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 **agrifirm**

KERRY

Future of Food.

Webinar Decarbonization of the food system

Realizing a net zero, or carbon negative food system

EVENT WILL START AT 4PM CET AND WILL BE RECORDED



F

Future of Food.

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4:00PM - 4:15PM

4:15PM - 4:40PM

4:40PM - 5:05PM

5:05PM - 5:30PM

Introduction



Fred Nijland

Food Decarbonization Lead

Deloitte.

Assessing & strategizing



Juan Aguiriano

Group Head of Sustainability

KERRY

Implementing & commercializing



Johan de Schepper

Head of Innovation

agrifirm

Managing your activities



Sem de Spa & Tim Moolhuijsen

Sustainability Tooling Experts

Deloitte.

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Birthe van der Voort

Future of Food Partner

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Decarbonization journey:

From commitment to successful execution

Corporates are making bold commitments to reduce their carbon footprint



Ahold Delhaize brings net-zero target forward to 2040 for direct carbon emissions

November 12, 2021 03:00 ET
| Source: Ahold Delhaize

Zaandam, the Netherlands, November 12, 2021 – Ahold Delhaize believes it is imperative that it achieves decarbonization of its business and partners to enable a 1.5°C-future. Ahold Delhaize and its brands commit to reach net-zero carbon emissions across their operations by no later than 2040 (scope 1 and 2) and to becoming net-zero

World's largest brewer promises carbon neutral breweries by 2028

Friday, 10 December 2021



AB InBev brewery at Jupille. © Wikimedia

Brewing giant AB InBev has pledged that its five largest European breweries – including those in Jupille and Leuven – will be carbon neutral by 2028, it announced Friday.

“The term ‘net zero’ refers to the balance between the amount of emissions produced and the amount removed from the atmosphere,” the group explained in a statement, adding that its ambition is to achieve net-zero emissions in its entire value chain by 2040, Belga News Agency reports.

Nestlé targets regenerative agriculture in €3bn climate plan



Image: Nestlé aims to ramp up regenerative agriculture in its supply chain, such as on this coffee plantation in Brazil

Food and drink giant's roadmap includes major focus on scaling up regenerative agriculture across supply chains worldwide as it sets sights on net zero emissions by 2050

Nestlé has today unveiled a multi-billion pound plan to deliver on its science-aligned climate goals over the next decade, with a major focus on scaling up regenerative agriculture techniques, rolling out renewable electricity for its operations, and expanding its plant-based food and drink offerings.

Starbucks Lays Out Sweeping Goals to Combat Climate Change

By 2030, the coffee chain wants to cut carbon emissions in half and reduce half of its waste.

McDonald's opens "UK's first net-zero restaurant"



Nat Barker | 20 December 2021

36 comments

Fast-food chain **McDonald's** has opened what it claims is the UK's first net-zero carbon restaurant building.

EasyJet to offset carbon emissions from all its flights

Airline will also relaunch its package holiday business in wake of Thomas Cook collapse



An easyJet plane takes off at Lille-Lesquin airport. Photograph: Philippe Huguen/AFP/Getty Images

Microsoft pledges to be 'carbon negative' by 2030

Company seeks to remove more carbon from the atmosphere than it emits within a decade

Kraft Heinz sets goal of net zero GHG emissions by 2050



Photo: ©DUNCAN ANDISON - STOCKADORE.COM

12.16.2021 by Jeff Gussel



HEINEKEN aims to be carbon neutral in production by 2030 and full value chain by 2040

April 15, 2021 02:00 ET
| Source: HEINEKEN NV

Heineken wants to link executive pay to climate change goals

BY THOMAS BUCKLEY, DANI BURGER, AND BLOOMBERG

June 16, 2021 5:00 PM GMT+2

In order to limit global warming to below 1.5 degrees Celsius we need to cut carbon emissions with 55% before 2030 and be carbon neutral by 2050

Poll question

**Has your company made commitments
to reduce carbon footprint?**

Poll question

Are you confident that these commitments will be reached on time in full?

Highlights previous webinar

Deloitte.



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Four market trends drive the case for change



Decarbonization provides commercial opportunities (e.g. carbon credits)



Five phases of the decarbonization journey: Assess, strategize, implement, commercialize & manage



A responsible food chain for future generations



Four changes (consumers, corporations, technology and funding)



New sustainable business models



Creating a world of sustainable nutrition



Decarbonization action plan

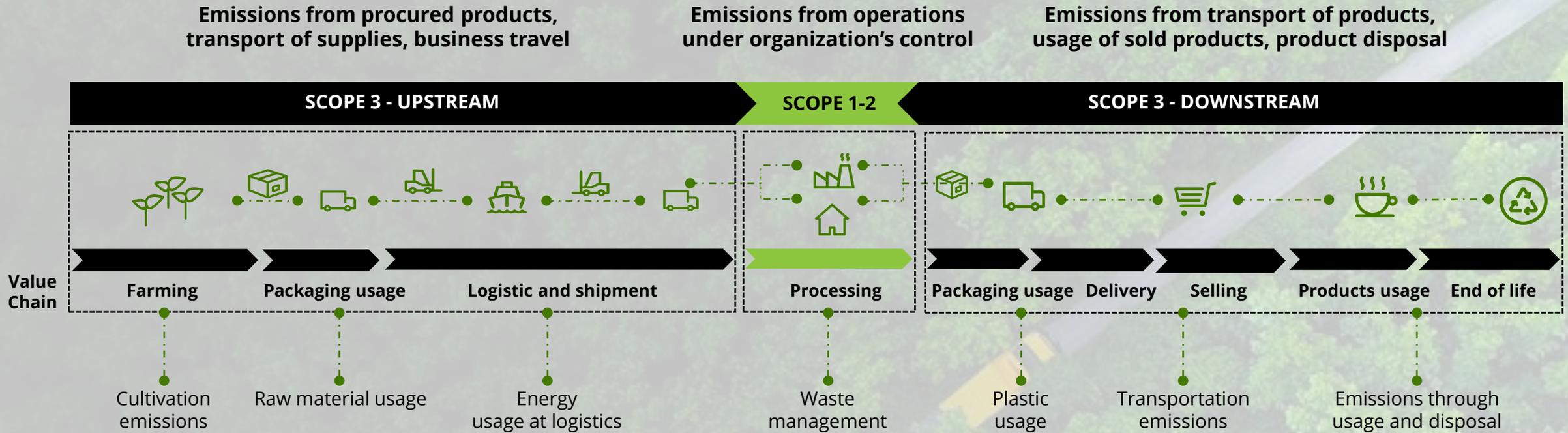


Partnerships, impact & performance

Execution of decarbonization

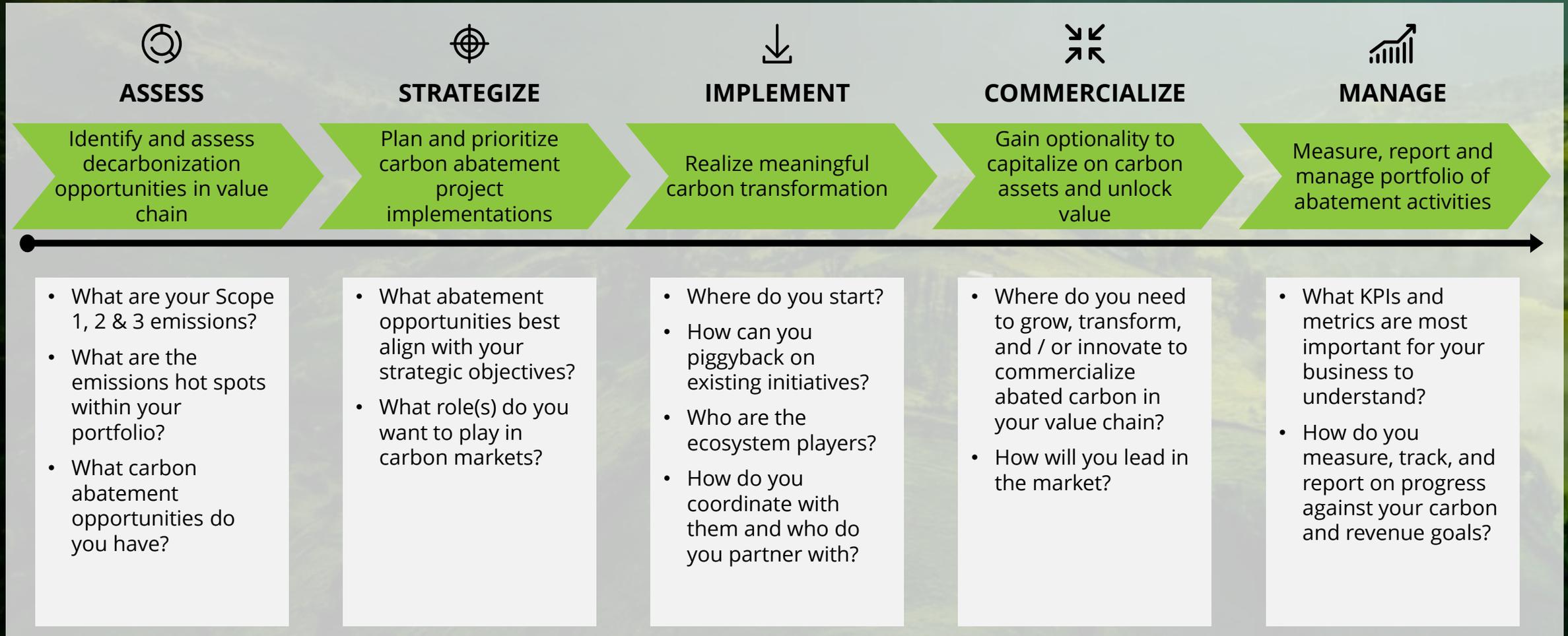
Practical examples showing a focus on innovation, circularity and ecosystems

