



EU Carbon Farming Policy

EC DG AGRI - CDG Milk

5th March 2020

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European Commission, DG CLIMA

2030 Climate and Energy Framework

≤-40 % Greenhouse Gas Emissions

from 1990 levels

**Emission
Trading
System (ETS)**

-43%

*Including:
Power/Energy
Sector and
Industry, Aviation*

*Max
100
MTC
O2eq*

**Includes
Agricultural
CH₄ – N₂O**

Non-ETS ≤-30%

*Including: road transport, buildings, waste,
agriculture, Land Use, Land Use Change and
Forestry*

**Effort
Sharing
Regulation**

-30%

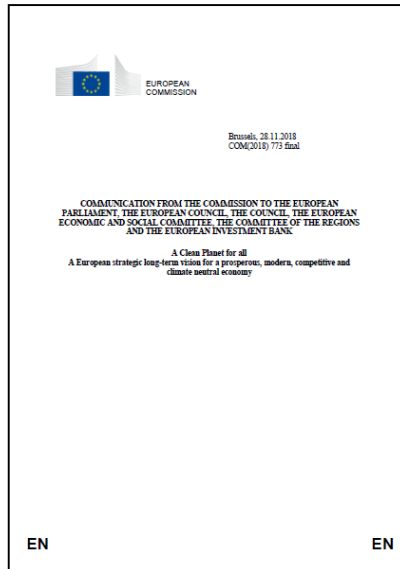
**Full
flexibility**

**Max 280
MtCO₂eq**

**Land Use,
Land Use
Change and
Forestry**

"No Debit"

**Includes
Agricultural
CO₂**



Communication “A Clean Planet for All” (Long Term Strategy)

25 pages

<https://europa.eu/!uJ83HG>

In depth analysis supporting the Communication




393 pages

<https://europa.eu/!JX39VJ>







Action Plan on Financing Sustainable Growth

One comprehensive strategy | Three main objectives | Ten Actions

-  **1 Reorienting capital flows**
towards sustainable investment
-  **2 Mainstreaming sustainability into risk management**
-  **3 Fostering transparency and long-termism**

Actions

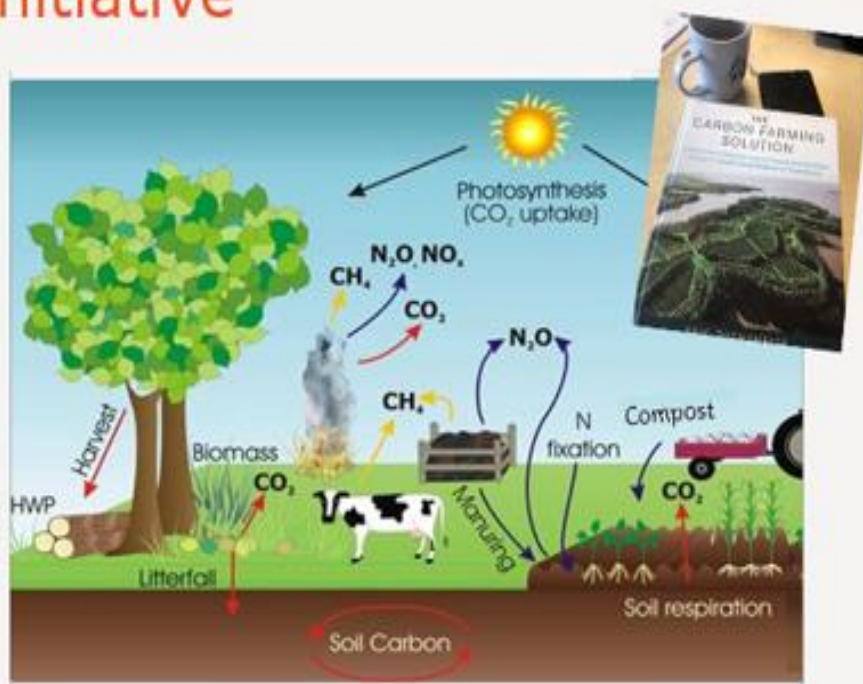
-  **Establish EU Sustainable Taxonomy**
-  **Create Standards and Labels**
-  **Foster Investment in Sustainable Projects**
-  **Incorporate Sustainability in Investment Advice**
-  **Develop Sustainability Benchmarks**
-  **Integrate ESG in Ratings and Market Research**
-  **Clarify institutional investors and asset managers duties**
-  **Incorporate sustainability in prudential requirements**
-  **Strengthen Sustainability Disclosure & Accounting**
-  **Foster Sustainable Corporate Governance**

Source: [European Commission: Action Plan on Financing Sustainable Growth \(2018\)](#).

Overview Carbon Farming Study - 1

Analytical Support for the Operationalisation of an EU Carbon Farming Initiative

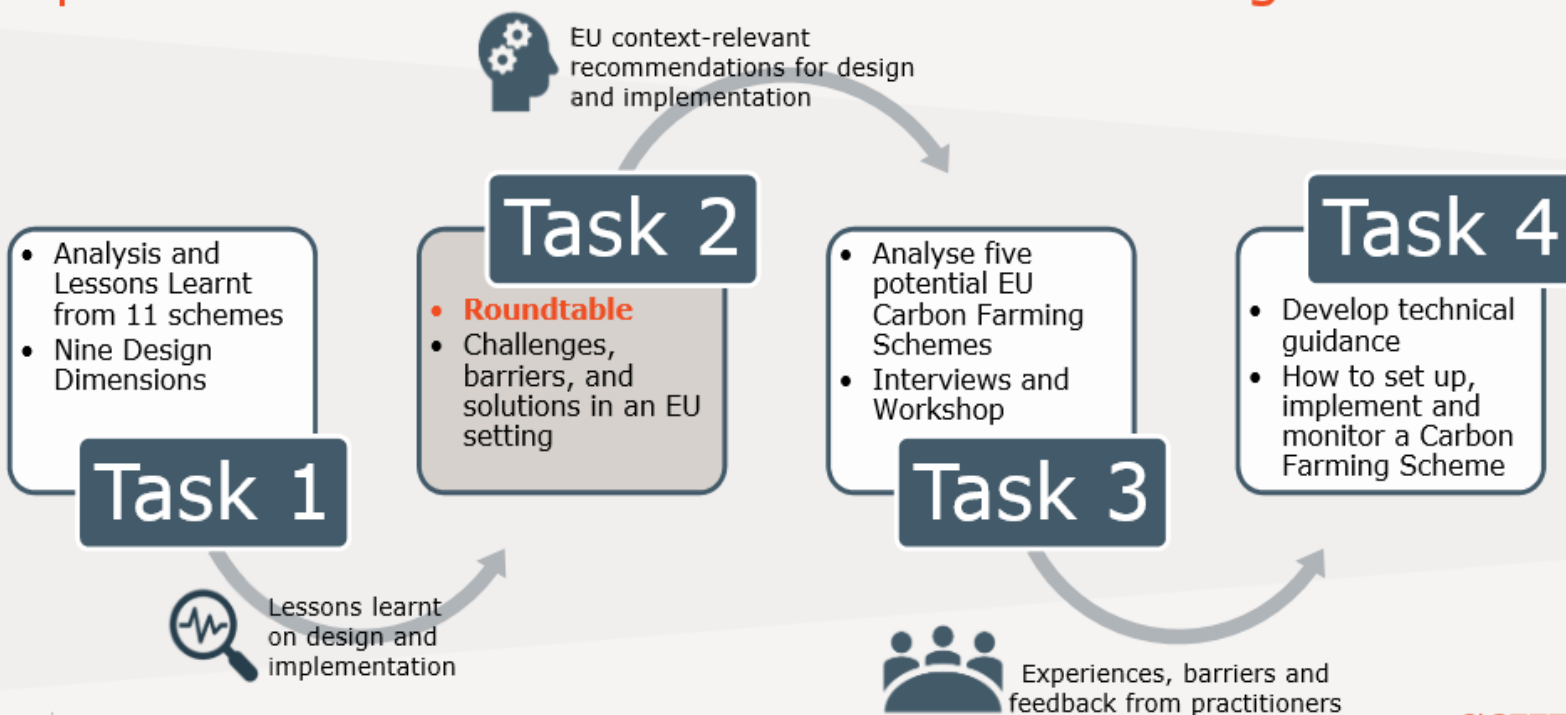
- › Study: CLIMA/C.3/ETU/2018/007
- › November 2018 – November 2020
- › COWI A/S Lead, plus Task 1 (Lessons Learnt)
- › Ecologic Institute, Task 2 (EU setting, barriers and solutions)
- › IEEP, Task 3 and 4 (Case Studies and Guidelines)



