

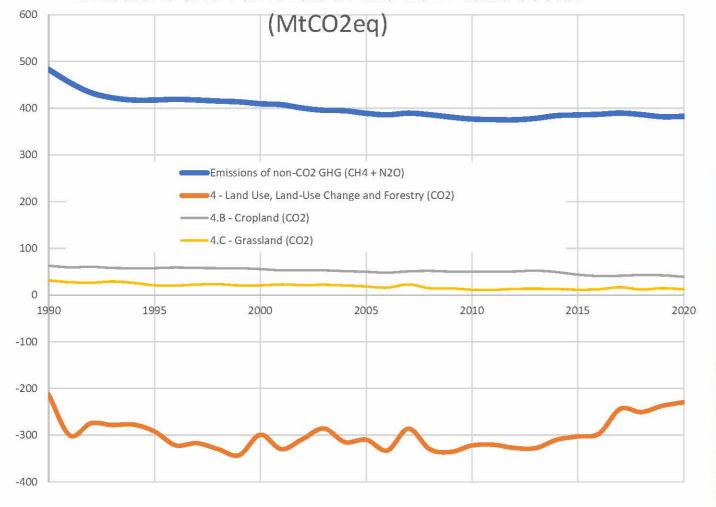
# Carbon farming and the Common Agricultural Policy

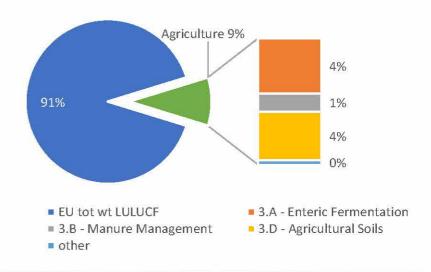
Pierre Bascou

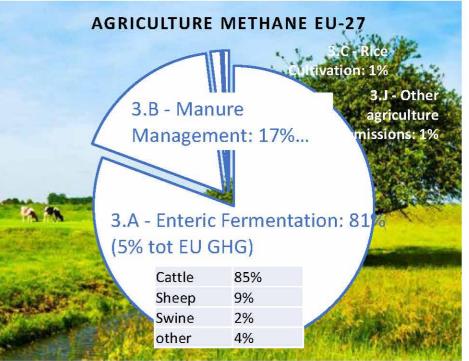
DG Agriculture and Rural Development

### GHGs in the land sector

#### Emissions and removals in the EU27 land sector







### Land sector contribution to climate objectives

## Increase net carbon removals

- Rewetting of drained peatlands
- Afforestation and reforestation
- Soil management
- Agroforestry
- Carbon Storage Products, Harvested Wood Products

## Reduce non-CO2 emissions

- Precision farming
- Efficient fertiliser use
- Anaerobic digestion
- Feed additives and breeding

## EU strategy to reduce methane emissions



European Commission 🔤 🤣 @EU\_Commission · Oct 14

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Methane is the second most powerful greenhouse gas contributor and an important cause of air pollution, causing serious health problems.

Our Methane strategy adopted today will be key to reduce our greenhousegas emissions to at least 55% by 2030.

#### #EUGreenDeal



Energy4Europe @ @Energy4Europe · Oct 14

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The EU #MethaneStrategy aims to **#reducemethane** in all relevant sectors: energy  $\neq$  agriculture  $\ll$  waste  $\bowtie$  with partner countries and mobilise an international coalition to support emission reduction. #EUGreenDeal

- news europa.eu/!uU86kn
- factsheet europa.eu/!dV78xc

Combine concrete cross-sectorial and sector-specific actions within EU and promoting internationally

Monitoring, reporting, verification, reduction in all sectors

Legislative proposal

## Carbon farming

Policy inititative to stimulate the EU carbon sink in the land sector

Benefits of 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.



Increased carbon removals



Additional income for land managers



More biodiversity and nature



Increased climate resilience of farm and forest land

Key challenge to protect the current sink as it has been decreasing substantially in the last years

## Dual opportunity for the land sector

- Development of voluntary markets of carbon removal certificates
  - > new business around carbon sequestration in soils and vegetation
  - > Possibility to strengthens the link within the food supply chain
- Development of bioeconomy for long-term carbon storage in bio-based products
  - ➤ New value chains in rural areas for the provision of feedstock
- It would also strengthen the farming system resilience

## Carbon farming practices - 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

## Upscaling carbon farming

#### Barriers to carbon farming initiatives:

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

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

Concerns around environmental integrity, additionality or permanence

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

Insufficiently tailored training and advisory services



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

## **CAP** common specific objectives

Power in Food Chain

Renewal



inclusion and local development in

including bio-economy and sustainable

rural areas,

forestry

SO4: to contribute to climate change mitigation and adaptation, including by reducing greenhouse gas emissions and enhancing carbon sequestration, as well as to promote sustainable

Resource Specific Impact and Result indicators,
Managementsome examples.:

- 1.10 Contributing to climate change mitigation: Greenhouse gas emissions from agriculture
  - R.14 Share of agricultural area that receives support to reduce emissions or store carbon in soils and biomass.
  - R.17 Afforested land, R.19
     Improving and protecting soils. R.34
     Preserving landscape features.

