



**CARBON FARMING
SCHEME**

LIFE Preparatory Project

LIFE Carbon Farming Scheme

Peltomaan hiilen sidonnasta euroja – miten hiilikompensaatiopalvelut kehittyvät

ProAgria - Hiiliviljely euroina 18.11.2021

Coordinator:



Partners:



Tyynelän
tila



puro ·
earth

NEOT
North European Oil Trade

Financed by:



LIFE19 PRE FI001 – SI2.828588
The Life Carbon Farming
project has received funding
from the LIFE Programme of
the European Union



LIFE Carbon Farming Scheme

- Develop an understanding of how to implement a carbon farming incentive scheme
- Identify factors of efficient markets
- Demonstrate the carbon sequestration in different pedo-climatic regions in Europe.



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Understanding supply and demand of carbon removals





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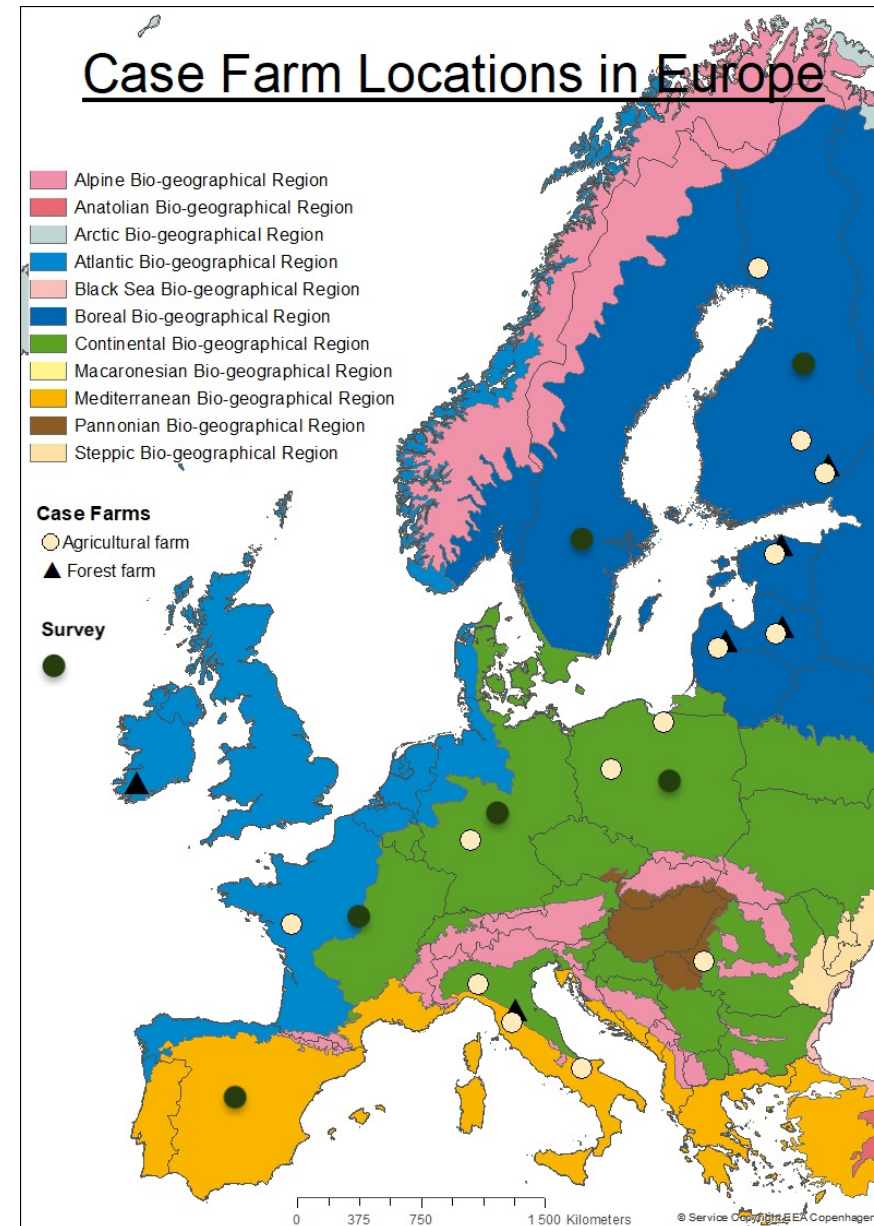
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The case farms and forests

