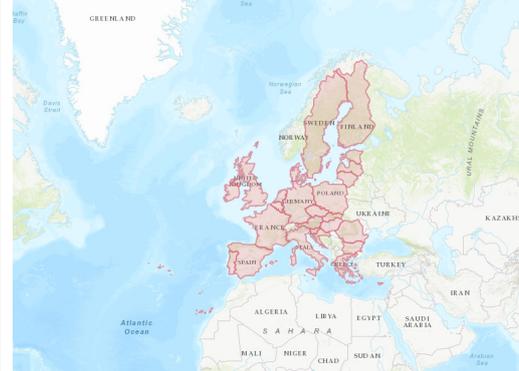# Land Carbon Dioxide Fact Sheet for E28
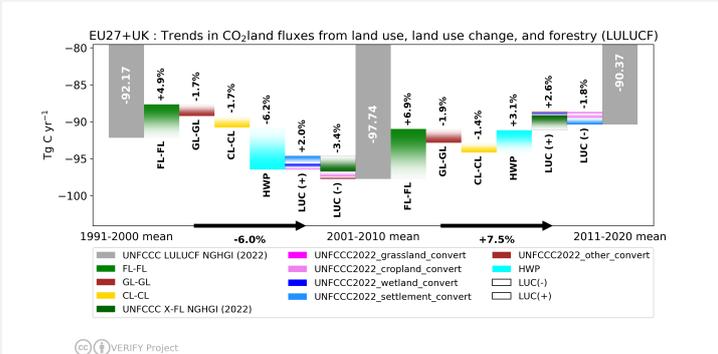
Jan 2023

CoCO2
Prototype system for a Copernicus CO₂ service
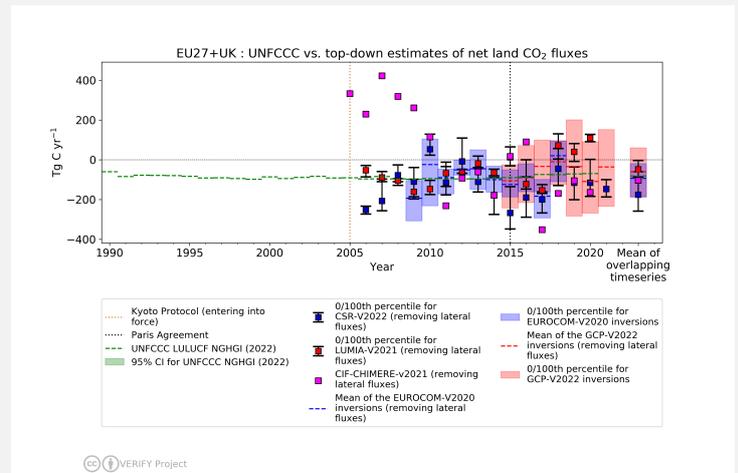

EU-27+UK (E28)

Austria; Belgium; Bulgaria; Croatia; Cyprus; Czech Republic; Denmark; Estonia; Finland; France; Germany; Greece; Hungary; Ireland; Italy; Latvia; Lithuania; Luxembourg; Malta; Netherlands; Poland; Portugal; Romania; Slovakia; Slovenia; Spain; Sweden; United Kingdom
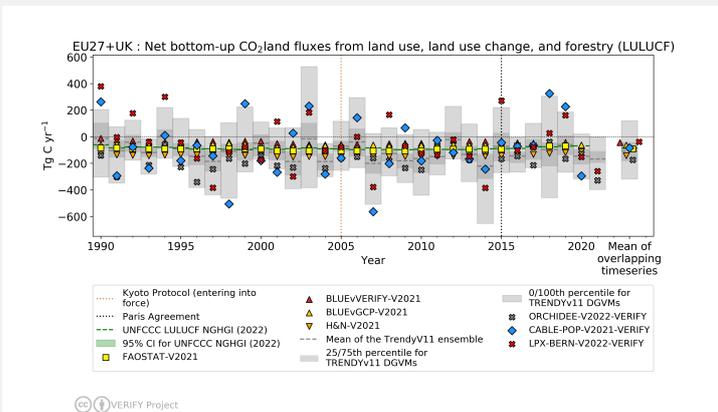
The contribution of changes in land-based CO_2 emissions in the thirteen UNFCCC subsectors to the overall change in decennial mean, as reported in UNFCCC national GHG inventories. For clarity, less commonly-used sectors are grouped into increasing (+) and decreasing (-) contributions.

Map highlighting the target region.

A comparison of different estimates of the CO_2 land fluxes from different bottom-up sources. These methods calculate emissions by estimating emissions from a certain activity or land type (e.g., grasslands, deforestation) and scaling up by the amount of that activity. The relative error on the UNFCCC value is computed with the error propagation method (95% confidence interval) independently for every year.

Comparison of top-down CO_2 land estimates using both regional (blue) and global (red) atmospheric inversions. These methods modify original estimates from bottom-up models in order to match observations of atmospheric CO_2 concentrations from a series of measurement stations. *Note that some results (EUROCOM and CarboScopeReg) are run with forcing specific to Europe, and may therefore not be available for all countries.*