

AGTECH M&A IS POISED TO ACCELERATE AS MACROECONOMIC CHALLENGES EASE

AGRICULTURE TECHNOLOGY SECTOR UPDATE | DECEMBER 2024



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CONTACT OUR AGRICULTURE TECHNOLOGY SECTOR BANKERS



Jerry Sturgill
Managing Director
Head of Agriculture Investment Banking
208-850-5215
jsturgill@capstonepartners.com



Skye Root
Managing Director
208-908-3848
sroot@capstonepartners.com

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Agriculture Technology

AgTech M&A is Poised to Accelerate as Macroeconomic Challenges Ease

KEY SECTOR TAKEAWAYS

Capstone Partners' [Agriculture Investment Banking Group](#) is pleased to share its inaugural Agriculture Technology (AgTech) report with insights and analysis on sector trends, buyer activity, and public company performance. Ongoing industry-wide pressures due to falling farm income and a challenging fundraising environment have continued to weigh on AgTech merger and acquisition (M&A) activity to date. However, sector participants that address persistent long-term industry challenges, demonstrate a financial value proposition, and bolster efficiencies of scale have continued to generate acquirer interest. Several key takeaways are outlined below.

1. The AgTech M&A market has remained active throughout 2024, albeit at a slower pace compared to prior years; deal volumes fell 21.4% year over year (YOY) to 66 transactions announced or completed in year to date (YTD) 2024.
2. Government- and company-level initiatives and growth capital investors have continued to prioritize sustainable farming AgTech companies and solutions. As a result, AgTech players with sustainable offerings have been attractive investment and acquisition targets.
3. Venture capital (VC) activity in the AgTech sector in 2023 to 2024 has been challenged as VC investors have become increasingly risk-averse amid a broader market correction in startup valuations.
4. Interest rate cuts and long-term tailwinds are expected to reinvigorate dealmaking in the sector, particularly as private equity and VC firms re-enter the M&A market in search of profitable exit opportunities for existing assets.
5. AgTech markets and deal volume will likely continue to experience sustained long-term growth driven by farm needs to improve yields, reduce input costs, mitigate weather risk, reduce labor costs, and implement sustainable farming solutions.

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AGTECH PLAYERS ABLE TO CONTINUE DRIVING INCREASED ADOPTION

Despite pressures related to ongoing headwinds across the broader Agriculture industry, AgTech adoption has continued to be fueled by rising demand for improved operational efficiencies and sustainable agriculture practices. In 2024, farm income has been impacted by falling commodity prices, rising input prices, and a lack of direct federal funding. As a result, equipment providers have reduced headcounts to cut costs, scaled back production to align with weak end-market demand, and shifted sales strategies towards used equipment and software upgrade offerings better suited for cash-strapped farmers. While these adjustments have helped larger equipment providers weather the headwinds, smaller AgTech providers have relied heavily on customer adoption and fundraising to prompt growth, both of which have been pressured by the current macroeconomic environment. Of note, in 2024, required monetary investment was identified as the top barrier of digital technology adoption among global farmers planning to incorporate digital capabilities, according to Bayer’s (XTRA:BAYN) 2024 Farmer Voice survey.¹



Headwinds aside, AgTech companies that address stubborn long-term challenges, such as climate change and food security, and can quickly prove their financial value proposition and efficiencies of scale have continued to generate interest from farmers, buyers, and growth capital investors to date. Over the past two years, the share of North American farmers currently using or looking to adopt at least one digital solution has risen 8.7%, according to a 2024 McKinsey survey.² AgTech adoption has continued to rise, underpinned by the ever-present need to improve operational efficiencies, as well as increased regulatory and environmental initiatives that have accelerated sector demand for sustainable agriculture solutions. Of note, in 2024, these initiatives have pushed the majority of farmers (75%) to consider adopting new technology to adapt to climate change, according to Bayer. These tailwinds are expected to continue driving long-term AgTech adoption and further support rising M&A and investment activity as macroeconomic pressures subside.

Global Farmers Speak: Key Challenges AgTech Must Overcome to Improve Adoption Rate (Top identified barriers to technology adoption among farmers planning to incorporate digital capabilities)



Source: Bayer’s 2024 Farmer Voice Survey and Capstone Partners

GROWING PRESSURE TO ADOPT SUSTAINABLE FARMING TOOLS

The AgTech sector has continued to respond to government- and company-level initiatives and VC firms prioritizing sustainable solutions to mitigate climate impacts. In 2022, the Agriculture industry generated ~10% of all U.S. greenhouse gas emissions, up 7.7% since 1990, according to the U.S. Environmental Protection Agency (EPA).³ Global rising emissions have worsened the impacts of disruptive weather events, with 61% of global farmers reporting weather-induced revenue losses over the past two to three years, according to the Bayer survey. Recently, agriculture damage from 2024 Hurricanes Helene and Milton has totaled ~\$8-\$9 billion across Florida and Georgia alone, according to press releases.^{4,5}

Sustainable AgTech investments have accelerated YTD, driven by rising demand for the segment’s environmental and operational efficiency benefits. Of note, the U.S. Department of Agriculture (USDA) more than doubled its 2025 funds for climate-smart agricultural practices YOY to \$7.7 billion in 2025, according to a press release.⁶ At a company level, Archer-Daniels-Midland (NYSE:ADM) and BASF (XTRA:BAS) have reaffirmed Sustainable Product investment strategies to bolster existing offerings and capitalize on heightened demand, according to transcript calls from ADM and BASF.^{7,8} In September, Kagome (TSE:2811) and SVG Ventures formed the Sunrise Agri Fund to invest in sustainable solutions that fortify the Agriculture value chain. The rise of sustainability-focused AgTech fund formations is expected to buoy long-term sector M&A and VC activity.

Notable Sustainable AgTech M&A Deal



In August, EarthOptics and PatternAg merged, with the combined entity operating under the EarthOptics name moving forward (terms of the deal were undisclosed). EarthOptics develops soil sensing technology for data insights into farm soil health. The new entity will leverage PatternAg’s predictive agronomy data analytics, metagenomic database, and modeling technology to offer comprehensive digital soil health insights for farmers’ crop management and climate sustainability initiatives. The technology combination will provide farmers with insights into their soil’s exact physical, chemical, and biological properties and offer tillage prescriptions for crop management and input decision-making.

The merger is also expected to provide farmers the ability to manage climate and sustainability goals by measuring carbon levels in soil and providing the tools to assess and report on carbon intensity and field emissions data. “We’ll help farmers that want to enroll in climate programs and look at their carbon intensity scores or their field emissions, and...we’ll be able to utilize satellites for some of that,” noted Todd Martin, EarthOptics Co-Founder and Chief Growth Officer at the merged entity, in an August AgWeb article.⁹

Farmers’ Perspectives and Opinions on Climate Change and Sustainable Farming

(Share of farmers surveyed)

- 79%** identified improving sustainability of farm practices as motivation for adopting digital farming tools.
- 77%** currently use crop rotation practices, making it the most commonly used regenerative farming practice in 2024.
- 75%** are experiencing or are worried about climate change impacts.

- 75%** are open to implementing new technologies on their farm to help adapt to climate change.
- 37%** see extreme weather events as the largest challenge in 2024, followed by price/income volatility (36%).
- 29%** believe regenerative/sustainable farming practices will increase farm yields and productivity.

