

ENRD Thematic Group on Carbon Farming

Good practices

This document presents a collection of 56 good practices shared by the members of the [ENRD Thematic Group on Carbon Farming](#). Composed of 38 members involved with carbon farming activities as farmers, researchers, advisory services, civil society, government, and the private sector, the Thematic Group explored how greater action on carbon farming can be encouraged throughout the EU. The two meetings, held in March and June 2022, as well as the informal small group discussions and interviews of volunteer members conducted between the meetings, drew on members' insights as to how CAP and other programmes, such as LIFE, Interreg, Horizon 2020 and the Structural Funds, have been used to promote carbon farming uptake by farmers. Additionally, co-benefits such practices can bring were highlighted as well as challenges and barriers at farm level, including the need for more technical knowledge sharing through tools and resources.

Members were encouraged to submit good practice examples from different Member States, research projects, companies, etc. As outlined in the Table of Contents, the examples have been arranged into the following seven categories:

1. **Labels:** initiatives aimed at offering a way to demonstrate that products have been produced with a lower carbon footprint;
2. **Networks:** associations and organisations focused on building collective action and sharing knowledge and resources to promote carbon farming;
3. **Offsetting initiatives:** initiatives which allow carbon offset purchasers to be connected with sellers of credits based on their carbon removals or to pay for certain practices to be undertaken;
4. **Projects:** demonstrating carbon farming practices on the ground, regenerative and conservation agriculture contributing to soil health and carbon content, as well as digital solutions contributing to measuring sequestration at scale;
5. **Publications:** articles exploring EU-wide and Member State-specific issues related to carbon farming and soil sequestration;
6. **Resources:** videos and tools to support farmers in increasing carbon farming practice uptake and removals within their farming operations; and
7. **Other useful links:** practical examples of case studies incorporating CF around the EU and organisations promoting farming approaches that contribute to better soil management and organic carbon accumulation.



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1. Labels

Label	Klim-label
Member State	Germany
Description	<p>The climate label identifies products from partners that remove more CO₂ from the atmosphere through their offset amount than they cause through their production, packaging, transport and raw materials.</p> <ul style="list-style-type: none"> • The product thus becomes climate positive and can be marketed as such. • To do this, the footprint is first calculated at product level and multiplied by a price of 45€ per tonne of CO₂. • Partners pay the corresponding amount to more than 1 000 regenerative farmers, who permanently store the corresponding amount of CO₂ in their soils with the help of regenerative agriculture. • The QR code on the climate label makes it possible to trace the climate-positive impact that the labelled product has achieved thanks to consumers and label partners together with the farmers.
Link	https://www.klim.eco/label
Funding	Public and private funding



2. Networks

Network	International Network on Soil Biodiversity
Member State	EU
Description	The International Network on Soil Biodiversity (NETSOB) was established in December 2021 to promote the sustainable use and conservation of soil biodiversity and to bring experts in this field and existing initiatives together to form the human talent that contributes to the implementation of the Global Soil Biodiversity Observatory (GLOSOB).
Link	https://www.fao.org/global-soil-partnership/netsob/en/
Funding	FAO

Network	Carbone Fertile
Member State	France
Description	Carbone Fertile is an association born from the desire to bring together actors working for the development and promotion of agroecology. Its goal is to bring together, at the national and international level, people, associations, private companies and public groups around the same desire to carry a vision of agriculture centred around carbon.
Link	https://carbonefertile.fr/
Funding	A joint initiative of Ver de Terre Production , the Institute for Sustainable Agriculture (IAD), La Vache Heureuse (LVH), La Belle Vigne (LBV), Arbre et Paysage 32 (AP32), The Independent and Triple Performance Winegrowers



Network	Greenotec
Member State	Belgium
Description	The non-profit association Greenotec (Grouping for Research on the Environment and Study of New Cultural Techniques) was founded in 2006 by farmers motivated to search for concrete solutions to the practical problems they encountered on a daily basis in the adoption of Soil Conservation Techniques (TCS) on their farms. The association engages in experimental activities; extension activities to inform and train farmers (e.g., study days, conferences, newsletters and a website); and advisory activities.
Link	https://www.greenotec.be/
Funding	Operational Directorate-General for Agriculture, Natural Resources and the Environment (DGARNE) of Wallonia (Direction of Rural Development of the DGARNE), agricultural research institutes (CRA-W, Gembloux Agro-Bio Tech and UCL, among others) and 200+ farmer members of the association. Since 2009, it has also engaged in collaborations with various public (municipal administrations) and private (particularly agri-food companies) organisations.

