



Why do consumption-based emissions matter for EU policies?

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European Commission – Joint Research Centre

Beyond borders: How can the EU become a leader in consumption-based emissions reduction? - 9 Jan 2024

Life cycle thinking: A supply chain perspective

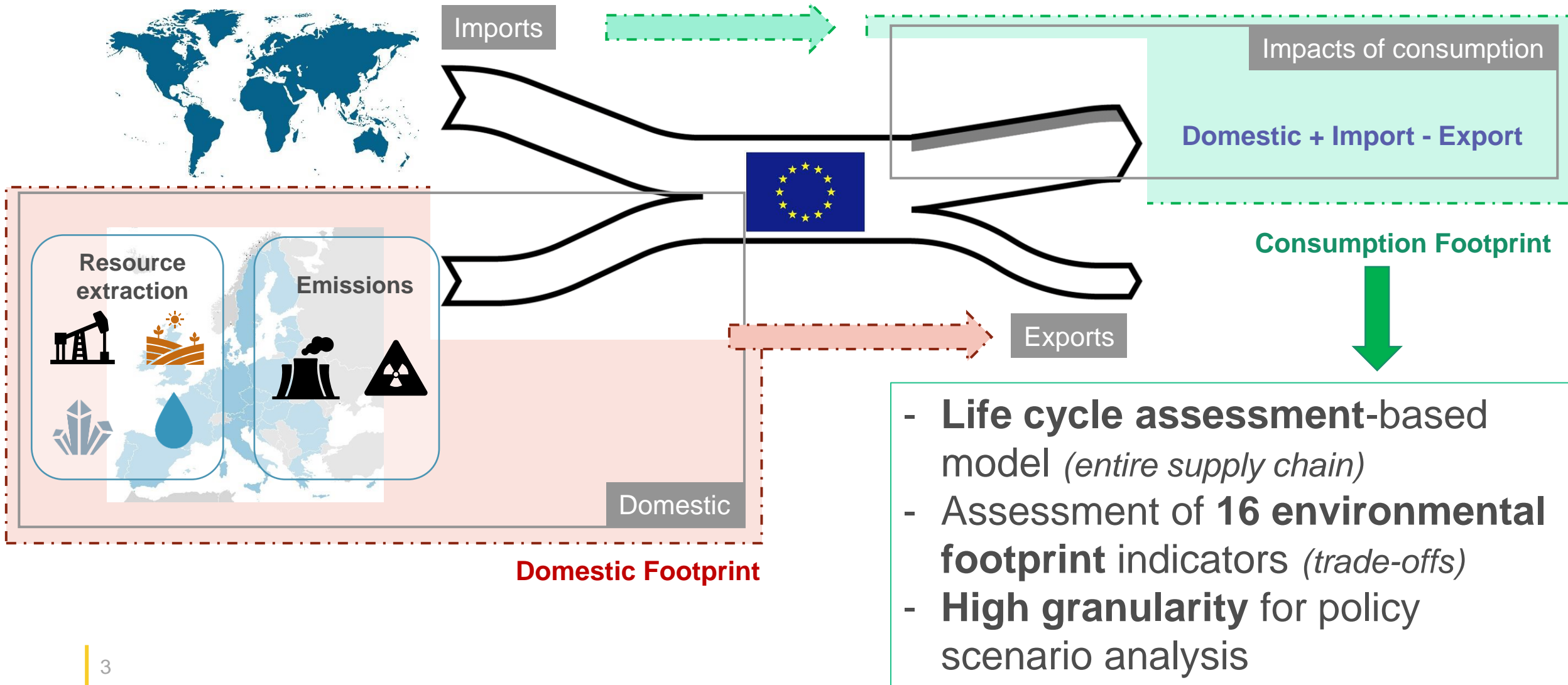


Some part of the supply chain might occur outside the EU



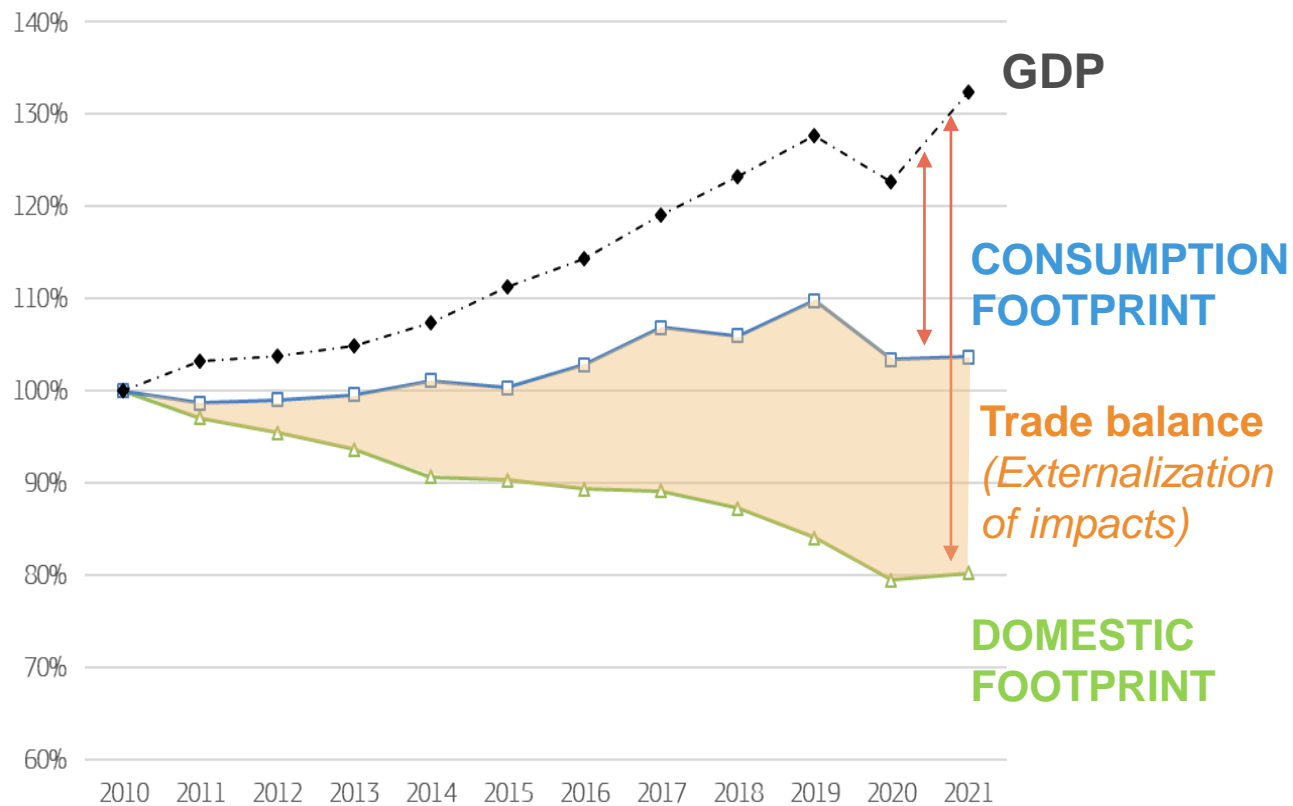
How to account for such impacts?

