



From Conventional to Regenerative Agriculture through Carbon Farming with farmers in the centre

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Ciasnocha Family Farms – we do not want to be unique any longer



On the mission of making European farmers the key part of the climate change solution in a profitable way



Conventional agriculture is feeding the world...

...for the next 60 years at the maximum



Conventional agriculture is part of the climate problem and is being challenged



Massive soil loss



Contribution to climate change



Political pressure

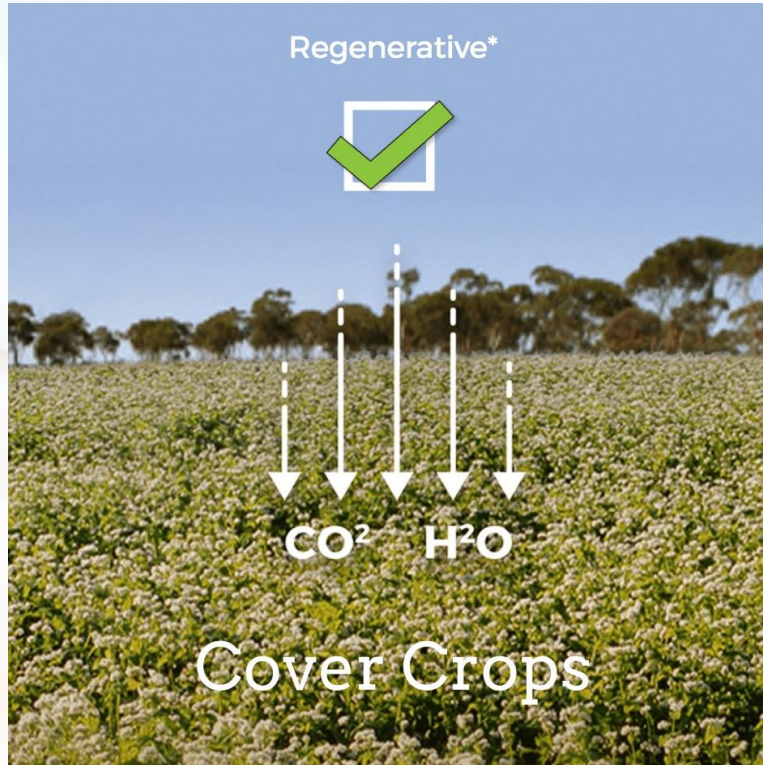


Regenerative agriculture is the solution

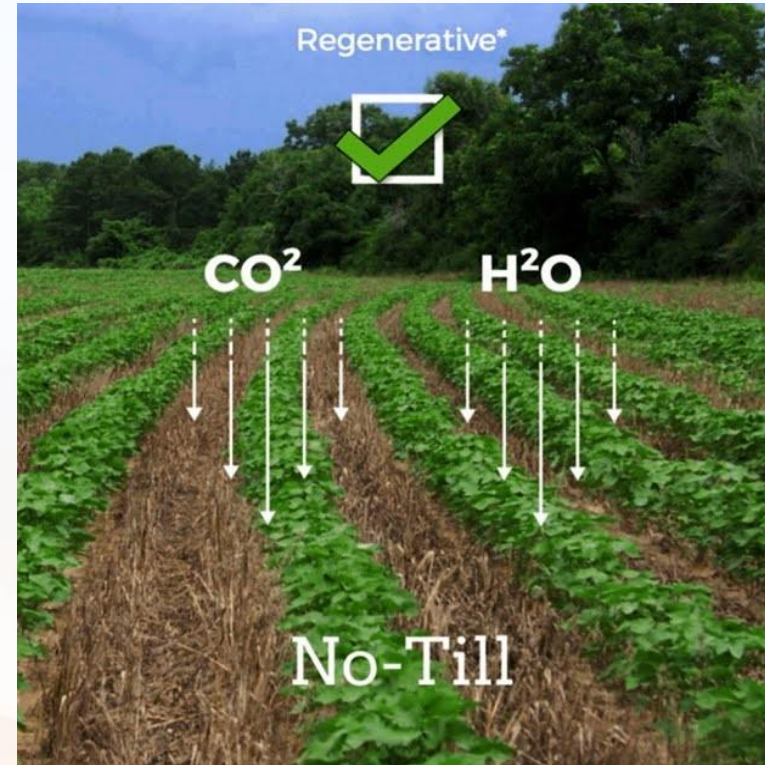
How do we get there in a way, which is not threatening an individual farm's financial viability?



How do we speed and scale up the second wave of regenerative agriculture practices?