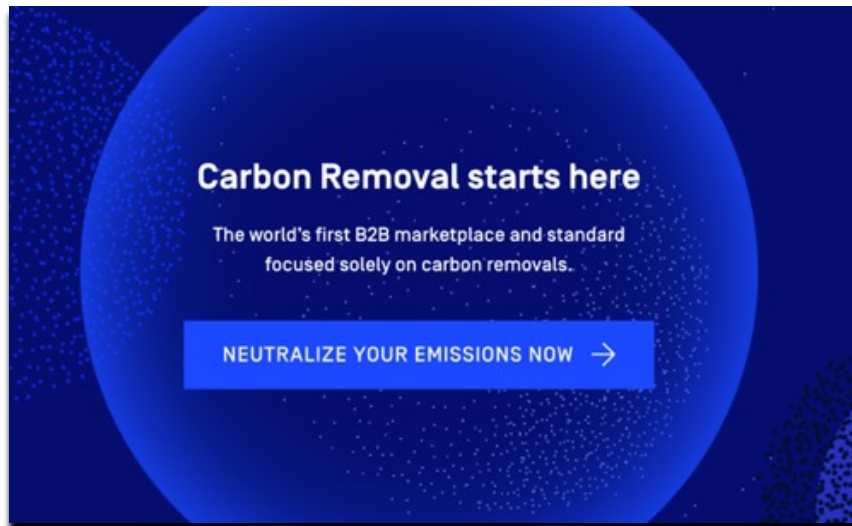
Test and review viable carbon farming methods and estimate the CO2 sequestration potential in test farms in different European climate zones.

Survey and interview for demand and supply

Surveys aims to increase common knowledge on stakeholder priorities concerning various aspects of nature-based carbon sequestration and how to incentivize actions by policy and market mechanisms. The interviews seek to better understand the practical farm management context in which incentives for carbon farming are applied.



Trading pilot in Puro.earth marketplace



Puro.earth marketplace¹ and Soilfood² pilot the Carbon Removal achieved using soil amendment fiber from pulp and paper mill sludges to store stable carbon into agricultural soils.

Piloting gathers information about trading and demand of carbon removals.

*1 Carbon marketplace to buy and sell verified CO₂-certificates

<https://puro.earth/>

*2 Providing a full service of side stream and product utilization for the forest, bio-energy, food, mining, chemical, and environmental industries.

<https://soilfood.fi/en/>



Published Reports

[Available online](#)

Soon publishing: Report on 5-10 best methods to bind carbon in European agricultural and forest ecosystems and prevention of the carbon loss (Luke)

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**Draft report on calculation methods
to be applied in estimating
quantitatively agricultural and forest
carbon sinks and their stability**

