



LIFE CARBON FARMING

Objective: to reduce the carbon footprint of 700 European farms by 15%

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Livestock farming is responsible for the emission of three major greenhouse gases (GHGs, namely): methane (CH₄), carbon dioxide (CO₂) and nitrous oxide (N₂O). In fact, this sector contributes to 14.5% of total global GHG emissions (FAO, 2013). Nevertheless, ruminants are able to make the most of grasslands, whose soils are large carbon sinks. As a result, livestock farming both emits and absorbs greenhouse gases. These functions give livestock farming a vital role in the fight against climate change and in maintaining the viability of farms. Reducing the sector's climate impact is possible thanks to a diversity of actions implemented by farmers.

The aim of the LIFE Carbon Farming project is to reduce the carbon footprint of 700 European farms in France, Germany, Belgium, Italy, Spain and Ireland by 15%, by setting up a climate financing mechanism for farmers.



Co-funded by the European Union



PROJECT AMBITION

Reduce greenhouse gas emissions from mixed farming by 15% over a 5 year period, while rewarding farmers for reducing their carbon footprint.

LIFE CARBON FARMING IS:



6 year

European project
2021 - 2027



more than 30

partners from
6 European countries

PROJECT OBJECTIVE

Develop a results-based funding mechanism by building a common certification framework for the 6 countries involved in the project.

6 actions to meet these challenges:

1. **Develop harmonised tools and a common framework** for implementing low-carbon livestock farming initiatives.
2. **Implement low-carbon projects** on 700 mixed crop-livestock farms in France, Belgium, Ireland, Germany, Spain and Italy.
3. **Benchmarks mitigation costs** for low-carbon projects.
4. **Create a results-based financing mechanism** for carbon reduction.
5. **Set up a European network** of low-carbon farmers.
6. **Draw up a common framework** for a European low-carbon strategy for agriculture.

ACTION 1



ELABORATION OF HARMONIZED TOOLS AND STANDARDS FOR IMPLEMENTING CARBON FARMING INITIATIVES.

OBJECTIVE(S): At European level, develop 3 tools for implementing low-carbon practices, through a harmonized whole farm sustainability assessment methodology, a robust and common Monitoring, Reporting and Verification (MRV) process for mixed farming systems, an engineering tool for implementing and monitoring carbon farming projects.

IMPLEMENTATION:

- **Task 1:**
 - **Developing** a whole farm sustainability assessment methodology based on pre-existing tools (CAP'2ER, AgNav, Bovid CO₂).
 - **Creation** of a sustainability grid comprising at least 10 environmental indicators, 5 social indicators and 5 economic indicators to be monitored on the farms over the course of the project.
- **Task 2: Compare** existing standards to identify good practice and synergies. Exploring the links that can be established between national, European and international standards.
- **Task 3:** On the basis of this inventory, a **common certification method** will be developed for the 6 countries involved in the project, defining: a baseline scenario, the steps involved in monitoring a project, the method for calculating the tonnes of CO₂ avoided and verifying the reductions achieved.
- **Task 4: Development** of a project management tool to centralise farmers' low-carbon documents and monitor projects more effectively.



Tasks 1, 2, 3 and 4

October 2021

December 2023



ACTION 2

CARBON FARMING PROJECTS IMPLEMENTATION IN 700 MIXED CROP LIVESTOCK FARMS IN THE 6 EUROPEAN COUNTRIES.

OBJECTIVE(S): Put into practice results-based mechanism by involving 700 farmers. This action will consist in performing partnership with farmers, project developers, advisors, external auditor and carbon buyers.

IMPLEMENTATION:

- **Task 1: Recruitment** of 700 farms.
- **Task 2: Initial GHG emissions and sustainability audits** for each farm involved.
- **Task 3: Drawing up a carbon action plan** to be implemented by each farmer of the project.
- **Task 4: Description of the carbon farming projects**, including the project boundary (characteristics of the farms involved), the mitigation practices implemented by farmers, the quantity of carbon avoided during the crediting period and the application of the MRV process.(characteristics of the farms involved), the mitigation practices implemented by farmers, the quantity of carbon avoided during the crediting period and the application of the MRV process.
- **Task 5: Contracting procedure** between aggregator, project developers and farmers.
- **Task 6: Farm advice and monitoring.**
- **Task 7: Second GHG emissions and sustainability audits** and calculation of GHG reductions per farm.
- **Task 8: Verification by an external auditor of the carbon footprint reductions achieved.** This validation will subsequently be used to generate carbon credits.
- **Task 9: Paying** farmers for results.



700
European farms
involved



More than 78
advisers trained



Task 1

Task 2

Task 4

Tasks 3, 5, 6, 7, 8 and 9

Oct. 2021

Oct. 2022

Oct. 2023

Sept. 2027





ACTION 3

ELABORATING CARBON FARMING PROJECT REFERENTIAL COSTS.

