Foodtech startups and venture capital - Q1 2022

April 2022

The first VC in Europe focused on innovative consumer-facing food companies.

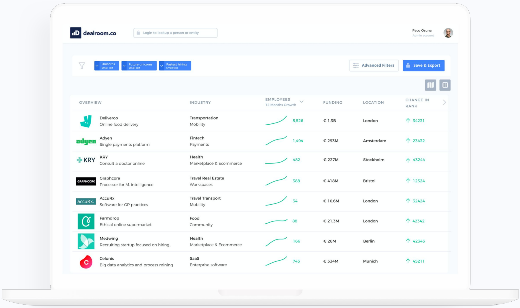
We back Food Tech entrepreneurs for a healthier, more sustainable and more efficient food system.
Five Season Ventures is the first VC fund in Europe solely focused on investing in innovative consumer-facing food companies.

*Exited

Global startup & venture capital intelligence platform.

Dealroom.co is the foremost data provider on startup, early-stage and growth company ecosystems in Europe and around the globe.

Founded in Amsterdam in 2013, we now work with many of the world's most prominent investors, entrepreneurs and government organizations to provide transparency, analysis and insights on venture capital activity.



Previous reports:

The State of European Foodtech 2021

Deliveroo: An incredible ride to IPO

The State of European Foodtech 2019

The State of European Foodtech 2018

Following a record 2021, foodtech VC has cooled in Q1 2022, amid supply chain volatility, war in Ukraine and an inflationary environment.

The combined enterprise value of foodtech companies is $1.1 trillion.

Amid public market volatility at the start of 2022, foodtech companies declined in value by 8% since the end of 2021. The cohort of companies launched between 2010-2014 declined the most, 17%. However foodtech value overall is still up +45% since the end of 2020.

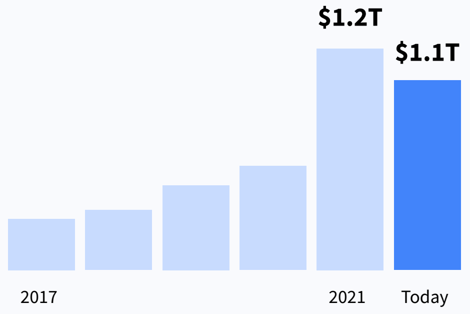
Q1 2022 foodtech investment reached $9.2 billion, down 16% year on year.

Investment into foodtech startups grew fastest in India, while the US, Europe & China contracted. With $4.6B raised in Q1 2022, food delivery is the most funded category, followed by online supermarkets and alternative protein. Pet food was the fastest-growing segment, while online supermarket funding retreated from pandemic-driven highs.

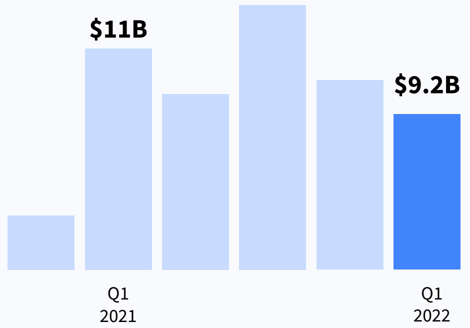
M&A activity has cooled, while IPOs have all put frozen.

With only 84 exits, this quarter saw fewer exits than any quarter of 2021. With many companies putting their planning public debuts on hold, there were only 4 traditional IPOs and no SPACs in Q1 2022, the fewest of any quarter since Q1 2020.

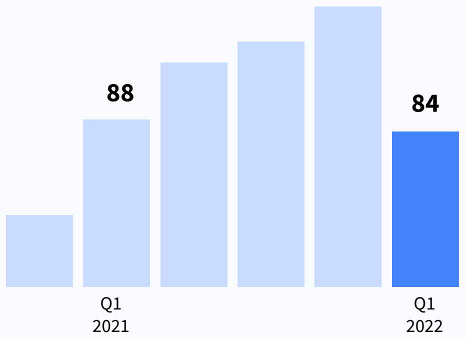
Combined enterprise value by year



Global VC investment by year



Number of exits by year



 Source: Dealroom.co.