Your challenge: there are numerous opportunities to reduce your carbon emissions, but which ones to implement?



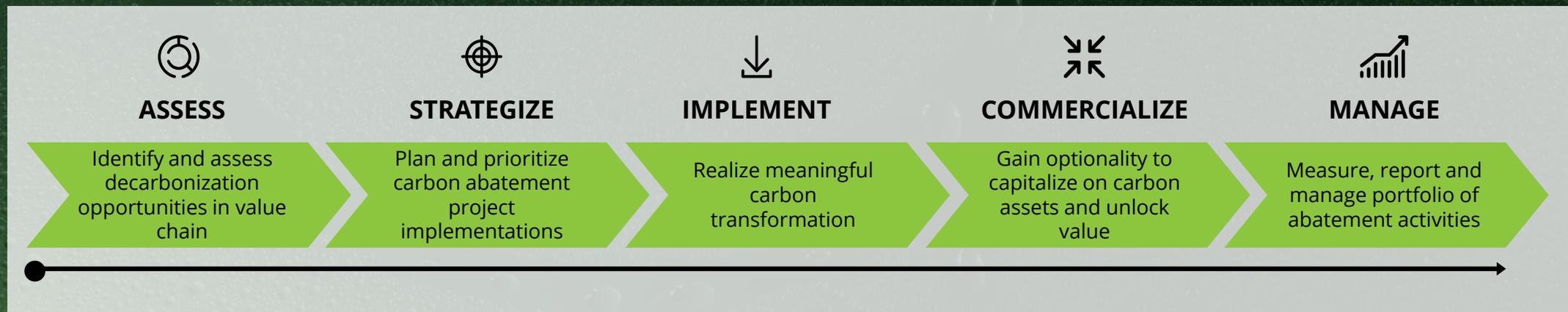
Initiatives are generally **focused more on business' own operations (52%¹) or close to organizational boundaries (33%¹)**; addressing **scope 3 emissions** is a growing focus

From (public) commitment to a successful execution of decarbonization initiatives. How to do it?



Poll question

Where is your company in the decarbonization journey?



Poll question

What is the biggest challenge that your company is facing to reduce carbon footprint?



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Kerry Sustainable Dairy



By 2030, we will reach
over **2 billion**
people with
sustainable nutrition

Sustainable Nutrition:

The ability to provide positive and balanced nutrition solutions that help maintain good health, while protecting people and the planet.



Beyond the Horizon

Our Commitments

Better for People

Reaching over **two billion people** with **sustainable nutrition** solutions by 2030



1 billion+

We currently reach over one billion consumers with positive and balanced nutrition solutions.



Better for Society

Upholding our **values** and internationally recognised **human rights**

Ensuring a **safe and healthy workplace**

Achieving the highest levels of **diversity, inclusion, belonging and engagement**

Engaging in **community partnerships** that deliver impact

Making the **science of healthier food accessible** through Kerry Health and Nutrition Institute

Better for Planet

Climate Action

Scope 1 & 2

Adopting a Science Based Target for a **55% carbon reduction** by 2030 and achieving **net zero** before 2050

Scope 3

Working with suppliers to **reduce emissions** intensity by **30%** across our supply chain

100% Renewable Electricity

within 12 months

Water Intensity

Achieving a **15% reduction** in water intensity by 2025

Circular Economy

-50%

Cutting our **food waste** by 2030

100%

of our plastic will be **reusable, recyclable or compostable** by 2025

Zero

Waste to Landfill by 2025

-25%

Achieving 25% **reduction in virgin plastic** use by 2025

Responsible Sourcing

100%

of priority raw materials **are responsibly sourced** by 2030

Creating A World of Sustainable Nutrition

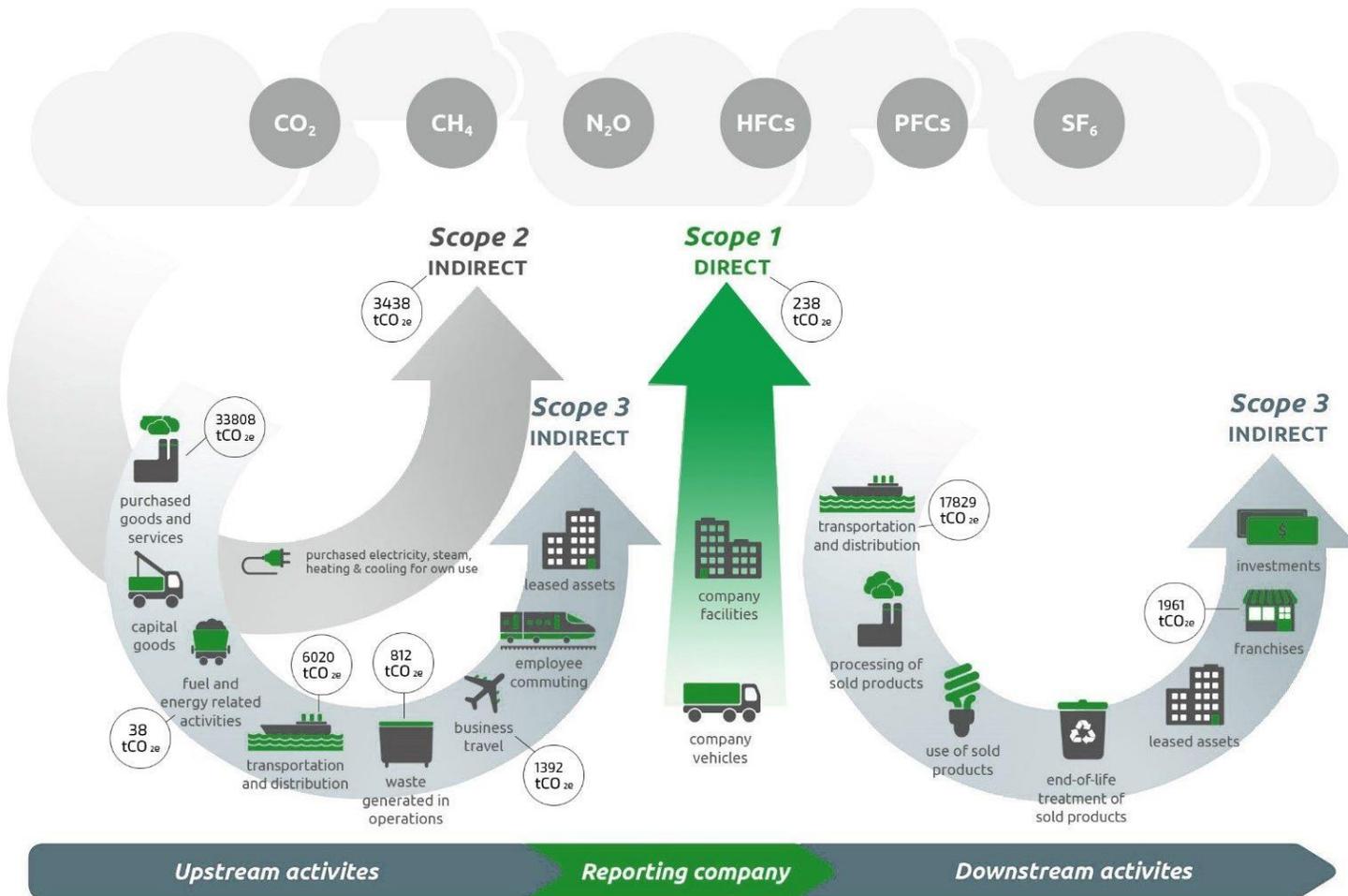
Enabling our Customers Move Along the Sustainable Nutrition Spectrum