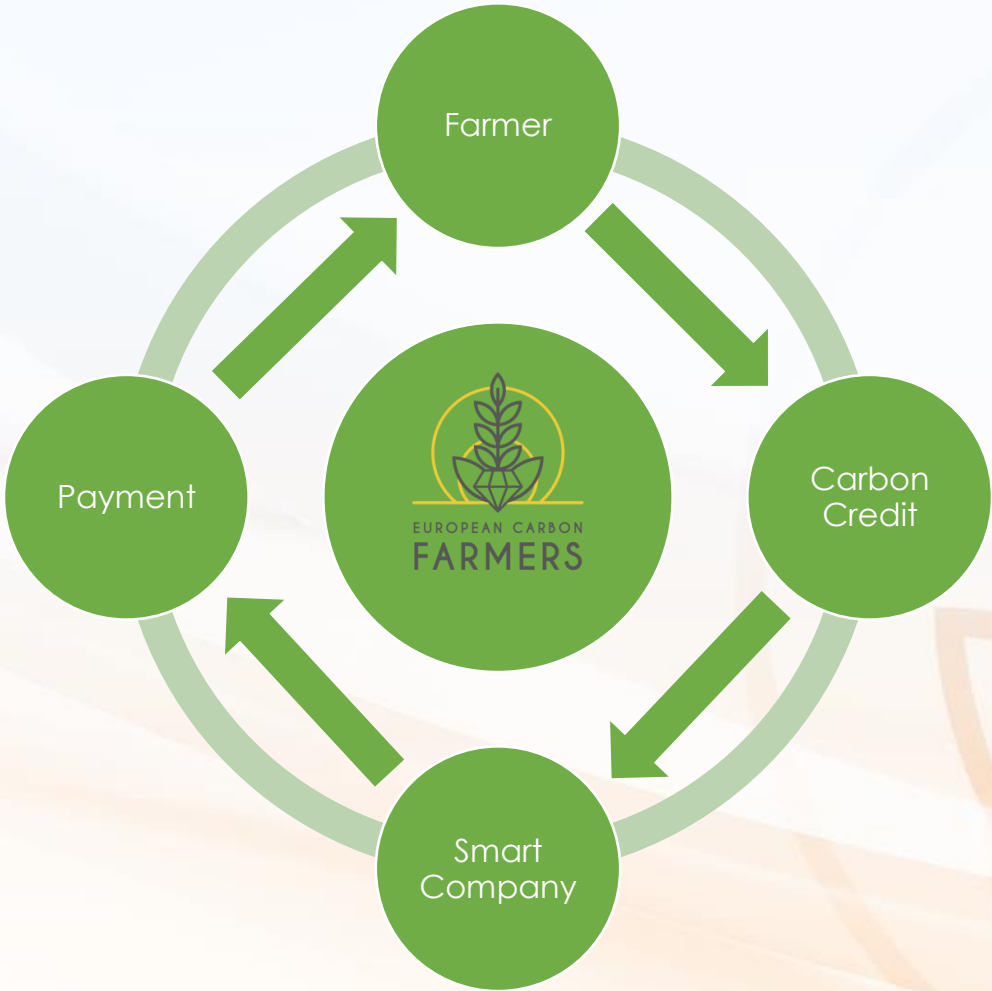
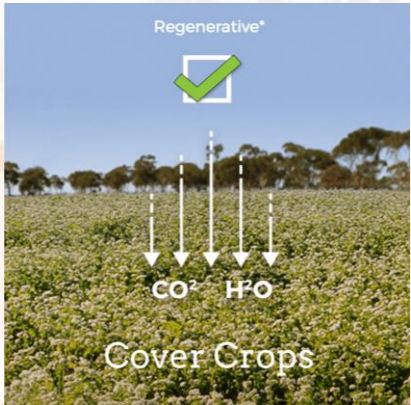
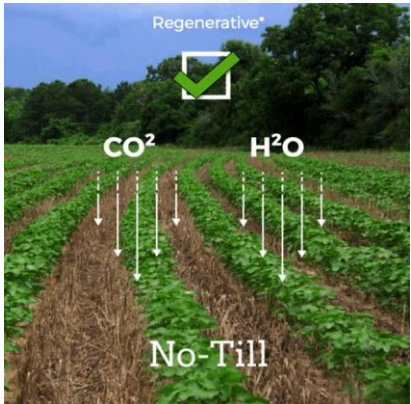
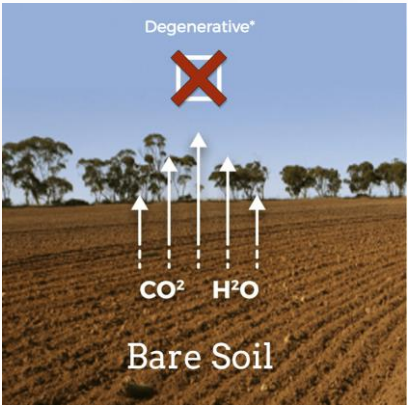
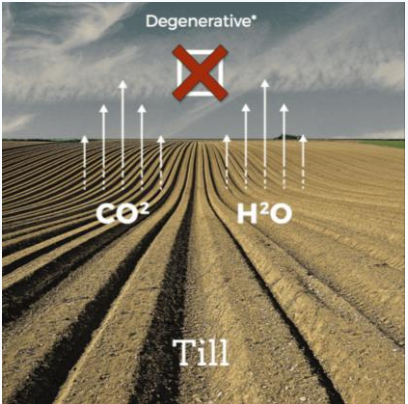


All year-round
ground cover



Zero tillage

The solution: agricultural carbon credit – paying farmers for additional carbon captured and stored in their soils





1

Farmer

2

Smart
Company

3

Regulator

Marathon starts now – you are invited to join us!

We are grateful for your attention and we are looking forward to the future!



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Together let's make European farmers the key part of the climate change solution in a profitable way

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Backup Slides

European Carbon Farmers – internal

Our Why?, How? & What?

What?

- Starting with bringing the Cool Farm Tool to Poland.

How?

- Bridging the gap between agriculture and the public by education.
- Developing agricultural carbon credit payments in Poland.

Why?

- Agriculture can – and should – be the key part of climate change solution – we want to unleash this potential in a financially viable way for each farmer.

