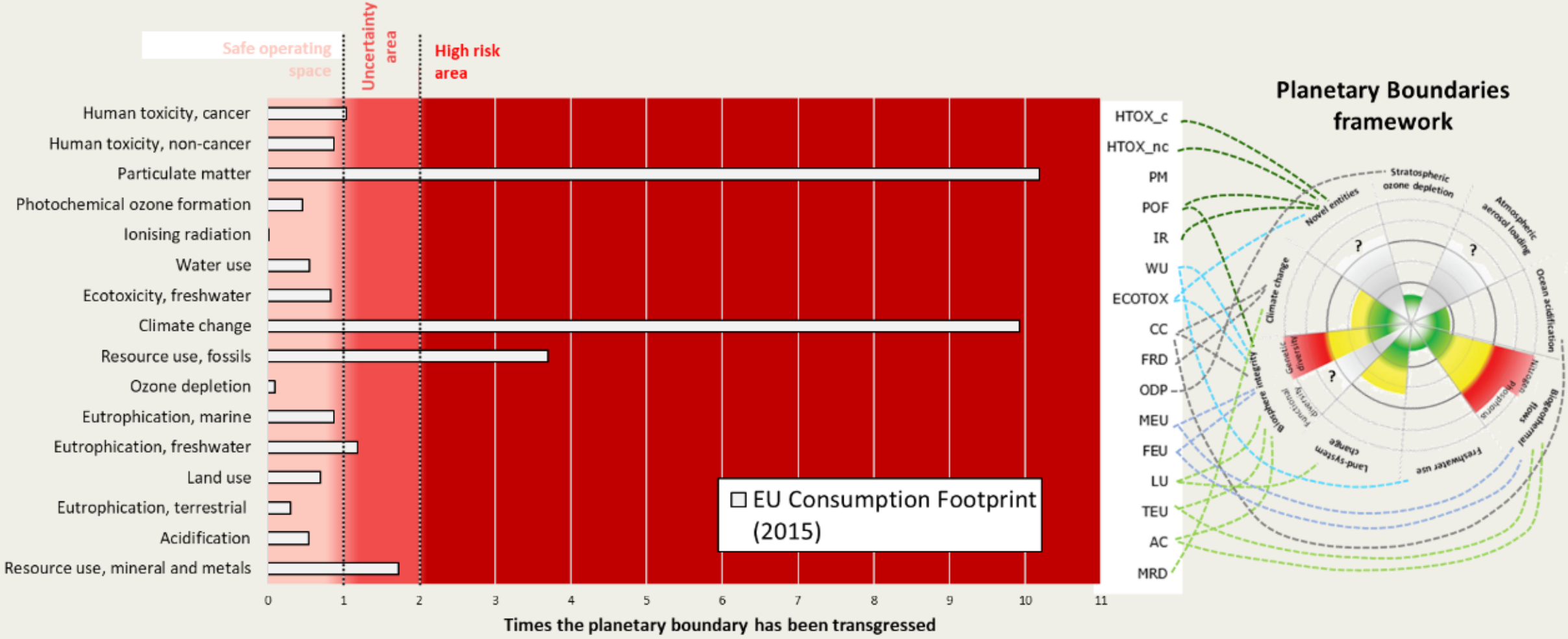
EU consumption per capita exceeds planetary boundaries



The greatest part of this impact is generated during production

The non-use phases represent:

- **50** to **60**% of the impact on **climate change** – CC of EU consumption (according to the modelling used)
- **93** to **96%** of the impact on resource use – minerals and metals – MRD
- **65** to **75%** of the impact on particulate matter – PM
- **35** to **60%** of the impact on the resource use, fossils – FRD

Source: JRC (2019) – Sala S., Benini L., Beylot A., Castellani V., Cerutti A., Corrado S., Crenna E., Diaconu E., Sanyé-Mengual E., Secchi M., Sinkko T., Pant R (2019) Consumption and Consumer Footprint: methodology and results. Indicators and Assessment of the environmental impact of EU consumption, Fig. 58.

What is Circular Economy?

- European Commission “Circular Economy Action Plan” of 2015 definition:

> An economy “*where the value of products, materials and resources is **maintained** in the economy **for as long as possible**, and the generation of waste minimised*”.