Network	Terra Nostra Foundation for Agricultural Development
Member State	Poland
Description	Terra Nostra Foundation for Agricultural Development, known also as Terra Nostra Foundation, was established in 2019. Since its establishment, it has been an independent, non-governmental organisation with the goal of gathering best practices, promoting knowledge exchange and certifying progress in regenerative agriculture (RegenAg). Terra Nostra Foundation is focused on educating farmers about and the integration of regenerative practices and principles into farming systems. Regenerative practices introduce biodiversity, soil fertility, improvements in water status and quality, as well as carbon footprint reduction.
Link	https://fundacjaterranostra.pl/
Funding	Co-financed by Polish public funds and Erasmus+, and the farmers converting to regenerative practices pay for 2-3 years advisory services (~1,000 EUR) and for the certification process (~1,000 EUR).



Network	Zero Emission Fertiliser Network
Member State	Denmark
Description	Manure and chemical fertilisers make up about a third of the agriculture and food sector's climate footprint, due in part to the nitrous oxide emissions they release. The Zero Emission Fertiliser Network is a network of companies, universities and research centres, as well as organisations from throughout the food chain working together on creating fertilisers with a lower climate impact. For example, SEGES Innovation has a project researching the effect of adding nitrification inhibitors to manure and chemical fertilisers that is contributing to the Network's activities.
Link	https://www.landbrugsinfo.dk/public/2/2/3/godskning_miljoeffekter_nitrifikationshammerne
Funding	Public-private research and innovation funding



3. Off-setting initiatives

Offsetting initiative	Claire
Member State	Belgium
Description	Claire stands for 'Clean air' and aims to enable companies to offset their CO ₂ emissions by putting them in touch with local projects which are taking action in this area. Claire is a new marketplace to reward local climate efforts within Belgium. It offers a solution for local CO ₂ offsetting.
Link	https://www.claire-co2.com
Funding	Public and private funding

Offsetting initiative	Go2Positive
Member State	The Netherlands
Description	ZLTO launched Go2Positive within the context of the Interreg North Sea Region Carbon Farming project for companies that want to invest in carbon sequestration offsets by farmers, from arable farmers to fruit growers and from dairy farmers to tree nurseries. The soil forms the basis for sustainable food products and can also make an important contribution to climate, water conservation and biodiversity. By taking sustainable soil measures, farmers and horticulturists are able to fix CO ₂ from the air in the soil over a long time period.
Link	https://www.go2positive.com/over-ons
Funding	Interreg



Offsetting initiative	Humus+
Member State	Austria & Slovenia
Description	Bringing ecology and (agriculture) economy into harmony is the aim of the Humus+ development project, in which around 400 farmers throughout Austria and Slovenia are taking part. 5,000 hectares of arable land are being cultivated sustainably, while at the same time numerous tonnes of climate-damaging CO ₂ are being removed from the atmosphere and stored in the soil as humus. The Humus+ development project consists of an agreement between Humus+ and the individual farmer, who agrees to develop humus on an agricultural area of his/her choice (usually farmland) over a period of five to seven years. In addition to better soil, the farmers get their ecological contribution rewarded by the economy through the Humus+ certificate trading scheme.
Link	https://www.humusplus.at/
Funding	Privately funded through the certification scheme

Offsetting initiative	KlimaHumus
Member State	Germany
Description	<p>The KlimaHumus initiative enables and supports land users to build up humus in their soil and thus permanently bind CO₂. The aim is to accompany farmers, winegrowers and soil users working toward regenerative soil cultivation. For this purpose, the Soil Competence Centre will offer soil seminars in which theory and practice go hand-in-hand.</p> <p>Companies, municipalities and organisations that want to voluntarily offset their operationally unavoidable CO₂ emissions can do so by purchasing KlimaHumus certificates. It is about climate responsibility, in which the aspects of regional sustainability are taken into account.</p>
Link	https://stiftunglebensraum.org/humus-initiative-boden-gut-machen
Funding	Lebensraum Foundation humus certification scheme and private sponsors



