



# Sustainable Carbon Cycles

DG AGRI B2. Environmental sustainability

*CDG Animal Products-Beef and Veals sectors-30/03/2022*



European Commission

1.134.199 follower

2 giorni • 🌐

Deal on the Climate Law!

The European Climate Law turns our European Green Deal targets into legal obligations:

- 📊 reducing net greenhouse gas emissions by at least 55% by 2030
- 🌍 reaching climate neutrality by 2050

Today's deal between the co-legislators also introduces:

- ✅ a process for setting a 2040 climate target
- ✅ a commitment to negative emissions after 2050
- ✅ the establishment of European Scientific Advisory Board on Climate Change
- ✅ stronger provisions on adaptation to climate change

Climate neutrality will shape the EU's green recovery and a socially just green transition.

More here → <https://europa.eu/!dn66PW>

#EUGreenDeal #EuropeanUnion #ClimateAction

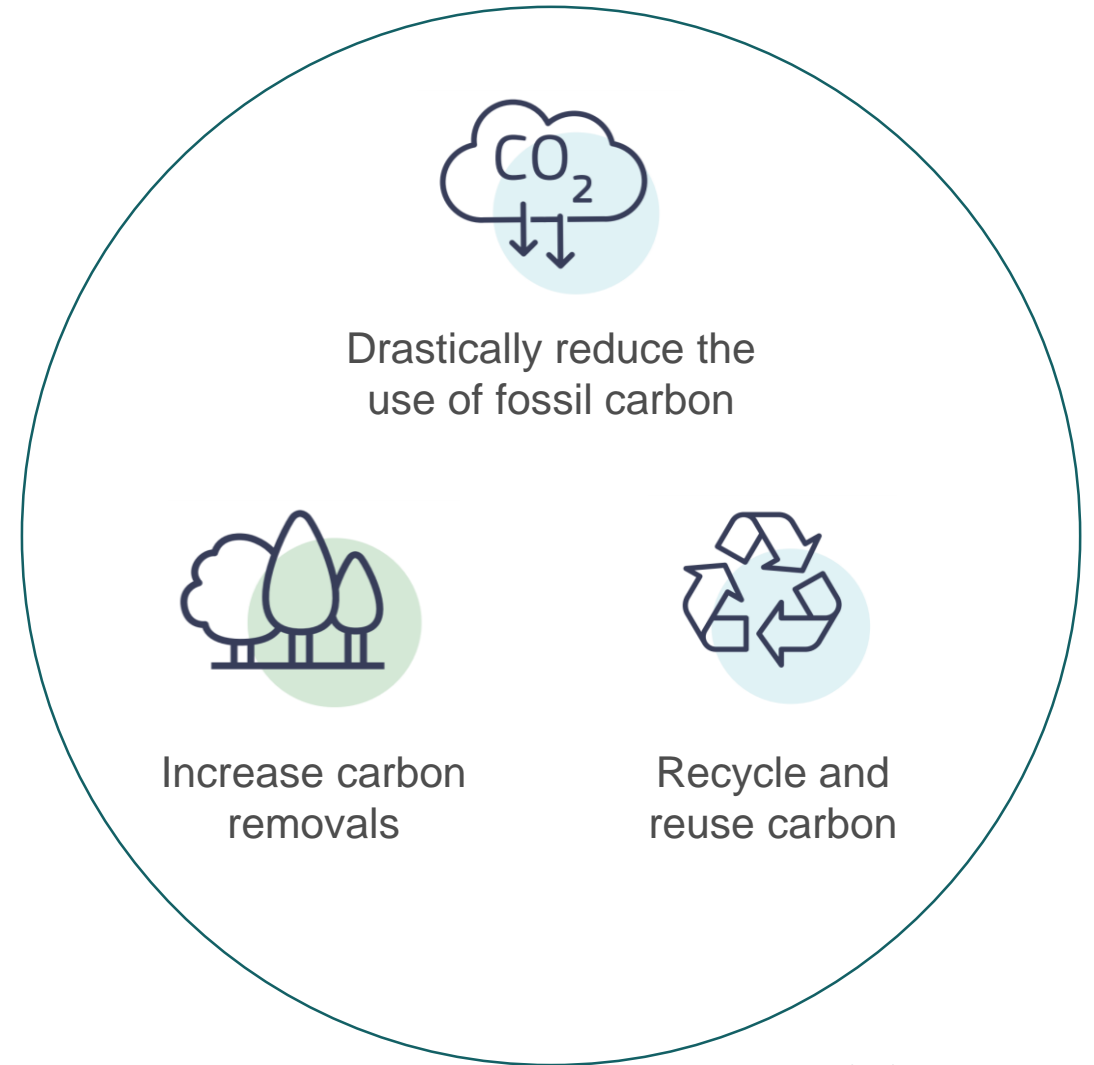


# Sustainable carbon cycles

To achieve **climate neutrality** at the latest by 2050 and **negative emissions** thereafter, the EU needs to increase carbon removals and establish **sustainable carbon cycles**.

