

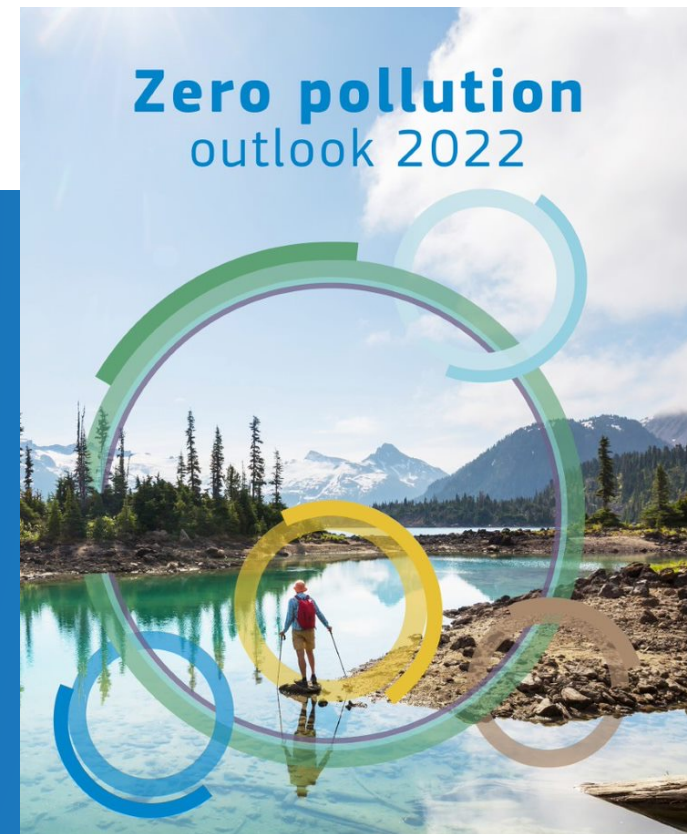


# The Consumption Footprint Outlook

*Land Resources Unit, Joint Research Centre*

*Zero Pollution Stakeholder Meeting, 14 December 2022*

Joint  
Research  
Centre



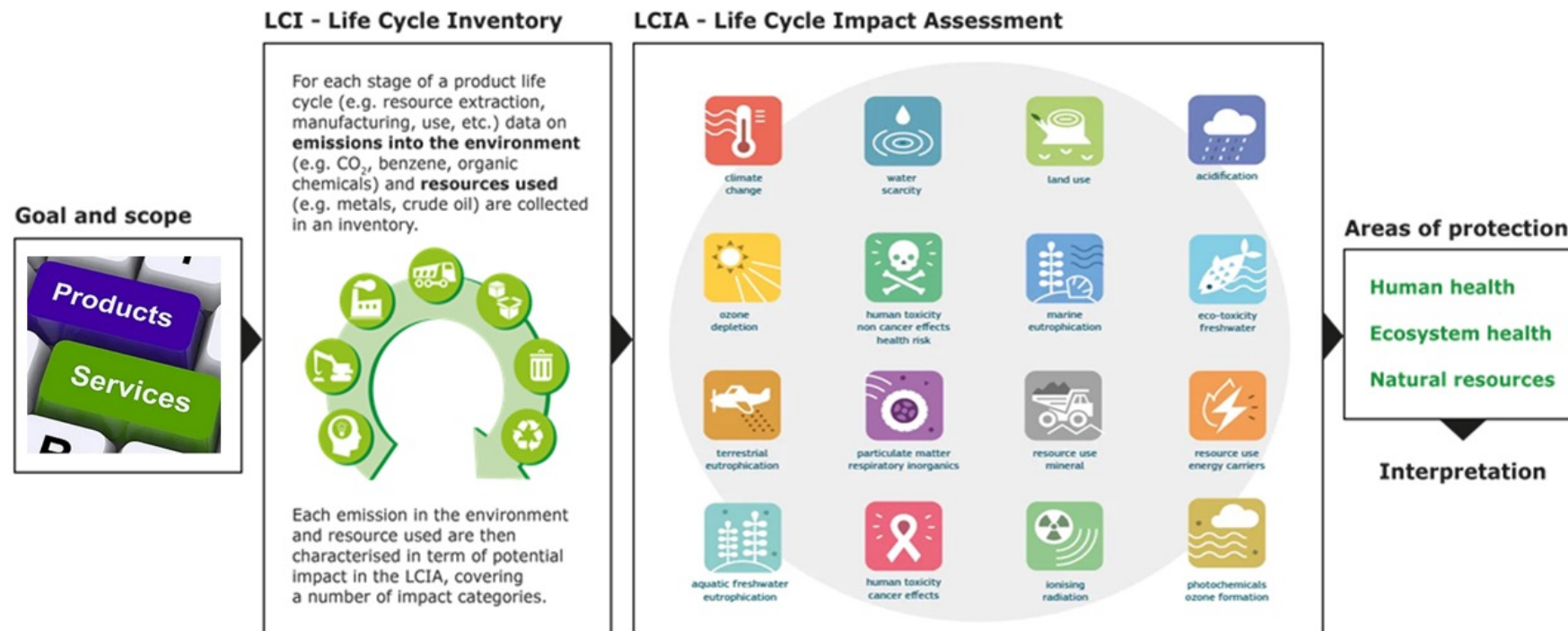
# Content

- The JRC Consumption Footprint and its policy uses
- Trends and hotspots of the EU Consumption Footprint
- The Consumption Footprint Outlook
- Take-home messages

# What is the Consumption Footprint?

A set of **16 life cycle-based indicators** to assess the **environmental impacts of the consumption patterns at EU and Member State levels.**

**Life cycle assessment**, is a **systematic approach** for the evaluation of **environmental impacts of products along their entire value chain**, from extraction of raw materials to waste



# How is the Consumption Footprint assessed?

## Selection of representative products



**Food**  
(45 products)



