# FoodLabs ID dealroom.co

# **Food for Climate**

The State of the Sustainable Food- & AgTech Ecosystem in Europe

June 2024

# **1** Introduction: Food for Climate

- 2 FoodTech deepdive
- 3 AgTech deepdive
- 4 Cross-topic technologies

### **Introduction: Food for Climate**

The increasing frequency of heat waves, floods, hurricanes, and wildfires worldwide highlights the escalating impact of climate change, putting immense pressure on our food production systems. Climate change has already degraded 23% of the EU's agricultural land, reducing annual agricultural production by up to \$177 billion.

A recent UN report reveals that the hidden costs of the global food system amount to \$12.7 trillion, approximately 10% of global GDP. These costs predominantly affect health (73%) and the environment (over 20%). Notably, these hidden costs are a staggering 27% of GDP for low-income countries (mostly due to poverty and climate), in contrast to 8% for high-income nations (mostly driven by unhealthy diets).

As a whole, our food system is a significant contributor to climate change, responsible for 34% of global greenhouse gas (GHG) emissions.

As highlighted at Dubai's COP 28: to build sustainable and climate-resilient food systems, we must pursue multiple goals simultaneously: decarbonizing agriculture, restoring soils, ensuring safe and healthy food for all, and adapting to the new realities of a changing climate.

In this report, we delve into the current landscape of the climate-conscious European FoodTech startup scene, analyzing how innovative food ventures are driving change towards a more sustainable future.

#### Share of greenhouse emissions per sector of the food system



FoodLabs dealroom.co

\*Tonnes in billions or thousands of CO2 emitted yearly \*\*Percentage as of fraction of Global greenhouse emissions fro

\*\*Percentage as of fraction of Global greenhouse emissions from the food system Source: IPI Global Observatory & Nature, 2023

### **Beyond greenhouse gas** emissions reduction in food production, food security & agriculture resilience is rising in the agenda.

Rising challenges from climate change and a growing population are constraining food systems: as the world reaches nearly 9.7 billion people by 2050, we must achieve a staggering 70% increase in food production to ensure global food security.

EU leaders have responded by putting the matter at the center of the next five years' agricultural policy. Though no reference to sustainable practices in the agricultural sector or the protection of the environment were made in the Paris agreement, the text mentions "preparing for the new realities stemming from climate change."

#### **Mitigation** The process to reduce greenhouse gases MOSO Meat Alternative proteins Heura Sustainable packaging SULAPAC Notpla & biomaterials Sustainable fertilizers **«**APHEA<sup>bio</sup> DUCTOR Carbon capture + E A R T H + Deep Branch for agriculture

#### Food waste Onethird () kern tec & circular economy Biostimulants SUGAR (X agrobiomics Sustainable S ILMON Aquaculture Ĉ constellr -- IGS Precision farming **XFARM** Vertical & indoor farming inform Nature-based (NBS) InPlanet Plantilizer Other alternative ingredients winwin 🛞 Amatera Adaptation & resilience The process of adjustment to climate and its effects Sustainable irrigation Agrodit Crop insurance A P U L A 🎯 ibisa Climate-resilient crops **TRAIT©MIC** HR 🕷 Cordulus Jua Climate risk & weather modeling Crop protection WEENAT FINRES 🕷 SOLASTA & pest control

\*

Infinite Roots

PACIFICC

tupu

# European climate food startups attracted \$2B in 2023, in line with 2022's record high. 2024 is for now projected to return to pre-pandemic levels due to the lack of megarounds.

#### European investment in climate Food- & AgTech startups

\$0-1m (pre-seed) \$1-4m (seed) \$4-15m (series A) \$15-40m (series B) \$40-100m (series C) \$100-250m (mega rounds) \$250m+ (mega+) Projection



Top climate FoodTech & AgTech rounds of 2023 » view online

Company	Amount	Round	Business
ATLAS AGRO	\$325M	Growth Equity	Renewable fertilizer
First 🎗 Water	\$88M	Growth Equity	Aquaculture
	€70M	Series C	Biostimulants
	€55M	Early VC	Regenerative fermentation
Agreena	\$50M	Series B	Regenerative agriculture
ENOUGH	€40M	Series C	Mycoprotein

#### Share of Food x Climate VC funding by region



In 2023, Europe constituted more than half of global food- x climate tech funding, surpassing the US for the first time.

