2024 BUSINESS IMPACT REPORT

JOHN DEERE

2024 Business Impact Report

INTRODUCTION

STRATEGY AND FINANCIAL PERFORMANCE

CUSTOMER OUTCOMES

OPERATIONAL SUSTAINABILITY

PEOPLE AND COMMUNITIES

BUSINESS IMPACT REPORT: SUSTAINABILITY DISCLOSURES AND METRICS

This appendix contains our sustainability and climate related reporting priorities; governance, strategy, and risk management disclosures; metrics; and our TCFD, SASB, UN SDGs, and GRI indices. Visit https://www.deere.com/assets/pdfs/common/our-company/sustainability/data-book-2024.pdf

YEAR IN HIGHLIGHTS

455M Engaged Acres

125M Highly Engaged Acres

197M Sustainably Engaged Acres

775K
Connected Machines

$51.72B
Net Sales and Revenues

$25.62

in diluted earning per share, making it the second best level in company history

342,015 Hours

largest number of employee volunteer hours in our history

To see our full sustainability metrics visit https://www.deere.com/assets/pdfs/common/our-company/sustainability/data-book-2024.pdf

CHAIRMAN AND CEO LETTER

For more than 187 years, our commitment to empowering our customers has remained steadfast. We've empowered them to achieve more with fewer resources by leveraging our unique technology and insights, backed by our dedicated dealers who consistently deliver exceptional customer experiences and identify optimal solutions to drive both economic and sustainable outcomes.

Despite the significant challenges in the markets we operate in, we have proactively managed our business performance throughout the cycle. By learning from the past, we have taken decisive actions to better serve our customers and deliver results for our stakeholders.

In this year's Business Impact Report, we highlight how effective management of our business and resources fuels meaningful investments in our future, starting with strong partnerships with our customers. For example, enhancing the connectivity of our machines enables us to deliver unparalleled customer value through John Deere Operations Center™. This cloud-based digital platform is designed to improve productivity, efficiency, and decision-making, significantly reducing the total cost of ownership for our customers. We believe this value is further demonstrated by a year-over-year growth of 17% in the total number of acres actively utilizing our technology services.

Furthermore, we continue to make significant strides in the market adoption of our cutting-edge technologies, including See & Spray™, our intelligent spraying system, and ExactShot™, our precision starter-fertilizer solution. These innovations provide value by lowering

"Our commitment to effective financial management, strong partnerships with our customers, and continued investment in the future has been instrumental in ensuring our resilience and ongoing success."

JOHN MAY
Chairman and CEO
Deere & Company

input costs for herbicides and fertilizers while maintaining or enhancing yields. We've introduced a new Solutions as a Service business model for these technologies, offering customers lower upfront costs coupled with usage-based license fees. When paired with existing products like our AutoTrac™ precision guidance system, and Section Control — which reduces overlap in inputs such as seed, crop protectants, and fertilizers — we seek to empower our customers to achieve more with less.

Our commitment to building strong customer partnerships is exemplified by a successful pilot program with the Sonoma County Winegrowers Association, which showcases the economic and sustainable benefits of our Smart Apply spraying system. In addition to this collaboration, we also engage closely with farmers to gain insights into low-carbon fuel markets while advocating for renewable fuels and financial support for sustainable practices.

We're not just innovating in agriculture; we're also making great progress in roadbuilding and on construction sites. Our latest advancements — including Wirtgen's Rock Crusher WRC 240i, the next generation of SmartGrade™ precision grading technology, and SmartDetect™ Assist for real-time object detection and awareness — are designed to enhance job outcomes while also improving safety and reducing project time and traffic disruptions. Internally, we have embraced advanced technologies within our operations. Through digital continuous improvement platforms and automated material tracking systems, we have increased workforce engagement, accountability, and overall product quality.

Our commitment extends beyond technology. We are dedicated to helping ensure that the food produced by farmers reaches those in need. The John Deere Foundation actively addresses food insecurity and waste through initiatives like our partnership with nonprofits, such as The Farmlink Project, which delivers fresh produce to food banks and effectively aims to tackle long-standing supply chain challenges.

Together, these initiatives reflect our holistic approach to driving impact and supporting our customers and communities.

As we look to the future, we understand that addressing our customers' most pressing challenges demands a proactive and innovative approach. Given the constraints of tight operating windows and a shortage of skilled labor, we are dedicated to automating various tasks in the field and on jobsites. Our goal is to deliver fully autonomous solutions across all our customers' production systems — a vision we proudly showcased at the CES 2025 tradeshow.

At the heart of all our achievements are our people. We believe that attracting and retaining top talent is crucial for developing the best products. I'm incredibly proud of our employees, whose resilience and determination in overcoming challenges exemplify the exceptional talent that fuels our success. To further underscore our commitment to our workforce, the communities we serve, and the land we cherish, we introduced a fifth core value — humanity. This value strengthens the connection between our identity and our higher purpose, emphasizing the importance of fostering inclusive relationships where every individual is valued and has the opportunity to thrive.

Finally, we sincerely appreciate your steadfast support. Your trust and confidence in our company, along with the significant impact our customers make on the world, inspire us each and every day. As we journey forward together, you can rely on us to keep pushing boundaries and driving innovation and progress. Together, we are united in pursuing our higher purpose: We run so life can leap forward. Thank you for being an integral part of our journey toward a brighter future.

Respectfully,

John C. May

Chairman and CEO

Strategy and Financial Performance

LEAP AMBITIONS

JOHN DEERE is uniquely positioned to deliver both **ECONOMIC** and **SUSTAINABLE VALUE** for our customers through **ADVANCED TECHNOLOGY** and **SOLUTIONS.**

INCREMENTAL ADDRESSABLE MARKET OPPORTUNITY

>$150

BILLION USD

PRODUCTION & PRECISION AG

By 2026

- Reach 500 million engaged acres* with 50% highly engaged**

By 2030

- Ensure 75% of engaged acres are sustainably engaged acres***

SMALL AG & TURF

By 2026

- Ensure 100% of new small ag equipment is connectivity enabled
- Offer an electric option in each turf and compact utility tractor product family
- Deliver a fully autonomous, battery-powered electric ag tractor to the market

CONSTRUCTION & FORESTRY

By 2026

- Deliver 20+ electric and hybrid-electric product models
- Earthmoving: Increase grade management adoption to 50%
- Forestry: Boost Intelligent Boom Control adoption to 100%
- Roadbuilding: Increase precision roadbuilding solutions adoption to 85%

DELIVER ONGOING VALUE TO CUSTOMERS IN ALL THREE BUSINESS SEGMENTS

Connect **1.5 million** machines by 2026

Demonstrate viable **low/no carbon** alternative power solutions by 2026

Deliver and scale **Solutions as a Service** business model by 2030

FINANCIAL AND SUSTAINABLE OUTCOMES

Financial Outcomes by 2030

- Expand Equipment Operations OROS to 20%
- Grow enterprise recurring revenue to 10%

Product Circularity by 2030

- Achieve 95% recyclable product content
- Ensure 65% of product content is sustainable material
- Grow 50% in remanufacturing revenue

Enhance Ag Customer Outcomes by 2030

- Improve nitrogen use efficiency 20%†
- Increase crop protection efficiency 20%†
- Reduce 15% of customer CO_2e emissions†

Safety by 2026

- Improve Total Recordable Incident Rate 20%

Reduce Environmental Footprint by 2030

- 50% of operational CO_2e emissions (Scope 1 & 2)
- 30% of upstream and downstream CO_2e emissions (Scope 3)
- 15% of waste intensity
- 10% freshwater consumption intensity at water-stressed manufacturing locations

* Engaged acres is one of the foundational measures of customers' use of John Deere Operations Center™ (our online farm management system). It reflects the number of unique acres with at least one operation pass documented in the past 12 months.

** Highly engaged acres include documentation of multiple production steps and the use of digital tools to complete multiple, value-creating activities over a 12-month period.

*** Sustainably engaged acres include incorporation of two or more sustainable John Deere technology solutions or sustainable practices over a 12-month period.

† Per unit of output.

To see more on the 2024 Leap Ambitions progress click here: Business Impact Report: Sustainability Disclosures and Metrics.

CONNECTIVITY LINKS CUSTOMERS TO TECH, DRIVING MORE INFORMED DECISIONS

Getting — and staying — connected to our customers' businesses not only adds value for each customer, it makes their lives easier. A critical link in establishing that connection can be found in our technology, which we believe is essential in executing our strategy and achieving our Leap Ambitions.

This connectivity provides a better understanding as to how our innovations and solutions can lead to increased efficiency and profitability.

It also unlocks vast opportunities that were previously viewed as limited or unavailable. In order to maintain that upward trajectory, we continue to innovate and form collaborations on behalf of customers around the world. For example, our agreement with SpaceX is bringing satellite communications through its Starlink network to farmers experiencing rural connectivity challenges. This allows countries like Brazil to fully leverage our precision agriculture technologies.

Similar growth and potential are also happening in India where contractor farmers rely on small tractors outfitted with Deere Modular Telematics Gateway (MTG) devices for their businesses. With a 2026 Leap Ambition goal of ensuring 100% of new small agriculture equipment is connectivity enabled, we are helping those growers see the potential of data collection and digitalization for their businesses.

These types of reliable network connections are part of our ongoing journey that began more than a decade ago and are key in allowing data to be moved from the field or jobsite to the office and then back again.

LEAP AMBITIONS

CONNECT

1.5M

MACHINES BY 2026

BEING ENGAGED

A connected machine, like a tractor or sprayer, is more likely to utilize our precision ag solutions, creating an engaged acre that helps us understand the breadth of utilization of Deere technology across farms. Our other Leap Ambitions — to increase highly engaged and sustainably engaged acres — can help provide insights to further unlock economic and sustainable outcomes.

Through automation and sensor readings we can use machine data captured with JDLink™ to show efficiency gains to customers. Data from John Deere Operations Center™ also drives agronomic decisions and can highlight sustainable practices by showing input reductions (for example, fuel and herbicides) that may lead to bottom-line savings.

This information may help customers better manage their businesses while also preparing for future automation and autonomy solutions.

John Deere Operations Center is foundational to seamless workflow plans from trusted advisors, live monitoring of logistics, and the storage of all data in one place for analysis — operational, agronomic, and economic.

And not only are we focused on making John Deere Operations Center the operating system on the farm, we're also extending it to other production systems such as Small Ag & Turf, earthmoving, and roadbuilding.

LEAP AMBITIONS

REACH

500

MILLION ENGAGED ACRES WITH 50% HIGHLY ENGAGED BY 2026

LEAP AMBITIONS

ENSURE

75%

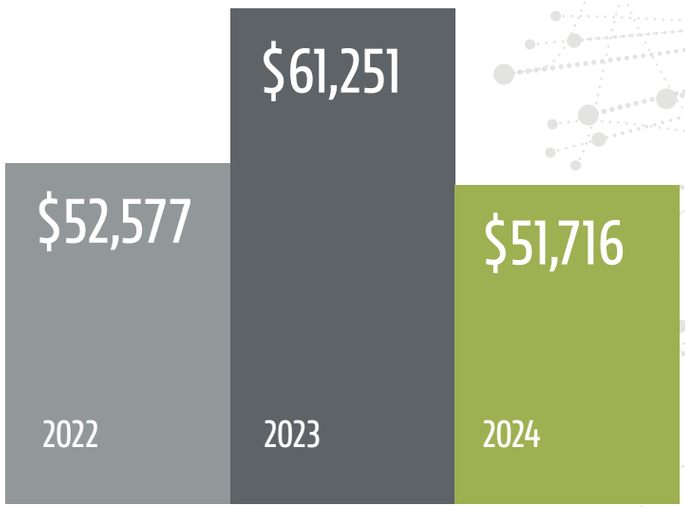
OF ENGAGED ACRES ARE SUSTAINABLY ENGAGED ACRES BY 2030

FINANCIAL HEALTH

Margin Growth Coupled With Disciplined Asset Management

NET SALES & REVENUES

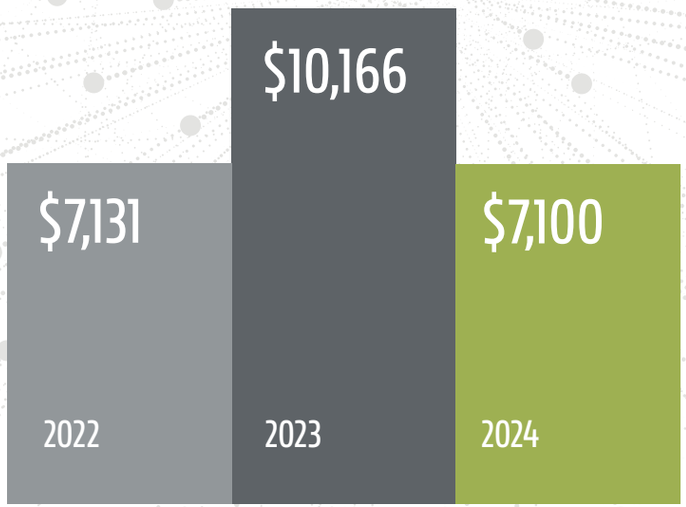
$51.72 BILLION



NET INCOME

(ATTRIBUTABLE TO DEERE & COMPANY)

$7.10 BILLION



The amounts shown in the charts above represent millions of dollars (USD).

SOLID AND DISCIPLINED EXECUTION

- Continued to demonstrate better performance across the cycle
- $25.62 diluted earnings per share, making it the second best level in company history
- Showcased structural improvements since announcing the Smart Industrial Operating Model in 2020
- Remain committed to making investments that enhance customer productivity and profitability
- Returned over $5.6 billion (in FY24) to shareholders via dividends and share buybacks

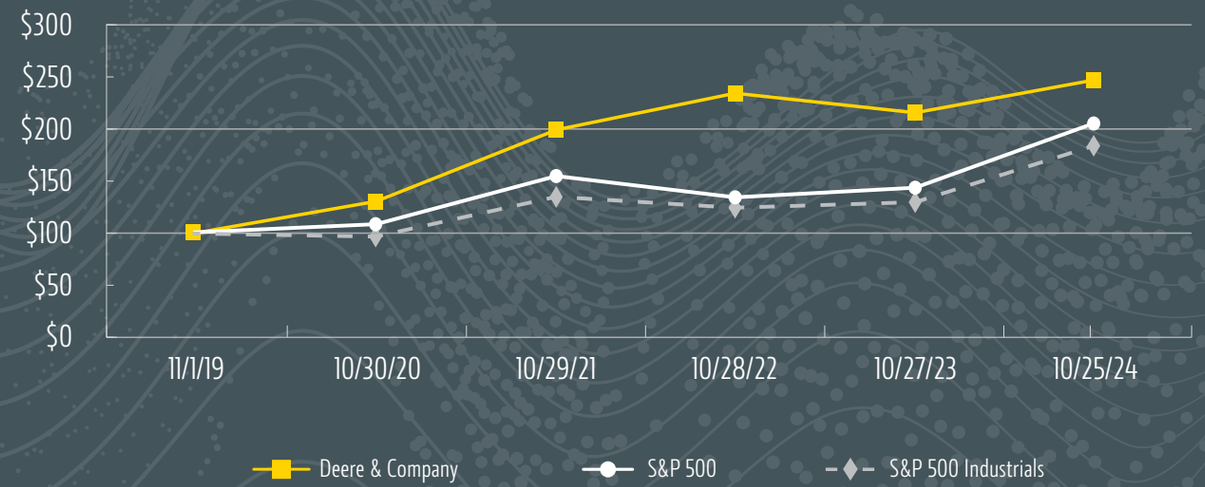
"2024 marked a year of resiliency, resiliency in our business and resiliency in our employees, who in the face of significant challenges throughout the year, still performed at the highest level and with the utmost determination. It's noteworthy that our earnings per share and cash returned to shareholders surpassed historical mid-cycle levels."

