



DEERE & COMPANY 2019 SUSTAINABILITY REPORT

A POWER FOR GOOD



JOHN DEERE

www.JohnDeere.com

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Today, more than any other time during my 44-year career at John Deere, I see the power of the John Deere Strategy to deliver sustainable outcomes for our customers, employees, investors, communities, and the world.

At John Deere, sustainability starts with our higher purpose of serving those linked to the land. For nearly two centuries, we have worked side-by-side with our customers to tackle the global challenges of food security and economic empowerment by delivering productivity-enhancing innovations. As the world grows—to an estimated nearly 9.7 billion by 2050—so will these challenges. And so will the opportunities to meet these challenges for which John Deere and our stakeholders are uniquely positioned.

There's no better example than our work in precision agriculture. It's an area that will define the future of agriculture and one in which John Deere aspires to be the undisputed leader. Today, our innovations allow customers to use less fuel and to plant seeds and apply fertilizer and herbicide with pinpoint accuracy. These innovations permit farmers not only to be more productive and profitable as they feed a growing population, but also to safeguard the soil, water, and air upon which their livelihoods depend.

For us, sustainability goes even further and ultimately creates the framework upon which our long-term success depends. It encompasses how we govern our business, foster safe work environments, develop distinctive products, inspire our global talent, and give back to communities we call home. These activities are so important to our past, current, and future success that we have integrated them explicitly into the John Deere Strategy: We call them our Foundational Success Factors.

To highlight how sustainability is integral to executing the John Deere Strategy and maintaining our success, I am proud to launch this new and expanded Sustainability Report. In it, we celebrate many of the accomplishments of our more than 74,000 employees in 2018. We also reveal the ways in which we will challenge ourselves to accomplish even more in the future.

On behalf of John Deere, thank you for your interest in our work and our future. As I look to the horizon, I remain convinced that John Deere is both an exceptional and sustainable business as well as a meaningful contributor to a more prosperous world.

Samuel R. Allen
Chairman and CEO

**JOHN DEERE IS UNIQUELY POSITIONED
TO DELIVER SUSTAINABLE OUTCOMES**

Sustainability is deeply rooted in John Deere's higher purpose—to improve the quality of life for people around the world through our commitment to serving those linked to the land.

Our 182 years of service to generations of families and businesses who work the soil and build upon it have demonstrated our dedication to feed a growing population, empower global prosperity, inspire transformational innovation, and protect our natural resources.

By honoring our commitment to them in everything that we do, we help our customers achieve their potential. Through premier solutions, we enable them to be more profitable, more productive, and more sustainable. In doing so, we support the improvement of living standards for people around the world, but also deliver superior and longer-lasting returns for customers, employees, investors, and all our other stakeholders.

In 2018, we built upon our unique position to deliver sustainable outcomes in three key ways. First, we continued to develop cutting-edge innovations that will make farmers more productive and profitable and help them feed a growing population. Second, we pursued innovations that protect our world's resources and affirm the role of our customers as vital stewards of the environment. Third, we purposefully invested in those linked to the land to empower economic development and prosperity.



FEEDING THE WORLD THROUGH INNOVATION

The world's population is growing and changing, and farmers are challenged to produce more with less. As our population grows—to nearly 9.7 billion people by 2050 and 10.9 billion by 2100—demand for food and other agricultural products will grow with it. As this demand grows, however, land, water, and other resources will come under even more pressure.

John Deere's innovations in precision agriculture will allow farmers to overcome this challenge in a sustainable way. With our precision ag solutions, farmers can

achieve maximum efficiency for every outcome in the field by such innovations as automated placement of the right seed and nutrient at the right place and time. No wasted money, no wasted resources, and no wasted time. Simply put, fewer inputs and higher yields drive higher production, which is critical to feeding a growing population.

Our goal is to make our customers—regardless of the size of their farm or the crops they grow—the most profitable and sustainable. They will have the best plans; the most

productive, precise, and reliable automated machines; and a comprehensive digital platform to confidently control their operation from anywhere.

When our customers become the most profitable and sustainable through the full array of our precision agriculture innovations, we will secure their ability to continue farming for generations to come.



FEEDING THE WORLD THROUGH INNOVATION

PRECISION AGRICULTURE: PRODUCING MORE WITH LESS

Over the 182 years since our founding, John Deere has earned a reputation for innovation.

Historically, our focus has been on bigger, faster, and more powerful equipment. Our equipment innovations have made significant contributions to the modernization and increased productivity of global agriculture.

Today, our customers need to be efficient and productive day in and day out throughout the farming cycle. The business of farming is complicated. Dealing with everything from water and soil to weather and pests, from money and staffing to markets and planning, our customers have specific outcomes in mind.

John Deere has invested heavily in precision agriculture technologies for more than 20 years. Drawing on our deep understanding of farmers' operations, we use technology to make farming more automated and more precise. Our smarter equipment helps farmers produce more with less—making fewer passes in the field and using fewer herbicides and pesticides and less fertilizer. Precision agriculture is quickly allowing the world's most productive farmers to produce and profit more while excelling as stewards of the environment.

According to the United States Department of Agriculture, the average American farmer feeds 155 people. Today's U.S. farmers are more productive and efficient than ever. Since 1948, farm outputs have more than doubled, while farm inputs have remained flat.

Farm Forward 2.0 portrays John Deere's vision of how technology could drive the increased productivity necessary to feed the world's growing population—[click here to watch](#).



FEEDING THE WORLD THROUGH INNOVATION

DELIVERING IMPROVEMENTS THROUGH JOB AUTOMATION

By automating jobs, we can optimize every seed planted, every drop applied, every grain harvested, and every pass through the field.

AutoTrac™ *(Make every pass count)*

- Provides hands-free guidance from the moment the farmer pulls into the field
- Allows sub-inch accuracy, which means machine overlaps are virtually eliminated, saving fuel, reducing seed and chemical use, and minimizing compaction
- Improves operator comfort and performance

TruSet™ *(Make every pass count)*

- Enables precise seedbed preparation
- Adjusts tillage depth and down-pressure on the go from the cab, eliminating time-consuming manual adjustments
- Automatically controls the tillage based on field requirements



ExactEmerge™ *(Make every seed count)*

- Doubles the speed, planting up to 10 mph
- Electrification of row units increases accuracy in spacing, depth, and seed population, driving significant yield improvement and efficient seed use
- Enables variable-rate planting jobs with push of button, strengthening operator control

Combine Advisor™ *(Make every grain count)*

- Embedded sensors, cameras, and advanced algorithms help optimize machine settings for specific field conditions
- Artificial intelligence delivers better results by making thousands of adjustments on the go to continually recalibrate key settings
- Improves grain quality, reduces grain losses, and increases yield

ExactApply™ *(Make every drop count)*

- Individual nozzle control allows precise spraying throughout the field, eliminating the risk of double-spraying
- Automatically compensates spray volumes during turns
- Delivers chemical savings

FEEDING THE WORLD THROUGH INNOVATION

OUR JOURNEY TO PLANT-LEVEL MANAGEMENT

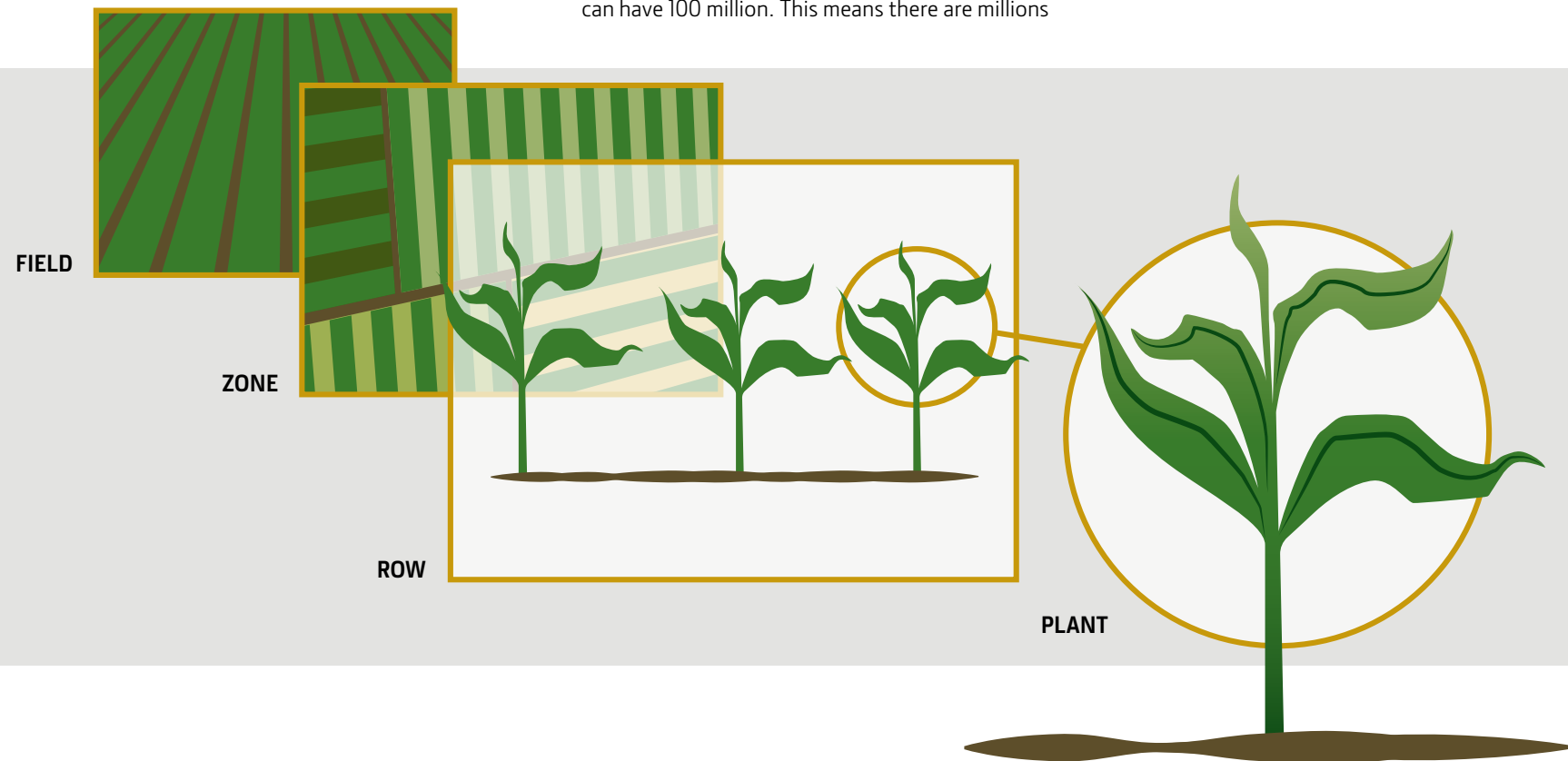
Traditional agricultural practices manage jobs such as planting and harvesting at the field level—all plants in the field, including weeds, are treated the same way. Productivity advancements in equipment were focused on completing field-level work with bigger, faster, and more powerful machines.

Today, John Deere's innovations in automation permit our customers to manage field zones and individual rows. These innovations have helped enhance our equipment beyond bigger, faster, and more powerful to be easier to use and more precise.

Our future will take us even further—to plant-level management. That's no small task. A corn field may have as many as 8 million plants while a wheat field can have 100 million. This means there are millions

of opportunities to improve yield or reduce costs for farmers. Artificial intelligence has the potential to allow our equipment to manage at the plant level in real time.

Artificial intelligence and machine learning are quickly becoming a transformative force in agriculture, and we continue to lead the way by increasing productivity, lowering costs, and delivering more precision in each job a farmer executes.



FEEDING THE WORLD THROUGH INNOVATION

BLUE RIVER TECHNOLOGY: ACCELERATING EXECUTION OF PLANT-LEVEL MANAGEMENT

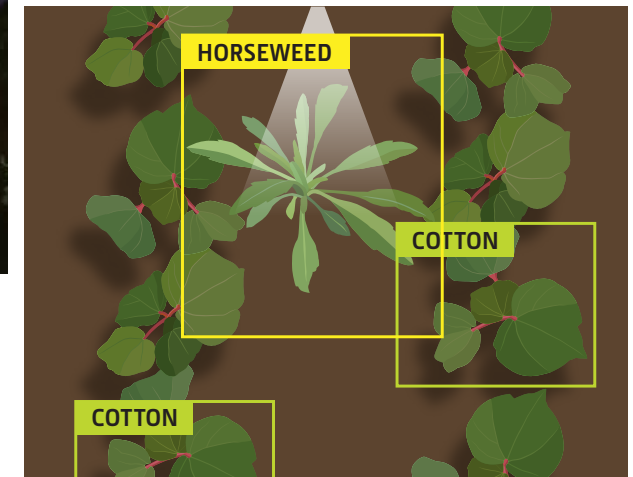
We believe that the future of farming is on the plant-level.

However, we know that the incorporation of artificial intelligence, machine learning, and sensor technologies is necessary to make this future a reality. Our 2017 acquisition of Blue River Technology is allowing us to test these innovations in the field today.

