



EMERGING TECH RESEARCH

# Agtech VC Trends

VC activity across the agtech ecosystem

Q4  
2024





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For previous updates as well as our complete agtech research, please see the designated [analyst workspace](#) on the PitchBook Platform.



# Agtech landscape

- 1 Ag biotech
- 2 Agrifinance & e-commerce
- 3 Indoor farming
- 4 Animal ag
- 5 Precision ag





# Agtech VC ecosystem market map

This market map is an overview of venture-backed or growth-stage companies that have received venture capital or other notable private investments. [Click to view the full map on the PitchBook Platform.](#)

## 1 Ag biotech

### Animal biotech



### Biomaterials



### Plant biotech



### Plant data & analysis



## 3 Indoor farming

### Components



### Systems



### Growers



## 4 Animal ag

### Aquaculture



### Insect farming



### Livestock & land animal technology



### Pollination tech



## 5 Precision ag

### Drones & imagery analytics



### Farm management software



### Field IoT



### Robotics & smart field equipment



## 2 Agrifinance & e-commerce

### Agribusiness marketplaces



### Finance & insurance





# VC activity

The agricultural technology (agtech) sector experienced a tumultuous year in 2024, marked by both challenges and opportunities. Despite facing significant headwinds, the industry demonstrated resilience and continued innovation across various segments.

## Investment trends

The year concluded with a strong fourth quarter, as agtech VC deal activity grew to \$1.8 billion across 149 deals, representing an 8.9% increase QoQ. This growth built upon the momentum seen in Q3, with larger investments in more mature companies driving the trend. Consequently, the median deal value reached a record high of \$3.6 million in 2024, up 36% YoY.

However, the focus on late-stage startups led to a decline in early-stage investments, particularly in pre-seed/seed deals, which saw a 33.7% YoY decrease. This shift was evident in the quarter's top deals, such as Sound Agriculture's \$100 million Series D and Carbon Robotics' \$70 million Series D.

Despite the strong finish, annual agtech VC deal activity in 2024 experienced a significant decline. Deal value fell by 25.6%, while deal count dropped by 24.3% compared with the previous year. This downturn was primarily attributed to high interest rates, unfavorable trading conditions for public agtech companies, and a challenging exit environment.

## Sector performance

Precision agriculture emerged as the leading segment, attracting \$2.1 billion across 238 deals in 2024. The increased demand for automation, robotics, and software solutions—driven by persistent labor shortages—fueled this trend. Remote crop health monitoring technologies, particularly those utilizing aerial imagery, saw substantial funding, with notable deals for companies like Pixxel, Muon Space, and EarthOptics.

The indoor farming sector faced significant challenges, with 28 companies ceasing operations or declaring bankruptcy. Bowery, once valued at \$2.3 billion, shut down in November 2024. However, the segment was not without its successes, as evidenced by Oishii's \$150 million Series B round, valuing the startup at \$615 million.

## Global landscape

While the US maintained its position as the leading recipient of agtech VC, Asian countries made notable strides, accounting for three of the top 10 deals. The largest deal of the year was a \$200 million Series C investment in Malaysia's Aerodyne for industrial drones used in agriculture and other sectors.



## VC ACTIVITY

### Emerging technologies and themes

Throughout 2024, the agtech sector demonstrated remarkable resilience in several key areas, with AI and autonomous solutions, precision agriculture, gene editing, and biological inputs emerging as dominant themes. These technologies garnered significant attention from investors who recognized their potential to address critical global challenges such as food security and climate change. The continued focus on these areas underscored the industry's commitment to developing innovative solutions that could revolutionize agricultural practices and contribute to a more sustainable future.

Robotics and AI technologies showcased their ability to significantly enhance farm productivity while simultaneously reducing operational costs, making them increasingly attractive to farmers and agribusinesses alike. Precision agriculture solutions made substantial strides in addressing operational inefficiencies and improving sustainability metrics, offering farmers powerful tools to optimize resource use and minimize environmental impact. Gene editing technologies continued to show promise in boosting crop yields and enhancing disease resistance, although regulatory hurdles remained a challenge in some regions. Notably, biological inputs—particularly biofertilizers—gained traction as consumer demand for safer, healthier produce grew and the costs of traditional chemical inputs continued to rise. This shift toward more sustainable and environmentally friendly agricultural practices reflected a broader industry trend of balancing productivity with ecological responsibility.

### Exit activity and acquisitions

Exit activity declined in 2024, with only 35 exits totaling \$1.1 billion. The most prominent exit came from veterinary therapeutic developer Invetx's acquisition via LBO by Dechra Pharmaceuticals for \$520 million. The year saw three public listings in the agtech sector: Synspective's IPO on the Tokyo Stock Exchange, Bolt Threads' public listing via SPAC, and Kweather's IPO on the Korea Stock Exchange.

Notable acquisitions highlighted the growing importance of AI and advanced imaging in agriculture, including Kubota Corporation's purchase of Bloomfield Robotics and GEA Group's acquisition of CattleEye. Ginkgo Bioworks' acquisition of AgBiome signified the adoption of biological alternatives to traditional chemicals and growing awareness of regenerative farming practices.