Page / 6

Top European industries 2023 and year over year growth



Average european slowdown -37%

As an industry, foodx climate tech, ranks 10th in Europe and was the best performing sector behind only Energy.

Food, as a whole, ranks 6th most funded in Europe.



### France ranked 1st in European Food- x Climate tech VC funding in 2023 despite a 29% decline.

Countries such as Belgium and Iceland have shown impressive growth in that period.

In Belgium, multiple companies reaching breakout stage in 2023 pushed the country's growth.

Iceland strong growth is due to the fact that almost no food x climate companies had been funded before 2023. Top Food- x Climate tech European countries by VC Funding in 2023 & year-over-year growth



### Top investors in European Food x Climate startups since 2016.

	•			
	Investor name	Investor HQ	Number of food x climate rounds	%climate focused investments
1	EIC Fund	Belgium	33	>50%
2	Blue Horizon Corporation	Switzerland	30	>50%
3	Bpifrance	France	26	25-50%
4	SOSV	United States	17	>50%
5	FoodLabs	Germany	16	25-50%
6	Scottish Enterprise Growth Investments	United Kingdom	15	>50%
7	Agfunder	United States	14	>50%
8	Veg Capital	United Kingdom	13	>50%
9	Mudcake	Sweden	12	>50%
10	Almi Invest	Sweden	11	>50%
11	SHIFT Invest	Netherlands	10	>50%
12	Nordic FoodTech VC	Finland	10	>50%
13	Kale United	Sweden	10	>50%
14	VF Venture (Vækstfonden)	Denmark	9	>50%
15	PINC	Finland	9	>50%
16	Agronomics	Isle of Man	9	>50%
17	CPT Capital	United Kingdom	9	>50%
18	Kima Ventures	France	8	<25%
19	Rockstart	Netherlands	8	25-50%
20	Crédit Agricole	France	8	25-50%

#### (Pre) Seed Investors

#### **Series A+ Investors**

	Investor name	Investor HQ	Number of food x climate rounds	%climate focused investments
1	Astanor Ventures	Belgium	18	>50%
2	Demeter Partners	France	17	>50%
3	Pymwymic	Netherlands	13	>50%
4	Five Seasons Ventures	France	12	25-50%
5	European Circular Bioeconomy Fund (ECBF)	Germany	11	>50%
6	Sofinnova Partners	France	11	>50%
7	CapAgro	France	9	25-50%
8	Aqua-Spark	Netherlands	9	>50%
9	Flanders Institute for Biotechnology (VIB)	Belgium	9	>50%
10	DSM Venturing	Netherlands	8	>50%
11	Balderton Capital	United Kingdom	7	25-50%
12	Novo Holdings	Denmark	7	>50%
13	Invest-NL	Netherlands	6	>50%
14	Novo Seeds	Denmark	6	>50%
15	V-Bio Ventures	Belgium	6	>50%
16	Clay Capital	Singapore	5	25-50%
17	Vorwerk Ventures	Germany	5	25-50%
18	Felix Capital	United Kingdom	5	25-50%
19	Creadev	France	5	>50%
20	ZKB - Zürcher Kantonalbank	Switzerland	5	>50%

Dealroom.co Ranking by number of VC rounds in Food X Climate startups headquartered in Europe.

Page / 10

### 1 Introduction: Food for Climate

## 2 FoodTech deepdive

- 3 AgTech deepdive
- 4 Cross-topic technologies

### FoodTech deepdive

The global food system is estimated to contribute 34% of total greenhouse gas emission with livestock accounting for ~50% of them.

Even if fossil fuel emissions were immediately halted, global protein production with current methods alone would make meeting the Paris Agreement's 1.5°C target impossible. Alternative proteins are an attempt to mitigate food related emissions all the while strengthening food security.