Blue River Technology is the industry leader in artificial intelligence in agricultural equipment and in combination with John Deere holds the promise of transforming agriculture. Blue River Technology's first

concept—See & Spray™—uses machine learning and a complex vision system to differentiate between a crop (cotton, for example) and a weed, and the machine selectively sprays herbicide only on the weed.

Today's application of chemicals is imprecise, broadcasting them across an entire field, and represents one of the most inefficient jobs in the entire farming production system. Blue River Technology's innovation can reduce the use of herbicides by up to 90% and is a great example of how plant-level management can improve profitability for farmers and sustainability for us all. Although we have not fully commercialized this



technology, we are aggressively testing it and at the same time we're making enhancements to build a smarter See & Spray machine.

See & Spray is not our ultimate goal; it's just the beginning. John Deere engineers and technologists see opportunities to leverage artificial intelligence throughout our product portfolio to deliver enhanced productivity, precision, and automation to our customers.

PROMOTING STEWARDSHIP OF THE LAND

When John Deere expresses our higher purpose as a commitment to those linked to the land, we purposefully emphasize “the land.”

As a practical matter, our customers work with and on the land. More importantly, our customers and those they serve depend on the land and the world’s other resources to survive and thrive. As a result, our customers become stewards of the land and all the other resources they use—a mantle that many of them have worn proudly for generations.

Through our innovations, we help them carry the load.

Through the work of our employees and the solutions they develop, our customers become uniquely positioned to deliver superior financial and environmental outcomes.



JOHN DEERE IS UNIQUELY POSITIONED
TO DELIVER SUSTAINABLE OUTCOMES

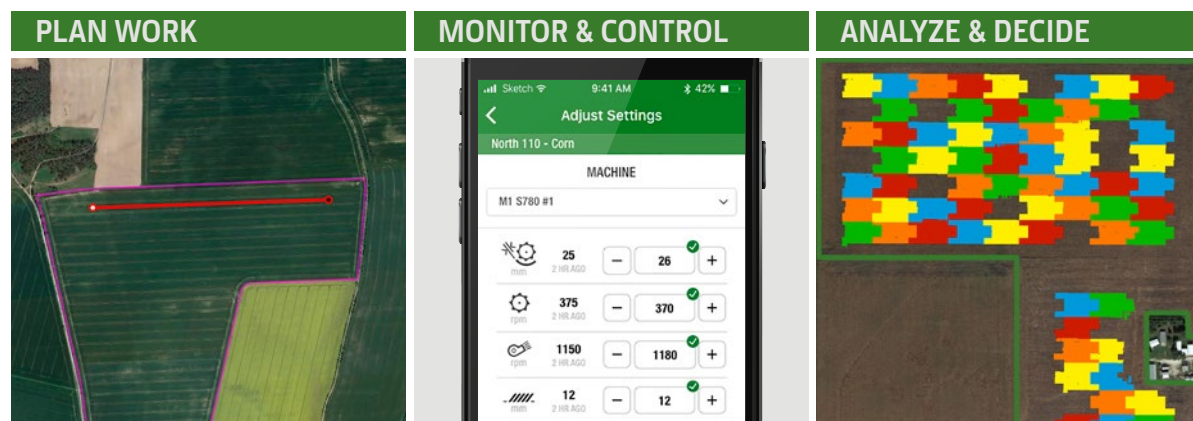
Living Lands & Waters, a world-renowned river cleanup organization based out of East Moline, Illinois, uses a John Deere 210G Excavator to help clean the Ohio River.

PROMOTING STEWARDSHIP OF THE LAND STEWARDSHIP THROUGH USE OF DATA-DRIVEN DECISION-MAKING

Data drives better decisions.

Leveraging our innovations in telematics—the long-distance transmission of computerized information—we have built a comprehensive digital platform through which our customers can harness machine and agronomic data to promote the long-term health and sustainability of their operations.

The John Deere Operations Center allows farmers to plan work in the off-season, monitor and control their operation in real time, and then analyze data about their operation to improve their performance. This platform complements the automation solutions that are becoming increasingly important parts of our customers' everyday lives.



We also know that our customers depend on agronomists and other advisors to make the best plans each year. This creates a need for our customers to access, share, and protect their data. We are committed to growing our leadership position as the most open and secure platform in the industry. To this end, we are committed to customer control, customer choice, and compatibility:

CUSTOMER CONTROL

Customers control their data and want to protect the competitive advantage that their data creates. Customers also do not farm alone and may want to share their data with trusted advisors who are integral to the decisions they make. John Deere understands these needs, and we have given customers complete control to grant data access to whomever they choose at the access level they need.

CUSTOMER CHOICE

With over 140 connected software tools to offer customers, John Deere provides unparalleled access to the leaders in the industry who can help meet the diverse needs of our customers.

COMPATIBILITY

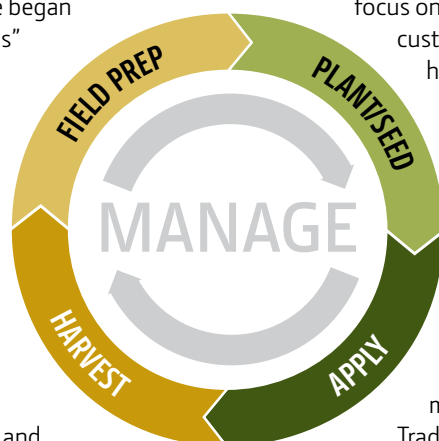
John Deere has a history as the industry leader in creating standards that enable equipment interoperability. John Deere proudly participates in industry standards organizations such as ISOBUS, ADAPT, and AgGateway. Compatibility goes beyond industry standards, enabling customers with mixed fleets to bring their data into the Operations Center.

PROMOTING STEWARDSHIP OF THE LAND

INNOVATION TEAMS IMPROVE YIELD, PROFIT, AND ENVIRONMENT

More than five years ago, John Deere began shifting to a “crop production systems” strategy. This strategy ensures that innovations focus on the entire system of producing a crop, leveraging the array of John Deere solutions used in field preparation, planting, application, and harvesting.

Our first step was to focus on product portfolios that optimize a crop system. To do this, we formed production system innovation teams organized by crops such as corn, soy, and small grains. These teams ensure innovations



focus on the farming jobs that address our customers’ most pressing needs and that have the greatest potential to unlock value. The teams then work across our various product platforms to allocate research and development investments accordingly.

One example focused on understanding the value of applying fertilizer closer to the time the plant needs it. The team studied and tested approaches of more precise and timely application. Traditionally, nitrogen is applied prior to planting and in many cases months before the

plant needs it. However, as a crop grows, it consumes nitrogen, and studies have revealed that nitrogen in the soil can be depleted before the end of the growing season, limiting yield.

The team quickly identified an opportunity to favorably impact yield and the environment through a more timely application of nitrogen. In 2016, John Deere acquired a majority ownership in Hagie Manufacturing, a maker of high-clearance sprayers, specializing in delivering nitrogen to corn late in the growing season. With this equipment, our customers can leverage data and information using our digital platform—the John Deere Operations Center—to collaborate with their agronomists and other advisors to ensure their crops are growing and have the nutrients they need throughout the season.

PROMOTING STEWARDSHIP OF THE LAND CONSERVATION THROUGH INTEGRATED FARMING

JOHN DEERE IS UNIQUELY POSITIONED
TO DELIVER SUSTAINABLE OUTCOMES



Santa Brigida Farm in Ipameri, Goiás, Brazil,
which adopted ICLF practices in 2006

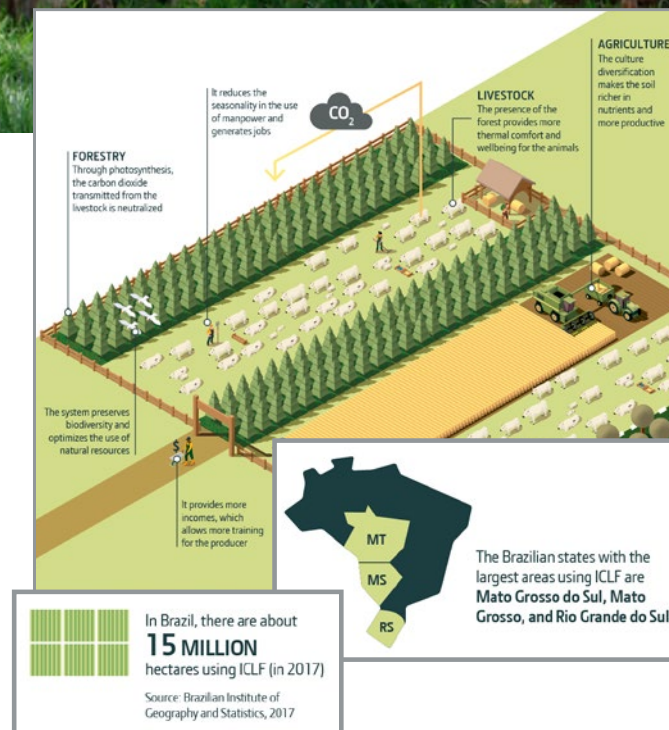
John Deere has long recognized the symbiotic relationship between those linked to the land and the land itself.

There are few places where this symbiotic relationship is displayed better than on an integrated crop-livestock-forest farm (ICLF), a concept being pioneered in Brazil. John Deere helped found the ICLF Network, a public-private partnership formed by Embrapa (Brazilian Agricultural Research Corporation), Cocamar cooperative, and companies Bradesco Bank, Soesp, Syngenta, Ceptis, and Premix. ICLF aims to accelerate the adoption of its practices and technologies by rural producers to strengthen the sustainable growth of Brazilian agriculture.

The system is a holistic approach to the farming operation. The setup integrates different production systems—row crops, livestock grazing on grasses, and

planted eucalyptus for forestry harvesting—within the same area. It can be implemented using mixed, rotating, or succession crops. The system benefits from the combination, succession, and rotation of plants and animals according to their biological cycles. ICLF can be implemented in different ways, with a wide range of crops and various animal species. It is adaptable to regional characteristics, climatic conditions, the local market, and the producer's profile and can be adopted by small, medium, and large producers.

Since 2007, the Santa Brigida farm has increased its yields dramatically through ILCF: soybeans from 34.8 to 66.9 bushels/acre; corn from 76.5 to 193.1 bushels/acre. Santa Brigida also experienced a 12 times productivity increase on beef produced per hectare.



EMPOWERING ECONOMIC DEVELOPMENT

The world's growing population and growing affluence create enormous opportunities for those whom John Deere serves. Each day, we ask ourselves, "How will we help our customers in feeding and nourishing billions more people? How will we assist our customers in building the infrastructure required to shelter and support a population who will live predominantly in cities far larger than we have ever

seen?" Although these questions are daunting, we are convinced that by providing those linked to the land with the solutions they need to thrive, they ultimately become the answer to empowering our global and collective prosperity.

In rural communities around the world, we are helping to modernize farming. In many parts of the world, this means empowering farmers through the

introduction of new agronomic practices. We also introduce mechanization to empower farmers to produce more with less inputs and with less labor. Less labor enables families to keep their children in school. It also means farmers can continue to farm—typically with higher yields and profitability—while allowing other family members to secure off-farm income, enabling families and communities to thrive.

EMPOWERING ECONOMIC DEVELOPMENT UNLEASHING THE POTENTIAL OF SMALLHOLDER FARMERS TODAY AND TOMORROW

In India, the John Deere Foundation partners with PYXERA Global. Our shared goal is to enhance the livelihoods and resilience of smallholder farmers and the communities in which they live by investing in the farmers of today and tomorrow. The Joint Initiative for Village Advancement's (JIVA) approach to development weaves together John Deere's solutions for world hunger, youth education, and community development initiatives and strategically positions John Deere to bring to life our higher purpose.

Born from a volunteer experience personally led by Sam Allen in 2011, JIVA centered initially on three villages of roughly 5,000 residents. The program is now in its seventh year and, through its pilot-to-scale approach, has sustainably increased its impact by efficiently expanding to 10 new villages and five smaller hamlets of over 10,000 people.

At no other time have partnerships been more critical—particularly partnerships that holistically invest in improving the livelihoods and resilience of smallholder farmers and their communities. Through a deep commitment to those linked to the land, JIVA bolsters global food security. JIVA accomplishes this by empowering smallholder farmers and generating a virtuous cycle, where investments in capacity-building enhance current farming practices that sustainably increase household incomes.

We have helped generate approximately \$1.2 million in additional income (measured in purchasing power parity) from agricultural production in the pilot project area to date. We expect to generate more than \$3 million annually in additional income from agriculture once interventions in the pilot project area reach full maturity.



EMPOWERING ECONOMIC DEVELOPMENT ADVANCING MECHANIZATION AND ENTREPRENEURSHIP

JOHN DEERE IS UNIQUELY POSITIONED
TO DELIVER SUSTAINABLE OUTCOMES



Over 130 dealer outlets
across Africa promote
mechanization and drive
economic growth.