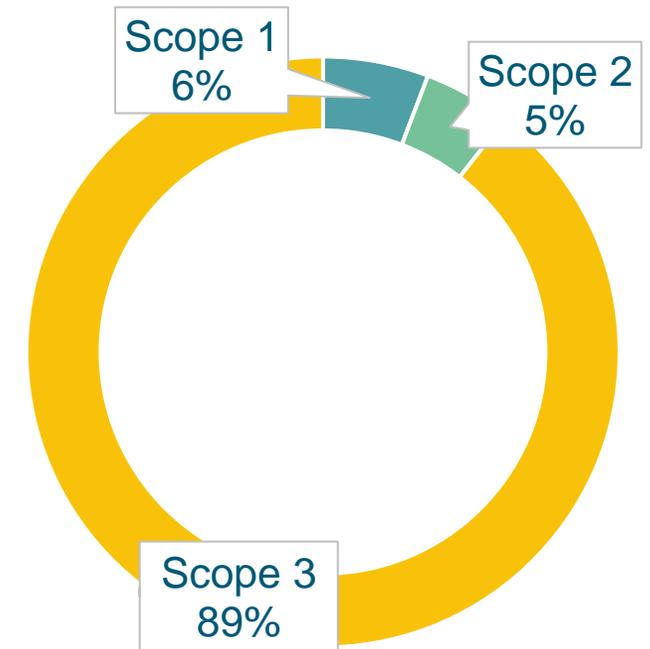
Our Carbon Emissions Targets

Reduce scope 1 & 2 absolute GHG emissions by 55% by 2030 from a 2017 base year.

Reduce scope 3 GHG emissions 30% per tonne of finished product by 2030 from a 2017 base year.



Kerry 2019 Global GHG Emissions (TOTAL)



Kerry's Irish Dairy Business Overview



1.3bn Litres Milk



5 Manufacturing Sites
32 Farm & Home Stores
Feed Mill



1,500 Employees



3,000 Milk Suppliers



Grass fed/outdoor grazing



History of sustainable action



Diarmuid Cremin

Kerry Agribusiness
Quality &
Sustainability
Award Winner



Leading Dairy Sustainability in Ireland

Better for Planet



- Up to 300 days outdoor grazing
- Greater than 95% grass fed dairy
- Origin Green - 100% SDAS Certification
- Average Carbon Intensity 0.98KG CO₂ E per KG FPCM
- Evolve Dairy Sustainability Programme

Better for People



- Forward Price Schemes
- Milk quality focus
- Knowledge transfer & peer to peer learning – building resilience
- Committed Agribusiness team – driving continuous improvement on-farm

Better for Society



- Animal health & welfare
- Supporting sustainable communities locally and internationally
- Addressing inter-generational challenges
- Partnering with local educational providers





Evolve

Dairy Sustainability Programme



KERRY



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AGRIFIRM TOMORROW, TODAY.

Royal Agrifirm Group, The Cooperative



FINANCE

- > € 2.2 billion turnover
- > € 486.5 million Group equity
- > 58.4% Solvency

EMPLOYEES

c. 3,000 fte worldwide

INTERNATIONAL

Locations in Europe,
America and Asia
Global export and distribution



SOLUTIONS

Outdoor Crop & Soil,
nutritional and industrial
solutions in the agricultural
sector worldwide

COOPERATIVE

Since 1892
Equity 100% farmer owned

MEMBERS

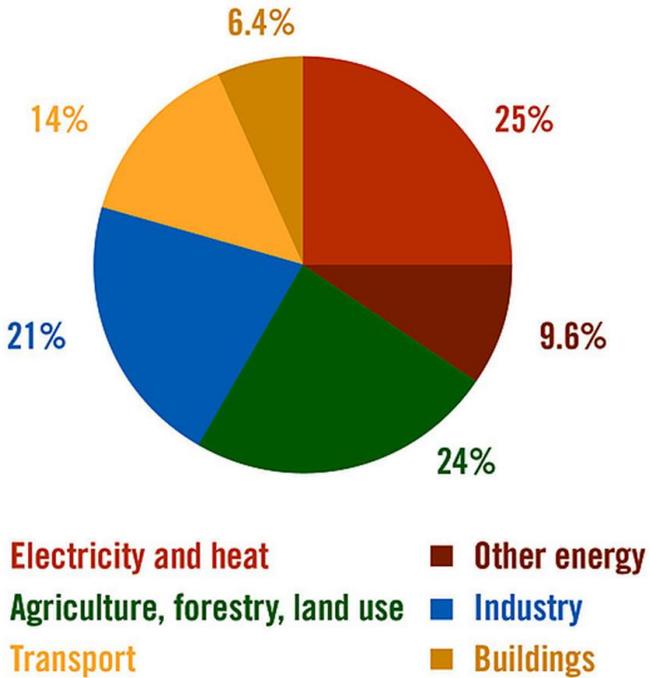
Collective ownership of
over 10,000 Dutch
farmers and growers

A close-up photograph of a protest sign. The sign is a rectangular piece of light-colored cardboard with the text "There is NO Planet B" written on it in thick, hand-painted letters. The word "There" is in blue, "is" is in black, "NO" is in blue, "Planet" is in blue, and "B" is in red. A hand is visible at the bottom center, holding the sign. In the background, a large yellow balloon is out of focus, and a building with windows is also blurred.

There is

NO Planet B

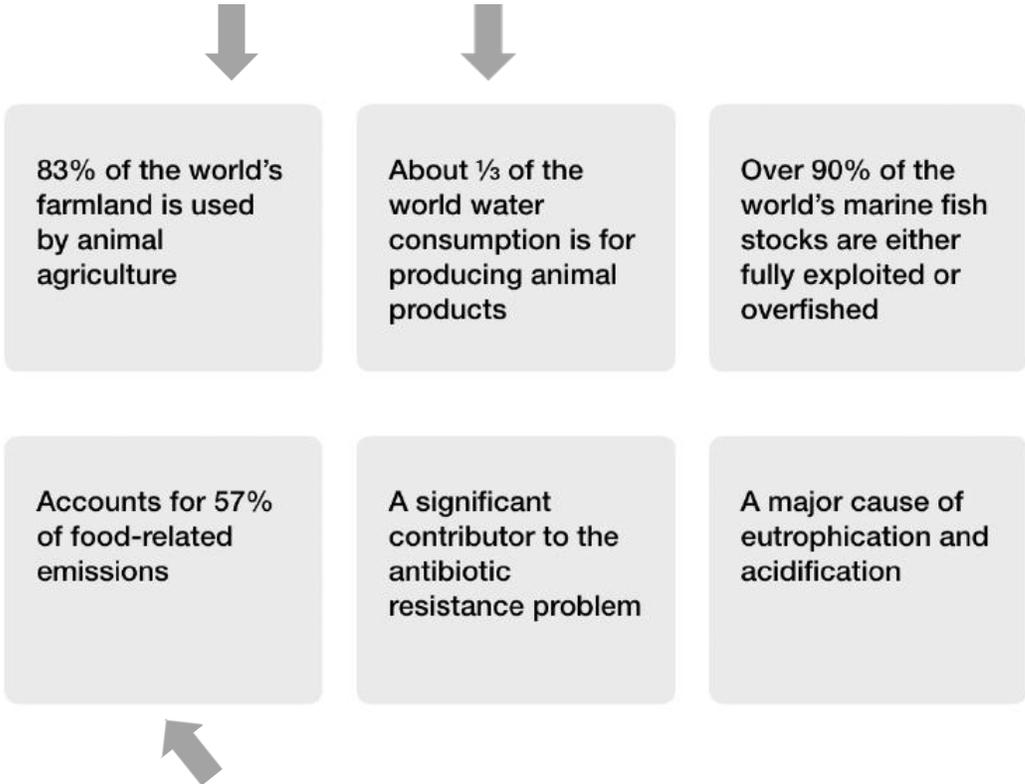
Animal agriculture can not sustainably meet future demand



Source: IPCC (2014)

Animal agriculture requires massive resources

While having major unintended consequences



FAO, [Poppo](#) and Nemecek Science 2018, Tong et al. Lancet Planetary Health 2017



