

IPCC Expert Meeting on Reconciling land use emissions 9-11th July 2024, Ispra (Italy)

GLOBAL LAND USE CARBON FLUXES (LULUCF HUB)

Joana Melo, Rosa Maria Roman-Cuesta, Simone Rossi, and Giacomo Grassi Joint Research Centre, European Commission

Joana Melo¹, Frédéric Achard¹, Josep G. Canadell², Pierre Friedlingstein³, David Gibbs⁴, Nancy Harris⁴, Michael O'Sullivan³, Glen P. Peters⁵, Julia Pongratz⁶, Melissa Rose⁴, Simone Rossi¹, Clemens Schwingshackl⁶, Stephen Sitch³, and Giacomo Grassi¹

> 1 European Commission, Joint Research Centre, Ispra, Italy. 2 CSIRO, Canberra, Australia. 3 University of Exeter, UK. 4 World Resources Institute, Washington DC, USA. 5 CICERO, Oslo, Norway. 6 university of Munich, Germany

MISUNDERSTADINGS





CNN, **December 15, 2028** Paris Agreement at risk.

A large gap in land use CO₂ emissions between IPCC AR7 and National inventories causes the failure of the UNFCCC Global Stocktake

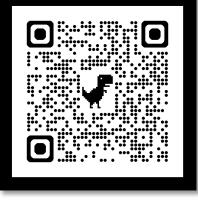
> Misunderstanding occurred on the concept of "anthropogenic sink"

Resolving misunderstanding Global Land Use Carbon Fluxes (LULUCF hub)



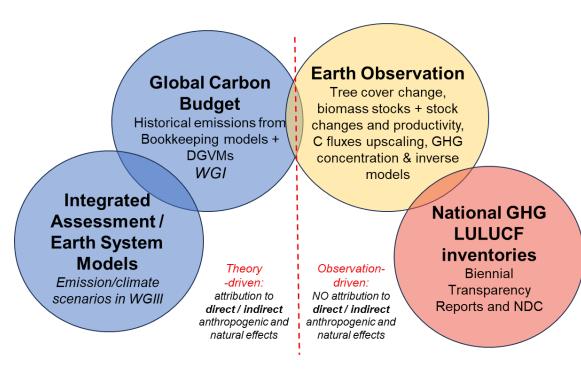


scan me!



https://forest-observatory.ec.europa.eu/

Resolving misunderstanding Global Land Use Carbon Fluxes (LULUCF hub)





https://forest-observatory.ec.europa.eu/

Sources (anthropogenic)



LULUCF in global models: land-use change, harvest, regrowth



Land ~ 12 GtCO₂/r

LULUCF in national inventories: GHG flux from managed lands*

Land in Earth Observations

INTERGOVERNMENTAL PANEL ON CLIMATE CHANE

Atmosphere

Oceans

~18 GtCO₂/yr

~ 10 GtCO₂/yr

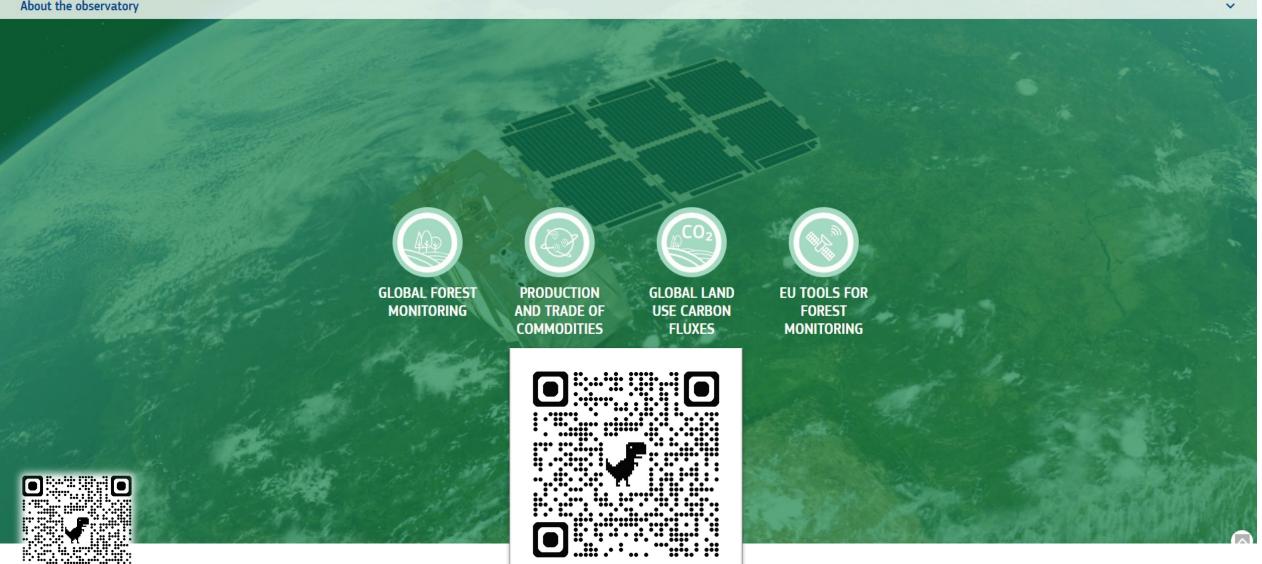
Sinks

UN 🏵

* Where human interventions and practices have been applied to perform production, ecological or social functions.



About the observatory



https://forest-observatory.ec.europa.eu/