Ivan Farnetti
General Partner
& co-founder at
Five Seasons Ventures

FIVE SEASONS VENTURES

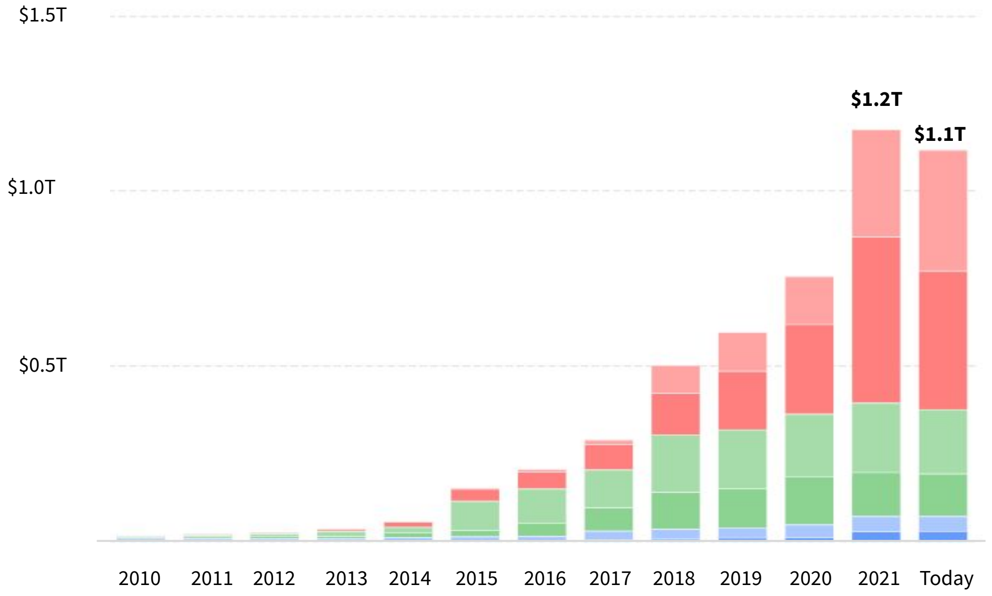
"2021 has been an exceptional year for innovation in the food supply chain.

More capital went to fund more entrepreneurs than ever at all stages. Some of the ways capital found its way into these companies was more opportunistic (i.e. SPACs) while others were structural, with the arrival of more and larger specialised funds investing in this sector. Food delivery, Quick Grocery services and D2C in general have been growing strong in Europe and attracted the lion's share of investments at ambitious valuations, but also healthier and more sustainable food and beverage products getting investor's trust and commitment at good scale.

As we entered 2022 however, increased geopolitical uncertainty and concerns on key food commodities, has added a layer of risk onto an already inflationary environment. The demand/supply balance of capital in the foodtech sector may well readjust, following what we have seen in public markets, to a more conservative level. The institutional capital will continue to back quality companies and entrepreneurs, while we might see a shift away of the less focused investors, or opportunistic asset manager players, like what we have seen happening during periods of high uncertainty in the past 20 years."

After early 2022 public market volatility, the combined value of foodtech companies is down 8.3% since December to $1.1 trillion, but is still up +45% since 2020.

Combined enterprise value of foodtech companies by launch year [» view online]

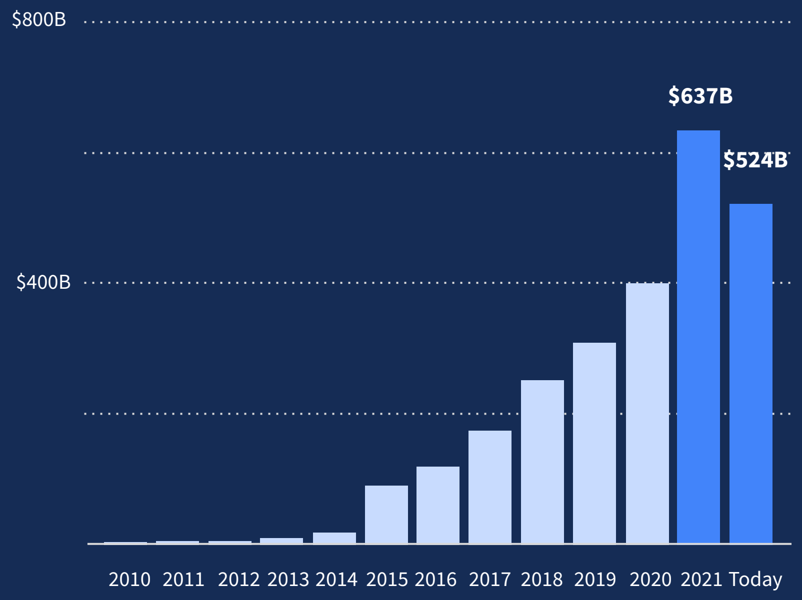


Cohorts, by year founded		Change since 2021 Q4
2015-now	$345B value	13% increase
2010-2014	$396B value	17% decrease
2005-2009	$184B value	7.5% decrease
2000-2004	$122B value	4.7% decrease
1995-1999	$44B value	1% increase
1990-1994	$27B value	18% decrease

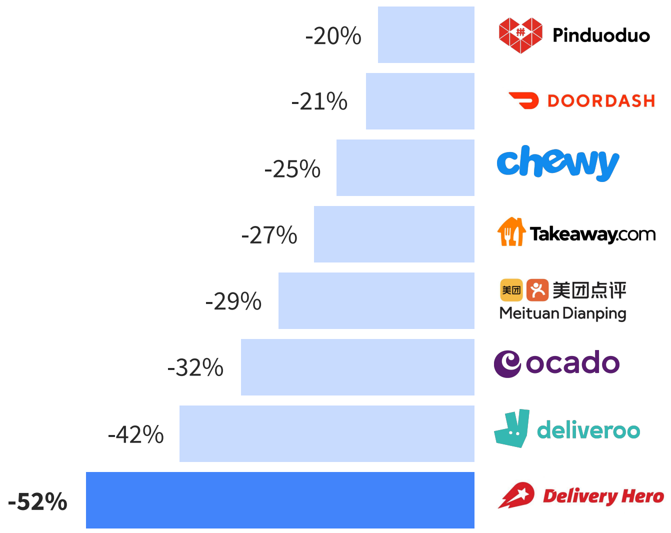
 Source: Dealroom.co

The 2022 drop in foodtech value is driven by public foodtech, particularly within the delivery space.

