

Impact Report 2024



CONTENT

A Note from Management	1	ICF III GROWTH INVESTMENTS		ICF III PRE-A INVESTMENTS	
Sustainability Report Approach	2	MOA Foodtech	13	Carbonoro	24
Climate Tech Areas	3	Abolis biotechnologies	14	Ful Foods	25
Deep dive: Food Systems	4	Innovopro	15	Wholefiber	26
Deep dive: Chemicals & Materials	5	Napiferyn Biotech	16	1-2 taste	27
Deep dive: Sustainable Industry	6	Nutrileads	17	Fotoniq	28
Deep dive: Carbon Tech	7	Holiferm	18	SEED INVESTMENTS IN PORTFOLIO	
ICF III Impact Recap	8	Carbon Clean	19	Rainmaker	29
Diversity	9	Gamaya	20	Icos Team	30
ICF III Portfolio Recap	10	eAgronom	21	Board And Venture Partners	31
		Invert Robotics	22		
		Squirro	23		



Nityen Lal
Founder, Partner



Peter van Gelderen
Founder, Partner

Accelerate Sustainability by Investing in a Portfolio of Breakthrough Technologies that Reduce 1 Gt CO₂e Emissions by 2050

Over the past year, the realism surrounding sustainability in the food and climate industries has become more apparent. While global targets like the Paris Agreement’s 2050 deadline remain crucial, we’ve had to acknowledge that not everyone supports these changes, and timelines may need adjustment. The market’s reality check has emphasized that large-scale adoption of new technologies takes time — often far longer than initial projections.

On a macro level, the investment landscape has undergone significant shifts. The entrance of the Trump administration in the U.S. brought a renewed sense of uncertainty to global climate policy. While there remains broad support for clean air and water, regulatory rollbacks and a shifting political climate have created hesitation in corporate and government-backed

sustainability efforts. At the same time, climate tech investment trends in 2024 reveal a more complex picture: although climate tech VC fundraising has remained resilient with \$11 billion raised over the past four quarters, total financing fell by 29% due to rising borrowing costs and global economic pressures. Exit markets have also become more constrained, lengthening holding periods and impacting liquidity across the board.

Despite these headwinds, we at Icos Capital remain committed to investing in companies with strong fundamentals and tangible market traction. With more than 18 years of experience, we’ve learned the value of discipline — supporting ventures that demonstrate real revenue growth and EBITDA development. Even as funding markets become more selective, our portfolio has

continued to perform solidly and mature financially. Icos III, first growth fund, currently delivering top tier financial performance in comparison to other sustainability and even most generalist venture capital funds as well

We continue to see a thriving entrepreneurial spirit. The strongest propositions still raise capital, and our portfolio companies are steadily growing — albeit at a more measured pace. We understand that for most businesses, sustainability is not a standalone priority; it must be integrated with performance, cost competitiveness, and innovation. This pragmatic approach ensures that sustainable solutions can be scaled realistically and remain viable in the long term. Overall employment in our portfolio increased from 27 per company to 29 per company.

Looking ahead, we believe the path to impact lies in technologies that address CO₂ emissions while remaining cost-competitive and performance-driven. Our investments in companies such as eAgronom, Carbon Oro, and Carbon Clean demonstrate our continued focus on scalable, commercially viable climate solutions. By combining technological depth with practical business alignment, we aim to support a new generation of climate innovators that can thrive in a dynamic global market. Our portfolio companies have reduced CO₂e by 2.93 M tons up from 2.85M tons last yaer.

Also important to mention that this years Forward secured some assistance from Chatgpt well.

This report presents an account of sustainability accomplishments from ICF III and ICF IV funds.

How
we define
impact and
sustainability

SUSTAINABILITY REPORT APPROACH

Icos Capital understands that climate change requires many parties to work together and build strong defensible systems, processes and results. The Sustainable Development Goals (SDGs) have comprehensively identified key aspects that need to be addressed. We believe CO₂e is one of the biggest and toughest challenge that ought to be addressed with new technologies.

Icos Capital invests in companies that can make meaningful impact on the CO₂ reduction / avoidance aspect in global terms. All investments in ICF IV have a CO₂ tracker connected to growth of the companies. Thus, with growth of each company, we can expect larger reduction of CO₂e.

For this report, we are tracking CO₂e reduction input from each company and also identifying SDGs related to each company. Specific metrics w.r.t. to sustainability is also profiled where relevant.

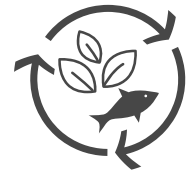
On investment portfolio, we have also collected data on human and governance aspects that is presented on aggregated basis.

Icos Capital Fund III is SFDR Article 8 Fund Icos Capital Fund IV is SFDR Article 9 Fund and has committed to removing / avoiding 10 M T CO₂e in 10 years. All investments target reduction of CO₂e and Sustainable Development Goals (SDGs)

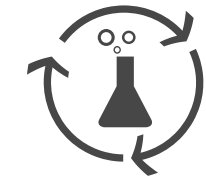


CLIMATE TECH AREAS

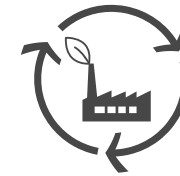
Climate tech includes many sectors but our focus is more specifically on 4 industry segments that are also responsible for 30% of global emissions



**Food
Systems**



**Chemicals &
Materials**



**Sustainable
Industry**



Carbon Tech





Food Systems



ALTERNATIVE PROTEINS

to replace animal & fish based proteins from land or ocean based plants, sidestreams



AG-BIOTECH

biofertilizers, bio-basefertilizers, pesticides based on land or ocean based plants, side-streams



FOOD INGREDIENTS

sugar alternatives, fatty acids, colourants from land or ocean based plants, side-streams



LIVESTOCK FARMING

climate friendly land and ocean based plants, sidestreams as feed supplements



Chemicals & Materials



BIO-CHEMICALS

for fossil fuel replacement based on land and ocean based plants, sidestreams



IMPROVED FUNCTIONALITY

of existing chemicals including (water) treatment solutions



CIRCULAR MATERIALS

including recycling of (micro)plastic, textile, batteries



INDUSTRY ENERGY SOLUTIONS

in batteries, mitigate ocean, water problems



Sustainable Industry



INDUSTRY DIGITIZATION

industry digitization for energy transition with IoT, satellites, precision agriculture & oceanography



BUSINESS INTELLIGENCE

on big data and AI to develop new solutions to mitigate climate change on land and oceans



VALUE CHAIN TRANSPARENCY

& optimization to reduce carbon footprint of scope 3 emissions in land and ocean environment



ADVANCED MANUFACTURING

advanced production methods incl. 3D manufacturing, process solutions to reduce CO2, increase efficient in industry incl. marine



Carbon Tech



CARBON CAPTURE

from (direct) atmosphere, (point) industry also to reduce ocean acidification



CARBON UTILIZATION

to bioplastic to avoid ocean pollution, biofuels for green shipping



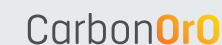
CARBON SQUESTRATION

Improvement of carbon storage including carbon farming in land & ocean



CARBON IT

financial solutions, GHG emission monitoring of land & marine ecosystems





- Alternative proteins
- Health-promoting food & food ingredients:
Particular interest in:
Ingredients improving gut health
Ingredients improving immunity
Sugar alternatives
Fat alternatives
- Ag Biotech
- Precision agriculture

Global food systems contribute to roughly one quarter of all GHG emissions. Food systems are the sum of the actors and interactions along the value chain – from raw material and the production of crops, livestock, fish and other agricultural commodities to the transportation, processing, wholesaling, retailing, preparation and consumption of foods to disposal.