### Looking ahead

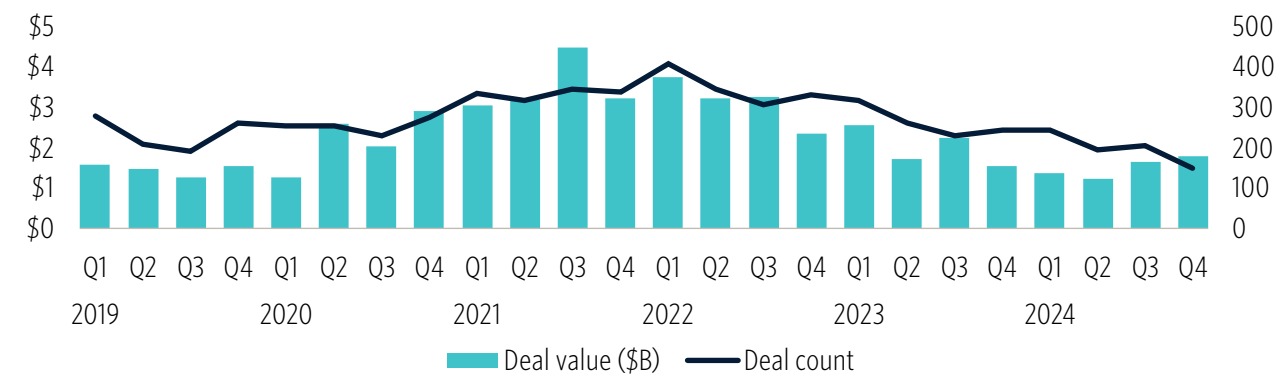
Despite the challenges faced in 2024, we anticipate a rebound in the agtech market—particularly for innovative companies with strong commercial traction—as the economy recovers and interest rates are cut. The industry's focus on capital-efficient solutions and sustainable growth, coupled with advancements in regenerative agriculture, ag biologicals, and robotics, positions it for potential growth in the coming years.

As the sector moves forward, it will continue to address critical global challenges, with increased emphasis on sustainability, food security, and climate change mitigation. The lessons learned from the challenges of 2024 will likely shape a more resilient and focused agtech industry in the future.



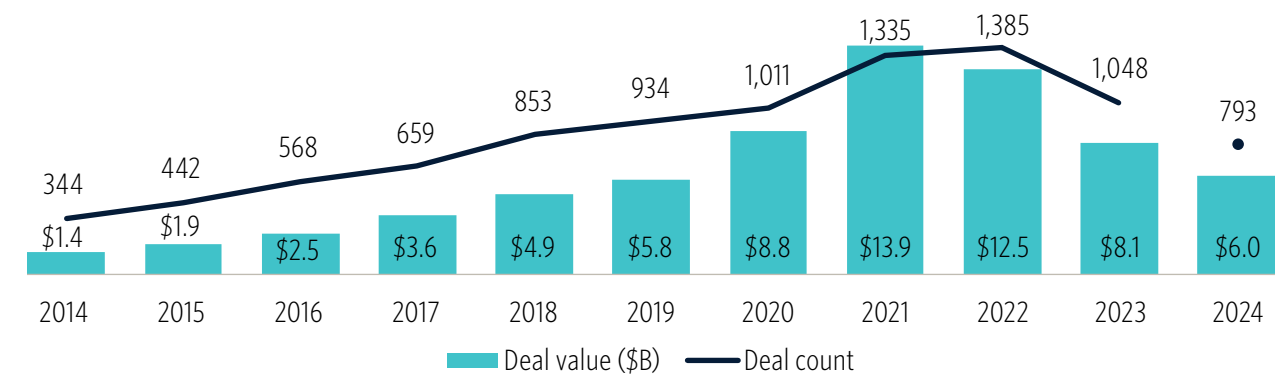
## VC ACTIVITY

### Agtech VC deal activity by quarter



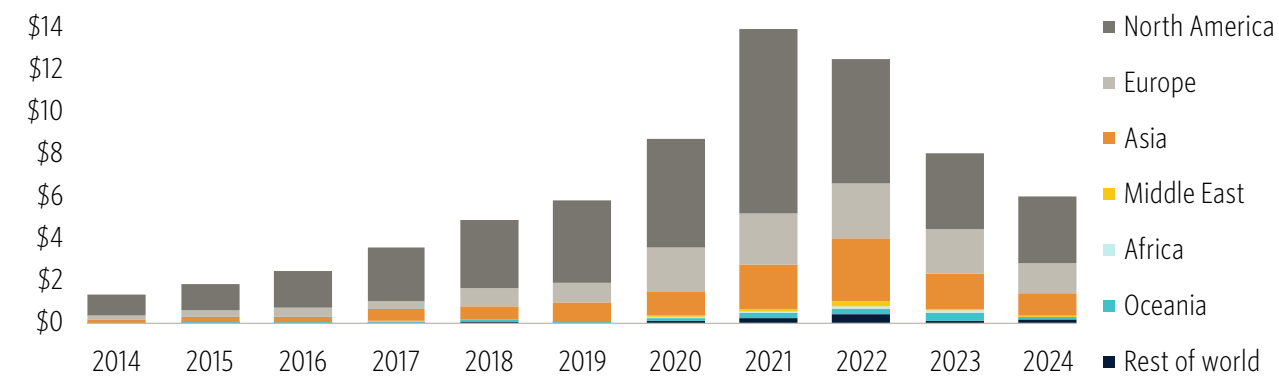
Source: PitchBook • Geography: Global • As of December 31, 2024

### Agtech VC deal activity



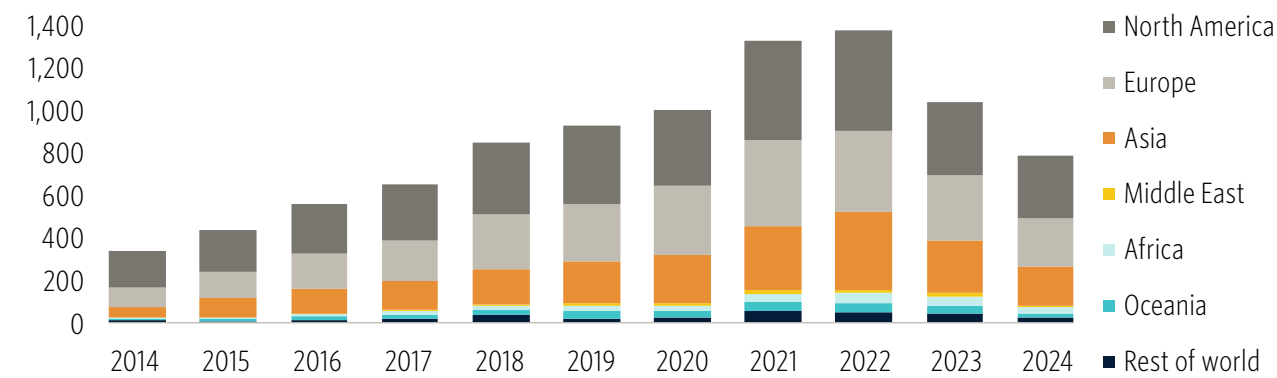
Source: PitchBook • Geography: Global • As of December 31, 2024