Combined enterprise value of public foodtech companies
» view online



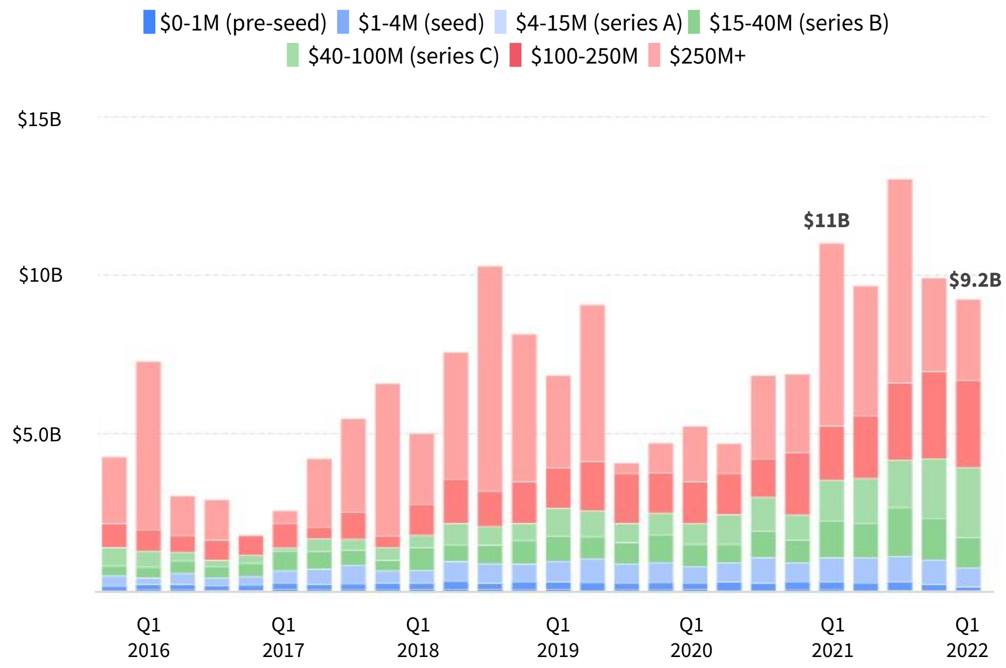
Change in share price since Q4 2021 of selected public foodtech companies



Source: Dealroom.co.

Global VC investment in foodtech reached $9.2 billion, down 16% year on year.

