

From: [GONZALEZ ALONSO Myriam \(CAB-TIMMERMANS\)](#)
To: [GONZALEZ ALONSO Myriam \(CAB-TIMMERMANS\)](#)
Subject: One additional slide : EVP meeting with Imagine on 07/02/2023
Date: vendredi 17 mars 2023 16:33:19
Attachments: [Investment Needed Slide.pdf](#)
[Printed copies Dialogue with EVP Timmermans on Regen Ag 7 Feb 2023.pdf](#)

From: [REDACTED]
Sent: Monday, February 6, 2023 10:36 PM
To: VISEK Lukas (CAB-TIMMERMANS) <xxxxx.xxxxx@xx.xxxxxx.xx>
Cc: [REDACTED]
[REDACTED]
Subject: One additional slide

Dear Lukas,

We're very excited for our dialogue session with EVP Timmermans tomorrow.

We had a preparatory call today where the CEOs requested to add one additional slide to the participants booklet (see attached). Please find it attached. The slide sums all we know about the investment needed to transition 40-50% of farmland to regenerative agriculture in Europe.

I am bringing copies of the participant's booklet tomorrow and will add this slide in.

I do hope that this is alright. Our apologies for the late addition.

Thank you for your understanding.

Regards,

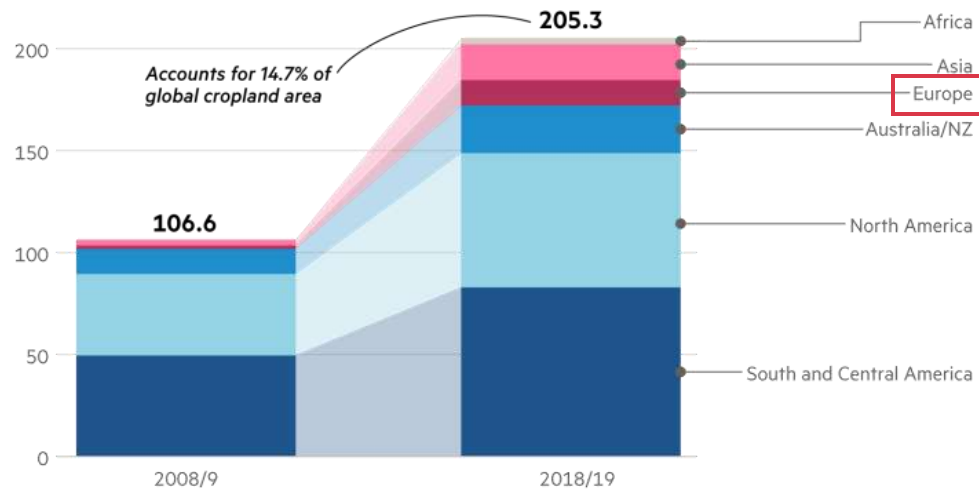
[REDACTED]
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We need to massively accelerate regenerative agriculture

Where are we now?

Regenerative agriculture nearly doubles in 10 years

Hectares* (mn)



*farmland managed with: minimum or no mechanical soil disturbance; maintaining a permanent mulch cover on the soil surface; diversification of species in the cropping system

Source: Kassam, A; Friedrich, T; Derpsch, R: 'Successful Experiences and Lessons from Conservation Agriculture Worldwide', Agronomy (2022)

© FT

Source: [Financial Times](#), 2022

N.B. Graph shows for cropland only

What is needed by 2030?

By 2030, **40-50%** of global agricultural land need to be farmed regeneratively to support food security, tackle climate change and biodiversity loss, and ensure good farmer livelihoods, according to FOLU Growing Better (2019).

Making **40-50%** of European farmland regenerative by 2030 requires an investment of **€6-10 billion a year**.

With €387 billion in funding allocated to the CAP for the 2021-27 period, this is roughly the **equivalent of 10-20% of CAP funding**.

Datapoints and Assumptions:

- Total European farmland: 157 million hectares ([Eurostat, 2020](#))
- Agricultural land (cropland + pasture land) currently farmed regeneratively in Europe: Assuming ~10%
 - Cropland Area under conservation agriculture in Europe in 2018/19: 5.6 million hectares, equivalent to 5.2% of European cropland ([Kassam et al., 2022](#))
 - We do not have data on how much more cropland has been converted to conservation agriculture between 2018/19 and 2022.
 - We do not have data on regeneratively farmed dairy and livestock.
 - We know that between 2013/14 to 2018/19, the rate of adoption of conservation agriculture in Europe increased by 170%, nearly tripling ([Kassam et al., 2022](#))
 - We therefore assume that in 2022, roughly 10% of farmland in Europe is farmed regeneratively
- Percent of agricultural land that needs to be farmed regeneratively in Europe by 2030:
 - Lower Ambition: 40%
 - Higher Ambition, for Europe to be a leader: 50%
 - Sustainable Markets Initiative's [Agribusiness Task Force](#) (2022), building on FOLU Growing Better [report](#) (2019) estimates that '40% of global cropland by 2030' need to be farmed regeneratively to 'deliver against the world's need to limit climate change to 1.5 degrees'. N.B. it is unclear what scientific basis is used for the 1.5 degrees.
 - [Regen10](#) advocates for 50% globally
- Yearly cost of the transition for farmers: between €123-161/ha for expert agronomist training and long term OPEX ([FOLU, 2019](#))
- CAP (Common Agricultural Policy) yearly allocations: between ~ €55-60bn/yr ([European Commission](#))

