

# Bioeconomy and Nature - *Ecology of a bioeconomy* -



Nicolas Robert / European Bioeconomy Scientific Forum 2023 / Sept. 7, 2023





# Main pressures on Europe's nature

## With 21 %, **agriculture** is

the most frequently reported pressure for habitats and species.

Abandonment of grasslands and intensification is particularly impacting pollinator species, farmland birds and semi-natural habitats.

## Invasive alien species

such as the False Indigo-bush, particularly affect dunes and sclerophyllous scrubs as well as species such as breeding seabirds.

## Forestry activities represent 11 % of all

pressures, particularly affecting forest habitats, and woodland species.

## Climate change

is reported as a rising threat, particularly due to ongoing changes in the temperature and decrease of precipitation.



Urbanisation and **leisure activities** account for 13 % of all reported pressures, representing

**48 % of all marine pressures.**

**Fisheries**

The modification on water regimes, physical alterations of water bodies and removal of sediments predominantly affect

**freshwater habitats and fish.**

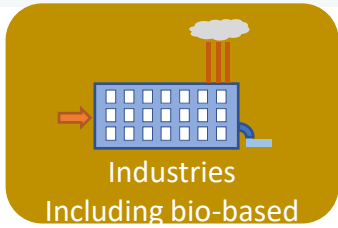
**13 % of all pressures**

for birds stem from the exploitation of species, mainly relating to **illegal killing and hunting.**

In Europe, the annual hunting bag amounts to at least **52 million birds.**

**Almost 50 % of all pressures related to pollution**

can be attributed to **air, water and soil pollution** caused by **agriculture.**