“CORRIDORS”
for a
CIRCULAR
AGRO-ECONOMY
cases

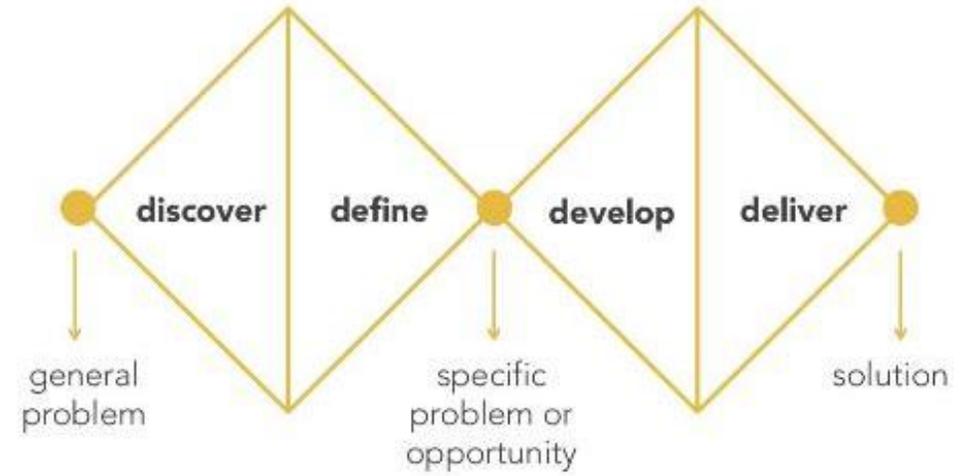
WHAT'S A CORRIDOR?

WHAT ?

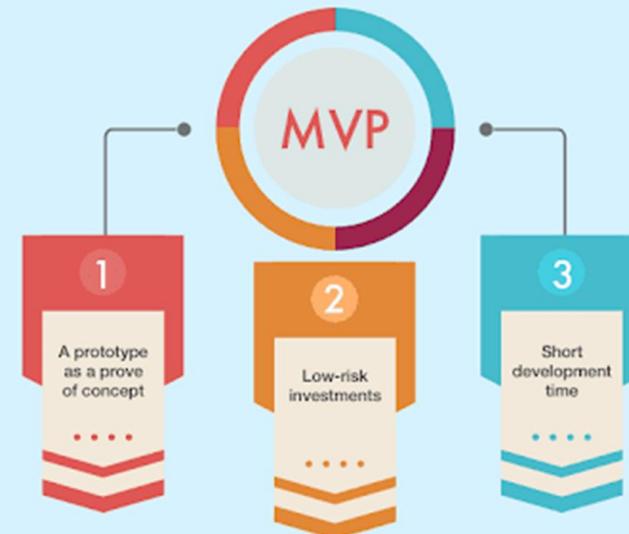
- > PASSIONATED TEAMS
- > EXPLORE NEW MODELS FOR AGRIFIRM
- > **ECOSYSTEMS – TOGETHER** corporate & startups)

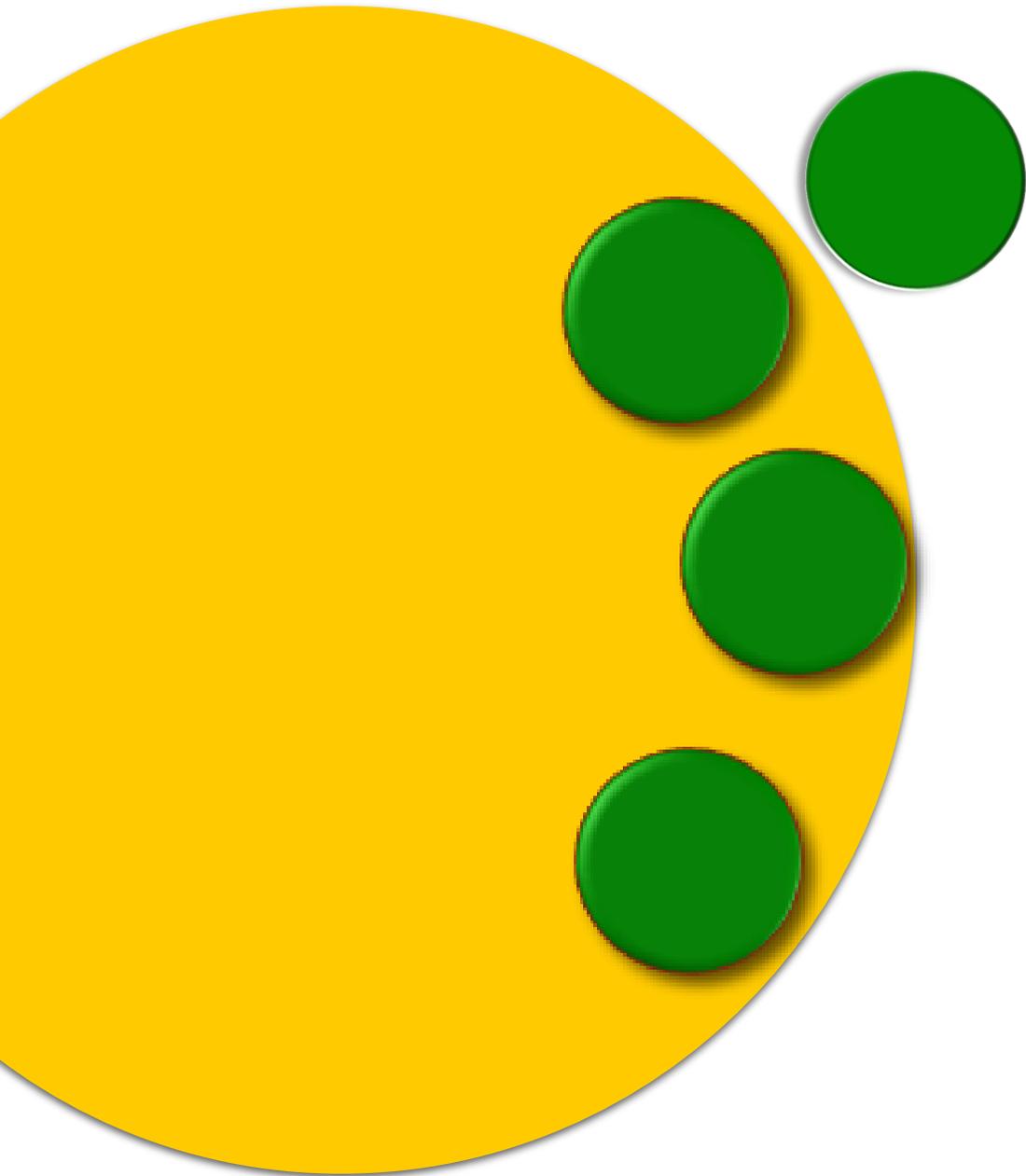
HOW ?

- > DIVERGENCE AND CONVERGENCE
- > SMALL PILOTS → **MVP's**
- > FAST GO/NO GO OR ADAPT



Advantages of an MVP development for investors and Startups





R&D = Perspective for the **core** – “sustainalize” (EXPLOIT),

Corridors = preparing **new business** (EXPLORE)

on the edge or outside of the business today

Regenerative Farming

Agrifirm's' vision on Circularity & Local food Production Systems



1. Lower Land use

Lower land use for agriculture



2. Circular Feed

Produce animal circular feed



3. Manure Treatment

Treat and process manure



4. Soil

Soil care and (circular) fertilizers



5. Regenerative System

Take care of crops with a regenerative cultivation system



6. Water

Lower the amount of drinking and irrigation water



7. Renewable Energy

Reduce and transform towards renewable energy

7 PILLARS OF REGENERATIVE SYSTEM

4 MODULES OF OUR REGENERATIVE SYSTEM

01

Regenerative cultivation advice

Offering tailored advice on sustainable crop cultivation methods and regenerative management practices and enabling on farm support during the season



02

Portfolio of alternative bioproducts

Offering a portfolio of bio solutions; recommending suitable fertilizers and stimulants based on soil status, nutrient demand and farm characteristics



03

Precision farming solutions

Offering data-driven support applications combined with sensors to enable healthy crop cultivation by measuring, monitoring (real-time) crop performance during the season



04

Carbon credit solutions

Offering different carbon solutions that measures, monitors, verifies and monetizes the sequestered carbon on your farm, to cover part of the costs of transitioning





Agrifirm's Regenerative Agriculture Program

HOW We offer a suite of services and products to support our farmers;

01



Regenerative cultivation advice

Offering tailored advice on sustainable crop cultivation methods and regenerative management practices and enabling on farm support during the season

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MODULE 1
Regeneratief gewasvitaliteitsplan

De toepassing van regeneratieve praktijken is gunstig voor het hele regeneratieve landbouwsysteem. Agrifirm kan een rol spelen door telers te helpen met de implementatie van deze praktijken door hun advies te geven, vooral gericht op het optimaliseren van opbrengsten en koolstofvastlegging. Deze module is een regeneratief handboek, bevat met alle informatie en voorbeelden van regeneratieve landbouw. Voor nauwkeurige informatie zullen minimaal drie soorten voorbeelden (bië-, zand- en veengrond) onze bevindingen en gegevens voor regeneratieve praktijken vertalen.