- A central component of the EU’s efforts to develop a sustainable, low carbon, resource efficient and competitive economy

Circular Economy: illustration

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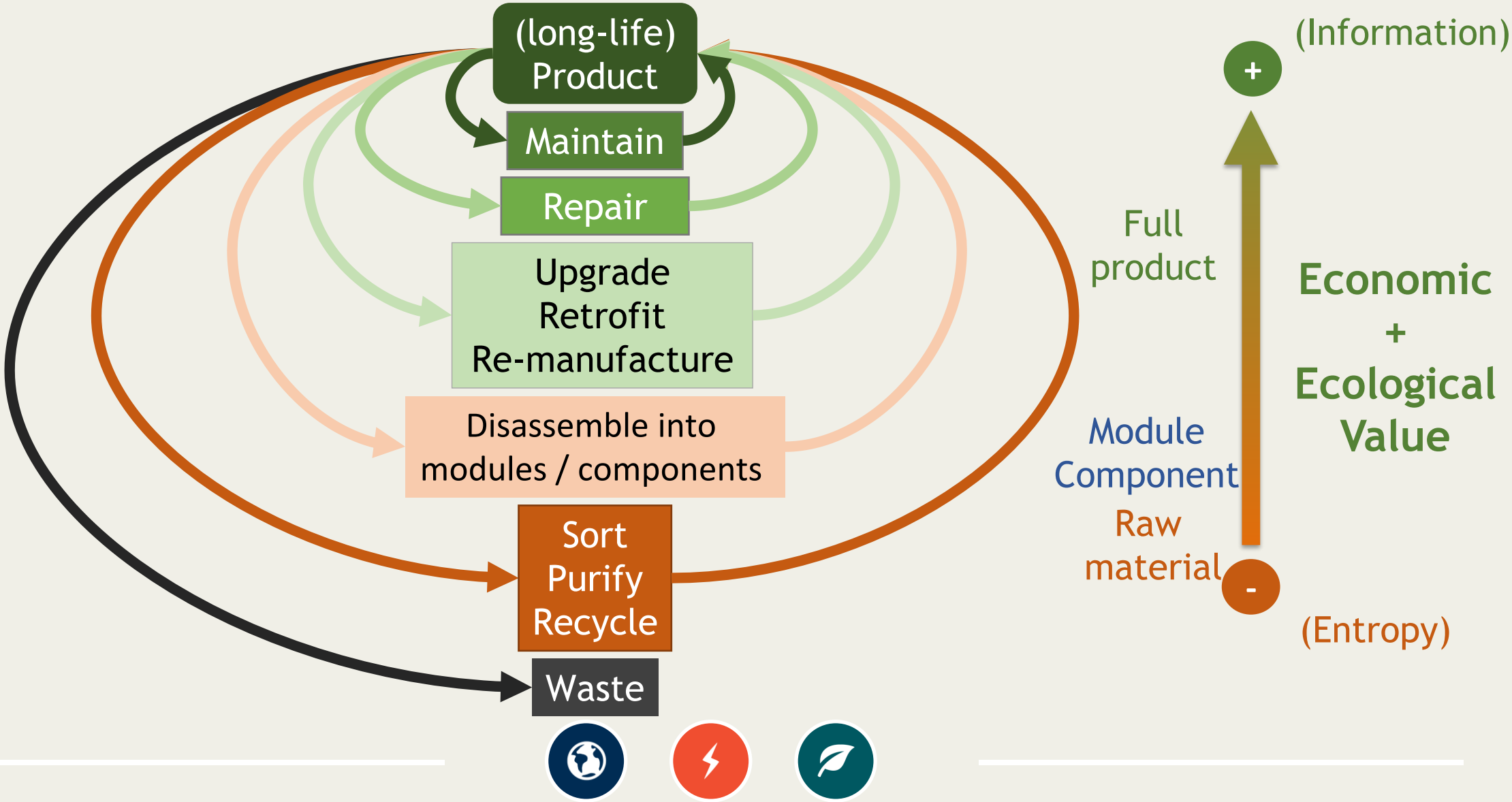

Transition to a Circular Economy

- **Longer lifetime** of products via:
  - Better design and manufacture
  - More maintenance, repair, upgrade, re-use
- **More intense use** via:
  - Sharing
  - Lending or leasing models
- **Less use of primary basic metals, materials or chemicals** via:
  - Use of **sustainably-sourced renewable** materials
  - Use of **recycled** materials:
    - Recyclable products and materials
    - Avoidance of hazardous substances
    - Higher-quality sorting
    - Increased recycling

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Combined effect: less impact

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Circular Economy Action Plan 2015

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"Closing the loop - An EU action plan for the Circular Economy" COM(2015) 614 final