Sustainable food systems should be able to deliver affordable, nutritious, environmentally sustainable food. Currently, half of the world’s habitable land (ice and desert-free) and 70% of global freshwater is used for agriculture*. This is even more difficult to comprehend when we consider that a doubling of food production may be needed by 2050 to cater for increased population and growing wealth.

SDG: Sustainable Developmental Goals



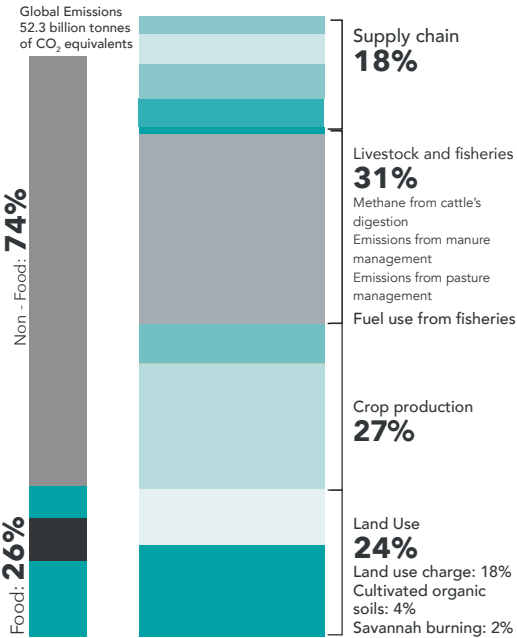
Within food systems, innovations have significant potential to scale. We look forward to furthering the potential of technology within some high potential areas of food systems. Firstly alternative proteins where fermentation is of particular interest. Secondly health promoting food ingredients such sugar and fat alternatives and those that improve immunity and gut health.

Alongside that ag biotech including seed breeding and biofertilisers are of interest. We have a particular interest in soil monitoring, irrigation systems and ag-robotics.

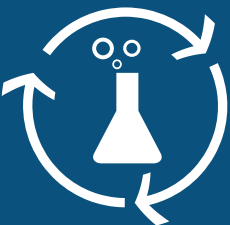
Portfolio Companies active in Food Systems:



GLOBAL GREENHOUSE
gas emissions from food production



Source: ourworldindata.org



- Bio-chemicals
- Improved functionality
- Circular materials
- Industry energy solutions

The Chemical & materials industry uses 10% of global supply of fossil fuels. This industry being pressured by new regulations focused on safety, climate change and consumer interest to reinvent itself. Following market needs, significant investments are required for:

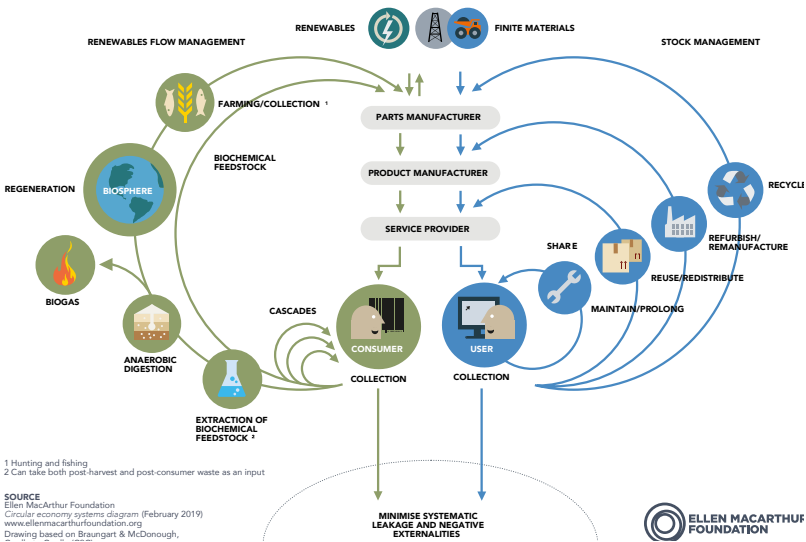
- (i) the replacement of non-renewable and non-recyclable feedstock with biobased counterparts,
 - (ii) the shift towards sustainable energy resources for production needs,
 - (iii) the development of recycling technologies which allows for reducing the environmental footprint of goods produced.
- Following the consumers' demand, the replacement of fossil based feedstock, for example in home and personal care

products, with ingredients that come from sustainable resources such as biomass, became of high importance to FMCG producers.

Hence, the use of fossil resources, crude oil in particular, has been already reduced in some industries.

The Fund follows current trends across different segments of the Sustainable Chemical & Material sector to reduce carbon footprint along the whole production value chain and the product life cycle.

Portfolio Companies active in Chemicals & Materials:



SDG: Sustainable Developmental Goals





- Industry digitization
- Business intelligence
- Value chain transparency
- Advanced manufacturing

Sustainable industry presents the ongoing revolution in manufacturing through increasing interconnectivity and smart automation.

Integration of new technologies such as the Internet of Things (IoT), cloud computing, analytics, Artificial Intelligence (AI), and machine learning, strongly revolutionize industrial production facilities and their operations.

Rapid changes are currently happening across the entire organization, including processes in product development, manufacturing, structuring, and service, containing internal operations from suppliers to customers, and key value chain partners.

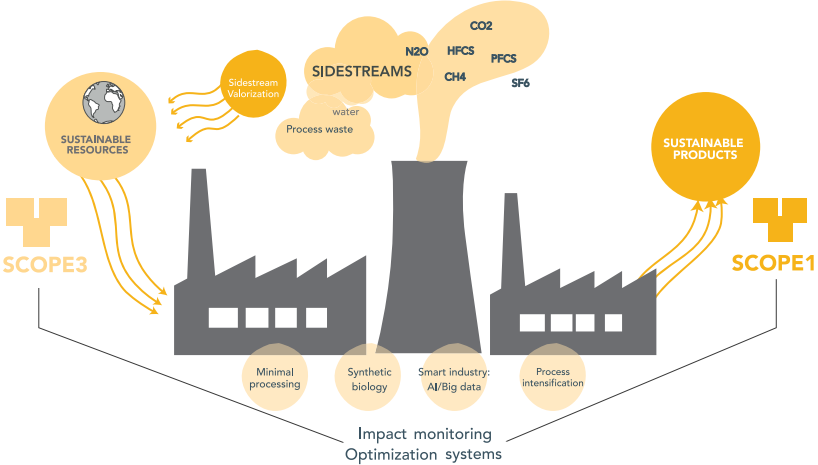
Portfolio Companies active in Sustainable Industry:



These technologies can be used to:

- (i) optimize industrial production processes, including smart energy consumption,
- (ii) minimize waste production, and
- (iii) conserve natural resources.