### Agtech VC deal value (\$B) by region



Source: PitchBook • Geography: Global • As of December 31, 2024

### Agtech VC deal count by region

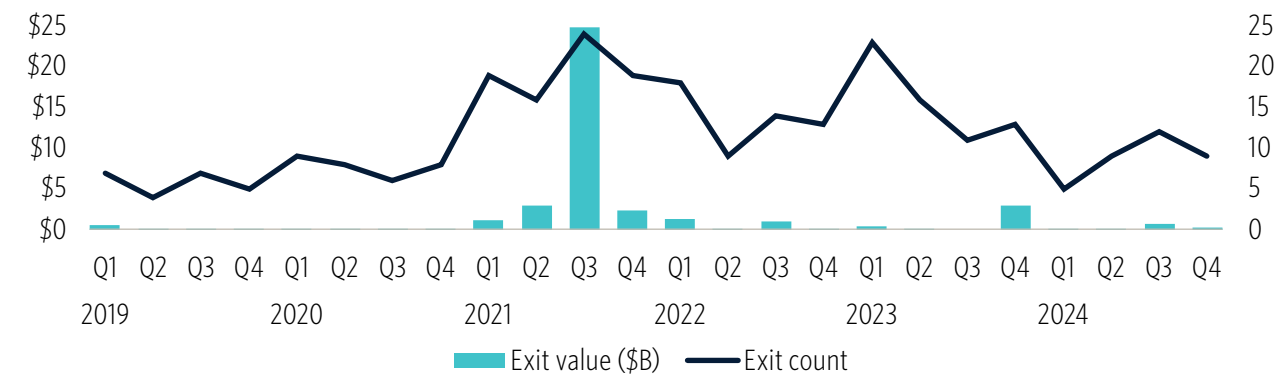


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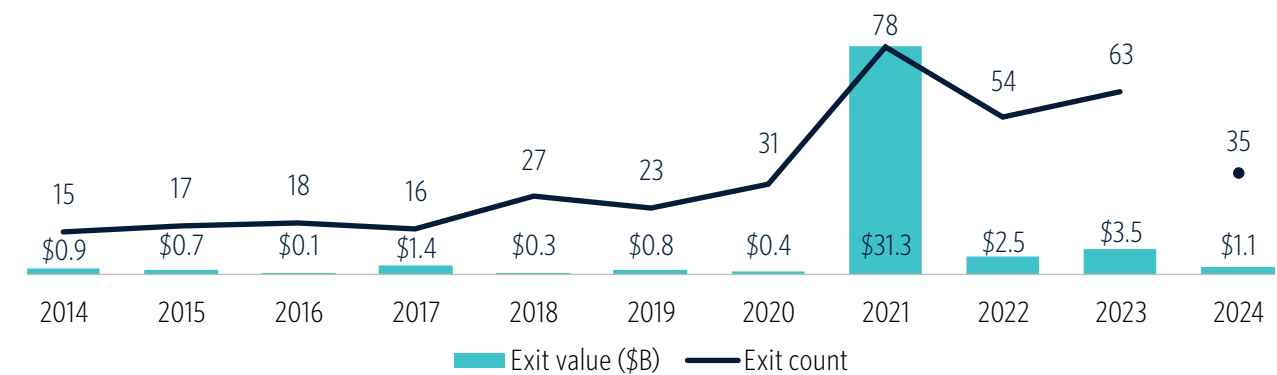
## VC ACTIVITY

### Agtech VC exit activity by quarter



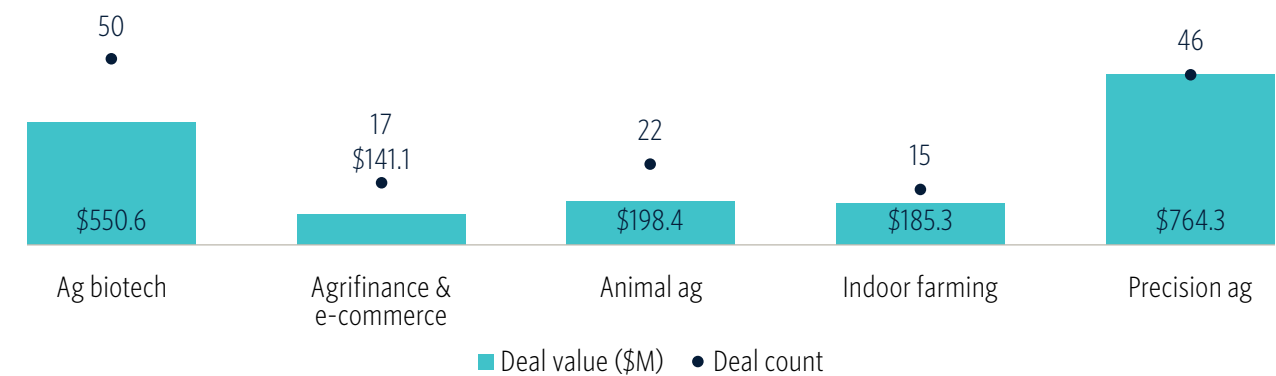
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### Agtech VC exit activity