We have turned this challenge into a validated opportunity



We continue on our path in 2021



Q1 2021

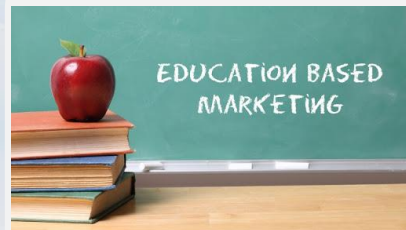


Q2 2021



Q4 2021

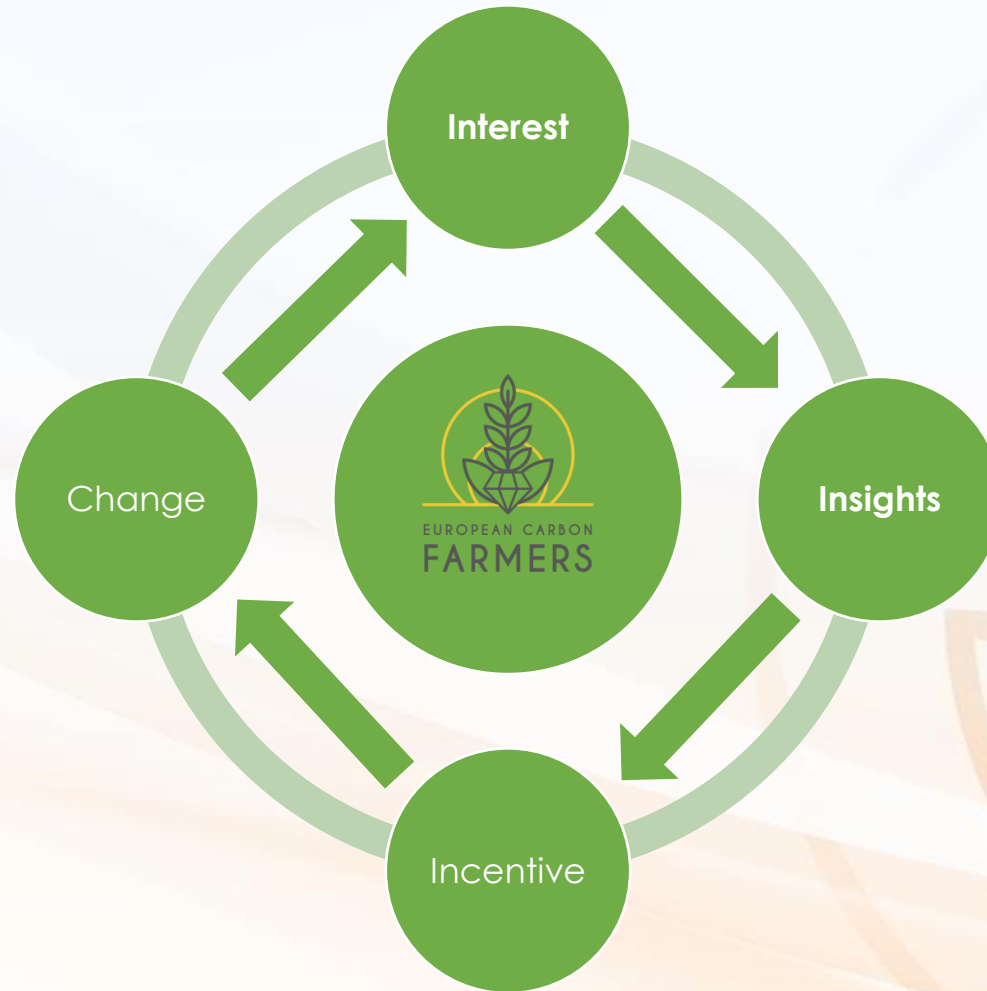
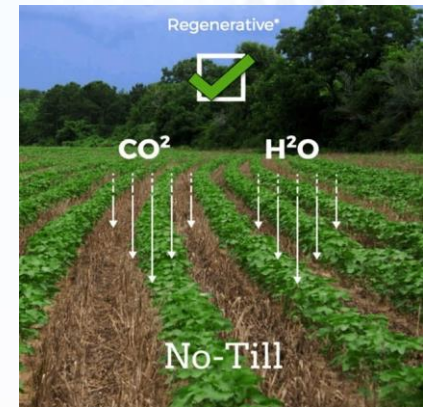
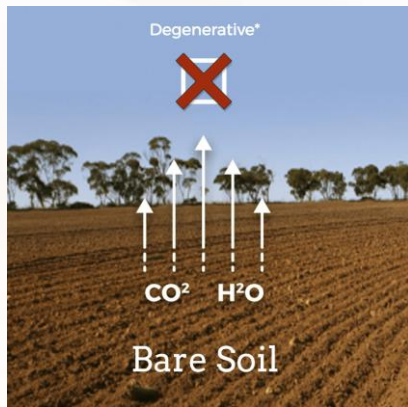
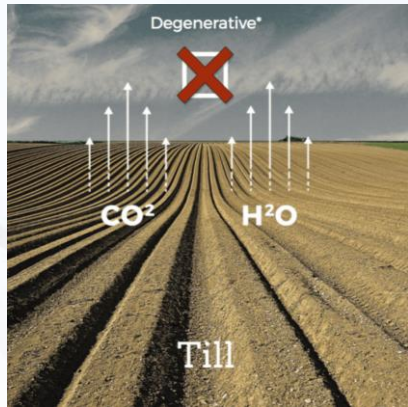
Q1 2021 & beyond



Q3 2021



Our actions are informed by a validated theory of change



Supported by our Board of Advisors



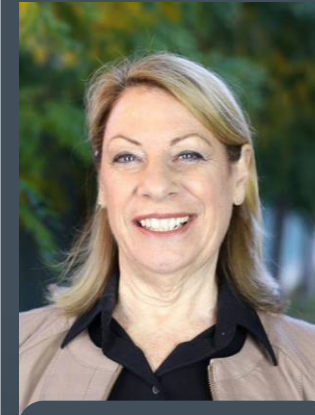
Julia Wdowin

PhD, Bennett Institute
University of Cambridge
United Kingdom



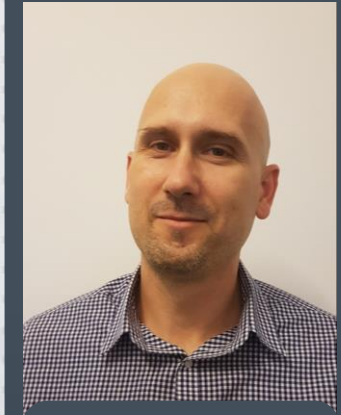
Becky Willson

Farm Carbon Toolkit &
Nuffield Scholar
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Louisa Kiely