Food supply chains also need to be altered to meet 2050 targets. Packaging accounts for approximately 5% of GHG emissions from food systems while more than 1.3 billion tons of food waste are generated along the whole food supply chain, producing approximately 1.1 billions of tons of CO2 per year. Key food innovations for climate transition







#### **Technology innovation**

Innovative technologies that can enable the decarbonization of key food markets such as fermentation.

#### **Ingredient innovation**

Innovative ingredients that can enable the decarbonization of key products such as alternative proteins, cocoa or coffee.

#### Food circularity & sustainable distribution

Ensure circularity in the post-retail phase and implement circular, non-fossil based packaging for food and beverages.



Christophe F. Maire Founding partner at Food Labs "To address some of Europe's most pressing challenges, we urgently need to finance and support innovative food solutions that help us adapt to a changing climate and mitigate its effects, while securing our food supply.

We believe that the emerging bioeconomy and scientific breakthroughs have the potential to solve some of the biggest food and climate issues.

Many companies are pioneering efficient, cost-effective, and eco-friendly proteins and alternative ingredients through precision fermentation, biomass fermentation, molecular farming, and cell culture. Significant investments are also being made in companies using synthetic biology to create new materials, reduce waste, and contribute to sustainability.

Transforming our food systems is essential to mitigating climate change, restoring nature and increasing our resilience. We remain committed to exploring and supporting solutions that drive climate innovation across the agri-food value chain and make a meaningful impact on the future of our planet."

# By technology, European alternative protein startups raised \$365M in 2023, driven by plant-based startups. So far, 2024 was dominated by mycelium-based alternative proteins.

VC funding of European Alternative proteins by technology

Plant-Based Lab-grown Fermentation Mycelium



#### Fermentation

Fermentation is the **process of using microorganisms in order to produce modulated ingredients.** 

With **precision fermentation**, **microorganisms can be programmed to produce complex organic molecules.** Alternative protein producers can thus efficiently make specific proteins, enzymes, flavor molecules, vitamins, pigments, or fats.

#### With **biomass fermentation**, **the microorganisms are themselves the key ingredient** of the alternative protein. For example mycelium or microalgae.

Fermentation-based startups have seen substantial growth, with funding **increasing twelve-fold since 2020**. In 2023, these startups secured **\$76M** in venture capital, accounting for **22% of the total investment in European alternative protein startups.** In 2024, they have already raised \$12M, positioning them as **third must funded** segment, ahead of plant-based alternative proteins.

Dealroom.co Data as of May 17th 2024.

Page / 14

Source: Algae & seaweed has been included under fermentation in this chart. Insect-based alternative proteins have been excluded in this analysis as not plant-based/vegan alternative. For more on other alt proteins including insects see our landscape.

Mitigation – Molecular farming

# Molecular farming in food is still a very early-stage sector, but holding considerable potential for alternative protein production.

Molecular farming is a frontier technology that allows the **production of proteins within plants instead of animals**. Plants are modified so that their cells **replicate the desired proteins and are then harvested from the leaves or other plant tissue**.

Molecular farming has **mostly been used in the pharmaceutical** space (from vaccines to antibodies), it is **now also being targeted at food protein** production to shift away from carbon and land-intensive animal products.

Precision fermentation and molecular farming are similar technologies, themain difference being that the former engineers microorganisms to fermentthe target protein, while the latter engineers plants to express the protein andthen harvest it. Molecular farming could potentially be scaled to the open field(while today it is still at the lab level), while precision fermentation requiresbioreactors. But faces potentially complex regulation to safeguard the wholevaluechainchainfromseedtofinalproduct.

Most European molecular farming startups focus today on producing growthfactors for cultivated meat, such as Multus, Bright Biotech and Core Biogenesis.While there is much less focus on direct food ingredients like dairy proteinspursued by US companies like Nobell Foods and Mozza. Moolec Science is anexceptionfocusingonmeatsubstituteingredients.