Welke behoeften pakken we aan?

- Advies van een adviseur over het soort praktijken dat geschikt is op het landbouwbedrijf
- Een gezonde en koolstofrijke bodem met een grote diversiteit aan bodemlevens
- Zekerheid over de dekking van de kosten op korte termijn, en rentabiliteit op lange termijn
- Behoeftes aan kennis en vaardigheden i.v.m. regeneratieve landbouwproducten en -praktijken

Wat zijn de voordelen?

- Verhoging van de biodiversiteit
- Geen gebruik van chemicaliën
- Ongst
- Wijziging van gewasrotatie
- Voordelen voor organische materialen
- Beprijde of geen grondvervuiling
- Verhoogd watermanagement

Welk advies geeft Agrifirm?

Bouwen plan voor de boerderij met advies van specialisten
Adviesrapport van de specialist over welke aanvullende jaarlijkse maatregelen en (DST-)diensten aan de teler worden geadviseerd om de 'regeneratieve' prestaties onder specifieke omstandigheden te verbeteren op basis van kenmerken van het bedrijf.

Gewasrotatieplan
Advies over de geschikte gewassen voor een teler met het oog op een optimale opbrengst en winst. Bovendien moet de organische stof in de bodem worden geïntegreerd en gemaximaliseerd met permanente bodembedekking. Hiervoor is een nauwkeurige planning van doorslaggevend belang.

GBM plan en Fertilization plan
Een adviesrapport per gewas met een praktisch schema met biostimulanten, vermindering van moment, dosering, groenbemesters, meststoffen op basis van een grondsondering, een gewasvoedmodel, timing. Aanvullend rapport met lijst van aan te schaffen producten, wetelijke voorkeuren, milieueisen, CO₂-balans, A/B-overzicht (biologisch).

Groenbemestingsplan en teeltvrije zone plan
Een bekrachtigd advies over groenbemesters of biodiversiteitsgebieden die na de oogst van dit jaar zijn opgevoerd op basis van de beste praktijken. Aanvullend rapport met lijst van zaden die nodig zijn. Aanvullend rapport over weigering of subsidiemogelijkheden.

Seizoen teeltbegeleiding

- Basisevaluatie van een specialist
- Totoplossing tot het dashboard
- Optimale uitbreidingsdiensten: bv. Irijsmonitoring, dynamisch N-advies, onkruid wieden, enz.

MODULE 2
Alternatieve producten

Het begrijpen van gewascondities, gewasproductie en op peil houden van de gewasgezondheid is essentieel en kost meer tijd in een duurzaam, regeneratief systeem, aangezien het complexe vraagstuk omvat en je telers de kaders van het regeneratief meet (opereert) die geen chemische middelen gebruiken. Regeneratief betekent o.a. dat chemische middelen en producten zo veel mogelijk worden ingevuld voor biologische producten. Om risico's te beperken in een regeneratief systeem, helpt Agrifirm met de juiste keuze van biologische mest- en gewasbeschermingsmiddelen om onvoorziene problemen bij de teelt van gewassen te beperken.

Welke behoeften pakken we aan?

- Landbouw op een meer duurzame of regeneratieve manier die goed is voor de gezondheid van de bodem en de groei van de planten
- Een breed scala aan biologische oplossingen voor uitdagingen bij het telen in een regeneratief systeem
- De teler helpen met specifieke kennis over biostimulanten en biogewasbeschermingsmiddelen
- Advies over het vinden van de juiste biologische meststoffen en gewasbeschermingsmiddelen die de teler helpen de bodem en gewassen efficiënt te onderhouden
- De juiste alternatieve biologische bio-meststoffen en gewasbeschermingsmiddelen selecteren

Wat bieden we aan?

Breed assortiment aan alternatieve bio-producten, zoals stimulanten en gewasbeschermingsmiddelen voor specifieke uitdagingen op de akker

Advies op maat en aanbeveling van geschikte kunstmest en gewasbeschermingsmiddelen o.b.v. de bodemgesteldheid, nutriënten behoeften van gewassen en kenmerken van het bedrijf

Samen met de adviseur wordt er gekeken naar de condities en doelstelling van het bedrijf.

- Nutriënten beheer - specifiek voor alle gewassen
- Water bodem vruchtbaarheid - specifiek voor gewassen met hoge opbrengsten waarbij kwaliteit belangrijk kan zijn voor vocht, zuur, pH, Ca, Mg, sporenelementen, natrium, etc.
- Planten en ziekte bestrijding - specifiek voor gewassen met hoge opbrengsten waarbij kwaliteit belangrijk kan zijn voor vocht, zuur, pH, Ca, Mg, sporenelementen, natrium, etc.
- Onkruid beheer - specifiek voor gewassen met hoge dichtheid, waarbij kwaliteit onkruid kan staan door onkruid zoals bij, onkruid, v. d. zand, kuberbeten

Wat zijn de voordelen?

- Verminderde chemische meststoffen en gewasbescherming en vervang ze door biologische producten
- Vind de juiste biologische meststoffen en gewasbeschermingsmiddelen voor de meest voorkomende plantenziekten
- Het overnemen van biologische landbouwuitdagingen, zoals ziekten en plagen, met producten die de bodem of het milieu niet schaden
- In staat zijn om voedingsstoffen in de bodem te optimaliseren
- Telers niet betalen met het moeten bestrijden van ziekten

MODULE 3
Precisie gewasgroei

Het monitoren van de groei en de opbrengsten van gewassen tijdens het seizoen is essentieel. Dit zorgt ervoor dat je op tijd kunt irrigeren om risico's te beperken waardoor je een optimale opbrengst kunt genereren aan het einde van het seizoen. Geavanceerd van de gewassen is belangrijk en hangt af van vele factoren zoals bemesting en irrigatie. Boerenkunnen helpen je in de meeste situaties maar om weloverwogen besluiten te nemen in real-time data uit het veld cruciaal. Agrifirm biedt hier een oplossing voor.

Welke behoeften pakken we aan?

- Behoeftes aan tools om de groei en prestaties van gewassen te monitoren en te verbeteren
- N-efficiënte berekenen voor gewassen en vermindering van onnodige bemesting en irrigatie
- Zekerheid over wanneer bemesting en irrigatie van gewassen moeten worden aangepast
- Risico's beperken en een optimale opbrengst aan het einde van het seizoen garanderen
- Noodzaak om gewassen te verbouwen waarbij de gezondheid afhankelijk is van vele dynamische factoren

Wat bieden we aan?

- Meten van de condities van de gewassen in het veld via IoT-sensoren
- Monitoren van de groei van de gewassen in de tijd via IoT-sensoren
- Op peil houden van de gezondheid van gewassen in elk ontwikkelingsstadium te volgen
- Maat het real-time meten van water, plagen, ziekten, nutriënten en andere factoren in het veld mogelijk
- Maat het mogelijk om de groei van gewassen in elk ontwikkelingsstadium te volgen
- Maat het mogelijk om afwijkingen vroeg te kunnen identificeren en bemesting en irrigatie op het veld bij te stellen

Wat zijn de voordelen?

- Verminderd risico tijdens het groeiseizoen
- Verminderde kosten voor bemesting, irrigatie en arbeid
- Neem weloverwogen besluiten gebaseerd op data uit het veld
- Beheer van bedrijf op een meer innovatieve, efficiënte manier
- Krijg controle over uw gewasgroei

Hoeveel kosten kunnen we per jaar reduceren?

Conventionele telers met een gemiddeld landbouwbedrijf van 50ha €30-80² per ha bespaart voor bemesting

Biologische telers met een gemiddeld landbouwbedrijf van 50ha €30-320² per ha bespaart voor bemesting

MODULE 4
Koolstofkredietenplan

Agrifirm wil telers helpen om broeikasgas CO₂ die zij helpen te verlagen door opslag van koolstof in de bodem, om te zetten in aantrekkelijke koolstofkredieten. Hiermee zal Agrifirm telers helpen om voor hun meest waardevolle land te zorgen (d.w.z. de bodem), en te kwalificeren voor zorgen dat de geproduceerde koolstofkredieten kunnen worden gekocht door bedrijven en/of overheidsinstellingen om hun emissies te compenseren. Dit zal ook een win-win situatie opleveren om de klimaatverandering te mitigeren.