Source: Bayer’s 2024 Farmer Voice Survey and Capstone Partners

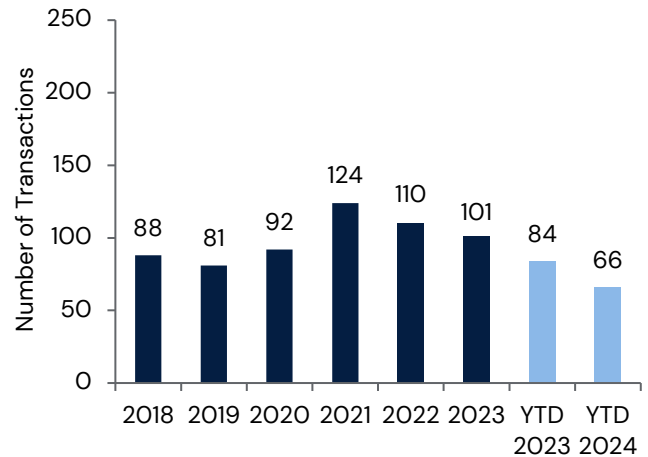
STRATEGIC INVESTORS EXPECTED TO PUSH DEAL VALUATIONS HIGHER

Deal volume in the AgTech sector has been subdued by a challenging macroeconomic environment, dropping 21.4% YOY with 66 transactions announced or completed in YTD 2024. Deal volume declines have come as falling commodity prices have dampened farm income and high financing costs have led farmers to delay equipment and technology purchases. As a result, many buyers and sellers have remained on the sidelines through YTD. However, AgTech participants that can address critical sustainability issues and provide significant cost savings to farmers have continued to draw M&A interest. Of note, digital solutions provider, CropX, acquired startup EnGeniousAg, a provider of nitrogen sensing tools in September (terms of the deal were undisclosed). CropX cited EnGeniousAg’s strong intellectual property (IP) portfolio and its ability to address the Farm industry’s nitrogen management challenges as motivation for the acquisition.

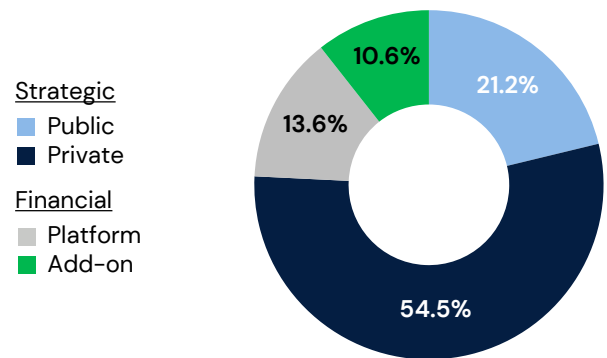
Strategics have continued to comprise the majority (75.8%) of sector deal volume in YTD 2024, led by private strategic buyers (54.5%). Revenue pressure from weak end-market demand and fewer exits amid extended private equity and VC holding times have affected public buyer M&A activity for the past two-years, falling 36.4% YOY in 2023 and another 22.2% YOY in YTD 2024. The slowdown of VC exits has been difficult for public players in the sector that rely on acquisitions of early-stage AgTech companies to expand product offerings and drive growth through technology innovation. As a result, public players have increased AgTech startup investment activity to date, demonstrated by the launch of Corteva (NYSE:CTVA) Catalyst, the firm’s new R&D startup investment and partnership platform (March). This influx of growth capital will likely help accelerate sector M&A activity, driving valuations higher as participants battle for innovative technology.

Deal volume to date has fallen YOY across all buyer groups, apart from platform acquisitions. Mounting dry powder reserves and limit partner (LP) pressure to generate returns have spurred steady private equity platform activity in the sector since 2018, with YTD levels mirroring the prior year period. Recent interest rate cuts and long-term tailwinds are expected to reinvigorate M&A interest in the sector, particularly as private equity and VC firms re-enter the deal market in search of profitable exit opportunities for existing assets.

Agriculture Industry Headwinds Weigh on Sector M&A Activity Year to Date



Strategic Buyers Continue to Lead Sector Deal Activity To Date



Year to date (YTD) ended October 15
 Source: Capital IQ, FactSet, PitchBook, and Capstone Partners

“...We recognized...that we were absent in this early-stage VC space...What Catalyst has done is provide...a platform with which we can now engage early startups...We look at most of our investments in companies as opportunities to acquire down the road or access some technology coming through the portfolio...My hope is that we will make either follow on investments, acquisitions, or gain exclusive access...that we can translate into products. ”

- Dr. Tom Greene, Head of Corteva Catalyst, October interview with AgFunder¹⁰

PUBLIC AGRIBUSINESSES INVEST IN AGTECH, DIVEST NON-CORE ASSETS



Acquires

In September, Kubota North America, a holding company of Japanese agricultural and construction equipment manufacturer Kubota (TSE:6326), acquired Bloomfield Robotics (terms of the deal were undisclosed). Bloomfield Robotics' platform leverages advanced imaging and artificial intelligence (AI) to monitor specialty crop health and performance. The acquisition builds on a more than two-year relationship between both companies, in which Kubota provided venture funding for the startup. Kubota cited underdeveloped digitization, mechanization, and automation in specialty crop farming as motivation for the deal. Kubota plans to integrate Bloomfield's Software-as-a-Service (SaaS) data insight and monitoring tools into its range of specialty crop tractors, sprayers, and other equipment.



"Combining AI-driven technology with our legacy quality products will enable Kubota to solve real issues facing agriculture. This acquisition is a key milestone for Kubota's strategic vision to provide comprehensive smart agriculture solutions," said Kubota North America CTO, M. Brett McMickell, in a press release.¹¹



To Acquire

In July, Industrials-focused private equity firm, American Industrial Partners (AIP), announced its intent to acquire AGCO's Grain & Protein business unit in an all-cash deal valued at \$700 million or 8.3x EV/EBITDA. The business unit manufactures grain storage and seed processing equipment as well as protein production systems. Additionally, the business unit generates ~\$1.0 billion in annual revenue, employs ~3,200 people, and operates 14 manufacturing facilities globally, according to a press release.¹² Upon closing, AIP plans to leverage the unit's established brands, GSI, Automated Production, Cumberland, Cimbria, and Tecno, to capitalize on global growth trends and further drive technology innovation in the Food Production sector.



"The divestiture of this business supports our strategic transformation, recently accelerated by the PTx Trimble joint venture [April, \$2.3 billion] and is an inflection point for AGCO. Divesting this business allows us to streamline and sharpen our focus on AGCO's portfolio of award-winning agricultural machinery and precision ag technology products. We believe this sale will better position us for the long-term growth in our higher-margin and higher free cash flow generating businesses. Simultaneously, it will raise our profitability through the cycle, as Grain & Protein has historically been a below average margin business," said AGCO CEO, Eric Hansotia, in its Q2 2024 earnings call.¹³



Acquires



Merck & Co.'s (NYSE:MRK) Netherland-based subsidiary Intervet International, doing business as MSD/Merck Animal Health, acquired Elanco Animal Health's (NYSE:ELAN) Aqua business assets for an enterprise value of \$1.3 billion, or 7.4x EV/Revenue and 14.1x EV/EBITDA (February). Elanco's Aquaculture portfolio includes medicines, vaccines, and supplements, two manufacturing facilities, and a research facility. Elanco elected to divest the assets to prioritize its business units with greater earnings potential, of which it has slated six new product launches for release in 2025, according to a press release.¹⁴ Merck targeted the acquisition to further expand and bolster its portfolio of aquaculture offerings, including the CLYNAV Atlantic Salmon DNA-based vaccine. Additionally, the deal builds upon other recent acquisitions from Merck Animal Health targeting the Aquaculture market: Vaki (December 2019, terms were undisclosed), Scan Aqua AS (March 2019, terms were undisclosed), and Antelliq (December 2018, \$3.3 billion, 9.0x EV/Revenue).

"The addition of this innovative portfolio of...Aqua products across vaccines, anti-parasitic treatments, water supplements and nutrition, will establish Merck Animal Health as a leader in Aqua," said Rick DeLuca, Merck Animal Health President, in the press release.