The space is just emerging with most startups born since 2016.

 Page / 15
 Source:
 Dealroom.co

 Data as of Apr 29th 2024.
 Data as of Apr 29th 2024.

Global molecular farming startups » view online



VC funding of European Alternative proteins by ingredient



### By ingredient, European alternative proteins are led by meat substitutes.

Other products such as alternative fats and oils and egg substitutes have taken a large share of 2024 thus far.

Page / 16

Dealroom.co Data as of Apr 22nd 2024.

Source: NB. This does not cover the entire alternative protein landscape. Insect-derived protein has not been included in this report as it can't be considered a plant-based/vegan alternative. For more on other alt proteins including insects see our landscape.

# Since 2016, European startups in alternative fats and oils have raised nearly \$130M, highlighting an opportunity as the growing demand for alternative proteins will require greater alt-oil supplies.

Alternative fats and oils, key byproducts of alternative proteins, are often made using **precision fermentation**, **microbial lipids**, **or cell-cultured methods**, although traditional vegetable oils are still used by many brands. By 2030, it is expected that the plant-based **meat industry will need at least 16% of the global coconut oil supply.** 

These alternative fats and oils face **challenges including taste**, **texture**, **fat levels**, and concerns related to the environment and social issues like **deforestation**, **emissions**, **child labor**, **and animal welfare**.

Fat is essential for flavor, cooking quality, nutritional value, and binding in meat alternatives. When used effectively, alternative fats can also replace additives such as salt and thickeners, **reducing costs and enhancing product quality.** 

Beyond meat substitutes, alternative fats and oils can also be used to produce alternative dairy, cocoa and other food products.

#### » Alternative fats and oil landscape



Dealroom.co & Good Food Institute

NB. This does not cover the entire alternative protein landscape. Insect-derived protein has not been included in this report as it can't be considered a plant-based/vegan alternative. For more on other alt proteins including insects see our <u>landscape</u>. Data as of Aor 22nd 2024.

Source:

# Though historically alternative coffee and sugar were most present, in the past years alternative cocoa has been a growing segment amongst global VCs.

#### Сосоа

- Cocoa prices have surged (by **250% in the past year**) and environmental and socioeconomic concerns over the production is growing.
- West Africa is responsible for 63% of the global cocoa production but extreme rainfall and crop disease outbreaks in the region has lead to a yield decline. In fact, The International Cocoa Organization and cocoa traders estimate that **global production could drop by 10.9% this year.**
- To fill that gap alternative cocoa startups are stepping in with **fermentation**, **plant-based and cell-based solutions**.

#### Coffee

- In 2021 coffee prices hit a 10 year high due to a lack of shipping containers, dry weather and a spike in demand.
- 2.25 billion cups of coffee are consumed worldwide daily but each cup takes 140L of water to produce and destroys one square inch of rainforest.
- Currently, only 12% of global production is sustainable. Many farmers use chemical fertilizers and pesticides, but as importing countries tighten regulations, **over 125 million people could face economic losses.**
- Alternatively, lab-grown coffee is simpler and cheaper to scale than animal cells highlighting an interesting investment opportunity for VCs.

#### Global investment in Alternative ingredients

#### 📕 Cocoa 📕 Cocoa & Coffee 📕 Coffee 📕 Sugar



### The Alternative ingredients landscape

#### Explore the landscape »

### Cocoa Combined funding \$ 139M Win Win Foodyb... Graine D... O Planet A... Voyage... Nukoko # Califor... Foreve... Endles...

#### Sugar

Combined funding \$ 146M



Combined funding \$ 120M



# In 2023, European sustainable packaging and biomaterials startups collectively secured over \$100M and showed significant growth.