Welke behoeften pakken we aan?

- Realiseren van extra inkomsten
- Behoeftes aan oplossingen voor de huidige uitdagingen van regeneratieve praktijken
- Hulp om actief te zijn op de koolstofmarkt
- Meer zekerheid tijdens de overgang naar regeneratieve praktijken

Wat doet Agrifirm?

- Huidige situatie vaststellen voor de opslag van koolstof in de bodem en de draagkracht van de bodem
- Meten van de bodemkwaliteit
- Meten en modelleren van SOC en N2O-emissies met behulp van satellietgegevens en veldmetingen
- Verkoop van koolstofkredieten op de openbare markt met succes
- Meer koolstofrijke land controleren door een derde partij
- Telers passen regeneratieve methoden toe, en realiseren CO₂ reductie

Wat zijn de voordelen?

- Betere bodemvruchtbaarheid en dus meer productiviteit
- Minder bodemontlasting en meer bodemlevens
- Extra inkomsten door waardering van de kwaliteit van het eindproduct en verkoop van koolstofkredieten
- Verkrachtigere bodem tegen extreme milieugebeurtenissen
- Betere chemische, fysieke en biologische bodemaspecten

Hoeveel koolstof kunnen we mogelijk opslaan in de bodem?

Diep-voeding crops: 600 kg C ha⁻¹ jaar⁻¹ → verbetering van de bodem structuur tot op grotere diepte

Potentiele koolstofopslag in de bodem

Crop reducties: 50-200 kg C ha⁻¹ jaar⁻¹ → Mogelijke lichte toename van N₂O-emissies door meer organisch materiaal in de bodem als bron van mineralisatie N



Hoeveel kan ik oogsten?

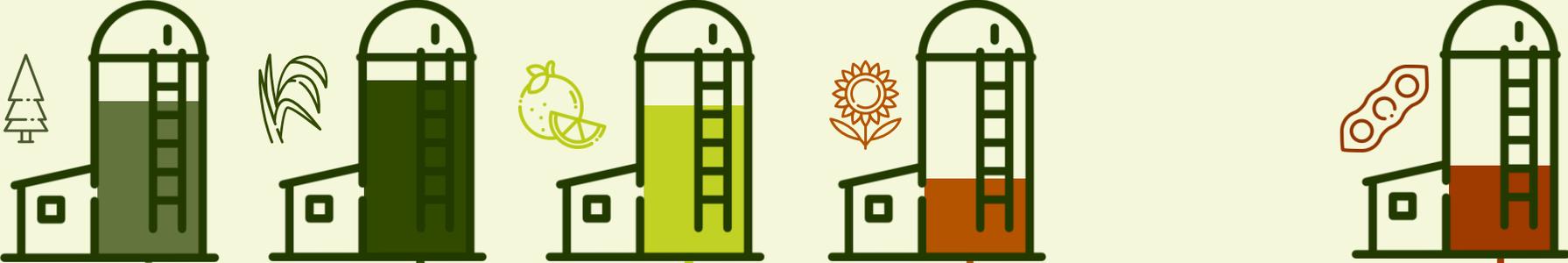
De volgende twee voorbeelden zijn afkomstig van collega's die zich al hebben aangesloten. Hoewel geen ondernemer hetzelfde is, geven ze een goed beeld van jouw verdienpotentieel. Je ontvangt minimaal € 30 per ton koolstof. Agrifirm verwacht dat dit bedrag in de toekomst fors gaat stijgen.

Conventioneel 

Regeneratief/biologisch

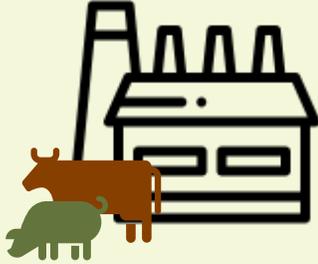
Making Inedible biomass edible

The story of RAG and biomass upcycling

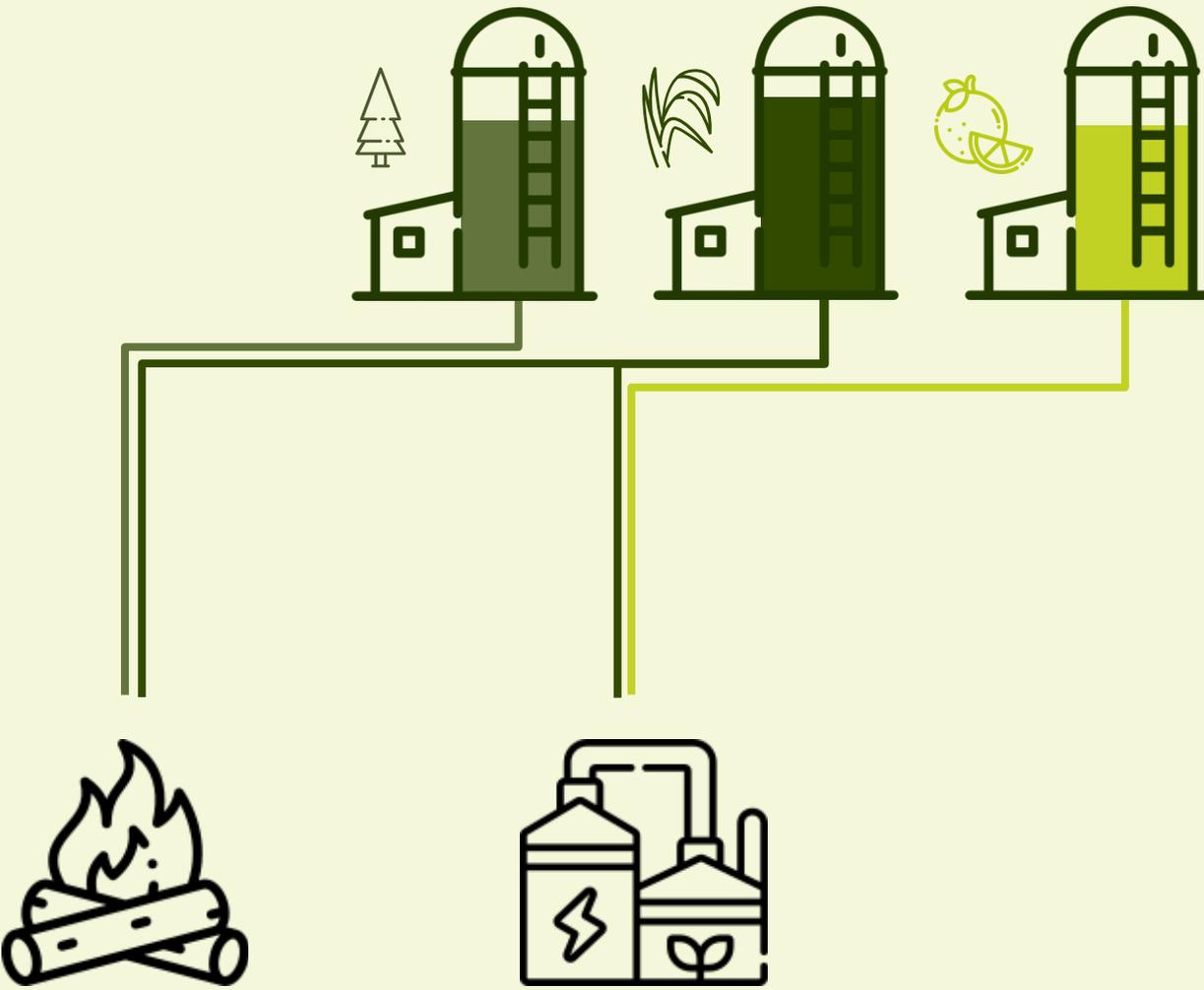


The inconvenient truth:

Not all biomass can be turned into feed...
... at the quantities that its available...
... while **suitable biomasses 4 feed will decrease...**