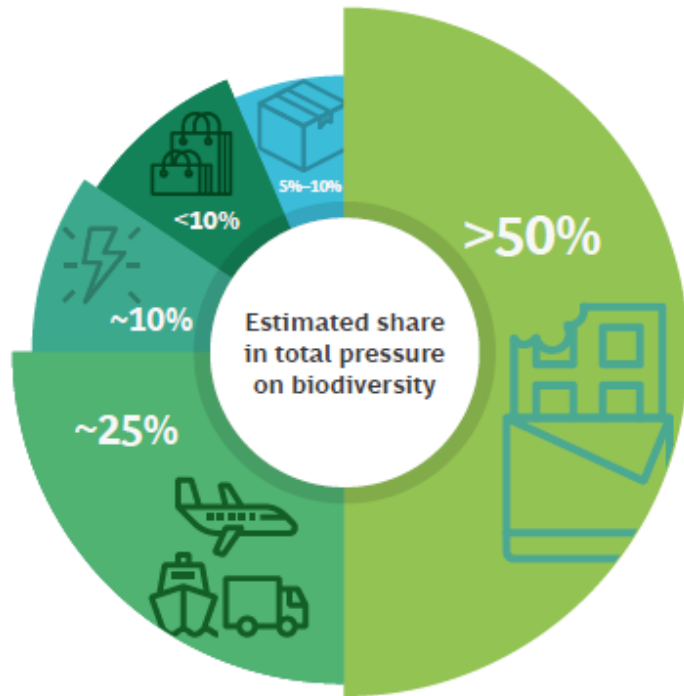


Source: EEA report No 10/2020: State of Nature

European Environment Agency



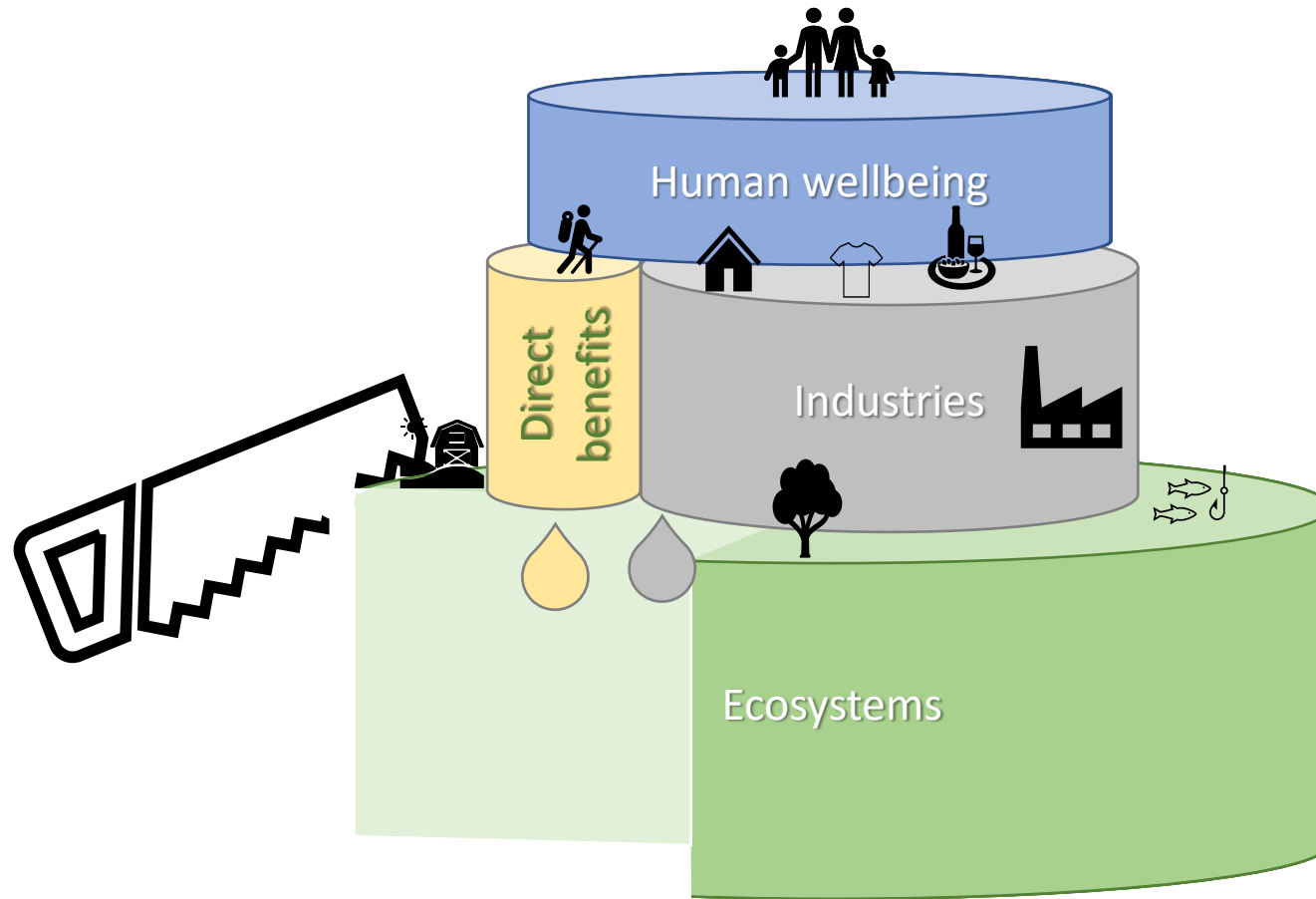
# From a consumption perspective



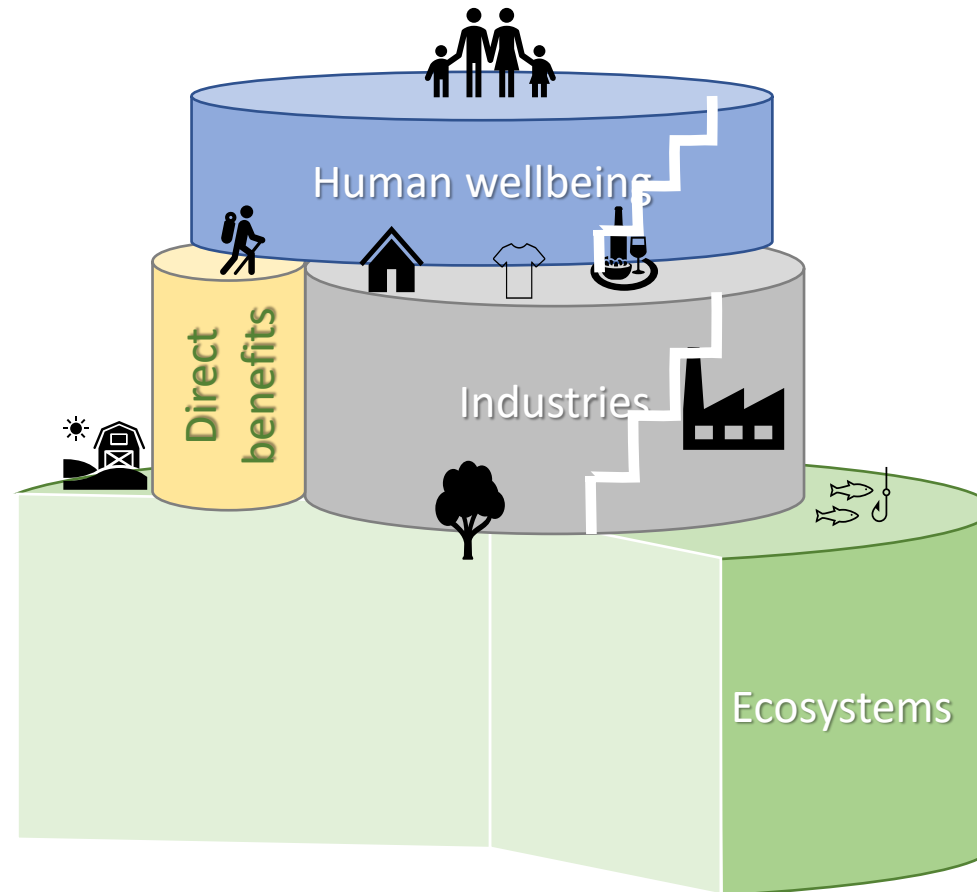
- Food and beverages, including packaging
- Infrastructure and mobility, including housing, public infrastructure, and vehicles
- Energy, including fuels, power, and other commodities
- Fashion and related FMCG, including luxury goods
- All other, including pharma, cosmetics, and consumer electronics