European investment in food circularity and sustainable distribution and year-over-year growth

	2023	Growth
Foodwaste	\$138M	20%
Sustainable packaging	\$70M	46%
Biomaterials	\$41M	238%
Supply chain management	\$35M	-77%
Circular economy	\$33M	-73%

Global governments are tackling food packaging waste through bans, incentives, and recycling targets as currently **80% is not suitable for recycling.** Corporate responses, fueled by ethical concerns and consumer demand, include **a willingness among 66% of US consumers to pay extra for sustainable packaging.** 

Novel materials have been key to improving packaging, recent trends include **bio-based drop-in materials, edible and water soluble materials or mono-materials** to simplify the recycling processes and reduce plastic waste.

Notable sustainable packaging in Europe » view all online

#### **Biomaterials & bioplastics**



Scalable, sustainable

seaweed. Natural &

compostable plastic-alternative.

materials formed from

traceless

Growing strong

Creating biodegradable, plastic-free materials from plant residues for a new generation.



natural packaging to

replace polystyrene,

helping sustain a

better world.

Xampla

A natural plastic alternative that creates plant protein material for commercial use.



Offers individualised, cleaner, and circular packaging solutions in a brisk amount of time.

- 1 Introduction: Food for Climate
- 2 FoodTech deepdive
- **3** AgTech deepdive
- 4 Cross-topic technologies

# AgTech deepdive & cross-topic technologies

Agriculture is a major contributor to the climate crisis, accounting for 19-20% of global emissions. As the population grows, concerns about food security and sustainable agriculture will intensify. By 2050, the world will need to produce about 70% more food to feed an estimated 9 billion people.

Centuries of unsustainable practices have degraded a third of global soils, crucial carbon sinks. Historically, 133Gt of carbon lost from soils has added nearly 500Gt of CO2 to the atmosphere.

Efforts to correct past mistakes include the Paris Agreement's actions to increase soil carbon stocks. Moving forward, regenerative agriculture and water resource management will be crucial methods to employ. With the aid of biotechnology and artificial intelligence, progress can be further accelerated.

#### Key agricultural innovations for climate transition







#### **Regenerative agriculture**

Regenerative agriculture encompasses various practices, including carbon sequestration and the replacement of chemicals with natural methods to enhance plant health.

#### Water resource management

These technologies not only help prevent soil degradation and reduce reliance on pesticides but can also enhance crop growth.

#### Cross-topic technologies: Synbio & AI

Such technologies are revolutionizing agritech and the broader food sector by improving efficiency, minimizing waste, enhancing data transparency, and fostering greater sustainability.



### "Agriculture is the backbone of our global food system and one of the most vulnerable sectors to climate change.

Soil degradation due to climate change has already reduced the productivity of 23% of the EU's agricultural land, and up to \$177 billion in annual agricultural production is at risk from pollinator loss. In the face of rising food demand and escalating threats from extreme weather events, novel AgTech solutions are being developed to optimize farming for climate resilience and future-proof our agricultural system. These solutions include regenerative practices, climate-resilient crops, microbial solutions and carbon dioxide removal techniques such as enhanced rock weathering. We are also excited about the growing number of water management and irrigation solutions."

# In 2023, European sustainable AgTech startups secured \$1B in funding, equalling the 2022 record. Fertilizers grew 1.5x, propelled by Atlas Agro's \$325M growth equity round.

#### European VC funding in sustainable agtech startups

Aquaculture Sustainable Fertilizer Vertical Farming Regenerative Agriculture Precision Agriculture



#### Between 2022 and 2023, vertical farming saw its funding cut by half.

This was precipitated by rising energy and labor costs, marking the end of the venture capital frenzy of 2021-2022 in vertical farming startups, as it became apparent that these businesses were struggling with low profitability.

However, other sectors are on the rise such as sustainable fertilizers and regenerative agriculture, both critical for the climate adaptation of the agritech sector. In fact, **Regenerative agriculture practices applied at scale has the potential to remove 3-4 Gt of CO2\* per year,** the equivalent of the European Union's yearly emissions.

Nonetheless, as it stands, **2024 is not on track to match past years'** record highs with only \$84M raised thus far. VC Funding of European regenerative agriculture startups

# European regenerative agriculture startups raised \$581M in 2023. Biofertilizers is by far the most funded segment though largely driven by one large round.