Overview Carbon Farming Study - 2

Introduction to Roundtable on

Operationalisation of an EU Carbon Farming Initiative



Result-based Carbon Farming Schemes - 1

www.ecologic.eu

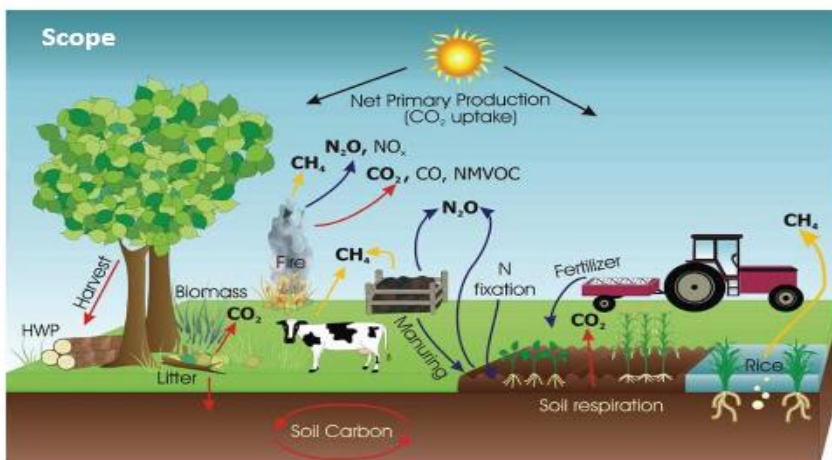
COWI



Institute for
European
Environmental
Policy

eco
logic

Carbon Farming



Management

Cropland management
(reduced tillage, residues,
crop rotations ...)

Livestock management
(feeding, health, breeding ...)

Improved **nitrogen efficiency**

Agroforestry / Afforestation

Peatland rewetting

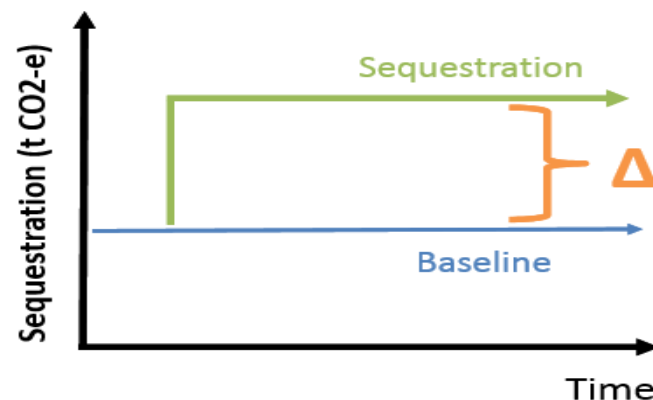
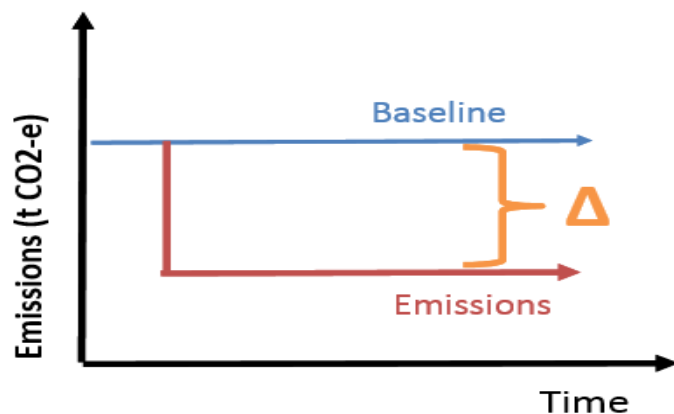
Planning / Carbon Audits



European
Commission

Result-based Carbon Farming Schemes - 2

Result-based schemes



Payment $\simeq \Delta$ CO₂ eq avoided / sequestered

Result-based Carbon Farming Schemes - 3

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Design elements

- Governance
- Coverage and eligibility
- Baseline and additionality
- Monitoring, reporting and verification (MRV)
- Reward mechanism
- Transparency and reporting
- Permanence, risk and flexibility mechanisms



Result-based Carbon Farming Schemes in the EU



Result-based Carbon Farming Schemes - grid






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| | | | | | |
|----------------------|---|-----------|-------------------------|-----------|------------|
| Supply chain |  Spar / WWF Healthy Soils | | | | |
| Result-based |  UK Woodland Carbon Code  MoorFutures  Carbon Agri - Label Bas Carbone | | | | |
| Management | Agri-environment-climate measures | | | | |
| Awareness/ advice |  | | | | |
| | Arable | Livestock | Above ground biomass | Peatlands | Whole farm |