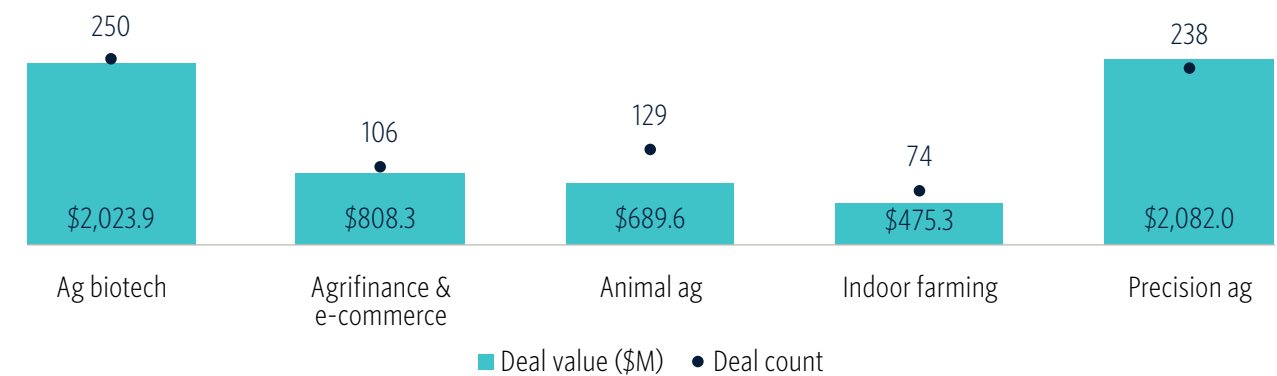
Source: PitchBook • Geography: Global • As of December 31, 2024

### Q4 2024 agtech VC deal activity by segment



Source: PitchBook • Geography: Global • As of December 31, 2024

### Trailing 12-month (TTM) agtech VC deal activity by segment

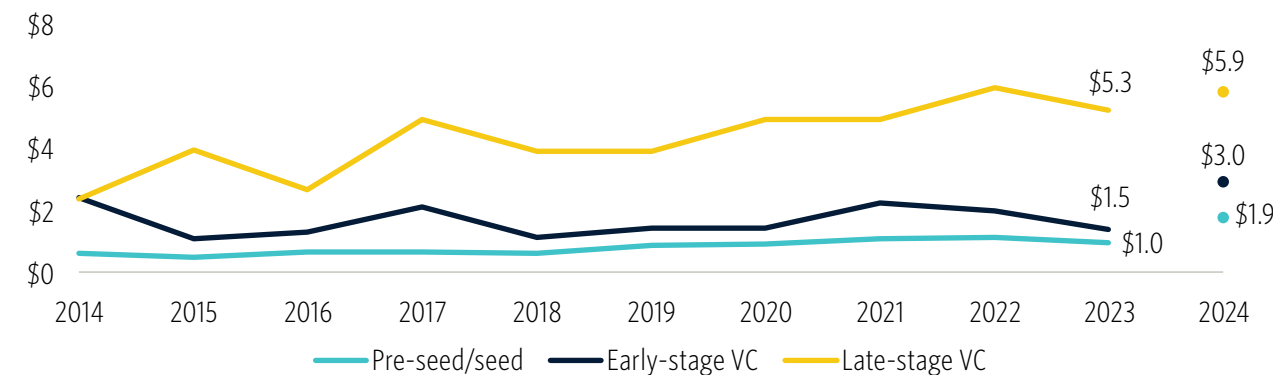


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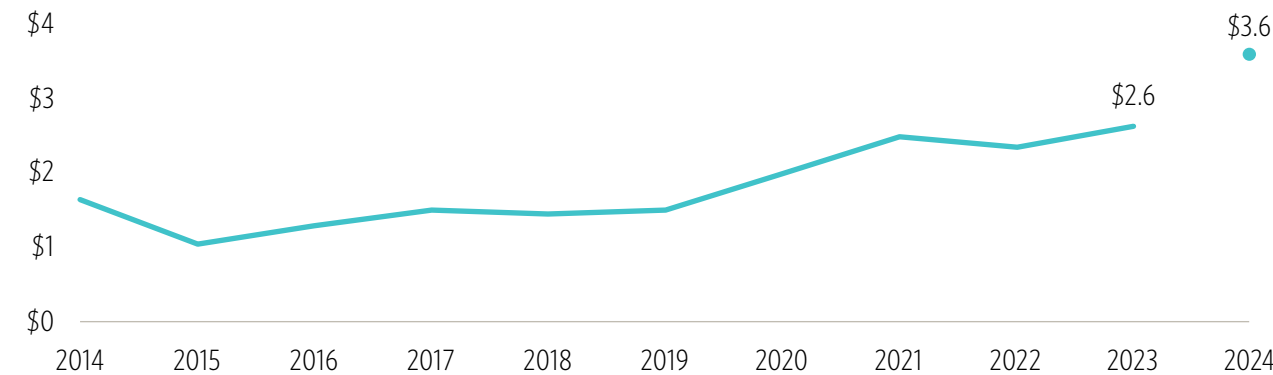
VC ACTIVITY

Median agtech VC deal value (\$M) by stage



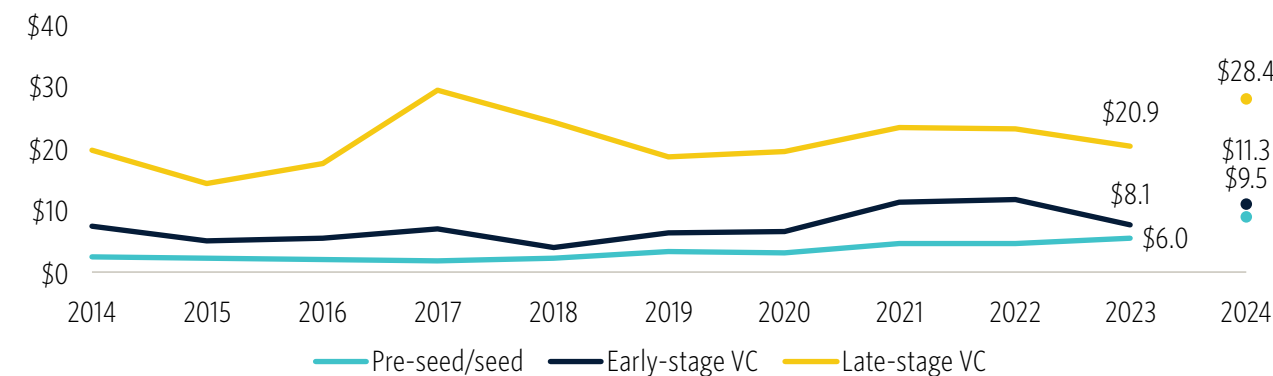
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Median agtech VC deal value (\$M)