SDG: Sustainable Developmental Goals





- Carbon capture & sequestration
- Carbon utilization
- Carbon accounting

The extended carbon dioxide (CO₂) emissions from energy use in transportation, electricity and industry (73.2%) greatly contributes to global climate change ^[1]. The carbon-neutral strategy is then the first important step on the net-zero path, which aims to limit the rise in global temperatures below 1.5°C, by removing CO₂ from the atmosphere. Technological solutions in the current market are now able tackle this problem from different angles ^[2]. As the chart shows, cumulative global GHG emissions YTD, avoidance technologies are not as yet very effective in reduction of CO₂. Consequently, Carbon tech's role in reduction through removal has become even more important than ever before.

Carbon dioxide can be pulled out directly from the air (direct air capture) or production site (point-source capture) applying carbon

capture technologies. Carbon capture might be followed by carbon utilization technologies, where CO₂ is used as a feedstock for building materials (e.g., concrete), chemicals (e.g., fuels, monomers), and proteins.

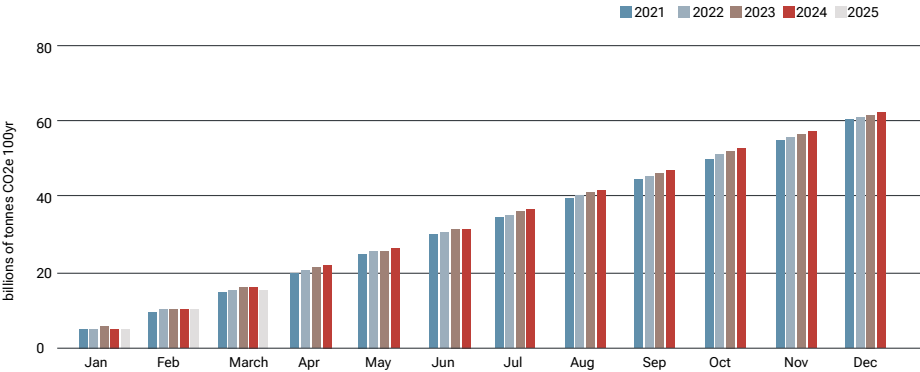
Captured carbon dioxide can be permanently stored to contain carbon underground, through soil sequestration or ocean minerals following carbon sequestration solutions. At the same time, carbon management can be supported by carbon accounting technologies providing software solutions designed to streamline, digitize, and automate carbon accounting processes.

Following current trends in the decarbonisation sector, the Icos Capital targets solutions that allows unblocking implementation of above mentioned carbon technologies on the industrial scale. Implementation which might be blocked due to high investment, long time horizons, greater permanence risk, and complexity ^[3].

Portfolio Companies active in Carbon Tech:



Cummulative global GHG emissions YTD (2021-2025)



source: Climate TRACE data version 4.3.0 (released may 2025)

ICF III Impact Recap



DIV ER SITY

At Icos we believe that increasing diversity in business means more thoughtful solutions, higher productivity and a stronger chance of success for scaling companies. That's something research has proven too. In a study by McKinsey, gender and ethnic diverse teams outperform teams with fewer women and ethnic-diversity by nearly 30%¹.

In our current portfolio over 60% of companies have management boards with C level minority or women representation. At Icos Capital, minorities and women represent majority of the team as well.

According to State of European Tech report, published by Atomico, overall pool of tech workers is at about 34% on average². In Icos portfolio, this number is at 40%. This number includes over 50% of portfolio companies with women in management boards or founders as well. In terms of pay ratio, between women/ men/ minorities, we did not find any difference in our portfolio.

Icos Capital is big believer in building diversity in teams as, in our experience, that does deliver superior performance and positive work atmosphere. In terms of

governance of these companies, all of the companies are European where governance structure is market conform, with Icos representation on the board, and no divergence from governance best practices.

60%
Average women and
minorities
management teams

35%
Companies led by
by women, minority



PLANET

CO₂ IMPACT

2.93 M tonnes

CO₂ impact:

2.93 M tonnes

4 Companies utilizing sidestream as feedstock

7 Number of planetary boundaries addressed in portfolio

10 Number of SDGs addressed in portfolio



PEOPLE

PEOPLE

586

586 opportunities created

WOMEN

234

234

Women in the startup teams, out of 482 employees
(40% of the total headcount)



PROFIT

FUNDS RAISED

€440 M

Total funds raised by the portfolio:
€440 M (approx.)

GROWTH STAGE PORTFOLIO

45%

Growth stage portfolio (series B or sales €5M+): **45%**

Early stage portfolio: **39%**

Pre-A stage portfolio: **16%**

MOA produces sustainable food ingredients from food by products through AI-optimized fermentation.

IMPACT AT A GLANCE



Climate
Change

MOA Foodtech is a unique impact story in that it addresses problems across climate, biodiversity and circularity. MOAS's approach and side stream utilisation cuts CO2 emissions compared to other alternative proteins and contributes to the circular economy. In addition, the avoided deforestation has considerable climate and biodiversity impact.

Focus Area: Food Ingredients, Fermentation, Sustainable Proteins

Year invested: 2024

Country: Spain

MOA BIOTECH upcycles food industry side streams into high-value, custom food ingredients using proprietary microorganisms, fermentation processes, and a unique AI tool to optimize inputs and outputs. Their flexible process allows for tailored functional properties and uses various side streams to create sustainable, functional food-grade ingredients. MOA's B2B platform combines software and in-house fermentation expertise to optimize quality, cost, and feedstock—offering a competitive edge through their exclusive AI technology.



Carbon Intensity

MOA can deliver substantial reduction / avoidance of CO₂e emission by (a) using circular products and valorising them for higher value functional food ingredients such as proteins by using low energy fermentation technology.

Currently, with CMO installations, CO₂ emissions are 30.5 Kg / Kg of protein produced. This is very high and based on external provider facilities. However, this is expected to be short and interim phase. The company is targeting 2.2 Kg / Kg of protein produced in its own full-scale facility.

SDG



17: MOA is actively partnering with corporations and side stream providers to reduce their carbon footprint valorising side streams

14: MOA is producing proteins from side streams that would otherwise be thrown in water and increase CO2 in water. MOA is taking

13: MOA is focused on side stream valorisation from food processing sector

12, 3, 2: MOA promotes vegan protein consumption

9: This is industrial innovation.





Abolis provide tailor-made industrial solutions based on micro organisms for a wide range of industries from food and health care to cosmetics and chemistry.

IMPACT AT A GLANCE



Climate Change

Abolis is dedicated to exploring and engineering microbial ecosystems to develop products that enhance biodiversity and ecosystem resilience. By leveraging renewable biological resources, the company minimizes waste, optimizes material efficiency, and offers sustainable, bio-based alternatives.