09/10/2019

Brussels, Carbon Farming Roundtable, Ecologic Institute

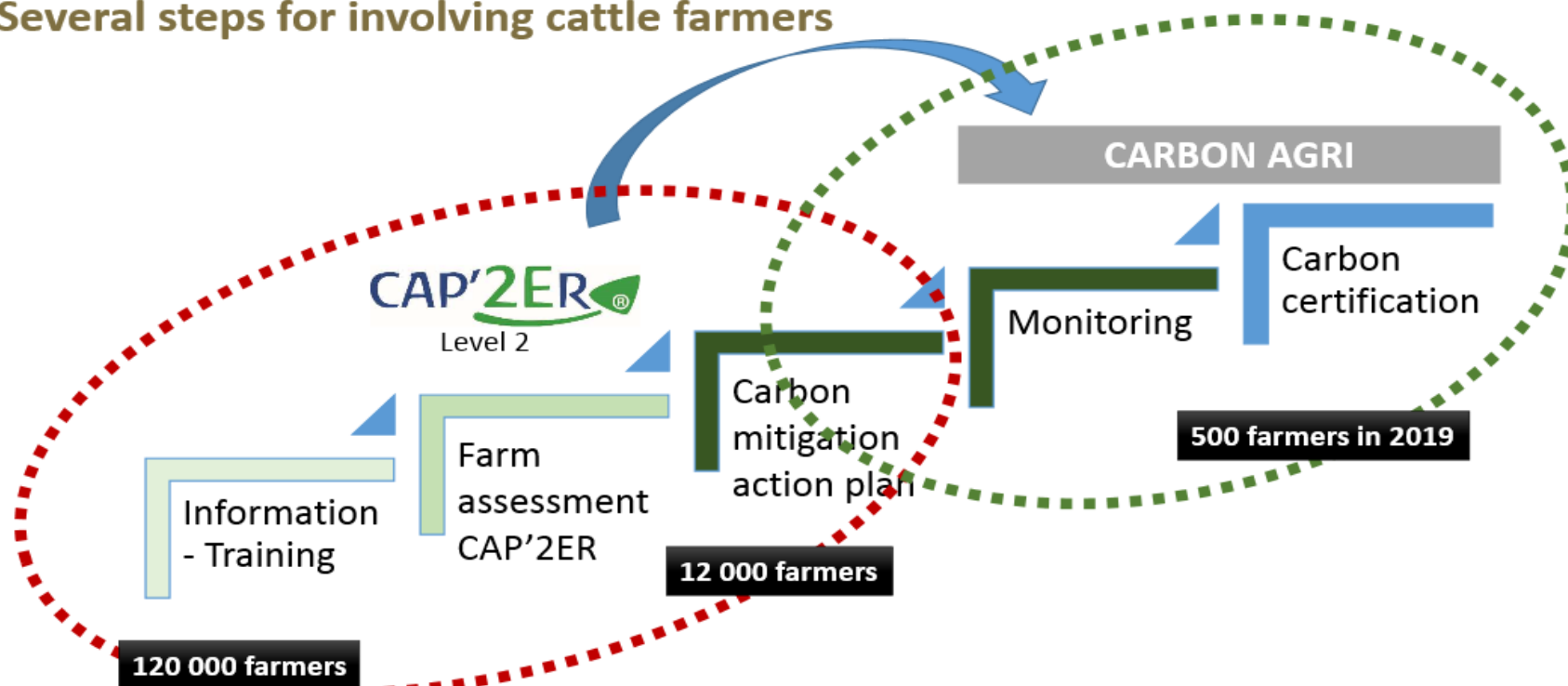
6

Case study leverage - 1

From carbon audit to carbon certification

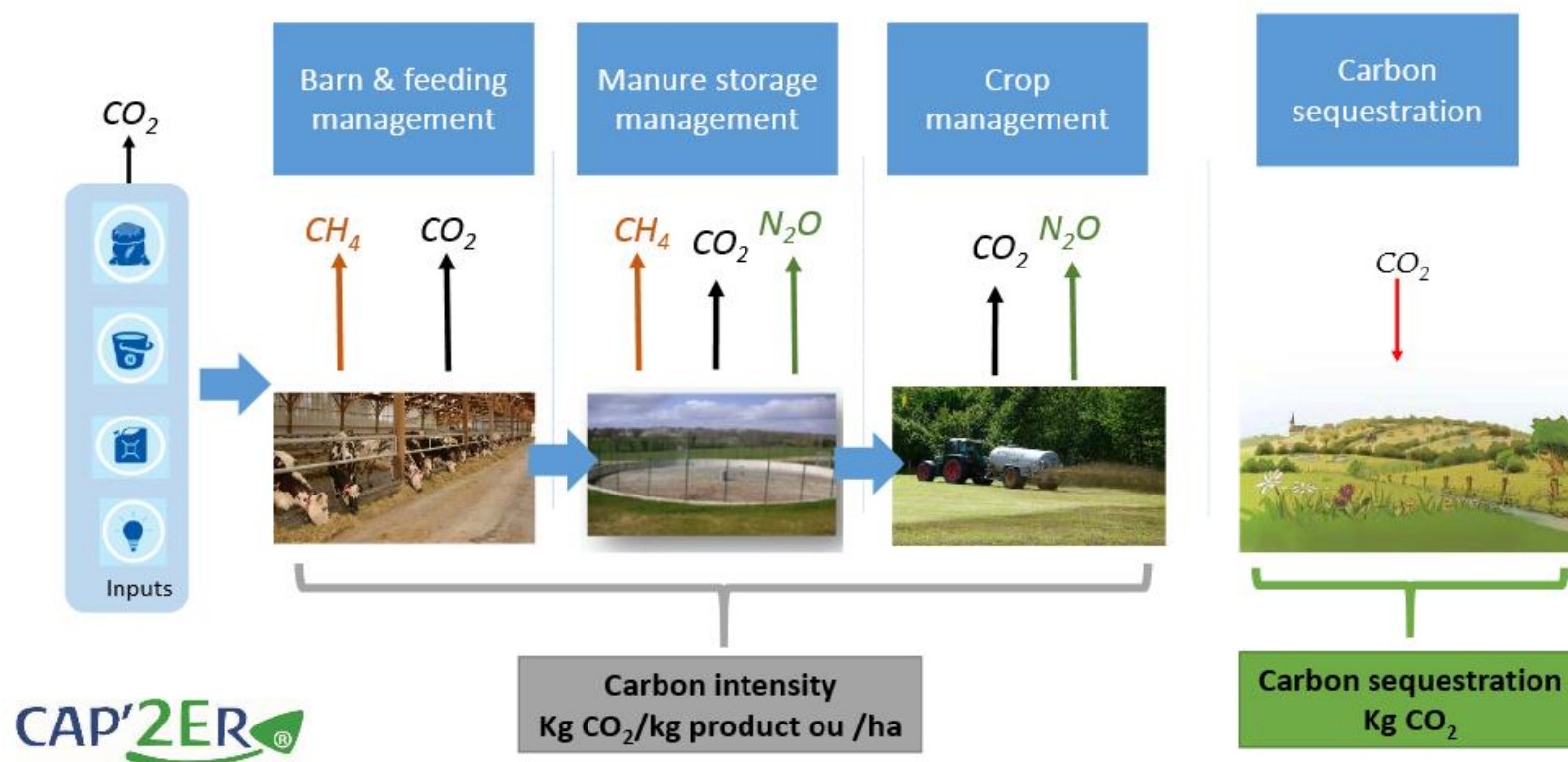


- Several steps for involving cattle farmers



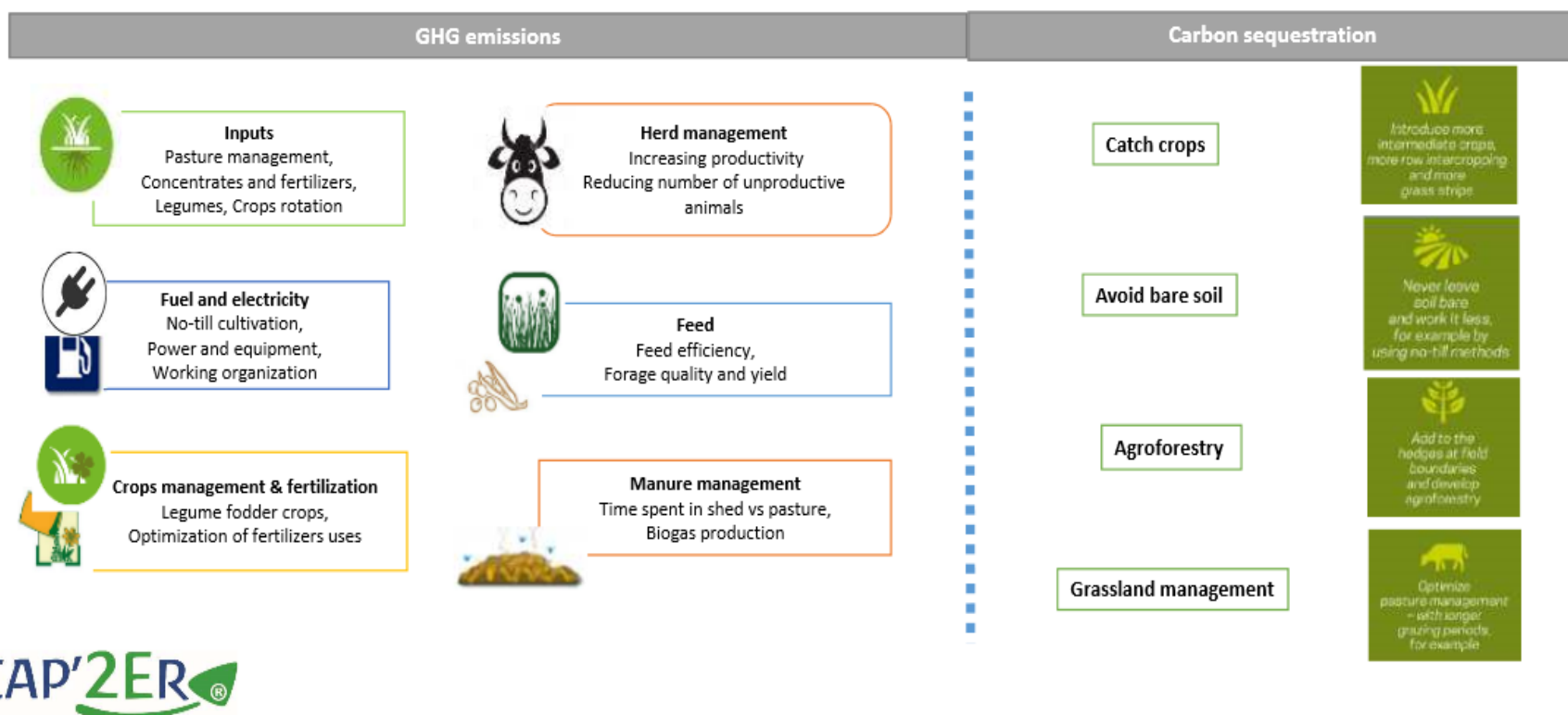
Case study leverage - 2

A whole farm assessment



Case study leverage - 3

A methodology for capturing more than 40 mitigations practices



Case study leverage - 4

