

Policy Updates in the Land Sector, Planning & Monitoring

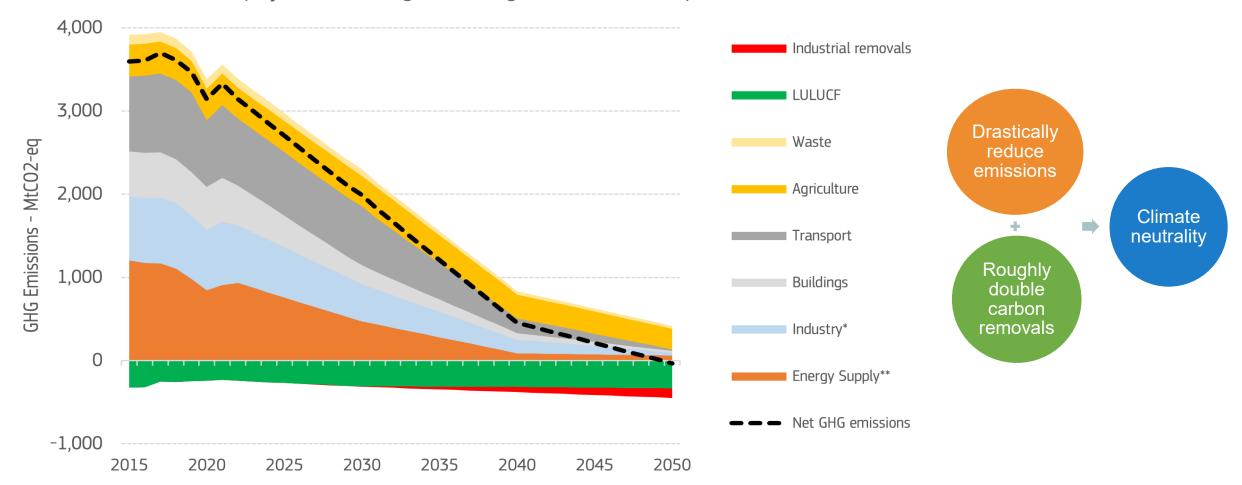
10 December 2025

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DG CLIMA Unit C3: Land economy and carbon removals

Towards climate neutrality

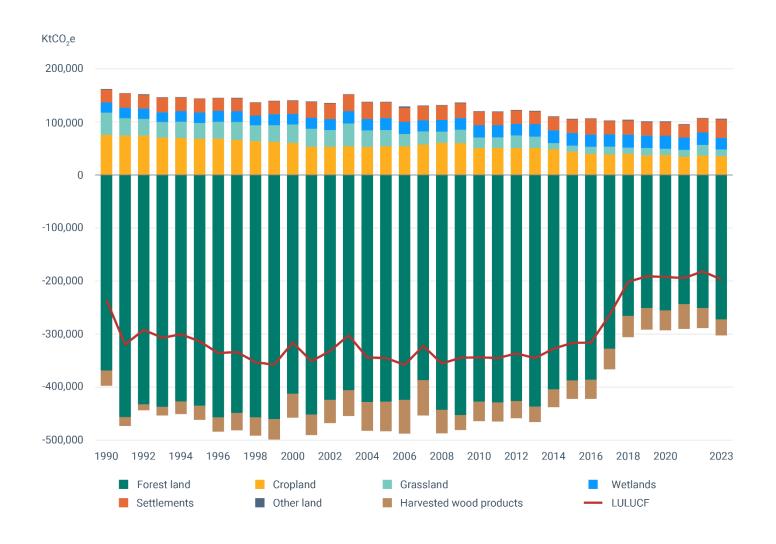
Historical and projected sectoral greenhouse gas emissions in the period 2015-2050



^{*}Excluding non-BECCS industrial removals

^{**}Including bioenergy with carbon capture and storage (BECCS)

LULUCF removals



Status (2023)

 Net land carbon sink was -198 MtCO₂e

Trend

- Declining net sink
- 2014-2023 the average annual sink was 30% smaller compared to 2004-2013

Main factors

- Decline in the forest sink
- Cropland and settlements are the major sources of emissions

The Context of Land

 One of the EU's most important natural resources

CLIMATE BIOECONOMY - Key carbon - Food removals - Materials Biomass, soils, - Energy long-lived products **RESILIENCE** - Vulnerable to the effects of climate change - Ensuring better management & growth of biomass