Global VC investment in foodtech by quarter » view online



The biggest VC rounds of Q1 2022

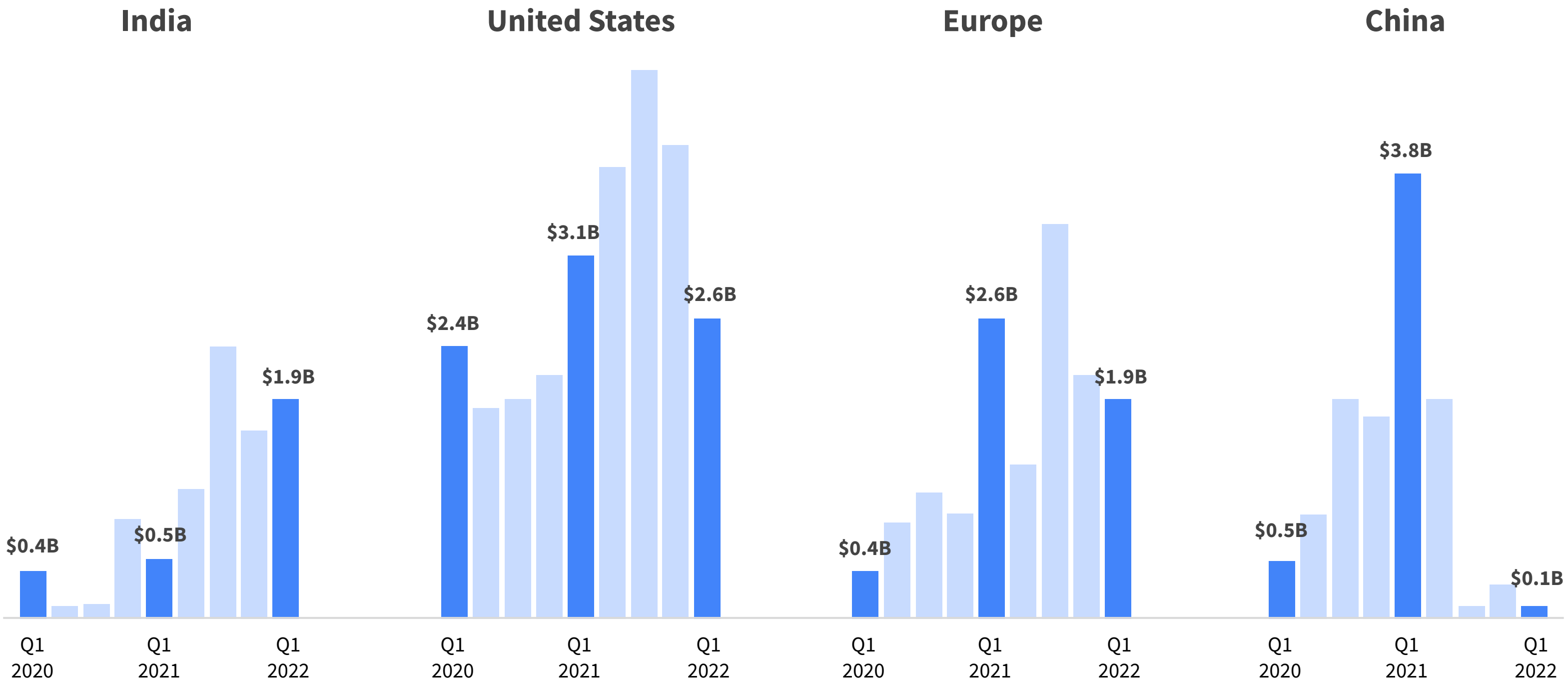
» view online

Swiggy	Food delivery app	$700M
Bolt	Super app	$628M
getir	Online grocery retailer	$768M
Plenty	Vertical farming	$400M
Redefine Meat	Plant based meat	$135M
remilk.	Plant-based diary	$120M
nextgen	Plant-based protein	$100M
gousto	Meal kits	$100M
flipdish	Restaurant ordering tool	$96M

Source: Dealroom.co

In Q1 2022, foodtech VC investment grew fastest in India among major markets, while the US, Europe and China saw varying levels of contraction.

VC investment in foodtech by region ($B) » view online

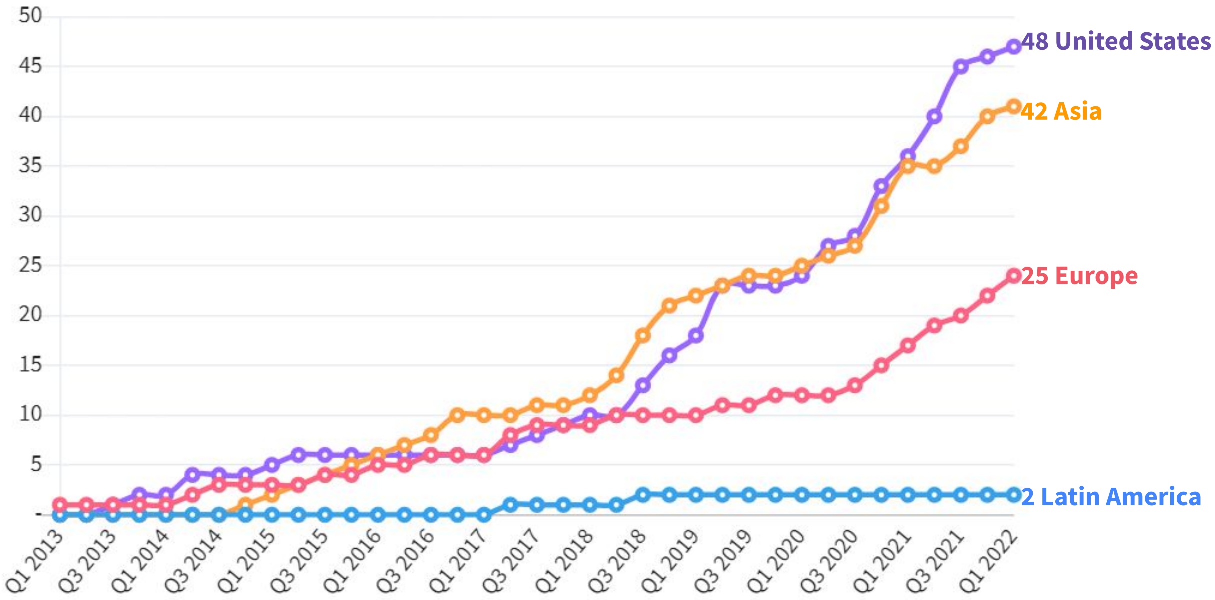


 Source: Dealroom.co

FIVE SEASONS VENTURES | dealroom.co

There are now 119 foodtech unicorns, 5 of which were created in Q1 2022. The US leads with 48 unicorns, followed by Asia (42) and Europe (25).

Cumulative number of foodtech unicorns: » view online



5 New Unicorns in Q1 2022

AthleticGreens.