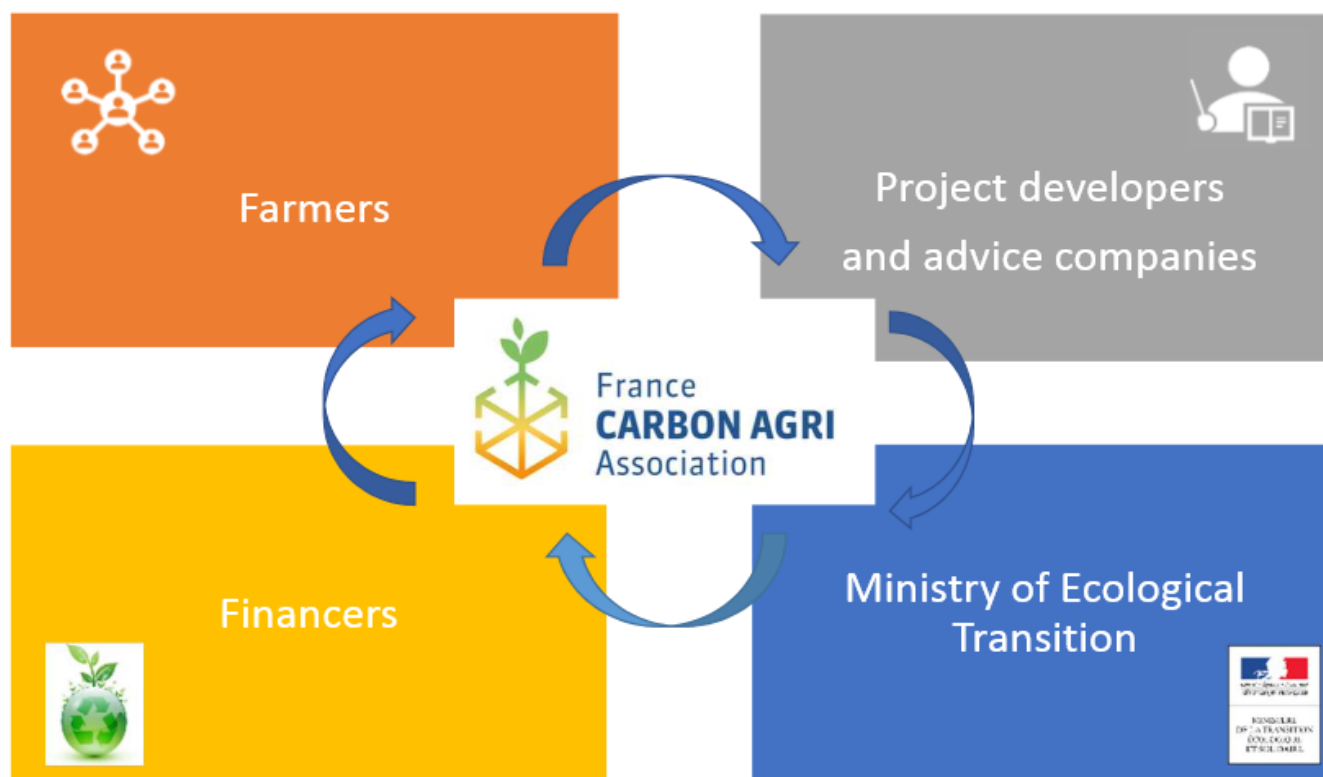
Environmental co-benefits



| Indicators | Units |
|---|------------------------------------|
| Increasing contribution to biodiversity | ha equivalent of biodiversity / ha |
| Reducing ammonia emissions (air quality) | kg NH ₃ / an |
| Reducing nitrogen balance (water quality) | Kg N / ha / an |
| Producing renewable energy | MJ / an |
| Reducing soya bean consumption | Kg / an |
| Increasing catch crops area | Ha |
| | |