Back of the envelope calculations:

- Farmland that needs to transition to regenerative agriculture by 2030:
 - (Farmland that needs to be regenerative by 2030) – (Farmland currently regenerative)
 - Lower ambition: $(157 \text{mn ha} * 40\%) - (157 \text{mn ha} * 10\%) = 47.1 \text{mn ha}$
 - Higher ambition: $(157 \text{mn ha} * 50\%) - (157 \text{mn ha} * 10\%) = 62.8 \text{mn ha}$
- Total yearly cost of the transition:
 - (Farmland that needs to transition to regen ag by 2030) * (Yearly cost of the transition for farmers, lower bound and higher bound)
 - Lower ambition:
 - Lower bound: $47.1 \text{mn ha} * €123/\text{ha} = €5.8 \text{bn}$
 - Higher bound: $47.1 \text{mn ha} * €161/\text{ha} = €7.6 \text{bn}$
 - Higher ambition:
 - Lower bound: $62.8 \text{mn ha} * €123/\text{ha} = €7.7 \text{bn}$
 - Higher bound: $62.8 \text{mn ha} * €161/\text{ha} = €10.1 \text{bn}$
- **Conclusion: between ~ €6-10bn per year is needed**
- This represents roughly ~10-20% of current CAP yearly allocations

Dialogue session with EVP Timmermans on regenerative agriculture

7 February 2023

--- Participant booklet ---

Organised in partnership with

**The Food
Collective**



Sustainable
Markets
Initiative



Agribusiness Task Force

Meeting flow

Chair: Geraldine Matchett, Co-chair Food Collective, Co-CEO DSM		
Time	What	Who
15.30 – 16.00	Arrival + passing through EU Commission security	All visitors
16.00 – 16.01	Word of welcome	
16.01 – 16.06	The current state of affairs	EVP Timmermans
16.06 – 16.10	Today's agenda: where we left from, what we see as a successful outcome of the meeting & questions we will address	
16.10 – 16.13	Business commitments to scale regen ag & what we've learnt about farm economics & how farmers are accompanied in the transition	
16.13 – 16.17	The perspective from farmers	
16.17 – 16.21	Presentation FrieslandCampina	
16.21 – 16.25	Presentation Syngenta	
16.25 – 16.30	The perspective from academia	
16.30 – 16.34	Presentation Unilever	
16.34 – 16.38	The roadblocks to scale regenerative agriculture	
16.38 – 16.43	The response from EVP Timmermans	EVP Timmermans
16.43 – 16.55	Dialogue & concrete next steps	
16.55 – 16.58	Reflections from everyone in the room & closing remarks	
16.58 – 17.00	Closing remarks	EVP Timmermans,

Welcome!

European Commission



Frans Timmermans
Executive Vice-President of
the European Commission



Lukas Visek
Member of Cabinet EVP Timmermans
(European Green Deal)

Food & Ag Leaders



Food Collective



Food Collective



Syngenta



Unilever



FrieslandCampina

Special Guests



Agriculture Lower Austria



Dutch Scientist & Writer

To support you in this dialogue:

The Food Collective



Food Collective



Impact & Action

OP2B



OP2B

Where we left off in June:

Key questions you've asked us

1. Why is scaling regenerative agriculture so important for us?
2. How are the economics for farmers? Is there a business case for them?
3. What are the roadblocks?
4. How do we get a critical mass of farmers on board?

Between Q4 2022 and now, company experts and partners have engaged with the European Commission to address what is needed to scale regenerative agriculture and provide supporting evidence to these five, high-level questions and agree a way forward in 2023:



Outcome-based Approach

What needs to be done to align on a set of goals and metrics for regenerative agriculture that will improve the environment and farmers' income?



Farmer Engagement and Economics

How will we build a compelling business case for farmers and accompany them in the transition to regenerative agriculture?



Supply Chain & Consumer Engagement

How will we build the needed supply chain infrastructure to transmit the value created at the farm all the way to citizen consumers?



Enabling Technology & Innovation

What are the enabling technologies & innovations that need scaling?



Enabling Regulatory Environment

What do farmers and industry need from the regulatory environment to enable the transition?