JOSH JEPSEN
Senior Vice President and Chief Financial Officer

STOCK PERFORMANCE

The following graph compares the yearly percentage change of Deere & Company's cumulative total shareholder returns (TSRs) for the last five years to that of the S&P 500 Index and the S&P 500 Industrials Index. The S&P 500 Industrials Index represents a focus group of companies across major industrial manufacturing categories that carry similar operational characteristics to us. The stock performance shown in the graph is not intended to forecast and does not necessarily indicate future stock price performance.

COMPARISON OF 5-YEAR TOTAL CUMULATIVE RETURN*



*$100 invested on 11/1/2019 in stock or index, including reinvestment of dividends.

DIVIDENDS AND SHARE REPURCHASE

	Dividends Declared per Share	Share Repurchase Spend ($Bn)
FY22	$4.36/share	$3.597
FY23	$5.05/share	$7.216
FY24	$5.88/share	$4.007

Deere & Company returned 81% of operating cash flows from equipment operations to shareholders in FY24.

Deere & Company has returned 76% of operating cash flows from equipment operations to shareholders over the past 3 years (FY22–FY24).

TSR PERFORMANCE

	2019	2020	2021	2022	2023	2024
Deere & Company	$100.00	$130.62	$200.08	$234.91	$216.46	$248.12
S&P 500	$100.00	$108.65	$155.28	$133.58	$143.35	$205.17
S&P 500 Industrials	$100.00	$96.67	$135.18	$124.17	$129.17	$184.31

SENIOR LEADERSHIP

From left: Ryan D. Campbell, Joshua A. Jepsen, Deanna M. Kovar, Cory J. Reed, Felecia J. Pryor, John C. May, Kellye L. Walker, Justin R. Rose, Rajesh Kalathur, and Jahmy J. Hindman.

John C. May (27)
Chairman and Chief Executive Officer

Ryan D. Campbell (17)
President, Worldwide Construction & Forestry and Power Systems

Jahmy J. Hindman (28)
Senior Vice President and Chief Technology Officer

Joshua A. Jepsen (25)
Senior Vice President and Chief Financial Officer

Rajesh Kalathur (28)
President, John Deere Financial, and Chief Information Officer

Deanna M. Kovar (24)
President, Worldwide Agriculture & Turf Division, Small Ag & Turf, Sales & Marketing Regions of Europe, CIS, Asia, and Africa

Felecia J. Pryor (2)
Senior Vice President and Chief People Officer

Cory J. Reed (26)
President, Worldwide Agriculture & Turf Division, Production & Precision Ag, Sales & Marketing Regions of the Americas and Australia

Justin R. Rose (2)
President, Lifecycle Solutions, Supply Management, and Customer Success

Kellye L. Walker
Senior Vice President and Chief Legal Officer, Global Law Services & Regulatory Affairs

Titles and years of service (in parentheses) as of January 1, 2025

MEET KELLYE WALKER, OUR NEW SENIOR VICE PRESIDENT, CHIEF LEGAL OFFICER

WHAT CAN THE COMPANY EXPECT FROM YOU IN YOUR FIRST YEAR AT DEERE?

Three tenets guide my leadership to support our shared success: clarity, collaboration, and communication. In my first year, the company can expect me to generate clarity, ensuring that objectives and expectations are transparent and well-defined. I foster a collaborative environment, encouraging teamwork and leveraging expert perspectives to drive innovation and efficiency. Moreover, I will emphasize open and effective communication, ensuring that information flows seamlessly across teams, facilitating informed decision-making and cohesive progress toward our goals.

WHAT IS IMPORTANT TO YOU AS A LEADER?

As a leader, it's crucial for me to be someone who listens actively, ensuring that team members feel heard and understood. Valuing every voice is essential, as diverse perspectives enrich our decision-making and foster a sense of inclusivity. Additionally, being open and transparent is vital to building trust and integrity within the team, as it encourages honest dialogue and clarity in our objectives.

BOARD OF DIRECTORS

Titles and years of service (in parentheses) as of January 1, 2025

John C. May (5)
Chairman and Chief Executive Officer,
Deere & Company

Leanne G. Caret (3)
Retired Executive Vice President and Senior Advisor,
The Boeing Company and Former President and
Chief Executive Officer, Boeing Defense, Space & Security

Tamra A. Erwin (4)
Retired Senior Advisor, Verizon Communications, Inc.
and former Executive Vice President and Group Chief
Executive Officer, Verizon Business Group

R. Preston Feight
Chief Executive Officer,
PACCAR Inc
(Appointed to the Board effective 11/01/2024)

Alan C. Heuberger (8)
Senior Investment Manager,
Cascade Asset Management Company

L. Neil Hunn (1)
President and Chief Executive Officer,
Roper Technologies, Inc.

Michael O. Johanns (9)
Retired U.S. Senator from Nebraska and
former U.S. Secretary of Agriculture

Clayton M. Jones (17)
Retired Chairman and Chief Executive Officer,
Rockwell Collins, Inc.
(Retiring from the Board effective
as of the 2025 Annual Meeting)

Gregory R. Page (11)
Chairman, Corteva, Inc.

Sherry M. Smith (13)
Former Executive Vice President and
Chief Financial Officer, SuperValu Inc.

Dmitri L. Stockton (9)
Retired Special Advisor to Chairman and Senior Vice President,
General Electric Company and former Chairman, President,
and Chief Executive Officer, GE Asset Management Incorporated

Sheila G. Talton (9)
President and Chief Executive Officer,
Gray Matter Analytics

MEET R. PRESTON FEIGHT, OUR NEWEST BOARD MEMBER

YOUR BACKGROUND IS IN BUSINESS STRATEGY, MANUFACTURING, AND TECHNOLOGY. HOW DOES YOUR EXPERTISE TIE INTO THE WORK DEERE IS DOING?

Both PACCAR and John Deere are on similar technology-driven journeys, committed to innovation in our industries. PACCAR focuses on producing high-quality trucks and transportation solutions, while Deere enhances productivity and efficiency in agriculture and construction.

In my 26 years with PACCAR, I have seen significant technological advancements that have greatly benefited our customers. I believe the lessons we've learned in business strategy and technology integration can be invaluable. By sharing my insights, I aim to help Deere enhance its value to customers and drive greater success for all stakeholders.

WHAT ARE YOU MOST LOOKING FORWARD TO WHILE WORKING WITH DEERE?

I'm excited to build on the strong history of collaboration between PACCAR and John Deere, rooted in our shared values and commitment to excellence. Both companies play a crucial role in driving the economy forward — whether through harvesting crops or transporting them to market. I believe our work significantly impacts communities and enhances lives.

I look forward to contributing ideas and insights to help Deere advance its mission and deliver even greater value to its customers, fostering innovation and driving positive change in its industries.

Customer Outcomes

OUR PRIORITIES

DEVELOPING SOLUTIONS THAT DELIVER ALIGNED SUSTAINABLE AND FINANCIAL OUTCOMES FOR CUSTOMERS

- 1.5 million connected machines by 2026 is the foundation of Deere's solutions road map
- Partnering with customers through engaged, highly engaged, and sustainably engaged acres to further unlock innovation opportunities for farmers
- Crop protection and nitrogen use efficiency goals to drive productivity and reduce ag customer CO_2e emissions
- Smart solution adoption targets to deliver more precision and unlock more productivity and profitability on the jobsite for earthmoving, roadbuilding, and forestry customers

WHAT WE HAVE DONE

- Continued expansion of tools and programs in John Deere Operations Center™
- Sonoma County Winegrowers saved on crop-protection chemicals and water usage with Smart Apply
- Launched new roadbuilding equipment
- Advanced precision earthmoving technology with SmartDetect™ and next-generation SmartGrade™
- Revealed first green hydrogen-powered Benninghoven burner
- Revealed several new autonomous machines at CES 2025

LEAP AMBITION	TARGET YEAR	PROGRESS[2]
1.5 million connected machines	2026	775,000 connected machines
500 million engaged acres	2026	455M engaged acres
50% engaged acres are highly engaged acres	2026	125M highly engaged acres
75% engaged acres are sustainably engaged acres	2030	197M sustainably engaged acres
50% grade management adoption	2026	53% adoption on eligible machines
100% Intelligent Boom Control adoption	2026	87% adoption on eligible machines
85% precision roadbuilding solution adoption	2026	87.6% adoption on eligible machines
20% increase in crop protection efficiency[1]	2030	17% increase[1]
20% improvement in nitrogen use efficiency[1]	2030	2% improvement[1]
15% reduction of customer CO_2e emissions[1]	2030	5% reduction[1]
30% reduction in upstream and downstream CO_2e emissions (Scope 3, Category 1 and 11)	2030	19% reduction

[1] Crop protection efficiency, nitrogen use efficiency, and customer CO_2e emissions are based on per unit of output and have progress reported based on 2023 results compared to the 2021 baseline. Please reference the Sustainability Disclosures and Metrics Book for additional information: https://www.deere.com/assets/pdfs/common/our-company/sustainability/data-book-2024.pdf

To see more on the 2024 Leap Ambitions progress click here: https://www.deere.com/assets/pdfs/common/our-company/sustainability/data-book-2024.pdf

[2] Except for the Ag customer outcome goals (see footnote 1), progress is based on fiscal year 2024 results compared to the 2021 baseline.

MORE TECH MEANS MORE PROFITABILITY AND SUSTAINABILITY IN EVERY PRODUCTION PHASE

The journey of growing a crop is laden with variability. And each year — based on the stresses of weather and timing — our precision technology helps farmers reduce the impact of that unpredictability while allowing them to do more with less.

Within the continuous loop of the production cycle, this may mean higher yields and increased productivity, which can lead to reduced costs and reduced inputs like fertilizer and herbicide.

To demonstrate this, we have highlighted the precision ag technologies that can drive productivity and efficiency with each pass and showcased their value by modeling potential savings results. The outcomes reflected throughout pages 17–19 are based on a model farm analysis, which is built to represent a 6,500-acre row-crop farm, spilt evenly between corn and soybeans, near central Iowa.[1]

UNDERSTANDING THE GROWING SEASON

Throughout and after the season, our connectivity and digital tools — housed in John Deere Operations Center™ — allow our growers to monitor their businesses, make tactical decisions, and create strategic plans based on data unique to their operations, lending credence to the concept of no two farms, two fields, or two rows of crops being the same.

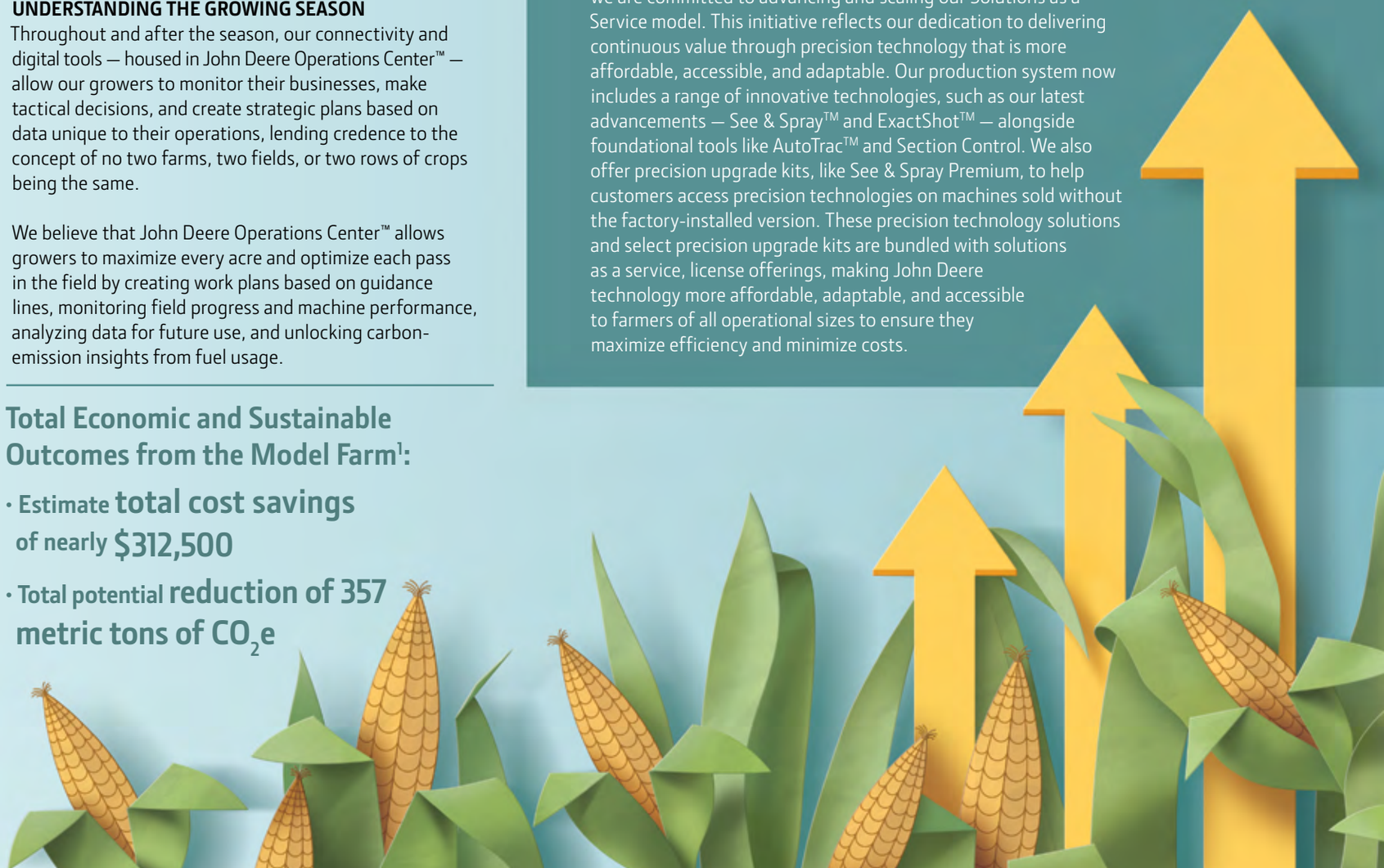
We believe that John Deere Operations Center™ allows growers to maximize every acre and optimize each pass in the field by creating work plans based on guidance lines, monitoring field progress and machine performance, analyzing data for future use, and unlocking carbon-emission insights from fuel usage.

