CNH INDUSTRIAL

A SUSTAINABLE YEAR

2016

Who we are

It is 175 years since Jerome Increase Case set up on the shore of the Root River in Racine, Wisconsin, USA, and invented an innovative threshing machine that transformed the lives of farmers. Today, the principles of the founders behind all of CNH Industrial's brands live on – to make the most of cutting-edge technology and provide our customers with products that enable them to work more efficiently and profitably.

In a world of finite resources, however, that is not enough. Across the company, we are also committed to achieving our goals sustainably. Climate change, food scarcity and security, and the rapid advances in technology that are creating a connected, digital world are megatrends that have a profound effect on everything we do, from the design of our products to the way we conduct ourselves at our plants around the world.

We are increasingly focusing on integrating these megatrends into our sustainability principles and, in turn, into our commitment and performance.

By combining telematics, data analytics, new software programs, sensing technology and autonomous piloting technology, we can create pioneering products – innovative blends of hardware and software – that deliver new levels of performance.

The practical examples in this report tell in a powerful way how all these trends are coming together in the world of CNH Industrial. From field to plate, we like to say, sustainability is in everything we do. We look at the benefits of World Class Manufacturing, an integrated management model focused on maximizing efficiency in our production facilities. We take in the relentless drive to reduce emissions and having all our products and facilities contributing to safeguarding the environment.

You will read, too, about the many projects that we undertake around the world. With 64 manufacturing facilities and a commercial presence in 180 countries, we are fully aware of the potential impact of our operations on local communities. And we believe that fostering a positive symbiotic relationship with these communities is a key material aspect of our success.

From sponsoring cultural events in Sete Lagoas, Brazil, and water management schemes in Tunisia to fighting homelessness in the USA and collaborating with the Slow Food association in Europe, we strive to make a positive impact in the communities where we operate.

We also tell the story of how our people are encouraged to take sustainability home, and how we harness their energy and commitment to make our company better and more sustainable places in which to work. We look at the systems in place that encourage innovation and are driving R&D across the group; from autonomous tractors that are raising the bar in farming productivity to automated systems in truck platooning, we are leading the way in sustainable industrial development. There is even a nostalgic look back at our history of pioneering change in our industries.

> From autonomous tractors that are raising the bar in farming to automated systems in truck platooning, we are leading the way in sustainable industrial development

Finally, we examine what it all means for CNH Industrial in the years to come and how we plan to stay ahead of the megatrends. We consider our sustainability actions a core competency of CNH Industrial and we are proud of the examples that we are able to share with you in this publication.

To see the full 2016 Sustainability Report and find out more about all of the projects covered here, visit www.cnhindustrial.com

Richard Tobin
CEO, CNH Industrial

In 2016, we continued to make progress on our journey towards being a successful and responsible long-term company

KEY INDICATORS OF OUR PERFORMANCE

+13%
World Class Manufacturing supplier plants

1,024
stakeholders engaged

+14%
hours of employee training

+10%
active patents owned

-2%
accident frequency rate

$6.7m
invested in improving energy performance

-5,483
tons of CO_2 in logistics processes

90
collaborative research projects

91%
amount of waste recovered

+6%
natural gas engines invoiced

4,700
remanufactured spare parts and components available

100%
new suppliers evaluated as per sustainability criteria

Data refers to 2016; variations are compared with the previous year.

56%
proportion of electricity from renewable sources

-5%
water withdrawal per hour of production

-10%
hazardous waste generated per hour of production

CNH INDUSTRIAL

CASE IH AGRICULTURE · STEYR TRAKTOREN · CASE CONSTRUCTION · NEW HOLLAND AGRICULTURE · NEW HOLLAND CONSTRUCTION

IVECO · IVECO ASTRA · IVECO BUS · HEULIEZBUS · MAGIRUS · IVECO DEFENCE VEHICLES

FPT POWERTRAIN TECHNOLOGIES

World Class Manufacturing

14 Silver Award plants

22 Bronze Award plants

12.7
suggestions per employee collected under the World Class Manufacturing program

$112m
saved through projects in the World Class Manufacturing program

FROM FIELD TO PLATE: SUSTAINABILITY IS IN EVERYTHING WE DO

Today's farmers must do more with less as the world population continues to grow. Our 49 R&D centers are committed to making machines more efficient and reducing the impact their use has on the environment

CNH Industrial is more than a manufacturing group. Yes, we make vehicles and develop technologies, but the sum of what we do involves us in every stage of getting food from the field to your plate. From the machines that prepare the fields and plant and harvest the crops, to the transport that takes them to processing plants, to the last-mile logistics of delivering food to supermarkets and even to your front door.

On the way, the machines we make are involved in the construction of the roads, bridges and ports through which that cargo passes. We help build your offices, schools and homes – and the buses on which you travel. Our excavators, tractors, trucks, engines and technology are integral to feeding the planet and building our sustainable future.

Because of the multiple roles that large industrial companies play, and always conscious of the world's finite resources, we must all foster and promote sustainability – and help bring communities, farmers, industries and decision-makers together. But at CNH Industrial, we take it that much further; sustainability runs through our every process, through all our machinery, our technology and all our people – from morning to night and from field to plate. We have adopted World Class Manufacturing (WCM), an efficiency program that encompasses our whole group, alongside a Sustainability Plan, both of which make us strive continually to become more sustainable in everything we do.

We are at the cutting edge in autonomous and precision vehicle design

FARMING OF THE FUTURE

Today's farmers are required to do more with less; better management of fertilizer and pesticides, smart water systems, micromanagement of yield in every corner of every field.

At CNH Industrial, we are developing precision farming solutions that allow farmers to use data to make better decisions. Our tractors and trucks can run on biofuels made from the stover harvested from the very fields in which they work – and our machines are highly fuel efficient, reducing pollution and running costs. The US Department of Agriculture estimates that using precision farming practices could save 16m gallons of fuel a year in the USA alone.