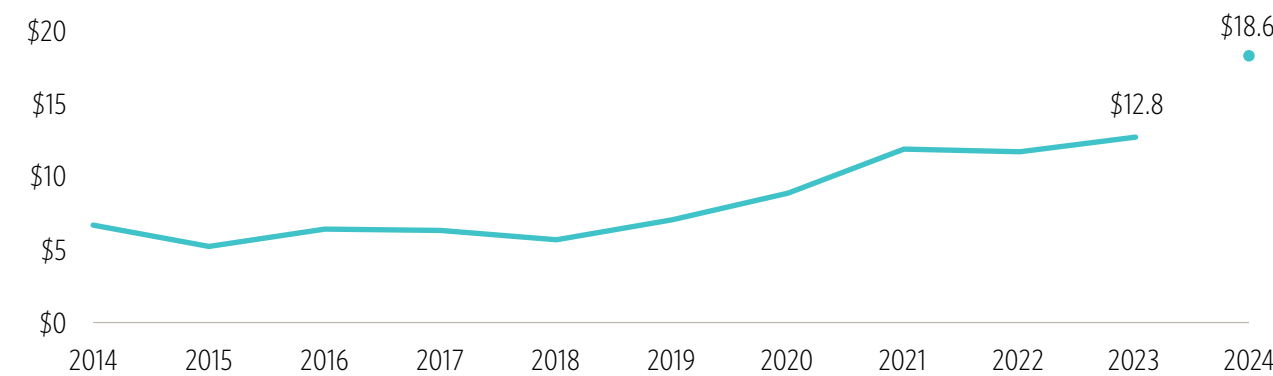
Source: PitchBook • Geography: Global • As of December 31, 2024

Median agtech VC pre-money valuation (\$M) by stage



Source: PitchBook • Geography: Global • As of December 31, 2024

Median agtech VC pre-money valuation (\$M)