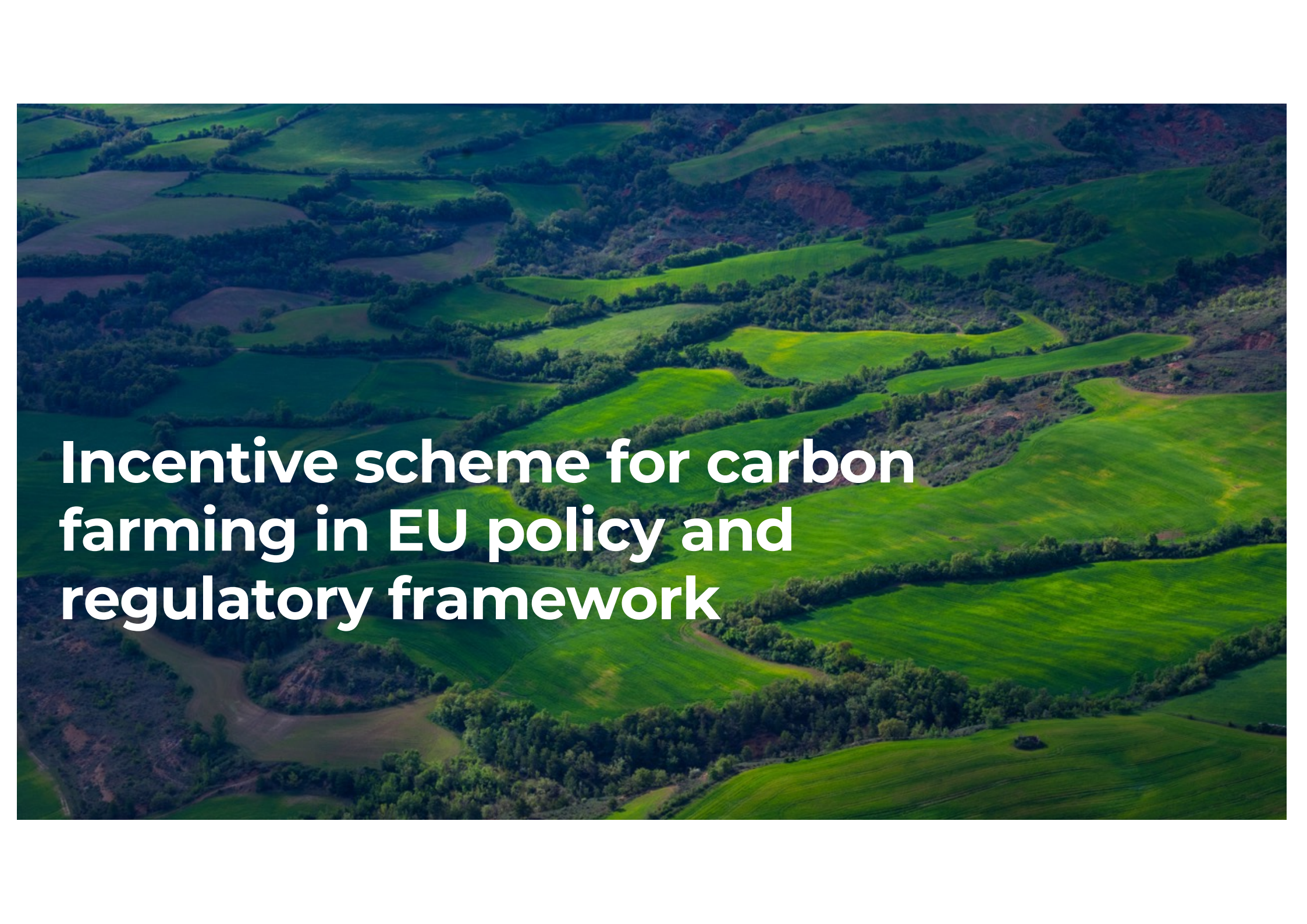
 LIFE PREP PROJ - 02.02020
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THE PROJECT HAS RECEIVED FUNDING FROM THE LIFE PROGRAMME OF THE EUROPEAN UNION

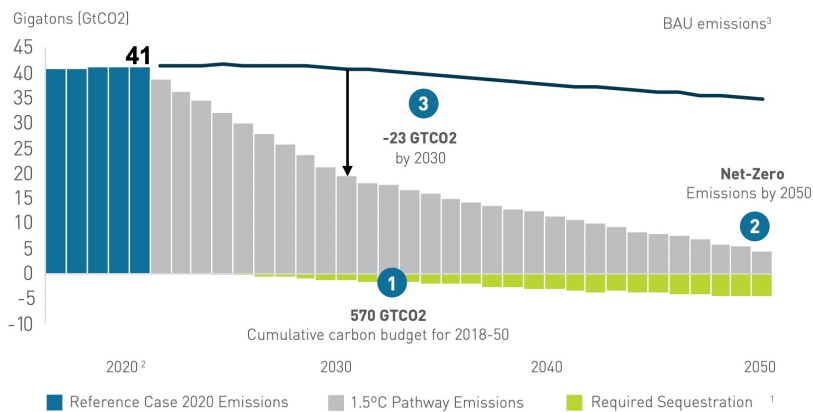


An aerial photograph of a lush, rolling landscape. The terrain is covered in vibrant green fields and patches of dense, dark green trees. The hills are undulating, creating a sense of depth and movement. The lighting is bright, highlighting the textures of the vegetation and the varied shades of green. The overall scene conveys a sense of natural beauty and agricultural productivity.