Total Economic and Sustainable Outcomes from the Model Farm[1]:

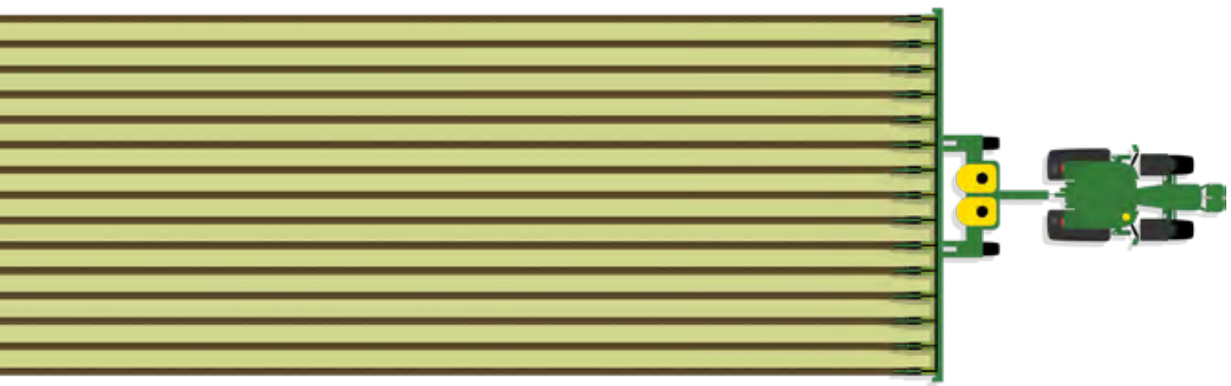
- Estimate **total cost savings of nearly $312,500**
- Total potential **reduction of 357 metric tons of CO_2e**

EQUIPPING CUSTOMERS WITH TECHNOLOGY THAT IS AFFORDABLE, ACCESSIBLE, AND ADAPTABLE

To enhance our customers' profitability and sustainability, we are committed to advancing and scaling our Solutions as a Service model. This initiative reflects our dedication to delivering continuous value through precision technology that is more affordable, accessible, and adaptable. Our production system now includes a range of innovative technologies, such as our latest advancements — See & Spray™ and ExactShot™ — alongside foundational tools like AutoTrac™ and Section Control. We also offer precision upgrade kits, like See & Spray Premium, to help customers access precision technologies on machines sold without the factory-installed version. These precision technology solutions and select precision upgrade kits are bundled with solutions as a service, license offerings, making John Deere technology more affordable, adaptable, and accessible to farmers of all operational sizes to ensure they maximize efficiency and minimize costs.



PRODUCTION CYCLE PHASES



PREPARE

Our precision ag essential technologies can help to unlock potential savings as the field is prepared to grow the crops through tillage, weed suppression, and nutrient application.

The technology that allows this phase to set up growers for success includes:

- **AutoTrac™** and **AutoPath™** are both solutions that support and help provide savings in each phase of the production system.
  - **AutoTrac:** This foundational innovation base technology, with more than 20 years of strong grower adoption and utilization, is the heart of our precise positioning and automated guidance. Driven by our StarFire™ receiver, AutoTrac helps combat operator fatigue common in 10-plus-hour days in the field as machines become hands-free when activated. And now with AutoTrac Turn Automation the machine will make end row turns on its own. In fact, based on industry studies, GPS guidance can result in an average of 6% reduction of fuel and labor expenses in production steps where GPS guidance is used.[2]
  - **AutoPath:** Mapping each field helps growers find the optimal starting point for the most efficient way to complete a job. With AutoPath — leaning on AutoTrac — a pass of an implement can be recorded to create guidance lines for the next pass. For instance, guidance lines created from the first pass when planting can be leveraged to efficiently set up a sprayer.
- **Section Control:** This automation reduces overlap and can be used in early spring with the sprayer applying herbicide and continue to be used through planting. Individual row shutoff reduces input waste and improves crop growth and yield.
- **TruSet™ Active:** This technology uses ultrasonic sensors to measure depth based on soil conditions and automatically adjusts based on varying field-to-field conditions.
- **Nutrient Application:** Getting the ground ready also means replenishing it. Our nutrient applicators cover a variety of options. These include lime application to adjust soil pH for optimal growing conditions as well as applying dry phosphorous and potassium. Our 2510H high-speed anhydrous applicator bar is able to leverage Section Control and AutoTrac to inject anhydrous ammonia into the ground to provide nutrients to the corn crop.

"The agricultural environment is changing and if we can cut chemical and fertilizer use, we feel that is the route we need to go to stay competitive in the industry."

ROGER PEINE
Peine Farms, Cannon Falls, MN

PLANT

Once equipment and fields are ready, the Plant phase follows. Keys to a successful planting phase include optimal weather, seed placement (depth/spacing), clean furrow, and fertilizer application.

- **ExactShot™:** This is our on-planter fertilizer system that can operate in two modes, continuous or dosing (directly on the seed). By dosing fertilizer on the seed in the furrow, fertilizer usage can be reduced by more than 60%.[3] This reduction means a customer is applying less volume, leading to increased productivity by matching seed and fertilizer filling at the same time.
- **ExactEmerge™:** Our high-speed row unit is designed to allow growers to plant at twice the speed as before while delivering seed to the trench with its brush-belt innovation.

"We need to be able to offset the price of the machine with the chemical savings, and we were able to do so. The See & Spray technology worked really, really good. We're spraying less chemical. It's saving us money. It's better for the environment."

BILL CAME
Came Farms, Salina, KS

APPLY

When the crop begins to take root and emerge, it battles weeds for soil nutrients, sunshine, and rain. That's when the Apply phase becomes critical and our See & Spray™ Ultimate's "green on green" technology saves time and money.

- **See & Spray Ultimate:** Utilizing our vision-processing units and 36 cameras across its 120-foot carbon-fiber truss-structure boom, Ultimate is able to scan more than 2,100 square feet per second while traveling at 12 miles an hour.[4] See & Spray can differentiate between a crop and a weed, then spray only the weed, which can save more than two-thirds herbicide from being applied:[5]
  - The two-tank system — with 1,600 gallons of capacity — can help make each pass more efficient by providing the ability to broadcast apply a residual herbicide while utilizing the second tank, containing a contact herbicide, with See & Spray.
- **ExactApply™:** Our nozzle-control technology enables customers to cover more acres accurately and consistently through individual nozzle control and curve compensation.

HARVEST

The idea of a "short window" doesn't only impact planting. It is critical during all phases, including the final phase of the production cycle, harvest. In many parts of the world, harvest season races to beat winter weather and the conditions that come with it.

- **Harvest settings automation:** On the combine, this technology can allow farmers to set up limits for grain loss, foreign material, and broken grain using the new G5^{Plus} Universal Display. With these outcomes, the combine will automatically adjust key performance settings, reducing manual adjustments and giving farmers more time to focus on getting crops harvested faster.

$48 PER ACRE IN VALUE ADD TO JOHN DEERE CUSTOMERS[1]

COMMON THEMES IN EVERY PHASE

Precision ag technology is a clear example of innovative practices capable of producing sustainable results while also linking each grower's business to the desired outcomes of profitability and efficiency.

Throughout the production cycle, a Deere customer farming 6,500 acres of corn and soybeans evenly split with these technologies could result in the following sustainable outcomes[1]:

Herbicide Cost Savings: $63,000
Fertilizer Cost Savings: $178,500
Time and Labor Cost Savings: $4,000
Fuel Cost Savings: $8,500
Seed Cost Savings: $58,500

TOTAL Cost Savings: $312,500

TOTAL CO_2e savings: 357 metric tons

[1] All results are estimated, will vary, and have not been verified by a third party. Results are calculated based on data gathered from various industry sources and will vary based on the source, year and region. Modeled results are based on a 6500-acre farm located near central Iowa. The per acre cost savings is the total cost savings of $312,500 divided by the 6500-acres with 3250 acres of corn and 3250 acres of soybeans. Assumptions used include corn following soybeans at 222-bushel corn/acre and 65-bushel soybeans/acre following corn. Corn and soy prices are based on the Federal Crop Insurance Price Set in February 2024 (https://prodwebnlb.rma.usda.gov/apps/PriceDiscovery/GetPrices/YourPrice). Diesel price is based on local spot for February 2024, at $3.45/gallon. Herbicide costs are based on a local commercial applicators 2024 herbicide program costs. Fertilizer is based on Iowa State 2024 crop budget (https://www.extension.iastate.edu/agdm/crops/pdf/a1-20-2024.pdf). Diesel fuel savings is based on AutoTrac's ability to reduce overlap and increase field efficiency, reducing the hours per acre of each machine in the model farm, considering a 10% reduction in inputs (Auburn University 2010).
Corn passes in the field include: an application of Anhydrous Ammonia, monoammonium phosphate (MAP), and Potash, conventional primary and secondary tillage passes with TruSet™, planting using an ExactEmerge™ planter while using ExactShot™ to apply in-furrow starter fertilizer, herbicide applications using See & Spray (66% herbicide savings based on internal John Deere strip trials compared to traditional application methods, https://www.deere.com/en/sprayers/see-spray-ultimate/), planting using Exact Shot (60% reduction as compared to a continuous rate of in-furrow starter fertilizer application), and harvesting corn using Harvest Settings Automation solution. AutoTrac™, AutoPath™, and Section Control are technology solutions used throughout the production cycle. Diesel fuel savings is based on AutoTrac's ability to reduce overlap and increase field efficiency reducing the hours per acre of each machine in the model farm, considering a 10% reduction in inputs (Auburn University 2010).
Soybeans passes in the field include: an application of monoammonium phosphate (MAP), and Potash, conventional secondary tillage passe with TruSet™, planting using ExactEmerge™ planter, herbicide applications using See & Spray (66% herbicide savings based on internal John Deere strip trials compared to traditional application methods, https://www.deere.com/en/sprayers/see-spray-ultimate/), and harvesting the soybeans using Harvest Settings Automation solution. AutoTrac™, AutoPath™, and Section Control are technology solutions are used throughout the production cycle. Estimated CO_2e emissions savings are based on ounces of herbicide savings, pounds of fertilizer savings, and diesel fuel savings with calculations based on the 2022 Argonne Greet National Laboratory's GREET FD-CIC Model for average corn and soybean fields in the United States with conventional tillage, no cover crops, and fall nitrogen fertilizer applications.

[2] https://energsustainsoc.biomedcentral.com/articles/10.1186/2192-0567-2-2.

[3] Initial tests of a prototype ExactShot system resulted in more than 60% reduction in fertilizer use compared to ExactRate with no material impact to yield.

[4] Deere launches See & Spray™ Ultimate: in-season targeted spray technology combined with dual product solution system for corn, soybeans, and cotton, https://www.deere.com/en/news/all-news/seespray-ultimate/.

[5] Results based on internal John Deere strip trials in corn, soybeans, and cotton in Iowa, Mississippi, Texas, and Illinois, in typical growing conditions, with varying weed size, crop canopy, and field conditions, using targeted spray of non-residual herbicide only, and using current software/algorithm at time of trials. Results vary based on crop; for details see https://www.deere.com/en/sprayers/see-spray-ultimate/. Weed-control results based on dual-tank operation, adding an additional herbicide that could not be added to an existing herbicide mix in a single tank. Individual results will vary.

SUSTAINABLE PRACTICES START WITH DATA, PARTNERSHIPS AND ADVOCACY

When we talk about making growers more profitable through our technology and sustainable practices, that often leads us to where farming begins — the soil.

Committing to sustainable farming practices, like reducing tillage and adding cover crops, is a long-term investment but can pay back with healthier soil, leading to more resilient yields and a more profitable business.

That's why we not only continue to innovate on behalf of growers, we also advocate for them, too. We aim to do this in two ways: first, by leaning on our data management and the insights captured by our technology and, second, by partnering with our customers.

Take, for example, Feikema Farms located near Luverne, Minnesota. After severe flooding in 2014 washed away valuable — and finite — topsoil, the operation decided it was time to use strip-till and no-till farming methods to help water infiltrate the soil more efficiently and reduce erosion. While the concept was not new to the Feikemas, John Deere Operations Center™ helped to streamline data management and provide insights to manage their field to a plant level.

"Our dad and uncle tried no-till in the 1990s, and it didn't work, because they didn't have the right tools," Shawn Feikema said. "And just 10 years ago we were keeping all our records by hand. Now it's all in the cloud and we control everything with sub-inch accuracy. We can manage the farm to a level that has never been possible."

PROOF THROUGH DEMONSTRATION

Research has shown that incorporating sustainable practices like no-till or cover crops often demands more costs and labor, and depending on crop type, can take almost three to five years to show benefits. It's here that our technology can help growers do more with less, ensure there are data solutions to help document successes, and make it easy to participate in emerging markets that help growers financially.

One way we're documenting those successes and providing that data is through proof points like our 80-acre Iowa State University (Ames, Iowa) sustainability demonstration farm. Over the past three years, the farm has allowed us to learn more about how to best provide innovative tools and technology when it comes to soil health.

Divided into eight 10-acre plots, the demo farm has utilized various tilling and cover-cropping techniques to deliver key findings, including:

- Soybeans planted in cover crops have shown to be more resilient than corn, showing less impact to yield and economics.
- Soil-aggregate stability in a no-till plus cover-crop combination is higher compared to conventional tillage on its own.
- Timing, management, and termination of a cover crop drives planting and fertilizer application timing decisions.
- Environmental conditions impacting soil moisture should be considered when making split fertilizer application decisions to reduce the risk of nitrogen losses and yield impact.
- At the field level, corn and soybeans with no-till plus cover crops showed an approximate 70% reduction per bushel in carbon intensity (CI) compared to conventional tillage practices.[1]

"We saw 30-bushel corn after integrating small grain cover crops. Now the system is starting to work. It is really just that biodiversity in the soil. When you take care of the land, the land takes care of us. When farmers do well, the small businesses do well, you get great community events and great community growth."

SHAWN FEIKEMA
Feikema Farms, Luverne, MN

70% REDUCTION PER BUSHEL IN CARBON INTENSITY[1]

CARBON EMISSION CALCULATOR

We calculated the demo farm's estimated field-level CI using our new Carbon Emission Calculator[1], now available to select U.S. corn and soy growers. The tool calculates field-level carbon-intensity scores using the GREET model by Argonne National Lab, which is commonly used to score crop feedstocks for renewable fuels.

By leveraging machine-generated data from connected equipment, growers can quickly calculate carbon emissions estimates to benchmark their fields and gain entry to new markets, and in the future they may qualify for additional downstream revenue.