Experience has proved throughout our 182-year history that mechanizing a farm operation—moving from hand tools and draft animals to tractors and implements—takes time. This transition is accelerated when a farmer becomes a contractor, supplying mechanization to neighboring farmers, creating an additional revenue source for the farmer-contractor and aiding in the justification and affordability of mechanizing their operation.

To help African farmers see the opportunities created by mechanization, we recently introduced our S.M.A.R.T. Complete Solutions Program.

Solutions for small farmers
Mechanizing for yield
Access to finance
Reliability for lower costs
Technology and education

By promoting both sensible mechanization as well as the support services needed to introduce and grow it, we have helped customers quickly and significantly increase their agricultural yields and household incomes. These increases, in turn, have permitted customers to reduce drudgery, expand cultivation, procure better inputs, invest in business growth, and ultimately secure a brighter future for their families, their communities, and the world.

By working collaboratively with local governments, nonprofit organizations, dealers, and others, John Deere creatively solves problems for customers, providing

solutions that enable economic development, increased entrepreneurship, and improved living standards.

In regions where agriculture is beginning to be mechanized, we find that access to financing is often the most significant barrier to adopting mechanized farming practices. In those cases, John Deere Financial plays a critical role. John Deere Financial works with local banks and governments to provide financing and related services. As our equipment sales have expanded geographically, so has John Deere Financial's footprint, with offices in over 50 countries in 2018.

EMPOWERING ECONOMIC DEVELOPMENT THE WIRTGEN GROUP: BUILDING ROADS AND GREATER OPPORTUNITY

One of the most significant trends created by the world's growing population will be rapid urbanization. Most of the world's fastest growing cities will be in Asia and Africa. For megacities such as Delhi, India—which is projected to grow from nearly 29 million inhabitants today to nearly 39 million by 2030—to thrive, they must be supported by roads that will connect them to the

farmers and rural communities that will provide them with food and other essential resources.

Our acquisition of the Germany-based Wirtgen Group in 2017 established us as an industry leader in global road construction. The Wirtgen Group has built a global operation with approximately 8,700 employees, selling products in more than 100 countries through a large network of company-owned and independent dealers.

With local production facilities in Brazil, China, and India and a distribution channel that reaches throughout much of the developing world, the Wirtgen Group will not only leverage growing urbanization to help its customers construct the roads, but also support the success of the farmers who will depend on these roads to help feed the world.



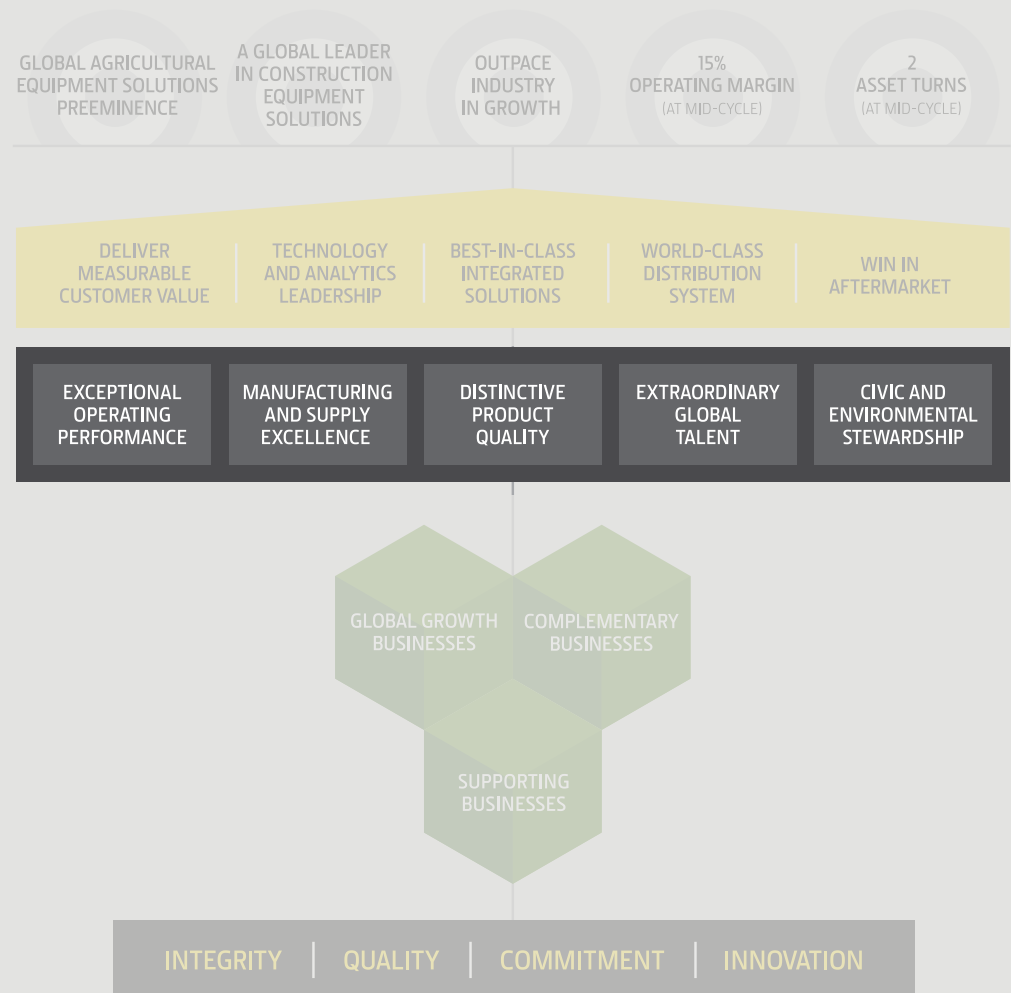
SUSTAINABILITY IS FOUNDATIONAL TO THE JOHN DEERE STRATEGY

By executing the John Deere Strategy, we realize our higher purpose.

We have five Foundational Success Factors—Exceptional Operating Performance; Manufacturing and Supply Excellence; Distinctive Product Quality; Extraordinary Global Talent; and Civic and Environmental Stewardship. For each, we have defined key themes and performance measurements, and in the following pages we explore how our progress on them both improves living standards for people around the world and delivers superior and longer-lasting returns for all our stakeholders.

THE JOHN DEERE STRATEGY

OUR PURPOSE Committed to those linked to the land



EXCEPTIONAL OPERATING PERFORMANCE

John Deere's business model—managing our assets and operating margin to generate an operating return on assets greater than our cost of capital, or what we call "Shareholder Value Added"—is the foundation on which we build sustainability. Without first operating a successful business, we could not pursue our higher purpose. Our recent performance has proven that through strict adherence to our business model, particularly in challenging business conditions, we are able to both operate a successful business as well as invest in growth-oriented projects.

At John Deere, we recognize that a strong Board of Directors contributes to long-term shareholder value. Our Directors are *(from left)* Michael Johanns, Alan Heuberger, Charles Holliday, Sheila Talton, Clayton Jones, Samuel Allen, Vance Coffman, Sherry Smith, Gregory Page, Dmitri Stockton, and Dipak Jain.



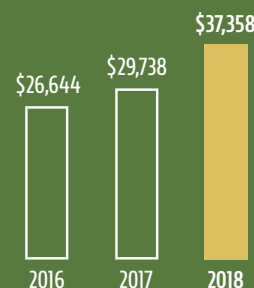
EXCEPTIONAL OPERATING PERFORMANCE

SHAREHOLDER VALUE

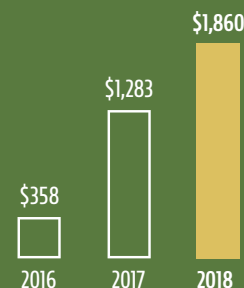
In 2018, John Deere generated a positive cash flow as well as \$1.86 billion in Shareholder Value Added. Our strong financial performance in recent years has allowed us to invest in advanced technologies and solutions. In 2018 alone, we devoted \$2.6 billion to research and development and capital expenditures. Further, acquisitions over the past three years, including Blue River Technology, Hagie Manufacturing, and the Wirtgen Group, strengthen our unique position to leverage global population growth and increasing affluence.

Today, as a result of our performance and growth, we produce equipment and solutions in 17 countries and sell them in approximately 130 countries. John Deere Financial, the company's financing arm, provides financing to dealers and customers. More than half of our approximately 74,000 employees work outside the United States.

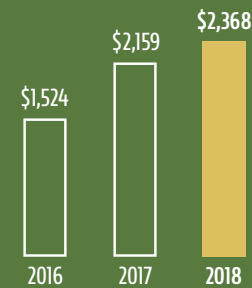
NET SALES &
REVENUES
**\$37.36
BILLION
UP 26%**



SHAREHOLDER
VALUE ADDED*
**\$1.86
BILLION
UP 45%**



NET INCOME
(attributable to Deere & Company)
**\$2.37
BILLION
UP 10%**



**The early 2000s introduction of the Shareholder Value Added (SVA) model was a pivotal period for John Deere because of the operating discipline it brought to our businesses. SVA is operating profit minus the cost of capital. Operating Return on Assets (OROA), the cornerstone of SVA, will continue to be one of our key financial metrics because it represents the operating profit generated per dollar invested in average assets. Using OROA as a key financial metric ensures we focus on effective management of both assets and operating margins. We built these metrics to manage the cyclical nature of our business and strengthen our sustainability.*

EXCEPTIONAL OPERATING PERFORMANCE

GOVERNANCE

At John Deere, we believe strong corporate governance—starting with our Board of Directors—enhances our business. With our Board’s oversight, we conduct our business openly, honestly, and fairly. We measure our accomplishments by how we achieve them as well as by the results themselves. More than this—we know that our results will be greater and more long-lasting when we achieve them the right way. In short, we believe that strong corporate governance creates long-term shareholder value.

John Deere currently has a Board of 11 Directors. Directors are nominated based on their skills, experiences, and backgrounds and the needs of

the Board and our company. Every Director must stand for election annually.

At all times, a majority of the Board of Directors must meet the criteria for independence established by applicable laws and regulations and the New York Stock Exchange. At the end of 2018, all of our Directors, except our Chairman, were independent.

Directors are recruited to strengthen the Board’s diversity and ensure that the Board reflects and understands the diverse perspectives of John Deere’s stakeholders around the globe. Four of our 10 independent Directors are female or people of color or both.

Our Presiding Director is elected by a majority of the independent Directors. Among other duties and responsibilities, the Presiding Director presides at all meetings of the Board at which the Chairman is not present and, jointly with the Chairman, approves the schedule of Board meetings, the proposed agendas, and the materials to be sent to the Board. The Presiding Director can also call meetings of the independent Directors and is available for direct communication with shareholders.

THE BOARD HAS DELEGATED SOME OF ITS AUTHORITY TO FIVE COMMITTEES:

EXECUTIVE COMMITTEE

The Executive Committee acts on matters requiring Board action between meetings of the full Board and has limited authority to act on certain significant matters.

AUDIT REVIEW COMMITTEE

The Audit Review Committee assists the Board in overseeing the integrity of our financial statements, our compliance with legal requirements, and the performance of our internal auditors.

COMPENSATION COMMITTEE

The Compensation Committee makes recommendations to the Board regarding incentive and equity-based compensation plans. It also evaluates and approves the compensation of our executive officers except for the compensation of our CEO, which is approved by the full Board.

CORPORATE GOVERNANCE COMMITTEE

The Governance Committee monitors corporate governance policies and oversees our Center for Global Business Conduct. It also makes recommendations concerning the size, composition, committee structure, and fees for the Board.

FINANCE COMMITTEE

The Finance Committee reviews the policies, practices, strategies, and risks relating to John Deere’s financial affairs and exercises oversight of our Financial Services business.

Charters for each of the Board Committees formalize their responsibilities and processes.

Committee charters are available [here](#).

EXCEPTIONAL OPERATING PERFORMANCE GOVERNANCE

Because we believe corporate governance is integral to creating long-term shareholder value, our Board of Directors has adopted company-wide corporate governance policies that are periodically reviewed and revised to ensure that they reflect the Board's corporate governance objectives. These policies, along with John Deere's Code of Business Conduct and other work-specific policies, establish the framework by which we conduct ourselves and our global business in full compliance with the law and by which we affirm our commitment to integrity in everything we do.

The Board recognizes that robust internal controls and risk management processes are essential for achieving long-term shareholder value. The Board embraces its responsibility for monitoring risks that may affect our company and stakeholders. The Corporate Governance Committee monitors specific risks related to our governance practices by reviewing succession plans and performance evaluations of the Board and Chief Executive Officer and monitoring legal developments regarding corporate governance practices. The Corporate Governance Committee also oversees the company's compliance programs and monitors risks related to environmental matters, global work-life safety, product safety, product compliance, product liability, and supply chain.

In addition, John Deere has developed a risk management process with oversight by the Board. Various internal committees comprising Senior Officers have responsibility for identifying, evaluating, mitigating, and monitoring risks. Reviews of key risks typically occur at regularly scheduled Board meetings. Periodically, pertinent risks are reviewed with the Board to provide a deeper understanding of the current trends and mitigation plans.