#### ATLAS \$581M AGRO \$325M Growth equity round \$400.0M \$179M \$161M \$148M \$142M \$51M \$52M \$46M \$13M 2016 2017 2018 2019 2020 2021 2022 2023 2024

Biofertilizers Carbon Soil health Crop genome breeding & crop protection Other

#### Biochar Soil health & productivity Combined funding \$ 5.6M Combined funding \$ 97M Earthly Bio... 🕥 Planboo 7 Cotierra R Plant Resp... 🚨 Soilsteam • Gaïago ---- Agrovar CC 🛛 🔘 Segana DUHI 🚟 Carbon Gold 【 Point2Hect... Downforce ... 🤐 MASH Biotech 🧠 Standard Bio 🛛 🚢 Volterra Ec... ZukunftMoor Merald EO 🔁 Elaniti Rhizocore T... --- AgroBiogel SilviBio 🚺 FA Bio Planet Meridia Enhanced rock weathering Combined funding \$ 17M Carbon capture and removal / Inplanet co2-zero DO UN-DO Combined funding \$ 15M ->- Silicate Car... 🧟 Green Sequ... NetCarbon Deep Branch Skymining 🐉 Future Fore... 😭 Horizom Earth plus Seabed Combined funding \$ 47M 🏯 Kelp Blue H... 🌐 Seaweed G... 🔥 Blusink Carbon data tools Combined funding \$ 26M 🚳 Ava Ocean 👘 👔 Seawater S... 📾 KelpCrofters 🗊 Bx Technol... 🔕 Verna

#### » European regenerative agriculture startups

# Historically, biotechnology companies dominated funding for European regenerative agriculture. Whilst their share has diminished, their importance remains.

Share of VC Funding of biotechnology solutions in European regenerative agriculture

Biotechnology Other regenerative agriculture



With the growth of tech tools and of the regenerative agriculture sector as a whole, biotech's share is shrinking but still immensely important and used in wide array of applications.

New solutions, leveraging biotechnology, can **modify crops to boost yield** while lowering emissions, also **reducing the use of chemical fertilizers and water resources.** 

» Crop genome breeding and crop protection startups



Combined funding \$ 190M



# Rice cultivation is responsible for 7-10% of methane emissions or 5 tonnes of CO2 per hectare and per harvest, but, alternative practices are aiming to decarbonize this high emitting sector.

The transition from **conventional rice farming (i.e. constantly flooded rice fields) to regenerative rice farming using Alternate Wetting and Drying** (AWD; i.e. allowing rice fields to breathe from time to time), which leads to a significant reduction in methane emissions over time, is technologically not too complex. However, switching from conventional rice farming to AWD can represent a financial burden that, in most cases, is not economically viable for smallholder farmers.

Innovative business models are linking farmers with companies seeking insetting solutions. These models provide **upfront financing for farmers to transition to AWD** which in turn benefits companies with reduced methane emissions in their supply chains. One of the key complexities of these models is developing a strong **measurement, reporting and verification (MRV) approach** that scientifically demonstrates the long-term reduction in methane emissions from switching to the new, regenerative method. In addition, operational excellence in working with farmers end-to-end will be critical.



Nicolaus Norden VC at FoodLabs

#### Global Sustainable rice startups » view online



 Page / 27
 Source:
 Dealroom.co, FoodLabs & McKinsey

 Data as of Apr 29th 2024.
 Data
 Data

# European water resource management startups collectively raised close to \$200M across the past five years, pushed by the growing strains on water supplies threatening food security.

Projected freshwater demand exceeding supply

**40%** by 2030

Total value of Water ecosystems

(or 60% of the Global GDP)

\$58T

Global water usage for Agriculture

### **70%**

Water resource management solutions such as **Telaqua's** connected irrigation system, **Alvatech's** water treatment devices or **Sencrop's** connected weather stations allow farmers to optimize their water usage. These technologies not only **help prevent soil degradation and reduce reliance on pesticides but also enhance crop growth.** Additionally, they equip farmers to **adapt to changing climate conditions,** such as droughts and floods, while navigating challenging economic conditions.