Incentive scheme for carbon farming in EU policy and regulatory framework

GLOBAL CARBON MARKETS

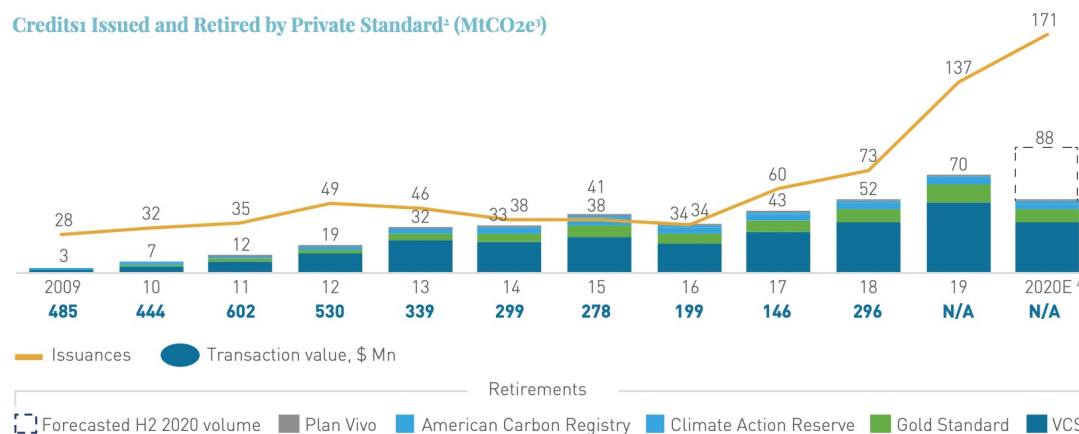
Total CO₂ Net Emissions



- 1 In order to reach the **1.5°C** goal we must remain within the **570 GtCO₂ carbon budget**
- 2 By 2050 **all remaining emissions need to be fully offset** by sequestration (net zero)
- 3 To set us on this path we must reduce net emissions by **23 GtCO₂ by 2030**

(1) 570Gt of cumulative CO₂ emissions from 2018 for a 66% chance of a 1.5°C increase in global mean surface temperature (GMST) [2] While emissions fell by a quarter at the peak of COVID-related lock-down, daily emissions have rebounded to be only 5% lower than 2019 levels. Scenarios to 2050 still remain the same. From Nature: Current and future global climate impacts resulting from COVID-19 (3) Business-as-usual emissions. Source: McKinsey 1.5°C Scenario Analysis; IPCC; Le Quéré et al. 2018

Credits Issued and Retired by Private Standard² (MtCO₂e³)



(1) One carbon credit represents one ton of carbon dioxide equivalent (CO₂e) avoided or sequestered. (2) Issuances and retirements based on registry data and McKinsey analysis; transaction value based on Ecosystem Marketplace 2019 report. (3) MtCO₂e = metric tons of carbon dioxide equivalent. (4) Based on YTD volumes until end of September 2020 (ie, 114 million for issuances and 63 million for retirements); we project 2020 FY volumes based on extrapolation in line with historical seasonality (last 5 years); this does not reflect any potential impact related to Covid-19. Source: Ecosystem Marketplace; press search; data from VCS, GS, CAR, ACR and Plan Vivo market registries; McKinsey analysis