We are putting together a working [catalogue](#) of supporting evidence on regenerative agriculture. It currently gathers examples across 10+ companies, 2 farmers, and 4 partners

Summary of catalogue content

Content	Description	Sample size (WIP)	
Executive summary		Key messages and decision points from December 2 nd expert workshop	n/a
Frameworks		Comparison of frameworks for regenerative agriculture across companies and business coalitions	14
Company case studies / viewpoints		Case studies of company projects: outcomes and learnings from implementing regenerative agriculture with suppliers	10 case studies 2 viewpoints
Farmer viewpoints		Farmer cases studies	2
Presentation from European Commission		Presentations from DG ENV on Soil Health Law and DG SANTE on Framework for Sustainable Food Systems	2
Annex		Additional insights, glossary of terms, recommended readings	n/a

What we hope to achieve today

Collectively scale regenerative agriculture and increase impact

1

OUTCOME-BASED APPROACH

EU policy to support the goals of regenerative agriculture and focused on positive outcomes & impacts –not prescribed practices

2

FINANCIAL SUPPORT TO FARMERS

Government incentives that help de-risk the transition & reward positive outcomes & impacts

3

SHARING OF LEARNINGS AND DATA

Government incentives & initiatives for farmers to share learnings & data

4

ENABLING ENVIRONMENT FOR TECHNOLOGY AND INNOVATION

Policies that enable the investment in science & technology to scale up regenerative agriculture

What is regenerative agriculture?

There is no universally accepted definition of regenerative agriculture but many working definitions are in development.

Our working understanding is that regenerative agriculture is an adaptive outcome-based farming approach that delivers positive impact on soil health, climate, biodiversity, water to ensure yield resilience and sustain good farmer livelihoods.

A recent [paper](#) from the Food and Land Use Coalition advocates for "moving away from practice-based definitions of regenerative agriculture towards alignment around results to accurately measure and report on the potential to contribute to positive social and environmental co-benefits." We agree that defining regenerative agriculture in terms of practices without carefully examining the outcomes they deliver in different contexts presents a risk of greenwashing and misrepresentation of what it can achieve.

There is increasing evidence and convergence on the outcomes that need be tracked and rewarded for and which practices can deliver them in different contexts. A mixed approach of practice-based, proxied and outcome-based incentives may offer a viable solution in the short to medium term, but tracking outcomes using a unified set of metrics will be key to ensure the science, knowledge and incentives adapt as we go.

Lastly, we believe regenerative agriculture needs to be productive and resilient to avoid GHG emissions and biodiversity loss leakage to other regions of the world while ensuring food security. In this light, we also acknowledge the importance of system changes needed on the demand side to reduce pressure on land.

The Food Collective is chaired by:



We're in it for scale: to make regenerative agriculture a no-brainer for ALL farmers. We need the European Commission's help to set a harmonized level playing field and make the economics of the transition work for farmers.

We see scaling regenerative agriculture as an imperative.

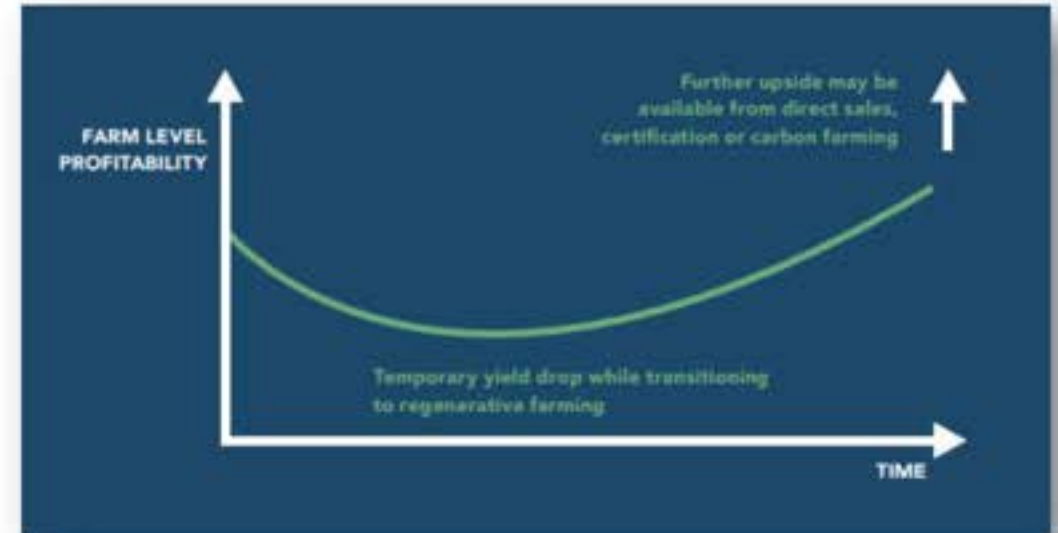
- Because there is growing evidence that it can **deliver positive environmental impact** on soils, biodiversity, climate, water and animal welfare.
- But also, because it turns out to be **good for farmers in the long run** as it makes them resilient. It makes their soils, crops, livestock, and the local ecosystem better at handling severe weather conditions and a changing climate.
- Recent [analysis](#) from BCG shows that in the face of extreme weather events regenerative agriculture practices can **reduce yield losses by up to 50%**.
- And thus, regenerative agriculture serves as a credible pathway towards the **safeguarding of future supplies of food** in Europe, to which our business depends, and it **contributes to the transition to sustainable food systems**.

