Carbon Farming in Europe

Executive Vice-President for the European Green Deal Frans Timmermans said: *“Our climate action must first and foremost reduce human-made emissions. But we also need to restore and protect natural carbon sinks, so that we can capture CO2 from the atmosphere and store it in our soils and forests. Carbon farming offers new income opportunities for farmers. It is an example of how the new Common Agricultural Policy’s ecoschemes and private funding can reward agricultural practices that help us fight the climate and biodiversity crises.”*

Commission sets the carbon farming initiative in motion

27/04/2021

Today the European Commission published the final report of a two-year study on how to set up and implement carbon farming in the EU. Building on this study and on the input from several EU-funded projects and events, the Commission plans to launch the carbon farming initiative by the end of 2021.

Carbon farming can be promoted via EU and national policies and private initiatives. This new type of financial support will create a new source of income for land managers. Member States will be able to accelerate the roll out of carbon farming practices in the context of the Common Agricultural Policy (CAP), for instance via eco-schemes or rural development support, and through State aid. Depending on the outcome of the CAP negotiations, eco-schemes can bring between EUR 38 billion to EUR 58 billion to farmers. The Commission already included carbon farming in its recommendations to the Member States' CAP Strategic Plans. The Commission is furthermore organising a workshop on 25 May to help Member States design carbon farming schemes in their CAP Strategic Plans.

Pilot projects are also co-financed by the EU through the LIFE programme and the European Regional Development Fund, among others.

More information

Carbon Farming Study:

Examples of effective carbon farming practices include:

- Enhancing soil organic carbon in depleted arable land, which also improves the productivity and resilience of farming activities;
- Planting new forests, restoring degraded forests, and improving the management of existing forests;
- Supplying biomass for the production of long-lasting bio-based products;
- Protecting carbon-rich soils, such as grasslands and peatlands, thanks to appropriate management techniques.

Carbon farming in Ireland:

Cooperative solutions for climate mitigation.

- Enhancing soil organic carbon in depleted arable land, which also improves the productivity and resilience of farming activities;

Green Restoration Ireland are engaging Trees On the Land in cooperative partnership to assess baseline conditions for potential further development of their Silvo-Arable EIP study as part of their approach to develop a national pilot scheme.

- Planting new forests, restoring degraded forests, and improving the management of existing forests;

GRI's " Farm:Carbon" EIP will be the first Carbon Farming Pilot in Ireland. Measures include options for planting Riparian Woodland buffers, Native Woodlands, Orchards, and Agroforestry.

- Supplying biomass for the production of long-lasting bio-based products;

Our partnership with the Fraunhofer Institute will work toward a trial for paludiculture/wet-agricultural production of insulated panel boarding from reeds/rushes.

- Protecting carbon-rich soils, such as grasslands and peatlands, thanks to appropriate management techniques.

Drained peat soils in Ireland are the largest single land use emission at an estimated 8 megatonnes tonnes of carbon dioxide emitted per annum.

The primary focus of the Farm:Carbon EIP is the delivery of a Payment for Results Scheme to incentivise and accelerate Peat Soil Rewetting in Ireland.

EU publications

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Setting up and implementing result-based carbon farming mechanisms in the EU

Technical guidance handbook

This Technical Guidance Handbook is intended to support the development of result-based payment schemes for carbon farming in the EU. The Handbook has been prepared as part of a wider study Analytical support for the operationalisation of an EU Carbon Farming Initiative, funded by the European Commission, which explores the options for wide-scale adoption of result-based carbon farming schemes or initiatives linked to climate change mitigation and adaptation. The Guidance is based on the two published reports from the first part of the study: -- a review and analysis of existing international and EU carbon farming schemes (COWI et al., 2020); and - the Annexes to this Technical Guidance Handbook, five detailed case studies of emerging result-based carbon farming initiatives in the EU, based on analysis of published documents and interviews conducted with stakeholders (COWI et al., 2021). The case studies examine five key thematic areas, analysing the potential for using result-based carbon farming payments in an EU context: peatland restoration and rewetting; agroforestry; maintaining and enhancing soil organic carbon (SOC) in mineral soils; managing SOC on grasslands; and livestock farm carbon audit. The Guidance also draws on relevant EU experience of result-based payment schemes for farmland biodiversity, developed over the past 25 years.

Group	Mitigation actions
Land Use	Conversion of arable land to grassland to sequester SOC
	New agroforestry
	Wetland/peatland conservation/restoration
	Woodland planting
	Preventing deforestation and removal of farmland trees
	Management of existing woodland, hedgerows, woody buffer strips and farmland trees

Cropland Management	Improved crop rotations
	Reduced and minimum tillage
	Leaving crop residues on the soil surface
	Ceasing to burn crop residues and vegetation
	Use of cover/catch crops

Livestock Management	Livestock health management
	Use of sexed semen for breeding dairy replacements
	Choosing breeds with lower methane emissions
	Feed additives for ruminant diets
	Optimised feeding strategies for livestock

Nutrient and Soil management	Soil and nutrient management plans
	Improved nitrogen efficiency
	Biological N fixation in rotations and in grass mixes
	Improved on-farm energy efficiency

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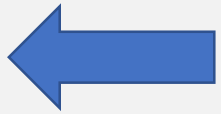
	Improved on-farm energy efficiency 

Farm:Carbon

-Assessing Baselines
-Implementing Regenerative Practices
-Measuring Outcomes
-Developing PFR and MRV schemas

Farm:Carbon

- Landscape Scale Sustainability Planning
- Alternative incentive structures
-Scaling Regenerative Agriculture