**Mobility**  
(34 vehicles)



**Housing**  
(30 archetypes)



**Household goods**  
(37 products)



**Appliances**  
(18 products)

## Calculation of consumption intensity

Quantification of the consumption intensity of each representative product:

- Apparent consumption = production + imports – exports
- Modelling of entire sector (i.e., housing, mobility)

Data from, e.g., Eurostat, FAOstat, literature

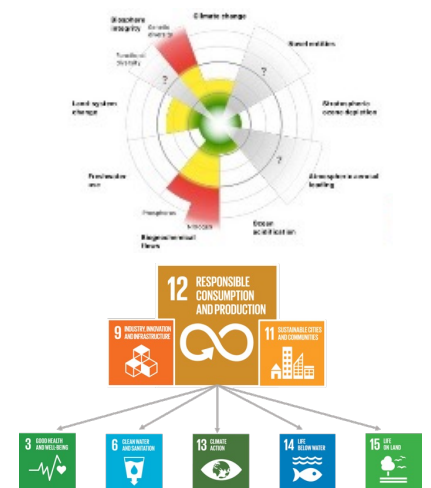
## Assessment of potential environmental impacts

### Environmental Footprint

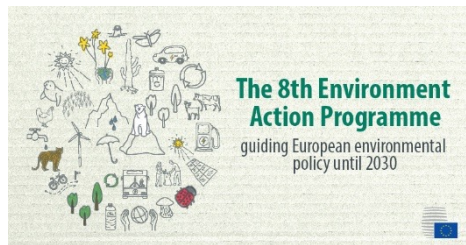
16 impact categories



### Against Planetary Boundaries and Sustainable Development Goals



# What are the policy uses of the Consumption Footprint?



Monitoring trends over time

Consumption footprint is an **headline indicator of the 8<sup>th</sup> EAP** to assess the progress towards “living well, within planetary boundaries”