FROM THE HEARTLAND

Feikema Farms was featured in the documentary "From the Heartland" where they shared their story and demonstrated how innovative farming practices are beneficial to the sustainability of their farm, the environment, and their local community.

27% REDUCTION IN CARBON INTENSITY COMPARED TO THE NATIONAL AVERAGE[2]

ENABLING CROP-BASED FUELS

We gained additional valuable insights from our two-year low carbon feedstock pilot program, which covered nearly 6,000 acres that incorporated a conservation practice such as reduced tillage, no-till, and cover crops. Notably, the program achieved an average 27% reduction in carbon intensity compared to the national average over the two years.[2] This pilot has been used to demonstrate to low carbon fuel markets and ethanol producers how conservation practices can lower carbon intensity in corn and highlighted the benefits of direct payments to farmers.

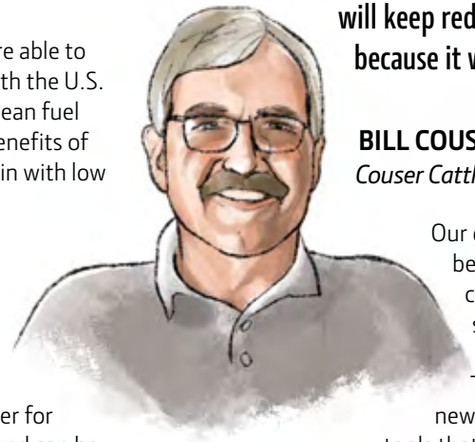
Having these insights means we're able to advocate on behalf of farmers with the U.S. Department of Agriculture and clean fuel markets, for the feasibility and benefits of paying farmers for producing grain with low carbon emissions.

We're doing this by helping support feedstock growth and advocating for financial support for these sustainable practices.

Biofuels are seen as a great answer for low carbon transportation fuels and can be an opportunity for our growers, particularly in the United States and Brazil, to provide the primary feedstocks contributing to renewable fuels production.

Bill Couser, a grain and cattle farmer in Nevada, Iowa, certainly understands ethanol's impact. About 20 years ago he was lamenting the fact that the corn he raised was being processed — and profited — by someone else. So, he did something about it: He raised enough money to build an ethanol plant. As he transitions away from his farming operation, he does so knowing he left his business and his community in a better place.

"The thing about ethanol is that it connects so many industries and lives together. Farmers like my son will keep reducing their carbon intensity score because it will benefit everyone."



BILL COUSER
Couser Cattle Company, Nevada, IA

Our digital agriculture solutions will be beneficial to enable dynamic, field-level carbon intensity in future climate-smart programs.

That leads us to continue to seek out new scalable opportunities and develop tools that will provide economic benefits to growers. We view it as our responsibility to help growers find economic benefits to the sustainable practices we support them in implementing. These actions go beyond the Carbon Emission Calculator and include enabling farmers to easily find and participate in conservation-practice programs.

A SUSTAINABLE PAYDAY

Within John Deere Operations Center™ is the sustainability program section, an all-in-one link that easily connects growers to opportunities. Previous successes include helping farmers participate in the Cargill RegenConnect® program and the U.S. Cotton Trust Protocol®. This year, we added a collaboration with the Soil and Water Outcomes Fund®.

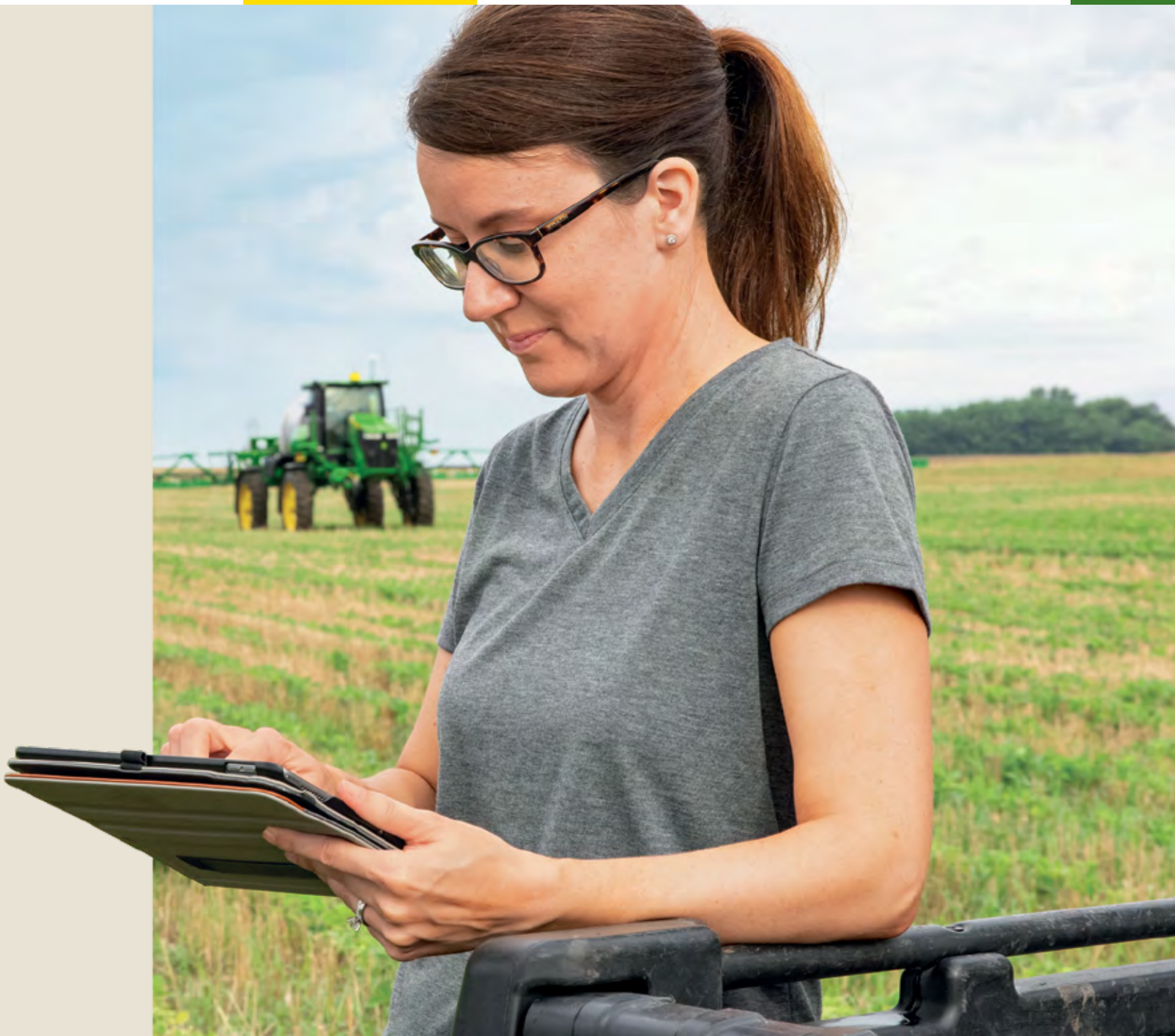
The fund provides financial incentives to growers for implementing on-farm conservation practices, making it easier for them to sign up, manage, and submit data. Those enrolled in the program implement conservation practices such as reduced tillage, cover crops, extended crop rotations, and fertilization management to improve soil health and reduce erosion. Eligible acres must have a primary crop of corn, soybeans, wheat, or sugar beets.

Through this integrated digital experience, we're going a step further in making the experience more seamless and ultimately easier for growers to be rewarded for their efforts.

By bringing these opportunities forward and connecting them with our technology, we continue to highlight how we're meeting growers at the intersection of sustainability and profitability.

[1] Calculations for corn and soybean carbon intensity scoring results are based on Argonne National Laboratory's GREET 2022 FD-CIC model and are internal estimates that have not been verified by a third party. The conventional tillage corn CI score is based on an average corn field in the United States with conventional tillage, no cover crops and fall nitrogen fertilizer application. The ISU demo farm is based on results from a corn field with no-till and use of cover crops with a split nitrogen fertilizer application. The conventional tillage soybean CI score is based on the average soybean field in the United States with conventional tillage and no cover crops. The ISU demo farm CI score results are based on results from a soybean field with no-till and use of cover crops.

[2] Based on Argonne National Laboratory's GREET 2022 FD-CIC model for an average corn field in the United States with conventional tillage, no cover crops, and fall nitrogen fertilizer application.



DEERE MAKES INVESTING IN TECH AN EASIER "DOLLAR TO SPEND" IN THE CHALLENGING VINEYARDS OF SONOMA COUNTY

As a farmer, regardless of what you're working the earth to produce, there are universal concerns that loom over your business.

At John Deere we continue to work directly with our customers to address those issues with technological solutions.

Take Sonoma County — a slice of northern California known for growing wine grapes — for example. Our relationship with the Sonoma County Winegrowers led to a 2024 pilot program that produced impactful results.

And while wine grapes definitely are different than corn and soybeans, growers' challenges are not. The pilot — and our technology — were able to address those shared issues of increased input costs, skilled labor shortages, and the need for actionable data.

Even though agriculture challenges can look familiar, there is one thing that makes wine grape growers unique.

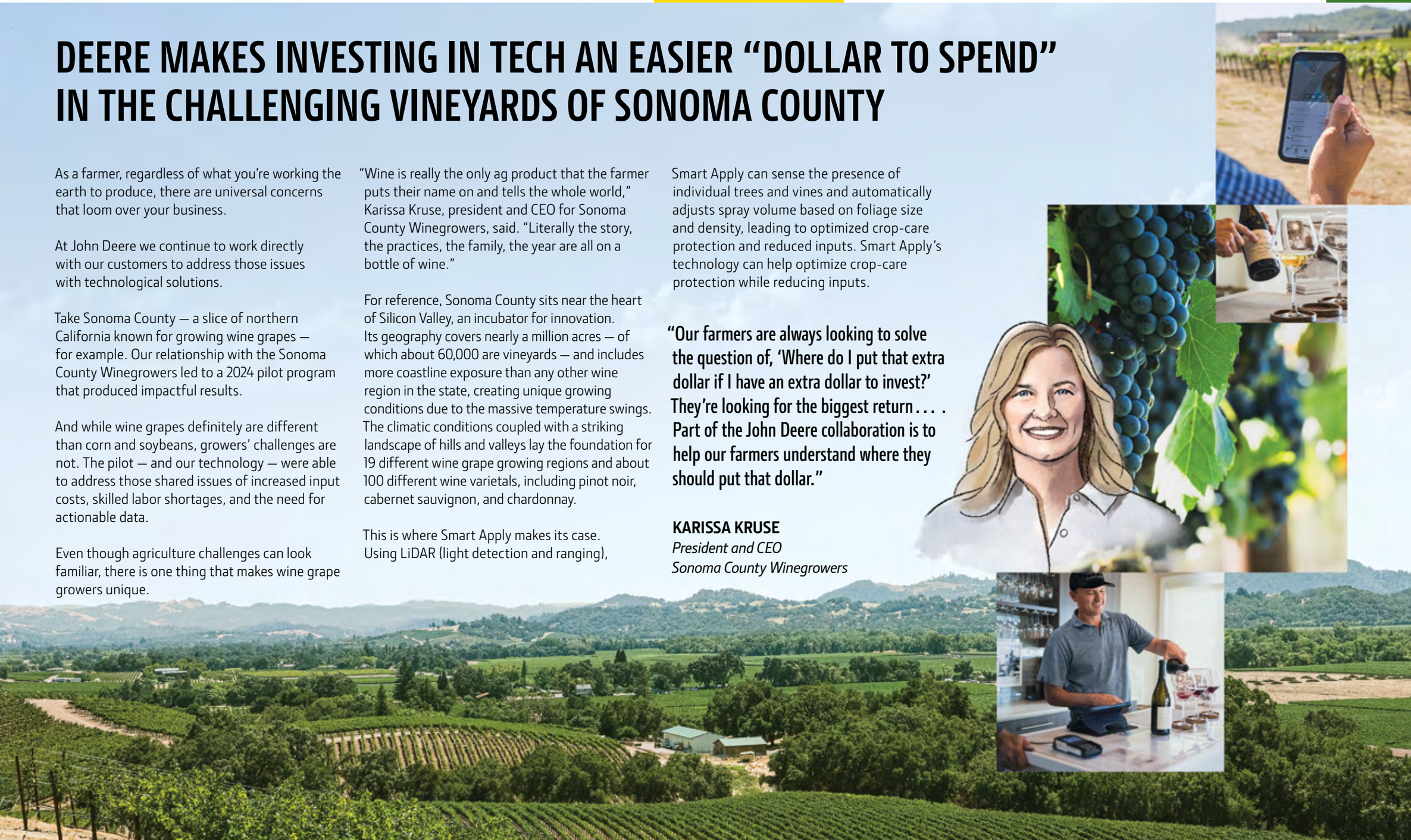
"Wine is really the only ag product that the farmer puts their name on and tells the whole world," Karissa Kruse, president and CEO for Sonoma County Winegrowers, said. "Literally the story, the practices, the family, the year are all on a bottle of wine."

For reference, Sonoma County sits near the heart of Silicon Valley, an incubator for innovation. Its geography covers nearly a million acres — of which about 60,000 are vineyards — and includes more coastline exposure than any other wine region in the state, creating unique growing conditions due to the massive temperature swings. The climatic conditions coupled with a striking landscape of hills and valleys lay the foundation for 19 different wine grape growing regions and about 100 different wine varietals, including pinot noir, cabernet sauvignon, and chardonnay.

This is where Smart Apply makes its case. Using LiDAR (light detection and ranging), Smart Apply can sense the presence of individual trees and vines and automatically adjusts spray volume based on foliage size and density, leading to optimized crop-care protection and reduced inputs. Smart Apply's technology can help optimize crop-care protection while reducing inputs.

"Our farmers are always looking to solve the question of, 'Where do I put that extra dollar if I have an extra dollar to invest?' They're looking for the biggest return . . . . Part of the John Deere collaboration is to help our farmers understand where they should put that dollar."

KARISSA KRUSE
President and CEO
Sonoma County Winegrowers



THE PILOT PROGRAM

The collaboration between Deere and the Sonoma County Winegrowers includes six farmers and focuses on the challenges of growing wine grapes, given the climate they are grown in.

"Our farmers were really impressed with the efficacy of Smart Apply and how it worked for them," Kruse added. "Each grower immediately recognized the impact to their bottom lines due to a reduction in material application while also benefitting from the protection the material applied."

In addition to Smart Apply, "modems and JDLink™ helped capture data and provided insights not realized before," Kruse said. It's those efficiency gains that has Kruse already looking forward to the second year of the pilot, knowing that even more can be realized.

"Our farmers are incredibly hungry for innovation," Kruse said. "Wine grapes are a fickle crop, and they're extremely time sensitive because that ultimately affects the quality, and quality is taste. And taste is everything. John Deere has helped us address those challenges and they've shown us a solution with their technology."