SELECT AGRICULTURE TECHNOLOGY TRANSACTIONS

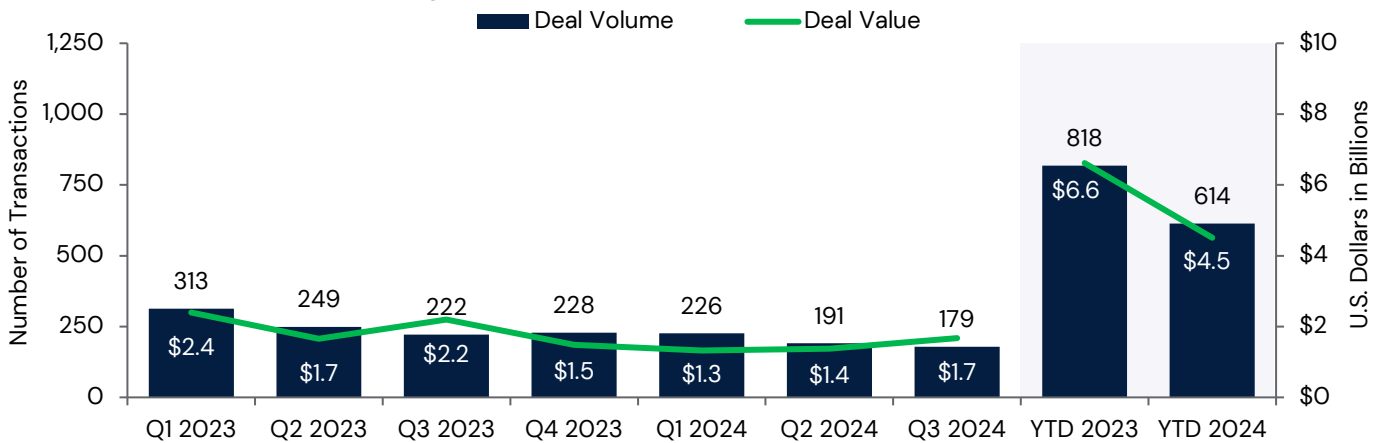
Date	Target	Acquirer	Target Business Description	Enterprise Value (mm)	EV / LTM	
					Revenue	EBITDA
10/04/24	Exact Corp	Jackrabbit	Manufactures harvesting equipment for almond, walnut, and pecan orchards.	-	-	-
09/18/24	EnGeniousAg	CropX	Develops field-based nitrogen management sensors for crops, soils, and water.	-	-	-
09/11/24	Bloomfield Robotics	Kubota North America	Provides a computer vision AI platform for crop monitoring and optimization.	-	-	-
08/28/24	PatternAg	EarthOptics	Offers and develops a soil analyzing metagenomics platform.	-	-	-
07/25/24	Grain & Protein Division of AGCO (NYSE:AGCO)	American Industrial Partners	Manufactures grain storage and seed processing equipment.	\$700.0	-	8.3x
07/18/24	Invetx	Dechra Pharmaceuticals	Offers a biotechnology platform for protein-based therapeutics in animal health care.	\$520.0	-	-
07/04/24	SciAps	Malvern Panalytical	Develops material analysis instruments.	\$260.0	-	-
06/27/24	Benson Hill (Nasdaq:BHIL)	Argonautic Ventures	Provides seed innovation and genetics technology-based solutions.	\$123.0	0.3x	-
05/31/24	Haber Technologies	Shivvers Manufacturing	Develops AI-based machinery for drying grains.	-	-	-
05/21/24	Drone Delivery Canada	Volatus Aerospace (TSXV:FLT)	Designs a commercial drone-based logistics platform for Agriculture and other industries.	\$867.2	-	-
04/30/24	AgCode	Arcadea Group	Offers a farm and crop management platform to agribusinesses in the Specialty Crop market.	-	-	-
04/11/24	BioTek Ag	Custom Agronomics	Manufactures plant growth regulators and nutritional, surfactants, and specialty products.	-	-	-
04/01/24	PTx Trimble	AGCO (NYSE:AGCO)	Offers a portfolio of precision agriculture software and solutions.	\$2,304.7	-	-
03/15/24	Agronomic Technology	Ever.Ag	Operates Adapt-N, a cloud-based platform for precision nitrogen management.	-	-	-
02/05/24	Elanco Animal Health's Aqua Business Assets	MSD Animal Health (Intervet)	Comprises pet and farm animal pharmaceutical product manufacturing business.	\$1,300.0	7.4x	~14.1x
01/08/24	Prairie Systems	Ever.Ag	Develops feed management and procurement software solutions, focused on pork producers.	-	-	-
12/21/23	Westside Equipment	Oxbo International	Manufactures tomato and pistachio harvesters and vineyard mechanization tools.	-	-	-
12/20/23	Bourgault Industries	Salford Group	Develops seeding and tillage equipment.	\$480.5	-	-
12/20/23	Buhler Industries (TSX:BUI)	Başak Traktör	Manufactures and sells agriculture equipment including tractors, augers, and mowers.	\$42.3	-	-
11/27/23	Inguran (ST Genetics)	-	Provides dairy and cattle genetic solutions and services in the U.S. and internationally.	\$24.1	-	-
11/16/23	Farmers Edge (TSX:FDGE)	Fairfax Financial Holdings (TSX:FFH)	Develops a portfolio of digital agriculture solutions including sensors.	\$65.6	3.3x	-
10/13/23	PCTEL	Amphenol (NYSE:APH)	Offers multi-industry wireless technology solutions, including precision agriculture tools.	\$110.0	1.3x	14.4x
09/22/23	Avidity Science	ATS (TSX:ATS)	Designs and manufactures animal watering, monitoring, and access control solutions.	\$191.0	-	-

Source: Capital IQ, PitchBook, FactSet, and Capstone Partners

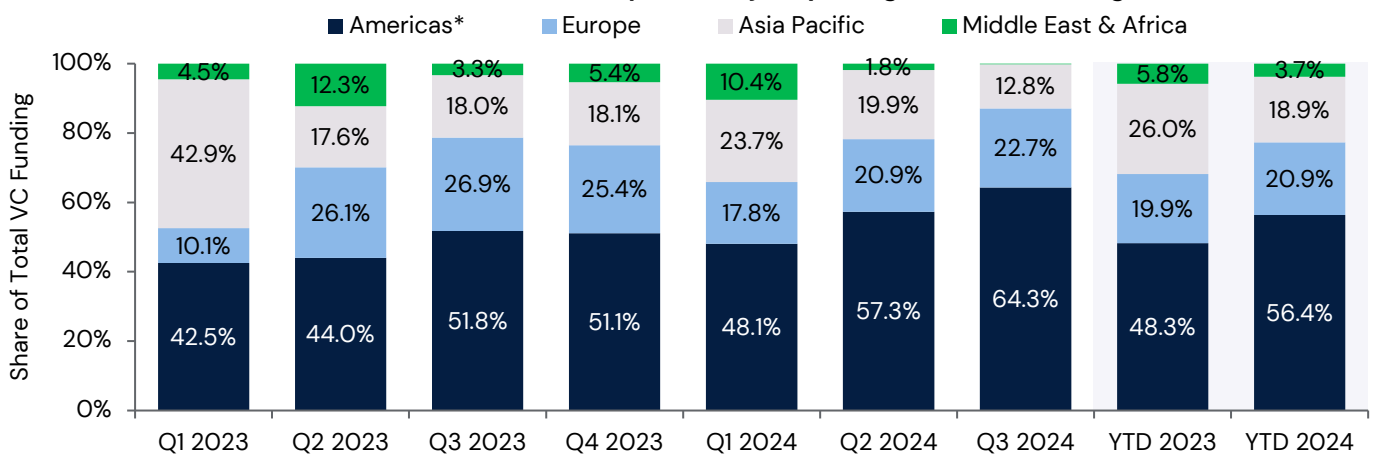
VC FUNDING SEES QUARTERLY GAINS, TAILWINDS TO BUOY REBOUND

The number of global AgTech sector VC deals has declined 31.9% YOY to 614 transactions through YTD. Global capital invested in the AgTech sector by VC firms has also dropped, falling 31.9% YOY to \$4.5 billion through YTD. AgTech growth capital activity started to wane in 2022 as agricultural headwinds exacerbated increasingly risk-averse VC investment attitudes that have been deterred by long R&D timelines that hamper a startups' long-term profitability and scaling potential. Sector VC exits have also declined, driven by dampened scaling potential and a higher-for-longer interest rate environment. VC exits in the sector have fallen 31.6% YOY through YTD, further contributing to depressed M&A activity. However, the majority (55%) of VC firms believe that exits will continue to materialize as the fledgling sector develops, according to AgFunder's 2024 investment report.¹⁵ In addition, long-term global industry pressures, such as food scarcity and climate change, have acted as tailwinds for VC investment and exit activity to date. As a result, companies that have proven efficiencies of scale, financial value proposition, and the ability to address industry challenges have continued to attract VC investment. VC firms have increasingly deployed capital to sector startups based in the Americas, which captured 56.4% of total funding to date. The U.S. has drawn the lion's share (49%) of total AgTech VC funding YTD, providing a favorable outlook for stateside growth equity investments. Capstone expects that the long-term tailwinds fueling investments in quality startups to date will further buoy a rebound in near-term AgTech investment activity, which has already seen two consecutive months of quarterly growth as of Q2 2024.