And that's why a growing number of businesses are committing significant resources and developing big plans to scale it across their supply chains

	<ul style="list-style-type: none"> • Investing €1.2B by 2025 to spark regenerative agriculture across supply chain. • 20% of our key ingredients will be sourced through regenerative agricultural methods by 2025, 50% by 2030 (14 million tonnes) (source)
	<ul style="list-style-type: none"> • Commitment to scale regenerative farming practices across 7 million acres by 2030, equivalent to PepsiCo's entire agricultural footprint (source)
	<ul style="list-style-type: none"> • Commitment to implement regenerative agricultural practices across 100% of McCain's potato acreage worldwide by the end of 2030 (source)
	<ul style="list-style-type: none"> • Commitment to source 100% of ingredients produced in France from regenerative agriculture by 2025 (source) • Targeting a 30% reduction in methane emissions from fresh milk supply by 2030 supporting the implementation regenerative dairy practices and develop innovative solutions (source)
	<ul style="list-style-type: none"> • Investing €1 billion in Climate & Nature Fund over the next 10 years contributing to the regenerative agriculture strategy (source) • Help protect and regenerate 1.5 million hectares of land, forests and oceans by 2030 (source) • 50% of Nutrition Business Group Land Footprint to be covered in regenerative agriculture by 2027
	<ul style="list-style-type: none"> • FrieslandCampina is expecting an additional investment of approximately €1.5 billion until 2030 to achieve its climate plan goals (source)
	<ul style="list-style-type: none"> • Enhance biodiversity and soil health on 3 million hectares of rural farmland every year (source) • Committed \$2 billion by 2025 to innovation specifically targeted at delivering a step change in agricultural sustainability (source)

What we've learnt about regenerative agriculture & farm economics

- Regenerative agriculture pays off farmers
- **Benefits are received over the long run** as soil fertility needs time to improve, and advanced practices and outcomes are achieved in stages
- **Farmers are challenged by the cost of transitioning:**
 - Upfront investments (training, baselining)
 - CAPEX (low till equipment, precision ag, natural habitat creation or restoration, etc.) and,
 - OPEX (machine operating costs, purchasing of seed mixes, soil assessments and monitoring)
- Because of the above two reasons, **yields and profits are often reduced in the short term** (reported as a 5-10% yield reduction in case examples)
- **Significant benefits from regen ag are experienced after 2 to 10 years** and on the condition that practices are implemented consistently



Based on modelling the cost of transition to regenerative agriculture and real-life case studies there is an initial dip in farm profit which recovers after 2-7 years (SMI Agribusiness Taskforce, 2022, p.20)

- A recent BCG analysis on farm economics of German farms reports that with the implementation of intermediate regenerative farming practices over the course of 6 to 10 years farmers' profits should increase by an estimated 60%, (see the following two slides for more insights)