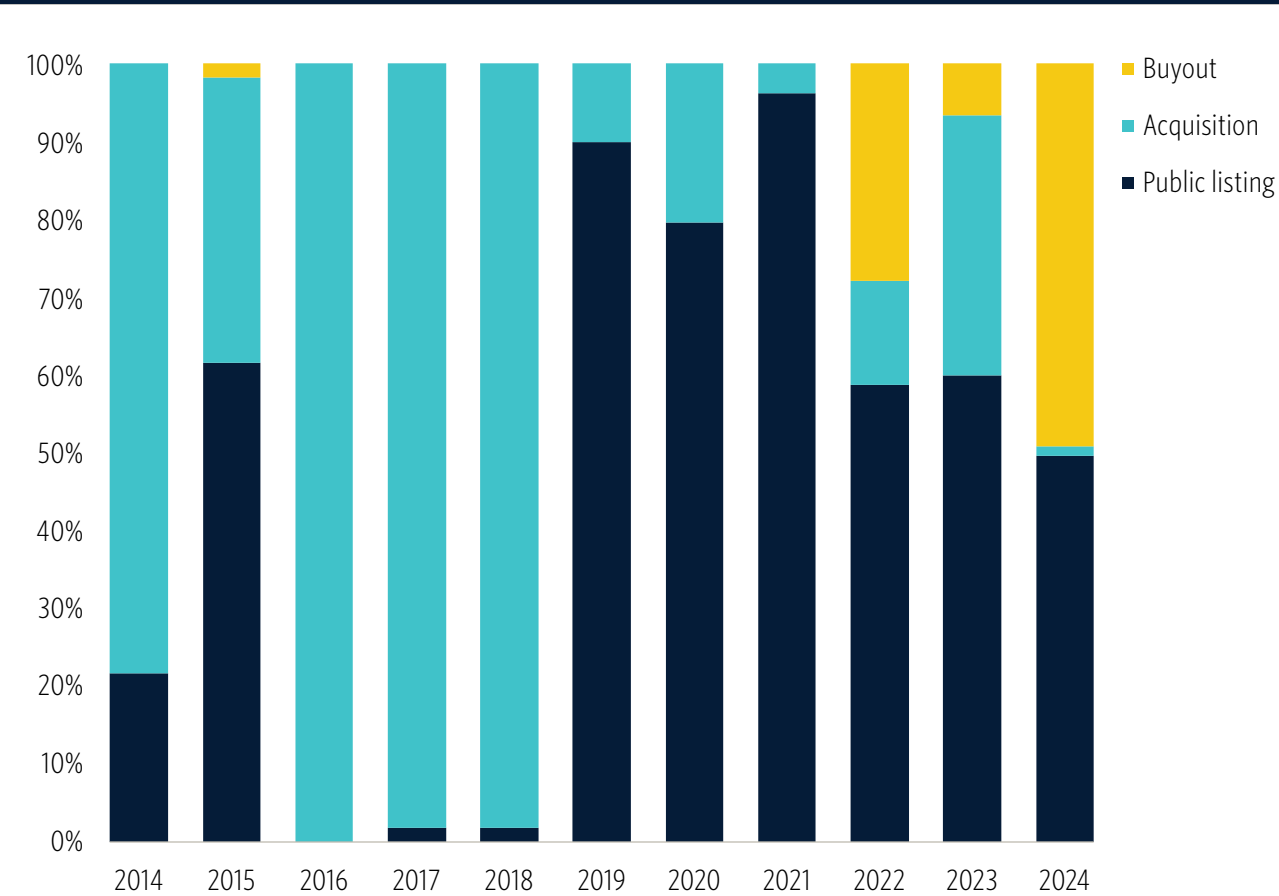


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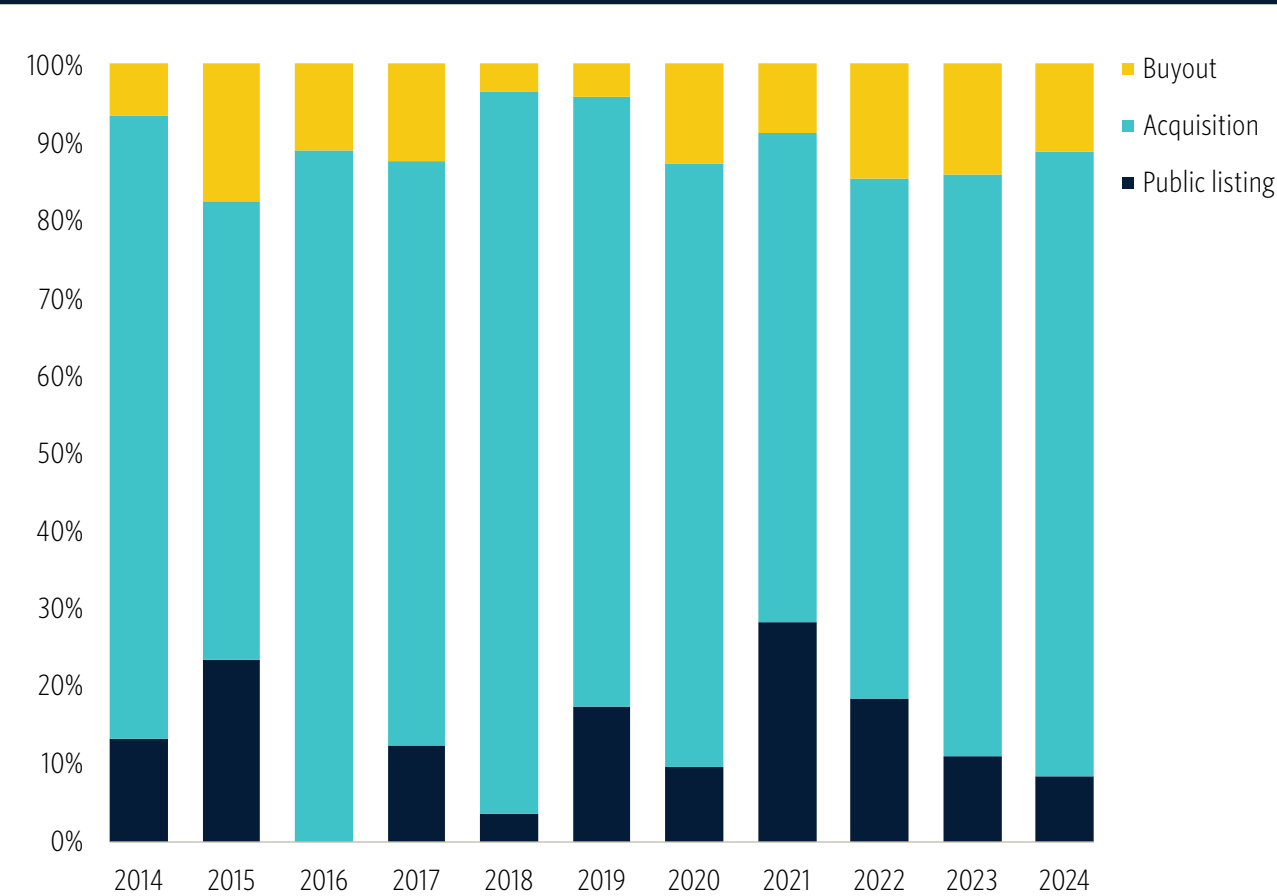
VC ACTIVITY

Share of agtech VC exit value by type



Source: PitchBook • Geography: Global • As of December 31, 2024

Share of agtech VC exit count by type



Source: PitchBook • Geography: Global • As of December 31, 2024



VC ACTIVITY

Agtech heatmap

Segment	TTM total deal value (\$M)	TTM total deal count	YoY deal value growth	YoY deal count growth
Ag biotech	\$2,023.9	251	-36.9%	-12.8%
Agrifinance & e-commerce	\$808.3	106	-42.4%	-44.5%
Animal ag	\$689.6	130	-47.2%	-16.7%
Indoor farming	\$475.3	74	3.6%	-29.5%
Precision ag	\$2,082.0	239	-2.0%	-24.4%

Source: PitchBook • Geography: Global • As of December 31, 2024



VC ACTIVITY

Key agtech pre-seed and seed VC deals in Q4 2024

Company	Subsegment	Close date	Deal value (\$M)	Post-money valuation (\$M)	Deal type	Lead investor(s)	Valuation step-up (post to pre)
Atmo AI	Drones & imagery analytics	December 20	\$17.6	\$94.1	Seed	N/A	N/A
Funga	Plant data & analysis	December 5	\$5.1	\$26.0	Seed	N/A	1.5x
Celleste Bio	Plant data & analysis	December 5	\$4.5	N/A	Seed	Supply Change Capital	N/A
NitroVolt	Plant biotech	November 9	\$3.8	N/A	Seed	BackingMinds, Denmark's Export and Investment Fund	N/A
Hoofprint Biome	Animal biotech	December 17	\$3.8	N/A	Seed	AgriZeroNZ	N/A
Crop Diagnostix	Plant biotech	December 19	\$3.5	\$10.5	Seed	N/A	N/A
AgriRobot	Robotics & smart field equipment	December 11	\$2.6	N/A	Seed	Norminal Venture Finance	N/A
Arable	Indoor growers	November 1	\$2.6	N/A	Seed	N/A	N/A
Alvie	Field IoT	December 19	\$2.2	N/A	Seed	Tilia Impact Ventures	N/A
Oaken	Farm management software	October 7	\$2.0	\$9.0	Seed	N/A	N/A