JOHN DEERE POLICIES

CORPORATE GOVERNANCE POLICIES

These policies establish the guiding principles for John Deere corporate governance, including Board composition and functions, meetings, committees, compensation, and management evaluation and succession planning.

[Click here to view.](#)

CODE OF BUSINESS CONDUCT

This code provides specific guidance to all employees and outlines how we can and must uphold and strengthen the standards of honor and integrity that have defined our company since our founding.

[Click here to view.](#)

SUPPORT OF HUMAN RIGHTS IN OUR BUSINESS PRACTICES

This guidance outlines how John Deere strives to ensure that human rights are upheld for our employees and all workers in our supply chain.

[Click here to view.](#)

OUR GUIDING PRINCIPLES

These principles serve as an accessible and contemporary guide for employees in making everyday judgments and decisions in furtherance of our higher purpose and values.

[Click here to view.](#)

ENVIRONMENT, HEALTH, AND SAFETY POLICY

With a focus on continuous improvement, this policy provides that we conduct our business in a manner that protects our customers, employees, communities, suppliers, and the environment.

[Click here to view.](#)

GLOBAL CONFLICT MINERALS POLICY

This policy sets forth our commitment to conducting worldwide business operations in a manner that complies with applicable laws and regulations regarding conflict minerals.

[Click here to view.](#)

CODE OF ETHICS

This code establishes ethical standards applicable to Directors, employees, and officers in satisfaction of applicable laws and regulations and the New York Stock Exchange.

[Click here to view.](#)

SUPPLIER CODE OF CONDUCT

This code ensures that all our suppliers conduct business with a high degree of integrity and in a socially and environmentally responsible manner.

[Click here to view.](#)

EXCEPTIONAL OPERATING PERFORMANCE

CYBERSECURITY AND DATA PRIVACY

At John Deere, we have driven and are managing a dramatic increase in data that is produced, collected, and analyzed. Properly managing and processing this data allows us to better run our enterprise, provide enhanced customer support, and offer better, more productive products and services for our customers.

Because of the importance of cybersecurity and data privacy, the Board of Directors' Corporate Governance Committee and Audit Review Committee provide oversight. To ensure strong execution and engagement with the Board, we have established a Digital Risk Governance Council and an Executive Business Conduct Council, which provide specific direction on information security governance, data governance, digital risk management, and privacy.

We leverage the National Institute of Standards and Technology Cybersecurity framework as the foundational building blocks of our global Information security program. Our program focuses on assuring operational resilience and protecting the information that has been entrusted to us by our customers, employees, dealers, and suppliers.

Our data privacy program is constantly monitoring, adapting to, and working diligently to comply with

changes in global privacy legislation. While the General Data Protection Regulation and other regional and state regulations have brought increased requirements and more general awareness to privacy, we have long been focused on ensuring responsible use of personal data.

As an example, John Deere has earned European Binding Corporate Rules, which are like a code of conduct for the treatment of European personal data. Binding Corporate Rules are often considered the gold standard for the processing of personal data in the European Union. To accomplish this, we submitted significant parts of our privacy program for review by European regulators.

To ensure we protect an individual's privacy, we also must make sure our organization is aware and well educated of cyber security and data privacy issues. To ensure our employees know how to handle personal data, we required all full-time salaried employees to take General Data Protection Regulation compliance training in 2018. In addition, we are in the process of implementing expanded data protection training to all full-time salaried employees.

EXCEPTIONAL OPERATING PERFORMANCE COMPLIANCE

Operating with the highest business ethics requires vigilance. John Deere's Center for Global Business Conduct helps ensure consistent compliance in a global business environment of increasing complexity of laws, regulations, and cultural practices.

The Center for Global Business Conduct provides continuous training, communications, and best practices throughout John Deere's operations to ensure compliance with laws and regulations. It also provides employee access to global policies and offers guidance on complex and sometimes ambiguous business and cultural situations. Ethics and compliance training are required for all full-time employees at least four times per year, and all new employees must complete a core curriculum of training courses.

While governance starts with our Board of Directors, it ultimately depends on our employees and other stakeholders freely reporting concerns of actual or potential misconduct or other risks. To encourage such reporting, we have established the John Deere Compliance Hotline, operated by an independent company and available to receive confidential reports from anyone within or outside John Deere. To access country-specific Hotline information, employees can review the posters on display at each company location or go to the John Deere intranet, which lists country-specific Hotline phone numbers. Anyone may access the John Deere Compliance Hotline through the website listed in the Code of Business Conduct and Supplier Code of Conduct.

We address all reported known or suspected violations thoroughly and promptly. John Deere will not tolerate retaliation against any individual for making a report. This is true even if an investigation does not uncover any actual misconduct.



Code of Business Conduct



MANUFACTURING AND SUPPLY EXCELLENCE

Setting new industry standards for manufacturing and supply excellence is vital to the sustainability of our business and the outcomes we aspire to achieve. Our employees in manufacturing and supply management, who make up more than half of John Deere's global workforce, are constantly on the lookout for safer and more efficient ways to work, as well as the suppliers who can help. In this way, we ensure that we deliver on our higher purpose to improve the quality of life within our factory walls as much as we do outside them.



MANUFACTURING AND SUPPLY EXCELLENCE

WORKPLACE HEALTH AND SAFETY



Commitment to **OCCUPATIONAL SAFETY**

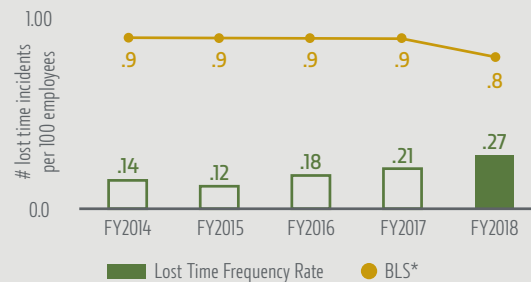
Achieve safety excellence through increased focus on leading indicators, risk reduction, health and safety management systems, and prevention.

Workplace health and safety is a priority at John Deere, and we strive to be among the safest places to work.

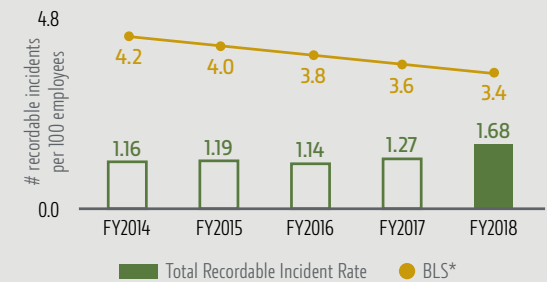
John Deere's workplace health and safety initiatives are overseen by our Enterprise Environment, Health, Safety, Standards, and Sustainability (EHSSS) Council. The EHSSS Council is responsible for setting the strategic direction and performance measurements for our health and safety programs. The EHSSS Council includes 19 members, representing all business divisions and markets, as well as our executive leadership.

Over the last five years, John Deere has performed significantly better than the industry average for lost-time frequency and recordable incident rates (see charts below). In our ongoing pursuit of safety excellence, we have provided additional training to safety professionals to further clarify incident recording, which has resulted in slightly higher reported rates over the last two years. We have also been launching new strategic initiatives for risk identification, reduction, and injury prevention; focusing on leading safety indicators designed to continuously measure safety performance; and improving our Health and Safety Management System.

LOST TIME FREQUENCY RATE



TOTAL RECORDABLE INCIDENT RATE



*BLS = Bureau of Labor Statistics - NAICS 333 + Machinery Manufacturing reported on two year lag.

MANUFACTURING AND SUPPLY EXCELLENCE

WORKPLACE HEALTH AND SAFETY

All workplace health and safety efforts at John Deere are guided by our Environment, Health, and Safety Policy.

To ensure we deliver on the commitments described in this policy, we have developed a Health and Safety Management System that integrated manufacturing sites must apply to full-time and temporary employees. The system is based on OHSAS (Occupational Health and Safety Assessment Series) 18001 and ANSI (American National Standards Institute) Z10.

Global health and safety standards set the minimum requirements for John Deere health and safety. These are operation-specific standards addressing safety requirements and particular business needs. We also set standards for contractor safety, which establish a risk-based contractor safety verification

process for high risks to personnel, property, and business interruption.

At John Deere manufacturing locations, team members—production employees, management, technicians, and engineers—work together to establish goals, assess safety and health risks, develop recommendations, and make improvements. We also use comprehensive safety processes for all employees, such as SERA (Safety and Ergonomic Risk Assessment), to identify and prioritize work on hazards and a “red tag” process to ensure equipment is reviewed for safety prior to release to operation. Through this collaborative and active process, many health and safety improvements are made each year.

Every five years, we conduct third-party audits at integrated manufacturing locations. These audits review the Health and Safety Management System performance, adherence to applicable John Deere

health and safety standards, and compliance with regulatory requirements.

To further improve health and safety performance, we track “near misses”—unplanned events that did not result in injury or illness, but had the potential to do so. We encourage employees to report near misses and we have deployed a global online tracking system of near-miss information. Upon learning of a near miss, unit safety managers work with engineers, supervisors, and others to correct potential problems.

John Deere factories such as Harvester Works inspire continuous improvement, or CI, through celebration. In its most recent CI Fair, employees were invited to vote for their favorite CI project in the categories of Safety, Quality, and Efficiency based on the areas of originality/innovation, teamwork, and impact.



MANUFACTURING AND SUPPLY EXCELLENCE

WORKPLACE HEALTH AND SAFETY

One reason our employees are safe on the job is the company's attention to ergonomics—the practice of designing work and workstations to reduce health issues caused by overuse of muscles, incorrect posture, and repetitive tasks. We are committed to delivering a world-class ergonomics by proactively integrating ergonomics principles and practices into business processes and establishing ergonomics as a technical competency of engineering. To this end, we establish the minimum requirements for an ergonomics program at John Deere integrated manufacturing units.

Our commitment to health and safety goes beyond the workplace, and we are mindful of the employee's health and welfare off the job. Through health assessments, training, and support, we are trying to enhance the wellness of our employees.

*Ergonomics specialists from our factories gather annually to share best practices and recognize accomplishments in developing innovative solutions to ergonomic risk and promote employee and engineer engagement. **More than 1,500 ergonomic improvements have been shared within our ergonomic community over the past 30 years**, which has led to the development of an internal "Excellence in Ergonomics Award" program that celebrated its 12th year in 2018.*



John Deere Werk in Mannheim tested and implemented an innovative human-robot cooperation known as the "chairless chair"—a wearable ergonomic mechatronic device designed for manufacturing environments that allows wearers to sit down whenever and wherever they need to. Workers can walk around freely, but have instant support once they get into a bending, squatting, or crouching position.

MANUFACTURING AND SUPPLY EXCELLENCE

ENVIRONMENTAL

The environmental commitments set forth in our Environment, Health, and Safety policy are integrated into the company's worldwide operations through the John Deere Environmental Management System. This system fosters continuous improvement and drives environmental performance. A global network of regional environmental managers works within our factories to assist with maintaining compliance programs and implementing sustainable practices.

Each year, our manufacturing and parts distribution facility managers document their efforts to manage environmental risks. Every four years, third-party audits are conducted at sites based on risk and internal audits are completed at other sites to assess compliance with environmental programs and applicable regulatory requirements around the world.



MANUFACTURING AND SUPPLY EXCELLENCE

SUSTAINABLE ENERGY USE



Commitment to **SUSTAINABLE ENERGY USE**

Reduce GHG emissions
by 15% through 50%
renewable electricity
supply and excellence
in energy efficiency.

We achieved our 2018 greenhouse gas (GHG) emissions-reduction goal by cutting GHG emissions per ton of production by 29% compared to 2012. We accomplished this with on- and off-site renewable electricity supplies, fuel switching, and increased energy efficiency. We also made structural improvements to reduce energy consumption. Measured by the metric we set, the improvements produced a nearly flat normalized energy performance per ton of production, despite significant challenges from production volumes and weather.

Our current goal is to reduce absolute GHG emissions by another 15% by 2022, from a 2017 baseline.

We will achieve this goal by driving excellence in energy efficiency and sourcing 50% of our electricity from renewable sources. As of the start of 2018, 24% of our electricity came from such sources.