The Context of Land

 Perhaps EU's most important natural resource

Need to enhance carbon removals in land

Offers co-benefits, strong potential for positive synergies

Long lead times in sector an important aspect to consider

CLIMATE

- Key carbon removalsBiomass, soils, long-lived products

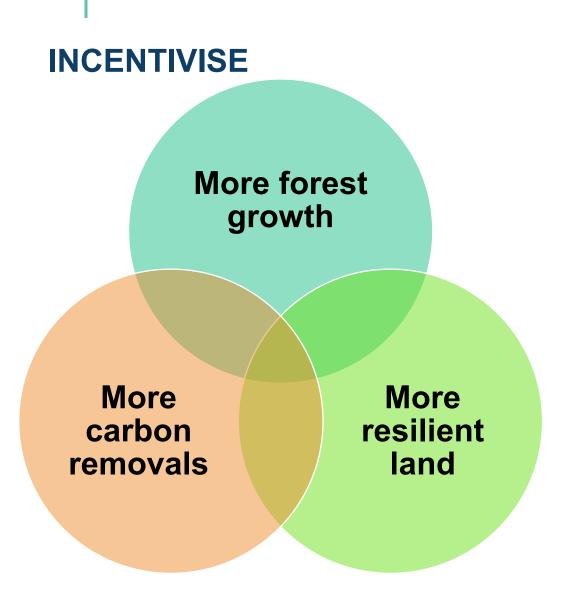
BIOECONOMY

- Food
- Materials
- Energy

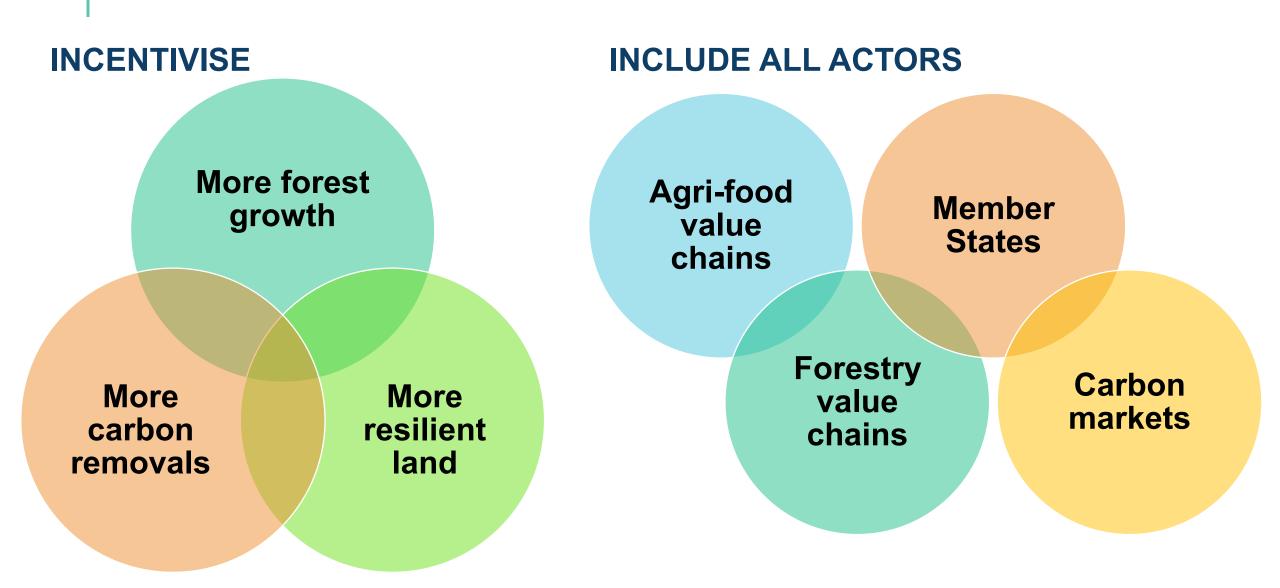
RESILIENCE

- Vulnerable to the effects of climate change
- Ensuring higher growth rates of resilient biomass

Resilient & Circular Bioeconomy



Resilient & Circular Bioeconomy



Carbon Removals and Carbon Farming Regulation

Carbon farming



Use of conservation tillage, catch crops, cover crops and increasing landscape features



Improved Forest
Management (upcoming)