OBJECTIVE(S): Encouraging the deployment of low-carbon farming practices and technologies by providing benchmark for mitigation costs in €/t of CO₂ avoided or reduced. These mitigation costs must cover not only the costs of implementing practices on farms, but also the support and administrative costs associated with undertaking sustainability assessments and certifying the tonnes of CO₂ equivalent avoided (calculation of tonnes of CO₂ avoided, project monitoring, external audit, etc). This referential cost shared with partners is crucial to implement a cost efficient common carbon strategy and optimise carbon rewarding to farmers during the project.

IMPLEMENTATION:

- **Task 1: Determine** the administrative costs associated with carbon farming projects on farms and seek technical solutions to optimise these costs. Production of a referential of mitigation costs by country, considering economic and working conditions in each country.
- **Task 2: Determination** of the technical costs, i.e. the expenditure associated with the application of a technique or the imputed costs. To facilitate this assessment of technical costs, a description of each technique will be provided.
- **Task 3:** To illustrate the economics associated with climate change mitigation, abatement costs (sum of private admin and technical costs) and marginal abatement cost curve (MACC) for the identified GHG mitigation options will be determined.

6,6 M
budget



Tasks 1, 2 and 3

Oct. 2021

August 2027



ACTION 4

APPLYING RESULT BASED CARBON FUNDING MECHANISM.

OBJECTIVE(S): Review climate funding opportunities. Evaluate funding opportunities to support the transition of the agricultural sector (public or private funding). Recruit buyers interested in purchasing carbon credits from CFPs, sign agreements with carbon buyers and schedule a workshop with all entities involved.

IMPLEMENTATION:

- **Task 1: Inventories** of funding opportunities for climate action on farm and description of the voluntary carbon market mechanism.
- **Task 2: Match** carbon farming project offer and carbon offsetting demand.
- **Task 3: Contract** procedure between aggregators and buyers.
- **Task 4: Organise** workshops in the 6 countries to launch a fruitful collaboration between farmers, advisors, project developers, aggregators and buyers.
- **Task 5: Share** experience and knowledge with Policymakers and stakeholders.

6 K€ to 12 K€
expected income
per farm



Task 1

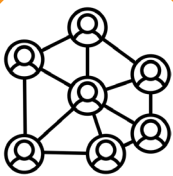
Tasks 2 and 3

Tasks 4 and 5

Oct. 2021

Oct. 2022

Sept. 2027



ACTION 5

SETTING UP A EUROPEAN LOW CARBON FARMING NETWORK.

OBJECTIVE(S): Create motivation and dynamism about low carbon initiatives at national and European levels. By promoting exchanges and discussions on lessons learnt and knowledge, we want to manage time to create a dynamic between farmers, project developers, aggregators, advisers and buyers.

IMPLEMENTATION:

- **Task 1: Organisation** of 6 “3-days European meeting” including: farm visits, expert exchanges and presentations managed by specialists in different technical areas, buyers testimonies to present their interest in purchasing carbon credits from carbon farming projects, collective discussion between farmers, advisers and project developers to improve the economic, social and technical performance of the LIFE Carbon Farming project.
- **Task 2: Organisation** of 11 “2-days national meeting” to allow project developers, aggregators, farmers and buyers involved in the carbon farming projects to share their knowledge at national scale.



Tasks 1 and 2

Oct. 2021

June 2027



ACTION 6

PRODUCE A COMMON FRAMEWORK FOR A EUROPEAN CARBON FARMING STRATEGY.

OBJECTIVE(S): The European team will produce a common framework with guidelines and a training kit. Shared with farmers, project developers, aggregators, buyers and stakeholders during and after the life of the project, these tools will support the replication of low-carbon projects. The kit will be used during training sessions for advisers.

IMPLEMENTATION:

- **Task 1: Production** of 5 guidelines on: (1) the carbon farming method and monitoring tools, (2) the climate change mitigation costs in mixed livestock farming, (3) the carbon finance mechanisms, (4) the roles and obligations in carbon farming projects, and (5) the business model of carbon farming projects. Finally, a summary framework for the application of a low-carbon livestock strategy for sustainable agriculture in Europe will be drawn up.
- **Task 2: Creation** of the training kit.



Tasks 1 and 2

Oct. 2021

January 2025

Sept. 2027





Our partners

6 European countries involved in the project:
France, Ireland, Spain, Italy, Belgium, Germany



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Find all the information about the project and our news on:



The LIFE Carbon Farming website:
<https://www.life-carbon-farming.eu/>



The LIFE Carbon Farming Twitter page:
<https://twitter.com/LCarbonFarming>



The LIFE Carbon Farming YouTube page:
<https://www.youtube.com/channel/UCLhQRjgEDE1qW04e0xVsGGQ>



National events (conferences, seminars, open days) and international events (workshops, seminars, meetings, farm visits, etc.).

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To find out more about the LIFE program click:
<https://www.ecologie.gouv.fr/programme-europeen-financement-life> 



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