- Requirements on products: **durability**, **repairability**, **recyclability**
- **Extended Producer Responsibility** at end of life
- Guidance on and promotion of **industrial symbiosis**
- Research on **premature obsolescence**
- Circular Economy criteria in **Green Public Procurement**
- More ambitious **recycling targets** for municipal waste
- **Quality standards** for secondary raw materials
- Reflection on the handling of **legacy hazardous substances** in products being recycled
- **Plastics**: ban of some single-use items
- Food waste, Critical Raw Materials, construction and demolition waste, bio-based materials
- **Research & Innovation**

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Setting the stage

Circular Economy Action Plan 2020

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Circular Economy Action Plan - For a cleaner and more competitive Europe
COM/2020/98 final

- **Sustainable Product Initiative** on Eco-design + product passport + support for circular business models
- **Right to repair**, Substantiating green claims
- Mandatory **Green Public Procurement** criteria
- Circularity criteria in revision of **Industrial Emissions Directive**
- **Priority application** to ICT, batteries, packaging, plastics, textiles, construction, food, water, nutrients
- Higher targets for recycling of **municipal waste**
- Requirements for **recycled material content** in products
- Restrictions to **extra-EU export of waste**

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Increasing the ambition

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Circular Economy indicators

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Circular Economy indicators

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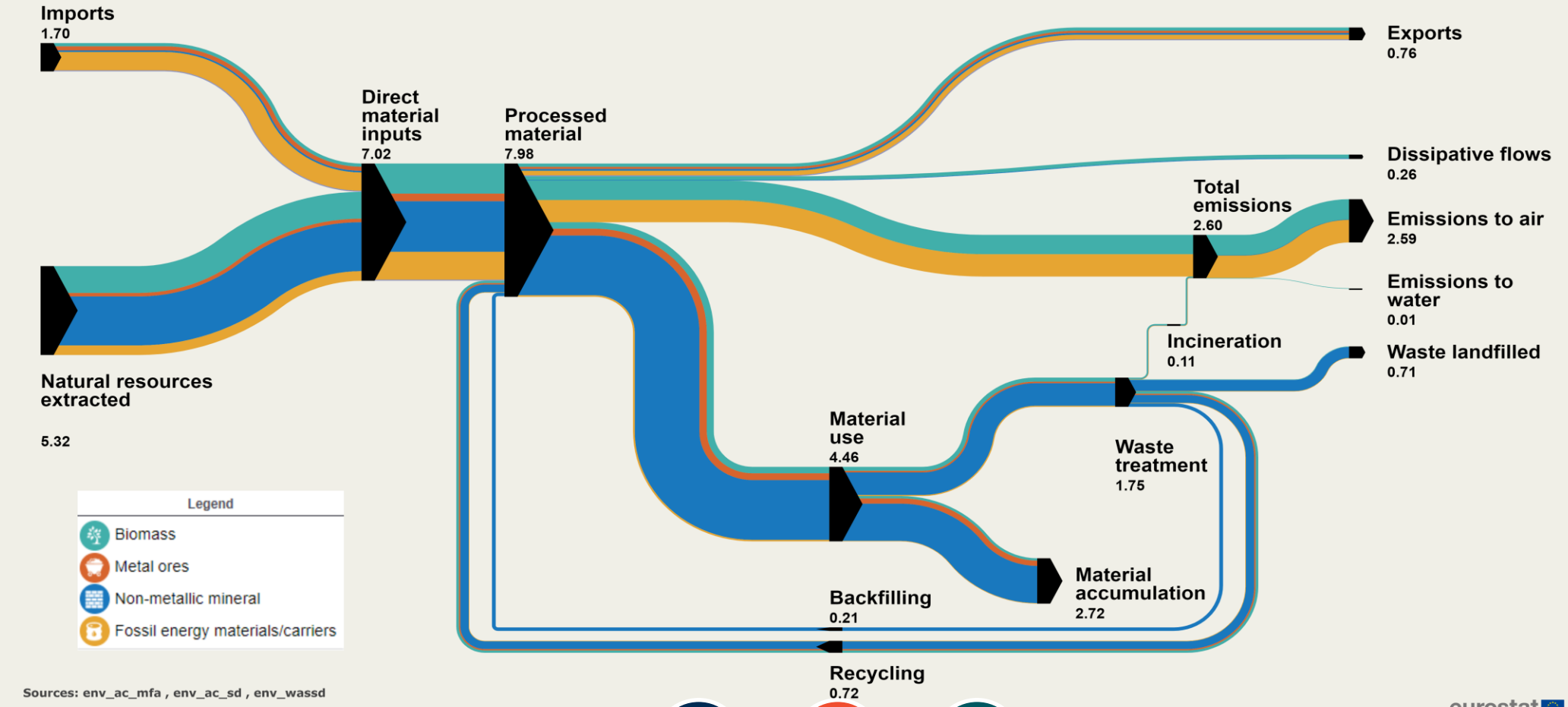
Material flow diagrams 2017 for