The Case for Regenerative Agriculture in Germany—and Beyond

January 2023

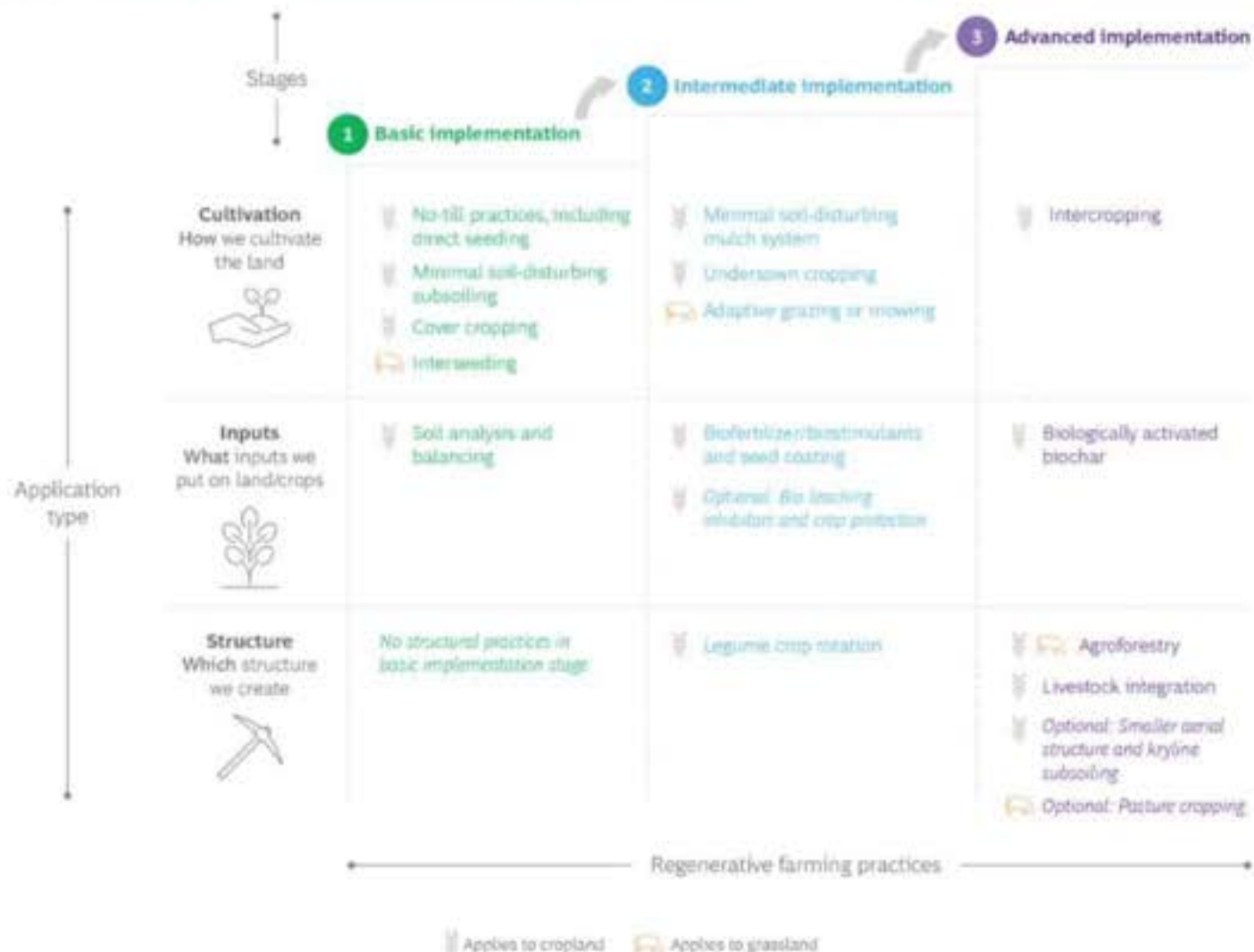
By BCG and NABU

"We define regenerative agriculture as "an adaptive farming approach applying practically proven and science-based practices, focused on soil and crop health aimed at yield resilience and a positive impact on carbon, water, and biodiversity."

Healthy soil is a key enabler for productive agriculture, and most regenerative practices are designed to support the soil's functions by protecting and feeding its biodiversity. This is the goal of the three principles at the heart of regenerative agriculture: no-till farming, including direct seeding; permanent coverage of the soil with plants; and promotion of biological diversity, including wider crop rotation.

*The essential practices of regenerative agriculture are meant to be **implemented in three stages—basic, intermediate, and advanced—over the course of several years.** (See Exhibit 1.) In general, each stage includes three kinds of activities that affect how soil and crops are cultivated, what inputs are used, and how the land is structured." (BCG, 2023)*

Exhibit 1 - Regenerative Agriculture Involves Changes in Cultivation, Inputs, and Farm Structure, to Be Carried Out in Three Stages



"Regenerative agriculture has long been associated with lower yields and shrinking profits for farmers. However, an objective analysis of the economics of German farms conducted on a per-hectare basis shows that **regenerative agriculture offers huge benefits in the middle to long term**, resulting in higher profits for the country's farmers. Overall, once a steady state of implementation is in place—typically after 6 to 10 years—Stage 1 and Stage 2 practices should increase farmers' profits by an estimated 60% or more.

An example of this analysis breaks down the specific practices carried out on a typical crop farm that grows cereals and oilseeds. (See Exhibit 2.) Improvements in soil structure as a result of no-till farming, for instance, would increase the farm's profits by €97 per hectare, including a gain of €69 per hectare in net cost savings from avoided tillage operations and €28 per hectare in revenue from increased yields. Aside from the positive impact on farmers' income, long-term improvements in the fertility of the soil increase farmland's productive potential and thus have a positive effect on its value." (BCG, 2023)

Exhibit 2 - Once Fully Implemented, Regenerative Practices Offer Farmers as Much as 60% Higher Profits on Their Cereal and Oilseed Crops

Profits per hectare (average of winter wheat, barley, and rapeseed, in €)

Excluding subsidies



Sources: Bavarian State Institute for Agriculture; FAO; German ministry for agriculture; DLG; BayWa; KTBL; farmer interviews; BCG and NABU analysis.

¹"Avoided yield loss" due to better soil structure, which increases resilience to droughts. Analysis based on yield in 2018, a drought year.

How farmers are accompanied in the transition

- The private sector makes the case for a flexible outcome-based approach that besides enabling learning and innovation also enables rewarding farmers for implementing a range of practices which are indicators for regenerative agricultural outcomes, without being prescriptive about it.
- Here's how the private sector accompanies farmers in the transition:

Farmers need access to knowledge and community learning is critical to overcome social barriers to adopt regen ag practices. Innovations and technologies are also needed to accelerate the transition.

Case examples :

1. **Technical assistance to farmers** (Earthworm Foundation with Nestlé & McCain, Syngenta LIVINGRO™)
2. **Demo farm networks** (Danone Farming4Generations, Arla European Regen Ag Pilot Farm Network, LEAF Farm Network, Livelihoods Funds Living Farms Fund, Syngenta Nature Positive Farming Project)
3. **Peer-to-peer** (Boden leben in lower Austria)
4. **Disruptive tech R&D**: Precision agriculture for NUE solutions YARA, Methane inhibiting feed additive DSM, Digestible silage corn Corteva, Biologicals Syngenta, Gene mapping Corteva, Soil & biodiversity scanners Syngenta, etc.