Quarterly and YTD AgTech VC Transaction Volume and Growth Capital Invested



Americas Continue to Capture Majority of AgTech VC Funding



Year to date (YTD) ended October 15
 *Includes North, Central, and South American countries
 Source: PitchBook and Capstone Partners

INNOVATIVE TECHNOLOGY ATTRACTS VC ATTENTION



Round: Series A
Capital Raised: \$2.5 million
Total Capital Raised: \$2.5 million
Post-Money Valuation: NA
Lead Investor: Vertical Ventures

AcreShield, developer of the YieldOptimizer technology, raised \$2.5 million in Series A financing in October. AI investor Vertical Ventures, led the funding round with co-investment fund InnoVenture Iowa. AcreShield's solution protects row crop farmers and addresses yield-gap challenges in crop insurance models by providing farmers with hybrid AI-enabled data for improved seed selection. Following the Series A round, the company's board approved AcreShield for an additional \$2 million in funding given the companies recent successes in revenue growth, customer adoption, and the procurement of a distributor network, according to a press release.¹⁶ "[AcreShield's] smarter seed selection model and the proprietary data set used, they can offer farmers a performance guarantee. We haven't seen anything like this before in the AI market," noted Vertical Ventures President, Scott Stewart in the press release.



Round: Series C
Capital Raised: \$133.0 million
Total Capital Raised: \$220.0 million
Post-Money Valuation: \$518.0 million
Lead Investors: Astanor and HH-CTBC

In June, Monarch Tractor, an agriculture robotics and software startup and creator of the first electric autonomous tractor, secured \$133 million in Series C funding, the largest VC round in agricultural robotics history, according to a press release.¹⁷ The round was led by agrifood technology impact firm Astanor and Foxconn's (TWSE:2354) affiliate fund, HH-CTBC Partners. With \$220 million raised to date, the new fund's timing has been opportune as Monarch has struggled to scale operations and meet demand amid a difficult growth capital environment. Monarch plans to leverage the funding to expand its production capabilities and geographic reach and further develop its digital solutions and AI applications. "This fundraise is going to...give confidence to our dealers that we are here for the long term," said Praveen Penmetsa, Monarch CEO, in a July TechCrunch article.¹⁸

Venture Capitalists' Perspectives on the Current AgTech Fundraising Environment

" The quality of [AgTech] products and services is only getting better and the industry will more accurately identify and price value which will lead to exits for the best-run companies that can deploy their solution at scale. "

– **Katrin Burt**, Executive Manager at Grosvenor Food & AgTech, the AgFunder Global AgriFoodTech 2024 Investment Report

" What we need is exits... not only for Food, but for Agriculture, because what has happened is all the capital is stuck where it is, so our [limited partners] cannot reinvest... and if the capital is not moving, you get stuck in this loop. "

– **Mary McCarthy**, Partner at Sofinnova Partners, AgFunder coverage of the Future Food-Tech Innovation Summit¹⁹

DEERE PRIORITIZES AGTECH INVESTMENTS WHILE DOWNSIZING OUTPUT



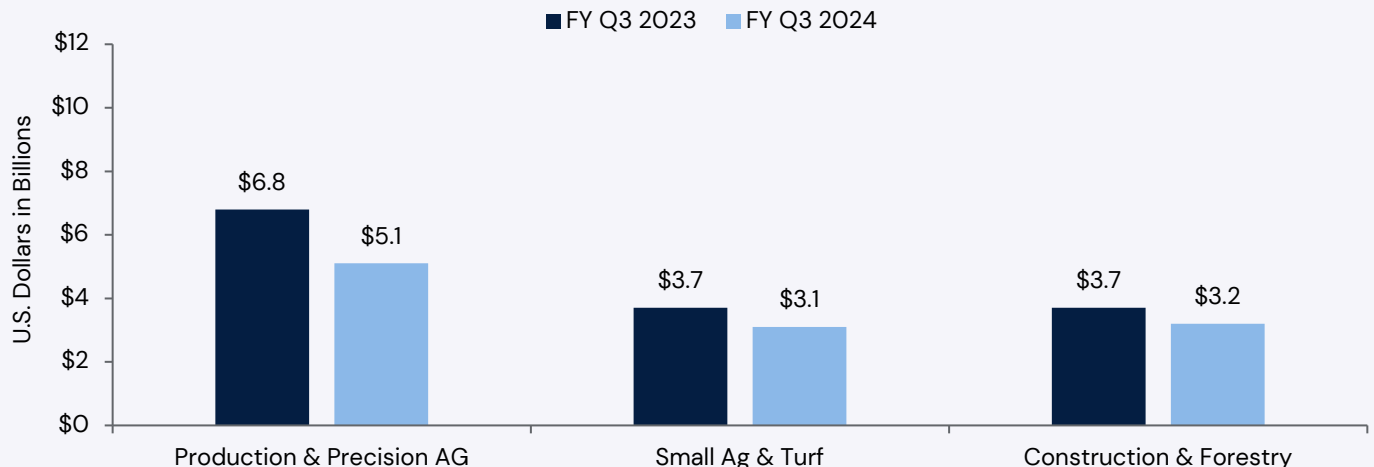
Ticker: NYSE:DE
Headquarters: Moline, Illinois
Markets: Agriculture & Farm Machinery
LTM Revenue: \$55.9 Billion
Market Capitalization: \$111.9 Billion

Company Description

Deere & Co (NYSE:DE) has experienced declining sales and stunted growth since its fiscal year (FY) Q4 2023 as the company navigates the impacts of reduced buying power among its end market consumers. Lower shipment volumes have driven Deere’s FY Q3 2024 sales revenue and net income down 11.5% and 24.9% YOY, respectively, according to its FY Q3 earnings release.²⁰ Deere attributed the decline to increased margin pressure at farming operations which has forced consumers to forgo technology and equipment investments. As a result, Deere plans to capitalize on rapidly aging farm equipment and technology by shifting its sales model to prioritize Precision Upgrade Kits (PUKs) and has invested \$13.5 million to expand its Missouri-based remanufacturing facility by 2026, according to a press release.²¹ Additionally, Deere has made moves to slow its production of new products in an effort to right-size manufacturing output with reduced demand. Notably, the company has laid off more than 1,800 Midwest factory workers and office employees as of July 2024, according to Agriculture Dive.²² Despite criticism surrounding the company’s workforce reduction measures, Deere’s aggressive pricing and cost reduction strategy amid sector volatility is expected to fortify its balance sheet in the long-term.

Despite expectations that Deere’s FY 2024 revenues will remain subdued YOY, cost reduction measures have helped Deere preserve its capital allocation strategy to support future technology investments and maintain its competitive advantage within the sector. Of note, Deere contributed to genetically-adapted living plant sensor provider InnerPlant’s \$30 million Series B funding round (July) and led the \$10.2 million Series A round for HabiTerre and its AI-enabled environmental impact monitoring tool for farms (July), according to articles from AgFunder.^{23,24} Additionally, Alphabet’s (Nasdaq:GOOGL) AgTech robotics spinout, Mineral, ceased operations, citing a crowded market and profitability struggles. Deere acquired a portion of Mineral’s technology suite to bolster its See & Spray solution (August, terms were undisclosed), according to a TechCrunch article.²⁵