» Read "The \$58T water ecosystem & Water tech innovation" article

European funding of Agriculture water resource management startups » view online

\$0–1m (pre-seed) \$1–4m (seed) \$4–15m (series A) \$15–40m (series B)



- 1 Introduction: Food for Climate
- 2 FoodTech deepdive
- 3 AgTech deepdive
- 4 Cross-topic technologies

### Applications of SynBio in Food- and Agtech.



### Artificial intelligence across Food- and Agtech.



### 400+ Food x Climate startups

#### Explore the landscape »

#### Alternative Protein | Molecular farming

Combined funding \$ 25M

🚱 Bright Biotech	🕮 Core Biogenesis	sour ORF Genetics
🧼 Genetwister	CellFree	📰 Kyomei
Alternative Protein	cell-cultivation	
Combined funding \$ 40.	1M	
🛑 ArtMeat	🚱 Ivy Farm	b Bene Meat
👷 Bruno Cell	MIRAI Foods	🥯 Alife Foods
Peace Of Meat	👄 Gourmey	😂 Biotech Foods
🖘 Cellular Agricu	🙆 Meatable	O Uncommon

🖂 Cubiq Foods

O Hoxton Farms

legan Cow

airv

Alternative Protein	Microbial	termentation	

Combined funding \$ 250M

Mosa Meat

I Protera	PROTe-IN	Nutrop
Arkeon Biotechn	Max&Bien	au Those \
Novacca	MOA MOA	🚛 Better I
Better Nature	🐨 Fervena	East Lab Lab
🕕 La Marmite Végé	🖐 Petit Veganne	🛑 l am nu
ma Mouse's Favouri	Happy Cheeze	🔤 Delishu
드 Kinda Co	*= FUMI Ingredient	Formo
😬 Les Nouveaux Af 👘	🗰 Fairment	Solar F
Ki Tomm'Pousse	40 A20	(i) Fermer
Melt&Marble	NoPalm Ingredie	🗱 Clean F
🕒 Maya Milk	Cultivated	COLIPI
	👧 Sunbearbioworks	õin Äio

#### Sustainable Packaging Combined funding \$ 109M

G Mayung 👕 ruumi

1 reNatur

Agreen Meridia

. Soilste

Zukun

🧟 Green

CE Point

DO UN-E

📀 Рухо	Notpla	🎯 B'ZEOS
∾ Noriware	Again	🍪 Street Food Box
🥌 junee	BOXO	Shellworks
Pack'n GREEN	🚳 When In Rome	💪 B-Fresh
🖙 S.Lab	🔿 Emnandi Bioplas	Sulapac
(E) VYTAL	💽 The Ocean Packa	e Reternum
G Jordisk	🦇 Ozarka	🛸 SwapBox
Advanced Techno	IFCO Systems	Oceanium
Greenwave UG -	🚳 CupCup	NWB
🞎 Lactips	Searo	

#### **Regenerative Agriculture**

Combined funding \$ 230M

Technolo	Saïago	Klim
	elimate farmers	Soil Capital
e	Skymining	EAgronom
1	- MicroGen Biotec	Ø Dovu
	📥 FA Bio	AgroBiogel
m	A Planet	R Plant Respons
Moor	🚆 Rhizocore Techn	Earth plus
Biochar	🖶 Horizom	🕏 NetCarbon
equest	Se PUHI	att Carbon Gold
lectare	🅼 Inplanet	🐉 Future Forest
	🐨 Cotierra	o co2-zero
	S Planboo	😑 Deep Branch

#### Food waste & Circular Economy

Combined funding \$ 858M PeelPioneers 🖦 Ricehouse 🔘 Too Good To Go - Fresh Inset 🧕 Mimica Nextalim ---- HiProMine Babaco Market Smartway PHENIX w Winnow K Karma Choco Nuctor olio 🤷 🕞 Fiksu Ruoka Oy 🛞 Bene Bono Oddbox = Matsmart Loritus