Source: Kurth et al 2021

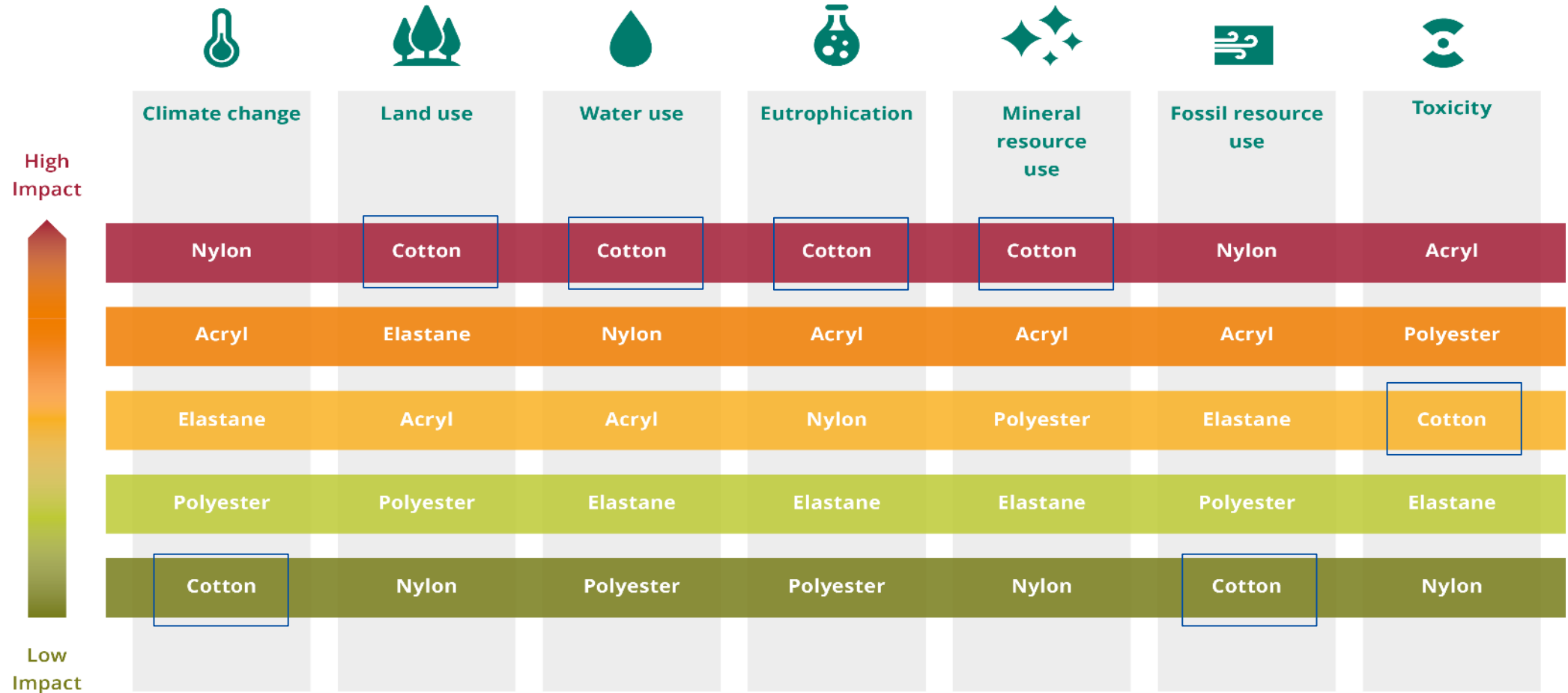
# Ecosystems supporting human wellbeing



# Ecosystems supporting human wellbeing... so far

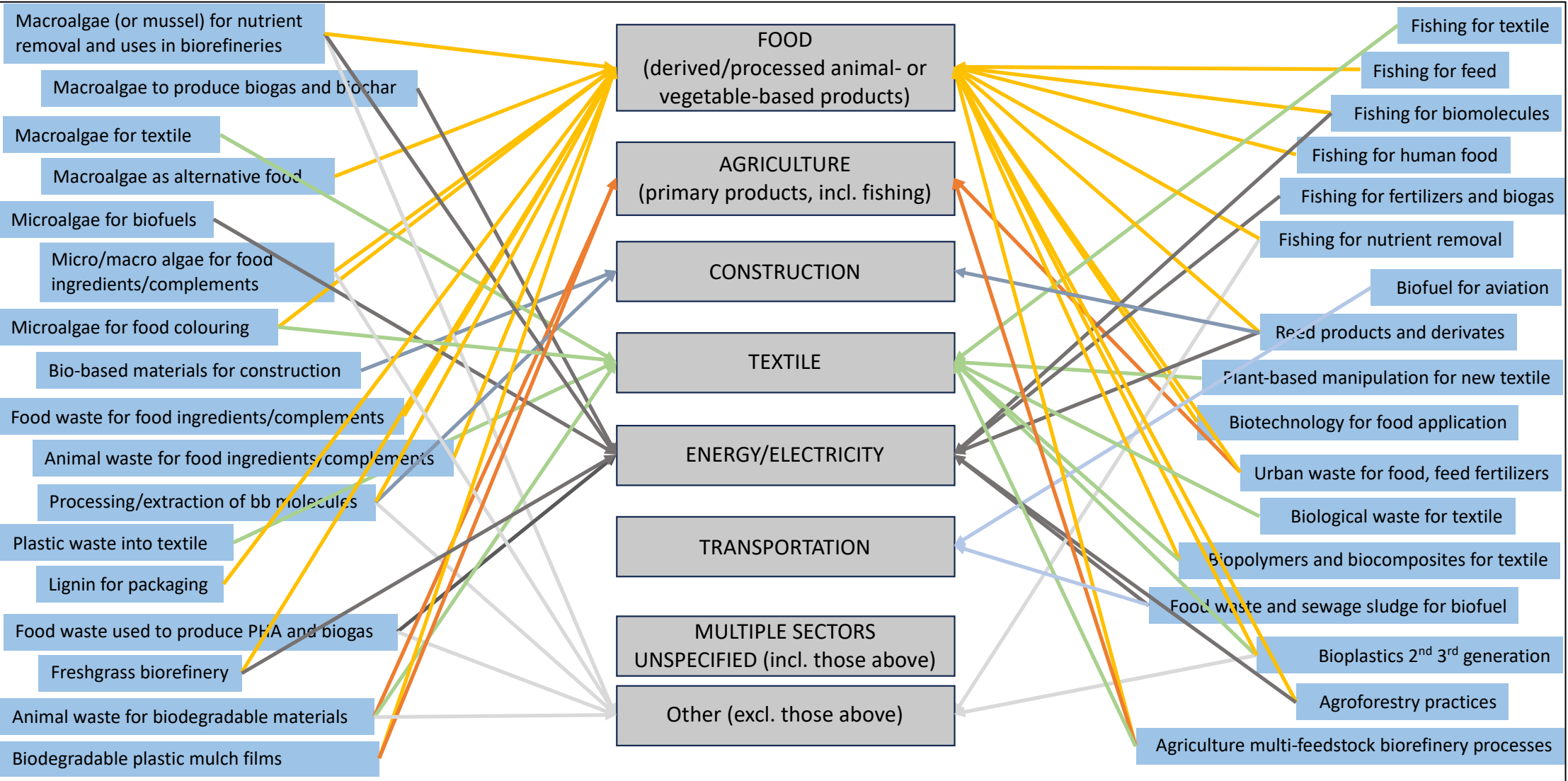


# Bio-based is not always better!



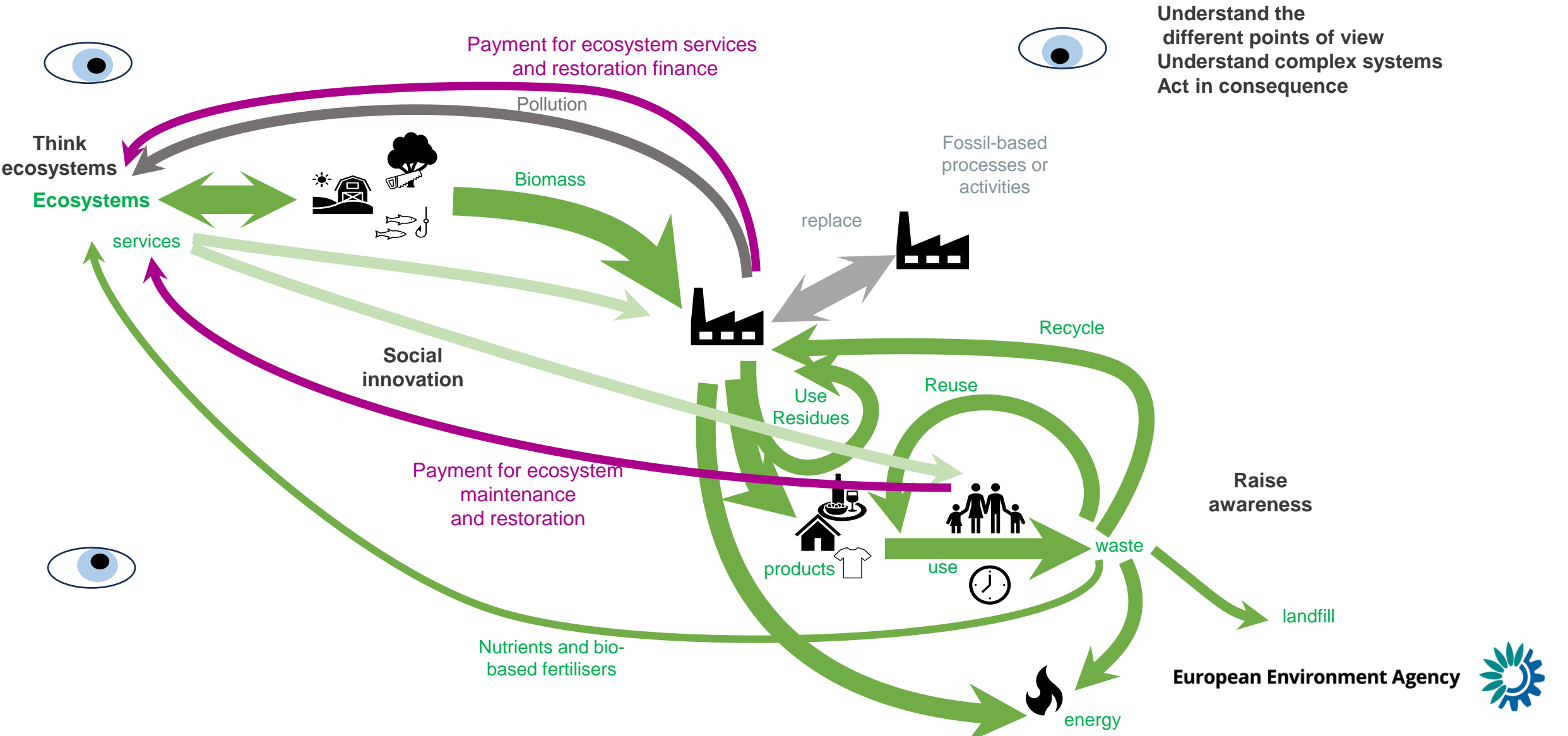
Source: EEA and ETC/WMGE, illustration by CSCP

# The bioeconomy provides solutions



Mancini et al. Bioeconomy and bio-based innovations: identifying key levers for delivering the EU Green Deal targets /ETC BE draft report 2023

# The bioeconomy: positive feedback to ecosystems needed!





Thank you



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