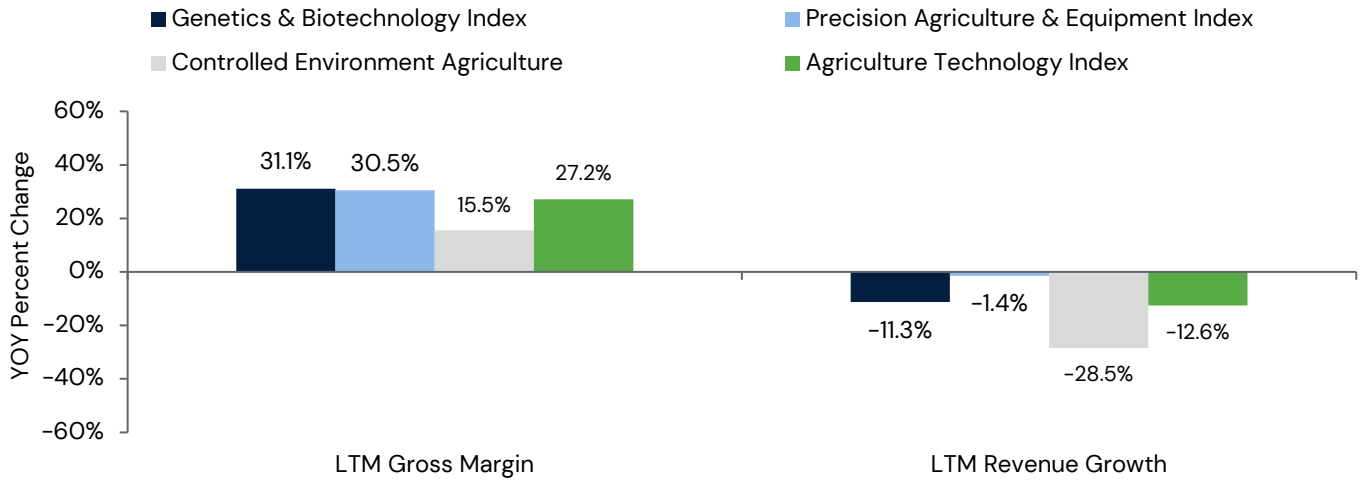
Deere’s Net Sales Decline Across All Business Segments



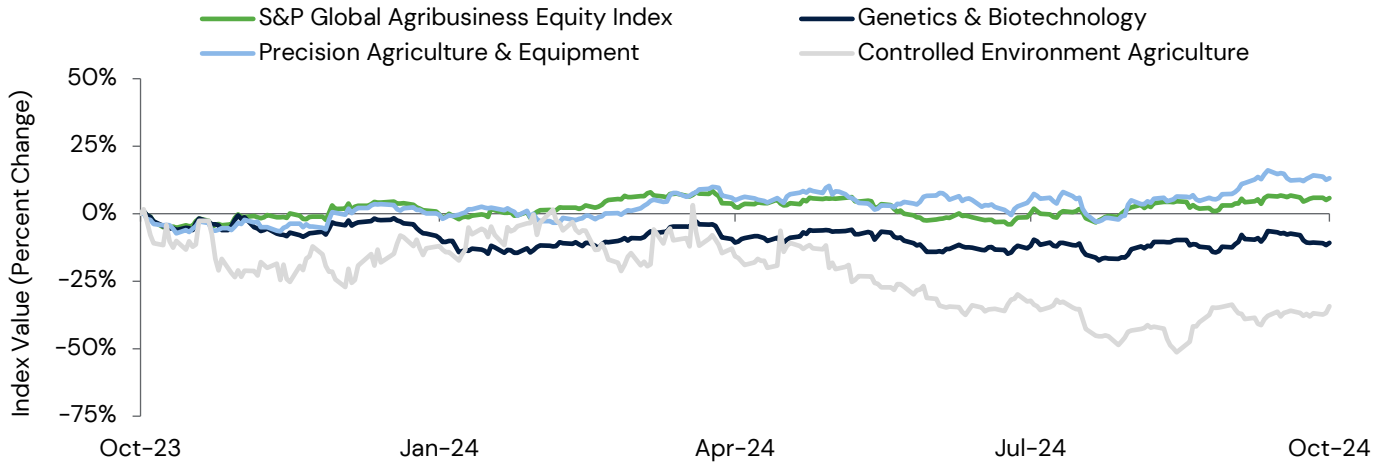
FY = Fiscal Year
 Source: Deere & Co Q3 Earnings and Capstone Partners

PUBLIC PRECISION AGRICULTURE PLAYERS LEAD SECTOR PERFORMANCE

Public AgTech Companies' LTM Gross Margin and Revenue Growth Performance



Public AgTech Players' Index Performance



Genetics & Biotechnology Index includes: 512070, ADM, BAS, BAYN, BIOX, CTVA, MOS, NTR, SMG, YAR
 Controlled Environment Agriculture Index Includes: AGFY, AGRI, CUBX.F, HYFM, UGRO
 Precision Agriculture & Equipment Index Includes: 6326, AGCO, CNH, DE, M&M, VMI
 Agriculture Technology Index includes: 6326, 512070, ADM, AGCO, AGFY, AGRI, BAS, BAYN, BIOX, CNH, CTVA, CUBX.F, DE, HYFM, M&M, MOS, NTR, SMG, UGRO, VMI, YAR
 LTM = Last Twelve Months. Source: Capital IQ and Capstone Partners as of October 15, 2024





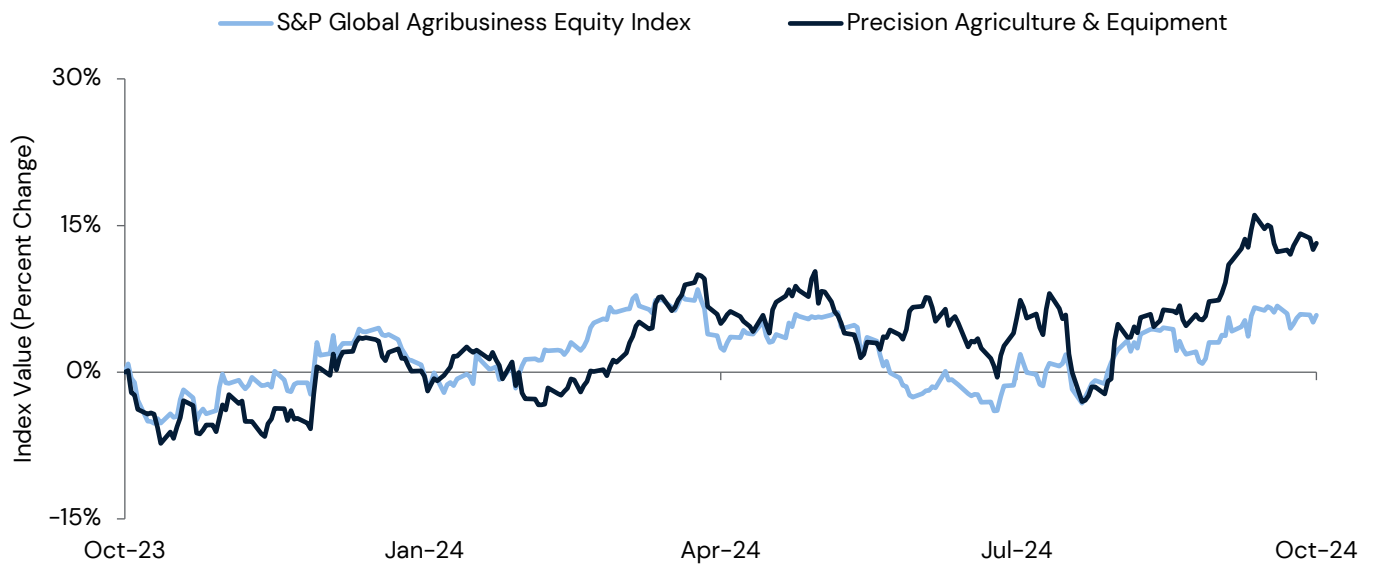
PUBLIC COMPANY UPDATE: PRECISION AGRICULTURE & EQUIPMENT