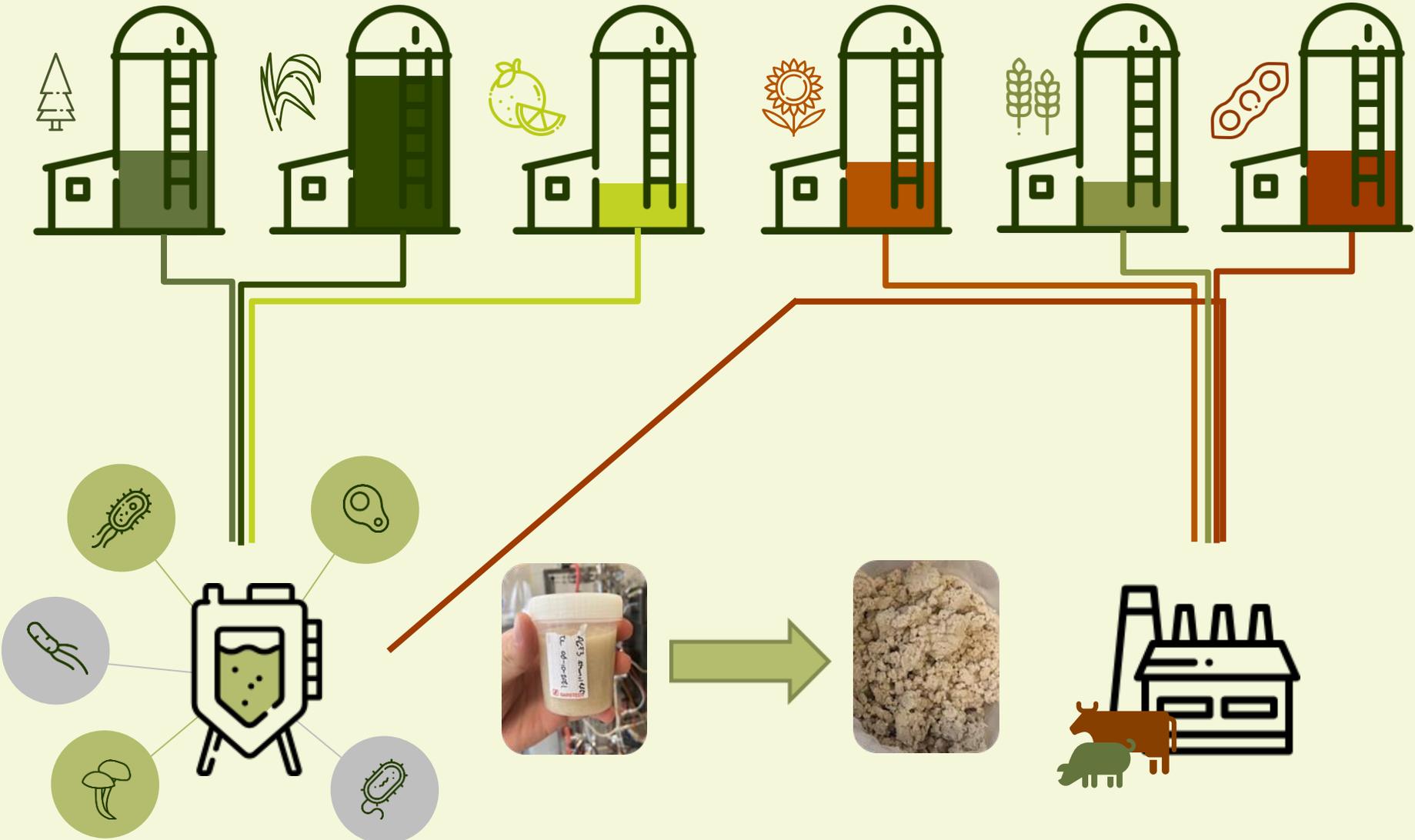
The story of RAG and biomass upcycling



Why are these stream unsuitable?

- Low nutritional value:
- Low protein
 - High fiber

Solution: flexible Single Cell Protein production



Short Chains

A photograph of three piglets lying on a bed of straw. The piglets are pink and appear to be resting or sleeping. The straw is a golden-brown color and is piled up around the piglets. The text "LOCAL FOOD CONCEPTS" is overlaid in the center of the image in a black, hand-drawn font.

LOCAL FOOD
CONCEPTS

THE PIG CONCEPT 4 RETAIL

Climate Neutral Pork from Dutch farmers

FROM THE FARM



LOCAL FOODWASTE AND PROTEIN



CLIMATE NEUTRAL



- The first scalable pig concept that really comes from the **local** farmer.
- Open and **transparent**. The consumer is welcome at the farmyard.
- The farmer receives a **fair** price

- The feed = 100% European raw materials & side streams

- **Certified**
- The footprint =
 - 42% lower CO2 emissions
 - Free from soy & palm oil (no deforestation)
- To 0 % → On-Farm generates the farmer's own energy

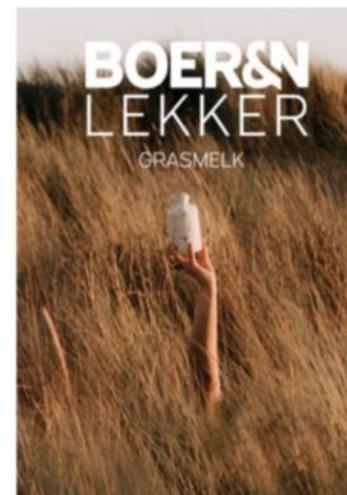
- **Strategic Partnership with startup**
- De Nieuwe Melkboer
- **Plant Based Dairy**





SHORT CHAIN
CONCEPT

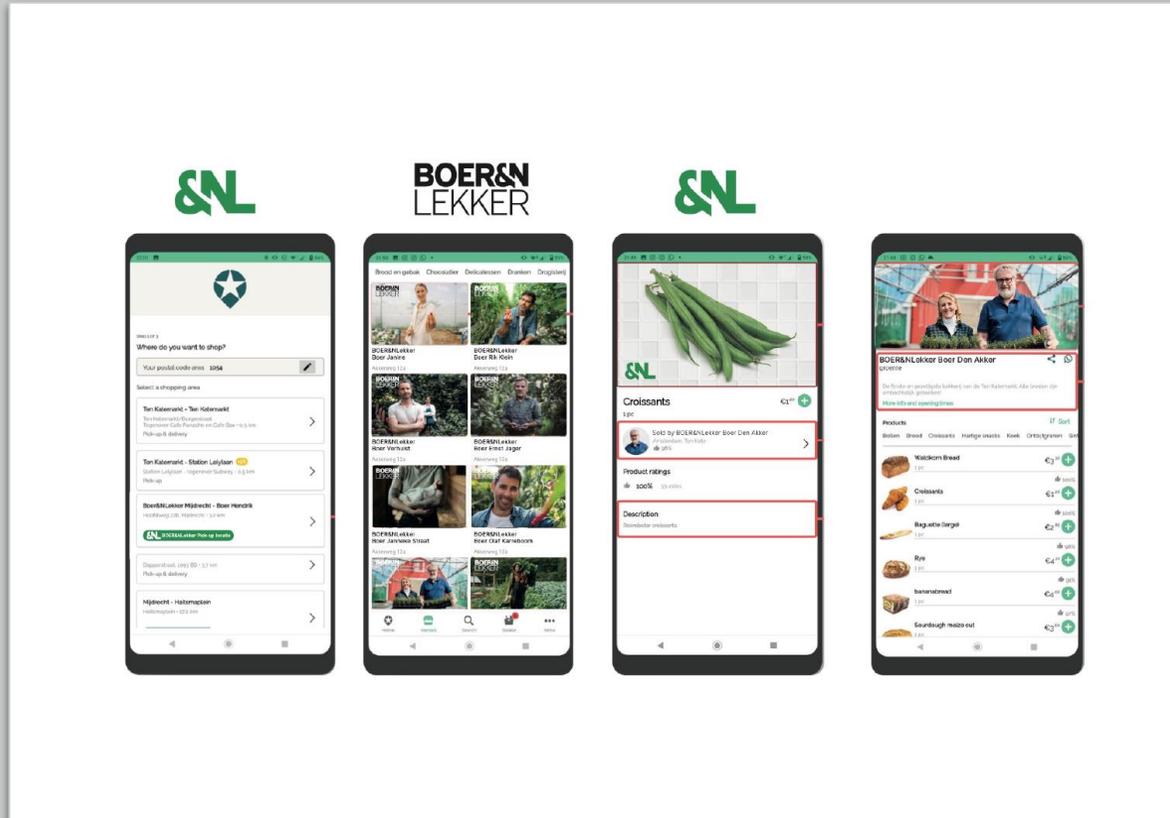
BOER&NLEKKER



BOER&NLEKKER



BOER&NLEKKER LAUNCHED FEB 19TH





Happy People in Breda (launch)

SUSTAINABLY PRODUCED MEDIUM CHAIN FATTY ACIDS

(FUNCTIONAL FEED & FOOD INGREDIENTS)



Beauty of Nature, Our Resource Today



NEW START → FROM BIOWASTE



TO



SCFA | MCFA

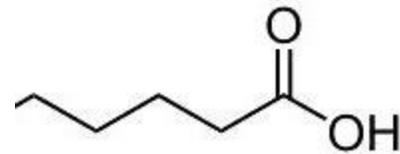


CHAINCRAFT

BIOBASED INNOVATORS

royal agrifirm group
better together

& SUGAR REST STREAMS





**People.
Planet.
Profit.**
Perspective

OUR PURPOSE

“ A responsible food chain for future generations ”

4:00PM - 4:15PM

4:15PM - 4:40PM

4:40PM - 5:05PM

5:05PM - 5:30PM

Introduction



Fred Nijland

Food Decarbonization Lead

Deloitte.