And we are at the cutting edge in autonomous vehicle design, unveiling the Case IH and New Holland Agriculture Autonomous Concept tractors. Used in conjunction with telematics and precision farming techniques, such autonomous vehicles could contribute to a 70 percent rise in farm yields by 2050, according to estimates from investment bank Goldman Sachs.

For those involved in the autonomous vehicle program, it's about realizing the future today. The priority is to develop what the customer wants and needs and then help others across the whole group to use what has been learnt.

We work also with universities worldwide to find innovative sustainable solutions. For example, a project started in 2009 with the State University of New York looked at using the quick-growing willow tree to produce biofuels; this led to a harvester that can work with willow to produce the necessary biomass.

As more of our machines run on biofuels, more of our R&D projects are delving deeper into that area and also into recyclable materials. Our 49 research and development centers worldwide are committed to making machines more efficient, reducing vehicle impact on the soil, cutting pollution – air emissions and noise – improving safety and developing new technology to achieve these.

For example, our new seed and fertilizer systems were confirmed in 2015 by the University of Nebraska as best in class, delivering the most power and best fuel and fluid efficiency.

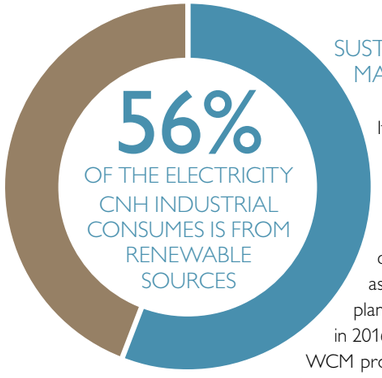
Projects such as these have a real impact on the ground, helping to optimize the use of local, natural resources to reduce carbon emissions. Similar projects in Brazil and the USA work with sugarcane, wheat and corn, and the output is not →

+70%

rise in value that precision farming, including autonomous driving, could contribute to farm yields by 2050, according to estimates from Goldman Sachs

The US Department of Agriculture estimates that using precision farming practices could save 16m gallons of fuel a year in the USA alone

just used in transport. These biofuels are used to power the refineries that process the crops, heat the homes of those who work there and fuel the kitchens in which we cook.



SUSTAINABLE MANUFACTURING

It is crucial, of course, that the plants in which we make our tractors and harvesters, our transport trucks and urban buses, our construction equipment and powertrains and components, are also sustainable and as efficient as possible. Some 52 of our plants were part of our WCM program in 2016.

WCM projects are having a significant impact. In Spain we are recovering heat energy from the painting process at the Valladolid IVECO plant to chill water for the cooling circuit of the plant's assembly line, cutting CO_2 emissions by 230 tons a year. Similarly, in Brazil one project to reuse water reduced consumption by more than 13,000 cubic meters. In fact, some 91 percent of our waste is now recovered and reused, with just 3.4 percent sent to landfill.

Nearly 56 percent of the electricity CNH Industrial consumes comes from renewable sources. In 2016, over $6.7m was invested in improving energy performance, leading to a reduction in energy consumption of over 164,000GJ and a corresponding reduction in CO_2 emissions of 10,000 tons.

Other projects are small scale, but no less important. They might change the way materials are introduced to a production line to save time or energy, for example, or perhaps alter a process to reduce damage.

We also look at innovative technologies that promise to help make the workplace safer and more sustainable. In 2015, for example, we were involved in tests for Google Glass virtual reality technology in Brazil. The trial successfully cut human error, and improved productivity and execution in our Sete Lagoas vehicle plant.

Our IVECO Eurocargo city truck was named Truck of the Year 2016 and its environmental credentials were a key factor

Looking ahead, we're excited about the impact of new technologies such as 3D printing and robots. We believe that 3D printing will have an enormous impact on low-volume, highly complex manufacturing. Components that are today made far from where they are assembled will soon be able to be made locally and robots will make manufacturing safer – lifting heavy loads, for example.

It's not just our own sustainability. We also encourage our suppliers to adopt our best practices and today have 170 of them in our WCM program.

ORGANIZED TO MAINTAIN OUR FOCUS

Programs such as these help CNH Industrial to attract and retain the best staff, foster a healthy workplace and burnish our reputation. For the second year in succession, CNH Industrial has been named among the 150 best companies to work for in Brazil by Você SA magazine.

In 2016, we achieved significant milestones. For the sixth consecutive year, the Dow Jones Sustainability World and Europe Indices (DJSI) named us an Industry Leader and we were included in the CDP A List, the highest recognition for action against climate change.

These accolades are no accident. Sustainability Planning and Reporting, based in Turin, Italy, is responsible for monitoring over 200 key performance indicators and implementing our stringent Sustainability Plan, which covers everything from sourcing to production, resource consumption to delivery, recruitment to training and community projects. The unit reports to the Chief Sustainability Officer, who is also the Chief Financial Officer. It helps keep us focused on sustainability – and produces results.

FROM THE COUNTRYSIDE TO THE CITIES

Once food is harvested and processed, it needs to get to our urban centers. Here our attention is also focused on efficiency, carbon footprint and safety.

Our IVECO Eurocargo city truck was named →

FPT Industrial's Sete Lagoas engine plant achieved a Silver Award in World Class Manufacturing (2016)

WORLD CLASS MANUFACTURING: TOWARDS THE ZERO IMPACT PLANT

When it comes to sustainability, we should be more than the sum of our parts; the more connected our efforts, the greater the impact will be. This is why 10 years ago CNH Industrial adopted the principles of World Class Manufacturing (WCM), an integrated management model focused on maximizing efficiency.

We take seriously our responsibility as a major global manufacturer to reduce our impact on the environment and to make the most of all resources we use.

We strive to incorporate as much of our business as possible into the WCM program; of our 64 plants, 52 are in the program, 14 of which have received Silver level designation with a further 22 currently at Bronze level.

WCM is so successful because it throws down constant challenges to every corner of the group. It requires continuous effort and has enjoyed huge support from CNH Industrial personnel.