Precision Agriculture & Equipment

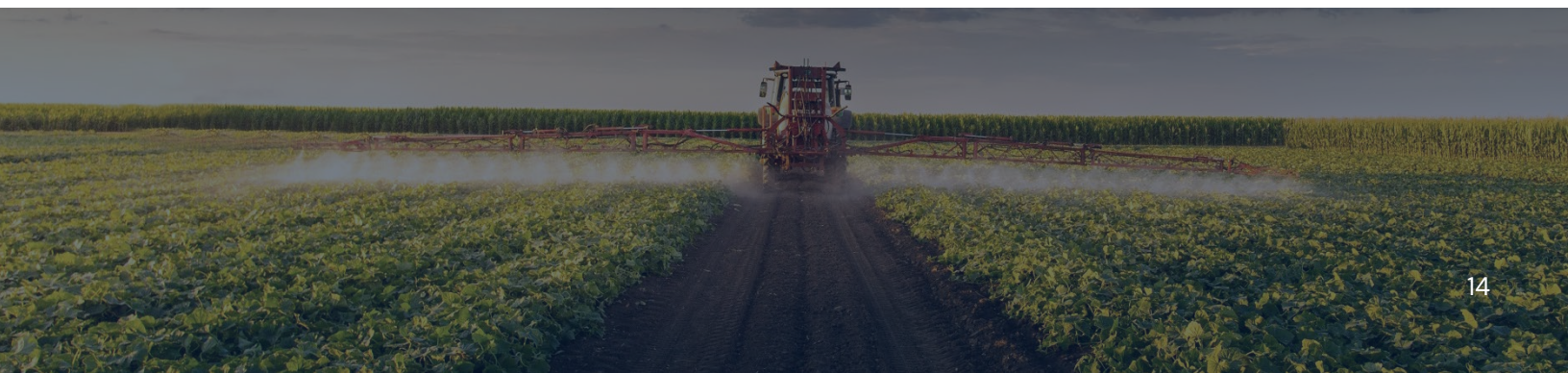
Company	Price	% 52 Wk	Market	Enterprise	LTM			EV/LTM	
	10/15/24	High	Cap	Value	Revenue	EBITDA	Margin	Revenue	EBITDA
AGCO Corporation	\$98.75	75.8%	\$7,370.9	\$11,327.5	\$13,431.5	\$1,850.8	13.8%	0.8x	6.1x
CNH Industrial N.V.	\$10.96	82.4%	\$13,741.4	\$39,372.4	\$23,084.0	\$3,332.0	14.4%	1.7x	11.8x
Deere & Company	\$401.99	95.6%	\$109,984.4	\$170,948.4	\$55,955.0	\$14,639.3	26.2%	3.1x	11.7x
Kubota Corporation	\$14.00	81.5%	\$16,173.4	\$31,182.9	\$19,148.0	\$2,680.5	14.0%	1.6x	11.6x
Mahindra & Mahindra	\$37.54	97.9%	\$41,849.0	\$53,042.6	\$17,291.1	\$3,243.7	18.8%	3.1x	16.4x
Valmont Industries	\$303.70	98.7%	\$6,124.4	\$7,181.7	\$4,053.3	\$634.5	15.7%	1.8x	11.3x
Mean							17.1%	2.0x	11.5x
Median							15.0%	1.7x	11.7x
Harmonic Mean							16.3%	1.7x	10.5x

EV = enterprise value; LTM = last twelve months
\$ in millions, except per share data

Precision Agriculture & Equipment Index Performance



Precision Agriculture & Equipment Index Includes: 6326, AGCO, CNH, DE, M&M, VMI
Source: Capital IQ and Capstone Partners as of October 15, 2024





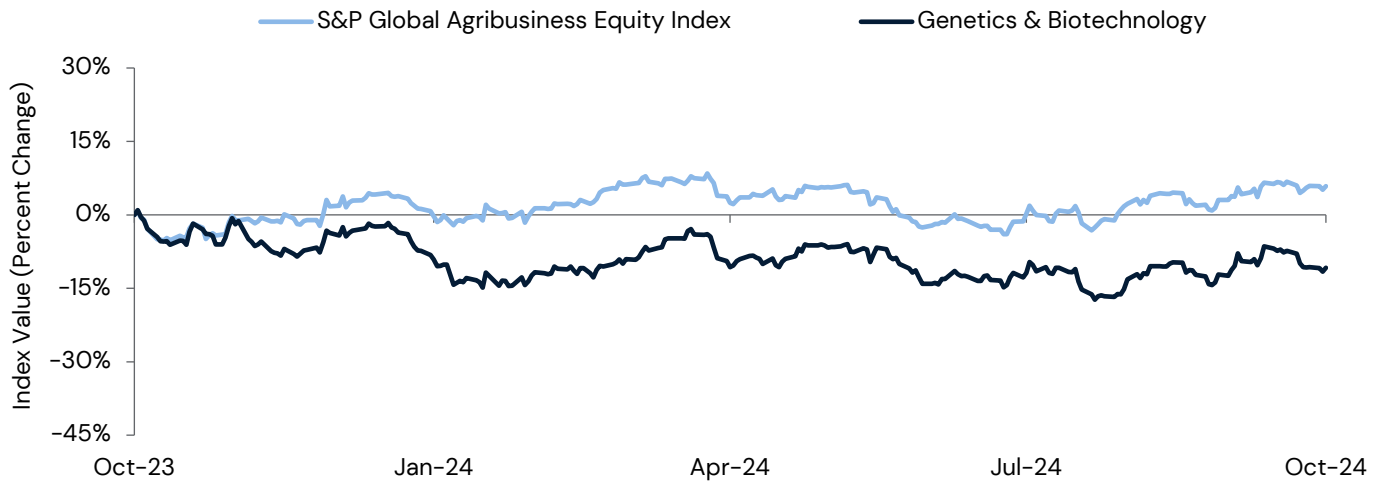
PUBLIC COMPANY UPDATE: GENETICS & BIOTECHNOLOGY

Genetics & Biotechnology										
Company	Price	% 52 Wk	Market	Enterprise	LTM			EV/LTM		
	10/15/24	High	Cap	Value	Revenue	EBITDA	Margin	Revenue	EBITDA	
Archer-Daniels-Midland Company	\$57.67	74.6%	\$27,574.5	\$38,999.5	\$88,768.0	\$5,110.5	5.8%	0.4x	7.6x	
BASF SE	\$50.08	83.6%	\$44,694.2	\$71,404.2	\$69,933.6	\$6,527.4	9.3%	1.0x	10.9x	
Bayer Aktiengesellschaft	\$28.93	60.9%	\$28,422.8	\$68,459.9	\$50,480.0	\$11,845.1	23.5%	1.4x	5.8x	
Bioceres Crop Solutions	\$7.25	51.6%	\$455.7	\$706.0	\$464.8	\$65.4	14.1%	1.5x	10.8x	
Corteva	\$57.30	97.0%	\$39,665.8	\$42,570.8	\$16,901.0	\$3,428.0	20.3%	2.5x	12.4x	
Nutrien	\$47.87	77.3%	\$23,643.1	\$35,936.0	\$25,839.0	\$5,178.0	20.0%	1.4x	6.9x	
The Mosaic Company	\$25.53	66.7%	\$8,134.8	\$12,388.8	\$12,193.8	\$2,272.0	18.6%	1.0x	5.5x	
The Scott's Miracle-Gro Company	\$89.01	99.2%	\$5,057.6	\$7,559.0	\$3,512.5	\$439.2	12.5%	2.2x	17.2x	
UPL	\$6.83	90.4%	\$5,126.6	\$8,862.5	\$5,182.6	\$464.2	9.0%	1.7x	19.1x	
Yara International	\$31.98	87.2%	\$8,145.2	\$11,693.6	\$13,910.0	\$1,833.0	13.2%	0.8x	6.4x	

Mean	14.6%	1.4x	10.3x
Median	13.6%	1.4x	9.2x
Harmonic Mean	12.3%	1.1x	8.6x

EV = enterprise value; LTM = last twelve months
\$ in millions, except per share data

Genetics & Biotechnology Index Performance



Genetics & Biotechnology Index includes: 512070, ADM, BAS, BAYN, BIOX, CTVA, MOS, NTR, SMG, YAR
Source: Capital IQ and Capstone Partners as of October 15, 2024