CEO, Carbon Farmers of
Australia
Australia



Liviu Gheorghe

CEO, Eco2ro
Romania



Charles de Liedekierke

CEO, Soil Capital
Belgium & France



Din Ćatić

Associate, The Carbon Trust
Croatia & United Kingdom



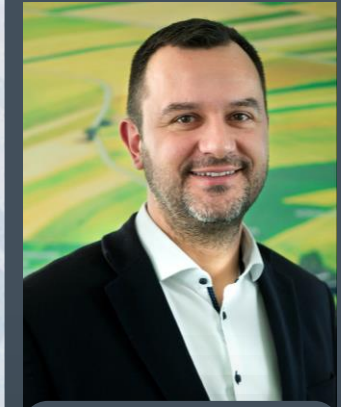
Maurice Bryson

Sustainable Finance, S&P
Rankings
Ireland & United Kingdom



Augusto Semmelroth

Farmers; Investment
Manager, SLM Partners
Brazil & United Kingdom



Matija Zulj

CEO, Agrivi
Croatia & United Kingdom

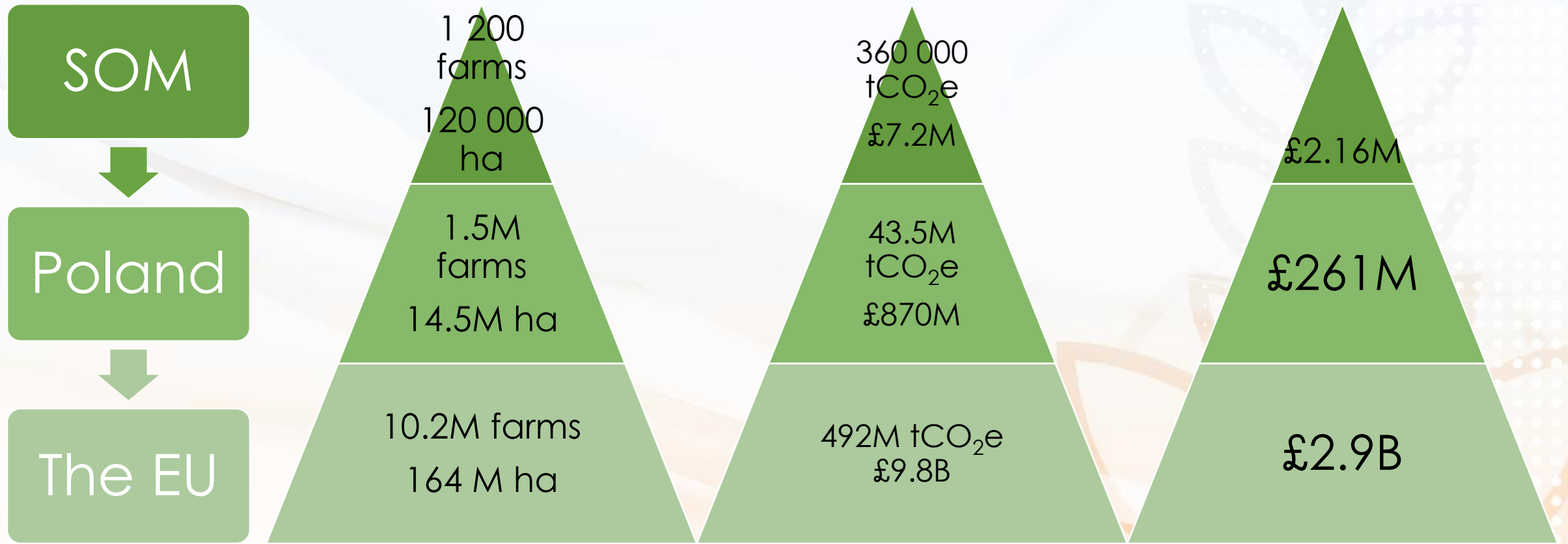
Together with our Community



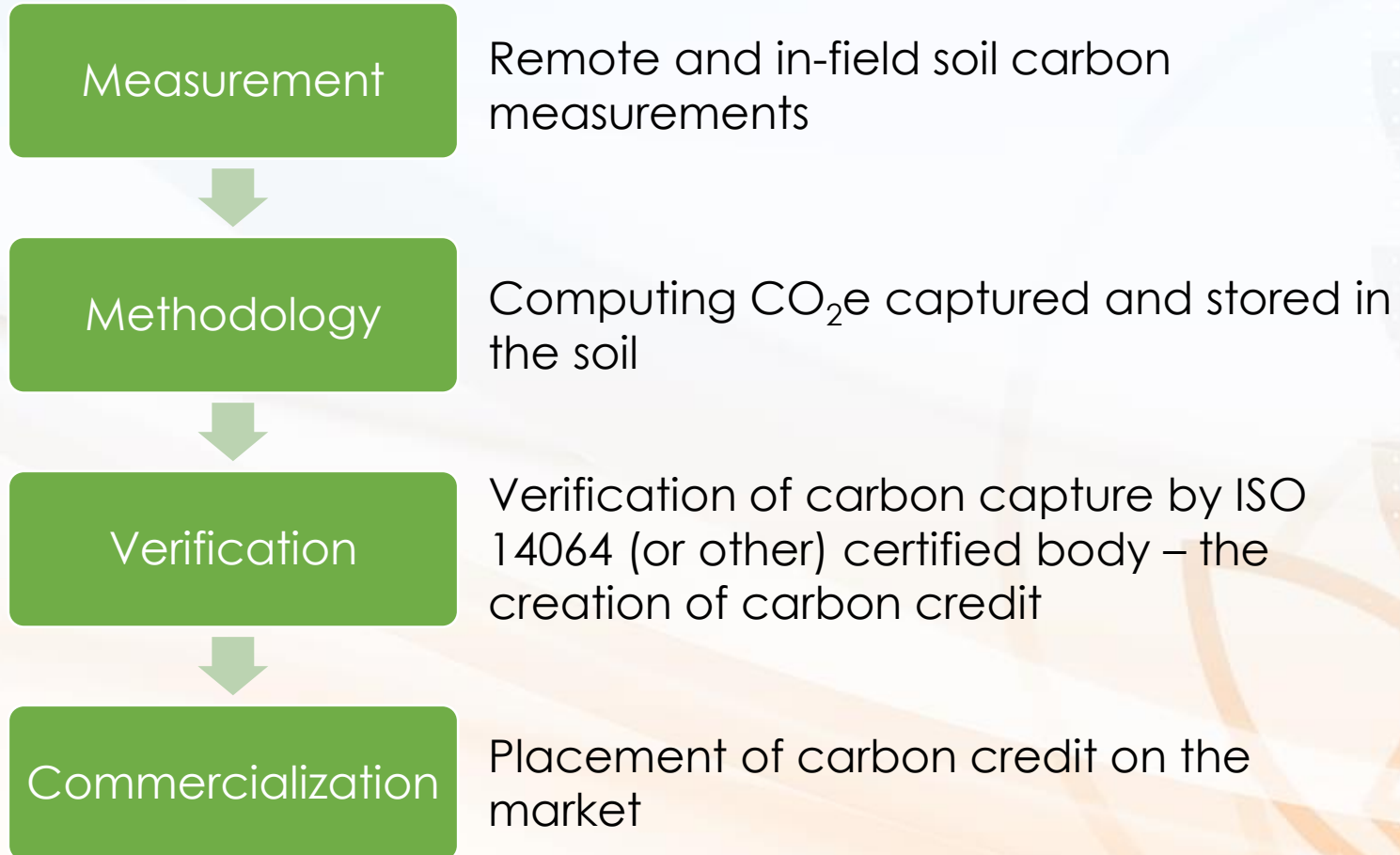
07 May 2021



Our mission defines our market: making each European farm emissions negative – in a profitable way