Territorial vs. Consumption impacts: The JRC framework

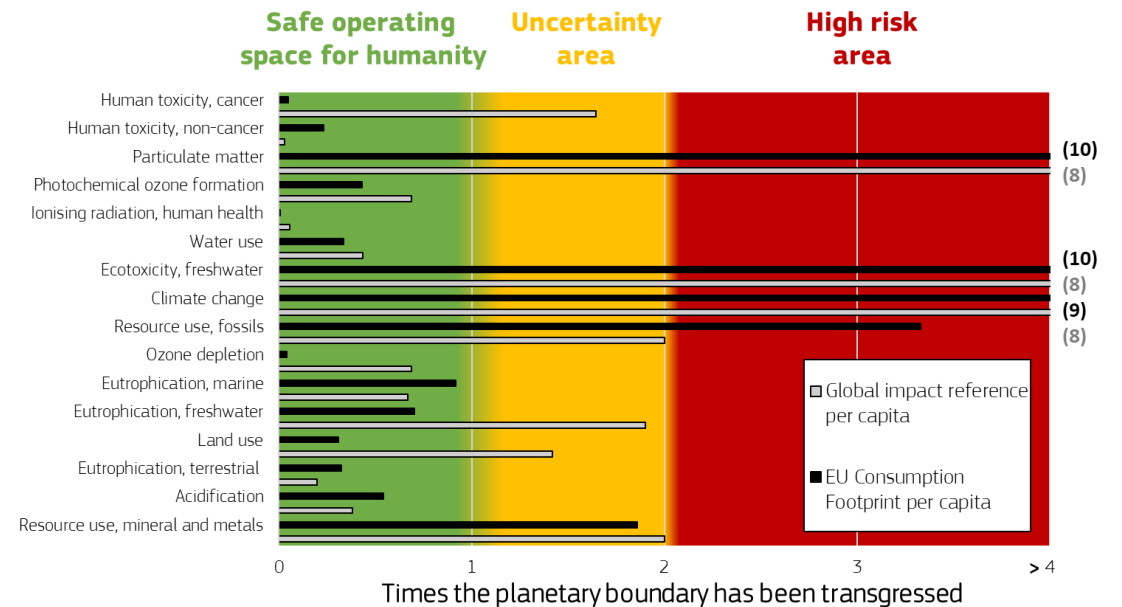


Why is a consumption perspective important?