Source: IETA 2020 Annual Report

LIFE analysis of the market mechanisms

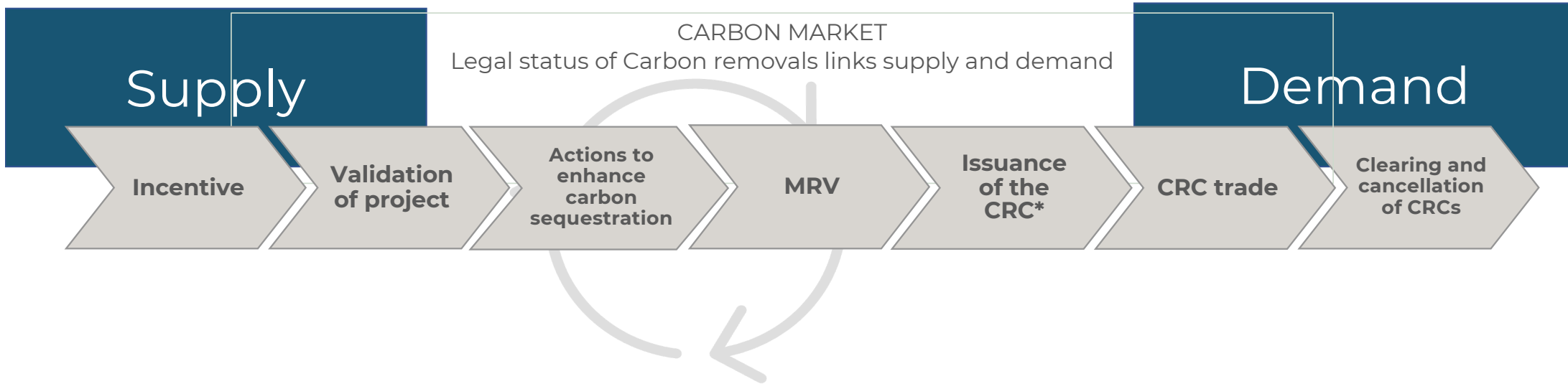
Table 1 Key information on the studied carbon market systems

Carbon market system	Project sectors included	Compliance / voluntary	Starting year	CRC volumes
California – Cap-and-Trade	transportation, electricity, industrial, agricultural, waste, residential and commercial sources	Compliance	2013	12 MtCO ₂ used, 127 MtCO ₂ issued
Australia - Carbon Farming Initiative	Waste management, vegetation management, transport, mining, oil and gas, energy efficiency actions and agriculture	Voluntary	2011	52.7 MtCO ₂ e delivered, 140 MtCO ₂ e still to be delivered
Klik Foundation	Transportation, Businesses, Buildings and Agriculture	Compliance	2013	9.6 MtCO ₂
Label Bas Carbone - France	Until now, forestry (afforestation, coppicing, and restoration) and agriculture	Voluntary	2018	No volumes yet
New Zealand – Emissions Trading Scheme	Forestry	Compliance	2008	28.6 MtCO ₂ e
Nori	Soil carbon project in agriculture.	Voluntary	2017	13.5 tCO ₂ e
Registro De Huella De Carbono - Spain	Afforestation and reforestation	Voluntary	2014	123 590 tCO ₂ e
Woodland Carbon Code - United Kingdom	Afforestation	Voluntary	2011	Current projects will deliver 6.3 MtCO ₂ e during their 100 years' lifetime 100
Puro.Earth	Biochar, Carbonated Building elements, Wooden building elements	Voluntary	2019	10 084 tCO ₂



[Available online](#)

Value chain of the nature based carbon removal



- Public finance
- Private capital
- Hybrid model

- Criterias
- Methodology
- Location information

Practicing methodology to enhance carbon sequestration and maintaining the carbon stocks

- Monitoring/ measuring
- Reporting
- Verification

- 1 ton CO₂ emitted = 1 ton carbon sequestered
- Credit registration

- Voluntary markets
- CORSIA Potential
 - Road transport
 - ETS sector
 - EU aviation
 - Heating & Cooling
 - Agriculture
 - Maritime