Focus Area: Fermentation, Nutrition, Speciality Chemicals, Health, Cosmetics

Year invested: 2024

Country: France

Abolis employs synthetic biology and metabolic engineering to develop custom microorganisms capable of producing specific molecules of interest. By modifying the metabolic pathways of these microorganisms, the company creates industrial microbial strains that can efficiently produce desired compounds via fermentation. This approach offers environmentally friendly and economically viable alternatives to traditional petrochemical-based production methods

Carbon Intensity



Abolis's potential for CO₂ reduction typically ranges from tens of kilotons in the early stages to hundreds of kilotons over time, depending on the specific bioprocesses and products involved.

Abolis is currently developing its first two in-house fermentation-based processes to improve the carbon footprint of:

• **Palm oil/kernel oil;** Abolis fermentation process can reduce CO₂ emissions associated with land use and processing. If performed using renewable feedstocks fermentation process can reduce 2-6x CO₂ emissions associated with land use and processing.

	Extraction Process	Fermentation Process
CO ₂ Emissions per kg of Kernel Oil	3.4 to 7.58 kg CO ₂ e/kg	~2 to 4 kg CO ₂ e/kg
CO ₂ Emissions per kg of Kernel Oil	~8–20 kg CO ₂ e/kg	~1.5–3 kg CO ₂ e/kg

• **Vitamin K production** - The CO₂ emissions from fermentation-based Vitamin K production can be up to 90% lower than traditional methods, depending on the feedstock, energy sources, and optimization of the fermentation process. Abolis' process has the potential to reduce the CO₂ footprint by a factor of 10.

	Chemical Synthesis (K1 or K2)	Fermentation Process (K2)
CO ₂ Emissions per kg	20 – 40 kg CO ₂ e/kg	1.5–3 kg CO ₂ e/ kg

SDG



SDG 3: Abolis provide good health and well-being providing bio-based food and chemical ingredients

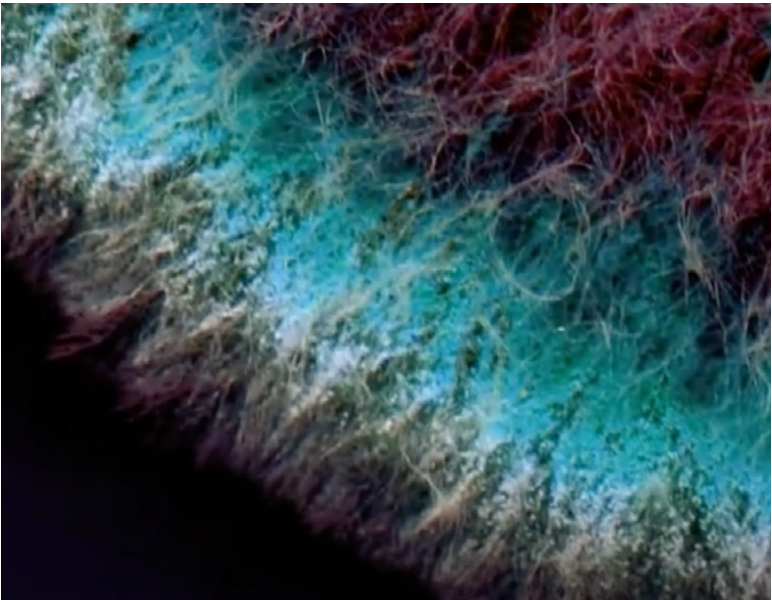


SDG 9: Abolis works on sustainable industry innovation

SDG 12: Abolis technology allows to do more and better with less, reducing waste, and improving resource efficiency across the entire lifecycle of products




SDG 13: Making efforts to reduce greenhouse gas emissions, enhance climate resilience, and promote policies that mitigate the effects of climate change.



Innovopro sparks a sustainable food revolution with cutting-edge chickpea protein.

IMPACT AT A GLANCE




Climate Change

Innovopro is producing alternative proteins with a weighted average carbon intensity lower than animal-based alternatives that it replaces such as meat and milk. In addition, Innovopro products use less land, less water and less harmful chemicals than meat-based alternatives.


Focus Area: Alternative Proteins, Food Systems
Year invested: 2020
Country: Isreal

Innovopro is a rapidly growing FoodTech company that has developed a unique platform of chickpea protein ingredients for the global food and beverage industry. Innovopro aims to revolutionise the way people eat across the globe by empowering customers to create delicious, healthy, clean label and sustainable products.



Carbon Intensity

Example: Plant based milk with 5% CP-Pro compared to dairy milk (Zhao et al., 2018; "ourworldindata.org")




Animal Based


1.12 - 3.15 kg CO₂ per kg


Innovopro


0.4 - 0.72 kg CO₂ per kg


SDG

- 


3: Innovopro products contain no additives or preservatives.
- 

12: Producing a socially and environmentally conscious product.
- 

13: Chickpeas require less land, water and have a lower CO₂ output that animal-based alternatives.
- 

14: Plant based protein is used in fish replacement vegan meals
- 

15: Chickpeas do not require nitrogen fertilizer, protecting the balance of local ecosystems.



UNIQUE METRICS

(Since beginning)

Metric tonnes of CP-Pro70 produced

330 +

Number of products on market containing CP-Pro70 (per yer)

110 +

Impact growth over 2022/2023

9% ↑



NapiFeryn has developed a technology for extraction and isolation of rapeseed proteins.

IMPACT AT A GLANCE



Climate
Change



Circular
Economy

NapiFeryn is producing protein from a sidestream after rapeseed oil pressing. This will have a significantly lower impact than animal-based alternatives. By utilising a sidestream as an input for their products, the CO₂ impact is further reduced and circular economy benefits are achieved.

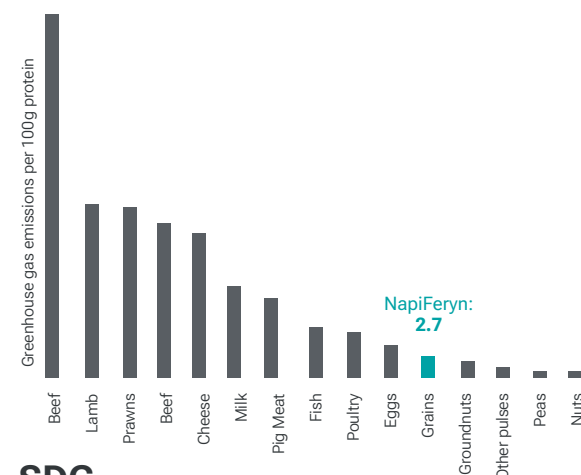
Focus Area: Alternative Proteins, Food Systems

Year invested: December 2022

Country: Poland

NapiFeryn BioTech is a Polish innovator that developed and patented a unique technology for obtaining rapeseed protein from the side-streams of oil pressing. This is a unique innovation in that NapiFeryn technology makes it possible to retrieve all protein contained in rapeseed.

Carbon Intensity



SDG



3: NapiFeryn products contain no additives or preservatives.



12: Producing a circular and socially & environmentally conscious product.



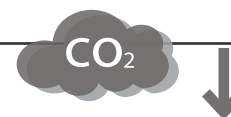
13: Using a sidestream requires less land, water and have a lower CO₂ output than animal-based alternatives.