Site audits are conducted twice a year by external parties and help to promulgate the sharing of industry best practice. Processes are challenged and new targets set.

$112 million: value of savings generated from WCM

Some 10,000 processes have been documented as part of the program, covering everything from energy use, environmental impact and waste to health and safety. But not every process or project comes from the top or is the result of an audit. Employees are encouraged to make suggestions and last year more than 465,000 were put forward (an increase of 10 percent on 2015) – that works out to an average of 12.7 suggestions per employee.

The result was an amazing 14,443 projects. While some might have been small – encouraging operators to switch off engines when vehicles aren't in use, for example – others →

The Case IH St Valentin plant awarded Silver status in World Class Manufacturing (WCM)

were more substantial and the total benefits amounted to a significant $112m in savings.

When we first adopted WCM, our focus was reactive – changing the way we do things for the better. But as we achieved our goals, the focus has shifted so that today we integrate sustainable practices in any new processes from the outset.

> It's relentless, granular. It's pervasive and it's connected

A decade since the program started, and there is still lots of rigor and logic in pursuing our company's journey. Last year six new plants earned the Bronze WCM award and four the Silver.

But WCM doesn't stop at our door. We encourage suppliers to embrace the program, extending its impact like a ripple in a pool. Some 170 of our suppliers have signed up to WCM, encouraging their own contacts to minimize their environmental impact and become more sustainable too.

The whole program is perfectly summed up by Tom Verbaeten, CNH Industrial's Chief Manufacturing Officer: "It's relentless, granular. It's pervasive and it's connected and that is how we can and always will make sure we improve. The ultimate goal, after all, is to have a zero-impact plant."

Spain: the IVECO plant in Madrid has recently been presented with a prestigious Kaizen Award. These recognize success in achieving lean operation – one of the key goals of CNH Industrial's World Class Manufacturing program

Truck of the Year 2016 and its environmental credentials, efficiency, maneuverability, comfort, low cost of ownership and safety all played a key role.

We also recently took part in the world's first cross-border autonomous truck platoon demonstration, in which a two-truck IVECO convoy traveling 10 meters apart used connectivity technology and automated driving support systems to go from Brussels in Belgium to Rotterdam in the Netherlands. The system allows the lead truck to set the pace, with the following truck copying its behavior. It is designed to cut drag, improve safety and fuel efficiency, and ensure optimal road use thereby cutting congestion. Research suggests that it could cut CO_2 emissions by 10 percent, with fuel savings of between 5 and 10 percent.

Our logistics too are increasingly efficient, emitting 5,483 fewer tons of CO_2 a year. For example, the Commercial Vehicles segment continued to optimize packaging in Europe for shipments to Latin America and Australia. As a result, the use of wood crates sent to Australia was cut by approximately 24 percent, with a reduction in wood shipped of some 14 tons.

Much of this technology can be applied to a broad cross-section of vehicles, and already we are producing eco-buses that run on compressed natural gas as well as bio-methane alongside those with hybrid and electric powertrains, helping to improve air quality in our cities and towns.

Our construction equipment, used to help build those towns and cities, is also equipped with cutting-edge technology such as telematics to ensure precision work and maximum efficiency and safety, keeping the carbon footprint and environmental impact to a minimum.

BEYOND BUSINESS

All this has a direct effect on the communities in which we operate and where we source our materials. While we maintain a strong dialogue with all those communities, these relationships are further strengthened by our commitment to promote social and economic development worldwide.

In 2016, we invested $4.5m in local community projects ranging from charitable donations to volunteer work, both of which are key aspects in North America. Projects include those assisting returning veterans in finding skilled jobs in construction and manufacturing to helping street children in Brazil.

From field to plate, from the office to your home, we strive to make the journey as efficient as possible to make the world's resources go as far as possible. That informs everything we do, because that is our duty and that is our way. ■

REDUCE, REUSE AND RESTORE

Sustainability best practice starts at home, which is why CNH Industrial is taking relentless action to safeguard the environment at its numerous plants around the world. Remanufacturing is just one way to save energy, conserve natural resources and lower the cost of ownership

CNH Industrial is a truly global company. And we are an acknowledged leader in sustainability. Fundamental to that position is how we safeguard the environment within and around our numerous plants.

With each passing year we strive to be more productive with the use of fewer natural resources and to develop ever more eco-friendly products. And the numbers unfailingly show we are making progress: in 2016 the amount of waste generated per hour of production dropped 4 percent. In addition, some 56 percent of our electricity now comes from renewable sources. We are working continuously to improve these figures.

THE TRACTOR THAT RUNS ON METHANE

The work being done by the innovation unit based in Modena, Italy, offers a striking example of how CNH Industrial's advanced engineering can help customers work more sustainably without sacrificing performance. The methane-powered prototype New Holland tractor they have been developing since 2012 offers farmers the opportunity to use the waste from cows and other animals on their farms. Methane is produced from this 'digestion' process and then refined into pure biomethane – it is this gas which is eventually used as fuel to power their tractors. Prototypes have been tested on working farms in Germany, the Netherlands, the UK, Italy and Spain, and farmers reported that the biomethane-powered vehicle performed and felt just like a "normal" tractor, and produced less engine noise to boot.

"We're focusing on medium-sized tractors, the ones that give farmers the most flexibility for different applications – plowing, front loader work, transport," explains Stefano Fiorati, lead engineer on the methane tractor project.

The environmental impact will be startling: biomethane produces almost none of the →

The New Holland tractor offers farmers the opportunity to use the waste from cows and other animals on their farms – refined to produce biomethane

Up to 25%
lower fuel bills for natural gas compared to diesel

particulates that are produced by diesel engines and, when running on biomethane, a tractor's carbon footprint is virtually zero.

The fact that the farms are producing their own biomethane on site cuts out the emissions produced all along the journey of getting oil from a well, creating the fuel and bringing it to the vehicle – in those terms, from well to wheel, it makes the biomethane tractor's CO_2 impact the same as an equivalent electric vehicle.