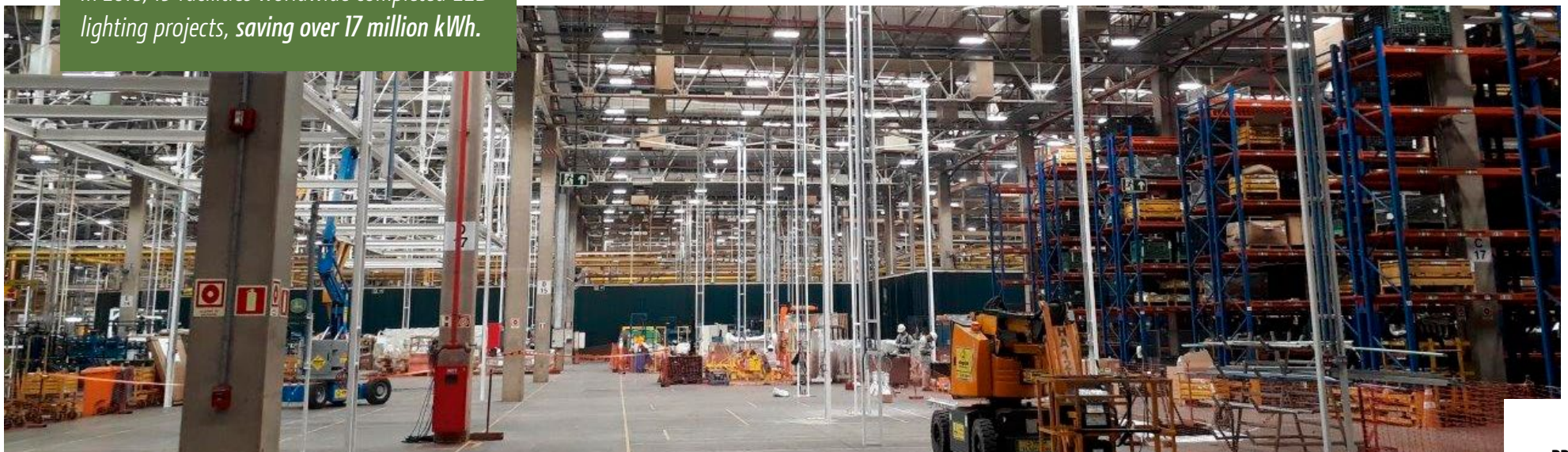
By partnering with third parties, we can identify priority energy-efficiency projects as well as host kaizen-type events to identify low- to no-cost projects to save energy and water.

At many sites, we have established dedicated energy teams—multi-disciplinary groups who are responsible for analyzing baseline energy usage at their site, reviewing environmental and energy use factors, establishing goals that will help us achieve our group-wide climate and energy commitments, and creating and completing the necessary projects.

We have also established regional cross-functional teams that share energy-efficiency best practices, including new technology investments, training initiatives, and energy-efficiency project successes.

We regularly hold various energy-efficiency awareness-raising events at sites all over the world, promoting the day-to-day behaviors that cut energy use.

In 2018, 19 facilities worldwide completed LED lighting projects, saving over 17 million kWh.



MANUFACTURING AND SUPPLY EXCELLENCE

USING WATER RESPONSIBLY AND RECYCLING WASTE



Commitment to **INCREASE RECYCLING**

Recycle 85% of total waste.



Commitment to **USE WATER RESPONSIBLY**

Implement water best
management practices
in 100% of water-scarce
manufacturing locations.

As with our energy use in 2018, we are more efficient in our water use than we were in 2012. Absolute water consumption increased at a lower rate than production volumes, resulting in improvement to the normalized consumption rate compared to prior years. The normalized rate remained flat compared to 2012.

Water is important to us and a key resource for our customers. We track and collect water usage data at all our manufacturing locations, excluding recent acquisitions and leases. Standards and guidelines for constructing new manufacturing facilities encourage

the inclusion of water use-reduction technology in the initial project design.

We continue to make progress on percentage of waste recycled. In 2018, we recycled 80% of our waste, up from 2017. Waste management is part of the environmental management system in place at every Deere manufacturing location, excluding recent acquisitions.

Using the World Resource Institute Aqueduct tool, we have identified 19 John Deere sites located in areas of water scarcity, mainly in Mexico, India, and China. In these areas, manufacturing sites must implement applicable Best Management Practices, which may include:

- *Site-specific water-management strategies*
- *Employee education and awareness programs*
- *Efficient water treatment and softening*
- *Leak-management plans*
- *Water-reuse programs*



MANUFACTURING AND SUPPLY EXCELLENCE

SUPPLY CHAIN

At John Deere, we rely on strong, competent suppliers and a supply base that mirror the diversity of all our stakeholders worldwide. For that reason, we have adopted programs to qualify and help develop small and diverse suppliers. We attract promising suppliers through a supplier diversity website, supplier fairs, and other avenues. Supply Management routinely works with suppliers to help them become more competitive by adopting lean manufacturing principles. We often do this through university partnerships such as the one we have with Tecnológico de Monterrey in Mexico, which has helped two small suppliers in Chihuahua and Toluca. We are also developing projects with universities in China, France, and Canada. Ongoing programs are helping 31 John Deere suppliers in eight U.S. states.

Women- and minority-owned businesses made up over 6% of our spending on suppliers in 2018. We continue to focus on these types of suppliers by placing priority on growing our spending with existing suppliers while also looking to expand the supply base with new women- and minority-owned businesses.

We insist that all our suppliers treat workers with dignity and respect, provide safe working conditions, use environmentally responsible manufacturing processes, and adhere to the highest ethical standards. Our actions, from on-site supplier audits and supplier training to our consistent and fair treatment of suppliers, demonstrate our commitment to supply chain excellence.

To ensure suppliers conduct business with a high degree of integrity and in a socially and

environmentally responsible manner, all our suppliers are expected to adhere to our Supplier Code of Conduct. Based on our own Code of Business Conduct, the Supplier Code of Conduct applies to all suppliers worldwide. Under the code, for instance, suppliers are expected to comply with child labor laws and must not engage in or support the use of forced or involuntary labor. They are expected to comply with all applicable local laws concerning discrimination in employment, provide safe working environments, and comply with safety and health laws and regulations.

Environmental compliance is a key expectation of our suppliers. They must ensure their operations comply with all laws related to air emissions, water discharges, toxic substances, and hazardous waste disposal. Suppliers are further encouraged to conduct their operations in a way that minimizes the impact on natural resources and protects our customers, employees, and the environment. Suppliers are expected to have an environmental management system in place and are encouraged to support and provide information to the CDP (formerly known as Climate Disclosure Project) climate change questionnaire.

Additionally, our suppliers are expected to be familiar with the business practices of their own suppliers and subcontractors and ensure that they, too, operate in accordance with the Supplier Code of Conduct. John Deere provides a reporting process through which suppliers can anonymously report potential violations.

John Deere has developed an Achieving Excellence management and evaluation process for suppliers.

This process is used to evaluate a supplier's performance in quality, delivery, cost management, and technical support and includes all requirements of the Supplier Code of Conduct. We proactively monitor suppliers to mitigate risks of a negative impact on human rights, health, safety, or the environment and we take measures to ensure that our suppliers conduct business in an ethical manner. John Deere selects suppliers to participate in the Achieving Excellence program, through which their environmental sustainability efforts can be highlighted and recognized by John Deere.

We have put a risk-management tool in place to monitor supplier risks for compliance, financial health, performance, and event and business continuity planning. The compliance portion of the tool monitors activity related to the Supplier Code of Conduct, compliance to environmental and quality assessments, and all other compliance issues reported through other channels. This tool enables improved risk management in the supply chain.

We implement a robust and formal supplier audit, assessment, and verification program. Many onsite audits include a compliance verification section that covers all requirements of the Supplier Code of Conduct.

In the event of non-compliance, we have developed a formal internal corrective action process. Programs and processes are formalized through the John Deere Supplier Qualification System and Non-Conformance & Corrective Action Process.

DISTINCTIVE PRODUCT QUALITY

At John Deere, quality is one of our core values for a reason. Through distinctive product quality, we build our brand, clearly differentiate ourselves from the competition, earn dedicated customers, improve our financial performance, and ultimately achieve our higher purpose. As part of distinctive product quality, we are committed to making product safety a priority.



DISTINCTIVE PRODUCT QUALITY

PRODUCT SAFETY

John Deere's EHSSS Council provides oversight on product safety and is supported by the Product Safety Standards Regulatory and Compliance (PSSRC) council. The PSSRC council meets at least three times a year and makes a formal annual report to the Corporate Governance Committee. The council includes corporate and platform product safety and standards personnel, as well as legal and public affairs counsel. In general, the council provides guidance and direction for product safety and standards.

Our Corporate Product Safety Department works with factory safety committees, especially during product technology development, and provides coordination and consistent processes for multiple-factory product development projects. In addition, each unit has product safety and standards engineers who participate in standards development and trade organizations and keep abreast of advances in product safety.

During all product design, we adhere to our General Rule for Product Safety. This rule requires that an acceptable design must not present an unreasonable risk of injury to a product user or others nearby. In applying this rule, we consider the people, environmental conditions, and other products with which a product is likely to be involved.



In 1966, John Deere announced the release of Roll-Gard. This equipment, known to the wider industry as a rollover protective structure (ROPS), marked a giant step forward in our commitment to the safety of our customers. In 1971, we even made our Roll-Gard patents available to other companies at no charge. Continuing our history of setting industry standards in safety, the John Deere India Product Safety Team recently launched a campaign to give away 100 ROPS to customers across the country to promote safety technology.



DISTINCTIVE PRODUCT QUALITY PRODUCT SAFETY

Beyond our General Rule for Product Safety, we rely heavily on applicable safety standards as published by the International Standards Organization (ISO), the American National Standards Institute (ANSI), the American Society of Agricultural and Biological Engineers (ASABE), European Committee for Standardization (CEN), and other organizations. Our goal is to meet or surpass the intent of these standards.

As part of our design process, we ensure safety information appears in pre-delivery instructions, operator's manuals, technical manuals, and other service publications according to the activities to which they apply. In addition, safety instructions in the form of safety signs are affixed to the product to appropriately warn an operator of potential hazards.

We also provide training resources such as videos, posters, brochures, and guides. We support child-safety organizations, such as Progressive Ag Safety Day, and we encourage our dealers to promote safety in their communities through local John Deere safety days.

We also have adopted a robust incident reporting system that collects incident information from multiple sources and provides dedicated responsibility for incident reporting and corrective action. Reports of incidents involving John Deere equipment are obtained from numerous sources, including our dealers, the customer call center, and public information.

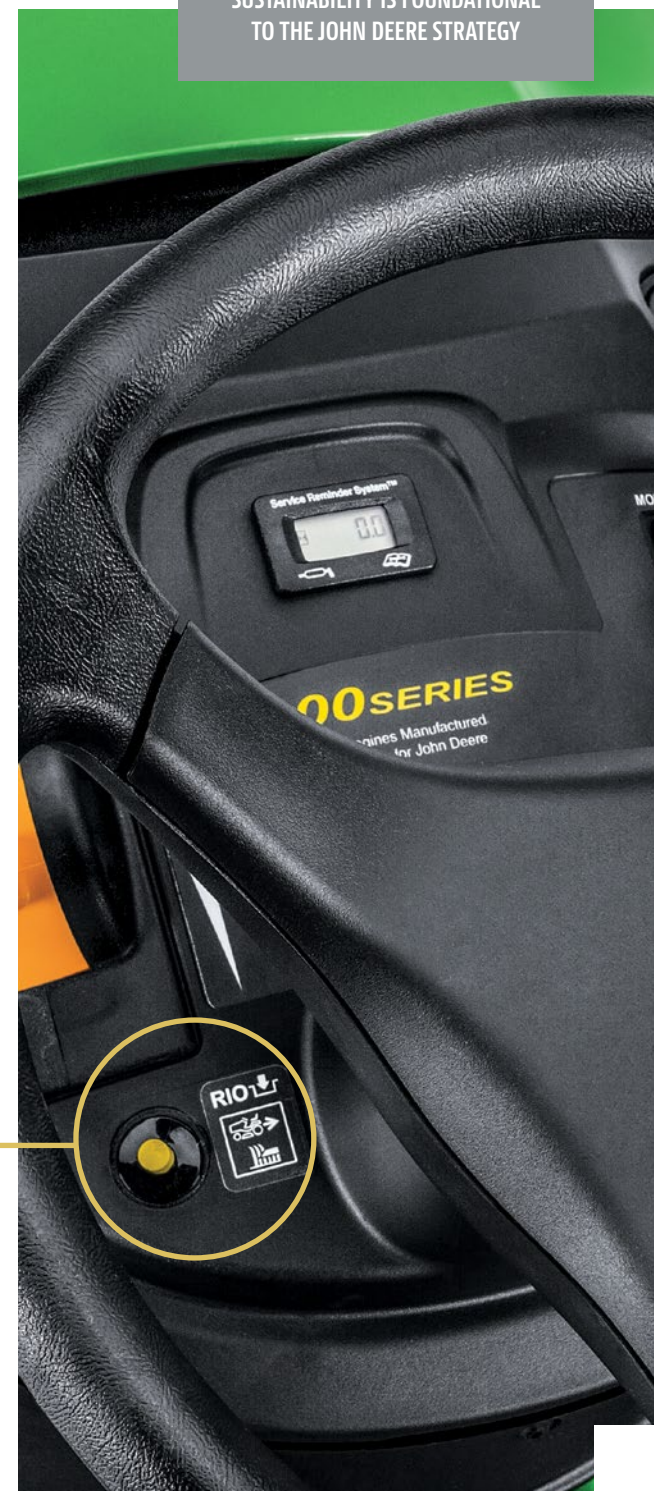
All incident reports are forwarded to the Corporate Product Safety Department and entered into a central repository. A formal report of the incident is sent to the factory and marketing group responsible for the product, where it is reviewed by the factory Product Safety Committee.