Source: PitchBook • Geography: Global • As of December 31, 2024



VC ACTIVITY

Key agtech early-stage VC deals in Q4 2024

Company	Subsegment	Close date	Deal value (\$M)	Post-money valuation (\$M)	Deal type	Lead investor(s)	Valuation step-up (post to pre)
Terradot	Drones & imagery analytics	December 12	\$49.0	N/A	Series A	John Doerr	N/A
Agtonomy	Robotics & smart field equipment	October 16	\$32.8	N/A	Series A	Autotech Ventures, Momenta Ventures	N/A
NetZero	Biomaterials	November 14	\$27.0	N/A	Early-stage VC	N/A	N/A
Klim	Farm management software	November 12	\$23.8	N/A	Series A	Autotech Ventures, Momenta Ventures	N/A
Inevitable Technology	Farm management software	December 11	\$15.0	\$70.5	Series A1	N/A	1.3x
Cascadia Seaweed	Plant biotech	November 12	\$7.2	\$18.0	Series A	N/A	N/A
Stockguard	Livestock & land animal technology	October 15	\$6.0	N/A	Early-stage VC	N/A	N/A
Solis Agrosiences	Plant data & analysis	December 1	\$4.5	\$11.0	Series A	N/A	N/A
FruitScout	Farm management software	October 10	\$3.8	N/A	Early-stage VC	N/A	N/A
Singrow	Indoor growers	October 23	\$3.0	\$11.7	Early-stage VC	N/A	N/A
Everest Carbon	Farm management software	December 3	\$3.0	N/A	Early-stage VC	N/A	N/A

Source: PitchBook • Geography: Global • As of December 31, 2024



VC ACTIVITY

Key agtech late-stage VC deals in Q4 2024

Company	Subsegment	Close date	Deal value (\$M)	Post-money valuation (\$M)	Deal type	Lead investor(s)	Valuation step-up (post to pre)
Oishii	Indoor growers	December 17	\$150.0	\$615.0	Series B	Nippon Telegraph & Telephone, Resilience Reserve	1.3x
Carbon Robotics	Robotics & smart field equipment	October 17	\$70.0	\$375.0	Series D	BOND Capital	1.7x
Pixxel	Drones & imagery analytics	December 9	\$60.0	N/A	Series B	N/A	N/A
Entosystem	Insect farming	October 2	\$58.0	N/A	Late-stage VC	Fondaction, Idealist Capital, Sanimax	N/A
EarthOptics	Field IoT, plant data & analysis	November 19	\$55.0	\$105.0	Late-stage VC	Conti Ventures, The Production Board	1.0x
Agrolend	Finance & insurance	October 18	\$52.0	N/A	Series C	Creation Investments Capital Management, Syngenta Group Ventures	N/A
Elicit Plant	Plant biotech	November 14	\$51.9	N/A	Series B	Carbyne Equity Partners	N/A
Tidal Vision	Plant biotech	November 25	\$46.7	\$500.0	Series B2	N/A	1.5x
xFarm	Farm management software	October 9	\$39.9	N/A	Series C	Partech	N/A
Asto CT	Livestock & land animal technology	October 4	\$35.5	\$267.0	Series C	N/A	1.1x

Source: PitchBook • Geography: Global • As of December 31, 2024



VC ACTIVITY

Key agtech venture-growth deals in Q4 2024

Company	Subsegment	Close date	Deal value (\$M)	Post-money valuation (\$M)	Deal type	Lead investor(s)	Valuation step-up (post to pre)
Aerodyne	Drones & imagery analytics	December 19	\$200.0	N/A	Series C	N/A	N/A
Sound Agriculture	Plant biotech	December 17	\$100.0	\$375.0	Series D	BMO Capital Markets, Chan Zuckerberg Initiative, S2G Ventures	1.5x
Ecozen	Robotics & smart field equipment	November 11	\$75.0	N/A	Late-stage VC	N/A	N/A
Terviva	Plant biotech	December 20	\$46.2	N/A	Late-stage VC	N/A	N/A
Nuritas	Plant data & analysis	December 20	\$42.0	N/A	Series C	M&G	N/A
Sistema.bio	Plant biotech	October 14	\$19.3	N/A	Late-stage VC	EDFI MC	N/A
Aereo	Drones & imagery analytics	October 7	\$16.8	N/A	Series B	360 ONE, JSW Ventures	N/A
Supernormal Greens	Indoor growers	October 31	\$14.4	\$32.5	Late-stage VC	N/A	0.3x
Orbital Sidekick	Drones & imagery analytics	November 7	\$8.6	\$62.0	Series A2	N/A	1.5x
Hazel Technologies	Plant biotech	November 12	\$8.2	\$109.2	Series AA	N/A	1.4x

Source: PitchBook • Geography: Global • As of December 31, 2024



VC ACTIVITY

Key agtech VC exits in Q4 2024

Company	Subsegment	Close date	Exit value (\$M)	Exit type	Post-money valuation (\$M)	Acquirer/stock exchange
Synspective	Drones & imagery analytics	December 19	\$274.0	Public listing	\$341.2	Tokyo Stock Exchange
Rezatec	Drones & imagery analytics	December 12	N/A	Acquisition	N/A	N/A
Geora	Finance & insurance	December 4	N/A	Acquisition	N/A	AgriProve
Leaf Trade	Agribusiness marketplaces	November 26	N/A	Acquisition	N/A	LeafLink
Ferris Genomics	Animal biotech	November 20	N/A	Acquisition	N/A	Solis Agrosiences
Databourg Systems	Farm management software	November 15	N/A	Acquisition	N/A	Komunidad
Athenium Analytics	Drones & imagery analytics	November 6	N/A	Buyout	N/A	Hale Capital Partners
AQUAOSO	Finance & insurance	December 19	N/A	Acquisition	N/A	Growers Edge
ReCarbn	Biomaterials	December 19	N/A	Acquisition	N/A	Skytree