The carbon credit commercialization mechanism has four stages and monetization takes place annually





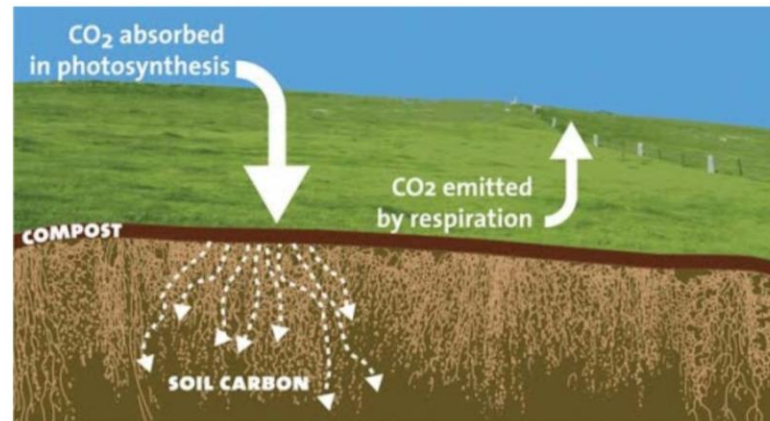
Carbon Farming – research

Survey on carbon farming in Poland: <https://bit.ly/2HP0t8e>

Rolnictwo węglowe w Polsce i na świecie

Szanowny Rolniku - dziękujemy za Twoje zainteresowanie rolnictwem węglowym!

W tej ankiecie będziemy chcieli zapoznać Cię z przykładami rolnictwa węglowego na świecie, a także zrozumieć jakie praktyki rolnictwa węglowego już prowadzisz, albo chciałbyś prowadzić w Twoim gospodarstwie rolnym.



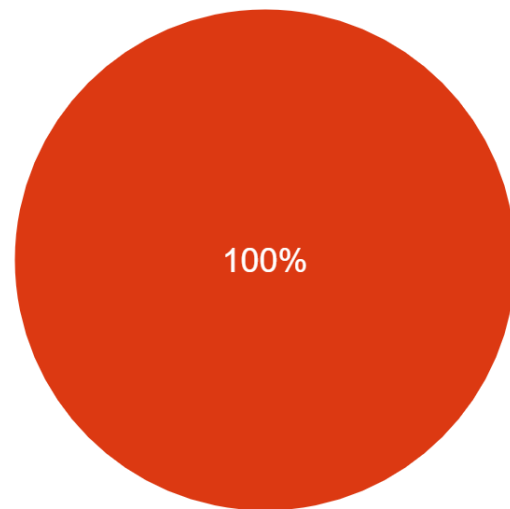
Dalej

Strona 1 z 22

Survey results [1]: Are you aware of the Cool Farm Tool?

Czy byłeś/byłaś świadomy istnienia the Cool Farm Tool?