Environmental impact decoupling from GDP

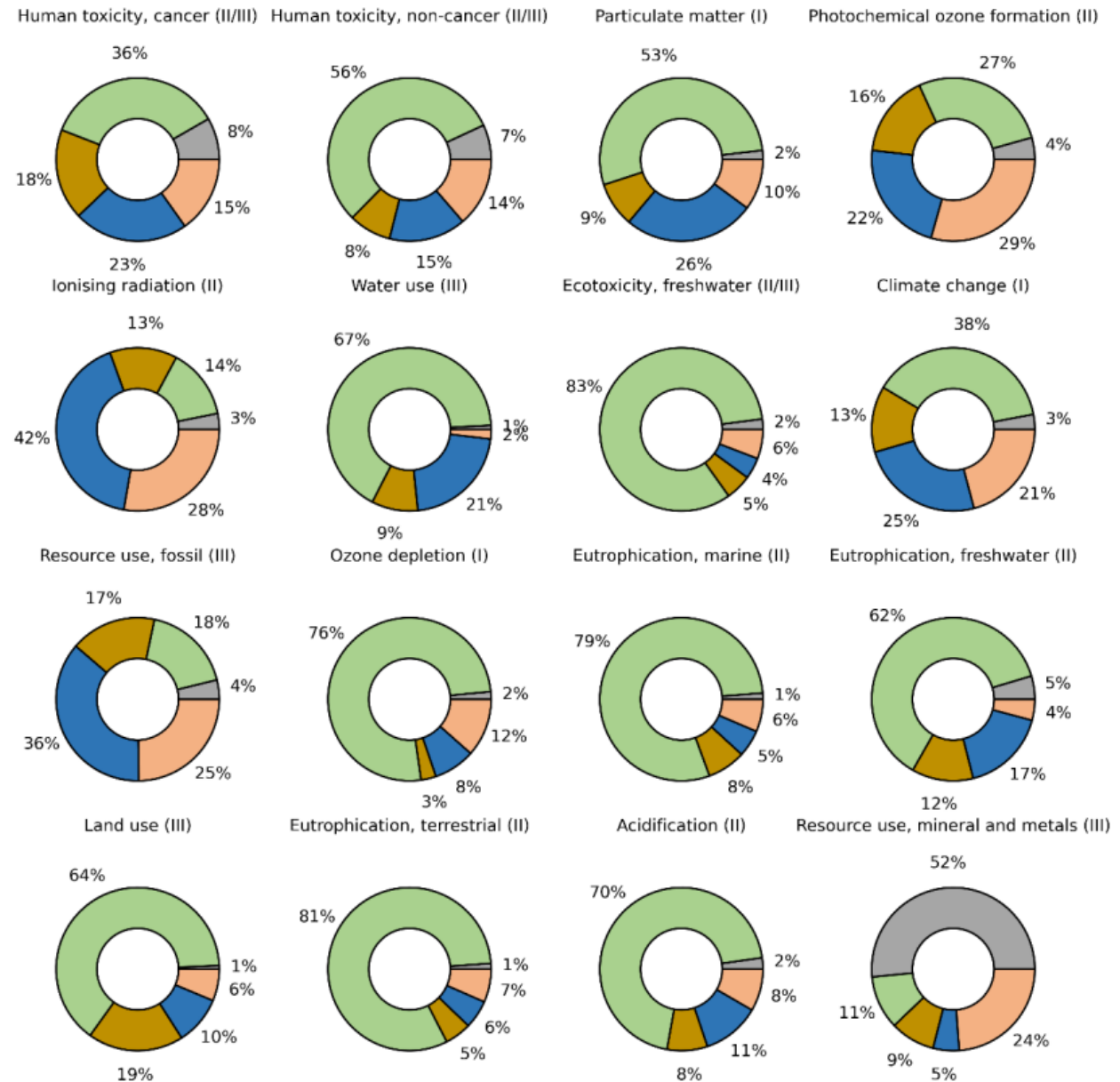


Current consumption patterns transgress the limits of our planet in different impact categories.



The relevance of a multi-dimensional assessment

- Consumption Footprint per capita (2021) by area of consumption