Offsetting initiative	Label bas Carbone
Member State	France
Description	Created by the Ministry of Ecological Transition with the collaboration of many partners, the Low-Carbon Label aims to contribute to the achievement of France's climate objectives by facilitating the linking of project leaders and financiers or companies wishing to finance projects. Label bas Carbone aims to "collect a commitment to offset 1 million tonnes of CO ₂ equivalent, i.e., the annual carbon footprint of 100,000 French people". After 3 years of existence, some forty structures wishing to commit to reducing their greenhouse gas emissions, including more than 30 large companies, have become partners of the Low-Carbon Label and have already committed to more than one million euros. Projects developed within the framework of the Low-Carbon Label are qualitative, locally based and carried by local actors, and in addition to reducing GHG emissions, respect environmental integrity and generate numerous co-benefits.
Link	Website of the Ministry of Ecological Transition featuring the Label bas Carbone initiative
Funding	Ministry of Ecological Transition

Offsetting initiative	Nieuw Groen
Member State	The Netherlands
Description	Nieuw Groen works with green entrepreneurs who use their initiative to capture CO ₂ . Those wanting to offset their carbon footprint can choose to purchase offset credits from a specific initiative.
Link	https://nieuw-groen.nl/
Funding	Social enterprise funded through purchasers of carbon offsets



Offsetting initiative	Woodland Environmental Fund
Member State	Ireland
Description	The Woodland Environmental Fund is a good practice example for a carbon farming-type scheme in Ireland. The Woodland Environmental Fund seeks to utilise public and private resources to increase the level of native woodland planting in Ireland by offering companies the opportunity to pay a fee per hectare for tree planting to offset their emissions.
Link	https://www.gov.ie/en/service/b2a2b-woodland-environmental-fund/
Funding	Private companies pay private landowners for forest establishment (one-time 1,000 EUR/ha) approved by the Department of Agriculture, Food and the Marine



4. Projects

4.A EU level

Project	AgriCaptureCO2 Regenerating soils for climate and farmers (2021-2023)
Member State	EU
Description	The project is developing an innovative, robust, and scalable solution to measure carbon capture in soil. By combining satellite images with farmers' data and soil samples, it aims to make soil carbon measurement more accurate and cheaper than ever before. This will allow farmers to easily track how their efforts in the field are translating into increased carbon in their soils – and will help farmers get paid for their results.
Link	https://agricaptureco2.eu/
Funding	Horizon 2020

Project	Arla Foods & Royal DSM – Fodder composition and feed additives
Member State	EU
Description	<p>European dairy cooperative Arla Foods and global purpose-led, science-based company Royal DSM are set to start a large-scale on-farm pilot with the methane-reducing feed additive Bovaer® on 10,000 dairy cows across three European countries. Bovaer has been approved for use in the EU and is expected to reduce methane by approximately 30 %, but it still lacks testing and approval as a climate measure. Throughout the summer and autumn of 2022, Arla Foods will work with its farm owners to ensure a diverse group of farms for the pilot programme.</p> <p>During the on-farm pilots, farmers will receive Bovaer® from their feed suppliers and mix it into the feed for their dairy cows. Arla will collect milk samples for analysis and make a comparison with milk from dairy cows not fed the feed additive. If preliminary findings are as expected, Arla Foods plans to double the pilot project to include 20,000 cows in 2023.</p>
Link	Arla press release
Funding	Private companies



Project	ClieNFarms (2022-2026)
Member State	EU
Description	The project aims to co-develop and upscale systemic, locally relevant solutions to reach climate-neutral and climate-resilient sustainable farms across Europe in support of the European Green Deal. It brings together a consortium of 33 partners and started in January 2022.
Link	https://www.inrae.fr/en/news/more-climate-neutral-and-climate-resilient-farms-across-europe
Funding	Horizon 2020

Project	Demeter (2019-2023)
Member State	EU
Description	The H2020 DEMETER project is a large-scale deployment of farmer-driven, interoperable smart farming-IoT (Internet of Things) based platforms, delivered through a series of 20 pilots across 18 countries (15 EU countries). Involving 60 partners, DEMETER adopts a multi-actor approach across the value chain (demand and supply), with 25 deployment sites, 6,000 farmers and over 38,000 devices and sensors being deployed. They are currently developing their own carbon farming tool.
Link	https://h2020-demeter.eu/
Funding	Horizon 2020



Project	EU LIFE Carbon Farming Scheme (2020-2022)
Member State	EU
Description	The goal of the project is to identify and accelerate the development and adoption of novel incentives for carbon sequestration and the increase and maintenance of the organic carbon stock in soil and biomass throughout Europe. With the aim of promoting a well-functioning voluntary carbon market, the project will uncover the key factors in supply and demand measures to invite the private sector to accelerate climate action. The results of the project will be fed into the development of the EU agricultural and climate policies.
Link	https://www.st1.com/st1-life
Funding	LIFE