30 responses

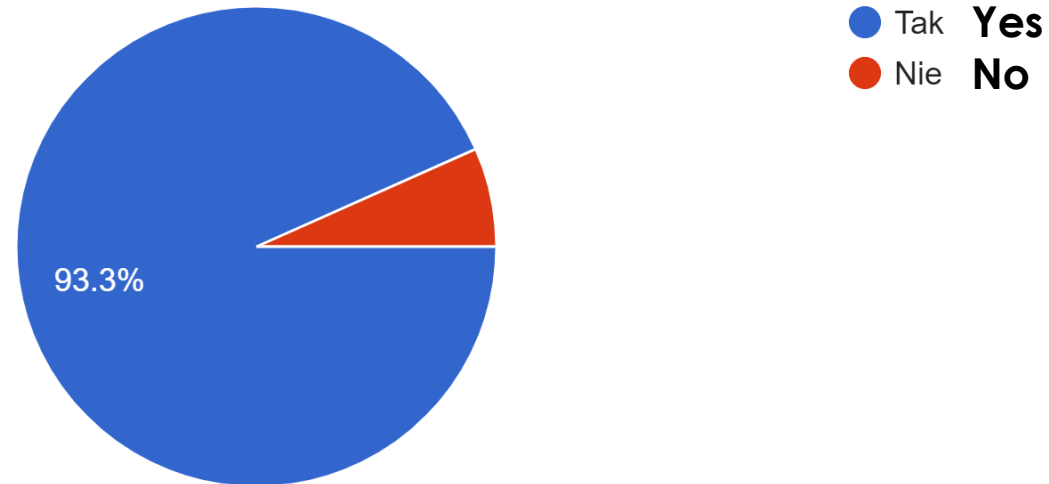


● Tak **Yes**
● Nie **No**

Survey results [2]: Do you agree that the economy, including agriculture, has to decarbonize?

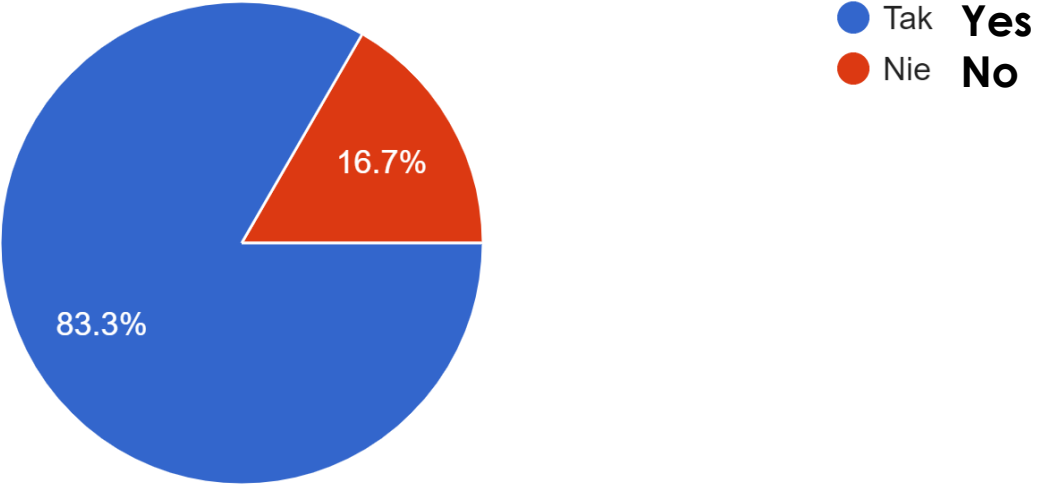
Czy zgadzasz się z powyższymi twierdzeniami?

30 responses



Survey results [3]: Do you think emissions regulations in the EU are coming?

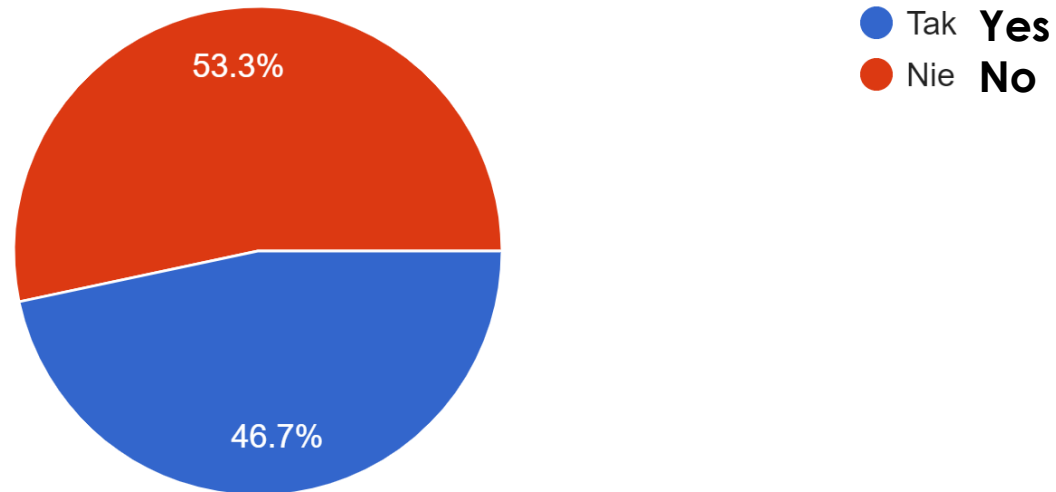
Czy Ty również myślisz, iż regulacje emisyjności rolnictwa nadchodzą?
30 responses



Survey results [4]: Is your farm ready for those regulations if they were to be implemented today?

Czy Twoje gospodarstwo rolne jest gotowe na te regulacje jeżeli weszłyby one w życie dzisiaj?