SMART APPLY

Deere's commitment to high-value crop farmers was enhanced when we acquired the Smart Intelligent Spray Control System in 2023. Smart Apply can allow growers to reduce material costs, where they can sustainably improve their bottom line with a reduced environmental impact.

SONOMA COUNTY WINEGROWERS' SAVINGS WITH SMART APPLY[1]

Nearly 28%

OF CHEMICAL AND WATER USE REDUCTION EQUATING TO

Nearly 38,000

GALLONS OF CROP PROTECTION AND WATER SAVINGS ON

2.7K

TOTAL APPLIED ACRES

[1] Savings is provided based on results of Sonoma County Winegrowers 2024 usage of Smart Apply technology compared to traditional crop protection chemicals and water usage. Results will vary.

SEE MORE AND REDUCE REWORK WITH PRECISION CONSTRUCTION TECHNOLOGY

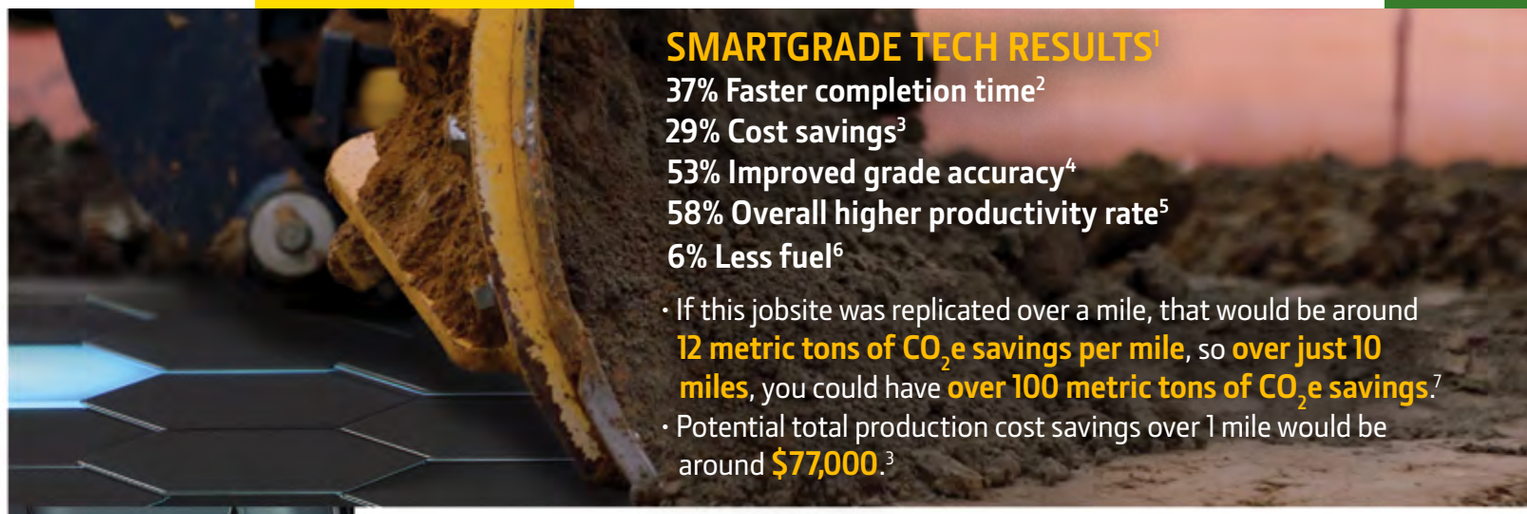
Precision technology advancements in our construction equipment allow customers to unlock profitability, especially in environments where limited skilled labor, safety, and rework are always top of mind.

So, what does that look like?

It all starts with the efficiency, performance, flexibility, and ease of use that comes from proper grade management. Through precision technology like our grade management solutions, we help customers tackle the biggest waste of time — rework. Because rework can account for more time spent at a jobsite, products like SmartGrade™ can help reduce both time and cost.

A site-development study in Arizona put our innovations on display by doing simple A-B testing with known variables — creating a real-world jobsite by doing the underlying base-level work necessary for building a road/ditch/bike path project first without our technology and then building it again using Deere technology.

Deere's innovations on the earthmoving equipment used in the study — dozers, graders, and compact track loaders with grade control — led to 37% faster project-completion times, a 53% improvement in grade accuracy, a 35% reduction in personnel hours, and a 58% overall higher productivity rate — all while using less fuel and producing less CO_2e emissions.[1,2,3,4,5,6,7]



SMARTGRADE TECH RESULTS[1]

37% Faster completion time[2]
29% Cost savings[3]
53% Improved grade accuracy[4]
58% Overall higher productivity rate[5]
6% Less fuel[6]

- If this jobsite was replicated over a mile, that would be around **12 metric tons of CO_2e savings per mile**, so **over just 10 miles**, you could have **over 100 metric tons of CO_2e savings**.[7]
- Potential total production cost savings over 1 mile would be around **$77,000**.[3]

Even with proven results, we are continuing to innovate technologies such as the next generation of SmartGrade. By allowing more control of the blade position and user interface, John Deere is enabling customers to realize additional value through larger displays, more precise accuracy, enhanced grading performance, simpler user interface with greater diagnostic capabilities, and remote support through John Deere Operations Center™. Deere's customers now have more options to access integrated grade control solutions. By enabling optionality through SmartGrade, customers can choose John Deere with the technology preference that best suits their jobsite requirements.

The release of the next generation of SmartGrade means we can offer the largest global OEM (original equipment manufacturer) portfolio of grade management solutions, available at various price points and performance levels both from the factory and as performance upgrade options.

"Experienced operators tell us the performance of next-generation SmartGrade is extraordinary. They can trust the machine to do the job right the first time, eliminating the need of exiting the cab to check the grade. Additionally, operators state the enhanced display with the grade-control guide, allows them to get the work done efficiently. "

SEAN MAIRET
Group Product Manager
Grade Management

"If someone is walking behind you, the alarm will sound and you will know they are there and they will know you are there. It's a great warning and great device for you as an operator."

ZAC COPPOCK
Rock n Dirt Excavating

ENHANCING JOBSITE AWARENESS
Whether the work is being done in a quarry, while building a road, or on a construction site, constant motion creates a hive of nearly nonstop activity, making safety the most critical priority.

It's here where Deere's next generation of utility and production class loaders — enabled with new technology — can help ensure timely and effective communication to reinforce jobsite safety through our strategy of "show me, tell me, assist me."

HERE'S HOW IT WORKS:
- **Show me:** Our advanced vision and object detection system provides the foundation for our class-leading avoidance notifications. Our in-cab display acts very much like your own vehicle with projected path lines when in reverse. We've also added two cameras to the side mirrors, giving the operator a 280-degree view around the machine.
- **Tell me:** SmartDetect™ utilizes machine learning and stereo cameras, similar to Deere's See & Spray™, to give audible and visual alerts in identifying potential hazards within close proximity to equipment while also providing an external alert for bystanders.
- **Assist me:** SmartDetect Assist™ will help assist the operator to slow and stop the equipment before coming in contact with people or objects.

[1] The site-development study was an internal study conducted and calculated based on comparison of path using SmartGrade technology compared to traditional, non-technology grading methods setup to simulate constructing a road and ditch from a rebuild flat pad. Prior to each run (technology and traditional), the dirt was prepared and graded to this starting surface using a SmartGrade grader. Equipment utilized in the study includes excavators, articulated dump trucks, and a compactor. Equipment used that had SmartGrade technology include the crawler, compact track loader, and grader. The time for the compactor was omitted from the project since it was the same for each and was only done to allow for a good quality finish grade. Results will vary.

[2] Faster completion time was based on internal studies conducted and calculated based on a comparison of using SmartGrade technology versus completing the project with traditional machine operation methods. Results will vary.

[3] Production cost savings is based on fuel, labor, and materials cost savings for this site development study with and without SmartGrade technology replicated over a mile. Results will vary.

[4] Grade accuracy is based on ± 0.10-foot tolerance.

[5] Productivity is based on yards of material or soil moved per hour.

[6] Estimated fuel consumption savings is based on internal studies conducted and calculated based on a comparison of the total fuel consumption of machines used in site-development study with and without SmartGrade technology. Results will vary.

[7] Estimated CO_2e savings is based on total fuel consumption savings from internal study conducted and calculated based on comparison of the total fuel consumption of machines used in site development study with and without SmartGrade technology. The GREET model for 2023 was applied and emission factor for low-sulfur diesel was utilized. All results are estimated, will vary, and have not been verified by a third party.

WIRTGEN ROCK CRUSHER MAKES QUICK, EFFICIENT WORK OF DEMANDING JOBS

"Everything in life is somewhere else. And you get there in a car."

That's how author E.B. White saw it and today, with nearly 40 million miles of roads crisscrossing our planet, he wasn't wrong.[1]

By connecting communities and commerce, the world's roadways face daily stress. And while municipalities can't simply tear up every faltering mile and put down new, they can repair what already exists.

That's where John Deere and the Wirtgen Group showcase a suite of hard iron and innovative technology products that aim to not only build roads but to rehabilitate them. In Europe, where nearly 12 million miles of road exists, this approach is paying off by reducing both time and cost while also sustainably increasing the road's durability.[2] Wirtgen's Rock Crusher WRC 240i (a cold recycler and soil stabilizer) has proven to address each of those demands.

OLD ROAD TO NEW BASE IN A SINGLE PASS

Launched in February 2024, the WRC 240i combines several process steps in one pass for the stony ground (hard core, concrete fragments, cobblestone hand-packed pavement layers, and stony soils) most common in Europe. These steps include on-site crushing, mixing, and screening at production rates of up to 600 tons/hour to create a homogenous mix in a continuous process.[3]

The WRC 240i expands Wirtgen's product portfolio of wheeled soil stabilizers designed especially for the processing of stony ground. In addition to the crushing of rocks and stones, the machine can add binding agents (e.g., cement) and water in the same pass, for instance in the preparation of base layers.

As opposed to the removal and replacement of material, the processes here are characterized by shorter construction times and conservation of resources.

REHAB IN ACTION

Take, for example, Germany's L98, a two-lane country road that winds along the Moselle River in a scenic setting two hours west of Frankfurt. This case study, while relatively short on distance (3 kilometers or just under 2 miles) had a big impact for the municipality of Beilstein.

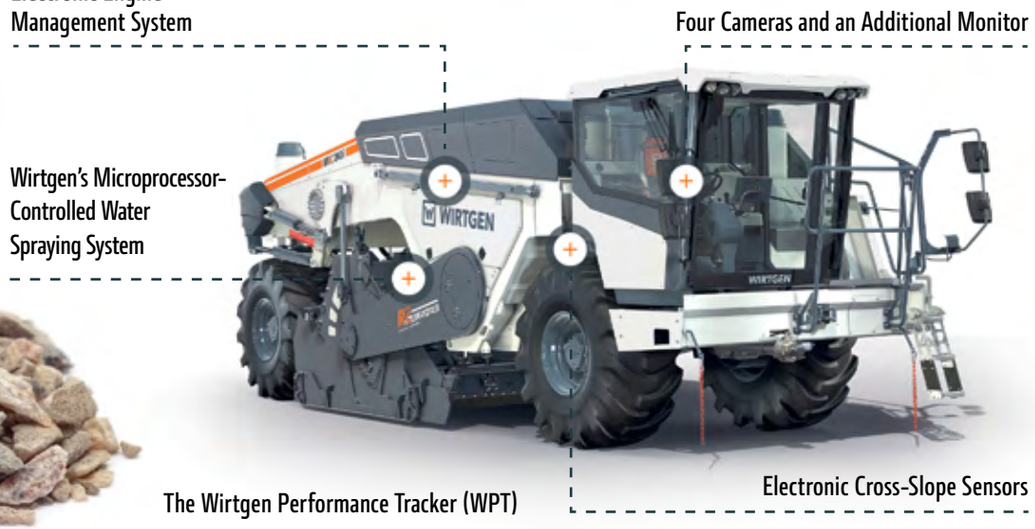
In need of rehabilitation, this portion of the L98 was made of an underlying hand-packed stone layer and asphalt surface layer. The goal was the creation of a new, homogeneous base layer that would provide long-term resistance to the axle loads of heavy traffic common to the area.

The L98's composition meant traditional rehabilitation could be labor intensive, with conventional processing proving to be time consuming and costly largely due to material transportation.

With the lack of skilled labor, the WRC 240i's technology was essential in addressing time, performance, and efficiency. Additionally, reducing operator fatigue is aided by the sensitive electrohydraulic steering system and optional AutoTrac™ steering.

Inside the cab, our technology displays maintenance diagnostics, parameter settings, and troubleshooting. Automatic self-diagnostics also provides autonomous monitoring of valves, sensors, and control components on the WRC 240i. Enhanced visuals of work areas and processes are aided by four cameras and an additional monitor, which can improve the safety of the jobsite by reducing the instances of the operator leaving the cab to double-check progress and performance.

Also aiding the operator and the business is the Wirtgen Performance Tracker (WPT) Recycling. WPT uses GPS positioning via Global Navigation Satellite System sensors and machine information to determine the area and volume performance and the additive quantities needed.



This allows the operator to continuously track key information in real time and means an automatic determination of mixing performance needed for exact project accounting and analysis of savings potential can be realized.

From a diesel standpoint, the WRC 240i's fully electronic engine management system matches fuel consumption and power needed for crushing and mixing to achieve maximum efficiency. Precise dosing specifications are handled in a similar way as Wirtgen's microprocessor-controlled water spraying system ensures exact compliance.

When the project was completed, the WRC 240i allowed the L98 to be ready for asphalt paving in just **two days.**[4] That efficiency:

- Eliminated the need for transporting roughly **1,200** truckloads of processed or new material[4]
- Reduced CO_2e emissions by **66%**[4]
- Reduced construction costs by **75%**[4]
- Sped up completion time by **55%**[4]

[1] Smithsonian Magazine, How Roads Have Transformed the Natural World, https://www.smithsonianmag.com/science-nature/how-roads-have-transformed-the-natural-world-180982809/#:~:text=Some%2040%20million%20miles%20of,an%20Eiffel%20Tower%20per%20person (2024).

[2] European Commission, Road Infrastructure in Europe: Road Length and its Impacts on Road Performance, https://ec.europa.eu/regional_policy/sources/work/road-2022/road-infrastructure-2022.pdf (2024).

[3] Wirtgen Group, Global market Launch - Rock Crusher WRTC 240(i), https://www.wirtgen-group.com/en-us/news/wirtgen/global-market-launch-rock-crusher-wrc-240-i/ (2024).

[4] Estimated results are based on cost and performance comparison of WRC 240i vs. conventional processes with a mobile impact crusher. CO_2e savings is based on savings in fuel consumption and utilizing an emission factor consistent with well to wheel derived from DIN EN 16258:2013-03 standard. Results will vary. Study was internal within Wirtgen and has not been independently verified. Further information can be found at https://www.wirtgen-group.com/en-us/magazine/the-road/passion/wrc-240i-recycling-of-hand-packed-stone-pavement-in-a-single-pass/.