14: Plant based protein is used in fish replacement vegan meals



15: Protecting biodiversity, decreasing land use, chemical use and water use to protect life on land and below water.



NutriLeads is strengthening human health through the power of plants.

★ UNIQUE METRICS

Number of products on the market containing BeniCaros®
10
 Percentage of raw materials as sidestream
6%
 Impact growth over 2023/2024
62%

IMPACT AT A GLANCE



Climate Change

NutriLeads produces products that support human health. By utilising the sidestream of carrot pomace, they also support circular economy principles.

Focus Area: Health-promoting ingredients, food systems

Year invested: 2019

Country: the Netherlands

NutriLeads is a Health Ingredients innovator, harnessing the health-giving power of natural plant compounds to help people strengthen their health through nutrition, addressing top consumer demands. We develop and commercialise natural ingredients with clinically proven health benefits, which we market in partnership with food, beverage, and food (or dietary) supplement companies, incorporating our ingredients into their products.

Carbon Intensity

The carbon footprint of 1kg of root vegetables (including carrots) equals approx.

0.4kg CO₂*

NutriLeads valorise up to 6% of side-stream (carrot pomace) avoiding approx.

180kg CO₂ emission

(6% * 3000kg production capacity).



SDG



2: NutriLeads are producing products that support human health. They have been clinically proven to improve immune response.



12: NutriLeads is producing with responsible and sustainable practices and utilising a sidestream, carrot pomace.





Holiferm produces biodegradable surfactants through fermentation.

★ UNIQUE METRICS

Kilo Tons of Holiferm biosurfactants capacity (per year)

1550 tonnes

Kilotons of sidestream products utilization capacity (per yer)

1650 tonnes

IMPACT AT A GLANCE



Climate
Change



Circular
Economy

Holiferm is producing bio-based alternatives to petrochemical based chemicals. With fermentation technology, this enables two primary benefits. Firstly, a weighted average carbon intensity lower than that of petro alternatives and secondly, limiting the input of such chemicals and novel entities into the environment with a biodegradable product.

Focus Area: Sustainable Chemicals, Circular Economy

Year invested: 2019

Country: United Kingdom

Holiferm, a spin-out from the University of Manchester, develops sustainable and environmentally friendly processes for producing biochemicals, thus eliminating the need for the use of harmful petrochemicals in manufacturing. Based in the North West, Holiferm has a research and development facility in Manchester and commercial plant in Liverpool. Holiferm currently supplies sophorolipids, through its patented fermentation with integrated gravity separation technology, and will introduce rhamnolipids and MELs to the market in 2024.



Carbon Intensity

Carbon footprint of traditional surfactants:

2.5 tonne CO₂ per 1 tonne of product

Carbon footprint of Holiferm biobased surfactants:

1.5 tonne CO₂ per 1 tonne of product

1.5T of CO₂ x 1550T = **2325T of CO₂ avoidance**

SDG



12: Holiferm is providing a fossil free alternative that is completely biodegradable.



14 & 15: Traditional surfactants can cause bio toxicity in oceans and land environments. With a biodegradable alternative, ocean and ecosystems are better protected.



13: Holiferm aims to have a low carbon footprint and move towards net zero. The weighted carbon intensity of Holiferm's biosurfactants is of key importance and ambitions are to improve even further.



Carbon Clean is a global leader in carbon capture solutions

★ UNIQUE METRICS

Metric Mtons of CO₂ capture/year
0.322

Number of carbon capture facilities
49

Impact growth over 2023/2024
9% ↑

IMPACT AT A GLANCE



CO₂ intensity in the atmosphere is higher than ever in human history and passed the threshold. With point-source carbon capture technology, Carbon Clean has a cost competitive solution to prevent CO₂ from being released into the atmosphere, supporting the net zero transition.

Focus Area: Carbon capture, Decarbonization

Country: United Kingdom

Year invested: 2019

Carbon Clean is a global leader in carbon capture solutions for hard-to-abate industries including cement, steel, refineries and energy from waste. The company's patented technology significantly reduces the costs of carbon capture when compared to conventional solutions. The company is an innovation leader in the CCUS market, with 110 active patent assets across 14 patent families covering 32 countries, and has developed a fully modular technology, CycloneCC, that is vital for scaling industrial carbon capture deployment to achieve global net zero targets.



Carbon Intensity

Since 2009 company
capture 2.5 Mton of CO₂ by deploying our technology across sites globally.

SDG



12: Enabling net zero production in heavy industry



13: Carbon Cleans technology captures CO₂ at scale, minimizing the release GHGs in the atmosphere





Gamaya specialises in climate smart solutions for Sugarcane farming.

★ UNIQUE METRICS

Area under monitoring (Mha)
1.2
Number of mills
14
Impact growth over 2023/2024
unaffected

IMPACT AT A GLANCE



Gamaya develops automated crop intelligence solutions that help sugarcane farmers to implement more sustainable practices and reduce carbon footprint from sugarcane farming. For value chain players Gamaya tools help to ensure sustainability of supply chain, automatically measure and report carbon footprint related to sugarcane farming as well as tool set to implement and deliver corporate decarbonization targets.

Focus Area: Carbon capture, Decarbonization, Ag Tech, Food systems

Year invested: 2017

Country: Switzerland

eAgronom goal is to provide solutions that encourage farmers to operate smarter and sustainably, with numerous other benefits. eAgronom helps farmers monitor and verify sustainable practices, generate carbon credits, increase agricultural efficiency, and gain better access to financing in the future.

Carbon Intensity

1M hectares of sugarcane farms can sequester carbon up to 7 M tonnes of carbon (total potential).

Gamaya covers approx. 1.2M ha of sugarcane that can be translated to 8.4 Mt tonnes of CO₂ sequestered per year.