DealShare

OASIS

deliverect

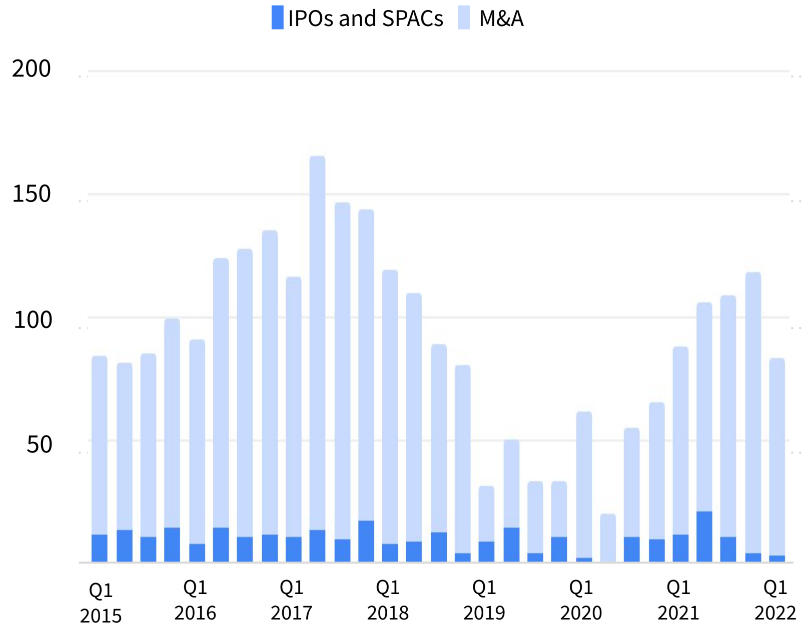
flipdish

 Source: Dealroom.co A unicorn is defined as a rapidly scaling company (and tech-enabled) that has reached a $1 billion valuation. More details here.

FIVE SEASONS VENTURES | dealroom.co

M&A activity has cooled off, while IPOs have frozen almost entirely.

Number of foodtech exits



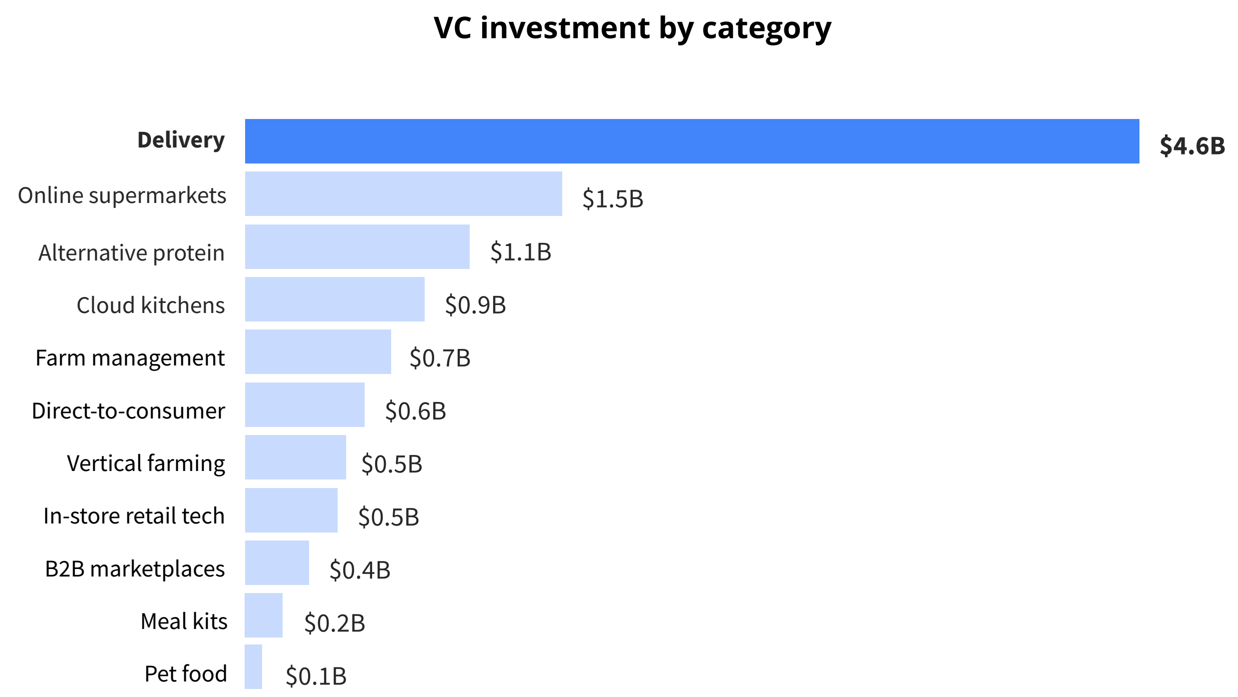
Biggest food tech exits in Q1 2022: » view online

NAME	BACKERS	ACQUIRORS	MARKET	ENTERPRISE VALUE
Gavilon Agricultural and Energy Commodi...	NGL Energy Partners General Atlantic	Viterra	food agritech	$1.1b
NomNomNow Uses data, technology and cutting ...	Headline Greycroft Partners CircleUp Tandem Capital Bullish	Mars	food home living kitchen & cooking tech	$1.0b
Ruchi Soya Industries Ruchi Soya is India's largest manuf...	-	Patanjali Ayurved	food in-store retail & restaura...	$575m
Marrone Bio Innovations	Point Financial Ospraie Ag Science Valley Oak Investments Checkmate Capital Group Syngenta Group Ventures	Bioceres S.A.	health food	$236m
Pete's Pete's - We Live For This Stuff | Try ...	Mosaic Capital Partners	Local Bounti	food	$123m
Deroose Plants Specializes in breeding, propagati...	-	Agriforce growing systems ltd.	logistics & delivery agritech	$69m
Real Foods Real Foods operates food cafes Its ...	Kleoss Capital	Virgin Active (Pty)	food	£29m

 Source: Dealroom.co The stats include companies in the process of going public through SPAC: link