We have developed and use product repair and recall processes, which include specific activities and procedures for product recall reporting and notification. All consumer product recalls are posted on the John Deere website and the website of the appropriate governmental agency.

To ensure products meet specifications and achieve the highest quality, we have integrated key elements and fundamentals of Advanced Product Quality Planning into the product delivery and order fulfillment processes. These include processes such as design reviews, failure mode analysis, control plans, and production part approval.

We have developed and implemented a corrective action process to address non-conforming designs and parts that leverages the 8D discipline problem-solving approach and allows us to contain any issues that may occur and focus on short- and long-term corrective actions as necessary.

Appropriate features are built into John Deere products to help protect operators and others from injury. For example, the company's lawn and garden tractors include a system that requires operators to engage a switch to mow in reverse. This helps ensure customers check behind them for potential hazards before proceeding. John Deere mowers also have an operator-presence system that disengages power to the mower blade if the operator leaves the seat.




EXTRAORDINARY GLOBAL TALENT

To compete in dynamic world markets, John Deere must have a global workforce that is engaged, responsive, unwavering in its commitment to deliver outstanding value, and flexible in adjusting to the changing needs of the business. For us to succeed, we must attract, develop, and retain the right mix of talent to meet current and future business needs. Further, we must foster a diverse and inclusive workplace in which high-performing teams made up of employees from all backgrounds can deliver on our higher purpose. In this way, we see our employees—at every level of the company and regardless of role—as our most valuable asset.

We monitor diversity in our workforce and are committed to regularly tracking and reporting on key diversity metrics. Our diversity data for fiscal 2018 is:

	OVERALL	SALARIED	PRODUCTION
Female	19.0%	27.1%	11.3%
Male	81.0%	72.9%	88.7%
People of Color (U.S. only)	12.6%	11.2%	14.1%



Rosalind "Roz" Fox, factory manager at John Deere Des Moines Works, is the first black female factory manager in John Deere history.

EXTRAORDINARY GLOBAL TALENT ATTRACT

To attract talent, John Deere offers competitive compensation and non-financial benefits everywhere we operate. The non-compensation benefits we offer focus on all aspects of employee well-being, including financial, physical, social, community, and career. We select market-specific benefits to be competitive in each market and affordable for the company and its employees.

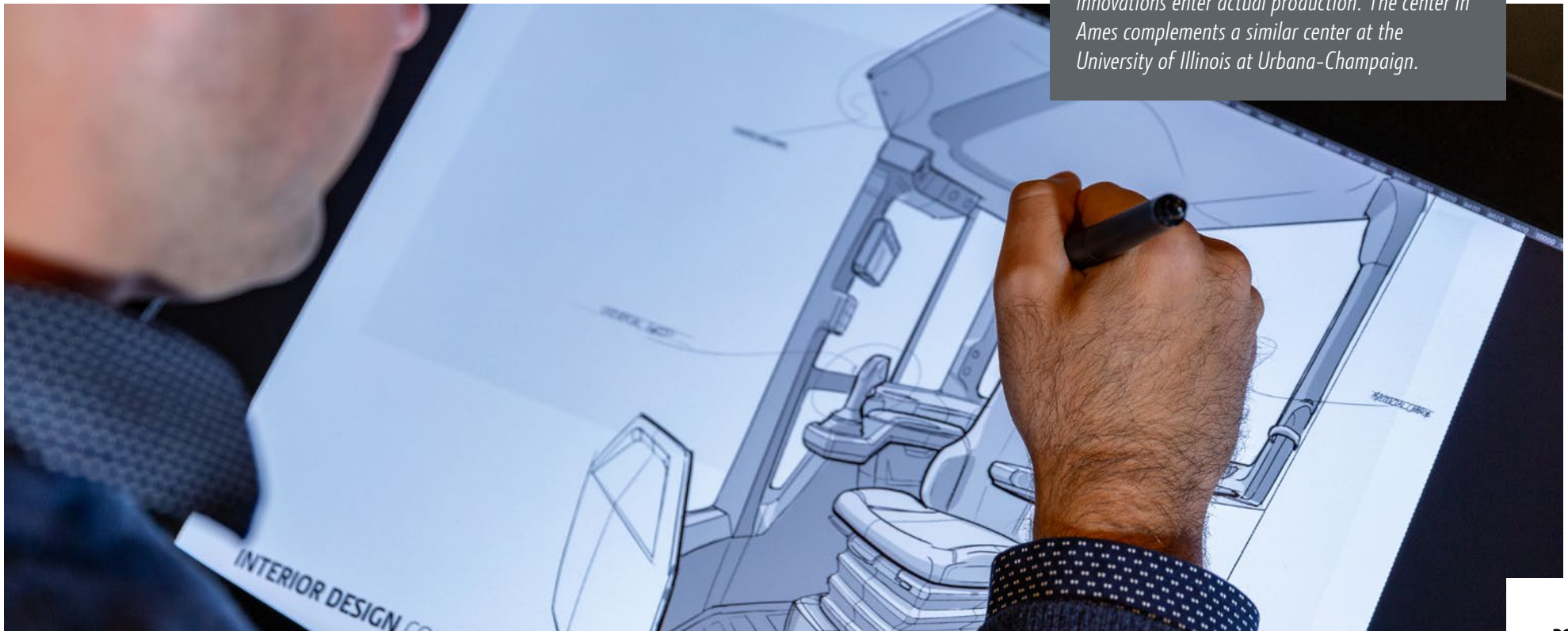
We offer a variety of working arrangements—including flexible schedules, telecommuting, and job sharing—to help employees manage home and work-life situations.

Deere subsidizes daycare providers in some communities to help employees secure quality child care.

Through our Healthy Directions initiative, we have introduced programs and resources to help U.S. salaried employees focus on their health and well-being. Some larger facilities have fitness centers on site.

We encourage and support employees around the world to volunteer time to both workplace-sponsored community projects as well as charitable causes important to them personally.

In 2017, John Deere announced that we would open a John Deere Technology Innovation Center in Ames, Iowa, in recognition of the world-class research, education, and talent development capabilities at Iowa State University. By the end of 2018, John Deere Technology Innovation Center-Ames had attracted more than 40 year-round student interns and 15 full-time employees. These students and employees are working on cutting-edge innovations. Since its launch, the center has generated invention disclosures and seen innovations enter actual production. The center in Ames complements a similar center at the University of Illinois at Urbana-Champaign.



EXTRAORDINARY GLOBAL TALENT ATTRACT

Diversity is vital to our continued growth and industry-leading innovation. Diverse teams bring better ideas and make better decisions, helping us build more innovative products and forge stronger partnerships around the world.

To attract diverse talent, John Deere invests in diverse college and university students as well as in their schools. For instance, we partner with the Thurgood Marshall College Fund Leadership Institute to support the development of leadership skills at publicly supported Historically Black Colleges and Universities and Predominantly Black Institutions.

Professional organizations also play a crucial role in our diversity recruitment strategy at John Deere. Developing and fostering deep relationships with several leading professional organizations allows us to position ourselves to attract exceptional, diverse talent. These relationships also provide a mechanism for current employees to take advantage of extensive leadership and development opportunities.

We proudly partner with these professional organizations:

- *Prospanica (The Association of Hispanic Professionals)*
- *Grace Hopper Celebration*
- *Minorities in Agriculture, Natural Resources, and Related Sciences*
- *National Association of Black Accountants*
- *National Black MBA Association*
- *National Society of Black Engineers*
- *Society of Hispanic Professional Engineers*
- *Society of Women Engineers*



EXTRAORDINARY GLOBAL TALENT DEVELOP

John Deere's development programs ensure that new employees gain experience in different areas of the company at the start of their careers. Development Programs exist for engineering, IT, supply management, marketing, accounting & finance, and HR.

Training and development opportunities for employees at all stages of their careers empower them to reach their full potential and are critical to the long-term success of our business. Once employees have identified the paths that can build the skills, experience, knowledge, and competencies needed for career advancement, we support them by providing comprehensive learning opportunities. John Deere University, a global online learning tool, provides access to a wide range of colleges and course curricula.

To empower employees to focus their work on activities that have the highest impact for both the company and their development, we have developed Global Performance Management (GPM). This system assists employees in aligning their work to key business objectives and the John Deere Strategy. GPM also focuses employee attention on the importance of how we work with one another, emphasizing teamwork and interpersonal relationships.

In addition to GPM, we have implemented Individual Development Plans (IDP). These plans provide a process for employees and their managers to identify and track their development objectives and actions.

GPM and IDP represent ongoing and collaborative processes through which managers and employees have regular performance and development conversations. GPM is part of the annual merit process, through which increases in base pay are determined.



In 2018,

95%

of salaried employees took advantage of at least one of their available training opportunities.

In 2018,

86%

of salaried employees had an active Individual Development Plan.

EXTRAORDINARY GLOBAL TALENT DEVELOP

As employees grow throughout their careers, we are committed to offering opportunities that will challenge and reward them.

Specifically, we create leadership opportunities for employees that not only align to our changing business needs, but also create paths for employees with diverse skills and experiences to grow professionally and personally.

Under the “People Path,” leaders develop themselves by engaging employees and maximizing their potential to achieve outstanding business results. They learn to establish a mission, strategy, and plans and to deploy resources to grow our business. They are accountable for developing talent and building effective teams throughout their organizations. Our People Leaders understand that the environment and culture they develop and sustain provide a competitive advantage to John Deere and cannot be easily duplicated.

Under the “Knowledge Path,” leaders develop themselves by contributing their technical and professional expertise to the building of products and services that will help improve the world.

Through their knowledge, these leaders execute, support, research, and innovate technologies and they develop and teach others. We draw on their knowledge to drive innovation, continuous improvement, and the development and execution of the John Deere Strategy. In 2015, we launched the John Deere Fellows Program, which bestows the highest level of recognition on employees who have contributed to the company’s success through deep expertise in their functional areas.

At John Deere, we know that most development occurs on the job through hands-on learning and support from others. To ensure that our employees have a strong network of support, we have developed a robust Mentoring Process. The vision for the process is simple—we want every employee to have cross-cultural, generational, and functional skill development from someone else in the company. This collaborative knowledge-sharing within the organization connects colleagues globally and leverages expertise and processes at John Deere. Although the main focus of the process is the development of the mentee, mentors also gain knowledge and development from the relationship.

In 2017, John Deere launched a “Top Performer” workshop for diverse employees. The workshop provides professional development programming and leadership interactions designed to share insights into learning, career ownership, deep relationship building, and leadership presence. Our focus is simple—we will place diverse employees on a leadership path.

SUSTAINABILITY IS FOUNDATIONAL
TO THE JOHN DEERE STRATEGY

John Deere mentors support not only our current colleagues, but also our future colleagues. Through professional organizations such as the Society of Women Engineers and nonprofit organizations such as FIRST (For Inspiration and Recognition of Science and Technology), John Deere employees are inspiring the next generation of innovators in science, technology, engineering, and math (STEM).

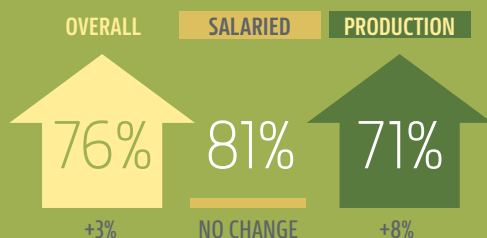


EXTRAORDINARY GLOBAL TALENT RETAIN

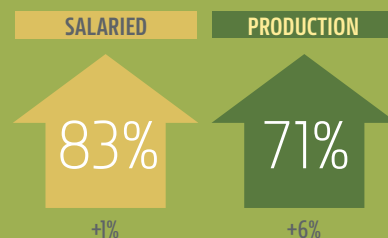
It is not enough for us to attract and develop our world-class talent—we must also retain them. To retain our employees, we measure and manage employee turnover and the quality of the employee experience. We are very pleased that our commitments to and investments in our employees result in low turnover compared to others in our industry.

We also conduct a biannual anonymous Employee Experience Survey across the majority of the business. In the survey, we emphasize employee engagement and manager effectiveness to ensure that we learn whether employees feel engaged in their work and empowered by their managers. Employees are strongly encouraged to participate. We use the results from the survey to develop action plans across the enterprise.