Restoration, rewetting of peatlands and wetlands



Agroforestry and other forms of mixed farming



Planting of Trees



Precision farming and more efficient use of fertilizers

Challenges

Cost of MRV

Lack of advisory services

Access to finance

Carbon Removals and Carbon Farming Regulation

Permanent storage



Bioenergy with carbon capture and storage



Direct air capture and storage

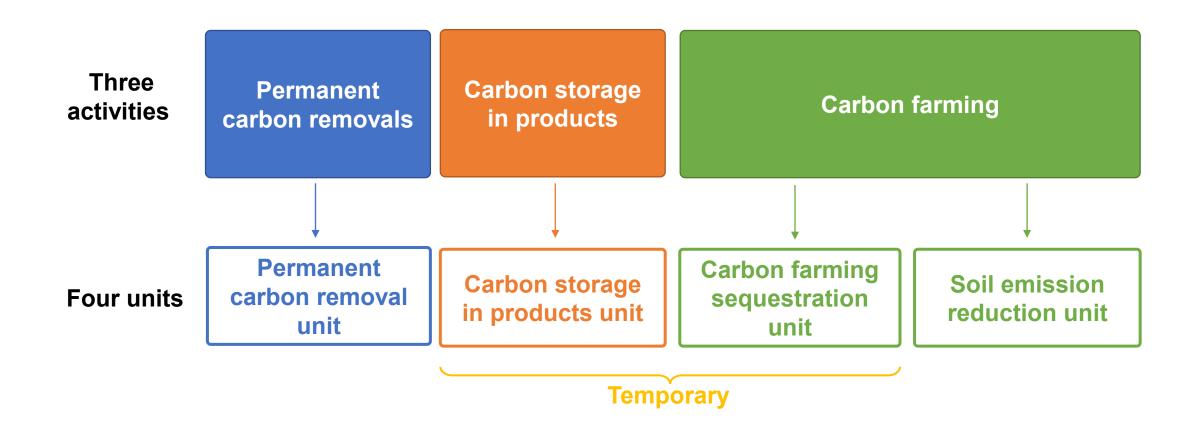
Carbon storage in products



Use of long-lasting wood-based construction products and other carbon-storing building materials



Overall architecture of the CRCF Regulation



Key elements of the CRCF Regulation

Two main pillars

Quality criteria for EU-based activities

- Quantification
- Additionality
- Long-term storage
- Sustainability

Certification rules

- Third party verification
- Certification
 schemes + bodies
- CRCF registry



EU certification methodologies

Operationalising the quality criteria for the different carbon removal activities