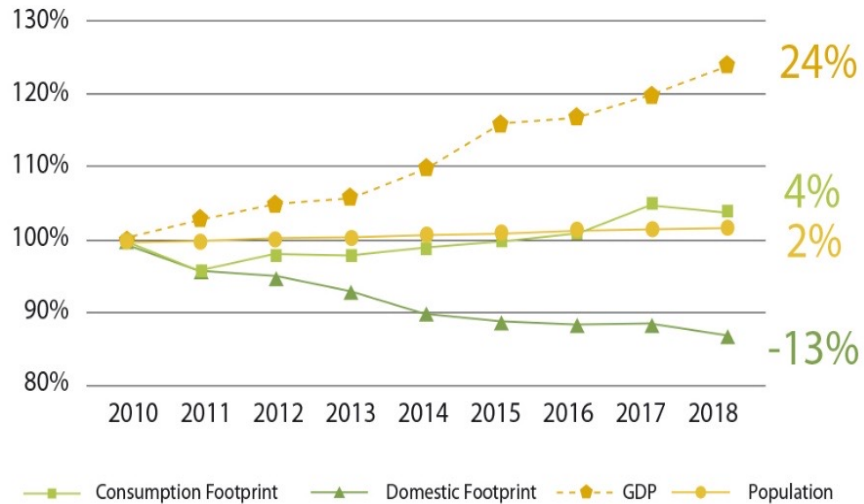


Identifying environmental hotspots at different levels (*area of consumption, product groups, individual products, life cycle stage and pollutants*)

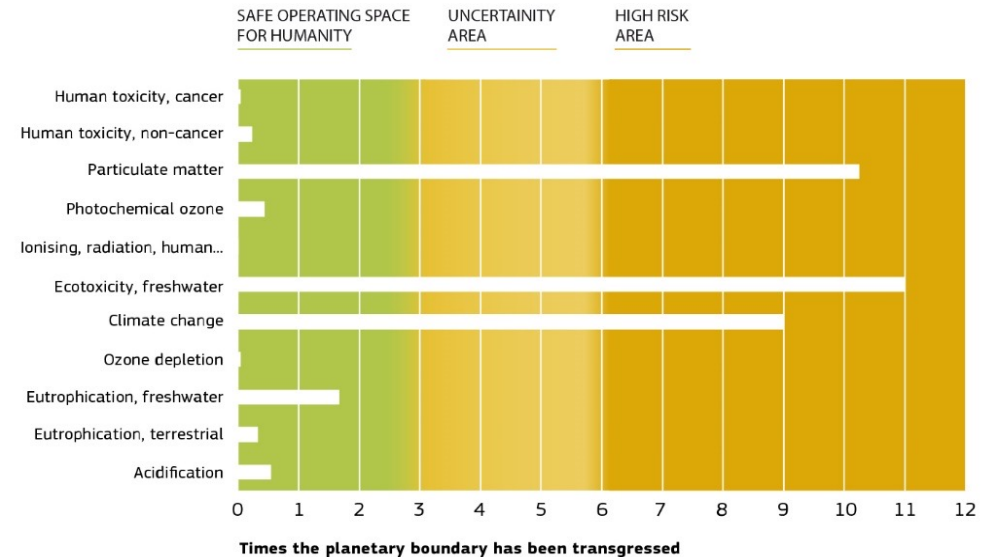
Testing policy option and green transition scenarios (Outlook)



# How has the Consumption Footprint evolved over time?



- The environmental impacts of EU consumption have (Consumption Footprint) **increased by 4%**
- The environmental impact of activities taking place within the EU (the EU domestic footprint) decreased by 13%

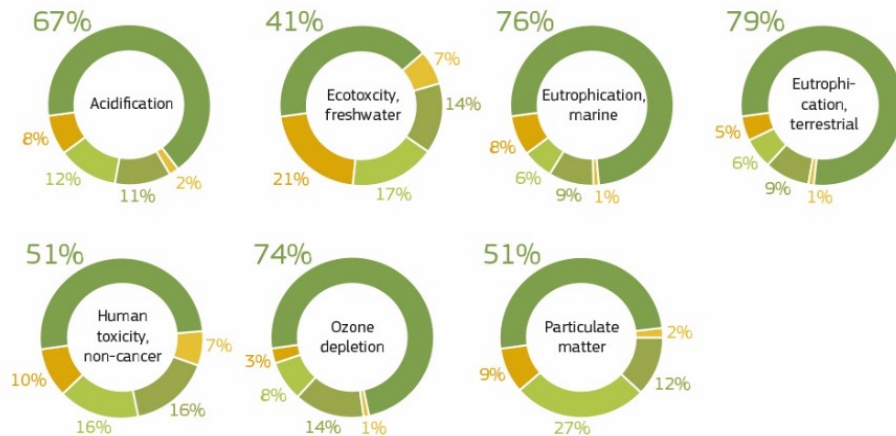


The current impacts of consumption **have transgressed several of the planetary boundaries associated with emissions to the environment** (air, water and soil).