FIVE SEASONS VENTURES | dealroom.co

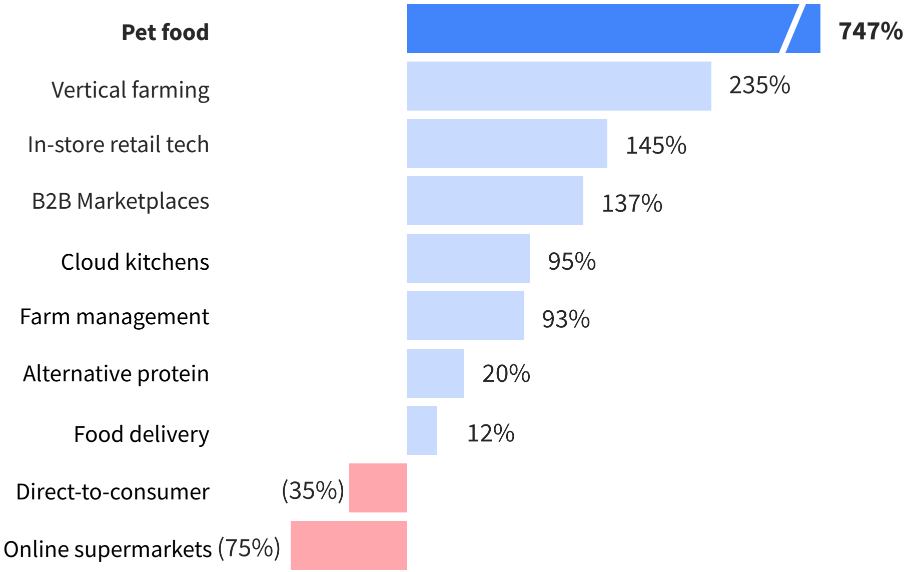
With $4.6 billion raised globally in Q1 2022, VCs are still bullish on food delivery, despite the public share prices in the space being squeezed.



 Source: Dealroom.co

Pet food startups saw the biggest funding uplift year on year in Q1, while online supermarket funding retreated.

VC investment Q1 2022 vs. Q1 2021



The pet food market is expected to grow at 5.4% CAGR by 2029, reaching $164B.

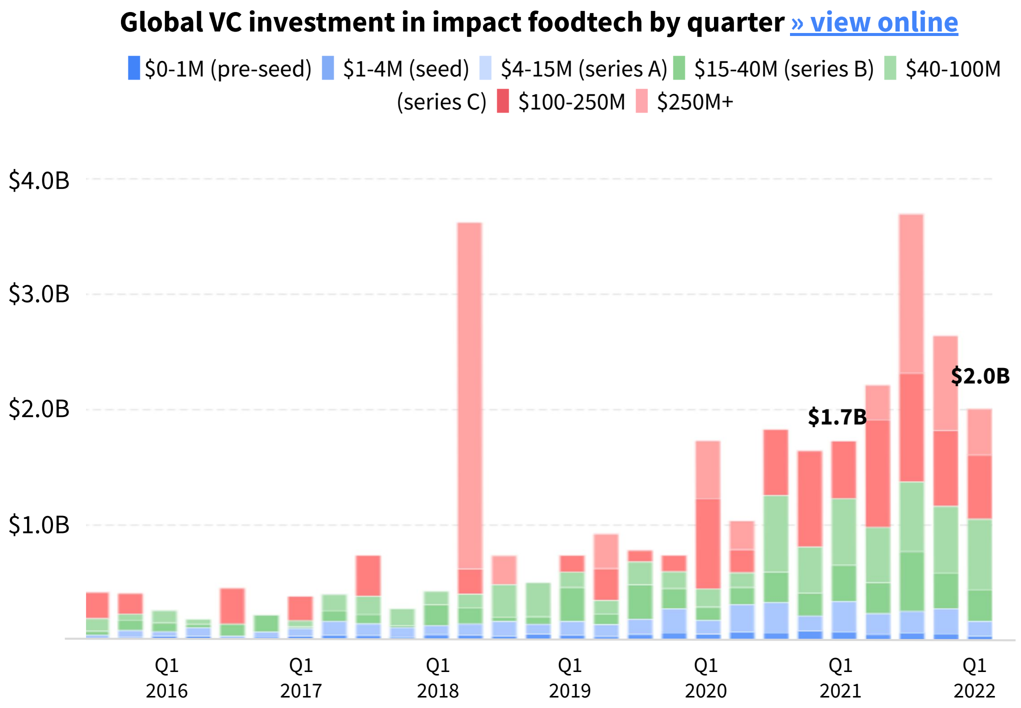
"Our research concluded that the humanisation of pets is following the trend of human preferences being projected on pet nutrition choices (think plant based, organic, functional food), and the trend towards food supplements is also growing stronger rapidly (6.1% CAGR for functional snacks vs. 5.4% for regular pet food). Pet parents want to offer their dog all the nutrients they need, and often have the perception that most of the current food offerings fall short on that front. Our portfolio company Mammaly, which is selling functional treats for pets, was only launched commercially in 2020 and has since then been growing almost 40% MoM with no signs of slowing down."

Saskia Hoebée
Senior Associate at
Five Seasons Ventures

FIVE SEASONS VENTURES

 Source: Dealroom.co.