European Union (27 countries)

Gigatonnes



Sources: env_ac_mfa , env_ac_sd , env_wassd

eurostat

Circular Economy indicators

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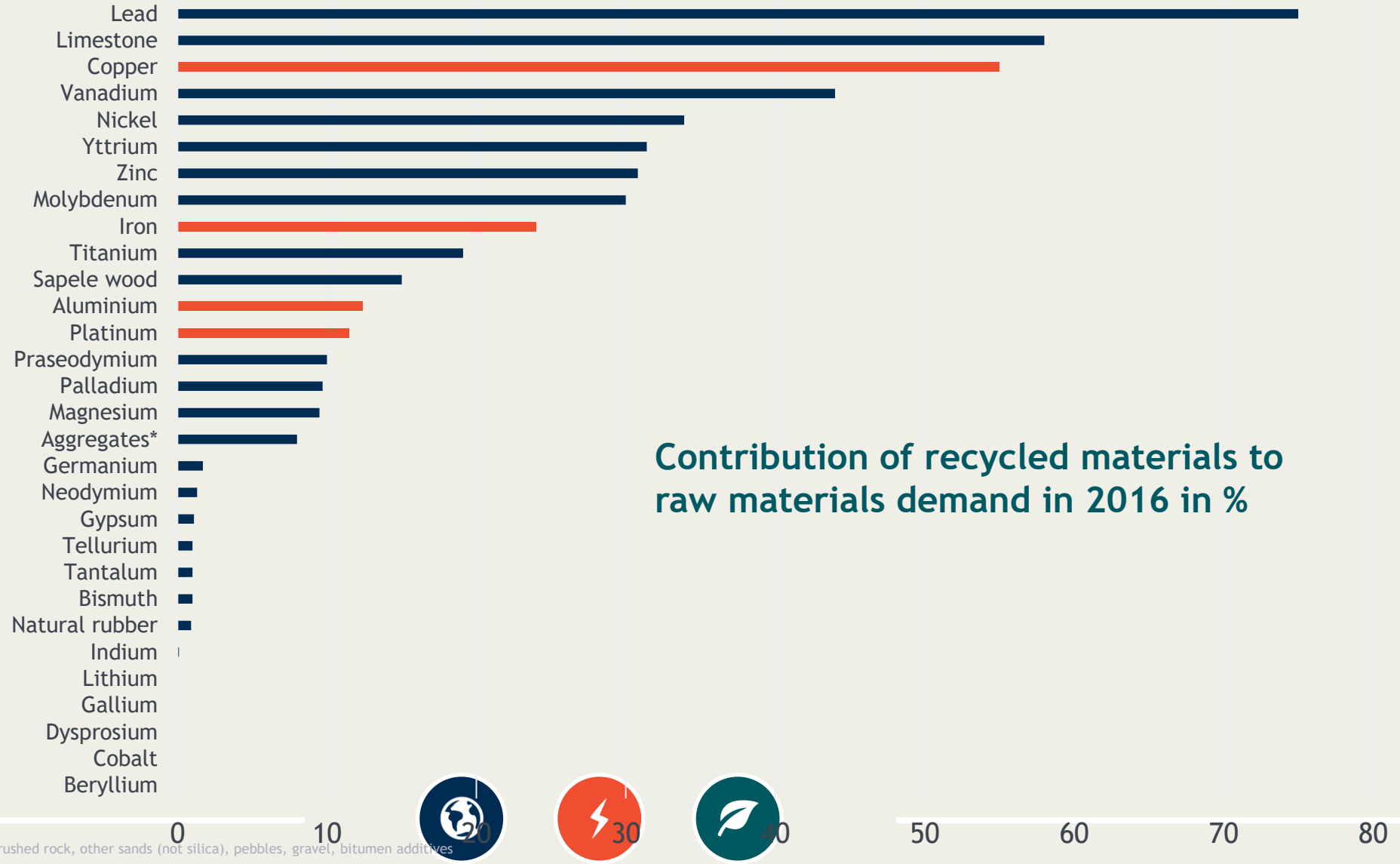