Dual opportunity for the **agricultural sector**:

- New business around carbon **sequestration** in soils and vegetation
- New value chains offering long-term carbon **storage** in bio-based products





Brussels, 15.12.2021  
COM(2021) 800 final

**COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN  
PARLIAMENT AND THE COUNCIL**

**Sustainable Carbon Cycles**

{SWD(2021) 450 final} - {SWD(2021) 451 final}

**Published 15 December 2021:**

**Communication  
Sustainable Carbon Cycles**

**Staff Working Document #1  
Technical assessment for 2050  
Climate Neutrality**

**Staff Working Document #2  
Carbon Farming**

# Carbon farming



A **green business model** rewarding land managers for improved land management practices, resulting in carbon sequestration in ecosystems and reducing the release of carbon to the atmosphere.

## Benefits of carbon farming:



Increased carbon removals



Additional income for land managers



More biodiversity and nature



Increased climate resilience of farm and forest land

# Carbon farming - examples



**Afforestation and reforestation**  
according to ecological principles



Targeted conversion of **cropland to fallow**, or of set-aside areas to **permanent grassland**



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



**Agroforestry**  
and other forms of mixed farming



Restoration, rewetting and conservation of **peatlands and wetlands**



**Blue carbon:** coastal wetlands, regenerative aquaculture, marine permaculture

# Crucial role of the LULUCF in the coming years

Role of grassland in mitigation potential?

Role of forests, their age, their management?

Role of arable lands in in sequestering more carbon?

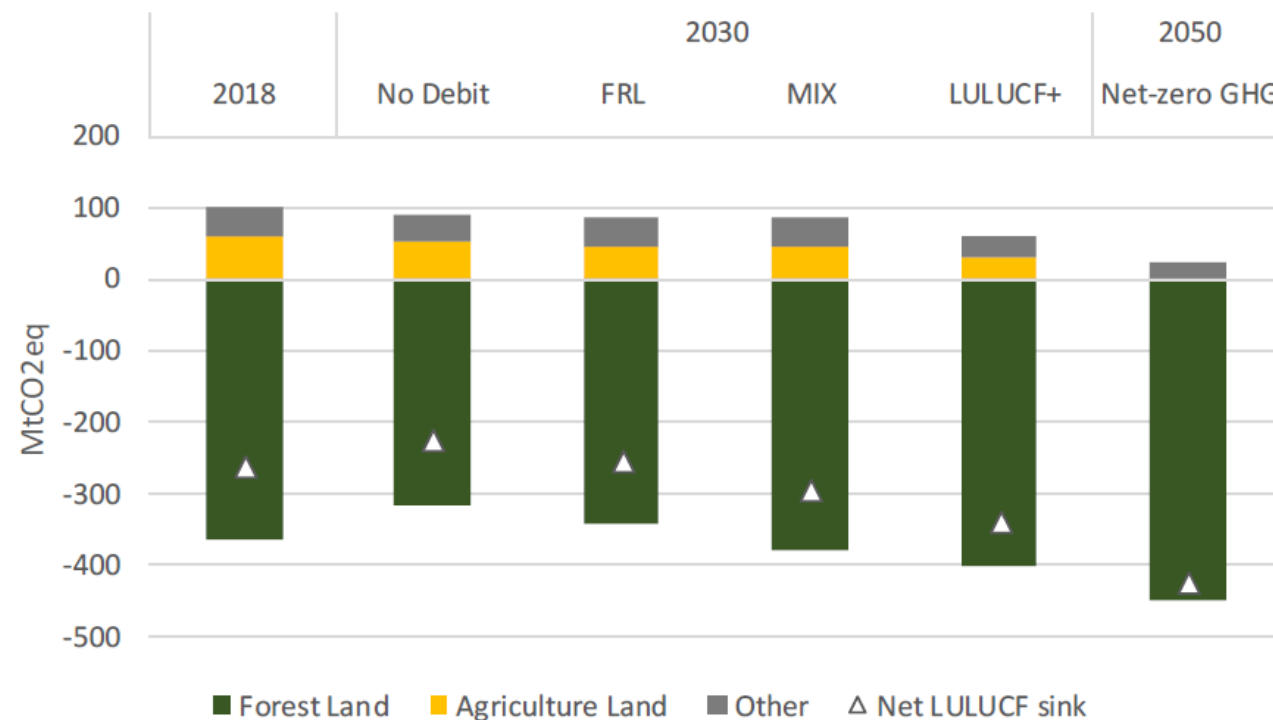
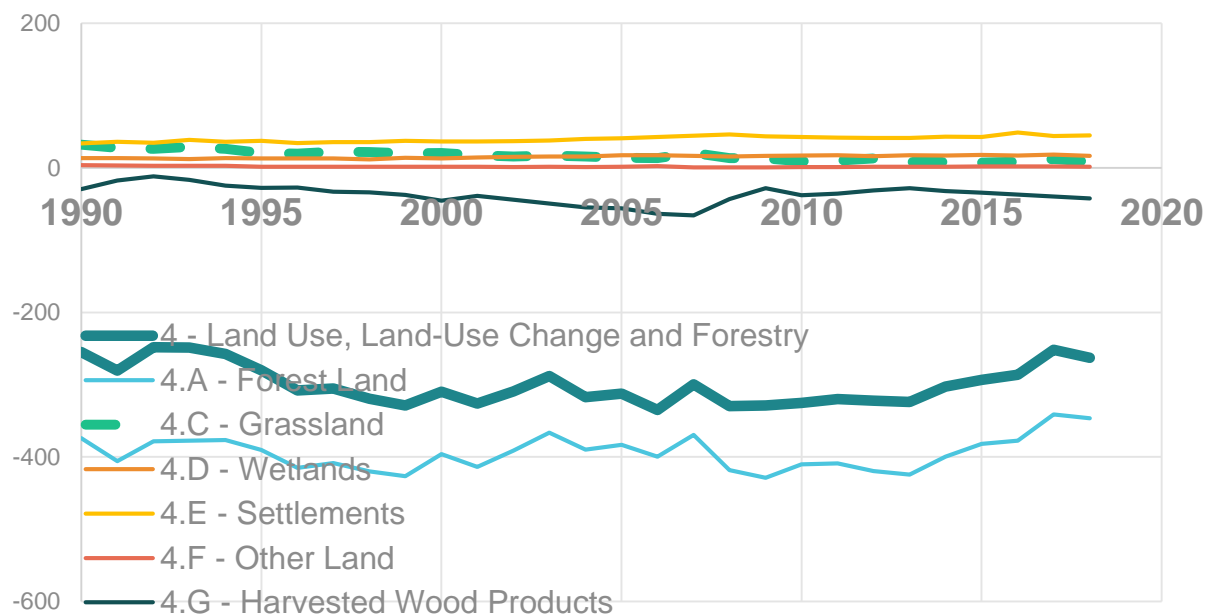
Role of farm management decisions?