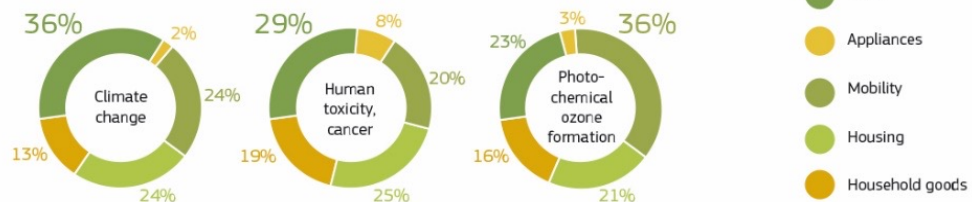
# What are the hotspots of impacts due to pollution?



## IMPACTS DOMINATED BY FOOD CONSUMPTION



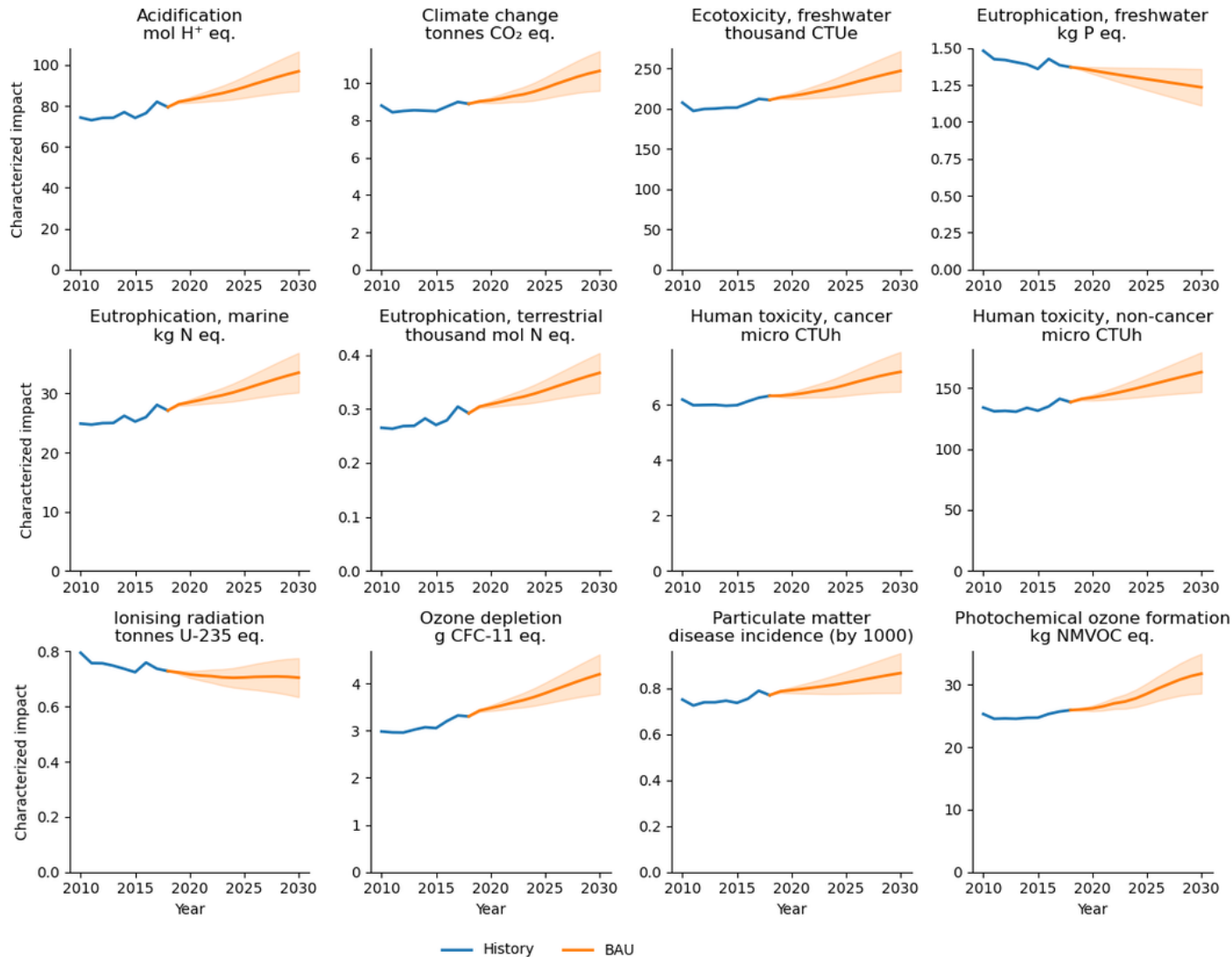
## IMPACTS DOMINATED BY FOOD, HOUSING AND MOBILITY:



The current impacts of EU consumption on environmental pollution are dominated by:

- Food – primary production (e.g., nutrients)
- Housing – energy consumption and wastewater
- Mobility – fuel consumption

# What are the expected trends?

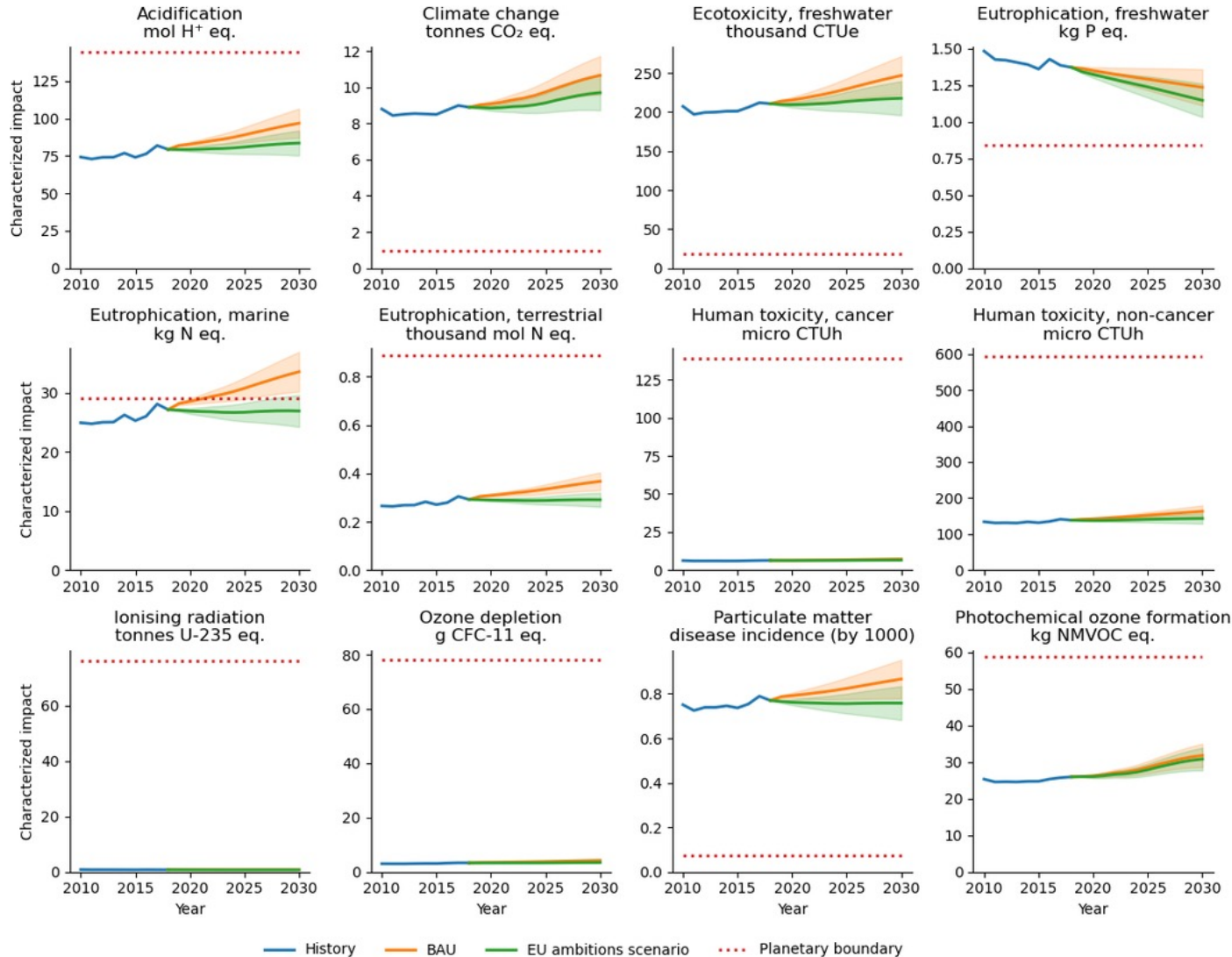


In a **business-as-usual (BAU)** context, the environmental impacts of EU consumption are **projected to increase until 2030** due to:

- further development of the economy – *e.g., projected GDP*
- associated consumption patterns – *e.g., expected vehicles and housing stock evolution*



# What are the expected trends?



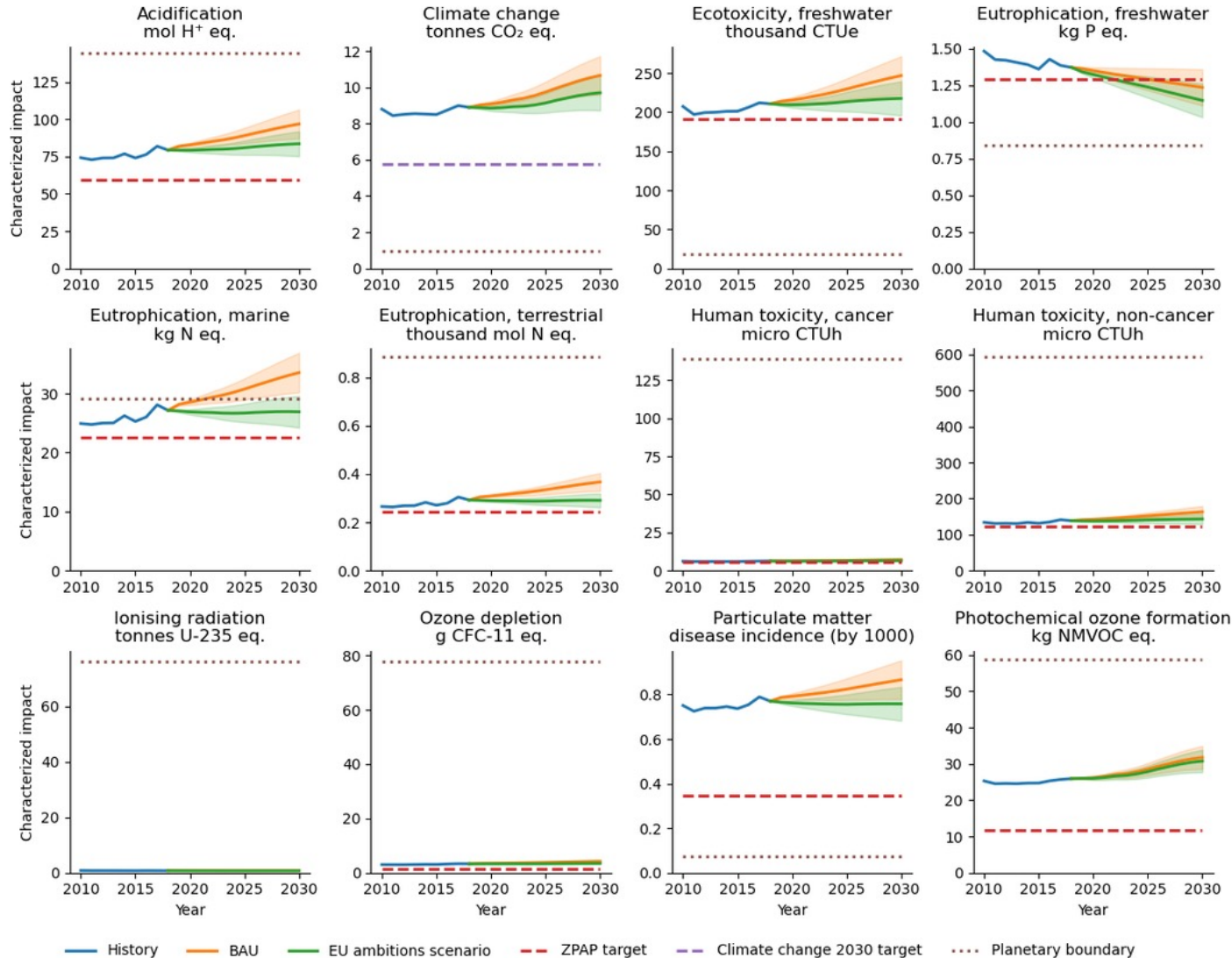
When considering **EU policy ambitions** regarding:

- Food: Farm to Fork Strategy
- Housing: Renovation Wave
- Mobility: Clean Vehicles Directive

Consumption Footprint is still **projected to increase until 2030** although to a lesser extent than (BAU)

Such trends indicate that the consumption footprint will **remain beyond the planetary boundaries** for several categories related to environmental pollution...