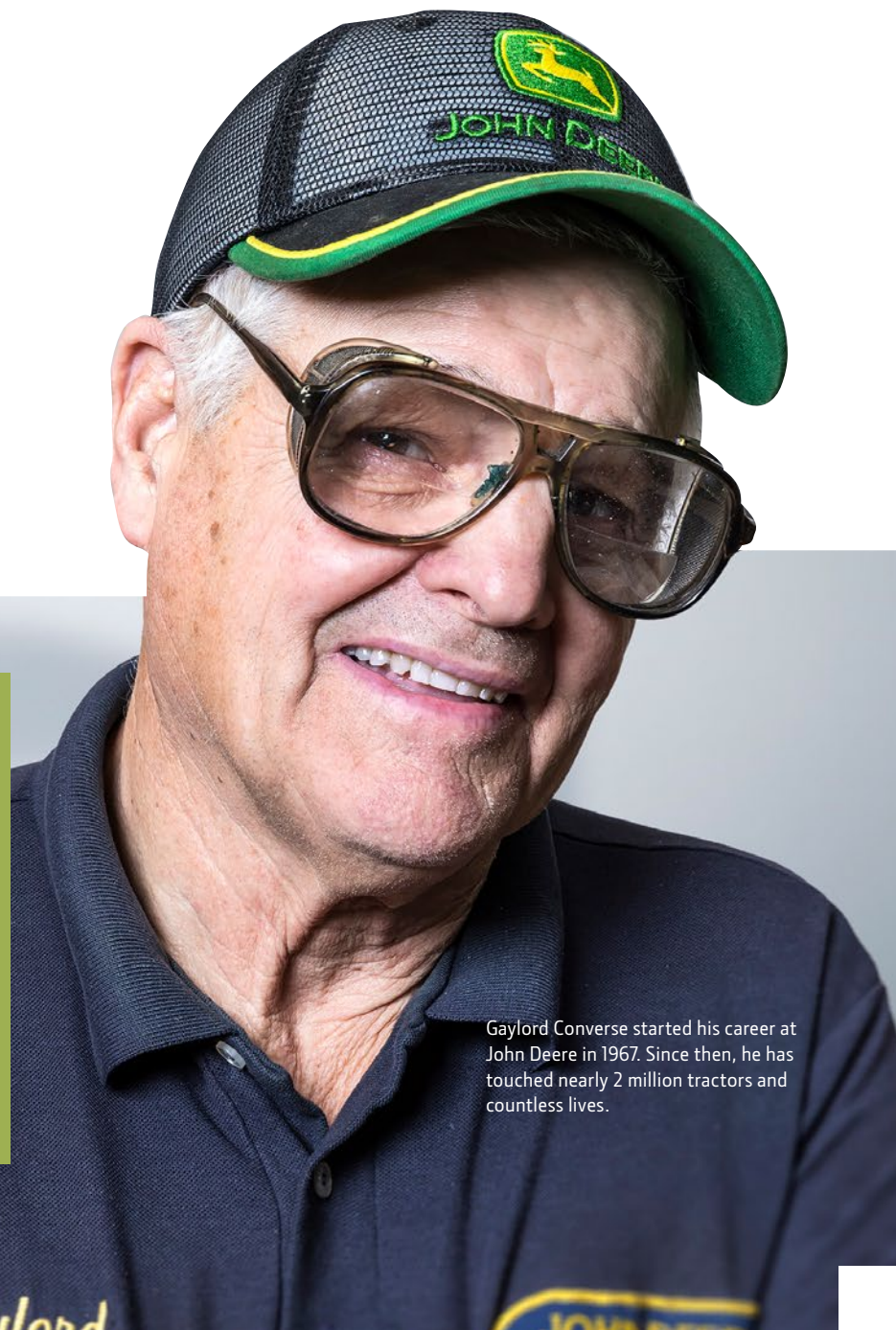
EMPLOYEE ENGAGEMENT



MANAGER EFFECTIVENESS



In 2018, global voluntary turnover was 2.9% for salaried positions and 5.8% for production positions.



Gaylord Converse started his career at John Deere in 1967. Since then, he has touched nearly 2 million tractors and countless lives.

EXTRAORDINARY GLOBAL TALENT RETAIN

From the highest levels of our company, we have made the retention of our diverse talent a priority.

Our management sets a consistent and transparent tone on diversity and inclusion. Leadership training focuses on building an inclusive environment and driving positive behavioral change in the organization. To help managers with development and team-building, questions measuring inclusiveness are a part of our Employee Experience Survey.

Diversity and inclusion are so important to us that we have established a regional council structure to develop processes and behaviors that support a diverse workforce and build an inclusive work environment. The councils identify region-specific approaches to teamwork. Employees from a variety of backgrounds work together on identified focus areas to find ways to encourage and enable high-performance teamwork.

Of all our efforts to attract, develop, and retain diverse talent, we are most proud of the efforts our employees themselves lead through Employee Resource Groups (ERGs). Our ERGs are company-sponsored, employee-run organizations formed around a common dimension of diversity, interest, or experience that affects the workplace. Our ERGs serve as resources to the business while also bringing together individuals with shared interests. Their efforts address three key focus areas—employee development, community involvement, and business alignment.

EMPLOYEE RESOURCE GROUPS ENRICH JOHN DEERE UNITS AROUND THE WORLD.

Examples of ERGs that empower employees across multiple units include:

.EDU: engages and retains members by challenging them to share their passions for learning, teaching, and leading.

Asian Connection: develops and promotes professional competencies and enhances employees' understanding of John Deere's link to the Asia/Pacific region.

Black Employee Resource Group: fosters employee engagement, provides professional development opportunities, and facilitates community involvement, all while promoting and supporting a diverse and inclusive environment within John Deere.

HOLA: helps recruit and retain Hispanic/Latino employees, offers community outreach programs, leads employee development programs, and advocates for diversity and inclusion.

Military Employee Resource Group: enables members to express their support for military families and activities and exercise innovation and leadership.

Multicultural: brings together employees from a variety of racial and ethnic backgrounds to promote understanding, creates an inclusive and collaborative environment, and fosters personal and professional development.

NEON (New & Experienced Organizational Network): focuses on both business- and social-oriented events and is open to all employees, regardless of their years of experience.

Parent & Caregiver Connection: empowers and improves the effectiveness of John Deere employees in their dual role as business professionals and family caregivers.

Rainbow: supports lesbian, gay, bisexual, transgender, and queer/questioning (LGBTQ) inclusion at John Deere by breaking isolation and encouraging employee networking.

Teleworkers Unlimited: supports work-life management and employees in a formal teleworking arrangement worldwide by increasing engagement and awareness.

Women in Operations: attracts women for careers in operations, develops current talent for careers and opportunities in operations, and retains women in operations.

WomenREACH (Relating, Enriching, Achieving, Challenging, and Helping): creates an environment for women to learn, develop, and build professional relationships.

CIVIC AND ENVIRONMENTAL STEWARDSHIP

John Deere's foremost responsibility is to operate a successful business, one that delivers exceptional operating performance, achieves manufacturing and supply excellence, produces distinctive product quality, and inspires extraordinary global talent. This success, in turn, creates both the means and responsibility for us to fulfill our higher purpose in other ways, including through giving and volunteerism, political participation, and product sustainability. Done right, these activities not only improve the quality of life for people around the world, but also ensure an environment in which John Deere and its stakeholders can achieve even greater business success, thereby creating a virtuous cycle of sustainability for John Deere.





CIVIC AND ENVIRONMENTAL STEWARDSHIP GIVING AND VOLUNTEERISM

John Deere and the John Deere Foundation generate power for this virtuous cycle by focusing our energy, intellect, and resources on three activities essential to honoring our commitment to those linked to the land.

First, we empower smallholder farmers to become more productive and profitable. Through the success of smallholder farmers, we magnify opportunities to strengthen family farms, bolster local food security and nourishment, revitalize rural agricultural regions, and empower global prosperity.

Second, John Deere strives to inspire the next generation of innovators to develop the skills and passion necessary to create the technologies that will enrich the world's growing population. As one of John Deere's core values, innovation is a key to our past, present, and future success. To help innovation thrive, we provide youth with dynamic, rewarding, and actionable experiences that motivate them to pursue education and careers in engineering, IT, and manufacturing.

And third, with facilities around the world, we understand the economic and social impact that we have on those who live in our home communities. Operating a successful business not only supports our employees, but also permits us to invest deeply in our communities to ensure that our neighbors have opportunities to become self-sufficient and contribute in their own ways to our collective prosperity.

CIVIC AND ENVIRONMENTAL STEWARDSHIP GIVING AND VOLUNTEERISM

In 2017, John Deere committed to invest at least 1% of our net income in these three priorities based on our previous three-year average performance.

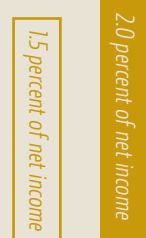
Linking annual civic investments to net income means that as we grow, we will become a stronger power for good in our home communities and throughout the world. In addition, we committed to supporting our employees to record at least 1 million hours of volunteerism from the beginning of 2017 through the end of 2022. Through their volunteerism, our employees not only make their communities better, but also bring our higher purpose to life.

BEING A POWER FOR GOOD

TOTAL CHARITABLE CONTRIBUTIONS*

(IN MILLIONS)

\$33.4 \$38.3



2017 2018

*Includes charitable contributions from John Deere, the John Deere Foundation, and affiliates

VOLUNTEER HOURS

160,688 185,830



2017 2018

As part of its Dollars for Doers program, the John Deere Foundation provided over

**\$1.8
MILLION
IN GRANTS**

in 2018 to the nonprofit organizations and schools to which employees volunteered their time.

By focusing giving and volunteerism on empowering smallholder farmers, inspiring youth through education, and investing in the self-sufficiency of those living in our home communities, we align closely to the United Nations Sustainable Development Goals on poverty, hunger, education, and partnerships.



CIVIC AND ENVIRONMENTAL STEWARDSHIP

POLITICAL PARTICIPATION

At John Deere, we believe that participating in democratic political processes around the world and advocating for public policies that permit us to compete fairly and freely in the marketplace are vitally important to all our stakeholders.

In whatever form it might take, our engagement in the political process is grounded in and guided by our firm commitment to strong corporate governance and global corporate citizenship. All political spending by John Deere reflects our business interests and is used to further our public advocacy goals. John Deere complies fully with all federal, state, and local campaign finance laws and regulations governing political contributions and the disclosure of these contributions.

In compliance with U.S. federal and state election laws, John Deere administers the John Deere Political Action Committee (JDPAC), a voluntary, non-partisan group comprising U.S. employees. JDPAC members voluntarily pool their personal financial contributions to help elect and re-elect federal and state office candidates who understand and support free enterprise and the general business interests of the company, our customers, our employees, and our stakeholders. Under federal law and company policy, participation in JDPAC is limited to U.S. administrative and executive-level employees.

Except for administration expenses, JDPAC is funded solely by John Deere employees and is not supported by funds from John Deere itself. The company does not reimburse employees directly or indirectly for political contributions, including contributions to JDPAC.

JDPAC takes no stance on legislative matters and does not engage in lobbying on specific issues. Further, JDPAC does not seek to influence any particular vote through contributions. Oversight of JDPAC's contributions and related activities is exercised by its board of directors, currently comprising 13 John Deere employees from throughout our various business units.

JDPAC fully discloses all contributions made and received through reports filed with the Federal Election Commission and various state ethics commissions, as required by law. To improve access to information about JDPAC's contributions, John Deere posts an annual report on our website summarizing JDPAC contributions made in the most recent calendar year or election cycle, categorized by state, candidate, and amount. To view the annual report for the 2017–2018 election cycle, [*please click here*](#).

Consistent with U.S. federal law, John Deere does not contribute corporate funds to federal candidates, national political party committees, or other federal political committees. For example, even when permitted by applicable law in connection with certain state and local elections, we do not use corporate assets to support or oppose any candidate for political office or ballot measure. The company does, however, reserve

the right to make exceptions to this practice so long as any contribution we make is consistent with our public policy agenda, in accordance with our Code of Business Conduct, and previously approved by our Chairman, Chief Executive Officer, Senior Vice President, General Counsel & Public Affairs. John Deere does not pay for any independent expenditures or electioneering communications, as those terms are defined by applicable law. In the interest of transparency for our shareholders and other stakeholders, we publicly disclose and update annually our corporate political contributions. John Deere did not make any political expenditures out of corporate assets in the 2018 calendar year.

John Deere belongs to several trade and industry associations and pays regular dues to these groups. We join trade associations in part to join other like-minded companies in engaging in public education and advocacy efforts regarding major issues of common concern to our industries.

Our participation in trade associations is subject to management approval and oversight. We publicly disclose and update annually a list of those U.S. trade associations to which John Deere pays dues or makes other contributions of \$50,000 or more, as well as the portions of such dues or payments that are not deductible under Section 162(e)(1) of the Internal Revenue Code. To view the annual report for trade association memberships and expenditures, [*please click here*](#).