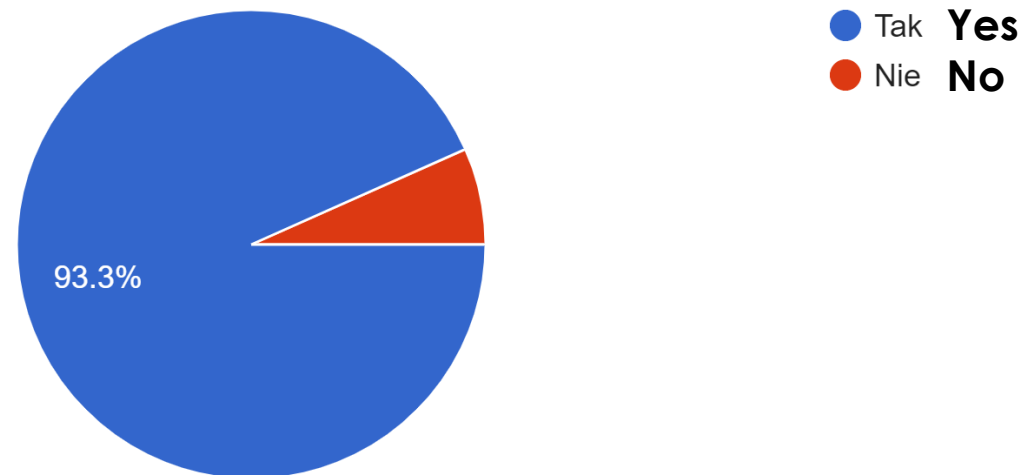
30 responses



Survey results [5]: Are you interested in developing carbon farming on your farm?

Czy jesteś zainteresowany rozwojem praktyk rolnictwa węglowego w Twoim gospodarstwie rolnym?

30 responses



Ciasnocha Family Farms

Ciasnocha Family Farms



Farming in the Vistula Delta since the 1970s

1

Conventional cereals production

- Till 2004 (Poland enters the EU)

2

Regenerative Agriculture 1.0

- 2004-2008
- Spring crops with cover crops
- Min-tillage

3

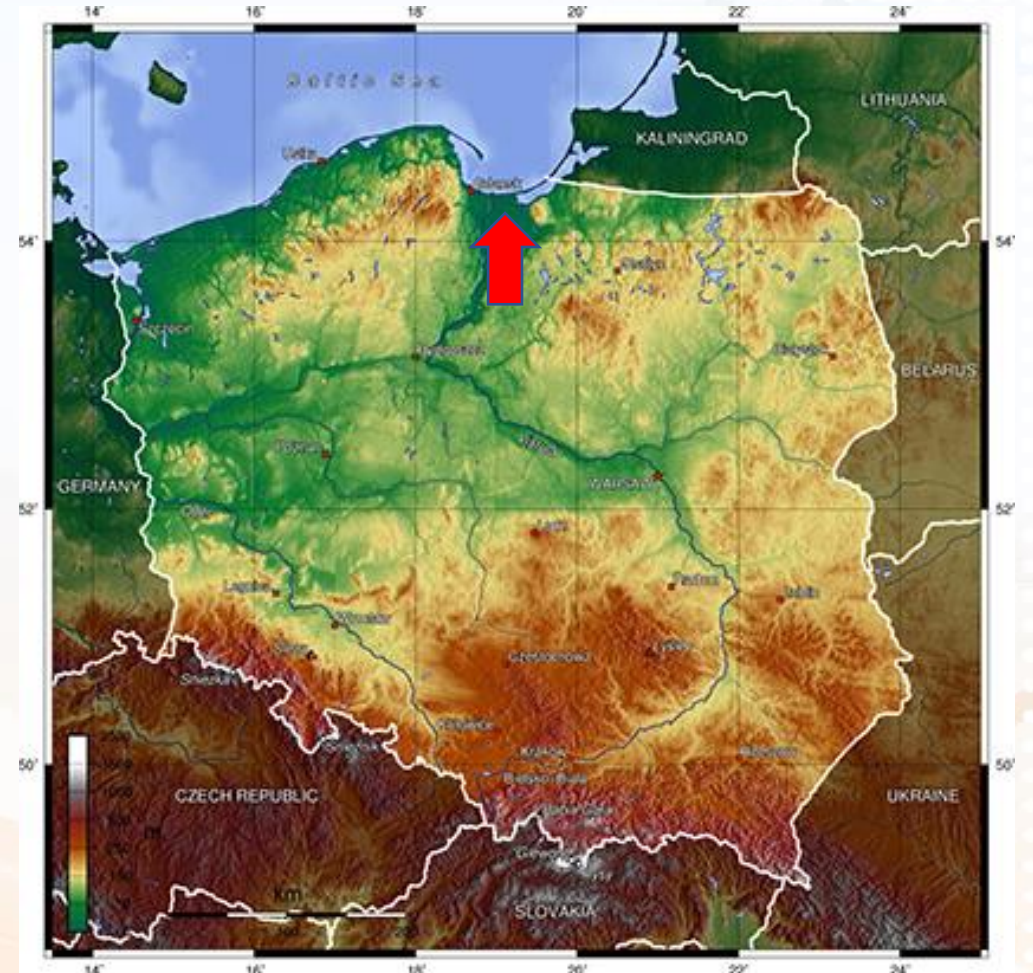
Regenerative Agriculture 2.0

- 2008-now
- Permanent grassland

4

Regenerative Agriculture 3.0

- Livestock integration?
- Pollinator strips?
- Agro-forestry?