Role of biomass in the bioeconomy?

> necessity of studies and research applied to specific conditions

- Significantly increase of the sink capacity is required, while providing biomass for renewables and bioeconomy (e.g. use of the harvested biomass in buildings), and face natural disturbances.
- Main contribution is from forest.
- Energy crops (perennials) a possibility to reduce pressure on forest sink.

EU27 Land Use Land Use Change and Forestry



# Upscaling carbon farming

## Barriers to carbon farming initiatives:

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**Financial burden** (cost of management practices, uncertainty about revenues)

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Uncertainty or lack of public trust in the **reliability** of voluntary carbon markets

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Concerns around **environmental integrity**, **additionality** or **permanence**

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Unavailability, complexity or high costs of **monitoring, reporting and verification systems**

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Insufficiently tailored **training and advisory services**



Technical Guidance Handbook:  
“Setting up and implementing result-based  
carbon farming mechanisms in the EU”  
<https://europa.eu/!VW49yw>



# Upscaling carbon farming

## Public funding opportunities :

### Common Agricultural Policy

- Support to carbon farming practices through eco-schemes or rural development measures (e.g. Commission [list of potential agricultural practices](#))
- EIP-AGRI and new AKIS, supports cooperation and testing of new approaches
- Advisory services, knowledge exchange, training
- Limitations: land eligible to CAP, timeframe, administrative burdens for a robust MRV for carbon credits.

### LIFE Programme

- Pilot projects (e.g. three new projects on better monitoring tools)

### Cohesion Policy

- Investments into e.g. restoration and conservation of peatland (also Just Transition Fund)
- Cooperation across regions (INTERREG)

### State Aid

- Aid for agri-environmental-climate commitments, investments, advisory services, R&D, cooperation
- Result-based carbon farming schemes, incentive payments for forest ecosystem services

# Carbon farming

## Challenges

### By 2028:

- Access to verified emission and removal data for all land managers

### By 2030:

- Contribute to reaching LULUCF target of 310 Mt CO<sub>2</sub>eq net removals + Climate neutrality for the land sector in 2035 ( carbon removal to balance all agricultural emissions)



# Links

- Our [webpage](#) and our [press release](#) on the Sustainable Carbon Cycles communication
- Our webpage on [Carbon Farming \(europa.eu\)](#)
- Commission list of potential eco-schemes <https://europa.eu/!yb74nC>
- Legislative proposal on a new Regulation for Land use, forestry, and agriculture [Delivering the European Green Deal | Climate Action \(europa.eu\)](#)
- Study on Carbon Farming: <https://data.europa.eu/doi/10.2834/594818>
- Study on Wood in construction: <https://dx.doi.org/10.2834/421958>

# Thank you



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Slide “Sustainable bioeconomy – examples”: picture BECCS, source: <https://www.stockholmexergi.se>; picture fiber crops, source: <http://news.europeanflax.com/>; picture wood in construction, source: <https://www.build-in-wood.eu>