- Areas of consumption have a different role depending on the impact categories
- Differences in consumption patterns can have a different effect



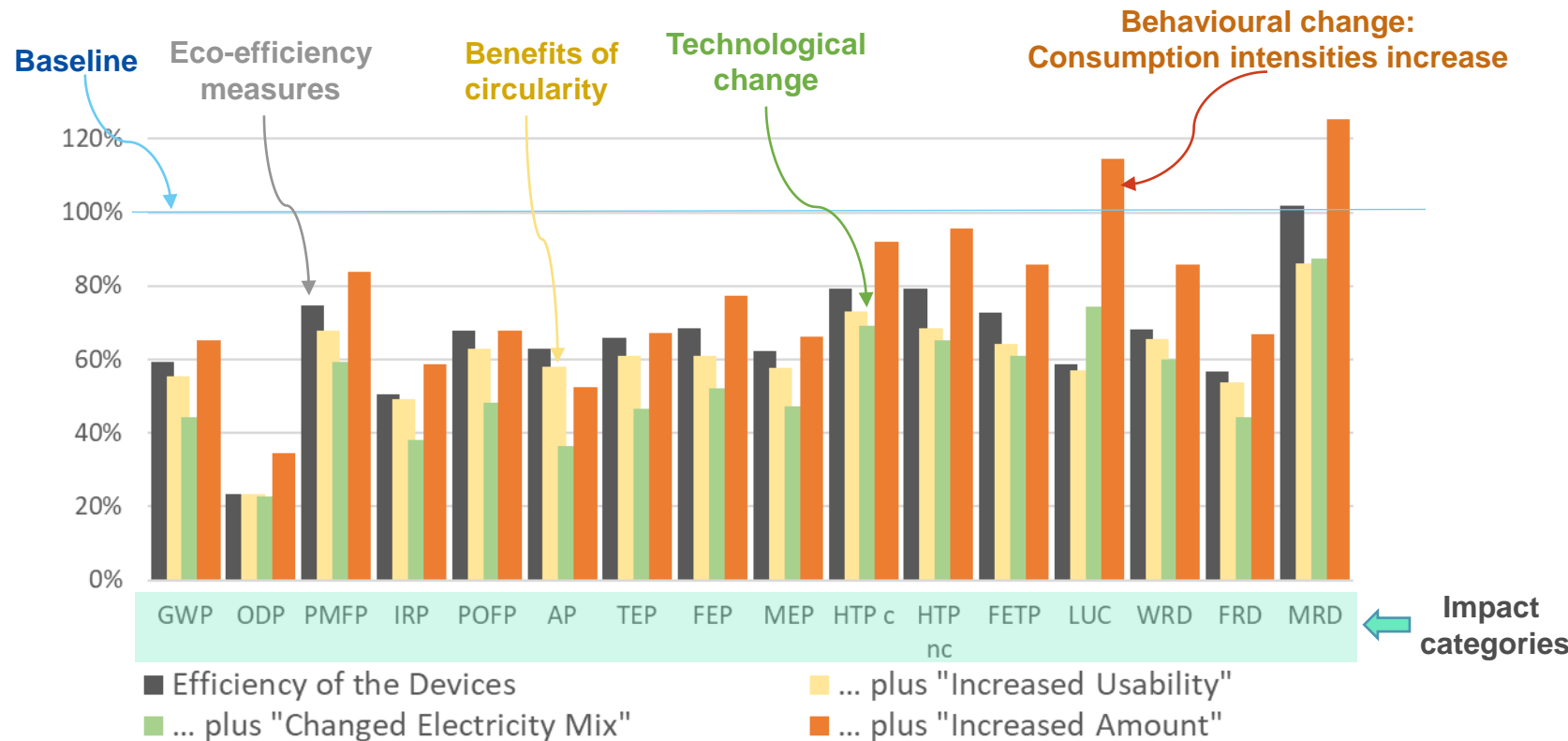
■ Food
 ■ Mobility
 ■ Housing
 ■ Household goods
 ■ Appliances