Case study leverage - 5

Projects implementation

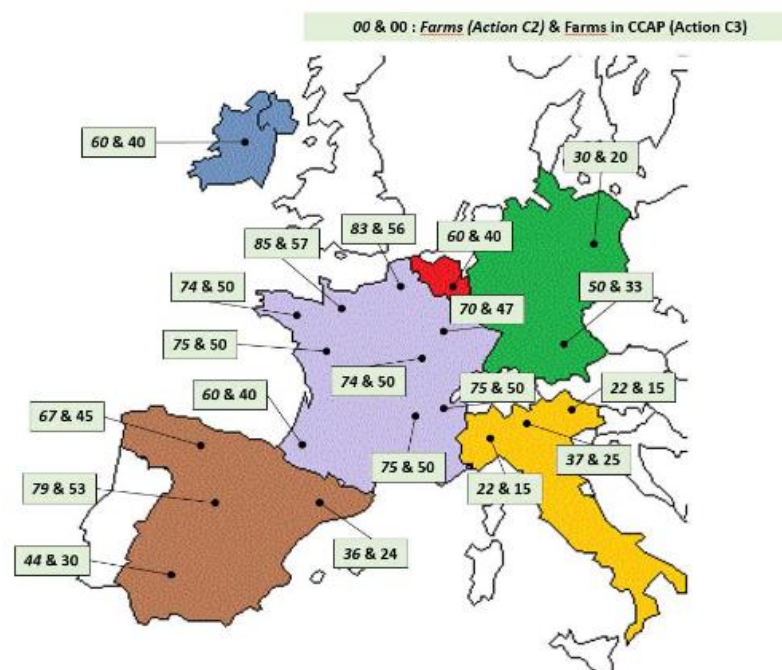


Case study leverage - 6

Transferability of CARBON AGRI



- Small ruminants,
- Other crops,
- Monogastric,
- EU LIFE SUSTAINABLE CATTLE



Case study leverage - 7

Healthy Soil for Healthy Food

69

Austrian

Farmers



Austrian Farmers



Case study leverage - 8

Possible extension to other countries

- Considering country specific challenges
- Producer – Retailer – NGO – triangle constellation recommended
- Accompanying communication measures → Soil must be seen as an important issue in society

Strategy at the moment: sharing knowledge with other WWF offices in Europe and especially in countries where SPAR is operating



Case study leverage - 9

The “MoorFutures-family” – in Germany



Start 2011

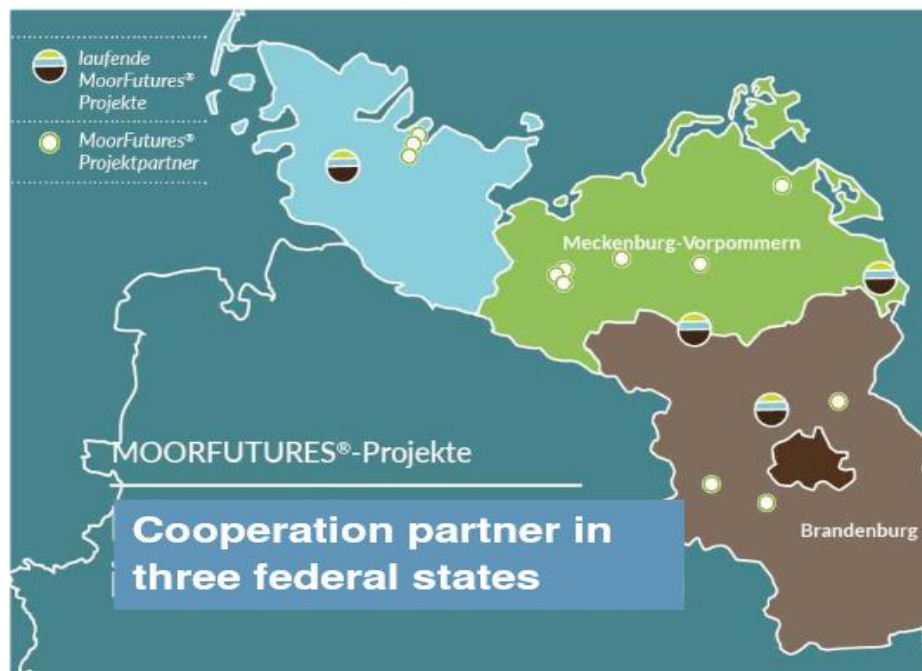


Start 2012



Start 2014

**One standard for three
federal states in
Germany!**

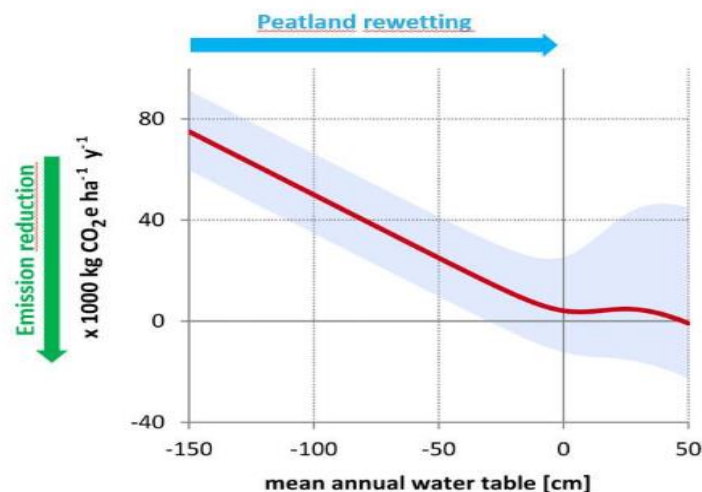


Case study leverage - 10

Water table and greenhouse gas emissions

The GEST-Approach (Greenhouse Gas Emission Site Types): Assessing greenhouse gas emissions from peatlands using vegetation as a proxy!

1. The water level in peatlands determines the plant community.
2. The water level in peatlands determines the emissions.
3. The plant community can therefore be a proxy for the emissions.