- Transparent registry
- No double counting
- No double claiming

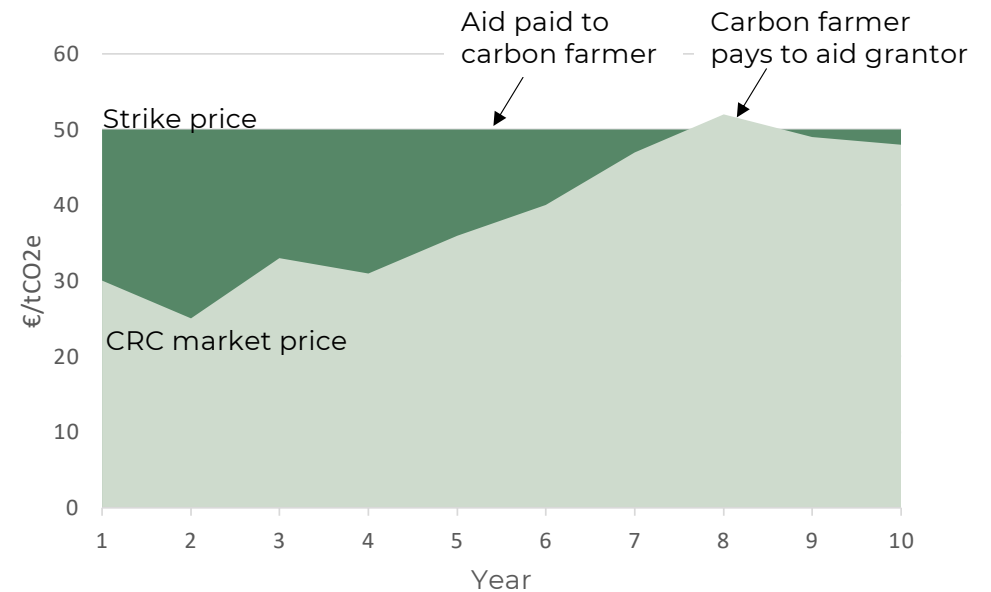
* CRC= Carbon removal credit

Financing methods

Questions to be answered

- Why public funding, why private investments?
- What are the costs related to each part of the value chain?
- What type of funding is needed/suitable for each part of the value chain?

Example financing method for carbon farming: Carbon Contracts for Difference (CCfD)





Published Reports

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 <p>CARBON FARMING SCHEME LIFE Preparatory Project</p>	 <p>CARBON FARMING SCHEME LIFE Preparatory Project</p>	 <p>CARBON FARMING SCHEME LIFE Preparatory Project</p>
		
<p>Analysis of the market demand mechanisms and the demand potential for land-based carbon credits</p>	<p>Incentive scheme to encourage foresters and farmers to adopt agricultural practices enforcing removal of CO₂ from the atmosphere</p>	<p>Review of risk assessment and policy aspects for best practices</p>
 <p>LIFE19 PSE F201 - 02.020508 The Carbon Farming project has received funding from the LIFE Programme of the European Union.</p>	 <p>LIFE19 PSE F201 - 02.020508 The Carbon Farming project has received funding from the LIFE Programme of the European Union.</p>	 <p>LIFE19 PSE F201 - 02.020508 The Carbon Farming project has received funding from the LIFE Programme of the European Union.</p>

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Go to www.menti.com and use the code 8480 5532

Mikä on viljelijän näkökulmasta tärkeintä hiilikorvauksessa / kompensatiomarkkinoissa?

 Mentimeter

- 1st | korvauksen taso ja säännöllinen tulo
- 2nd | toimenpiteen riskittömyys
- 3rd | toimenpiteen ja pellon käytön vapaus
- 4th | kokonaisvaltainen tilan hiilitase
- 5th | kokonaisvaltainen ympäristöhyöty



Next steps

- Report on 5-10 best methods to bind carbon in European agricultural and forest ecosystems and prevention of the carbon loss (soil management, fires) (10/2021)
- Stakeholder workshop Q4/2021 and Q1/2022
- A4 will report the outcome of all A4 activities (Q1/2022)
- Socio-economic impact modelling in carbon farming (2/2022)
- Final Guidance 2/2022
- Reporting the Actions and end of the project 11.5.2022
- Final reporting 30.6.2022

Thank you

Read more: <https://www.st1.com/st1-life> & [Carbon Action -platform](#)

Follow in LinkedIn for news: <https://www.linkedin.com/company/life-carbonfarmingscheme>

More information about the project, please contact:

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