TAILORED TECHNOLOGIES:

EACH MACHINE, JOB, AND BUSINESS DRIVES THE NEEDS OF POWER

Technology. Infrastructure. Power. Those are three key factors our customers consider when choosing alternative power solutions.

Technology includes the options available in battery-electric, hybrid-electric, internal combustion engine advancements, and renewable fuels.

Infrastructure readiness and availability determine what type of technology is possible for a customer based on where and how they work.

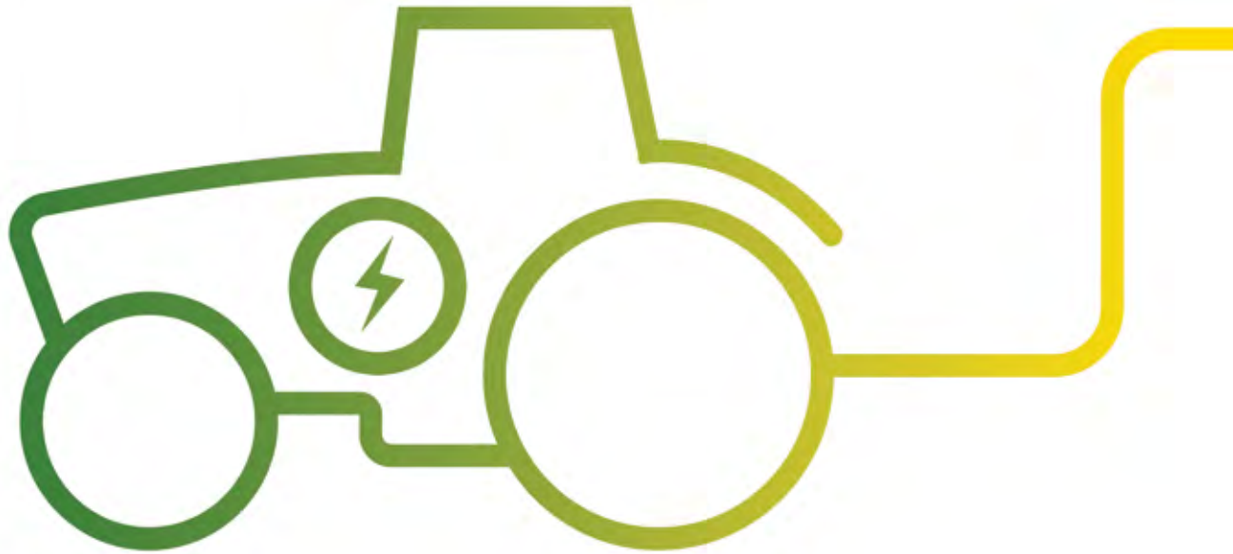
And power is the ultimate driver in determining how efficiently and sustainably a job gets done.

Based on the job and current cost-effective battery technology, machines with more than 130 horsepower are best suited for hybrid solutions, electric drives — like the E-Drive 644 X-Tier Wheel Loader — or running on renewable fuels. Machines below 130 horsepower can be candidates for full-battery electrification.

That's why we're working on a variety of solutions viable with today's battery technology while planning for what future innovations could bring.

E-Power Prototype Tractor
Estimated lifetime product emissions savings[2] of up to
99 metric tons of CO_2e

Z380R Electric Zero Turn Mower
Estimated lifetime product emissions savings[3] of up to
2 metric tons of CO_2e



EXAMPLES OF OUR COMMITMENT

SMALL AG & TURF
For more than two decades, Deere has used electrification in the drives and motors of several products and customers have benefited from the efficiencies. The next evolution is full battery-electric, an option with numerous benefits. Our customers in industries such as high-value crop (HVC) farming (nuts and fruits), as well as customers working in turf care and construction, are asking for this option.

HOW WE USE OUR TERMINOLOGY:

ELECTRIC: Used for fully electric turf products, as in our Z370R Electric Mower

E-CUT HYBRID: Used for turf products where the cutting units are powered via electric motors

In the last two years we have expanded our turf and utility product family offerings by introducing numerous options. Included in that portfolio are the Z370R and Z380R Electric Zero Turn Mowers, Electric Gator™ Utility Vehicles, 185 and 225 E-Cut™ Electric Walk-Behind Greens Mowers, and the 6700A and 7700A E-Cut™ Hybrid Fairway Mowers.

For those customers interested in an electric utility tractor, at CES 2025 we revealed our E-Power prototype, autonomy-ready, zero operating tailpipe emissions tractor.[1] This model is of comparable size and capacity to existing diesel 5M/ML models on the market today. This model can provide a continuous 130-horsepower output and deliver instant power and torque.

The E-Power tractor will be a good option for customers in the HVC and dairy and livestock sectors facing labor challenges and downstream sustainability pressures.

Electrification benefits:
- **Performance and reliability**
- **Quieter, easier, and more intuitive operation**
- **Lower operating costs**
- **Reduced complexity and simplified maintenance**
- **Technology enablement and scaling, leading to automation of common tasks and potential for autonomous operation and improved data capture**
- **Zero operating tailpipe emissions[1]**

"We purchased 10 225 E-Cuts last season with the goal of enhancing our sustainability efforts and reducing our carbon footprint. These mowers allowed us to get much closer to that while also providing our members with a superior experience. I would highly recommend these mowers to anyone looking to make the transition to electric."

KEVIN BANKS
Golf Course Superintendent
Vineyard Golf Club
Edgartown, MA

CONSTRUCTION & FORESTRY
In our Construction & Forestry Division, we've pushed forward with our E-Drive offerings aligned with customer demand.

HOW WE USE OUR TERMINOLOGY:

E-DRIVE: Used for products with electrified mechanical transmissions or individual wheel motors

E-POWER: Fully electric products

Vehicles like our 850 X-Tier Dozer have caught the attention of customers for its responsiveness, power, and ability to tailor performance and fuel consumption to specific jobsites. An E-Drive machine, the 850 X-Tier, features an electrified drivetrain with an engine as its primary power source.

Wirtgen Group continues to innovate in the roadbuilding and minerals processing market by incorporating electric options with its new impact crusher — the Kleemann MR 100i NEOe.

In the area of "urban mining" — facing challenges unique to urban jobsites and space limitations — the new Kleemann model is compact, flexible, and an efficient recycler when it comes to getting projects completed.

With the option of connecting to a local electric grid, the NEOe impact crusher can operate with zero operating tailpipe emissions.[1] And if operated in diesel mode, the operator can experience reduced noise emissions and fuel consumption due to the load-dependent fan.

"Being electric, I thought this dozer would be weaker than the hydraulic offering, but the 850 X-Tier really impressed me. It has more than enough power to push. And it's a great finish dozer. The blade control is outstanding."

SCOTT NUGENT
Superintendent
Spriggs Excavation
Durango, CO

850 X-Tier Dozer with E-Drive Tech
Estimated lifetime product emissions savings[4] of up to
93 metric tons of CO_2e

MR 100i NEOe
Estimated lifetime product emissions savings[5] of up to
252 metric tons of CO_2e

Benninghoven asphalt plant burner TBA 3000 has an estimated product lifetime emissions savings[11] of up to

33,117 metric tons of CO_2e

when using green hydrogen compared to natural gas.

INNOVATIONS BEYOND ELECTRIFICATION

Renewable fuels offer an alternative to customers seeking more power while still wanting to keep sustainability in mind. Crop-based biofuels being produced today — including ethanol, renewable diesel, and biodiesel — have emission factors that rival battery-electric vehicles, given that many electric grids are not 100% renewable.[6]

Crop-based renewable fuels like ethanol — beneficial for our Brazil and U.S. customers — and renewable diesel — beneficial for European and U.S. customers — can provide additional revenue streams for our customers' businesses.

Ethanol provides upwards of 40% less CO_2e emissions than gasoline, and the production and distribution network for ethanol is already mature in many geographies around the world.[7] With ethanol's upside it is no surprise that we are developing an ethanol-burning 9-liter engine.

In 2023, we showcased a concept engine at AGRITECHNICA. The engine serves as an illustration of our commitment to exploring as many energy and fuel sources as our customers tell us they want and need.

While we continue development work in ethanol technology, our available engines can already run on renewable diesel, a 50–80% less carbon intensive alternative to petroleum-based fuels.[8]

THE POTENTIAL OF HYDROGEN

Our focus, however, is not confined to one part of the world. We are looking for solutions that fit each customer's business. In Europe, hydrogen provides a unique opportunity to be a part of Wirtgen Group's sustainable roadbuilding innovation.[9]

Benninghoven, a Wirtgen Group company, introduced the first green hydrogen-powered burner. Now an asphalt plant's burner can be run with 100% green hydrogen.[10]

Burner technologies from Benninghoven can be used to equip new plants and existing asphalt mixing plants. Retrofit solutions also can be deployed in plants from other manufacturers. This flexibility means any customer can start using the latest technologies whenever they want, helping ensure cost-effective, sustainable asphalt production and long-term job security.

Other benefits from Benninghoven include:[10]

- New burner generation (that includes new burner-control system) can operate up to four fuels simultaneously with on-the-fly fuel switching, saving time and potential costs
- Constant feed capacity with a reduction of 20% power draw
- A 5-dB reduction in noise emissions

[1] Zero operating tailpipe emissions is due to the equipment operating completely grid-powered, meaning no emissions would be directly from the tailpipe of the equipment while it is operating.
[2] Estimated emission savings are calculated based on a comparison of the lifetime emissions of the gasoline alternative and the lifetime emissions of the electric version operation on an electric grid that has the U.S. average emissions factor. Results will vary. Study was internal and has not been independently verified.
[3] Estimated emission savings are calculated based on a comparison of the lifetime emissions of the diesel alternative and the lifetime emission of the electric version operating on an electric grid that has the U.S. average emission factor. Results will vary. Study was internal and has not been independently verified.
[4] Estimated lifetime emissions savings are calculated based on a fuel consumption comparison of the diesel 850L model and the 850 X-Tier model with E-Drive technology. Results will vary. Study was internal and has not been independently verified.
[5] Estimated emission savings are calculated based on a comparison of the lifetime emissions of the diesel alternative and the lifetime emission of the electric version operating on an electric grid that has the U.S. average emission factory. Results will vary. Study was internal and has not been independently verified.
[6] Emission factors based on Argonne National Laboratory's GREET model. It is third party calculated and is supported by the U.S. Federal Government.
[7] Office of Energy Efficiency & Renewable Energy, Ethanol vs. Petroleum-Based Fuel Carbon Emissions, https://www.energy.gov/eere/bioenergy/articles/ethanol-vs-petroleum-based-fuel-carbon-emissions (2024).
[8] CA.gov, Renewable diesel is increasingly used to meet California's Low Carbon Fuel Standard, https://www.eia.gov/todayinenergy/detail.php?id=37472 (2023).
[9] World Economic Forum, What is green hydrogen and why do we need it? An expert explains What is green hydrogen? An expert explains its benefits | World Economic Forum (weforum.org) (2024).
[10] Wirtgen Group, A world's first: 100% green hydrogen system for road construction, https://www.wirtgen-group.com/en-de/news/benninghoven/a-world-s-first-100-green-hydrogen-system/?q=ngd (2024).
[11] Estimated emission savings are calculated based on a comparison of the lifetime emissions of the natural gas alternative and the lifetime emissions of the green hydrogen version. The study was internal and not independently verified. Results will vary.

AUTONOMY JOURNEY CONTINUES TO BUILD ON PROVEN TECH

While autonomy at John Deere is very much a today-and-tomorrow story, it doesn't mean we just started telling it. As a matter of fact, our history in making customers' businesses more efficient through automated tasks — like steering a tractor — is more than two decades old.

This technology story is one we're constantly excited to share.

It begins, as it always should, with our customers. Their voices continue to push our solutions while also challenging us to deliver value tailored to their profitability.

With fewer operators available to help with operations and weather constraints impacting jobsite schedules and optimal growing conditions, our customers continually find themselves in difficult positions.

In short, autonomy is being asked for not to replace skilled labor positions but as a solution in filling them — all while hopefully bringing a sense of balance back to our customers' lives. It truly represents being able to do more with less.

Our journey to delivering value is driven by our commitment to automating processes and enhancing machine performance, seeking to achieve greater efficiency and precision with every pass across the soil in the field or the dirt on the jobsite.

The foundation of our autonomous innovations began with the StarFire™ receiver and automated guidance through AutoTrac™. By integrating these foundational elements with our unique data-gathering platform, John Deere Operations Center™, we have achieved significant efficiencies and precision across our product lines.

"REAL PURPOSE. REAL AUTONOMY."
We first introduced a fully autonomous product during our CES 2022 keynote address. It was there that our 8R Tractor grabbed headlines and made news not as a concept but as a reality.

At CES 2025 — behind the theme "Real Purpose. Real Autonomy." — we took our biggest step forward as we furthered that vision and provided a bold, futuristic view of the farm and beyond. This year's CES showcase — with the 9RX Tractor, 460 P-Tier Articulated Dump Truck, diesel and electric orchard tractors, and full battery-electric commercial mower — highlight our commitment to scaling and delivering on our technology stack to deliver customer value across all aspects of our business.

It's fair to say that we have been laying the groundwork for this moment, as these innovations directly link our customers' businesses to our higher purpose: "We run so life can leap forward."

Operational Sustainability

OUR PRIORITIES

MAKING DEERE'S OPERATIONS MORE SUSTAINABLE BY 2030:

- Reducing Scope 3 upstream and downstream CO_2e emissions by 30%
- Reducing Scope 1 and 2 CO_2e emissions by 50%
- Maintaining a safety-focused mindset by improving total recordable incident rate 20% by 2026

WHAT WE HAVE DONE

- Expanded renewable electricity usage
- Created supplier education program to expand renewable electricity engagement
- Refreshed our safety culture
- Continued to expand technology stack into operations

LEAP AMBITION	TARGET YEAR	PROGRESS[1]
30% reduction in upstream and downstream CO_2e emissions (Scope 3, Category 1 and 11)	2030	19% reduction
50% reduction in operational CO_2e emissions (Scope 1 and 2)	2030	28% reduction
20% improvement in total recordable incident rate	2026	15% reduction

[1]Progress is based on fiscal year 2024 results compared to the 2021 baseline.

To see more on our Leap Ambitions progress, see https://www.deere.com/assets/pdfs/common/our-company/sustainability/data-book-2024.pdf

OPERATIONAL GHG EMISSIONS–SCOPE 1 AND 2

To continue delivering on our Scope 1 and 2 greenhouse gas (GHG) emission reduction goal, we will focus on implementing further efficiency gains in our operations as well as increasing the use of renewable electricity and fuels.