Source: PitchBook • Geography: Global • As of December 31, 2024



VC ACTIVITY

Top VC investors in agtech companies since 2024

Company	Total deal count	Pre-seed/seed	Early-stage VC	Late-stage VC	Venture growth	Investor type
Climate Capital	14	7	5	1	1	VC
SOSV	12	5	2	4	1	VC
S2G Ventures	10	1	1	5	3	VC
AgFunder	9	2	6	1	0	VC
Cavallo Ventures	8	2	3	2	1	CVC
Enterprise Ireland	8	1	2	4	1	VC

Company	Total deal count	Pre-seed/seed	Early-stage VC	Late-stage VC	Venture growth	Investor type
Omnivore Capital Management	8	1	3	3	1	VC
Fall Line Capital	7	1	1	4	1	VC
Trailhead Capital	7	2	2	3	0	VC
Ponderosa Ventures	7	4	3	0	0	VC
Antler	7	7	0	0	0	VC
Gaingels	7	1	2	3	1	VC

Source: PitchBook • Geography: Global • As of December 31, 2024



VC ACTIVITY

Most active investors in agtech accelerator deals in 2024

Investor	Deal count	HQ location
Thrive by SVG Ventures	29	Los Gatos, US
Plug and Play Tech Center	24	Sunnyvale, US
EIT Food	11	Leuven, Belgium
Startupbootcamp	10	Amsterdam, Netherlands
StartLife	8	Wageningen, Netherlands

Investor	Deal count	HQ location
Techstars	8	New York, US
MassChallenge	8	Boston, US
Fresh Field Catalyst Accelerator	7	Newark, US
Pusa Krishi	6	Delhi, India
GROW Accelerator	6	Singapore, Singapore

Source: PitchBook • Geography: Global • As of December 31, 2024



VC ACTIVITY

Top strategic acquirers of agtech companies since 2021

Acquirer	Deal count	Investor type
Deveron	8	Corporation
CNH Industrial	6	Corporation
BioFirst Group	5	PE-backed company
xFarm	5	VC-backed company
De Sangosse	5	PE-backed company
Ever.ag	4	PE-backed company

Acquirer	Deal count	Investor type
Datamars	4	PE-backed company
GrowGeneration	4	Corporation
Zoetis	4	Corporation
CropX	4	VC-backed company
John Deere	4	Corporation
Kubota	4	Corporation

Source: PitchBook • Geography: Global • As of December 31, 2024



VC ACTIVITY

Top PE investors in agtech companies since 2021

Investor	Deal count	Primary investor type
Unigrains	10	PE/buyout
Sofina	8	Growth/expansion
Sofiproteol	8	PE/buyout
The Carlyle Group	5	PE/buyout
Aqua Capital	4	PE/buyout

Investor	Deal count	Primary investor type
Paine Schwartz Partners	4	PE/buyout
Mérieux Equity Partners	4	PE/buyout
Bridgepoint Group	4	PE/buyout
EQT	4	PE/buyout

Source: PitchBook • Geography: Global • As of December 31, 2024



VC ACTIVITY

Top VC-backed agtech companies by total VC raised to date

Company	VC (\$M) raised to date	Subsegment	IPO probability	M&A probability	No exit probability
Indigo	\$1,951.6	Agribusiness marketplaces, Plant biotech	96%	2%	2%
Farmers Business Network	\$1,074.2	Agribusiness marketplaces, farm management software, finance & insurance	74%	24%	2%
Plenty	\$941.0	Indoor growers	92%	6%	2%
Enerkem	\$901.6	Biomaterials	38%	3%	59%
Plant-Ag	\$800.0	Indoor growers	N/A	N/A	N/A
Apeel	\$695.0	Plant biotech	95%	3%	2%
Solugen	\$637.8	Biomaterials	71%	24%	5%
Pivot Bio	\$622.0	Plant biotech	44%	27%	29%
Ynsect	\$583.4	Insect farming	67%	31%	2%
Inari	\$579.0	Plant biotech	91%	7%	2%

Source: PitchBook • Geography: Global • As of December 31, 2024  
Note: Probability data is based on [PitchBook VC Exit Predictor methodology](#).



# Agtech VC deal summary

	Quarterly activity						TTM activity	
	Q4 2023	Q1 2024	Q2 2024	Q3 2024	Q4 2024		Q1 2023 to Q4 2023	Q1 2024 to Q4 2024
Deal count	243	243	195	206	149		1,048	793
QoQ change	6.6%	0.0%	-19.8%	5.6%	-27.7%		N/A	N/A
Share of total VC	2.4%	2.3%	2.0%	2.4%	2.1%		2.4%	2.2%
Deal value (\$B)	\$1.5	\$1.4	\$1.2	\$1.6	\$1.8		\$8.1	\$6.0
QoQ change	-32.0%	-11.5%	-9.7%	34.3%	8.9%		N/A	N/A
Share of total VC	1.9%	1.6%	1.3%	1.9%	1.6%		2.3%	1.6%
Exit count	13	5	9	12	9		63	35
Public listings	4	1	0	1	1		7	3
Acquisitions	6	3	9	9	7		47	28
Buyouts	1	1	0	2	1		9	4

Source: PitchBook • Geography: Global • As of December 31, 2024



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As the private markets ecosystem continues to grow in complexity and competition, investors need tools and data that can give them an edge.

Our Industry and Technology Research provides detailed analysis of established industries and nascent tech sectors from the perspective of private market dealmaking, helping you stay current on market trends and providing the insights you need to pursue new opportunities with confidence.

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