Farmers need financial mechanisms of cost & risk sharing to overcome the lag in profit and yield gains

Case examples:

1. **Corporate funds** (e.g. Danone Ecosystem, Unilever Climate & Nature Fund, Livelihoods Ventures)
2. **Co-financing schemes** (e.g. Danone crowdfunding for farmers - donations or loans - through MilMOSA)
3. **Public Private Partnerships** (e.g. Danone- USDA Partnership for Climate Smart Commodities, the Rabobank AGRI3 Fund)
4. **Request standalone government funding**
5. **Loans on preferential terms** (e.g. McCain & Credit Agricole): Green loans, Impact Loans and Innovation Loans (Rabobank)
6. **Blended finance solutions** a.o with European Investment Bank (Rabobank)
7. **Green bonds** (Rabobank)

Financial incentives will make it attractive for farmers to take part in regenerative crop & dairy production schemes.

Case examples:

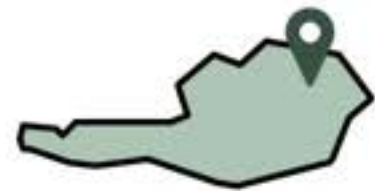
1. **Price premiums** (e.g. FrieslandCampina Fokusplanet, McCain Regenerative Potato Grower, Arla Sustainable Incentive, Danone Regenerative Agriculture, Nestlé Living Soils Program, Nestlé Regenerative Milk Plan, etc.)
2. **Access to carbon credits** (e.g. Rabo Carbon Bank, Agoro Carbon Alliance, Indigo Carbon, Bayer EU Carbon Program, Cargill RegenConnect, Climate Farmers Carbon+ Credits, etc.)

The Perspective From Farmers Presentation

Austrian regenerative farmer
120 ha of field crops

- **Challenges:** arid soils, long periods without rain with no possibility to irrigate, heavy storms, floods, runoff and soil erosion
- **Regenerative practices** are focused on soil protection, soil conservation and improving soil structure
- **Outcomes:** "In dry times, we manage to keep more water in the soil and the yield increases."

Ex ante Steinabrunn - 30 July 2014



76 l/m² in one hour

Ex ante Steinabrunn - 30 July 2014



Regenerative agriculture

Cover crops



7 different green covers as diversity is key



Cooler soil surfaces



Water collection



Biological loosening of soil

Direct sowing



Wheat



Oilseed rape



Maize



Maize

Other ways to prevent erosion & runoff and retain rainwater



Transverse dams & oats



Ex post Steinabrunn - 6 May 2015



Ex post Steinabrunn - 6 May 2015

Loss of nutrient value due to soil erosion was estimated at €838 per ha in 2012

Tabelle 1: Kalkulation Verlust des Nährstoffwertes durch Bodenabtrag nach Feitzlmayr 1996, verändert von Hölzl mit MD-Preisabschätzungen 2012.

Nährstoff	Gehalt im Boden in %	Kalkulationswert in %	Umrechnungsfaktor Element- auf Oxidform; P,K; 50%-ige Pflanzenverfügbarkeit	€/kg Nährstoff	Verlust durch Bodenabtrag in €/kg
					5 mm = 75 t/ha
Organische Substanz „Humus“	2,0 – 2,5	2,30		0,2	345,00
Gesamt-N	0,2 – 0,3	0,27	2,291	1,2	243,00
Gesamt-P	0,06 – 0,1	0,10	1,205	1,12	96,22
Gesamt-K	0,3 – 0,5	0,40		0,85	153,64
Verlust durch Bodenabtrag in € pro ha					837,86

Seed sown into mulched plant residues

Sugarbeet - 28 Apr 2018



Sugarbeet - 15 Aug 2018



Compared to others Sugarbeet - 15 Aug 2018



Sugarbeet harvest - 2 Oct 2018



NIEDERSCHLAG ⓘ



Niederschlagssumme über den angezeigten Zeitraum: **371 mm**



Boden.Leben - Association for climate-adapted and constructive agriculture



- The Boden.Leben association was founded in spring 2019 with the following goals:
- Practice-oriented research work should bring knowledge advantage
- Advice from farmers for farmers
- Awareness raising and sensitization for our natural resources
- We count now 550 members






**Foqus planet and On the way to Planet
Proof: towards a first regenerative milk
stream**

Presentation by [REDACTED]

Foqus planet: regenerative agriculture monitoring and remuneration scheme

- Audited by an external independent party
- 90 mio € annually rewarded
- Scheme provides upfront insights in rewards on efforts
- On farm innovations used to boost performances
- Farmers engagement program in place for knowledge sharing
- Support to farmers to make tailor-made farm plans on farm practices
- Forms basis for first regenerative milk stream (On the way to Planet Proof)

foqus planet		Sustainable development table					
Themes	Indicators	Threshold value (start premium)	Premiums			Top level (maximum premium)	
 ANIMAL HEALTH AND WELFARE	 Longevity (years + months)	€ 0.00	5 years and 4 months			7 years and 2 months	€ 0.10
	 Calf rearing (CalfOK)	€ 0.00	70 points			95 points	€ 0.10
 CLIMATE	 Greenhouse gas emission (gram CO ₂ -eq/kg milk)	€ 0.00	1,250 g CO ₂ -eq			900 g CO ₂ -eq	€ 1.50
 BIODIVERSITY	 Nitrogen soil balance (kg N/ha)	€ 0.00	160 kg/ha			20 kg/ha	€ 0.10
	 Ammonia emission (kg NH ₃ /ha)	€ 0.00	70 kg/ha			35 kg/ha	€ 0.10
	 Protein from own land (% use of total protein consumption)	€ 0.00	45%			80%	€ 0.10
	 Permanent grassland (% permanent grassland)	€ 0.00	40%			100%	€ 0.10
	 Nature & Landscape (% total surface)	€ 0.00	0%			40%	€ 0.10
 OUTDOOR GRAZING	 Outdoor grazing		Partial outdoor grazing € 0.40			Outdoor grazing € 1.30	

the AMBITION

The combination of all criteria means that approximately 10% of dairy farmers can obtain the certificate.