What are the implications of consumption patterns?

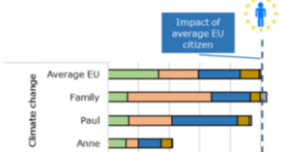
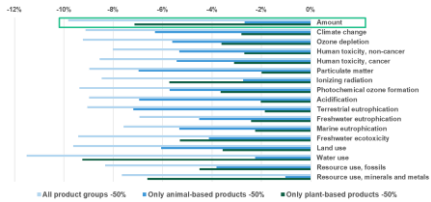
Example: Green transitions applied to appliances

Eco-efficiency measures can be offset due to increased consumption.

Potential **trade-offs** for specific impacts.



Features of consumption-based footprints



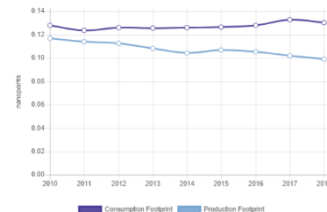
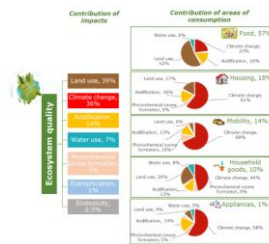
Evaluation of lifestyles and behavioural change

Testing green transitions and policy scenarios

Impact on different SDGs

Biodiversity footprint

Comparing production and consumption



Monitoring trends over time



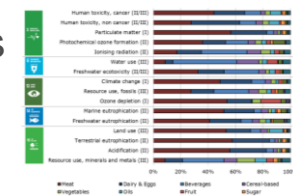
Environmental impact decoupling from GDP



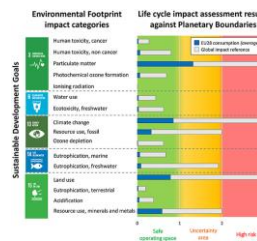
Monitoring of Sustainable Development Goals (especially SDG 12)