# What are the expected trends?

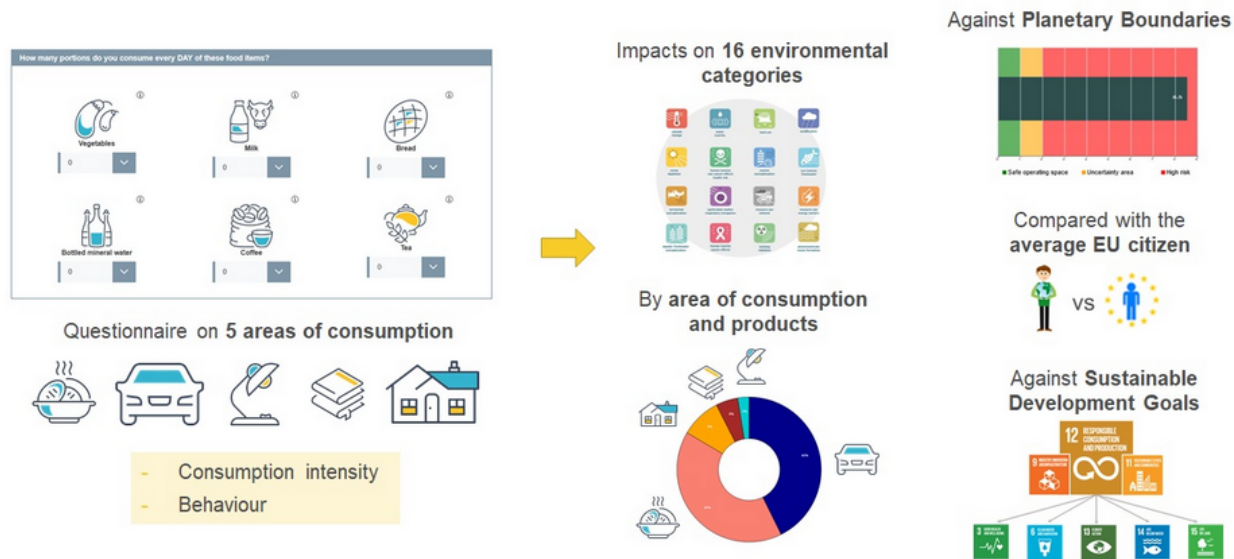


... as well as beyond some **Zero Pollution targets by 2030.**

# What is your contribution to zero pollution?

## Consumer Footprint Calculator

The Consumer Footprint Calculator allows EU citizens to calculate the environmental impacts of their consumption patterns and to evaluate how changes in their lifestyle may affect their personal footprint.



The assessment of the consumption patterns is performed for five areas of consumption, namely food, housing, mobility, household goods, and appliances. The tool follows a life cycle-based approach that considers the impacts occurring along the entire life cycle of the consumed products, i.e. all the resource used and emissions to the environment taking place from the raw materials extraction to the end of life. The environmental impacts of the consumption patterns are evaluated with the 16 environmental impact indicators of the Environmental Footprint method and the resulting single weighted score, compared to planetary boundaries, and compared to the environmental burdens of the consumption pattern of the average EU citizen.

Calculate your consumer footprint!

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

## Calculate your Consumer footprint

and compare your environmental profile with an average EU citizen or against planetary boundaries

# Take-home messages

- It is **crucial to include a consumption perspective** in the outlook of EU environmental impacts to consider pollution along the supply chains
- Impacts due EU consumption are **projected to increase until 2030**, led by the areas of consumption of food, housing and mobility
- These trends keep the EU consumption footprint **beyond the limits of the planet** and projected to miss 2030 ZP targets
- **Further efforts are required** to change consumption patterns, reduce consumption intensity and reduce the environmental impacts of consumer goods

# Thank you



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

Consumption Footprint Platform

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

Consumer Footprint Calculator

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



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