MILK

the CHALLENGE

Improvements in one theme can sometimes be accompanied by a lower score for another theme. It takes a lot of professional skill and expertise to score well for all themes.

SMK

To obtain certificate

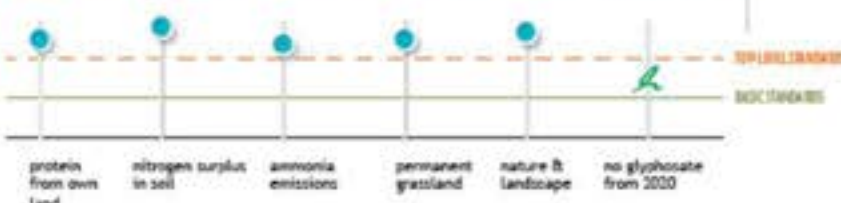


3 THEMES

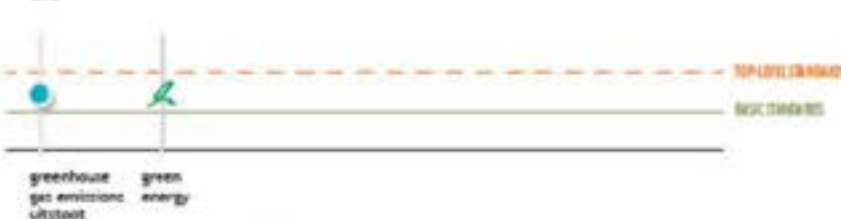
EXAMPLE WITH BIODIVERSITY AT TOP LEVEL



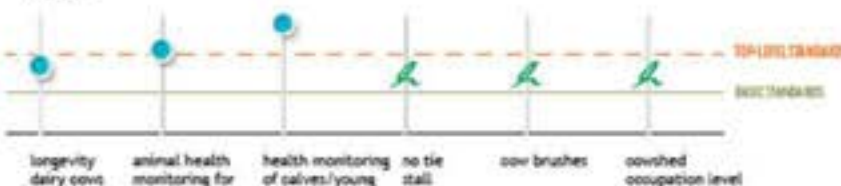
Biodiversity



Climate



Animal welfare



these criteria must always be satisfied

- Independently certified
- Physically segregated
- 10% best integral performance
- Paid for by consumers

This is needed to move forward, at scale and in an inclusive way



- Promoting regenerative agriculture across EU policies, following an **outcome-based approach**, and realize **one sustainability standard**
- **Unlock resources** to support farmers in the transition. Allow for **flexible policies** e.g. exempt farmers from restrictive policies if they can prove that they deliver sustainable outcomes.
- Create an **enabling regulatory environment** for **new disruptive technologies**

Unilever's ambition to scale regenerative agriculture Europe & beyond

February 2023



**The time for
Regenerative
Agriculture
'pilots' is over.**

**We must work together
to scale it up.**

Regenerative Agriculture



Agricultural practices including

- crop rotations
- cover cropping, composting, mulching
- conservation tillage

That have positive **impacts**

- **Soil health**
- **Biodiversity**
- **Water quality**
- **Emissions**
- **Farm profitability**

**Growing food in
harmony with
nature for today
AND for the future.**

9 Scaled Programmes in Field – 4 of which are in Europe 44 more to start in 2023 – 20 of which are in Europe



Soybean / ADM in Iowa

Implemented cover crop practices

33% reduction in water pollution, improved soil

150k HA, 400 farmers



Rice / Riviana in Arkansas

Implemented alternate wetting & drying method

30% reduction methane, 22% reduction water on average

5k HA, 9 farms



Rice / Parboriz in Italy

Implemented tailored water and biodiversity management

GHG & water reduction

900 HA, 233 farmers



Tomatoes / Agraz in Spain

Reduction of pesticide & fertilizer use, cover cropping

GHG reduction, restore soil health

2k HA, 148 farmers



Dairy in NL

Cover crops growing feed, change cow diets, methane reducing technology

Lead to 50% reduction in carbon footprint

1.8 hectares, 30 farmers



Onion & garlic / OFI in California

Restore central valley watershed through multi-stakeholder reforestation

9k HA, 78 farmers



Veg & Tomatoes Mendoza / Arcor in Argentina

Increase regenerative production through farmer engagement and education

1k HA, 25 farmers



Dairy in US

Cover crops growing feed, change cow diets, methane reducing technology

Lead to 50% reduction in carbon footprint

4k HA, 7 farms



Peas / Ardo in France

Implementing cover crop practices to preserve soil health

GHG & water reduction

3k HA, 80 farmers

Zooming in on 2 projects: Italy and Spain



RICE IN ITALY WITH PARBORIZ

Knorr



UNIVERSITÀ DI PAVIA



UNIVERSITÀ
DEGLI STUDI
DI MILANO

Innova-Tech

Implemented tailored water and biodiversity management practices to **reduce water pollution, reduce GHG emissions and have a positive impact on biodiversity.**