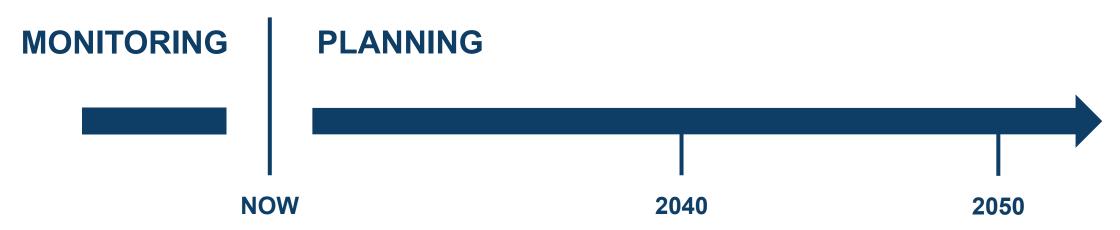


PERMANENT CARBON REMOVALS

CARBON FARMING

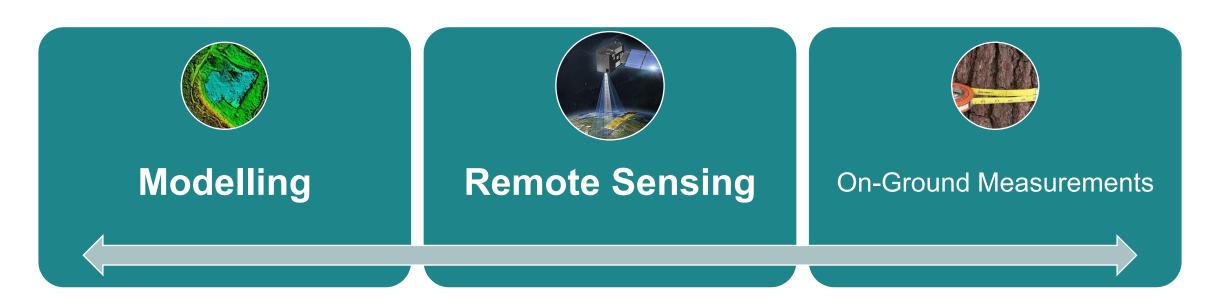
CARBON STORAGE IN PRODUCTS

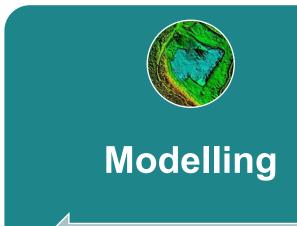
Commission to be advised by the EU Expert Group on Carbon Removals



- Picks up climate action on ground
- High granularity and timeliness
- High quality information of state of play on ground
- Compilation of national and company inventories

- Enables planning of policies and measures by companies and Member States
- Supports cost-effective decision making for investments in land
- Supports CRCF
- High granularity and timeliness
- Streamlining reporting and planning processes -> simplification and cost-effectiveness
- MRV as a service for all actors in bioeconomy value chains





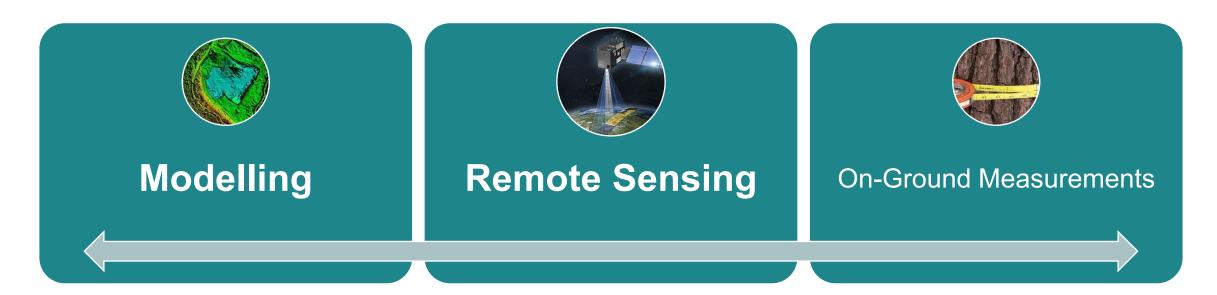


Remote Sensing

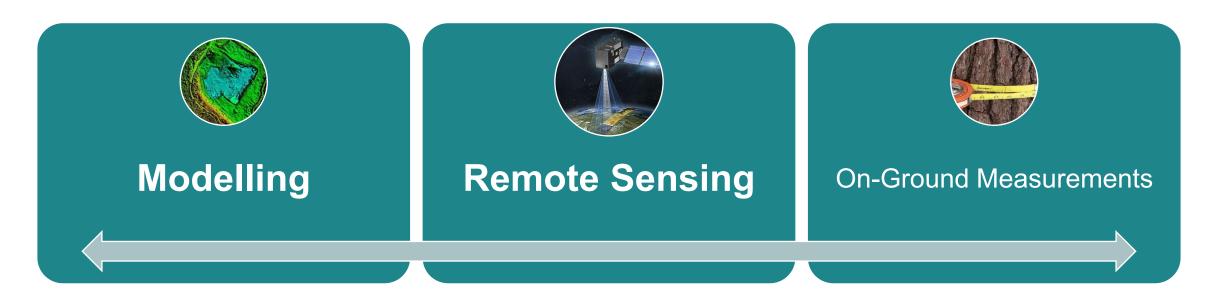


On-Ground Measurements

- More development of soil carbon models & forest growth models
- More products
 readily available for
 use to all actors in
 bioeconomy value
 chains
- Support for calibration



- Supporting MRV in CRCF methodologies;
- In line with tier-3 IPCC rules;
- Facilitating tracing emissions along value chains in company inventories;
- High-quality national greenhouse gas inventories;
- Management-dependent (ability to quantify mitigation efforts by Member States and by businesses across value chains)



- MRV as a service for farmers, foresters, companies, Member States
- Simplification & Cost-efficiency
- Detects climate action on the ground & plans decisions for future
- Supporting private and public investments in land for resilient biomass and carbon removals

Thank you!

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