Project	Harmonising Solutions: Regenerative Agriculture (2020-ongoing)
Member State	EU
Description	Leading and driving resilient systems, scalability and positive outcomes in all forms of crop and livestock agriculture. Wherever it is implemented, the Regenerative Agriculture Programme can guide, measure and enable essential regenerative agriculture outcomes and help farmers overcome the challenges they face to implement and scale solutions.
Link	https://saiplatform.org/regenerative-agriculture-programme/
Funding	SAI Platform partners (active and associate members)



Project	Interreg North Sea Region Carbon Farming project (2018-2021)
Member State	EU
Description	The Carbon Farming project aims for a double goal: mitigate climate change and improve agricultural soils. How? This is done by implementing carbon sequestration (CS) techniques at farm-level: fixing CO ₂ from the atmosphere in soils and improving the soil quality and biodiversity. Healthy soils, healthy climate. A win-win situation.
Link	https://northsearegion.eu/carbon-farming/
Funding	Interreg

Project	LANDMARC (Land Use Based Mitigation for Resilient Climate Pathways) (2020-2024)
Member State	EU
Description	The project aims to enhance understanding of the realistic potential of land-based negative emission solutions in agriculture, forestry, and other land use sectors. The LANDMARC project will estimate the climate impact, potential for upscaling, and associated co-benefits and trade-offs of various land-based negative emission solutions, such as net sinks for greenhouse gases in agriculture. The project will apply earth observation monitoring, a mix of climate, land-use and economic simulation models as well as local and regional stakeholder engagement activities across 16 case studies and five regional platforms.
Link	https://www.landmarc2020.eu/
Funding	Horizon 2020



Project	NEFERTITI (2019-2022)
Member State	EU
Description	The overall objective is to establish an EU-wide highly connected network of demonstration and pilot farms designed to enhance knowledge exchange, cross fertilisation among actors and efficient innovation uptake in the farming sector through peer-to-peer demonstration of techniques addressing 10 major agricultural challenges in Europe. The network comprises 32 partners from 17 countries and is coordinated by ACTA, the head of the Network of French Agricultural Technical Institutes.
Link	https://nefertiti-h2020.eu/
Funding	Horizon 2020

Project	NEGEM (2020-2024)
Member State	EU
Description	NEGEM – Quantifying and Deploying Responsible Negative Emissions in Climate Resilient Pathways – is a Research and Innovation Action project funded by the EU Horizon 2020 Programme, aiming to assess the realistic potential of Negative Emission Technologies and Practices (NETPs) and their contribution to climate neutrality, as a supplementary strategy to emissions mitigation. The project is carried out by a consortium of 16 partners from 11 countries, including 6 universities, 3 research and technology organizations, 2 non-governmental organisations and 5 companies.
Link	https://www.negemproject.eu/the-project/
Funding	Horizon 2020



Project	RADIANT (Realising Dynamic Value Chains for Underutilised Crops) (2021-2025)
Member State	EU
Description	This project promotes crop diversification, environmental and agrobiodiversity preservation, and fair economic development through the valorisation of underutilised crops. RADIANT is a multi-actor consortium composed of researchers, farmers, value chain actors and consumers.
Link	https://cordis.europa.eu/project/id/101000622
Funding	Horizon 2020

Project	Strategies for organic and low-input farming to mitigate and adapt to climate change (SOLMACC) (2013-2018)
Member State	EU
Description	SOLMACC is about demonstrating that farming can be climate-friendly by applying a combination of optimised organic farming practices to respond to climate change. Across Europe, 12 demonstration farms were selected with farmers adjusting their agriculture techniques over the course of five years under close scientific monitoring and supervision. The tested practices were optimised on-farm nutrient recycling, optimised crop rotations with legumes, optimised tillage systems and agroforestry.
Link	https://solmacc.eu/
Funding	LIFE