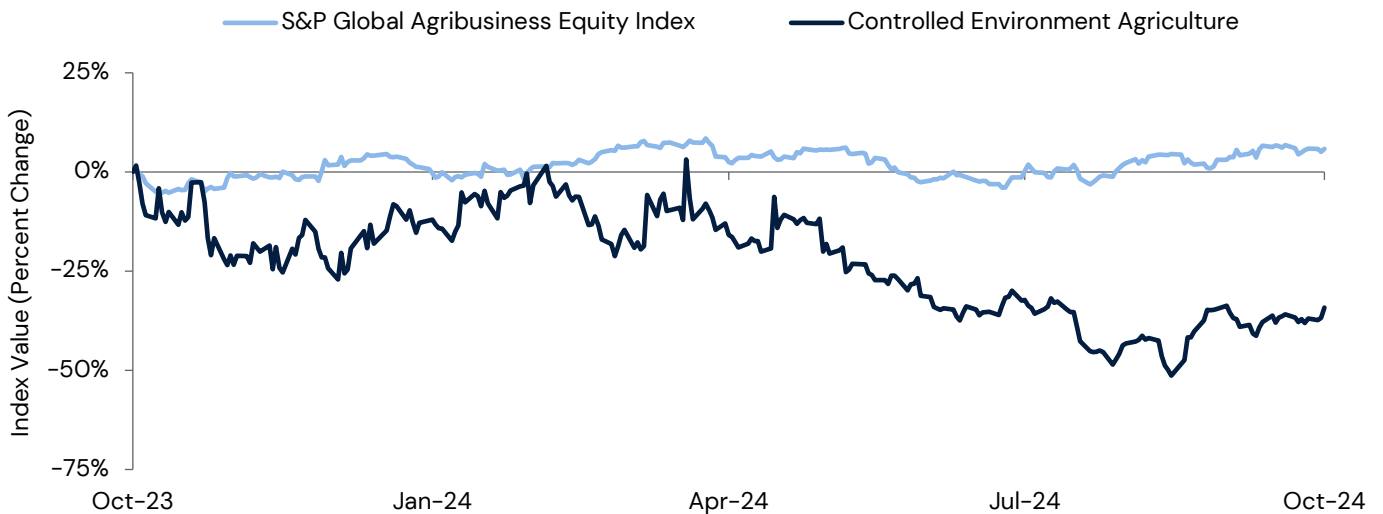
PUBLIC COMPANY UPDATE: CONTROLLED ENVIRONMENT AGRICULTURE

Controlled Environment Agriculture

Company	Price	% 52 Wk	Market	Enterprise	LTM			EV/LTM	
	10/15/24	High	Cap	Value	Revenue	EBITDA	Margin	Revenue	EBITDA
AgriFORCE Growing Systems	\$0.05	1.5%	\$6.3	\$4.4	\$0.1	NM	NM	NM	NM
Agrify Corporation	\$3.03	7.0%	\$4.0	\$11.3	\$11.6	NM	NM	1.0x	NM
CubicFarm Systems	\$0.00	0.0%	\$2.0	\$15.6	\$3.0	NM	NM	NM	NM
Hydrofarm Holdings Group	\$0.67	54.8%	\$31.0	\$175.4	\$210.3	\$8.6	4.1%	0.8x	20.3x
Urban-gro	\$1.46	51.2%	\$17.9	\$21.7	\$70.3	NM	NM	0.3x	NM
Mean							4.1%	0.7x	20.3x
Median							4.1%	0.8x	20.3x
Harmonic Mean							4.1%	0.5x	20.3x

EV = enterprise value; LTM = last twelve months
 \$ in millions, except per share data
 NM = Not Meaningful

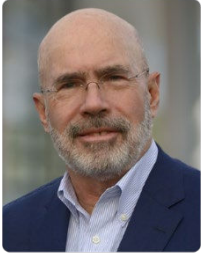
Controlled Environment Agriculture's Index Performance



Controlled Environment Agriculture Index Includes: AGFY, AGRI, CUBX.F, HYFM, UGRO
 Source: Capital IQ and Capstone Partners as of October 15, 2024



AGRICULTURE TECHNOLOGY REPORT CONTRIBUTORS



Jerry Sturgill

Head of Agriculture Investment Banking, Managing Director
jsturgill@capstonepartners.com | 208-850-5215

Jerry is a Managing Director and leads Capstone Partners' Agriculture Investment Banking Group. He has more than 30 years of experience across multiple disciplines, including investment banking, corporate law, and business operations. Jerry specializes in working with companies operating in agriculture, related food-processing, ag-tech and farm-based energy production. His vast expertise spans many areas, including mergers & acquisitions advisory, capital structuring, corporate governance, and tax structuring.

Prior to rejoining Capstone, Jerry co-founded boutique investment banking firm Galena Capital, based in Boise, ID. Previously, he was a Managing Director at Headwaters MB (now Capstone Partners). Additionally, he has experience as the turnaround CEO of a regional security company and as a board member and investor in a dairy processing company with distribution throughout the U.S. Jerry began his career as a corporate attorney at Latham & Watkins in New York, NY and Stoel Rives LLP in Boise, ID.



Skye Root

Managing Director
sroot@capstonepartners.com | 208-908-3848

Skye is a Managing Director within Capstone Partners' Agriculture Investment Banking Group. He brings nearly 20 years of vast experience in both institutional investment and agriculture, having developed a unique combination of deep expertise in the intersection of the two industries. He specializes in working with companies operating in the food and agricultural production, agricultural inputs, and ag-tech sub sectors. Skye is also the Founder of Root Agricultural Advisory where his team manages and grows farmland portfolios throughout the western U.S.

Prior to Capstone, Skye was a Managing Director and Head of the Agricultural practice at Galena Capital, a boutique investment banking firm based in Boise, ID. Previously, he was a Senior Vice President at Westchester Group Investment Management, a global farmland asset management firm. Skye has served on several private and non-profit boards and committees, including the Americans Society of Farm Managers and Rural Appraisers (ASFMRA), CFA Society of Idaho, Boy Scouts of America, and Farmer to Farmer. He was named the 2022 ASFMRA Farm Manager of the Year. He is a licensed real estate broker and is a graduate of Leadership Idaho Agriculture.



Izzy Jack

Market Intelligence Associate
ijack@capstonepartners.com | 281-620-1477

Izzy serves as a Market Intelligence Associate at Capstone Partners covering the Agriculture, Transportation & Logistics, and Building Products & Construction Services industries. Prior to joining Capstone, Izzy was a Research and Insights Associate for the PR Agency Racepoint Global, where she conducted secondary research to help guide brand communication strategies for clients in industries such as Consumer Technology. Izzy graduated with a Bachelor of Arts degree in Business from Southwestern University.

FIRM TRACK RECORD

Capstone Partners' Agriculture Investment Banking Group has represented clients across various Agricultural specialties. Our deep industry focus allows us to provide our clients with real-time transaction feedback and immediate access to key decision makers among the most active acquirers and investors in the Agriculture industry. A sampling of closed transactions is shown below.

 <p>HAS BEEN ACQUIRED BY</p> 	 <p>HAS DIVESTED ASSETS TO</p> <p>NDSM Holdings LLC a joint venture entity formed by</p>  	 <p>HAS BEEN ACQUIRED BY</p> 	 <p>HAS PARTNERED WITH</p>  <p>A TIAA Company</p>
<p>Mensonides Dairy</p> <p>HAS BEEN ACQUIRED BY</p> 	<p>TETON VALLEY BRANDS</p> <p>HAS RAISED SEED CAPITAL</p> <p>FINANCIAL ADVISOR</p>	<p>English Ranches</p> <p>HAS BEEN ACQUIRED BY</p> 	 <p>HAS BEEN ACQUIRED BY</p> 
 <p>HAS BEEN ACQUIRED BY</p> 	 <p>HAS BEEN ACQUIRED BY</p> 	<p>Global Organic Specialty Source, Inc.</p> <p>HAS BEEN ACQUIRED BY</p>  	 <p>HAS BEEN ACQUIRED BY</p> <p>AN INDIVIDUAL INVESTOR</p>