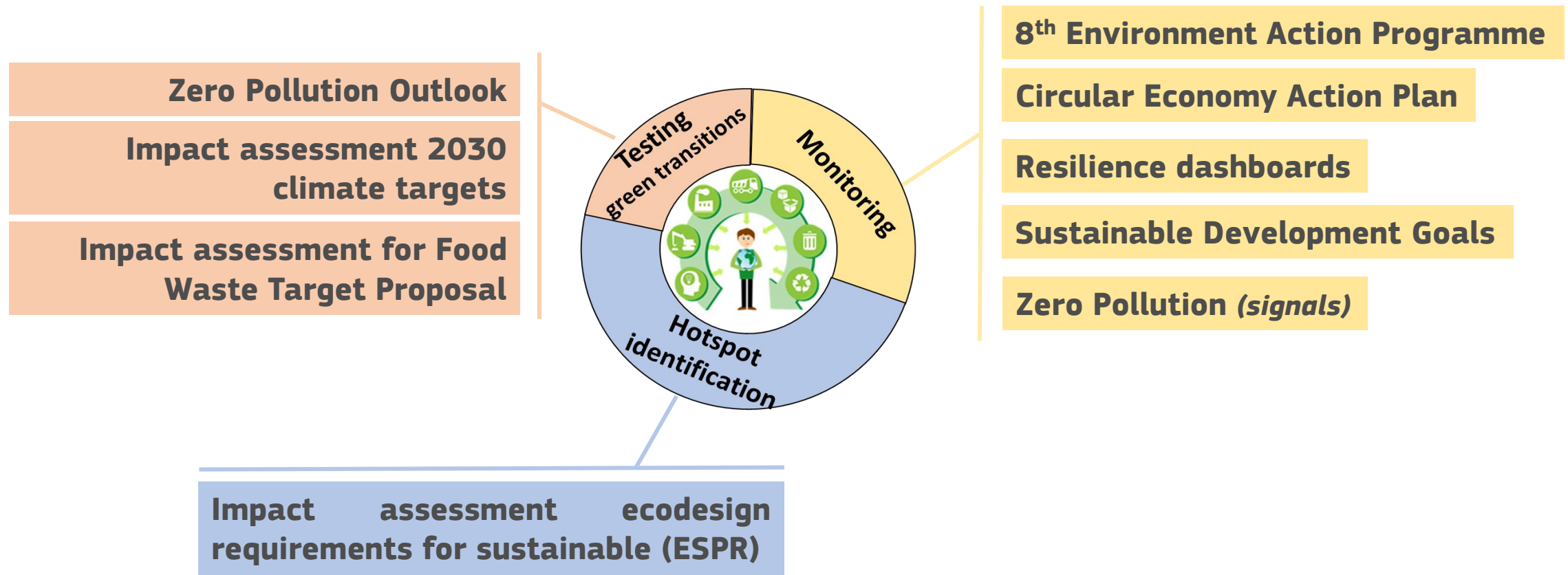
Hotspot: Areas of consumption, products, life cycle stages, substances



Transgressing Planetary Boundaries



Examples of policy use of consumption footprint



The Consumption Footprint at national level

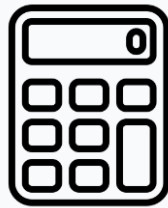
Available data at Member State level



[Consumption Footprint Platform](#)

- Consumption Footprint data for all EU-27 Member States
- Pilot: Dynamic data (time and spatial variation)

Possibility of customization



[Member States - Consumption Footprint Tool](#)

- Countries can access JRC data and modify consumption data
- Use of national data sources
- Calculation tool

Pilot study: Germany



[Joint UBA-JRC study](#)

- Comparison of JRC data with other national data sources (*e.g., surveys*)
- Need to complement with JRC data (*e.g., household goods*)
- Similar footprint results

Concluding remarks

JRC Consumption Footprint is being used in multiple EC monitoring frameworks **coherence across policies**

Data are based on official **production and consumption statistics** combined with environmental modelling **life cycle assessment perspective**