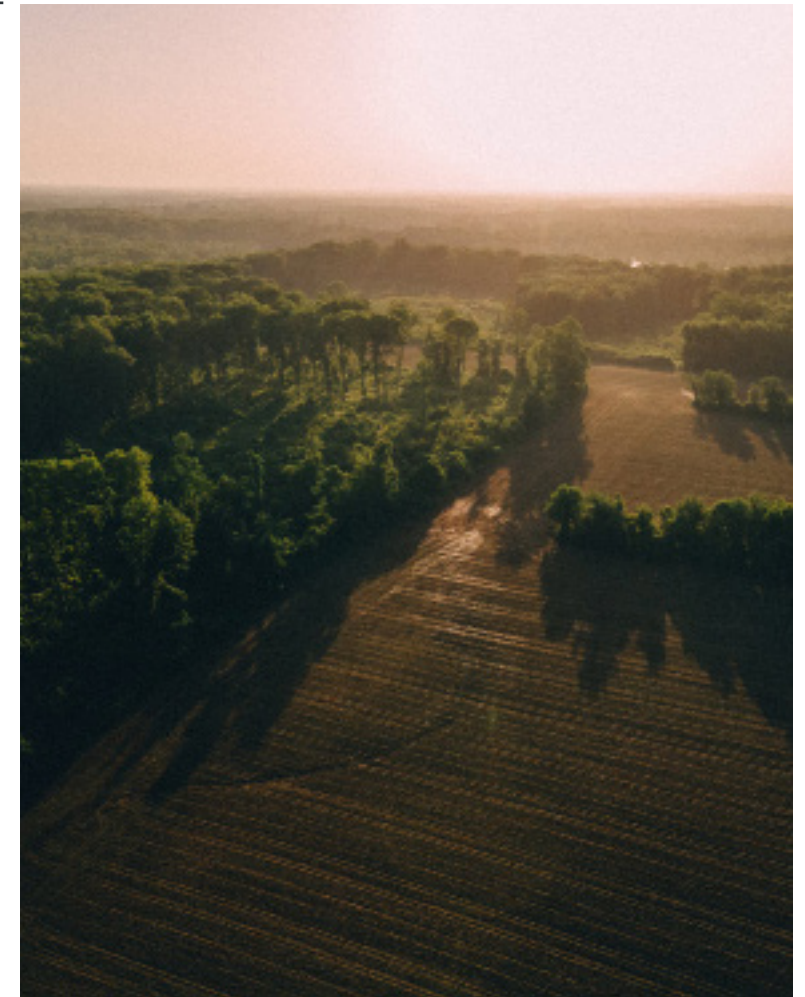
SDG



2: Gamaya improves the efficiency and sustainability of crop production, therefore contributing to increase in yield.



13: Gamaya develops its solution for the purpose of carbon accounting. This will allow farmers to better estimate how much CO₂ their farms are absorbing and to which extent they contribute to mitigating climate changes.



eAgronom helps farmers generate additional revenue, improve soil quality and access better financing.

Area under monitoring [ha]
2.5 M

Number of farms
3500+

Impact growth over 2022/2023
71% ↑

IMPACT AT A GLANCE



Soil is the largest carbon sink outside of oceans, yet it is unnoticed in farming. Agriculture is a significant opportunity to reduce emissions in the air by capturing carbon in the soil. eAgronom allows farmers to get paid for creating Carbon Credits, improve the quality of their soil, reduce the cost of inputs and get access to better financing terms. All together, making carbon-neutral farming profitable.

Focus Area: Carbon capture, Decarbonization, Ag Tech
Year invested: 2023
Country: Estonia

eAgronom goal is to provide solutions that encourage farmers to operate smarter and sustainably, with numerous other benefits. eAgronom helps farmers monitor and verify sustainable practices, generate carbon credits, increase agricultural efficiency, and gain better access to financing in the future.



Carbon Intensity

Since 2021 eAgronom have adopted regenerative agriculture practises with over 600 farms covers 480,000 ha that equals. **496,000 tons of CO₂ sequestered.**

SDG



9: eAgronom's innovative software enables farmers to increase efficiency and sustainability within agricultural production. Their cutting-edge digital tools enable to simultaneously simplify field management as well as track their performance transparently.



12: Financial benefits in the form of verified carbon credits and sustainable financing that our software solution enables, incentivize farmers to implement more efficient agricultural practices.



13: By implementing sustainable farming practices that we advise, farmers can take action to combat climate change by increasing carbon sequestration.



15: Our solutions promote sustainable and regenerative agriculture practices, thereby supporting the protection and restoration of terrestrial ecosystems.



Invert Robotics is providing safer industrial inspections to maximise asset integrity and make working conditions safer.

IMPACT AT A GLANCE



Climate
Change

Invert Robotics addresses the safety of workers by using robots to replace humans in industrial inspections. This removes the likelihood of dangerous scenarios that could result in injury. In addition, Invert Robotics minimises the distance its inspectors need to travel from their offices to the client side, lowering Scope 3 emissions connected to travel.

Focus Area: Advanced manufacturing, Sustainable industry

Year invested: 2019

Country: Ireland

Invert Robotics provides climbing robots to perform maintenance inspections of industrial equipment. The robots make inspection work faster, safer and more accurate than traditional inspection methods. Not only do Invert Robotics offer bespoke inspections, the robots are also available to lease or buy.



Carbon Intensity

The carbon footprint of travel is measured in grams of carbon dioxide-equivalents per passenger kilometer and its equal to approx. 171g* of CO₂/km. Invert Robotics performed over 300 travel inspections equal to more than 18,000 km **avoiding approx. 3 tons of CO₂.**

SDG



3: Good health and well-being. The company addresses the challenge of removing workers from unsafe working spaces.



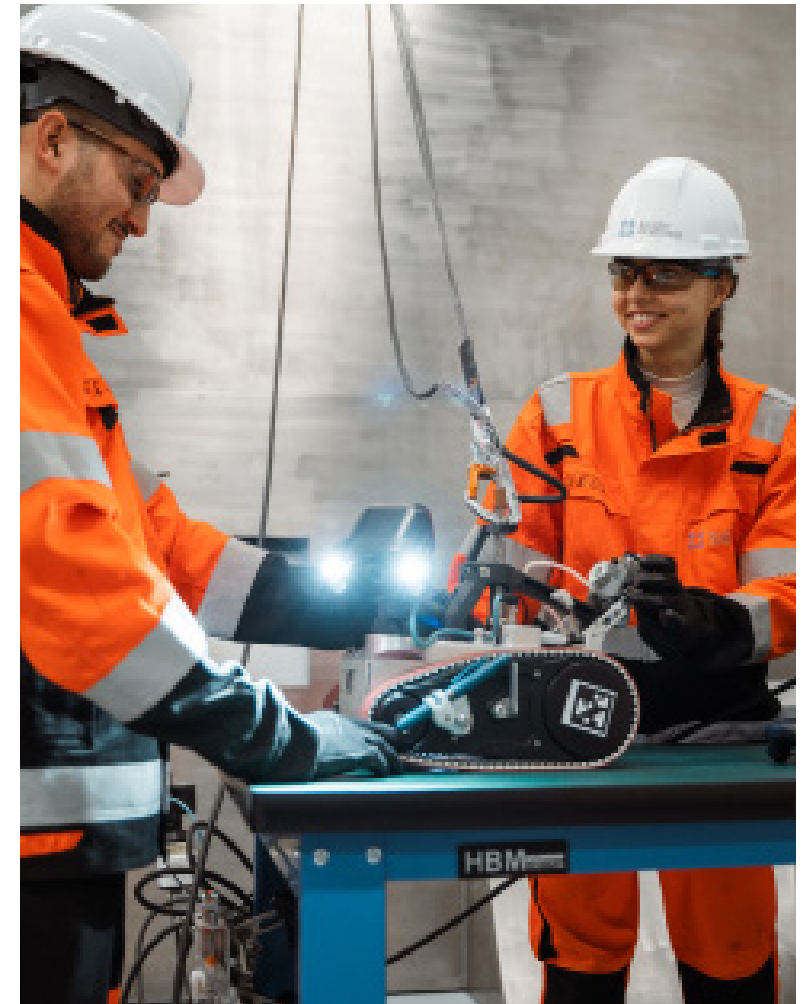
8: Decent work and economic growth. Enabling safety in industrial inspections minimises risk of injury for workers.



12: less water use to flush equipment and less chemical usage to clean equipment.



14: Use of invert robotics to improve uptime of marine and oil & gas equipment.