Global VC investment in impact-focussed foodtech startups increased 18% year on year.



 Source: Dealroom.co

FIVE SEASONS VENTURES | dealroom.co

Benjamin Peri
co-founder at
Pyxo

Activity
Tech platform providing reusable packaging solutions for food service

Last round
€7m

Lead VCs
Five Seasons Ventures, Eurazeo

How is the regulation framework positively impacting your business and your industry?
There are really two ways to make people adopt a more sustainable lifestyle: economic incentives (like Too Good To Go or BackMarket) or a binding regulatory framework. Pyxo is benefitting from a binding regulatory framework by January 2023 and QSR will have the obligation to offer reusable packaging on site. By 2025, the French regulator has set an objective of reducing 30% of the use of disposable packaging. Germany is witnessing a similar trend, all restaurants have the obligation to offer reusable packaging, regardless of the channel of distribution. This new regulatory framework is a huge opportunity for startups, that have started to work on different pieces of the supply chain, from consumer facing solutions like Pyxo to operating washing centers.

What is your main impact KPI?
We are monitoring the number of packages that were not thrown away thanks to Pyxo.

What is the vision of Pyxo?
Reuse. That's our magic word. This is the only option that our society has to grow sustainably. Even recycling is not enough. In the longer term, Pyxo has the ambition to help all industries reuse their resources, from food to fashion.

What are the main challenges Pyxo is facing in its mission to reduce waste?
The main problem does not really come from corporates, even if reusable packaging is more expensive, because they know that ultimately they will have to change the way they operate. The main challenge is to convince consumers because it is less convenient for them. Pyxo is addressing this challenge by creating an enhanced experience for consumers through gamification and social features. The ambition is to create such an amazing experience that ultimately corporates will come to Pyxo because consumers are asking for it.

Plant-based future?

Due to disruptions of the supply chain, climate change and rising energy prices, food prices have reached the highest level since 2011 according to a UN index. Key ingredients for meat production and labor costs have been increasing, while the price of a plant-based burger has been declining. Still, plant-based meat is a premium product.

In Q1, Singapore-based Next Gen Food, the company behind the plant-based chicken burger TiNDLE, raised the largest ever Series A in that category.

There are now 175 startups working on plant-based meat alternatives. In addition, there are 244 startups developing plant-based fish and dairy consumer products. VC Investment in plant-based meat products increased 20% year-over-year to $3.0 billion in 2021.

The first commercially viable plant-based protein products were introduced in the 1930s made out of soy and wheat, though taste and texture hardly resemble conventional meat, unlike today's generation of plant-based meat products. This is thanks to 160+ startups working on flavour and mouthfeel.

NAME	TYPE	GROWTH SIGNAL 12 months growth	LAUNCH DATE	VALUATION
InnovaFeed Leading insect farmer producing n...	selling own inventory manufacturing	190	2016	$616–924m
Anuvia Plant Nutrients Manufactures an enhanced efficie...	selling own inventory manufacturing	57	2005	$412–618m
Joyn Bio Designs microbes that provide cer...	manufacturing	84	Sep 2018	$400–600m
Sound Agriculture Alternative fertilizer company	manufacturing	85	2013	$180–270m
CampoRico Offers high quality services to cust...	manufacturing	77	2014	$160–240m
Ostara Nutrient Recovery Technologies Ostara develops technology to re...	manufacturing	54	2005	$44–66m
N2 Applied Improving global food production ...	hardware commission manufacturing	37	Jun 2010	$40–60m
Pro Farm Ltd Pro Farm Technologies, we're an a...		23	2014	$32m
Sistema.bio Hybrid reactor biodigester that tra...	manufacturing	113	2010	$31–47m

Open 420+ plant-based meat startups

Source: Dealroom.co

Fertilizer and food security

Ukraine, known as "the breadbasket of Europe", is the world's largest producer of sunflower seeds. It also ranks among the top 10 producers of corn, barley, rapeseed, wheat and soybeans. 25% of the world's "black soil", ideal for growing crops like wheat, cotton, oilseeds, but also cereals, fruit and vegetables, is in Ukraine, and agriculture accounts for 9.3% of the country's GDP. The invasion of Ukraine by Russia has prompted new concerns and discussion around food security and international reliance on production.

Beyond the direct disruption the crop production, the Russian invasion of Ukraine is set to have cascading knock-on effects for global food security and production.

Globally, Russia accounts for 23% of ammonia, 14% of urea, and 21% of potash, as well as 10% of processed phosphate exports, according to The Fertilizer Institute. In Europe, Russia supplies about a third of natural gas which is a main source of input for nitrogen fertilizers.

Globally, there are 154 startups working on smarter, tech-enabled fertilizers production, with a combined enterprise value of $3.0 billion.