Two cost-effective projects to highlight from fiscal 2024 include:

Ibérica installed solar panels, **generating approximately 5,700 MWh of renewable electricity per year.**[1]

A joint partnership with a local energy company and successful farmer Michel von Gemmingen is planned to use low-productivity portions of his land to **generate approximately 6,000 MWh of renewable electricity per year in Germany.**[1]

"We are thrilled to collaborate in making a positive environmental impact. It's partnerships like these that enable us to achieve results that would be impossible on our own."

MICHAEL VON GEMMINGEN
Founder of Kraichgauer Gueterverwaltung

[1] Metrics are annualized estimates.

UPSTREAM GHG EMISSIONS–SCOPE 3, CATEGORY 1

CONTINUING TO ENGAGE OUR SUPPLY BASE IS ESSENTIAL TO OUR SUCCESS IN REDUCING UPSTREAM GREENHOUSE GAS (GHG) EMISSIONS.

Two projects to highlight from fiscal 2024 include:

1 Connecting John Deere's Suppliers to Renewable Electricity Solutions

At John Deere, we recognize renewable electricity procurement as a cost-effective way for our suppliers to reduce emissions. As of 2024, we now offer a program that aims to provide the training and support for suppliers to successfully enter the renewable-electricity market.

Suppliers receive free access to live and on-demand educational resources on various renewable electricity purchasing options and guidance on choosing the most suitable ones. They can also explore and purchase renewable electricity with expert advisor support. Participation in the program is free for all John Deere suppliers.

2 Analyzing Emissions and Circularity at Waterloo Foundry to Drive Supplier Collaboration and Innovation

We are dedicated to collaborating with suppliers in energy-intensive industries like steel and iron to structurally reduce emissions, ensure best practices in environmental controls strategies, and track beneficial reuse of materials. We conducted a study at our Waterloo Foundry to analyze in detail the emissions associated with producing each type of iron casting. We believe the insights gained from this study will help our iron-casting suppliers and others in the metals value chain identify and follow our path for emission reductions using electric melt, high recycled content, and sourcing renewable electricity.

SAFETY

John Deere is committed to the safety and well-being of our people, aiming to improve our total recordable incident rate (TRIR) by 20% by 2026, using 2021 as the baseline. Our efforts are centered on preserving, strengthening, and transforming our approach to health and safety, focusing on four key areas: refreshing our safety culture, achieving optimal standardization, assessing and mitigating risk, and enhancing governance to support our global environmental, health, and safety (EHS) policy. Our EHS policy outlines expectations for sustainable outcomes and key responsibilities for employees at all levels.

To refresh our safety culture, we deployed visible safety leadership training, including video messages from executive leadership, and implemented Human and Organizational Performance (HOP) principles at targeted locations. By adopting HOP principles, we aim to enhance safety culture, reduce risks, and improve overall operational performance through a deeper understanding of human and organizational dynamics. Additionally, we prioritize risk reduction strategies and improved ergonomic programs. These initiatives and priorities demonstrate our commitment to fostering a proactive and robust safety environment.

We maintain the Deere Health and Safety Management System and conduct third-party health and safety audits at least every four years to ensure effectiveness, adherence to John Deere standards, and regulatory compliance. These audits, conducted based on the level of risk at each location, help us maintain high safety and health standards across all operations.

LITHIUM-ION BATTERY READINESS

As demand for alternative propulsion grows in agriculture, turf, and construction, we continue to prioritize safe handling, storage, and recycling of lithium-ion batteries. We offer a tiered safety-training program to equip our workforce with essential knowledge and skills:

- Awareness training covers general hazards and mitigation measures for lithium-ion batteries.
- Level 1 training teaches risk recognition for employees near lithium-ion batteries.
- Level 2 training focuses on safe practices for those directly handling these batteries.
- Level 3 training covers technical aspects and advanced safety protocols for working with lithium-ion batteries.
- Incident responder training prepares fire brigade professionals to effectively manage thermal runaway emergencies.

EFFICIENT ERGONOMIC SOLUTIONS

Several factories in Brazil have partnered with a supplier in the development of an AI and computer vision/machine learning solution to automate ergonomic assessments. This project was led and deployed by the Montenegro unit and later implemented at Horizontina, resulting in a solution that complies with local regulations and significantly cuts assessment time and reduces costs. This project demonstrated innovation, employee engagement, risk reduction, and scalability. Other John Deere units globally are evaluating this recently developed technology to accelerate proactive identification of ergonomic risks and to aid in the implementation of John Deere standards.

CONNECTING OUR FACTORIES PROVES TO BE A "SMART" USE OF OUR TECHNOLOGY

The idea of pushing technology across a company often means a focus most sharpened around enhancing a multitude of products using the same stack of innovation.

In John Deere's case, the utilization of that technology begins where the products begin — at the manufacturing facilities and with our smart connected factory approach. That approach includes the use of digital continuous improvement (CI), digital twins, and material tracking and automated storage systems.

CI at John Deere is a 20-year-plus engagement practice that has been foundational in capturing efficiencies for and from our workforce. CI allows production teams to systematically identify and implement enhancements in manufacturing processes, improve productivity, and ensure high quality. This commitment elevates operational efficiency, superior product reliability, increased levels of safety, improved customer delivery, maximization of resources, and ultimately rewards production employees through incentive plans.

The digitalization of this process allows for real-time, accurate, and clean data to manage CI in the most effective way possible. It can also help create a more consistent culture of accountability by providing feedback across operations to factory leadership.

In 2022, we launched Digital CI, the result of cross-functional team efforts coordinated to find solutions that could be spread throughout Deere. The initial trials began at three factories and now have grown to **25 locations in four countries** (Brazil, France, Germany, and the U.S.). Future plans call for more than doubling the number of units and warehouses in 2025.

As we continue to expand digital CI, we also continue to test those improvements. For instance, chatbots have been used to connect facilities and their CI processes, ultimately increasing efficiency and ease of sharing successful CI projects globally. Utilizing existing knowledge may lead to higher quality solutions and cost avoidance. The CI feedback tag tool, for example, allows teams to quickly share feedback digitally and directly to factory leadership, giving them time to efficiently assess progress and outcomes.

25
LOCATIONS IN

4
COUNTRIES WHERE DIGITAL CI IS IMPLEMENTED

GAINING PRODUCTIVITY, VIRTUALLY

By utilizing our manufacturing technology stack, we have seen efficiency gains that bring increased productivity. We're seeing this in our material tracking systems and operations digital twin platform—solutions that allow employees to locate materials in near real time. Just like our John Deere Operations Center™ is used by our customers to visualize and get insight into data to drive efficiencies on their farm or jobsite, the Operations Digital Twin platform provides similar capabilities for our manufacturing factories.

For clarity, a digital twin is any virtual model that mirrors a physical operation to enhance efficiency and decision-making. The Operations Digital Twin platform provides a digital version of more than 75 of our facilities, enabling unparalleled communication and collaboration. These capabilities unlock the true value of sharing information that allows our smart connected factories to run more efficiently.

This approach also is true in our material tracking and automated storage and retrieval systems as they seek to allow our facilities to reach peak optimization at point of use.

At John Deere's facilities in Augusta (Georgia), Dubuque (Iowa), and Engine Works (Iowa), automated storage and retrieval systems (ASRS) are improving how we utilize our warehouse and manufacturing footprint as well as how we service our production lines through efficient and timely delivery of components.

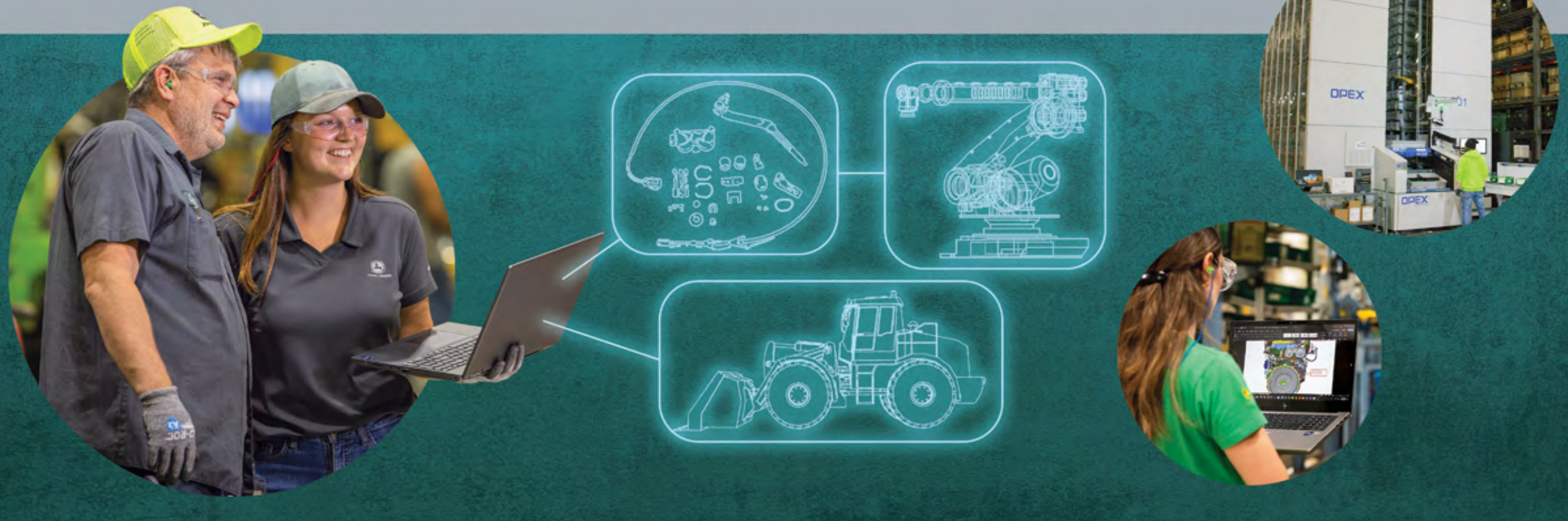
Here's how ASRS works:

- The automated system has the ability to store thousands of containers used to transport our components from suppliers to our production lines.
- Once the automated storage system receives a trigger, it selects the correct part number and quantity, creates a call for delivery, and then presents the requested parts to the operators on the manufacturing floor and assembly line location.
- This process reduces floor space, allows for automatic inventory reviews, and allows for faster delivery of parts from warehousing to assembly locations.

We have seen up to an 85% cycle time reduction in managing warehouse inventory, which also brought overall inventory reduction on-site.

This cycle time reduction is driven by the ability of the technology to accept a signal, then put away and pick up over 200 containers per hour in comparison to a manual storage process.

With these successes, teams are now focusing on how to scale these solutions across the enterprise and provide proven value at other facilities in the future.



People and Communities

DELIVERING CUSTOMER VALUE BEGINS WITH OUR WORKFORCE

For almost 200 years, we have been running so life can leap forward. We aim to create the best solutions for our customers with integrity, quality, humanity, commitment, and innovation. Our new fifth core value, humanity, unites us in our purpose to create solutions to produce the food, fiber, fuel, and infrastructure essential for our world to thrive.

To create these solutions, we need the best and brightest employees to solve some of the most compelling challenges in the world today. We believe our employees' unique perspectives, backgrounds, and experiences contribute to innovation and our ability to create value for our customers. We also believe that a workforce that reflects the communities we serve is essential to our long-term success.

HOW WE GET THERE

This means we support our employees at all stages of their careers by offering internships, training, upskilling, apprenticeships, and leadership development. It is a promise we must keep and a responsibility we honor. Additionally, our business resource groups are aligning processes and practices to best deliver professional development, networking and mentoring opportunities, and talent recruitment efforts. For recruiting and development opportunities, we work with a variety of professional organizations to support a pipeline of candidates representing the fields of accounting, agriculture, general business, engineering, science, and technology, and provide development opportunities for all employees.

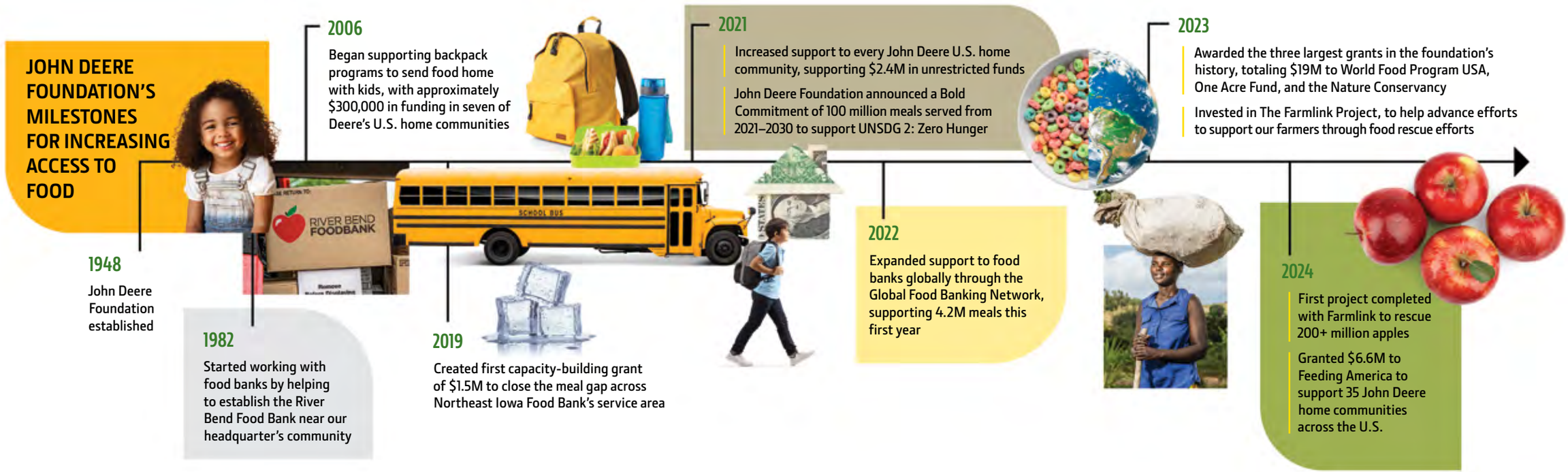
"With more than 75,000 employees from around the globe, we try to harness the power of our diversity to deliver solutions that add value to our customers. If you want the best solutions, you have to hire the best people. We value hiring people from all walks of life. It's who we are as a company and it's who we've always been as a company."

CORY REED
President for Worldwide A&T, Production & Precision Ag (Americas and Australia)

"Our goal always will be to create an empowering environment where every voice is heard, and every individual is inspired to contribute their best work. It's about what we do for each other inside of John Deere to make sure we're building a culture and environment of inclusion so we deliver the greatest value for our customers."

FELECIA PRYOR
Senior Vice President and Chief People Officer

Click here to see the Business Impact Report: Sustainability Disclosures and Metrics for more information on hiring and development and workforce metrics.



FOOD ISN'T WASTE UNTIL IT'S WASTED

For more than 40 years, the John Deere Foundation has made addressing food insecurity one of its most critical missions. Support of food banks in our home communities stretches into the tens of millions of dollars and volunteer hours are in the thousands.