Squirro creates Insight Engine applying AI-driven Cognitive Search to unstructured data for new opportunities, next-best-actions, & 360° client cockpits.

IMPACT AT A GLANCE



Climate
Change



Circular
Economy

Squirro is a leading provider of Augmented Intelligence solutions for search, analysis, and interpretation of unstructured information. Squirro is an ISO 27001 certified company. Thanks to its unique technology, marrying AI, Machine Learning, and Predictive Analytics, Squirro's solutions deliver measurable results for its customers in the form of revenue and efficiency gains, reduced risks and cost, as well as faster time to market.

Focus Area: Business intelligence, sustainable industry

Year invested: 2019

Country: Switzerland

Squirro is a leading provider of Augmented Intelligence solutions for search, analysis, and interpretation of unstructured information. Squirro is an ISO 27001 certified company. Thanks to its unique technology, marrying AI, Machine Learning, and Predictive Analytics, Squirro's solutions deliver measurable results for its customers in the form of revenue and efficiency gains, reduced risks and cost, as well as faster time to market.



Carbon Intensity

The company is focused on achieving net zero emission by use of net zero data centers and other similar solutions. Their products can be used to improve insight in climate change problems and planning activities.

SDG



8: Squirro improves efficiency of workers, in many cases reducing employee overtime and stress connected with that.



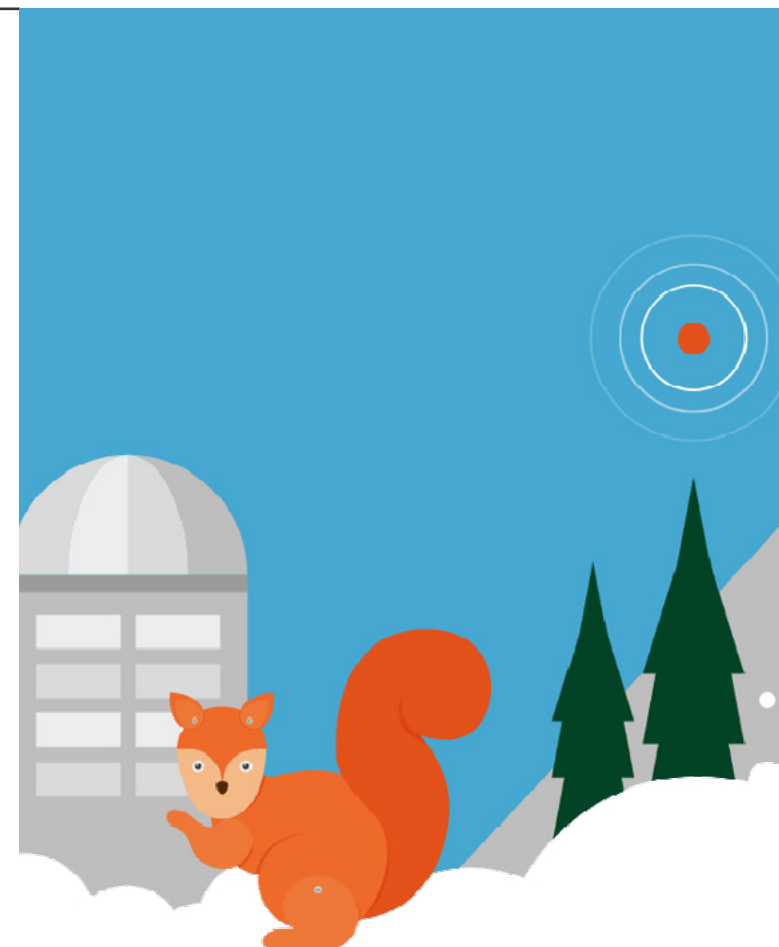
9: Squirro technology increase usage of existing resources and organizational growth through smart use of big data



14: Use of technology in various marine and water infrastructure projects to improve planning



16: Squirro technology is used by national banks such as Bank of England and European Central Bank to increase risk management and prevent fraud.



Carbonoro capture solutions for industrial flue gases.



UNIQUE METRICS

Number of pilot projects - 4

Carbon Dioxide Captured
10 kton/yr of CO₂ per working unit

Energy usage (Gjoule/tonne of CO₂ captured) of amine technology
2.9

(36% less than traditional amine based systems used for carbon capture)



IMPACT AT A GLANCE



Climate
Change



Circular
Economy

The bi-phasic amine technology of CarbonOrO is key to increasing the percentage of CO₂ capture in high and low temperatures. CarbonOrO captures CO₂ from flue gases, before it has the chance to enter and affect our atmosphere.

Focus Area: Carbon capture, Decarbonization

Year invested: 2022

Country: the Netherlands

CarbonOrO delivers carbon capture solutions to industrial CO₂ emitters across industries including waste management, energy, oil and amp; gas and the production of glass, chemicals, steel, cement and concrete. In these hard-to-abate sectors, capturing and storing (or using) CO₂ is indispensable to reduce emissions.



Carbon Intensity

Plan to improved modular design and mimicking 1Mton/yr

36% less energy use in comparison to 1st generation amine-based carbon capture solutions

10ktons / year CO₂ capture per unit

SDG



3: Good health and well-being. The company addresses the challenge of removing workers from unsafe working spaces.



8: Decent work and economic growth. Enabling safety in industrial inspections minimises risk of injury for workers.



12: less water use to flush equipment and less chemical usage to clean equipment.



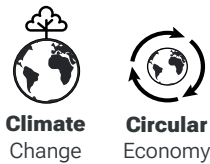
14: Use of invert robotics to improve uptime of marine and oil & gas equipment.





FUL Foods offers a sustainable nutrition solution by converting CO₂ into functional nutrition from spirulina, a blue green algae.

IMPACT AT A GLANCE

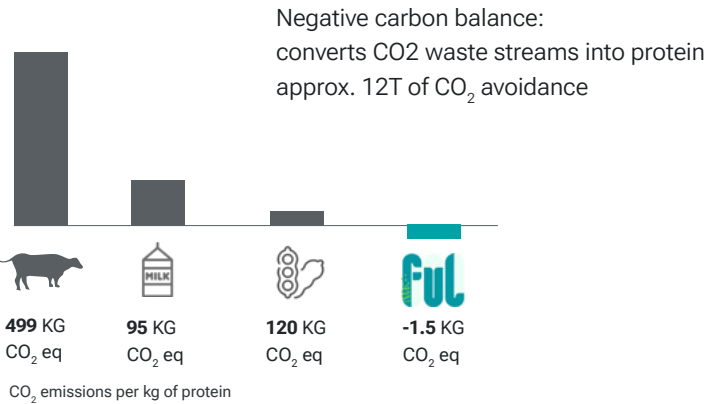


FUL uses CO₂ as a feedstock for micro-algae production. Industry standard uses bicarbonate or sugars and can't achieve a negative CO₂ balance that FUL can. In addition, the biomass utilisation is more than double industry standard, reducing the quantity discarded. FUL products use less (negative) CO₂, less water, less land, no chemicals and no pesticides.