A RANGE OF ECO-FRIENDLY FUEL OPTIONS

This biomethane tractor is just the latest innovation. CNH Industrial has been investing in natural gas as a fuel for years; IVECO has been researching its use since the 1980s and our first ever methane-powered Daily van prototype was developed in 1995. The new Stralis NP (Natural Power) truck launched by IVECO in 2016 features a Cursor 9 engine running on both compressed natural gas (CNG) or liquefied natural gas (LNG), delivering significant benefits in efficiency, emissions and also maintenance.

> To remanufacture an engine takes 80 percent less energy than making a new one

The savings in terms of total cost of ownership associated with natural gas vehicles can be as much as 10 percent compared with a diesel-powered one. Natural gas is also markedly less expensive than diesel and can reduce fuel costs by up to 25 percent.

FPT Industrial makes the widest range of natural gas engines on the market, with seven CNG engine models which are also 100 percent biomethane-compatible. They are used for commercial vehicles and buses worldwide, and the brand has supplied CNG-powered engines to Beijing Public Transport Holdings for more than 10 years.

In Brazil, CNH Industrial is the country's number one supplier of sugarcane harvesters through its Case IH brand. There FPT Industrial has been developing bi-fuel engines that run on diesel blended with up to 40 percent ethanol, as well as engines that run on 100 percent ethanol. The ethanol can be produced from the sugarcane leaves that are discarded during harvesting, enabling producers to gain an energy supply from a waste product.

CUTTING LAST-MILE EMISSIONS IN LOGISTICS

How to reduce emissions in cities and make the "last mile" of urban deliveries more sustainable is a subject CNH Industrial is tackling head-on. In line with European Commission recommendations, we make not only natural gas-powered engines, but also diesel-electric hybrid technology, and pure electric vehicles for cities.

In 2015, IVECO introduced the New Daily Electric – 100 percent electric and ideal for urban deliveries and public transport.

Hybrid buses are another significant strand of our sustainable transport commitment. By 2015, more than 50 percent of IVECO Bus city buses produced in Europe were either powered by natural gas or had an electric hybrid configuration, resulting in significant environmental benefits.

REMANUFACTURING – SAVING ENERGY, CONSERVING NATURAL RESOURCES AND LOWERING THE COST OF OWNERSHIP

As well as using advanced engineering to develop more eco-friendly products, CNH Industrial has invested in the remanufacturing industry, which returns used or worn items to like-new condition.

The CNH Industrial Reman plant in Springfield, Missouri

At CNH Industrial Reman plants around the world, such as those in Garchizy, France, and Springfield, Missouri, USA, worn parts are saved from being sent to landfill and brought back to life using advanced technology in state-of-the-art facilities.

In Springfield, engines, drivelines, fuel injection products, hydraulics, and rotating electrical and electronic components are taken apart, cleaned and verified. The plant in Garchizy is focused on engines and transmission, fuel injection and turbo products. In both facilities, worn components are replaced with new and salvageable components are re-machined. Finally, the components are assembled and tested again for original performance levels.

Despite all this work, remanufactured engines, for example, use 80 percent less energy than building new, because there is no mining for raw materials, no smelting or casting. And because the

An engine before remanufacturing (right) and once the remanufacturing process has been completed (left)

CNH INDUSTRIAL | REMAN

Remanufacturing brings substantial savings because there is no mining for raw materials, smelting or casting required

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The Reman site is leading the way towards a circular economy

raw material is already there, remanufactured parts cost less – something that is most appreciated by our customers.

CNH Industrial understands the importance of having this as a solution for customers. The latter are looking not just at buying a machine, but at all the elements of maintaining it; the cost of ownership over many years. If there are parts out there that are just as good as new and just as reliable, that's something on which they can depend.

Reman in CNH Industrial can trace its roots back to 1989 and the plant in Garchizy. The North American site is also advising CNH Industrial brands in countries including Russia and Australia on establishing remanufacturing in those places, as well as on the supply of remanufactured parts. The circular economy is growing worldwide and we are leading the way.

REDUCING OUR FOOTPRINT

800KG

the reduction in paper consumption at our Jesi plant in Italy – the equivalent of 20 trees

The second pillar of our environmental commitment is continually taking steps to lessen our own footprint – protecting the ecosystems around our facilities and improving our own processes and use of resources.

A standout example is our plant in Rorthais, France, which continues to work towards becoming a Usine Verte – or Green Plant – by reducing energy consumption and the greenhouse gases produced as a result. There have been practical changes – transitioning to using LED lighting and reducing gas consumption during idle periods – as well as a cultural shift; appealing to plant employees' sense of responsibility in using energy both wisely and appropriately.

The efforts made at Rorthais over the past few years have led to a reduction in energy consumption at the same production levels, cutting CO_2 emissions by 205 tons per year.

GETTING ALL OF OUR PEOPLE INVOLVED

Actively involving staff and the local community in environmental improvement processes at our plants across the world creates a firm foundation for this work.

In Italy, a number of environmental improvement initiatives implemented at our plant in Jesi led to a reduction in paper consumption of about 800kg, the equivalent of 20 trees. In collaboration with the nearby regional nature reserve, Oasi WWF Ripa Bianca, 20 new trees were planted and, in the coming years, this first copse will be expanded as the plant continues to cut paper consumption. Following this partnership, employees and their families had the chance to go on guided tours of the "oasis" itself.

Our plant in Piracicaba, Brazil, took inspiration from young people, using environmental slogans created by employees' children on posters throughout the plant, which featured a photo of the employee and their offspring. Over 400 members of staff also volunteered to clean up waste from the city's streets and the riverbank.

MAKING OUR PLANTS EVEN MORE SUSTAINABLE

Around the world, projects to reduce energy and water consumption and to manage waste better are benefiting our business and the areas in which it operates. At our plant in Lecce, southern Italy, installing energy-efficient LED lights in and around the factory's welding area resulted in a reduction of CO_2 emissions by 258 tons a year.

