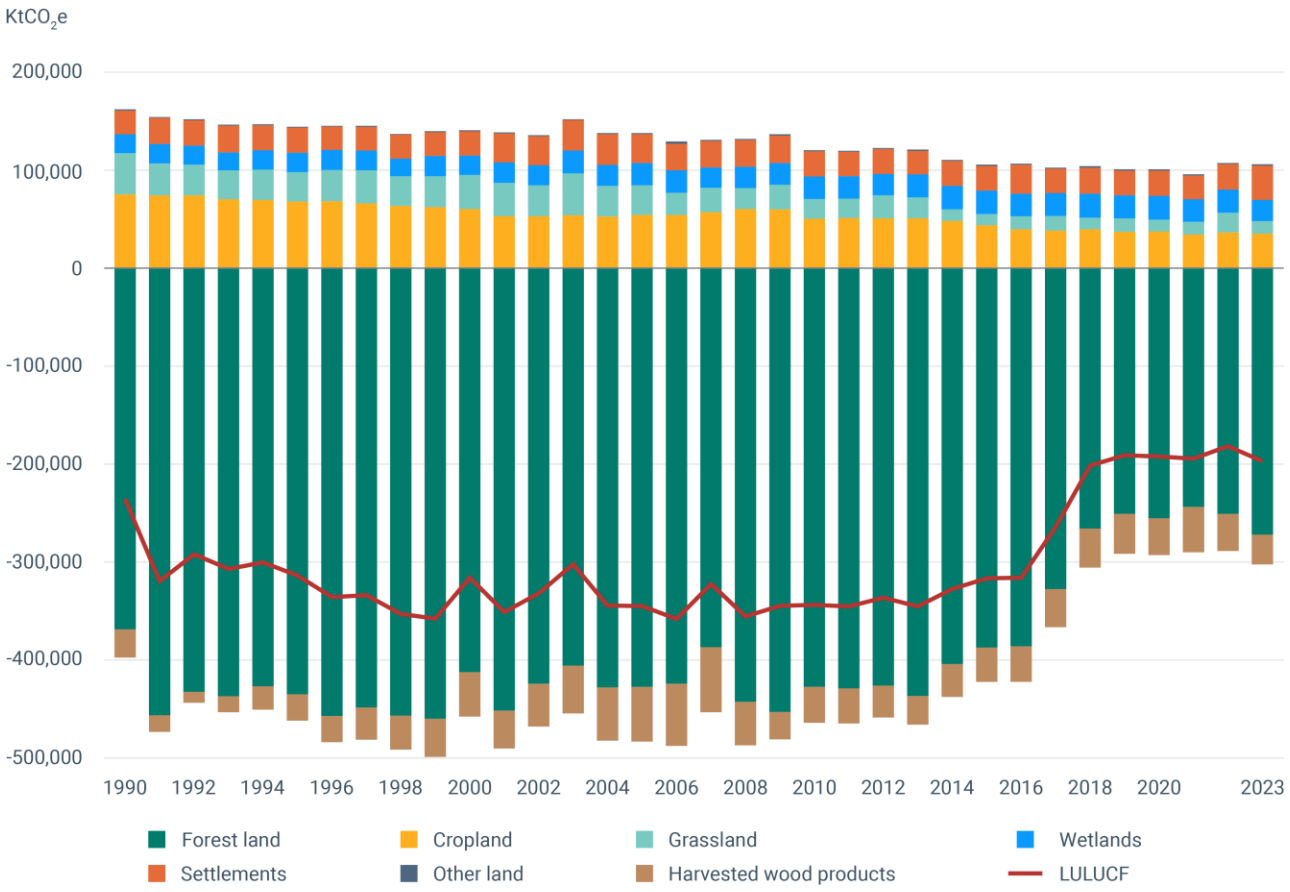
Enhancing Europe's land sink

Status and prospects

Linde Zuidema / OECD Expert Workshop Latvia/ 26-28 May 2025

1. Status of reported emissions and removals in the LULUCF sector 1/3

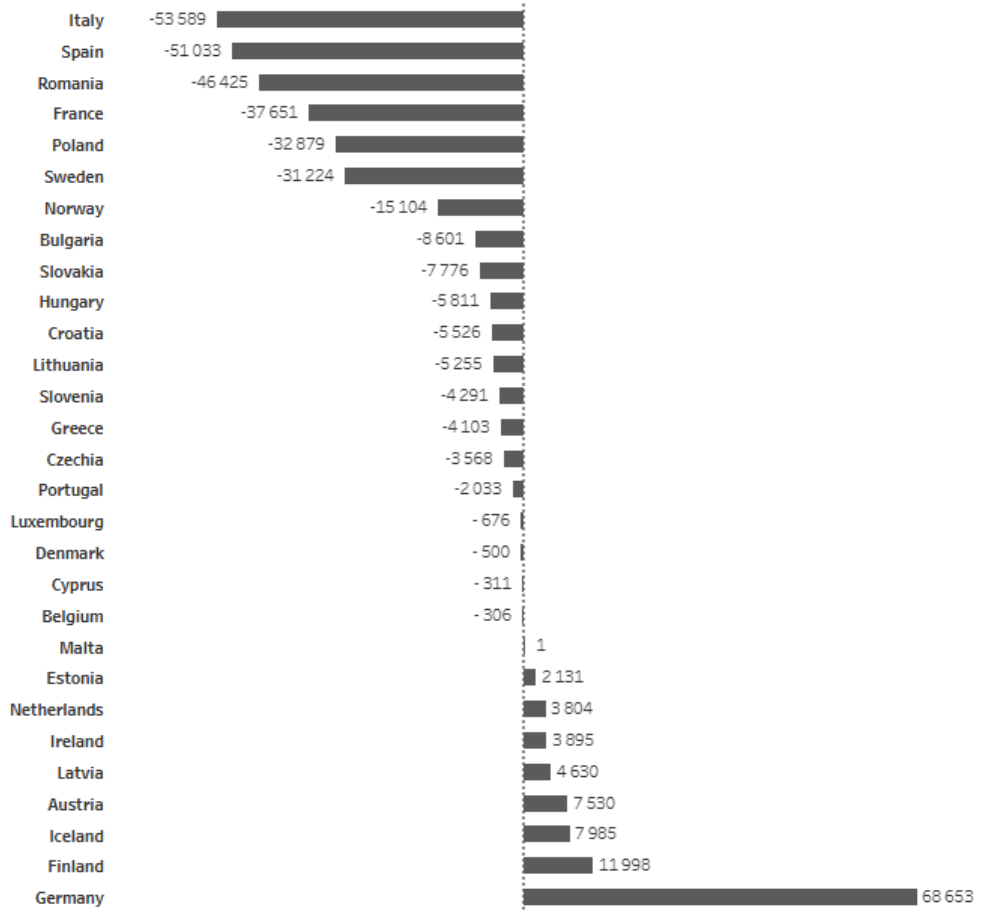


Source: EU GHG inventory (2025)

- In 2023, the LULUCF sector provided a net carbon sink at EU level of -198 $MtCO_2e$, counterbalancing around 6% of emissions from other sectors
- The LULUCF sink has been declining since about a decade. Between 2014-2023 the average annual sink was 30% smaller compared to the decade before, largely due to a decline in Europe's forest sink.
- Cropland and Settlements are the major sources of emissions, including due to drainage of organic soils and conversion of high carbon stock land to Settlements.

1. Status of reported emissions and removals in the LULUCF sector 2/3

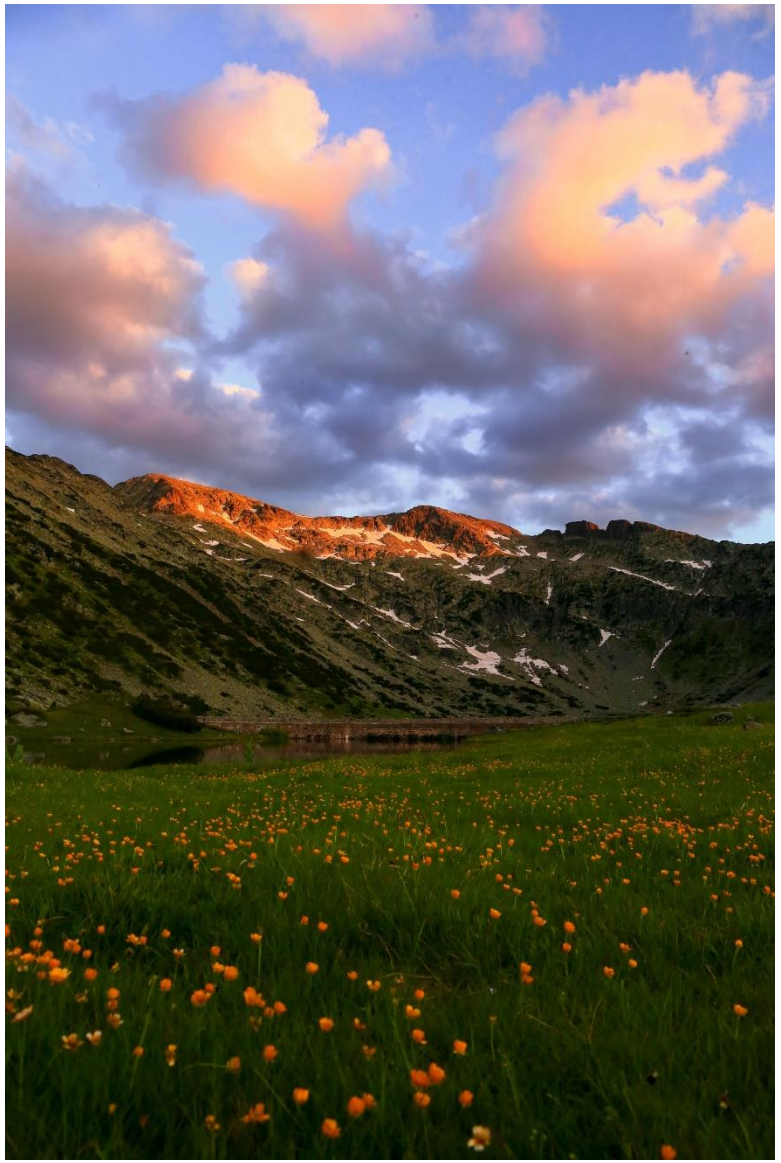
Net emissions/removals per country in Kt CO2e in 2023



- Behind the EU-level data, there is strong variability between countries, with certain MS reporting LULUCF as a net sink and others as a net source of emissions.
- Such variability arises from differences in extent of ecosystems, land characteristics, management intensity, climate conditions and effects from natural disturbances.
- Most forest-rich countries saw a declining trend in their forest sink in recent years, with some exceptions (incl. IT, ES, HU).

Source: EU GHG inventory (2025)

1. Status of reported emissions and removals in the LULUCF sector 3/3



The decline in Europe's forest land sink has been driven by a combination of interrelated factors:

i. Forests have matured. While they still sequester carbon, they do so at a lower rate.

ii. Forest harvests have increased due to economic- and policy drivers, and salvage logging.

iii. Climate change and natural disturbances have accelerated the decay of carbon stored in soils and dead organic matter, and forest fires, droughts and pests have affected standing trees.

iv. The annual rate of afforestation has decreased compared to 50-70 years ago, contributing to factor (i) above.

Thank you