4.B Member State level

Project	Green biorefinery
Member State	Denmark
Description	BioRefine Denmark is a biorefinery where organic, green protein is extracted from 3,000 hectares of locally produced clover grass and alfalfa. This plant is expected to produce about 7,000 tonnes of organic protein annually with a crude protein content of over 50 %. The plant is owned by Dansk Landbrugs Grovvarereselskab (DLG – a farmer-owned cooperative), Danish Agro and DLF Seeds A/S. Reports estimate that production of 100,000 ha of grass and clover may reduce CO ₂ emissions by 100,000-200,000+ tonnes if carbon sequestration is included. The project is working to refine the estimate as it does not include carbon storage deeper than 1 metre (grass roots can grow more than 3 metres deep) or differences between varieties that can store even more carbon in the soil.
Link	https://biorefine.dk/
Funding	14 DKK funded by Green Development and Demonstration Programme (GUDP)

Project	Livelihoods Carbon Fund project
Member State	France
Description	The Livelihoods Carbon Fund (LCF2) aimed to fund the conversion of 11,000 hectares to regenerative agriculture in the Brittany region in France. This project called “Sols de Bretagne” will support around a hundred farmers in their transition to regenerative agricultural practices through soil conservation agriculture grants. The project will help sequester 140,000 tonnes of CO ₂ over 10 years. It is carried out in partnership with the Brittany Region (territorial authority composed of the Regional Council of Brittany, which decides on the political and agro-economic orientations of the region), the Regional Chamber of Agriculture (public institution that accompanies the agroecological transition through its network of agriculture professionals, engineers, technicians) and the local association Sols d’Armorique.
Link	https://livelihoods.eu/portfolio/brittany-france-regenerative-agriculture/
Funding	Livelihoods Carbon Fund (private investment fund)



Project	Humus formation in agricultural soils
Member State	Germany
Description	<p>With this project, the German Association of Organic Farmers, Food Processors and Retailers (Bund ökologische Lebensmittelwirtschaft (BÖLW)) and the German Farmers' Association (Deutscher Bauernverband (DBV)) aim to find out how innovative, long-term effective measures beyond current agricultural practices may be established for humus conservation and humus formation.</p> <p>In this context, 150 farms in five German model regions were recruited to collaborate with the accompanying scientific research organisation (Johann Heinrich von Thünen Institute – Federal Research Institute for Rural Areas, Forestry and Fisheries) and organised into ten regional farm groups. On these farms, humus-effective measures are implemented, which are jointly developed and planned by the project management team, the participating farmers and the Thünen-Institute.</p>
Link	https://www.ble.de/DE/Projektfoerderung/Foerderungen-Auftraege/Bundesprogramm_Humus/Humusaufbau_MuD/Humusaufbau_nod_e.html
Funding	German Federal Ministry of Food and Agriculture

Project	Carbon Farming Certification System (C-FARMS) (2021-2023)
Member State	Italy
Description	<p>The LIFE CARBON-FARMS Project, lasting 18 months, aims to promote carbon farming practices through the creation of a knowledge base that supports the development of a regulatory framework for the certification of carbon removals based on a solid and transparent accounting scheme in connection with the national greenhouse gas inventory.</p>
Link	https://c-farms.eu/it/
Funding	LIFE



Project	CO ₂ Stored in Managed Forests MARCHE Project (2019-2021)
Member State	Italy
Description	Funded by the EAFRD through the Marche region RDP for 2014-2020 (Measure 16.1 Actions 1 and 2), the project promoted Sustainable Forest Management (GFS) of the forest assets managed by the Agricultural Forestry Companies (SAF) in the Operational Group (OG), through the drafting of a specific GFS Manual and the consequent adaptation of the existing management plans. The project also pursued voluntary certification recognised by accredited third-party certification bodies. An output from the project will be a training course for local forestry workers on best management practices to increase ecosystem services. To pursue the goal of conservation and sequestration in managed forests (Focus area 5E), the project promotes accounting for both woody biomass and forest soils.
Link	www.co2marche.it
Funding	EAFRD

Project	Forage4Climate (2016-2020)
Member State	Italy
Description	<p>The LIFE+ project aimed to show how systems related to milk production could contribute to climate change mitigation through the:</p> <ol style="list-style-type: none"> 1. application of best practices that limit emissions and preserve and increase the amount of arable land, meadows and pastures used to produce fodder for feeding ruminants (cattle, sheep and goats); 2. dissemination of tools for assessing carbon stocks and greenhouse gas emissions (GHG) according to the Intergovernmental Panel on Climate Change (IPCC 2006) guidelines for evaluating mitigation potential. <p>Forage4Climate aimed to contribute to the accounting of GHG emissions and removals from fodder systems in two European macro climatic areas: continental (cow milk production) and Mediterranean (sheep/goat milk production).</p>
Link	http://forage4climate.crpa.it/nqcontent.cfm?a_id=14261
Funding	LIFE