Energy use was brought down at our plant in Belo Horizonte, Brazil, by an assessment of how high temperatures were used in painting pre-treatment stages. This showed three high-temperature stages could be combined into one by using different chemicals. For a total investment of a little over $2,500, in 2016 alone the factory recorded 2,662GJ less energy consumption, and a reduction in CO_2 emissions of 150 tons.

More efficient HVLS (high-volume, low-speed) fans allowed our plant in Grand Island, USA, to cut energy use and emissions. They replaced two hot-air generators previously used to keep the working area at an appropriate temperature. The total investment of $28,000 led to 2,105GJ less natural gas consumption and a reduction in CO_2 emissions of 100 tons per year.

Day by day, we see incremental improvements in myriad ways. Plants at Curitiba, Brazil, and Plock in Poland both began reusing water from the painting pre-treatment process. Doing so enabled the Plock plant to reduce its water consumption by about 45,000 cubic meters and improved its water consumption index by 48 percent compared to 2014 (the baseline year) and 16 percent compared to 2015.

In Annonay, France, adding reusable plastic liners to the paint-mixing drums reduced the amount of hazardous waste by 45 tons. In partnership with our supplier, new packaging for air-conditioning parts reduced the amount of waste from wood packaging by 63 tons.

> Day by day, we see incremental improvements in myriad ways

We also look for ways to help our staff reduce their environmental impact when they are not at work; our plant in Madrid installed a charging station where staff can charge their electric vehicles. The station has already cut CO_2 emissions by 3.45 tons per year and more charging points are due to be added to meet demand.

SO WHAT'S NEXT?

Our efforts to minimize fuel consumption and the emission of CO_2 and other pollutants, and to maximize efficiency in our use of resources, are pivotal to our commitment to sustainability. We will continue to achieve our goals by developing innovative products that respect the environment while meeting customers' needs for efficient, high-performance vehicles and through continual improvements in our own plants. ■

258 TONS

the reduction in CO_2 emissions by installing energy-efficient LED lights in and around the factory's welding area at our plant in Lecce, southern Italy

In Brazil, sugarcane harvesters supplied under the Case IH brand run on ethanol produced from discarded leaves

BENEFITS *of* BIODIVERSITY

We are committed to protecting and enhancing the variety of plants and wildlife in the areas surrounding our sites, and since 2010 have worked with the scientific community to monitor and measure biodiversity in areas which are protected or of particular environmental interest.

CNH Industrial has made an in-depth study of the ecosystems around seven plants worldwide located within, bordering or near protected and high biodiversity areas: our site making heavy-duty diesel engines at Bourbon-Lancy in France; the agricultural equipment factory at Curitiba in Brazil; the engine factory at Foggia, Italy; truck production facilities at Madrid in Spain, Suzzara in Italy and Sete Lagoas in Brazil; and a firefighting vehicle factory in Ulm, Germany.

We assessed the range of plants and animals to be found within a radius of about 5km around the seven sites and looked for possible measures to improve them. The studies evaluated two factors: the man-made pressures generated by industrial, agricultural and urban activities and infrastructure in the area (known as the anthropic pressure index) and the biodiversity to be found on land and in water, using the most common biological indicators.

The great news is that the studies showed these plants contributed no more than 1 percent of the man-made pressure on their surrounding areas. As a result, no specific improvement measures were required.

However, we never stop there: in line with our commitment to protecting and enhancing bio-diversity within and around our sites, CNH Industrial has carried on with further improvements.

At the engine production facility in Foggia, Italy, an initiative was trialed in 2014 to add more native plants to the green areas of the site. Following the biodiversity study, the list of native plants was extended, drawing on recent work by the Puglia region, the National Institute of Agricultural Economics and the University of Bari. As a result, a greater variety of trees has been planted around the factory, including olive, fig, citrus and pomegranate, and there are plans to add vines and carob.

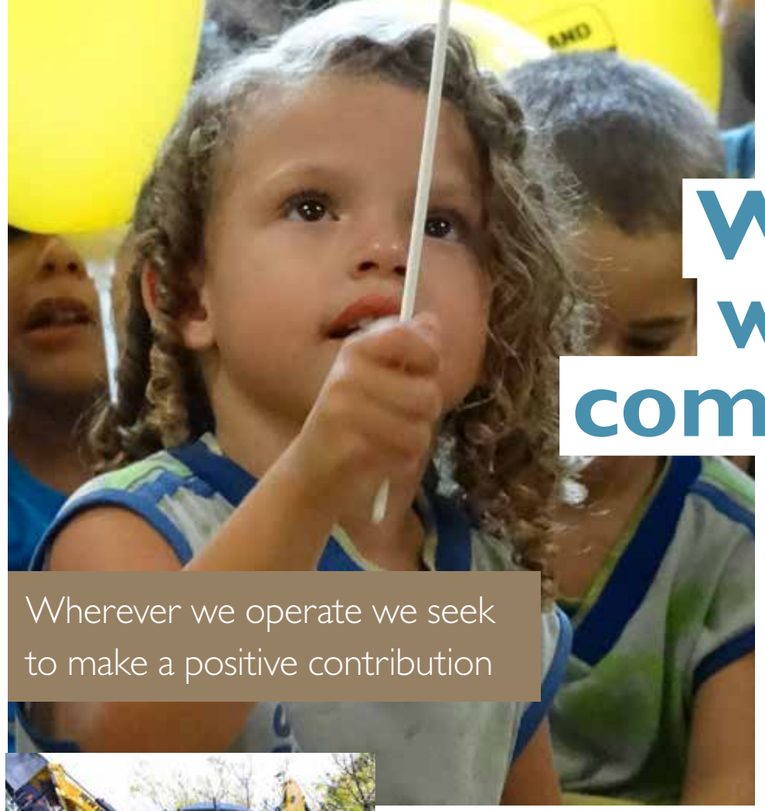
The assessment carried out at the plant in Curitiba, Brazil, in 2013 happily showed that it made a negligible overall contribution to man-made pressures on the surrounding area. Despite no improvement being required, during 2015 about 130 native species were added around the site to encourage biodiversity.