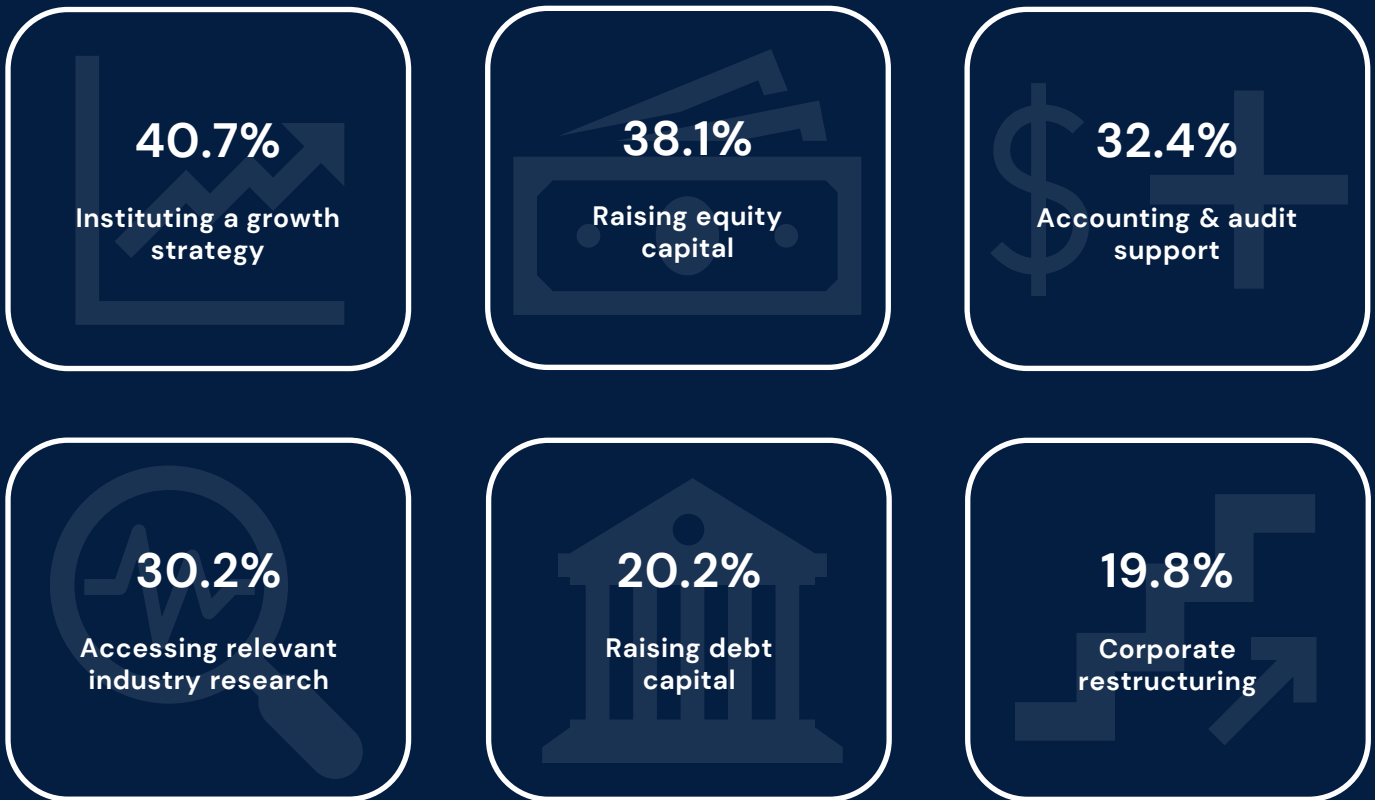
Note: Above transactions include those which were completed outside of the Capstone Partners platform

CAPSTONE’S PROPRIETARY RESEARCH REVEALS TOP SERVICES IN DEMAND

The stage and initiatives of a business often dictate which financial services are in demand. As the bulk of CEOs polled in Capstone’s 2024 Middle Market Business Owners Survey indicated growth strategies are a priority for 2025, the lion’s share (40.7%) of owners anticipate a need for growth strategy support services. Similarly, 38.1% of CEOs require equity capital advisory services to support operational initiatives and business expansion. Nearly one-third of owners require accounting and audit support to shore-up cash flows and establish financial stability. In addition, 30.2% of CEOs demonstrated an interest in accessing relevant industry research to keep up with emerging industry trends, complete competitor analyses, and track capital markets activity in their space.

Capstone has developed a full suite of [corporate finance solutions](#) to help privately owned businesses and private equity firms through each stage of the company’s lifecycle, ranging from growth to an ultimate exit transaction. In addition, we developed specialty advisory practices to provide financial performance, buy-side, employee stock ownership plan (ESOP), and equity and debt services. All of these capabilities are supported by 12 industry banking groups, an active sponsor coverage group, and a dedicated Market Intelligence Team.

Top Financial Services Required by Business Owners in 2025



Question: Have you ever had, or do you anticipate having, a need for any of the following services?
 Source: Capstone Partners’ Middle Market Business Owner Survey, Rebased Sample Size (N): 278



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Disclosure

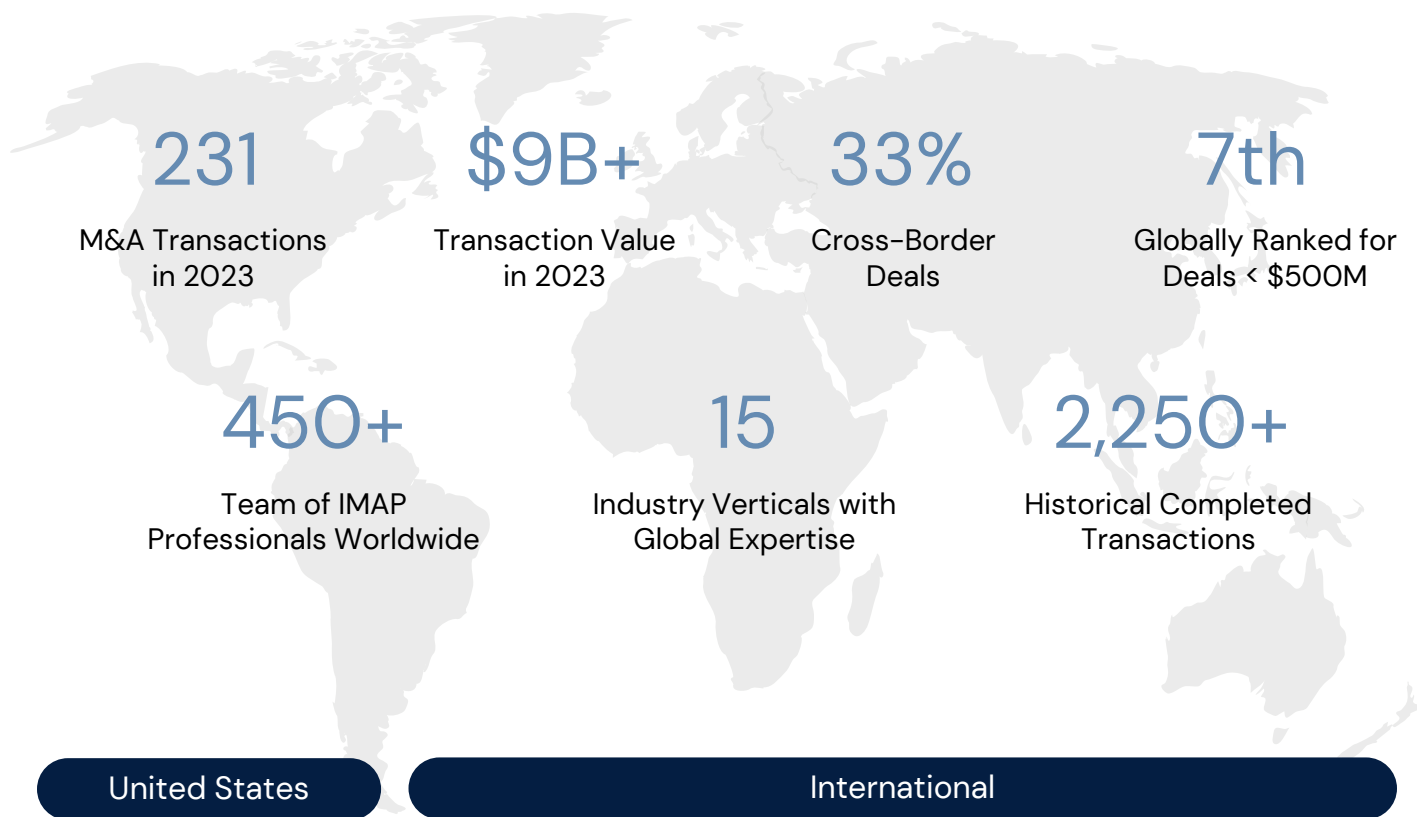
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CAPSTONE PARTNERS

Market Presence

With a long-established U.S. footprint, together with an international partner platform, we provide clients with broad expertise and access to key market relationships on a global basis. Our presence is backed by ~200 professionals in the U.S. with 450+ professionals across 41 countries.



~200 professionals
8 offices

Boston · Denver · Chicago · Dallas
Detroit · Irvine · New York · Tampa

450+ professionals
60+ offices in 41 countries

Asia: China · India · Japan · Thailand
Africa: Congo · Egypt · Ghana · Mauritius · Morocco · Senegal · South Africa
Americas: Toronto · Vancouver · Argentina · Brazil · Chile · Colombia · Mexico · Paraguay · Peru
Europe: Belgium · Bosnia & Herzegovina · Croatia · Czech Republic · Finland · France · Germany
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