Yet, through deep integration into the problem, the foundation has come across a troubling conclusion.

Food insecurity isn't about having enough food. It's oddly about something else: Access and distribution.

In fact, the world's growers produce enough food to feed everyone — nearly two times over — leading to the maddening conundrum of waste.

Globally, about 20% of all food produced is wasted.[1] In the United States that figure rises above 30%.[2]

So, if there's more than enough food yet millions of people don't have access to it, what's the solution?

This is where the foundation's attention turned to The Farmlink Project, to see how they could support more farmers, with barriers to distribute their surplus produce.

WHEN THE WORLD STOPPED

In the spring of 2020, while COVID-19 led to global lockdowns, Ben Collier, a Brown University student (and soon-to-be CEO and co-founder of The Farmlink Project), and his peers were struck by news of grocery stores and food banks facing food shortages due to supply chain disruptions.

"What started as a very small group grew to 10 curious people saying, 'All right, we're going to figure this out," Collier said. And that's how The Farmlink Project was born.

After extensive outreach, they connected with an onion grower who had two million pounds with nowhere for them to go.

Farmlink moved half of that surplus in just three weeks, serving as a proof point that the upstart nonprofit could initiate change in the food supply chain.

Since then, Farmlink has grown and partnered with state and federal government agencies by participating in a plethora of statewide fruit and vegetable rescue initiatives. The organization's growth is the kind that garners attention — and the John Deere Foundation has taken notice of how those "10 curious people" have acted on behalf of growers, food banks, and families from coast to coast.

FARMLINK'S IMPACT (SINCE 2020)[3]

MOVED MORE THAN **300M** POUNDS OF FOOD ACROSS AMERICA

= OVER **250M** MEALS

WHEN IT ALL COMES TOGETHER

The John Deere Foundation continues to help strengthen the entire food chain, both through unrestricted grants and by helping form partnerships between key players. That's how Farmlink and Feeding America®, a U.S.-based network of more than 200 food banks — including several in John Deere home communities — were brought together.

In their new partnership, Farmlink is working with Feeding America to supply rescued food throughout that network. To bolster those efforts, the John Deere Foundation has made a $6.6-million, three-year commitment of unrestricted support to Feeding America, representing a decades-long partnership with local food banks.

"With John Deere's support, the Feeding America network can extend our reach to help ensure more nutritious food gets to communities where it is needed most. Their grant will help address complex issues of food access, improving networks that support people experiencing food insecurity and strengthen communities and the farmers who sustain them."

CLAIRE BABINEAUX-FONTENOT
CEO of Feeding America

Farmlink's efforts to directly support growers and eliminate hunger aligns with our mission to fight food insecurity so no one goes to bed hungry while perfectly viable produce goes to waste. And that's why the foundation was excited to support Farmlink with its most recent project where they played a key role in securing $20 million in federal support for apple growers nationwide facing a surplus this fall. With the combined efforts of state and federal support, this funding will rescue over 200 million apples, helping to alleviate the challenges faced by farmers. Farmlink will directly deliver tens of millions of those apples to food banks and hunger-fighting organizations around the country.

You certainly don't have to tell Kim and Cordell Watt of its impact. Owners of Timber Ridge Fruit Farm in Gore, Virginia, the Watts have been facing the unforgiving math problem of oversupply and underconsumption of their apples.

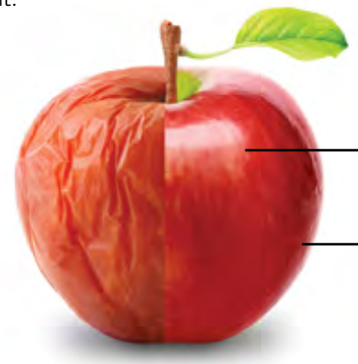
"In the last 15 months we've become very educated on food banks, charities, and Farmlink," Cordell said. "And it's opened up a whole new way of moving this product and getting it to where it's needed."

The Watts credit Farmlink with bridging the gap between growers and politicians at both the state and federal levels.

"They have really put together some instrumental meetings and been the voice for us. And we would not be here without Farmlink. They've been incredible," Cordell said.

The project helped move more than three million pounds of Timber Ridge apples to areas of need. "Without Farmlink, I would say 25 to 30% of our apples would not have a home," Cordell added, "And this nutrition is needed in schools, nursing homes, and pantries housed in the most vulnerable neighborhoods."

For Eleni Shepherd, senior manager at Capital Area Food Bank and a recipient of Timber Ridge apples, waste is the focal point.



Apples are high in fiber, vitamin C, and various antioxidants.

For food insecure the fiber creates a feeling of being full that creates a positive difference in their day.

"The more we're able to keep apples out of landfills and get to the folks that need them, it's incredible because there's such a need for fresh produce in our area," she said.

Shepherd said nearly half of what Capital Area distributes in its Washington, D.C., community is fruits and vegetables. "Because of that," she added, "it's really critical to have transportation and organization between the farms and the food banks. Farmlink provides that."

Collier said Farmlink understands the solution reaches beyond *what* ends up on a food bank shelf but more about *how* it got there.

"An apple is an emblem of dignity and nutrition, but the most inspiring part of all of this is not just the impact we'll have with these apples. . . . The fact that we're pushing toward a food recovery industry capable of more effectively responding to major food surpluses that have historically gone to waste is what I think is most important to take away from our work now and into the future."

BEN COLLIER
CEO and Co-Founder
of The Farmlink Project

He said Farmlink continues to understand its unique place in the challenge that is food insecurity.

"Abundance, surplus, and waste all describe the same thing," he said. "Food isn't waste until it's wasted, and surplus has this negative connotation, as if it was an accident. So the problem at Farmlink really isn't food waste. We view abundance as what we've created, and it's a matter of logistics and collaboration to get that food where it needs to be — from the right people to the right people, at the right time."

[1] World Food Programme, 5 facts about food waste and hunger, https://www.wfp.org/stories/5-facts-about-food-waste-and-hunger#:~:text=One%2Dfifth%20of%20food%20produced,one%20billion%20meals%20a%20day (2024).

[2] USDA, Food Waste FAQs, https://www.usda.gov/about-food/food-safety/food-loss-and-waste/food-waste-faqs#:~:text=In%20the%20United%20States%2C%20food,percent%20of%20the%20food%20supply (2024).

[3] The Farmlink Project, Our Mission, https://www.farmlinkproject.org/ (2024).

THE JOHN DEERE FOUNDATION HELPS MAP EDUCATIONAL FUTURES WITH FIRST-EVER SCHOLARS PROGRAM

A first-of-its-kind partnership between the University of Iowa (UI), the Davenport Community School District (DCSD), and the John Deere Foundation has been established to provide $6.6 million to need-based (low- to middle-income) high school seniors in the district.

The newly formed John Deere Scholars Program extends John Deere's primary and secondary education focus, creating a pipeline of support for DCSD students.

> College preparation: DCSD high school seniors and their families are all offered a free college readiness program aimed to help provide students with essential college skills like leadership, time management, and financial literacy. The program will also help with college and scholarship applications.

> Scholarships and support: Twenty, four-year scholarships per year will be awarded in 2025–2027, covering 90% of the total cost to attend the university. Recipients will receive continued support throughout their college career with ongoing academic advising, first-year seminar courses, and mentorship from John Deere employees to help prepare them for their careers.

The scholars program aligns with the foundation's 2021 pledge to invest in educational opportunities that would reach one million youth in John Deere home communities by 2030. Over the past decade the foundation has invested nearly $14 million in K-12 educational programs.

Turning the foundation's attention toward postsecondary education is a groundbreaking commitment to not only the lives of those impacted but to the communities where they live. To emphasize the need, in 2023, approximately 36% of low-income high school graduates in the DCSD pursued a postsecondary education.[1]

"For many of our students, the prospect of attending college can seem out of reach due to financial constraints," DCSD Superintendent TJ Schneckloth said. "These scholarships will make their dreams a reality. This partnership not only transforms the lives of individual students but also strengthens our community and economy by fostering a more educated workforce."

The scholars program will serve as a pilot in the Davenport community and, if successful, could be used in other communities where Deere employees live and work.

[1] Iowa Department of Education, Davenport Comm School District-Postsecondary enrollment, https://www.iaschoolperformance.gov/ECP/StateDistrictSchool/DistrictDetails?DetailType=Post%20Secondary%20Enrollments&k=8624&y=2023 (2024).

(From left) Mara Downing, president of the John Deere Foundation, TJ Schneckloth, superintendent of Davenport School District, and Barbara J. Wilson, president of the University of Iowa.

REPORTING SCOPE AND ISSUANCE

Except where specifically noted otherwise, the reporting period of the John Deere 2024 Business Impact Report, including the 2024 Business Impact Report: Disclosures and Metrics appendix, covers subject matter and data for Deere & Company's fiscal year 2024 (November 2023–October 2024) and is limited to the operations owned and/or operated by Deere & Company. References to "John Deere," "our," "we," or "the company" mean Deere & Company and its subsidiaries, unless the content indicates otherwise. Incorporation of acquisitions in Sustainability Metrics is at the discretion of the business and is dependent on level of materiality. Materiality, in this regard, is not being used as that term is used under the securities or other laws of the U.S. or any other jurisdiction, or as they are used in the context of financial statements and financial reporting. This report, including the 2024 Business Impact Report: Sustainability Disclosures & Metrics appendix, was published on January 16, 2025.

FORWARD-LOOKING STATEMENTS

Safe Harbor Statement under the Private Securities Litigation Reform Act of 1995: Statements in this report that relate to future events, expectations, and trends involve factors that are subject to change and risks and uncertainties that could cause actual results to differ materially. These risks and uncertainties are difficult to predict and often are outside of the control of the company.

When used in this report, including the supplemental information, the words "may," "could," "anticipate," "target," "plan," "continue," "goal," "commit," "achieve," "project," "intend," "estimate," "believe," "expect," and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain such words.

Forward-looking statements are subject to certain risks and uncertainties that could cause actual results to differ materially from our historical experience and our present expectations or anticipated results. Forward-looking statements are neither historical facts nor assurances of future performance.

Instead, they are based only on the company's current beliefs, expectations, and assumptions regarding the future of its business, strategic objectives, projections, anticipated economic changes and trends, and other conditions. Forward-looking statements in this report may include, but are not limited to, financial projections and outcomes, estimates of addressable market size sustainability projections and other goals; statements regarding the company's operational strategies; equipment designs that optimize performance outcomes for customers; efforts regarding energy, water, and emissions; and the development of mechanisms for tracking sustainability metrics. Important factors that could cause the company's actual results to differ materially from those indicated in the forward-looking statements include, among others, the following: Important factors that could cause the company's actual results to differ materially from those indicated in the forward-looking statements include, among others, the following: (i) compliance with and changes to global and regional environmental, health, safety, and human rights laws, including emissions and noise regulations, and other ethical business practices; (ii) compliance with and changes to greenhouse gas emissions and other standards related to climate change; (iii) the agricultural business cycle, which can be unpredictable; (iv) ability to execute business strategies including Smart Industrial Operating Model and Leap Ambitions; (v) the ability to understand and meet customers' changing expectations and demand for the company's products and solutions; (vi) accurately forecasting customer demand for products and services and adequately managing inventory; (vii) dealer practices and their ability to manage inventory and distribution; (viii) the ability to realize anticipated benefits of acquisitions and joint ventures; (ix) negative claims or publicity that damage the company's reputation or brand; (x) housing starts and supply, real estate and housing prices, levels of public and non-residential construction, and infrastructure investment; (xi) political, economic, and social instability of the geographies in which the company operates; (xii) worldwide demand for food and different forms of renewable energy impacting the price of farm commodities; (xiii) availability and price of raw materials, components, and whole goods; (xiv) delays or disruptions in the company's supply chain; (xv) suppliers' and manufacturers' business practices and compliance with applicable laws; (xvi) changes in climate

patterns, unfavorable weather events, and natural disasters; (xvii) higher interest rates and currency fluctuations; (xviii) the ability to attract, develop, engage, and retain qualified employees; and (xx) changes to existing laws and regulations, including the implementation of new, more stringent laws. The company, except as required by law, undertakes no obligation to update or revise any forward-looking statements, whether as a result of new developments or otherwise. The forward-looking statements speak only as of the date of this report, and undue reliance should not be placed on these statements. Goals, targets, intentions, ambitions, or expectations described in this report, including the Leap Ambitions, are aspirational and subject to change and are not guarantees or promises that all goals, targets, intentions, ambitions, or expectations will be met. The United Nations Sustainable Development Goals (UNSDGs) are also aspirational in nature. The analysis involved in determining whether and how certain initiatives may contribute to the UNSDGs is inherently subjective and dependent on a number of factors. There can be no assurance that reasonable parties will agree on a decision as to whether certain projects, initiatives, investments, or other aspects of our business contribute to a particular UNSDG. Accordingly, investors should not place undue reliance on Deere's application of the UNSDGs, as such application is subject to change at any time and in Deere's sole discretion. Similarly, there can be no assurance that our sustainability or ESG policies and procedures as described in this report will continue; such policies and procedures could change, even materially. We are permitted to determine in our discretion that it is not feasible or practical to implement or complete certain of our sustainability or ESG initiatives, policies, and procedures based on cost, timing, or other considerations. Any awards and designations presented herein are the opinion of the respective parties conferring the award or designation and not of Deere. None of the awards or designations herein relate to Deere's abilities. The views expressed by third parties, including customers, throughout this report represent views of the respective individuals and not views or claims made by or on behalf of Deere. Further, the receipt of any awards by Deere is no assurance that Deere's business objectives, including its Leap Ambitions or other sustainability objectives, have been achieved or successful.

Certain information contained herein has been obtained from third parties, and in certain cases has not been updated through the date hereof. We have not independently verified the data from these third-party sources in every instance and make no representation with regard to the verification of third-party data, unless explicitly otherwise indicated. While these third-party sources are believed to be reliable, we make no representation or warranty, express or implied, with respect to the accuracy, fairness, reasonableness, or completeness of any of the information contained herein, and we expressly disclaim any responsibility or liability therefor. The information contained herein is only as current as the date indicated and may be superseded by subsequent market events or for other reasons. Deere is not under any obligation to update or keep current the information contained herein. Statistics and metrics relating to ESG matters are estimates and may be based on assumptions (which may prove inaccurate) or developing standards (including internal Deere standards and policies). This report may contain links and references to other Internet sites. Such links or references are not endorsements of any products or services in such sites, and no information in such site has been endorsed or approved by the company. The inclusion of information in this report should not be construed as a characterization regarding the materiality or financial impact of that information. Further information concerning the company and its businesses, including factors that could materially affect the company's financial results, is included in the company's filings with the Securities and Exchange Commission (SEC) (including, but not limited to, the factors discussed in Item 1A, Risk Factors of the company's most recent Annual Report on Form 10-K, and quarterly reports on Form 10-Q).

2024 AWARDS

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