Our plant at Bourbon-Lancy in France was CNH Industrial's first to assess its biodiversity value in 2012. In 2015, we carried out a new monitoring program to measure the outcome of voluntary steps taken over the intervening three years. These included planting hedges and shrubs, as well as attempts to contain *Reynoutria japonica*, the non-native and highly-invasive Japanese knotweed that drives gardeners mad.

The new biodiversity values were in line with those previously recorded and the range of flora showed a slight improvement due to knotweed removal. This work continued in 2016.

~130

native species were added around the Curitiba site during 2015



Working with the community

We strive to be a force for good in every country where we have a presence – helping children and the disadvantaged

Wherever we operate we seek to make a positive contribution

CNH Industrial has a highly-developed tradition of community involvement in Brazil. Many projects focus on young people

With a commercial presence in some 180 countries, CNH Industrial and its brands are embedded in lots of different communities. Some of our employees work and live in affluent, developed nations, while others are in parts of the world where access to basic healthcare and education cannot be taken for granted.

Wherever we operate, we seek to make a positive contribution to the local community and we support projects and activities that encourage sustainable development, promote stronger communities and improve the lives of young people, especially through education.

Whether it's by means of financial support, donations of equipment and vehicles for training purposes or our employees giving up their time for a cause, we always aim to support projects that will help to make a difference to the communities around us. Across the world, that takes shape in very different ways.

HELPING DISADVANTAGED CHILDREN IN BRAZIL

We have a highly-developed tradition of community involvement in Brazil. For example, we support Próximo Passo, launched by IVECO in 2007 in Sete Lagoas, which helps foster environmental citizenship and community sustainability; CASE Multiação is a project set up by CASE Construction Equipment and Case IH that focuses on personal development and further education near plants in Piracicaba and Sorocaba; and we are involved in Pastoral do Menor, also in Sorocaba, which works to reduce the number of children and teenagers living on the streets.

In 2015, CNH Industrial spent more than $240,000 refurbishing the building that Pastoral do Menor uses for education and to provide sports and leisure activities. The classrooms, cafeteria, kitchen and roof were renovated and a sports field was constructed. In 2016, 710 children benefited from Pastoral do Menor initiatives.

Each year in Curitiba, the Atleta do Futuro program gives 100 boys and girls aged 6-14 the chance to play sport, particularly soccer. CNH Industrial has provided the space for the children to play in for more →

CNH INDUSTRIAL AROUND THE WORLD

THE COMPANY INVESTED **$4.5M** IN LOCAL COMMUNITIES IN 2016, INCLUDING:

7 TECHPRO₂ TRAINING CENTERS WORLDWIDE (BRAZIL, CHINA, ETHIOPIA, ITALY, SOUTH AFRICA)

100 STUDENTS TRAINED IN ITALY

$718,000 DONATED TO UNITED WAY

9,042 IN NAFTA

COMMERCIAL PRESENCE IN **180** COUNTRIES

8,298 LATAM

2,000 YOUNG PEOPLE INVOLVED IN THE CASE MULTIAÇÃO PROGRAM

40,678 IN EMEA

4 DAILY VANS DONATED FOR MOBILE HEALTH SERVICES

4,500 PATIENTS ASSISTED

3 AGRI TRAINING CENTERS

4,810 IN APAC

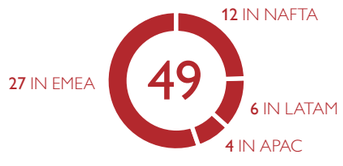
250 FAMILY GARDENS INVOLVED IN THE WATER MANAGEMENT PROJECT

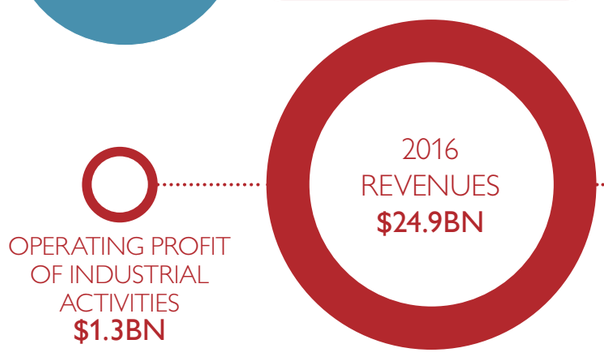
62,828 EMPLOYEES WORLDWIDE

CNH INDUSTRIAL IN NUMBERS

PLANTS WORLDWIDE

R&D CENTERS WORLDWIDE





Data refers to 2016; variations are compared with the previous year

than five years. As well as improving their sporting abilities, the children learn the value of teamwork, communication and other transferable skills that will help them through their lives. When organizers follow up with the children's schools, they frequently find that their work has improved.

Other sports-related projects supported by CNH Industrial include Esporte de Cidade in Sete Lagoas and Contagem, which involves 180 children and teenagers in judo and football, and Bola da Vez in Sorocaba, which provides sporting activities for 400 public school children.

Educational and cultural programs are a focus of the projects CNH Industrial supports in Brazil. The Cooperação para o Desenvolvimento e Morada Humana, in Contagem, offers training to community leaders, careers skills workshops for young people and youth activities such as judo and street dance. CNH Industrial began working with the organization in 2013 to help the growing district deal with its poor infrastructure and lack of basic public services, among them sanitation and drinking water. Employees volunteer their time to help with the project, which also puts on community parties and meet-ups for families.

FUNDING SCHOLARSHIPS AND AWARDS

As part of our commitment to promoting growth and development opportunities for young talent around the world, we support academic excellence by providing grants and scholarship programs for the children of employees.

CNH Industrial runs Student Achievement Awards in every country where we have a significant presence. These special awards are open to employees' children who have achieved a high-school or university diploma, or a university degree. In 2016, a total of $367,000 was awarded in grants and scholarships – helping to improve the life and education prospects of 280 deserving young people.