**Ciasnocha
Family
Farms (1):
trawling**





Ciasnocha Family Farms (2): cutting



Ciasnocha Family Farms (3): tedding



Ciasnocha Family Farms (4): windrowing



Ciasnocha Family Farms (5): balling



Ciasnocha Family Farms (6): logistics



Ciasnocha Family Farms (6): storage (1)

Ciasnocha Family Farms (6): storage (2)





As our family farm shows: farming cannot be green when farmers are in the red

Ciasnocha Family Farms' climate mitigation perspective:

- From net emitter of GHG in 2004 to the net capturer of CO₂ since 2008 onwards.
- 6.5 tCO₂e/ha/year (Cool Farm Tool)
- 6.5 tCO₂e/ha x 700ha = 4,550 tCO₂e/year

The amount of CO₂ captured and stored on our farm/year is equal to CO₂ emissions from producing 2,400 tons of steel

Ciasnocha Family Farms' financial perspective:

- 6.5 tCO₂e/ha/year (Cool Farm Tool) x £20/CO₂e = £130/ha
- £130/ha x 700ha = £91,000
- **£130/ha = 40% of the current farm profit**



Ciasnocha Family Farms – Cool Farm Tool assessment [1]

GHGs

Compare

Performance

Costs

Data

Total emissions

-4.61M
kg CO₂e

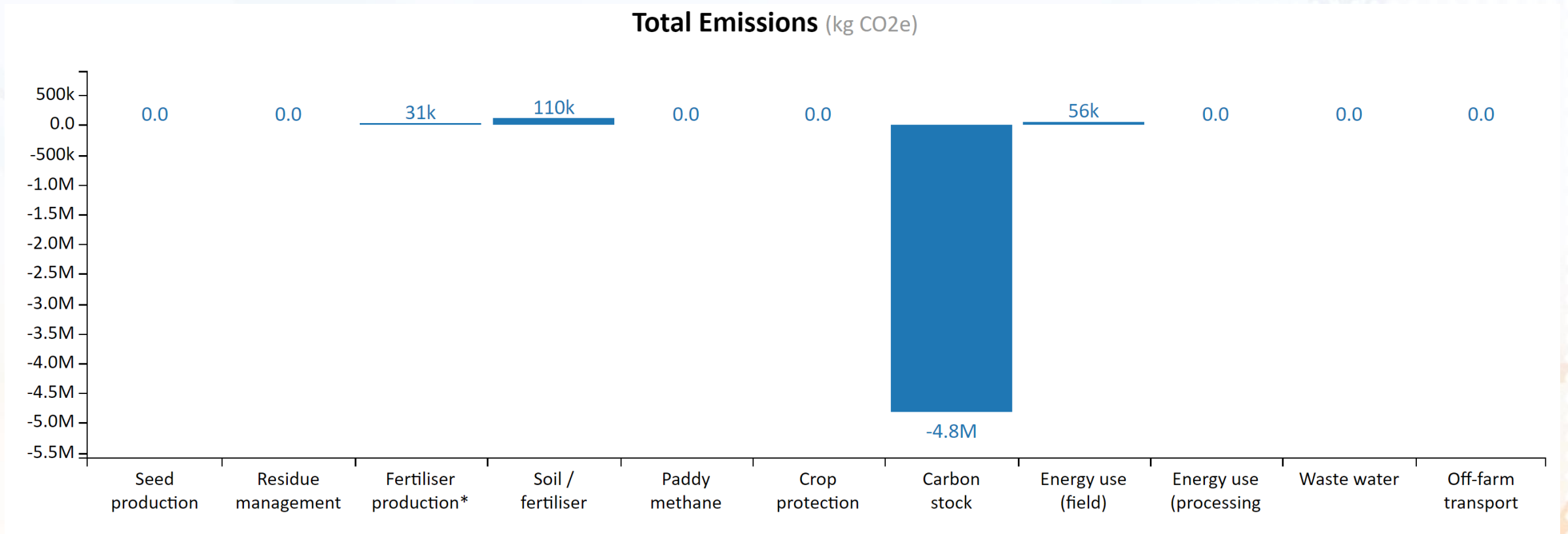
Emissions per hectare

-6.59k
kg CO₂e

Emissions per tonne

-922.42
kg CO₂e

Ciasnocha Family Farms – Cool Farm Tool assessment [2]



Ciasnocha Family Farms – Cool Farm Tool assessment [3]

Detailed data (all values in kg)

[Hide data](#)

Sources	CO ₂	N ₂ O	CH ₄	Total CO ₂ eq	Per ha	Per tonne
Seed production	0	0	0	0	0	0
Residue management	0	0	0	0	0	0
Fertiliser production*	30.73k	0	0	30.73k	43.90	6.15
Soil / fertiliser	25.67k	293.02	0	112.99k	161.41	22.60
Paddy methane	0	0	0	0	0	0
Crop protection	0	0	0	0	0	0
Carbon stock changes	-4.81M	0	0	-4.81M	-6.87k	-962.42
Energy use (field)	56.28k	0	0	56.28k	80.40	11.26
Energy use (processing)	0	0	0	0	0	0
Waste water	0	0	0	0	0	0
Off-farm transport	0	0	0	0	0	0

* Calculated with validated default values for fertiliser production.

Regenerative Agriculture

Conventional agriculture is part of the climate problem and is being challenged



Massive soil loss

- 50% of the world's top agricultural soil lost in the last 150 years.
- According to the FAO, we have only 60 harvests left before all top soil is gone.



Contribution to climate change

- Agriculture and LULUCF responsible for approximately 30% of the world's GHG emissions.
- Sink's storage potential for underutilized.



Political pressure

- Move away from production- and land ownership-based subsidies towards payments for public goods.
- Reflective of public opinion (young in particular).

Co-benefits of regenerative agriculture

Healthy and nutritious food



Lower healthcare costs

Biodiversity



Climate resilience

From Conventional to Climate Smart Agriculture in a financially sustainable way

Today



Tomorrow



The day after tomorrow



Conventional arable production

Emissions of 2.3 tCO₂e/ha



Regenerative

Sequestration potential of 2 tCO₂e/ha

Return economy flight LHR – JFK: 2.1 tCO₂e



Agro-Forestry

Sequestration potential of 8 tCO₂e/ha

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