CIVIC AND ENVIRONMENTAL STEWARDSHIP

PRODUCT SUSTAINABILITY



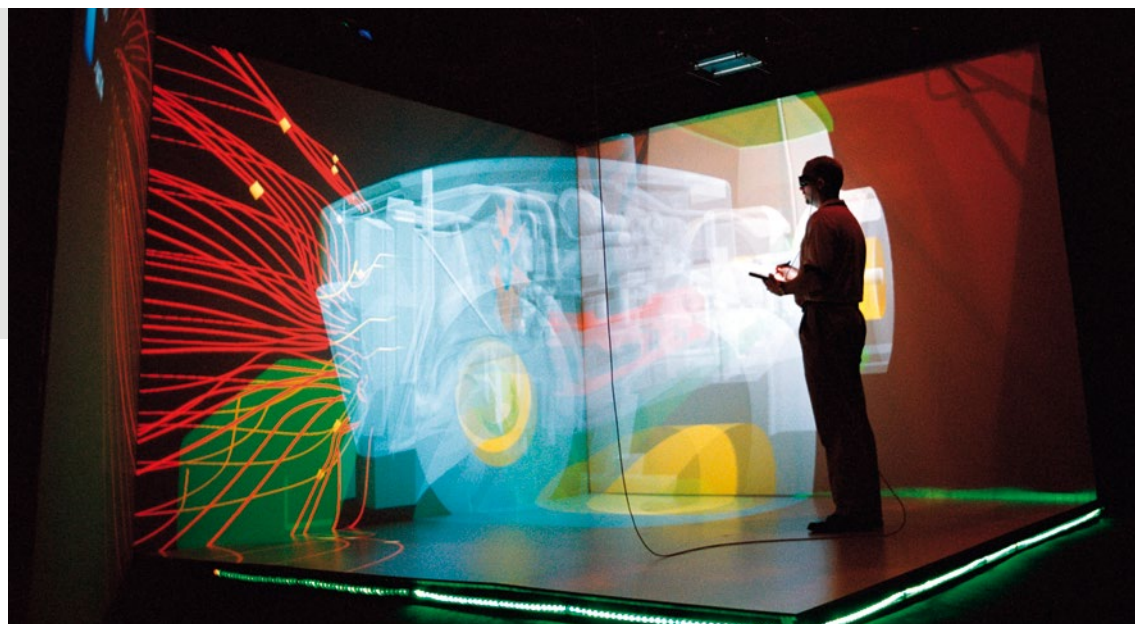
Commitment to **SUSTAINABLE PRODUCTS**

Reduce environmental impact, including CO₂e emissions, on 90% of new products. Increase the use of sustainable materials by growing remanufactured and rebuild sales by 30% and by increasing recyclable, renewable, and recycled content.

Our products and solutions are designed to increase our customers' efficiency and productivity. By truly understanding our customers' needs and incorporating innovative technology, we're able to offer machines and technology solutions that are not only more productive and efficient, but also minimize impact on the environment. "Product Sustainability," as we refer to it, is one of the best ways to offer lasting value to our employees, our business, our customers, and our world.

As with our other environmental priorities, our EHSSS Council oversees our product sustainability strategy and performance. Product sustainability is supported by our broader research and development investments.

To bring product sustainability to life, we use a Life Cycle Assessment methodology through which we look for ways to reduce the environmental footprint for a product during its entire life cycle while also improving performance and durability.



Every day, John Deere invests approximately \$4 million in research and development, with a growing emphasis on innovating productive, precise, and reliable automated machines that actively learn and adapt with our customers.

CIVIC AND ENVIRONMENTAL STEWARDSHIP PRODUCT SUSTAINABILITY

We also use a Design for Environment process through which we focus on selecting more environmentally friendly materials when designing and manufacturing products and minimizing the use of raw materials.

The Design for Environment process also minimizes energy and water use in the factory and supply chain and, most significantly in our case, minimizes the environmental impact of our products through improvements such as better fuel economy.

John Deere's products use various plastics that provide many benefits, including weight reduction, which, in turn, can reduce fuel consumption and/or increase payloads or capacity. Plastics can improve durability in exteriors, fuel consumption, and corrosion and wear applications while reducing the cost of components as well as reducing environmental impact by eliminating paint through molded-in color. Examples include:

- Headliners in the new Gator cab (XUV R-series released in 2018) contain PET (polyethylene terephthalate), sourced from recycled bottles.
- The front grille skeletons used in our riding lawn tractor product line are constructed with a post-industrial PP (polypropylene) glass-filled material, and the hood hinge is built from an industrial reprocessed nylon material.



Design for Environment efforts include:

Setting a specific requirement for the percentage of post-consumer recycled content in the steel we purchase from our steel suppliers.

- ◀ **Incorporating soybeans and corn in the manufacture of composite side panels for John Deere S-Series Combines.** These composites not only reduce weight compared to sheet-metal panels, but also provide the same structural strength and durability as petroleum-based materials.

Working to minimize part weight, save material, and reduce soil compaction through computational analysis.

CIVIC AND ENVIRONMENTAL STEWARDSHIP PRODUCT SUSTAINABILITY

John Deere is helping to lead the charge with fuel-efficient machines meeting increasingly stringent emissions regulations. Our dedicated off-road engine and drivetrain business, supported by an integrated electronics group, led a transformational two-decade emissions journey. By designing and executing a building-block strategy, we created a progressive approach to meeting global emissions regulations across a variety of machine forms, horsepower levels, and geographies. Along the way, we set multiple fuel and fluid efficiency ratings in the U.S. and Germany. The building block approach enables us to meet emissions requirements across the globe as standards change.

John Deere is focused on adding the right engine technologies at the right time to maintain and maximize performance to meet emissions regulations. John Deere PowerTech Final Tier 4 engines 75 hp and above are built on a proven platform of emissions control technologies including:

- Cooled exhaust gas recirculation (EGR)
- Exhaust filters
- Selective catalytic reduction (SCR)

We have met EPA Final Tier 4 Emission regulations and we are currently working on EU Stage V.

Over the past decade, equipment electrification moved from theory to our development labs and assembly lines. This shift allowed us to bring our customers lower-emitting technology and increased efficiency while illustrating our efforts to lead environmental stewardship.

Consider our 944K. Innovative electrification allowed us to turn a massive loader into a fuel-saving hybrid. Each wheel on the 944K is driven by an independent electric motor, which not only saves fuel and increases engine life, but also minimizes slippage. The electric motors match required torque to all four wheels, allowing for more pushing power and increased tire life. Innovative products such as the 944K are not only good for the customer, but also good for the planet.



A great example of Deere working to deliver efficiency and improved resource consumption is our production-class 944K hybrid wheel loader, introduced in 2018. Apart from meeting the latest engine emission standards, the 944K boasts nearly 40% fuel savings vs. conventional drivetrains.

CIVIC AND ENVIRONMENTAL STEWARDSHIP

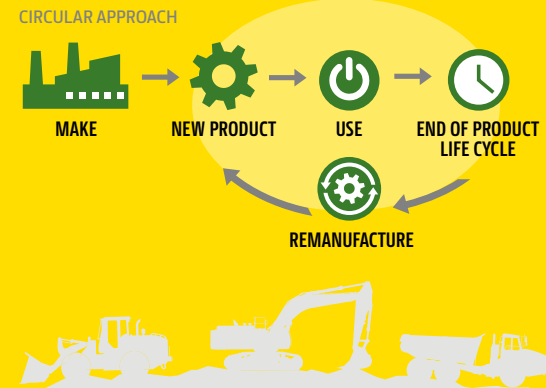
PRODUCT SUSTAINABILITY

John Deere REMAN provides quality remanufactured products to customers around the world and has been a part of our business for over a decade.

Remanufacturing allows us to recondition and refurbish parts and return them to the field with the same quality standards as our new parts. Remanufacturing reduces the manufacturing process's impact on the environment by reducing raw material use, reusing existing parts, eliminating waste, and reducing energy use compared to manufacturing new parts. Additionally, remanufacturing and ReLife lower customers' downtime due to part availability.

The John Deere Powertrain ReLife Plus program provides customers with multiple options to extend the life of their equipment without compromising the performance and reliability they have come to expect from it. Certified technicians conduct a thorough inspection of our customers' machines to help identify where investments are needed to give the machine new life. This allows customers the flexibility to consider working on the less critical areas of the machine. After the inspection, a complete set of John Deere REMAN powertrain components are installed, and these are covered by a John Deere Powertrain ReLife Plus warranty.

THE REMAN APPROACH TO PRODUCT SUSTAINABILITY.

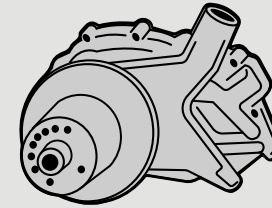


HOW IT WORKS

John Deere REMAN supports product sustainability through remanufacturing, a process through which a previously used part is returned to a "like new" or "better than new" condition.

At John Deere REMAN, a used product is disassembled, with each part cleaned and inspected. Parts are replaced, if necessary, and assembled the same way new components are produced.

The result: The same level of performance and reliability as new components, making them one of the highest quality remanufactured parts in the market.



A John Deere REMAN coolant pump reduces CO₂ by up to

57%

John Deere REMAN parts are typically priced at

25-30%
less than new parts

130 MILLION LBS.
of parts materials were recycled in the last 5 years by John Deere Reman factories.

MORE THAN 85% of resources used to make a product are preserved in the remanufacturing process.



CIVIC AND ENVIRONMENTAL STEWARDSHIP PRODUCT SUSTAINABILITY

Demand for our eco-friendly products is just as strong among our consumer customers as it is among our farmer and contractor customers. John Deere leads the way in consumer products, too, through innovative solutions. A great example of this is the Easy Change™ oil system available on many John Deere 100 Series lawn tractors, which are sold through John Deere Dealers, Lowes, and Home Depot. By designing a cooler-running, more efficient engine, Deere engineers greatly reduced the breakdown of the engine's oil. This, when combined with a revolutionary oil filter, gives customers one of the easiest to service and most environmentally friendly lawn tractors ever built.

The filter not only traps more impurities from the oil compared to common filters, but also stores 60% of the engine's oil when the engine is off. When it is time to change the oil, our customers simply replace the filter with a new prefilled filter. The job is done in 30 seconds. Our lawn tractors not only save time with each oil change, but also reduce oil usage—over their life cycle, one year's production of our Easy Change tractors will save approximately 21 truckloads of oil, the equivalent of 1,935 metric tons of CO₂.



PROGRESS BY THE NUMBERS

Manufacturing and Supply Excellence:

2012-2018 ECO-EFFICIENCY METRICS	2012	2013	2014	2015	2016	2017	2018	GOAL
Energy Consumption (GJ per metric ton of production)	4.36	4.63	4.85	5.19	5.43	4.86	4.45	3.71
Water Consumption (m3 per metric ton of production)	1.05	0.99	0.95	1.16	1.26	1.18	1.04	0.89
Greenhouse Gas Emissions** (mtCO ₂ e per metric ton of production)	0.48	0.51	0.51	0.54	0.54	0.40	0.34	0.40
% Waste Recycled	56%	64%	74%	77%	79%	80%	80%	75%

SAFETY	2014	2015	2016	2017	2018
Lost Time Frequency Rate**	0.14	0.12	0.18	0.21	0.27
Total Recordable Incident Rate**	1.16	1.19	1.14	1.27	1.68

** number of lost time incidents per 100 employees

Extraordinary Global Talent:

TURNOVER RATE	2018
Salaried	2.9%
Production	5.8%

*CDP information can be found [here](#).

†Bureau Veritas North America, Inc. (BVNA) has verified greenhouse gas (GHG) emissions data in accordance with the ISO 14064-3 assurance standard and water and waste data in accordance with the ISAE 3000 assurance standard. As necessary, previously reported data has been restated due to acquisitions, divestitures, and improved accuracy. GHG emissions are calculated in accordance with the World Resources Institute (WRI) Greenhouse Gas Protocol methodology for market-based emissions. Data associated with the operation of No Till Cooperatief U.A and its subsidiaries (PLA), King Agro Europa, S.L. and its subsidiary, Wirtgen Group are not yet included in the reported metrics.

All information is accurate as of September 2019.

Civic Stewardship:

PHILANTHROPY AND VOLUNTEERISM	2017	2018
Charitable Contributions (in millions)	\$33.4	\$38.3
Charitable Contributions (% of Net Income)	1.5%	2.0%
Volunteer Hours	160,688	185,830

2018 AWARDS

While we do not execute the John Deere Strategy to receive awards or other public accolades, we are always humbled and honored by any formal recognition of our efforts.

Best Global Brands — Interbrand

World's Most Ethical Companies — Ethisphere Institute

Top 10 Innovative Company in U.S. — American Innovation Index

Corporate Partner of the Year — National Society of Black Engineers

Top Employer recognition in:

Spain (Top Employers Institute)

Germany (Focus magazine)

Brazil (Great Place to Work Institute)

Top 5 Safest Companies — John Deere Iberica, Spain (Business Monitor of Excellence in Prevention, Safety, and Health)

Best of the Automotive Sector — Brazil (AutoData)

Brand of the Year — Brazil (Fenabrave)

The Big and the Best Ones — John Deere Financial, Brazil (EXAME magazine)

Value 1000 — John Deere Financial, Brazil (Valor Econômico newspaper)

Socially Responsible Company — Mexico (Mexican Center for Philanthropy)

Best Working Mother Companies Award in Mexico — Working Mothers Mexico Institute

LGBTQ ERG of the Year Finalist — Rainbow Employee Resource Group