J. Couwenberg in prep.

Case study leverage - 11

Portfolio connections

Facilitating the emergence of a European movement on voluntary carbon markets

Grove-FIT

VOCAL, support to French Label Bas Carbone

Carbon Farming

Geofootprint, local LCA for land use

Winners, guarantee and insurance tools

Food City targets, local food supply



Generate a European movement

Review and compare European initiatives

1 Synergize: coordinate approaches and build on complementarities

Catalyse new "carbon positive" projects

Stimulate compensation payments

2 Develop tools for existing and
3 additional practices/projects

4 Work with demand side actors (focus on Scope 3 emissions)

Scaling up Scope 3 Climate Action

5 Support the development of a European matchmaking platform

Innovate to leverage the potential of land based carbon credits

6 Test and implement solutions reducing MRV costs (AI, remote sensing...)

7 Test and implement DLT (blockchain) tools for the registry

ReddChainPilot, block chain for deforestation

8 Use carbon credits to develop levers (e.g. guarantee mechanisms) for best practices

9 Guide finance and CAP subsidies toward "carbon positive" projects

Saturn, connecting cities and rural

10 Develop concept and tools for "localized" carbon credits to stimulate climate-positive interactions between cities and rural landscapes

Valvolcar, local carbon credits for forestry

daniel.daniel.org

Partners

I4CE

Aalto University

Agricircle

SouthPole

Imperial College

F. E. Mach

WUR

Gold Standard

Danone

Quantis

Cities

INRA

EcoAct



European Commission

Case study leverage - 15

CARBON ACTION platform



Carbon Action, initiated by BSAG, started as an ambitious pilot and was built into a full platform. The platform contains several funders and projects, and enables close cooperation among the projects. The platform brings together farmers, advisors, researchers, companies and decision-makers.

Funders:



Companies:



Case study leverage - 16

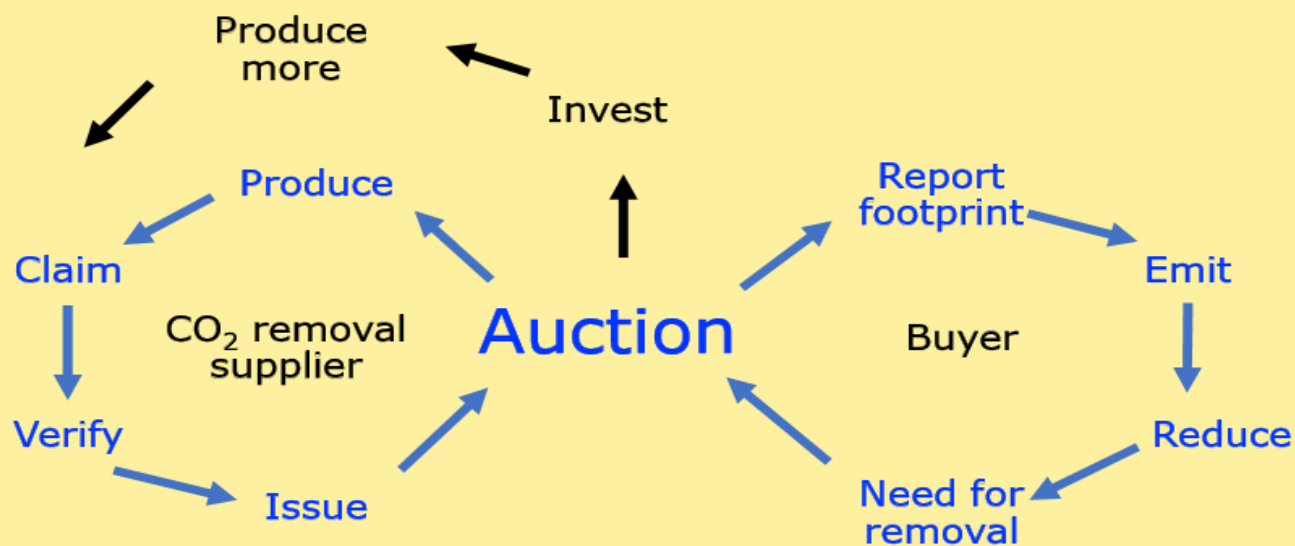
World's first marketplace
for voluntary
CO₂ removals

puro.earth

puro

Case study leverage - 17

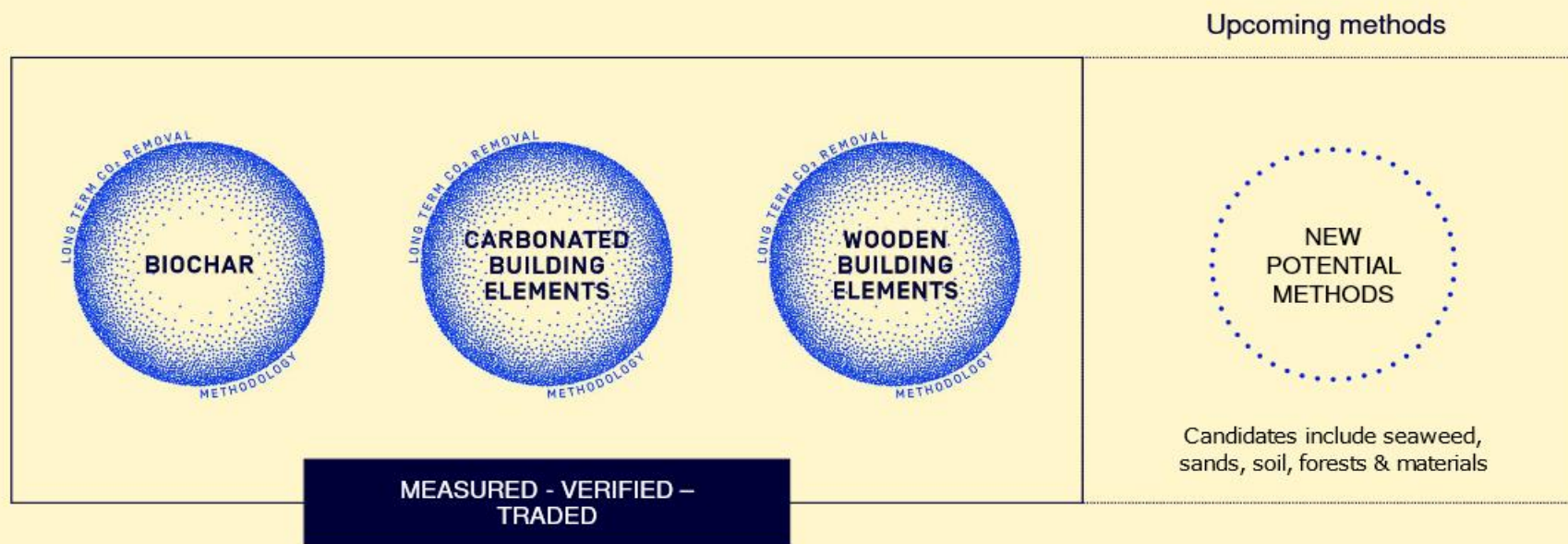
What is Puro and how does it work?