Open 150+ smart fertilizer startups

NAME	TYPE	GROWTH SIGNAL 12 months growth	LAUNCH DATE	VALUATION
InnovaFeed Leading insect farmer producing n...	selling own inventory manufacturing	190	2016	$616–924m
Anuvia Plant Nutrients Manufactures an enhanced efficie...	selling own inventory manufacturing	57	2005	$412–618m
Joyn Bio Designs microbes that provide cer...	manufacturing	84	Sep 2018	$400–600m
Sound Agriculture Alternative fertilizer company	manufacturing	85	2013	$180–270m
CampoRico Offers high quality services to cust...	manufacturing	77	2014	$160–240m
Ostara Nutrient Recovery Technologies Ostara develops technology to re...	manufacturing	54	2005	$44–66m
N2 Applied Improving global food production ...	hardware commission manufacturing	37	Jun 2010	$40–60m
Pro Farm Ltd Pro Farm Technologies, we're an a...		23	2014	$32m
Sistema.bio Hybrid reactor biodigester that tra...	manufacturing	113	2010	$31–47m

Source: Dealroom.co

Explore the key themes driving Foodtech.

Find more in our landscapes:

» Online groceries

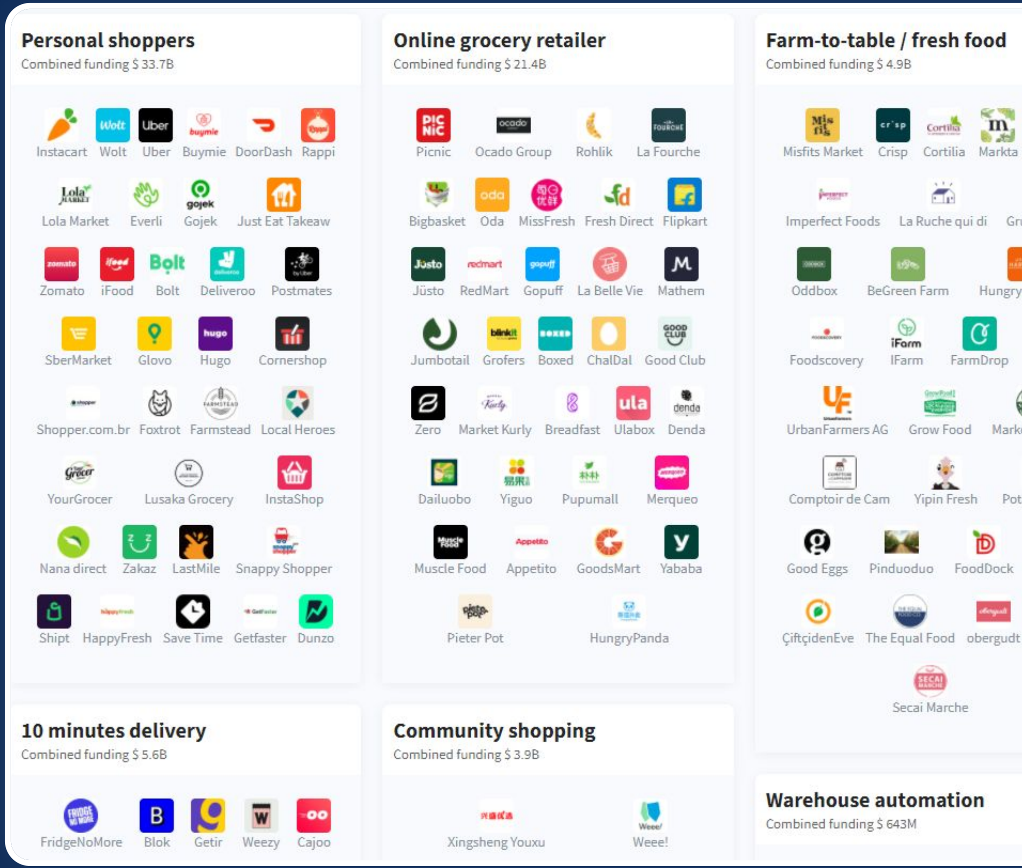
» Food waste

» Alternative protein

» Insects

» More ...

dealroom.co




dealroom.co

FOODTECH

Powered by FIVE SEASONS VENTURES

Fertile ground for vertical farming startups

Climate change and water security have driven foodtech entrepreneurs to find innovative ways to feed the growing global population and reinvent farming as we know it.

A busy startup segment, $3.1 billion of VC investments has poured into vertical farming startups in the last five years, and 2022 is already on track to be a big record. The combined value of startups in the space has increased 19x in the same period, and there are now four companies that have reached unicorn status.

A drive to extend growing seasons and move production closer to the point of consumption, while leveraging controlled growing environments, have resulted in not one but three forms of vertical, or indoor, farming.

- **Hydroponic:** growing plants without soil. Roots are dropped in a liquid containing nutrients and trace elements. Startups in the category include Just Vertical.
- **Aquaponic:** A closed system that is mimicking the natural environment. Water from a tank farming fish is connected to a unit containing plants, which absorb the nutrient-rich water. The plants purify the water, which is led back to the fish tank. Startups in the category include Refarmers and Prontus.
- **Aeroponic:** nutrients are misted in the air where plants are grown. In this category we count startups such as AeroFarms and CleanGreans

There are clear benefits of vertical farming such as pesticide-free produce, cleaner water, and proximity to customers. However, at this stage, the jury is out on whether vertical farms are truly the future of produce. The ecosystem is yet to converge to one business model and reach profitability. But there are now 103 startups now competing to make the model work.

Get the latest weekly insights, with the foodtech newsletter.

Sign up

FIVE SEASONS VENTURES

dealroom.co