Project	LIFE AGRESTIC – Reduction of Agricultural Greenhouse Gas Emissions through Innovative Cropping Systems (2019-2023)
Member State	Italy
Description	The LIFE AGRESTIC project takes place in Italy in three demonstration sites (Emilia-Romagna, Tuscany and Puglia) representing different climatic areas. In the demonstration sites, both conventional and innovative/efficient cropping systems (such as inclusion of legumes and cover crops in the rotation) will be implemented to evaluate and compare the two types of cropping systems.
Link	https://www.agrestic.eu
Funding	LIFE

Project	LIFE CarbOnFarm project – Technologies for the stabilisation of soil organic carbon, the productivity of farms, the enhancement of residual biomass and the mitigation of climate change (2013-2018)
Member State	Italy
Description	The main objective of the LIFE project (2013-2018), coordinated by CERMANU (Interdepartmental Research Center on Magnetic Resonance for the Environment, Agro-Food and New Materials of the University of Naples Federico II) was to improve the content and stability of organic matter in agricultural soils through the adoption of sustainable practices, both from an environmental and economic point of view. The project proposed solutions for composting on farms that could be adapted to different types of farm businesses. The CarbOnFarm project showed how the return to composting by farms, as well as promoting the productive and economic enhancement of residual biomass from local activities, actively contributed to the circular economy and the fight against climate change by increasing and preserving carbon in the soil.
Link	www.carbonfarm.eu
Funding	LIFE



Project	LIFE PEF&PES – Product environmental footprint and production of ecosystem services (2020-2023)
Member State	Italy
Description	Co-financed by the LIFE Programme, this project aims to conserve forest ecosystem services, increase CO ₂ absorption, decrease carbon losses due to extreme events, and maximize forest growth, whilst continuing to harvest outputs (i.e. products, timber) and create income and well-being for local communities.
Link	https://lifeco2pefandpes.eu
Funding	LIFE

Project	MediCarbonio
Member State	Italy
Description	<p>Under the MediCarbonio EIP-AGRI project, carbon emissions and sequestration from the production of alfalfa forage will be recorded to evaluate its climate mitigation potential. The goal of the Operational Group is to highlight and document the benefits, in terms of environmental sustainability, of alfalfa forage produced by members of the Italian Forage Supply Chain (Filiera Italiana Foraggi).</p> <p>The project aims:</p> <ul style="list-style-type: none"> • to evaluate the contribution of perennial alfalfa meadows to soil carbon sequestration; • to collect and document the elements of sustainability promoted; • to support ecological certification. <p>The description and analysis of the forage production process will also allow distinctive characteristics of the alfalfa forage to be compared to similar products obtained from other sources and for good production practices to be formulated.</p>
Link	https://ec.europa.eu/eip/agriculture/en/find-connect/projects/contabilizzazione-delle-emissioni-e-sequestri-del
Funding	EAFRD (Art. 56 of EU Directive 1305/2013)



Project	Progetto LIFE AGRICARE Innovative Green Farming – Introducing innovative precision farming techniques in agriculture to decrease carbon emissions (2014-2017)
Member State	Italy
Description	The project demonstrated that conservation agriculture, coupled with electronic, information and communication technology (Precision Agriculture), significantly affected both carbon emissions (reducing greenhouse gases) and soil protection (enhancing conservation, increasing organic carbon and preventing degradation). The experiments, conducted by the ValleVecchia demonstration company of Veneto Agriculture, aimed to assess the transferability and replicability of the techniques within other Italian and European agricultural systems.
Link	http://www.lifeagricare.eu/it/progetto
Funding	LIFE

Project	Progetto LIFE HELPSOIL – Sustainable techniques of conservation agriculture to improve soils and adaptation to climate change (2013-2017)
Member State	Italy
Description	The LIFE HELPSOIL project (2013-2017), defined by the European Commission as BEST LIFE, aimed to compare the management of agricultural soils based on conservation agriculture (as outlined by the FAO) to soils managed with conventional ploughing techniques. The project involved 20 demonstration companies located in the Po Valley area.
Link	http://www.lifehelpsoil.eu
Funding	LIFE