Challenges

Data quality is key – a joint effort

Opportunities

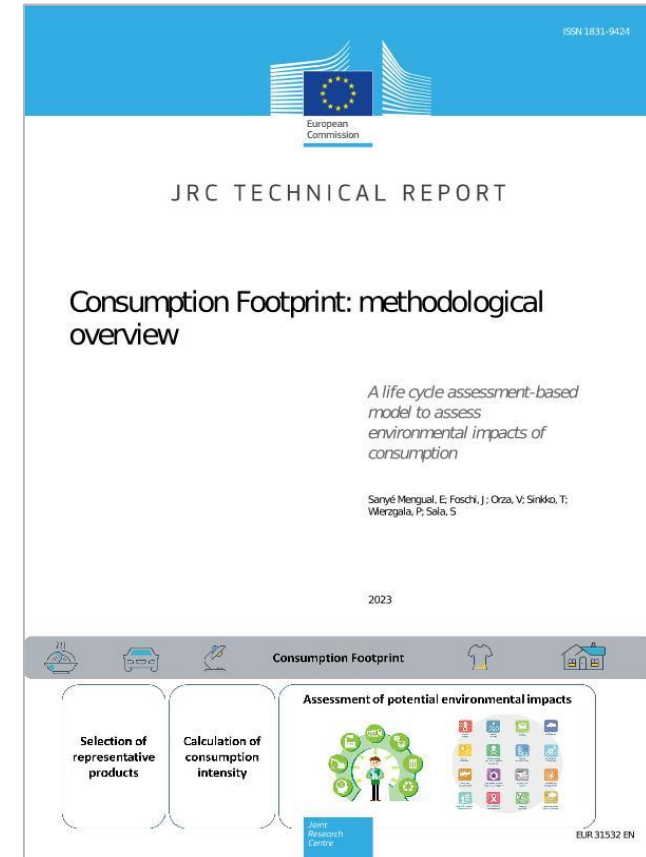
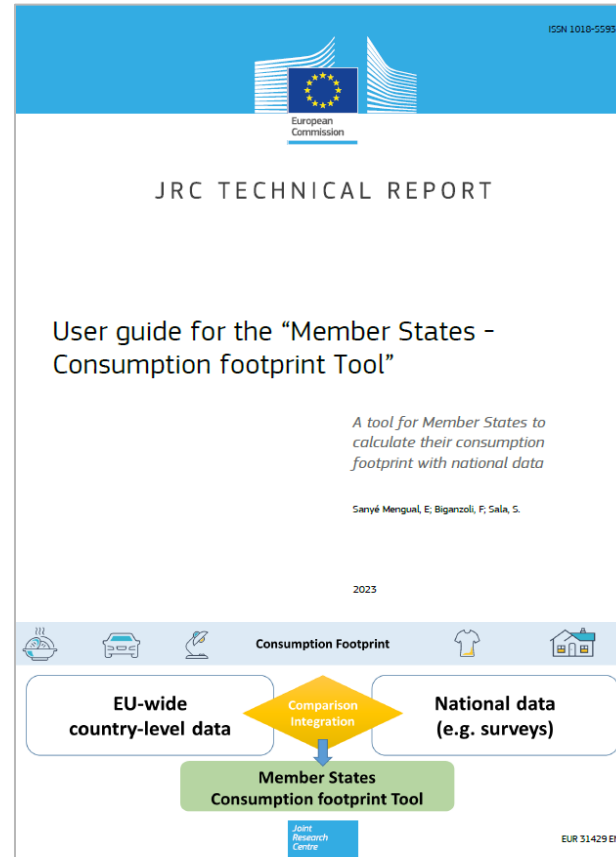
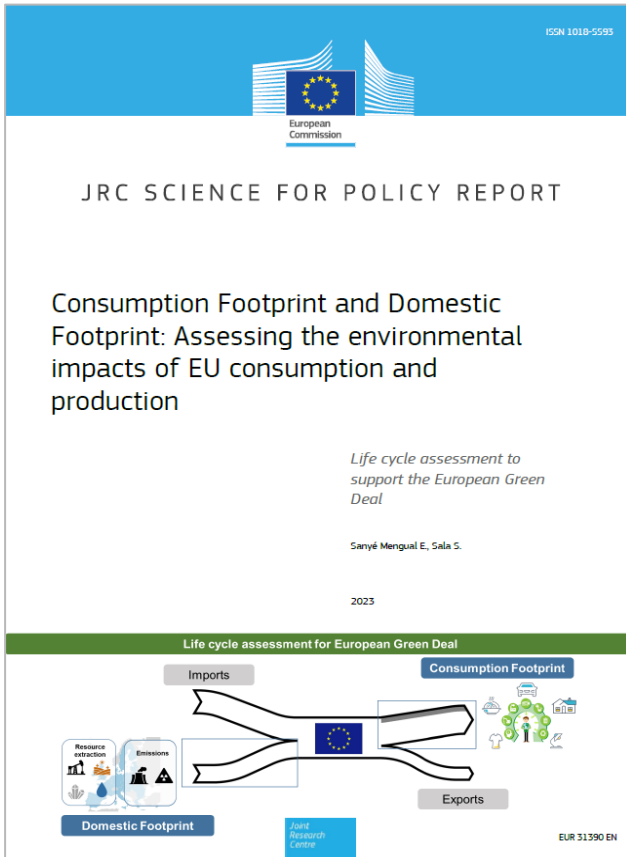
MS-tool allows **MS to test** alternative data sources

Define and monitor consumption footprint **targets**

(relation to Planetary Boundaries – science-based)

Advantages with other models *(alignment with Environmental Footprint)*

Latest publications



Reports available at:

<https://eplca.jrc.ec.europa.eu/sustainableconsumption.html>

Consumer Footprint Calculator for citizens:

<https://eplca.jrc.ec.europa.eu/ConsumerFootprint.html>

Thank you

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