In India, 35 children of employees received scholarships in 2016 as part of our Special Talent program. And in the Czech Republic, where 2015 was celebrated as the Year of Technical Education Support, students were invited to events at our Vysoké Myto plant and a special awards day for scholarship winners. →

TECHPRO²

In June 2016, seven young students from around the world came to Turin, Italy, for an awards ceremony. Two Italians were joined by an Ethiopian, a South African, an Indian, a Pole and an Argentinian. All were outstanding participants in the TechPro² youth technical training initiative, run jointly by CNH Industrial and Fiat Chrysler Automobiles in collaboration with the Salesian Society.

The training provides young people with valuable qualifications in the automotive and industrial machinery sectors and helps industry by tackling a growing demand for technical skills. Over one to four years, depending on their region, students between the ages of 12 and 17 take their first steps on the road to becoming workshop technicians.

The length of the course varies because in some parts of the world children leave school and begin work at a younger age, making longer study impossible.

Students on the course also develop the skills needed to become mature professionals, capable of working as part of a team and using their communication and problem-solving abilities to diagnose faults and build customer relationships.

CNH Industrial began supporting the TechPro² scheme in 2011, three years after it was founded, and has added programs in Brazil, China, Ethiopia, Italy and South Africa. While the Salesian Society is not present in China, it does share teaching models and a curriculum with Yizhong-Edulife, the company that provides technical training.

At CNH Industrial we are proud of TechPro²; it has become one of our most important projects. In 2015, a new program began in Johannesburg, South Africa, and trained eight students in its first year. It concentrates on commercial vehicles, through our IVECO brand, and in order to better support students, FPT Industrial gave an F1A engine and a generator to the school to help them in their studies.

Students of the TechPro² program learning about an FPT Industrial engine used for agricultural machinery

In December 2015, CNH added a new center in Rome, the first to train students to repair agricultural vehicles and machinery, with an initial intake of 20 students. New Holland Agriculture is supporting the program and provided a T6 Auto Command tractor that students will use to apply their knowledge.

In 2016, TechPro² and CNH Industrial trained 100 students in Italy and the program continues to grow. It allows young people to develop an enthusiasm for the profession and has the potential to change lives. At the Turin event was Teshale Belay, an 18-year-old Ethiopian who was living on the streets when he joined the TechPro² course in Addis Ababa. He now has a full-time job and is attending night school to gain further qualifications.

DELIVERING HEALTH PROJECTS

After education, healthcare is perhaps one of the greatest needs in many of the regions in which we operate. Yunnan, a mountainous part of south-western China that covers roughly 400,000km², is difficult to navigate. Road building has boomed over the past decade, but many routes there are still prone to landslides and flooding.

Workers who build these roads are exposed to a variety of challenging conditions, from high altitude where oxygen is scarce to tropical rainforests with oppressive heat and humidity. Such conditions mean that health problems can be common and medical help is not always within easy reach.

As part of its annual Customer Care Plan, CASE Construction Equipment teamed up with its local dealer – Yunnan Anrui Mechanical and Electrical Equipment Technology Development – and the local government to back a free, three-month medical consultation program for road-maintenance workers.

It was an exercise that covered five different routes and more than 12,000km. As a result, more than 15,300 workers received first-rate medical services over the project's 32-day duration with the help of 20 medical professionals from four highly-regarded hospitals in Yunnan.

Another health project supported by CNH Industrial took place in the north Indian city of Greater Noida. The conurbation has grown fast in recent years and alongside the rapidly rising population there has been a marked increase in diseases such as HIV, tuberculosis, malaria and dengue. New Holland Agriculture partnered with the SMILE Foundation to provide a mobile health unit called Smile on Wheels.

The vehicle is staffed by a doctor, a nurse/lab technician and an ambulance driver, who deliver mobile care to the city and its surrounding villages. Operating five days a week and equipped with first-aid kits, preliminary diagnostic kits and basic medicines, the unit brought medical care to 4,500 patients between March and May 2016.

New Holland Agriculture also worked with the SMILE Foundation to support 200 children aged 4-14 who enrolled at a SMILE school near the company's Greater Noida plant.

TRAINING THE NEXT GENERATION OF INDIAN FARMERS

In 2012, New Holland Agriculture inaugurated its first agri training center in India, in Bhubaneswar. The center, opened in association with the Department of Agriculture of the state government of Odisha, provides young farmers and unemployed people with the skills to find jobs in mechanized agricultural farming.

The course covers tractor maintenance and the overhaul of the main tractor sub-assemblies as well as repair and maintenance of other mechanized farming equipment. New Holland Agriculture provided special tools, engines and transmissions to help students learn.

Since then New Holland Agriculture has established two more training centers. The second opened in 2014 in Madhya Pradesh State as part of an initiative to raise awareness among farmers and facilitate more eco-friendly and efficient agricultural practices.

In 2015, New Holland Agriculture opened a third training center, this time in the Assam region in north-east India.

VOLUNTEERING WITH HABITAT FOR HUMANITY

CNH Industrial doesn't only support projects in the developing world. Last year 102 employees donated 556 volunteer hours to Habitat for Humanity projects, one of the core initiatives that we support in North America.

Founded in the USA in 1976, Habitat for Humanity builds affordable housing in America and across the world. Since then it has helped almost 7m people to find shelter.

CNH Industrial employees have helped with Habitat for Humanity projects in Burr Ridge, Illinois, Lebanon, Indiana, and Racine, Wisconsin. Our people took time away from their desks during working hours to carry out tasks including laying foundations, fitting windows and doors and installing siding.

Since 2007, CNH Industrial has donated almost $500,000 to Habitat for Humanity, including $34,000 in 2016, some of which will help to fund builds that the charity has planned for 2017 in Fargo, North Dakota, and the Quad Cities region of the Midwestern United States.