Project	Farming for Nature (2001-2038)
Member State	The Netherlands
Description	Farming for Nature envisions the integration of agriculture and ecology by means of extensive farming systems. In these designed systems, no-input of manure and feed from outside the farm are allowed, drainage is reduced and a minimum of 10% 'unproductive' landscape elements (including those already existing) are required. The farmer is compensated financially on the basis of a long-term agreement.
Link	https://www.wur.nl/en/project/Farming-for-Nature.htm
Funding	Regional and state funding; pilot started after a state aid procedure with the European Commission



5. Publications

Publication	Carbon versus Timber Economy in Mediterranean Forests
Member State	EU - Mediterranean
Description	<p>Forests produce goods and services, but the forest economy is based on goods with a market price more than on services. Under Mediterranean climate conditions, forests have low timber production, being frequently financially loss-making, despite the environmental services provided, such as carbon sequestration. Timber production and carbon sequestration are compatible, and a proper valuation of both can allow for more balanced forest management. The aim of this paper is to financially assess a scenario based on maximising carbon sequestration versus another based on maximising timber harvesting in a Mediterranean forest. To do that, timber stock, growth and harvesting, as well as carbon sequestration have been calculated. Applying market prices for timber and CO₂, both scenarios have been assessed carrying out a sensitivity analysis. Maximising carbon sequestration was more profitable in the vast majority of combinations; timber harvesting was only more profitable if CO₂ prices fell below 30% and timber price increased more than 20%; timber price rise is possible, but a collapse in CO₂ price is not probable. The real barrier is that while timber is as a commodity with market price, carbon sequestration is not. The challenge for the future is to pay for carbon sequestration, mobilising resources from polluting sectors to forests.</p>
Link	https://www.mdpi.com/2073-4433/12/6/746

Publication	OP2B Regenerative Farming Framework
Member State	EU
Description	Scaling up Regenerative Agriculture – One Planet Business for Biodiversity's (OP2B) contribution.
Link	https://op2b.org/wp-content/uploads/2021/09/OP2B-Regenerative-Agriculture-Leaflet_FINAL.pdf



Publication	Potential of land use activities to offset road traffic greenhouse gas emissions in Central Spain
Member State	Spain
Description	<p>Highlights</p> <ul style="list-style-type: none"> • Offsetting road carbon emissions through land use activities is possible in Spain. • It is possible to link carbon sequestration, biodiversity and rural development. • The challenge to offset carbon emissions is funding. • It is possible to apply a fuel tax, in accordance with the polluter-pays principle.
Link	https://www.sciencedirect.com/science/article/abs/pii/S0048969717304710?via%3Dihub

Publication	Towards an Integrated Environmental Compensation Scheme in Spain: Linking Biodiversity and Carbon Offsets
Member State	Spain
Description	<p>Biodiversity offsets and carbon markets are both environmental compensation schemes, which have much in common despite their different origins and development. They need active markets to succeed with actual offer and demand, which are currently practically non-existent in Spain. The inclusion of land use and forestry activities in greenhouse gas accounting could encourage carbon sinks, stimulating the development of carbon markets. Conservation banking was incorporated into Spanish legislation in the 2013 Environmental Assessment Act, as a tool for biodiversity offsets, but the current situation is hindering its development. Combining carbon and biodiversity offsets in a global compensation scheme would provide great opportunities: ecologically, creating and protecting habitats and species; socially, creating employment and channelling financial resources to rural areas; climatically, reducing greenhouse gas (GHG) concentration levels; and politically, contributing to compliance with emission reduction targets. Conservation banking is an appropriate candidate for this integration in Spain, as long as it is regulated flexibly, and different bank models are allowed that are able to integrate forest and agriculture production, conservation and compensation.</p>
Link	https://www.worldscientific.com/doi/abs/10.1142/S1464333217500065