Practices applied:

- Applying fertilizer with precision application
- Vegetated field banks
- Farmers training
- Field ditches flooded during rice cultivation

Impact as of Jan 2023:

- 900 hectares
- 233 farmers trained

Outcome as of Jan 2023:

- **20%** reduction of pesticide residue in water
- **300** hectares of on-farm natural or restored habitat



TOMATOES IN SPAIN WITH AGRAZ

Knorr



PETERSON



Reduced use of pesticides & fertilizers, implemented cover crops to **nourish the soil, enhance biodiversity, reduce water and carbon footprint.**

Practices applied:

- Water use optimization using satellite data & remote sensing
- Implementation of cover crops
- Application of organic fertilizer
- Planting of indigenous plant species

Impact as of Jan 2023:

- 1.892 hectares
- 148 farmers (100% of Agraz farmers to apply water saving practices)

Outcome as of Jan 2023:

- **16% Increased yield (end 2021)**





€1 billion

Over 10 years with
Unilever's dedicated
Climate & Nature Fund



€300 million

Private Equity fund with AXA,
Tikehau Capital and Unilever,
each investing €100 million



But more is needed

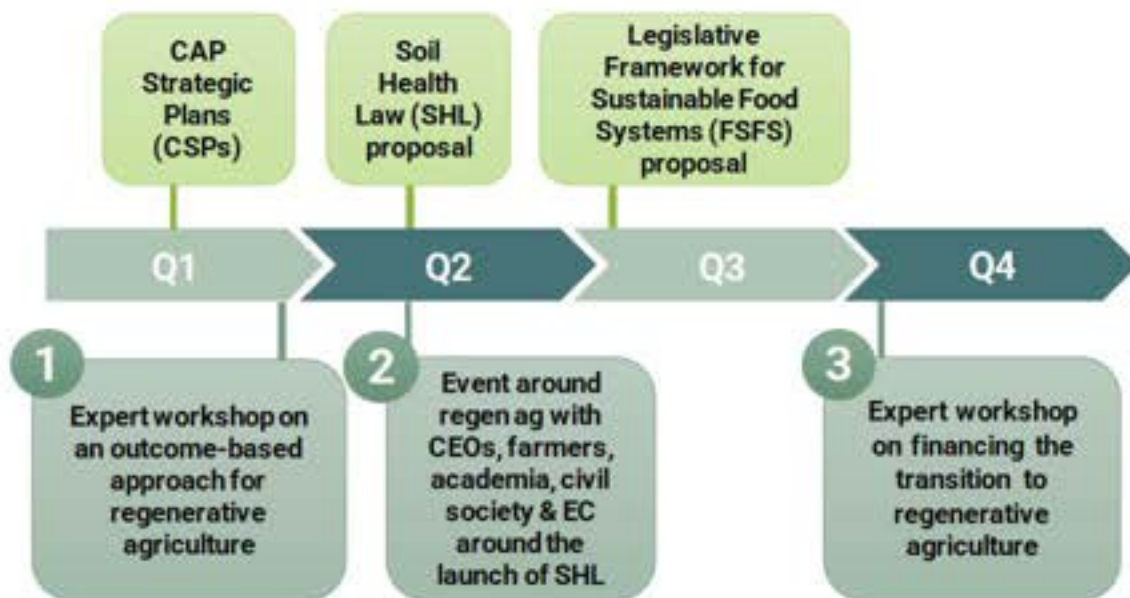
- Subsidies, grants
- Corporate Alliances (ABCD Traders)
- Loans & carbon financing (Banks)
- Private donors & philanthropies
- Impact investors (grants & results-based blended financing)

Collectively scale and increase impact

- EU policy to **support the goals of regenerative agriculture** and focused on positive outcomes & impacts –not prescribed practices
- **Government incentives that help de-risk** the transition & reward positive outcomes & impacts
- Government incentives & initiatives for farmers to **share learnings & data**
- Policies that enable the **investment in science & technology** to scale up regenerative agriculture

Driving engagements with private sector and other stakeholders to work towards the proposed actions

Upcoming milestones from the European Commission



Suggested engagements with company experts including farmers, academics, and other stakeholders

Proposed way forward, tentative dates (wip):

1 March '23

An expert workshop inclusive of all voices including farmer organizations to work towards an outcome-based approach for regenerative agriculture

2 June '23

A public event bringing together the private sector, the public sector, civil society and farmers around regenerative agriculture. The event would coincide with the publication of the Soil Health Law

3 September '23

An expert workshop on financing the transition to regenerative agriculture including further elaboration on public-private collaborations and novel financial models