puro

Case study leverage - 18

Verified CO₂ removal methods behind CORCs



puro

Next steps - 1

Enabling conditions – general

- **EU sustainable food policy** – pulls Carbon Farming product demand through supply chains
- **Integrated land use planning** – maps areas providing for food, habitat and biomass needs
- **FaST activation** – Knowledge and data, capacity building for farm-level customization, connection to national GHG inventories, EU carbon market platform
- **NECPs** – outline national contributions to EU climate-neutrality vision, including agricultural contributions (considers FaST Carbon Farming intelligence)
- **CAP strategic plans** – program national CAP policy instruments, green architecture in support of agricultural contributions in NECPs



Next steps - 2

Enabling conditions – specific aspects

- *Sustainable food policy*



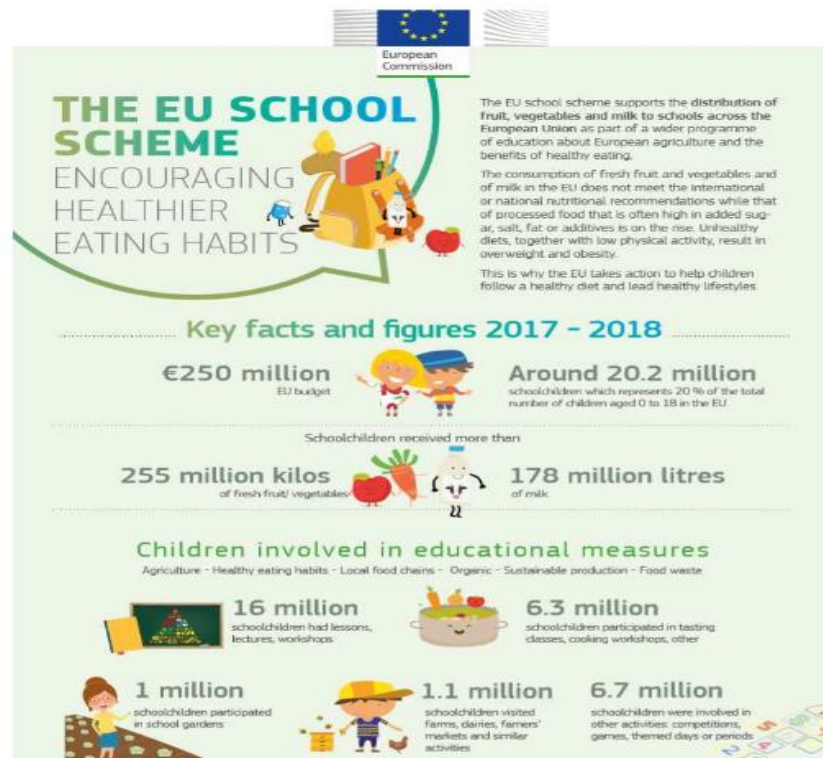
ACTIVITIES 5 SEP 2019

The results of the ORGANIKO randomized clinical trial are published!

Lower body burden of pesticides and parallel reduction in biomarkers of oxidative stress/inflammation after an organic diet treatment in children

An international research team from the Cyprus International Institute for Environmental and Public Health, within the Cyprus University of Technology and Emory University just published the results of the ORGANIKO randomized clinical trial about the organic diet impact on children's health. The organic diet trial results were published in the peer reviewed journal, PLOS ONE. The aim of the trial was to investigate whether a 40-day organic diet could reduce exposure to common pesticides (e.g. 3-PBA) and affect the levels of biomarkers of oxidative stress/inflammation (e.g. 8-OHdG) in primary school children.

The ORGANIKO trial results showed: i) the clear benefit of an organic dietary treatment by significantly lowering the body burden of pesticides (pyrethroids and neonicotinoids), and ii) significantly lower levels of biomarkers of oxidative stress/inflammation as the likely result of the pesticides' body burden reduction in healthy 10-12 years old children in Cyprus. Such biomarkers of oxidative stress/inflammation are considered as early stage markers for a suite of chronic conditions, such as obesity, type II diabetes, or cancer.



Next steps - 3

Enabling conditions – specific aspects

- Integrated land-use planning*

L'implantation d'un maillage de miscanthus à l'échelle d'un bassin versant

Un modèle innovant de production de biomasse
bénéfique à l'agriculteur et à l'environnement



4 Présentation du projet MiscALIFE

Présentation du projet MiscALIFE 5

Next steps - 4

Enabling conditions – specific aspects

- *FaST activation – preparation - I*

EUROPEAN JOINT PROGRAMME (EJP) ON AGRICULTURAL SOIL MANAGEMENT

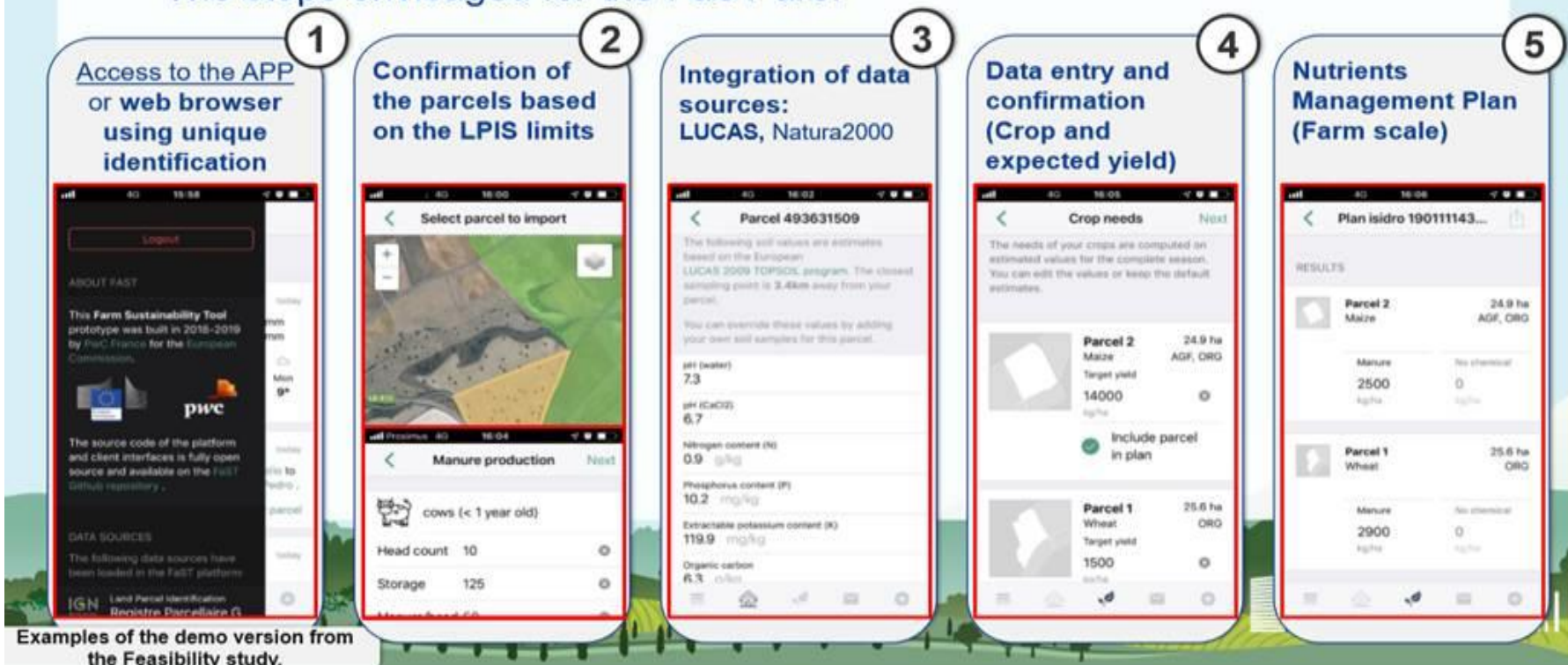


Next steps - 5

Farm Sustainability Tool for Nutrients – FaST

Implementation, first steps

- The steps envisaged for the FaST are:

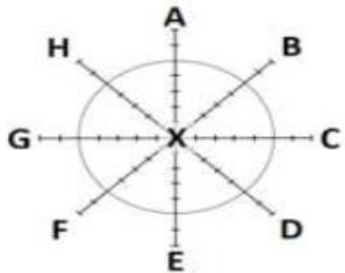


Farm Sustainability Tool for Nutrients – FaST

Next steps - 6

Enabling conditions – specific aspects

- *FaST activation – preparation - II*



- 2020 the German LULUCF grid will increase from 550k to 36m point
- Each pixel should have its own SOC stock
- Inventory dataset used to train a model that can predict SOC stocks based on
 - Topography
 - Climate
 - Soil and Parent Material

→ Synergies with other datasets, e.g. LUCAS



THÜNEN



European
Commission




Next steps - 7

Enabling conditions – specific aspects

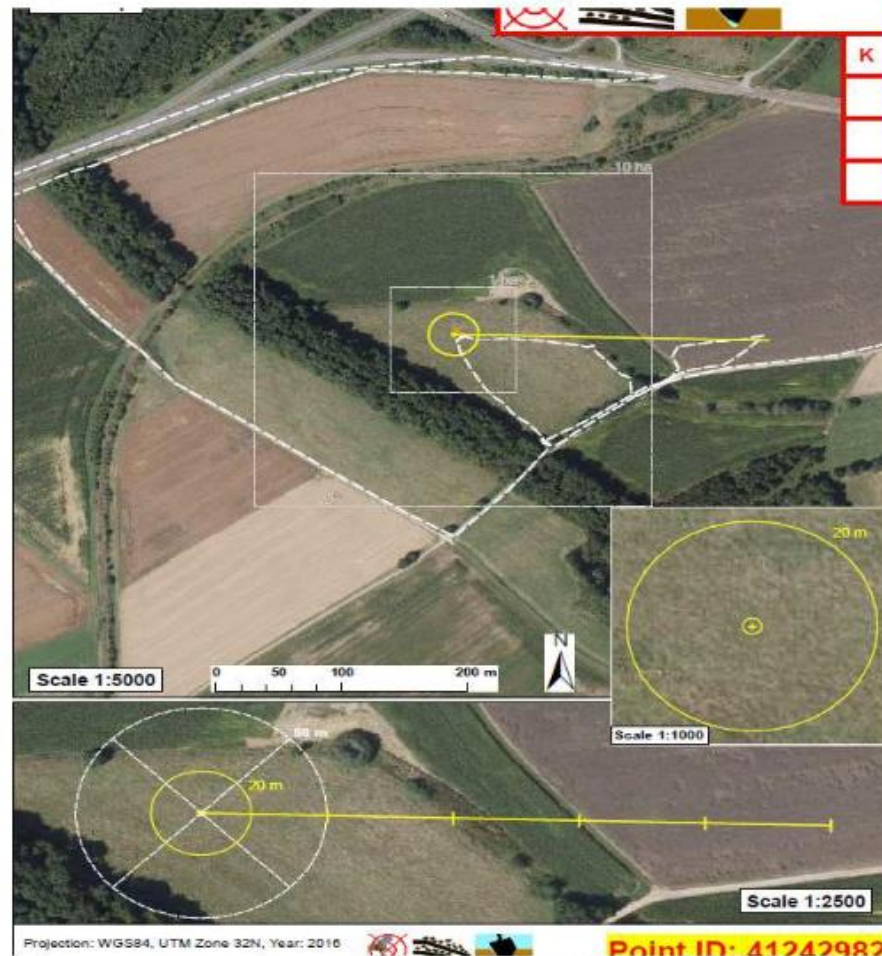
- *FaST activation – preparation - II*

Latitude: 49,917351 Longitude: 7,256587
 Previous Observation:
 Observed: Field survey < 100m
 Direction: On the point Date: 26.07.2015
 Sp.remark: No remark Distance: 5 m
 LC1: E20 LC2: 8 PC Lat: 49,91739
 LU1: U111 LU2: 8 PC Long: 7,25662



| Module | Soil Sample type | Description of the way: |
|--|------------------|-------------------------|
| Copernicus  | Standard (K) | X |
| Erosion  | | |
| Soil  | | |

LUCAS Ground Document DE 2018  



Projection: WGS84, UTM Zone 32N, Year: 2016

Point ID: 41242982



European Commission

Next steps - 8

Enabling conditions – specific aspects

- *FaST activation - demonstration*

LIFE call for proposals for action grants to finance "preparatory projects" under the LIFE sub-programmes for environment

2. Guidance concerning LIFE 2019 Preparatory Projects

2.1 Specific Needs Identified for 2019

Under the 2019 call, proposals may be submitted only to address the following four specific needs:

- 1) Carbon farming schemes to reward farmers and foresters for the delivery of climate public goods (max. EU co-financing: 1.015.000 €)

Timeline

- 24 May 2019
Publication of the call for proposals
- 24 September 2019 (16.00 Brussels local time)
Deadline for the submission of proposals
- October- November 2019
Evaluation and revision of proposals
- November- December 2019
Signature of grant agreements

Recent EU Carbon Farming Events

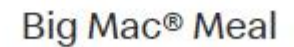


Informal Agricultural Council, Helsinki, September 2019

EU Carbon Farming Roundtable, Brussels, October 2019



Diagram illustrating a 11-year crop rotation cycle. The cycle consists of 11 years, each with a specific crop or cover crop. The crops are: Betteraves sucrières (Sugarcane), Pois protéagineux d'hiver et blé compagneon jusqu'en sortie d'hiver (Winter legume and companion wheat until winter exit), Colza et légumineuses compagnes (Rapeseed and companion legumes), Blé tendre d'hiver (Soft wheat), Couvert biomasse (Cover biomass), Orge de printemps (Spring barley), and Couvert biomasse (Cover biomass). The cycle repeats every 11 years.



**Thank you for
your attention!**



Contact:
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