Publication	Valorisation of local carbon farming practices: presentation of the show cases in the Carbon Farming project
Member State	EU (BE, DE, NL and NO partners)
Description	<p>The Interreg North Sea Region CF project was set up with two main goals. 1) To increase awareness of CF possibilities amongst farmers as well as in society. 2) To motivate farmers to apply more sustainable soil management by developing new business models for implementing CF practices. The outcomes of the initial study as to the most promising CF measures are highlighted in the report <i>Inventory of techniques of carbon sequestration in agriculture soils</i>. In parallel with that study, desk-based research was carried out by all partners on voluntary markets for carbon credits and the possibilities for the agricultural sector to valorise sequestered carbon. Four potential business models were identified for farmers, namely: within the agri-food chain, outside the agri-food chain, at farm-level and including government institutions. The report <i>Research of existing business models to valorise carbon sequestration</i> details how this research was conducted and how these business models were defined. The outcomes of these two studies on the most promising CF measures and the different business models were then combined and brought into practice through ‘show cases’. These show cases are the result of four years of practical implementation work under the Interreg CF project, where collaborations between farmers and other stakeholders were set up to valorise CF practices and carbon sequestration. The process of setting up these collaborations and the results are discussed and evaluated in this final project report.</p>
Link	https://northsearegion.eu/media/21485/2022-0701-final-rapport-carbon-farming-web.pdf



6. Resources

Resource	Arla's Climate Action Catalogue
Member State	EU
Description	Arla's Climate Action Catalogue contains 20 concrete actions for dairy farmers who want to become more climate efficient.
Link	https://www.arla.com/4987fd/globalassets/arla-global/sustainability/dairys-climate-footprint/climate-actions-on-dairy-farms.pdf

Resource	Arla - Climate Check Tool
Member State	EU
Description	Arla's Climate Check is a tool developed specifically for participating cooperative farmer owners to enable them to measure and reduce emissions from dairy farming effectively.
Link	https://www.arla.com/sustainability/sustainable-dairy-farming/how-we-measure-dairy-farmings-carbon-footprint/

Resource	Arla - Climate Check Tool video
Member State	EU
Description	How Arla's Climate Check tool is utilised to help reduce the carbon footprint of farms throughout the cooperative.
Link	https://youtu.be/gUBIJeCddiw



Resource	Arla - Improving Biodiversity on Dairy Farms video
Member State	EU
Description	Farmer explaining how practices have changed to provide better habitats and account for biodiversity within the farm.
Link	https://youtu.be/7INpreUuJ2I

Resource	Arla - Improving Soil Health on Dairy Farms video
Member State	EU
Description	Farmer explaining how they measure and maintain good soil health on their farm.
Link	https://youtu.be/ViMGkPzCkx8

Resource	Arla - Exploring Regenerative Dairy Farming video
Member State	EU
Description	Farmers participating in Arla's Regenerative Agriculture Pilot Farm Network describe their actions and experience and FAI Farms as collaborator on assessing the impacts.
Link	https://youtu.be/dKqQ5D3htX0



Resource	Arla - Regenerative Agriculture Pilot Farm Network
Member State	EU
Description	From September 2021, Arla will establish a network of pilot farms to provide insights and learnings about how to support Arla's farmer owners in adopting more regenerative practices. By collaborating closely with farmer owners, Arla wants farmers to drive the evolution and implementation of what it means to farm regeneratively in the context of dairy systems and make them an integral part of agreeing relevant principles and practices for success at scale. These pilots will also create an opportunity for members to meet on farms and gain inspiration, share experiences and learn from each other.
Link	https://www.arla.com/4a6ee6/globalassets/sustainability/regenerative-farming/arla_regenerative-farming-pilot-farm-network-brochure_english.pdf

Resource	Incentivising Carbon Farming video
Member State	EU
Description	Video highlighting four carbon farming projects under the Interreg North Sea Region Carbon Farming project.
Link	https://youtu.be/Xn2JTjud_FA

Resource	Veneto Region Rural Development Conservation Agriculture video
Member State	Italy
Description	Video explaining uptake of on-farm conservation agriculture practices in Veneto region (in Italian).
Link	https://youtu.be/woww0ludEAc



Resource	ZLTO – Carbon Farming video
Member State	The Netherlands
Description	Explanatory video about carbon farming from the Interreg North Sea Region Carbon Farming project.
Link	https://youtu.be/R--oEEejJ8U



7. Other useful links

Description	Link
European Association for Agroecology	https://www.agroecology-europe.org/
Practical examples of CF case studies from the Interreg NSR Carbon Farming project	https://www.3-n.info/news-und-termine/aktuelle-meldungen/themuebergreifendes/carbon-farming-%E2%80%93-neue-praxisbeispiele.html
SkyClean	<p>In March 2022, the company Stiesdal Fuel Technology launched a new Skyclean plant in Denmark with 2 MW generation capacity from pyrolysis technology and biochar. More Skyclean plants are planned in the near future to contribute to the Danish strategic climate plans.</p> <p>https://www.stiesdal.com/skyclean/</p>