Focus Area: Food Ingredients, Food systems
Year invested: December 2022
Country: the Netherlands

Featured as a Fast Company "World Changing Idea", FUL is a food tech startup on a mission to scale future-proof nutrition through its microalgae-based F&B brand. FUL has launched a proprietary biorefining technology that recycles CO₂ from carbon emissions to produce nutrients.

Carbon Intensity



SDG

- 3: GOOD HEALTH AND WELL-BEING**
3: Products contain antioxidants, vitamins and minerals such as vitamin C, calcium and iron. They also contain anti-inflammatory properties.
- 12: RESPONSIBLE CONSUMPTION AND PRODUCTION**
12: Producing a socially and environmentally conscious product that uses less land, raw materials, chemicals and water.
- 13: CLIMATE ACTION**
13: FUL produces products with (estimated, LCA in progress) lower carbon intensity compared to alternatives. Carbon balance is actually negative due to CO₂ as a feedstock.
- 14: LIFE BELOW WATER**
14&15: A range of benefits that avoid negative impact on land and under water including less land, no fertilisers and no pesticides.





Whole Fiber makes dried chicory root, naturally rich in prebiotic fiber, for a healthy gut flora.



IMPACT AT A GLANCE



Climate
Change

WholeFiber is producing inulin fiber from chicory with minimal processing which reduces carbon footprint. The whole ingredient here is utilised, minimising potential waste.

Focus Area: Health-promoting ingredients, food systems

Year invested: 2020

Country: the Netherlands

Whole Fiber contains no less than 85% prebiotic fiber, promoting the growth of good bacteria in the gut. Their product, produced from Dutch chicory root and minimally processed, has a positive effect on the gut microbiome, digestion and overall health.

Carbon Intensity

Weighted average carbon intensity compared to industry standards: Initial estimates show a **30-60% lower** carbon intensity than inulin technology



SDG



2: Prebiotic fiber is a key to a healthy gut microbiome which benefits general health and wellbeing.



12: Wholefiber is producing with responsible and sustainable practices by using the whole product and minimising waste.



1-2-Taste is the digital business to business marketplace for food ingredients and food product development.

IMPACT AT A GLANCE



Climate Change



Circular Economy



Biodiversity

1-2-Taste has a deep understanding of the food ingredients market combined with the tech understanding of platform dynamics. Both are crucial in digitizing the sales process for food ingredients. Key drivers for success are speedy sampling, a large offering and competitive pricing. 1-2-Taste offers 2000+ ingredients from over 2000+ suppliers. As a reference an average distributor has approximately 20-30 suppliers.

Focus Area: Food Ingredients, Food Systems

Year invested: 2023

Country: the Netherlands

1-2-Taste is the world's first platform that allows all food & beverages companies easy access to food & beverage ingredients: Easy to find, easy to select and easy to order. Without access to the right food ingredients and services food innovation or even manufacturing cannot happen. The 1-2-Taste marketplace provides digital access to the right food ingredients and helps food manufacturers find the right ingredients and services from dozens of categories with multiple suppliers to choose from.



Carbon Intensity

1-2-taste enable food manufacturers to choose ingredients based on CO₂ footprint, creating a more efficient supply chain.

The company helps food manufacturers to create more healthy and sustainable products

SDG



3: 1-2-Taste enable manufacturers to directly source sustainable and responsible ingredients online from many suppliers that feature sustainable ingredients. By that producers can create more healthy and products.



9: 1-2-Taste develop and offer new supply sources and services for sustainable and regenerative sourced ingredients



13: The company enable their customers to choose ingredients based on CO₂ footprint and help them reduce CO₂ emission in their food production.



FOTONIQ helping growers increase production in a sustainable way

★ UNIQUE METRICS

Applied coating area (hectar)

15

Impact growth over 2023/2024

66%



IMPACT AT A GLANCE



Climate
Change

Distribute light conditions evenly in greenhouse increase crop yield with at least 8% for 8 years, eliminating the waste material of seasonal coatings with our environmentally certified coating and lowering greenhouse indoor temperature.

Focus Area: Ag Tech, Chemical & Materials

Year invested: 2022

Country: the Netherlands

Manufacturer of a horticulture spray coating intended to enhance light diffusivity inside a greenhouse without reducing grow light. The company's spray coating specializes in making sunlight diffuse before it enters the greenhouse eliminating the need for seasonal coatings and reducing the need to air the greenhouse, enabling clients to use this greenhouse spray coating and get more evenly distributed light and heat, allowing it to go deeper into the greenhouse to reach the lower parts of the crops, thus improving the crop yield and reducing waste material.

Carbon Intensity

FOTONIQ developed green coating formulation
Replacing conventional coating FOTONIQ CO₂ avoidance equal approx 6000 kg of CO₂ per hectare
15x 6000kg of CO₂ = 90T of CO₂ avoidance

SDG



2: FOTONIQ improves the efficiency and sustainability of crop production, therefore contributing to increase in yield.



12: PAR+ coating provide a controlled climate environment in greenhouses, allowing control water, pesticides and energy consumption



13: FOTONIQ solution allows to avoid up to 6t of CO₂ in comparison with conventional/seasonal coatings





Rainmaker is providing communities with fresh drinking water worldwide.

Focus Area: Advanced manufacturing, Sustainable Industry

Invested: 2007

Country: the Netherlands

Today, more than 800 million people live without access to a source of safe drinking water. As the world population continues to grow, millions more suffer from water scarcity. Rainmaker's mission is to produce safe drinking water in places where this is not available.

SDG



ICOS TEAM



Nityen Lal
Partner



Peter van Gelderen
Partner



John van Grootel
Chair Investment Committee



Rudi Dupper
CFO



Marieke Plasmeijer
Coordination & Logistic



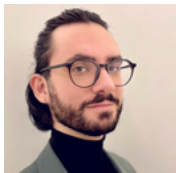
Sandro Fazio
Chef & Senior Analyst



Katarzyna Gil
Principal
Sustainable Industry



Ewelina Kuna
Principal
Sustainable Industry



Adonis Hilal
Analyst
Food System



Małgorzata Bołt
Analyst
Decarbonization



BOARD AND VENTURE PARTNERS



Matthias Kaiserswerth
Innovation Board
UBIF



Dimmes Doornhein
Chairman
Supervisory Board



Hans Meeuwis
CEO,
Royal Cosun



**Maaïke Van den
Maagdenberg**
Director Innovation,
Royal Cosun



Rolf Edvinsson
Chief Scientist
Nouryon



Ian Roberts
CTO
Bühler Group



Norbert Danneberg
Venture Partner



Andre Groeneveld
Venture Partner



Tadeusz Uhl
Venture Partner



Roger Knubben
Venture Partner



Veronique de Bruijn
Operating Partner



Carol Tarr
Non Executive Director
Phenix Capital Group



Amsterdam:
Barbara Strozzi 101,
1083HN Amsterdam,
the Netherlands
www.icoscapital.com

Warsaw, Poland:
CIC Warsaw, Chmielna 73,
00-801 Warszawa,
Poland

Mail address:
PO Box 8171,
1180 LD Amstelveen,
the Netherlands

ICOS
CAPITAL