Assessing & strategizing



Juan Aguiriano

Group Head of Sustainability

KERRY

Implementing & commercializing



Johan de Schepper

Head of Innovation

agrifirm

Managing your activities



Sem de Spa & Tim Moolhuijsen

Sustainability Tooling Experts

Deloitte.

Facilitated by



Birthe van der Voort

Future of Food Partner

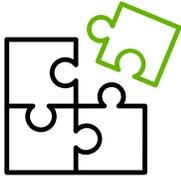
A close-up photograph of a pair of hands gently holding a small, vibrant green seedling with several leaves, planted in rich, dark brown soil. The background is softly blurred, showing more soil and another seedling in the distance. The overall tone is natural and hopeful, symbolizing growth and environmental care.

Deloitte.

**Decarbonization journey:
what technology to use and how?**

5 questions

...when considering which sustainability technology to use and how.



1 How to define the right functional and technical requirements?



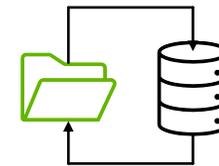
3 How to find, collect, verify, and analyze data (incl. scope 3) from distributed sources?



5 How to ensure adoption and effective use of the technology?



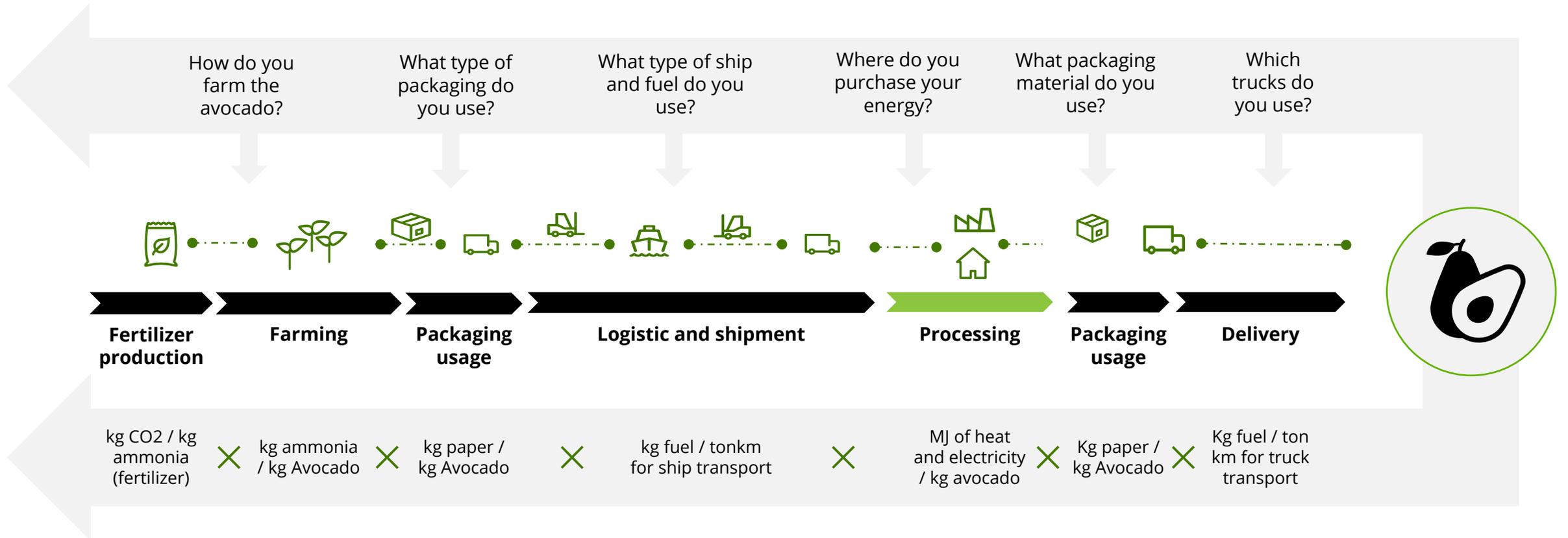
2 How to select the right technology solution for which many options are available in the market?



4 How to setup adequate governance and processes to ensure auditable and reliable data?

Sustainability technology in practice

Calculating emission of the humble avocado across the supply chain



Why a supplier assessment solution?

- Automated information requests & reminders
- Mapping of complicated supply chains
- Structured onboarding of tier 2-3-4 suppliers
- Reliable and auditable ESG information

Why a CO₂ solution?

- Oversight of calculation
- Clear structuring of emission categories
- Libraries of emission factors
- Reliable and auditable CO₂ / ESG information

There are many solutions in the market to choose from

And there is no silver bullet solution that works best for all organizations

Strategy

Assess...confront the sustainability challenge

Evaluate impact of climate and ESG trends /uncertainties. Define strategies and manage corporate transformation to advance towards a more sustainable future.

Operations

Address...configure to execute on opportunities

Build and implement the capabilities, processes, innovations, and ecosystems required to advance towards a sustainable future

Steering & Reporting

Account...communicate results responsibly, with confidence

Ensure complete, accurate, reliable and transparent preparation, assurance, reporting of ESG data and metrics. Enable integrated steering. Meet (integrated) reporting and disclosure (regulatory) requirements

Finance

Fund... obtain and allocate funds

Leverage evolving capital market transition to increase sustainable investments and optimize cost and capital structure

Decarbonisation

Climate risk mitigation, Corporate/ Product footprint emission calculation, Offsetting/ Compensation, Value chain emissions reduction, ...

Sustainable Supply chain

Scope 3, Responsible sourcing, Human Rights, Transparency, Circularity, Waste Reduction, ...

Technology vendors

This overview is non-exhaustive and simplified. Some technologies arch over multiple categories.

A structured approach

To select and implement the right technology for sustainability reporting



Define strategic & reporting requirements



Derive technology and data requirements



Selecting the right solutions



Design operating model



Implement



Run & maintain

Identify requirements in line with reporting requirements and sustainability strategy

Discover what is required from a data and technological standpoint

Based on the defined requirements, select the tool that best meets your needs

Design an operating model with a structured data governance model

Moving from technology selection to implementation

Ensuring the data governance and reporting process is maintained

- Which reporting regulations are you subject to? Create timeline.
- Which KPIs do you report on for your sustainability strategy?
- Which ESG topics are in scope?
- Create timeline

- What functional and technical capabilities should the tool have?
- Which existing software should it be compatible with?
- Define road map

- Which tools are playing in the market?
- Which of these meet your high-level requirements?
- How do they score against the requirements?

- How to ensure data is sourced and consolidated successfully?
- How is the data governance structured?
- How do we ensure auditability?

- How to implement successfully in the organization?
- How to make sure you have buy-in from all stakeholders in implementation?

- How to ensure data governance measures are followed?
- What to do to ensure continuous improvement of the process?

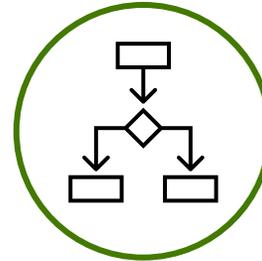
Final thoughts

To select and implement the right technology for sustainability reporting



People

- Organized a focused core team for sustainability data & technology
- Understand the stakeholders and their needs
- Involve business units in the selection, design and implementation



Process

- Follow a structured process to select the right technology
- Ensure processes are defined to collect, validate and report data



Technology

- Ensure all key requirements are mapped, and the technology meets these requirements
- Setup solid governance & processes for reliability, traceability and auditability
- Start small, scale timely

ORCHESTRATED BY

Deloitte.



KERRY

Future of Food.

Let's connect for impact!

**Realizing a net zero, or carbon negative
food system**



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