Contribution of recycled materials to raw materials demand in 2016 in %

*crushed rock, other sands (not silica), pebbles, gravel, bitumen additives

Impacts on employment volume and competitive position

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Employment volume

- Convergent quantitative studies + interviews
- Limited, but **positive**, overall impact: + 250 to 700 thousand jobs for EU (0-2% increase in employment)
- Sector **contrasts**:
  - **Positive:** waste management, repair, maintenance, recycling, re-manufacturing, re-use
  - **Negative:** extractive; primary basic metals, materials & chemicals; some durable goods
  - **Uncertainties**: retail, construction, textile & clothing
- Depends upon policy, technological innovation, and the capacity of sectors to adapt and capitalize on new opportunities

Competitive position

- Interviews
- **Positive** effects on **non-cost** competitiveness
  - Better match with **customer expectations** and **societal trends**
  - **Higher-quality** products
  - Anticipation of **regulatory change**
  - Higher **attractiveness** of sectors for young + qualified workers
- **Potential issues** on **cost** competitiveness
  - Higher price of secondary materials vs. primary
  - Need to ensure a level-playing field vs. less sustainable companies
  - Investment needs (esp. for SMEs)

Impacts on qualifications & skills, forms & organisation of work, health & safety

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Qualifications & skills

- Convergent studies + interviews
- **Higher** requirements:
  - Work on irregular input, adaptability (using recycled materials);
  - Reliability, quality (in design + manufacturing for longer-life products);
  - Use of complex equipment (automated sorting + recycling);
- Increase in **mid-level** qualifications (repair, maintenance)

Forms & organisation of work

- Work relationships: concerns expressed by **workers**
  - Change in economic activity towards circularity => potential change in **applicable collective agreement**
  - Request by workers: to be discussed in **Social Dialogue**
- Effects of Circular Economy very dependent on company
  - **Concerns**:
    - "sharing" economy
    - informal economy
  - **Start-up model** of new, innovative businesses: less familiar with social dialogue
  - "Advanced" companies for Circular Economy: also on social dimension

Health & safety

- Convergent studies + interviews
- Handling of **legacy hazardous substances**
- Waste management
- Usage of secondary raw materials (e.g. dust from recovered construction materials)

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Case studies

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LC Paper - ES

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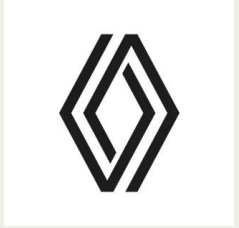
LC Paper

- SME
- eco-friendly manufacturing of kraft-paper and tissues
- Transition since 1993 towards low-impact processes
- Increase in work-force. Internalisation of packaging
- Transition at pace compatible with training of workers

Renault Group - FR



- Major car manufacturer
- Conversion of Flins plant (FR) into a “RE-Factory” dedicated to Circular Economy: retrofit, re-energy (batteries), re-start (innovation), recycle
- Large changes in qualifications
- Large training needs
- Disagreements among social partners on inclusiveness of the process

MUD Jeans - NL

- SME, start-up
- Design, sub-contracting and supply of jeans under a “rent and lease” model. Price comparable to high-end brand, accepted by eco-conscious clients (niche market)
- Choice of sub-contractor (Tunisia) with good social and health & safety credentials
- Removes harmful processes (sand-blasting) and usage of worker-friendly technologies (dry indigo, laser treatment)

BASF – DE

- Large multinational
- Chemical recycling of plastics
- Pilot project led with whole value chain
- Same process used for primary (naphtha) and secondary (pyrolysis oil) raw material
- Very low impact on labour

Saint-Gobain - FR

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- Large multinational
- Recycling of plaster plates
- Complete value chain created for collection + processing of used products (170 collection sites in FR)
- Increased competitiveness (sustainability labels for buildings)
- Evolution in skills needed (less controlled raw material)
- Health & safety issue being monitored: dust

Abfallwirtschaftsbetrieb München (AWM Munich) – DE

- Service of General Interest
- Waste management
- Composting, recycling, sale of second-hand items
- Rise in skills anticipated for recovery, reuse and repair

General conclusion

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The transition to Circular Economy is there – and deserves attention

- Very strong environmental and climate rationale
- Emerging phenomenon, some front-runners
- Employment consequences currently foreseen as moderate, and positive
- Differentiation per sector
- Increases in skills & qualification
- Possible changes in applicable collective agreement
- Need for anticipation of change + social dialogue!

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Thank you for your attention, please contact us for more information

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