#### **Crops & Soil Analytics**

Combined funding \$ 170M

🔔 Spacenus	🚥 xFarm Technolog	📮 Elaisian
🞯 Gamaya	30MHz	🍪 Agremo
🏏 Hummingbird Tec	Oropwise 🚱	🙀 Soil Grid
🛥 DB2 Vision	🧔 GeoPard Agricul	🕒 CropSaf
a Institute of Pr	AgNeo	star 2Grow
🕬 PreAgri	Alzagro	Sowit
4 HK Horticultura	····· Tarla.io	- Drone4/
CropZoomer	🗸 Agrifly	- EARTH-i
Agrovar CC	Orius	🥠 Sencrop
Space4Good	4 Sensoraide	🙆 ltk
💭 Brioagro	Agrointelli	💮 Downfo
🕐 Emerald EO	Seqana	🍘 Elaniti
SilviBio	👩 zeroCO2	ana MyEasyl
ScarbonFarm	SmartCloudFarmi	🧟 Agricart
S Meteory	Bx Technologies	
	🔷 Verna	

#### Sustainable Aquaculture

Combined funding \$ 67M

Oceano Fresco	📟 Sea Harmony	🥌 Gigante Salmon
(O Origin Algae	lagosta s.a.	🔅 LISAqua
Oynaspace	🔤 Vegafish	🖒 Nordic Aquafarm
58 Blue Lice	SafetyNet Techn	MonitorFish
MiAlgae	🥮 Gårdsfisk	📩 Ocean Rainfores
👐 SuSeWi	🗰 Fishency Innova	Kyanos Biotechn
Matorka	ver Vaxa Impact Nut	

#### Farm management & Automation

Combined funding \$ 110M

Trapview	💿 OneSoil	nue Naïo Technologi
/ Agrivi	Www. Vultus	b Odd.Bot
Prismab	Evity	🔔 aQysta
Deep Planet	Autoagri	😞 Sabi Agri
- AgXeed	Paintec	😡 Wisecrop
Monet Viticultu		

#### Water tech Combined funding \$ 50M

C constellr Vandersat PureWaterWell Sansox Irreo MART BIOSYSTEM Agrologies E Farm21 M-Projects Solu FoodLabs dealroom.co

### A few words on our methodology.

#### What is a startup?

Companies designed to grow fast. Generally, such companies are VC-investable businesses. Sometimes they can become very big (e.g. \$1B+ valuation).

When startups are successful, they develop into scaleups (>50 people), grownups (>500 people) and result in big companies. Only companies founded since 1990 are included in this report.

What is a startup?

#### What is a unicorn?

Unicorns are (former) startups that reached US\$ 1B valuation or exit at one point in time.

What is a Unicorn?

#### Food x climate definition

Food x Climate startups include sustainable agriculture and foodtech companies which contribute with their core products/services towards reducing the climate and environmental of agriculture (mitigation), or reducing the negative impact of climate change on food production and security (adaptation).

#### Venture Capital, Investors

Investment are referred to by their round labels such as Seed, Series A, B, C, ... late stage, and growth equity. VC investments excludes debt or other non-equity funding, lending capital, grants and ICOs.

Buyouts, M&A, secondary rounds, and IPOs are treated as exits: excluded from funding data, but included in exit data.

#### **Underlying Data**

Dealroom's proprietary database and software aggregate data from multiple sources: harvesting public information, user-submitted data verified by Dealroom, data engineering. Data is verified and curated with an extensive manual process.

The data on which this report builds is available via **<u>app.dealroom.co</u>**. For more info please visit dealroom.co or contact **<u>support@dealroom.co</u>**.

#### Venture Capital, Investors

Investment are referred to by their round labels such as Seed, Series A, B, C, ... late stage, and growth equity. VC investments excludes debt or other non-equity funding, lending capital, grants and ICOs.

Buyouts, M&A, secondary rounds, and IPOs are treated as exits: excluded from funding data, but included in exit data.

### FoodLabs

### ID dealroom.co