### **Upscaling climate actions with CAP**

#### **Public funding opportunities**

#### **Common Agricultural Policy**

- Good Agricultural and Environmental Conditions obligations (Basic conditionality for Direct Payments):
  - preserving carbon stock (GAEC 1 Maintenance of permanent grassland)
  - protection of carbon-rich soils (GAEC 2 Protection of wetland and peatland)
  - maintenance of soil organic matter (GAEC 3 Ban on burning arable stubble)
  - others
- Support to carbon farming practices through **eco-schemes** or **rural development measures** (e.g. Commission <u>list of potential agricultural practices</u>
- [Minimum 25% of Direct Payments to be dedicated to eco-schemes]
- [Minimum 35% of the EAFRD should be dedicated to environmental and climate objectives]
- EIP-AGRI and new Agricultural Knowledge Information System, supports cooperation and testing of new approaches
- Advisory services, knowledge exchange, training, collective and cooperation approaches and innovation actions,
- Limitations: land eligible to CAP, timeframe, administrative burdens for a robust MRV for carbon credits.



## Carbon farming support in the <u>approved</u> CAP Strategic plans (AT, DK, ES, FI, FR, IE, LU, PL, PT)

Eco-schemes and rural development measures are broadly used by many Member States to support practices such as: agroforestry, vegetation cover in orchards and arable crops, the reinforcement of crop rotation, conservation agriculture, support the inclusion of trees and non-productive vegetation, land conversion and several forestry interventions, such as support for afforestation and forest management.

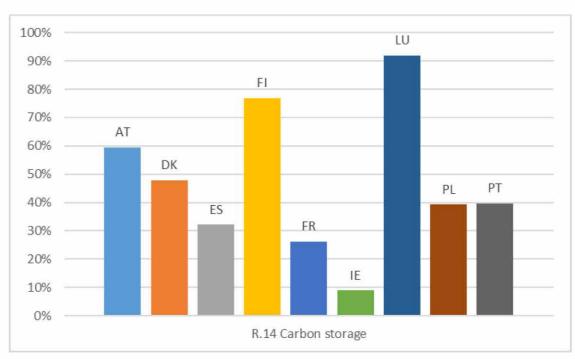
## MS set targets for the result indicator R.14 for Carbon storage in soils and biomass.

Share of utilized area (UAA) under supported commitments to reduce emissions or to maintain or enhance carbon storage

All MS (approved) linked interventions to this indicator (average 33.5%)

Other result indicators are relevant for Carbon farming

#### Target values of indicator R.14 in the first approved CAP SPs



## The Framework Law on the Sustainability of the Union Food Systems

- 1. Strengthen the sustainability and resilience of the EU food system
- 2. Increase resource efficiency and reduce loss and waste
- 3. Favourable and transparent food environment
- 4. Promote sustainable and healthy choices
- **5. Mainstream sustainability** in all food related policies
- 6. Ensure policy coherence at EU and national level



### Climate performance in the land sector - open challenges

#### Research and innovation

For the reduction of emissions in the agricultural sector, with techonology mainly (to ensure food secutirty) > feed additives; small scale biodigestors, precision agriculture, sustainable fertilization, nutrient recovery, circular economy

 Monitoring, reporting and verification. Use of remote sensing, field measurements and multisectorial integrated modelling, set standards for GHG accounting systems, set standards for biodiversity.

#### **Tool for farmers**

- GHG calculators for farmers, foresters, and policy makers, labelling sustainability
- Best management of peatlands and wetlands

#### Long vision

- Land use modelling for land availability and land dynamic > production of non-food crops
- Understand forest vulnerability (ensure biomass supply for the bioeconomy)
- Understand drivers of biodiversity and halt losses

#### **Knowledge transfer and consumers**

- Stricter link bertween research results, solution providers, policy making and its implementation (EU vision) > Science-based policy making
- Awareness creation and clear labelling





#### **Conclusions**

- Role of land manager and farmers is fundamental for the 2050 climate neutrality objective (both for emission reduction and carbon removals).
- Technology and land practices are available and can deliver substantial contribution. Tailored strategies reflecting local conditions are necessary in the land sector.
- The CAP is necessary in the upscaling carbon farming (upfront support, lowering MRV cost, advisory, innovation, cooperation). Revenues from voluntary carbon market and the development of bieconomy represent a new opportunity.
- The EU regulation on certification of removals is a first important step for the development of a voluntary carbon market, improve inventories in the land sector, ensure high quality certificates, develop sustainability labelling, strengthen the link among actors in the food chain.

### Links

- Call for Evidence on Carbon Removal
   Certification <u>Certification of carbon removals</u> –
   <u>EU rules (europa.eu)</u>
- Watch the recording of the Conference on Sustainable Carbon Cycles, 31 January 2021
   <u>Sustainable Carbon Cycles Conference - About</u> (b2match.io)
- Our <u>webpage</u> and our <u>press release</u> on the Sustainable Carbon Cycles communication
- Our webpage on <u>Carbon Farming (europa.eu)</u>
- Commission list of potential eco-schemes <a href="https://europa.eu/!yb74nC">https://europa.eu/!yb74nC</a>

- Study on Carbon Farming: <a href="https://data.europa.eu/doi/10.2834/594818">https://data.europa.eu/doi/10.2834/594818</a>
- Study on Wood in construction: https://dx.doi.org/10.2834/421958
- Legislative proposal on a new Regulation for Land use, forestry, and agriculture <u>Delivering the</u> <u>European Green Deal | Climate Action</u> (europa.eu)



## Thank you



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Slide "Sustainable bioeconomy – examples": picture BECCS, source: <a href="https://www.stockholmexergi.se">https://www.stockholmexergi.se</a>; picture timber in construction, source: <a href="https://www.build-in-wood.eu">https://www.build-in-wood.eu</a>; picture fiber crops, source: <a href="https://news.europeanflax.com/">https://news.europeanflax.com/</a>