In Racine, CNH Industrial also works with the Homeless Assistance Leadership Organization (HALO), which aims to tackle homelessness. Since 2011, CNH Industrial has donated more than $250,000 to HALO to create shelters, fund services and support coordination activities.

CNH Industrial employees in NAFTA volunteer to help build homes with Habitat for Humanity

102 employees donated 556 volunteer hours to Habitat for Humanity projects

KEEPING SLOW FOOD MOVING

CNH Industrial supported the 2016 Slow Food Foundation main event, the Terra Madre Salone del Gusto which was held in Turin, Italy, and welcomed some one million visitors. CNH Industrial was more than a mere provider of vehicles. The Company's Mobility and Transport Studies department analyzed the best way to transport visitors, delegates and exhibitors so as to ensure the lowest environmental impact. Eight IVECO Buses were provided to meet visitors' needs in downtown Turin, and all featured ultra-low emission systems and accessibility packages.

OUR CONTINUOUS COMMUNITY STRATEGY

CNH Industrial has been recognized as a leader in sustainability for several years now. From drives to reduce CO_2 emissions to moves to entrust more than 95 percent of supply to local suppliers, we are constantly pushing ourselves to do more.

The same is true of our efforts in the local community. Over the past year, we've helped to train hundreds of people around the world, our colleagues have donated hundreds of hours of their working time to charitable projects and we have given millions of dollars to community projects.

The initiatives that we support are not centrally imposed but are determined at a local level. We will continue to strive to be in synergy with each region we work in, to benefit the community and to enhance the satisfaction of our employees and their friends in the surrounding territory. ■

GOING GREEN IN INDIA

CNH Industrial has a long and mutually beneficial association with India. As a committed partner to this remarkable nation, and with agribusiness the country's largest provider of livelihoods, we've always realized the importance of promoting sustainable methods of working that build prosperity.

Our three facilities are each exemplars of best practice and represent the aspirations of the environmental pillar of our World Class Manufacturing approach.

At the plants in Greater Noida, near New Delhi, and in Pithampur, Madhya Pradesh, we operate a company-wide bus system where we can collect workers, bring them to the plants and return them again to a central point. In Delhi, for example, that means employees travel every day on a low-emission bus.

This guarantees the workers a reliable transport system when it might be difficult for many to get to work via other means, and we're cutting CO_2 emissions, too.

In Noida, we've also recently installed a water harvesting system, which captures and redistributes rainwater to irrigate the play-grounds and green areas at a local school. This community service project, which we've undertaken in partnership with Oerlikon Graziano, one of our key suppliers, as well as the Indian Society of Agribusiness Professionals, also saw us install a drinking-water purification system at the Gautam Budh Balak Inter College, not far from our facility.

We've used a similar system at our own facilities and the results have allowed us to plant trees and develop green spaces that create the sort of manicured garden that's a far cry from what one might expect at a traditional industrial facility. Our employees gather for the dedication of each new tree and show their commitment to the Earth by reciting an environmental pledge.

A NEW BENCHMARK

Meanwhile a new star is rising in our Indian firmament, with the construction of a state-of-the-art greenfield plant in Pune, which will manufacture harvesting equipment and be the embodiment of our best practices so far.

By learning from our existing plants, we're automatically starting at a higher level. The Pune facility was conceived as a Green Plant and we were able to incorporate every necessary sustainable aspect as we built it from scratch.

The new plant is not scheduled to start production until the end of this year, yet we have already received Green Plant pre-certification based on our original design from the India Green Building Council.

IN PARTNERSHIP WITH NATURE

The outsides of our facilities are as important as what happens inside. In India, a collective commitment to biodiversity as well as local culture has helped us to create wonderful green spaces, which have encouraged, for example, an increase in local wildlife visiting our plants. ■

The IVECO Stralis NP: winner of the Ecological Industrial Vehicle of the Year award. With a range of up to 1,500km, it is the first natural gas truck designed specifically for long-haul operations

SUSTAINABLE LINKS REINFORCE THE SUPPLY CHAIN

There's more to selecting a supplier than the quality and competitiveness of its products. Firms seeking to work with CNH Industrial must comply with a comprehensive list of social, ethical and environmental requirements

One of our senior managers was asked recently: "Who is responsible for sustainability at CNH Industrial?" She just laughed and replied: "Everyone!"

You don't become recognized as one of the world's leading sustainable companies without an integrated and committed approach. And while that mindset pervades all our work, we stretch it still further into our relationships with our suppliers. That allows us to make sustainability standards a core part of the value chain; there can be no difference between how we think about working with our colleagues and how we work with our partners – across all sectors and all operating geographies.

CNH Industrial has detailed procedures in place to ensure that the selection of its suppliers is based not just on the quality and competitiveness of their products, but on how well they fit with its social, ethical and environmental principles.

We have established an effective sustainability plan, embodying specific goals and targets

We evaluate a company's potential to be an effective supplier by means of a rigorous process. A PSA (potential supplier assessment) identifies strengths and weaknesses, looks at key sustainability factors – explicitly health and safety and environmental management – and must be carried out before a company can tender.

There is also a commitment declaration required of new suppliers, based on the CNH Industrial Supplier Code of Conduct. This requires them to demonstrate a commitment to fighting corruption, protecting the environment, promoting health and safety at work, ensuring non-discrimination, prohibiting forced and child labor, and recognizing freedom of association.

The scale of our industrial supply chain makes managing relationships with partner organizations tremendously complex, but we have established an effective sustainability plan, embodying specific goals and sustainability targets. In addition we monitor and assist our existing suppliers through the following:

- SELF-ASSESSMENT
- RISK ASSESSMENT
- SUSTAINABILITY AUDITS

Suppliers are required to fill out a self-assessment questionnaire endorsed by a leading industry standards body. They are expected to declare information on a diverse range of topics from the environment, through ethics, diversity and human rights, as well as health and safety.

This self-assessment is performed by a group of chosen suppliers every year, with an effort underway to gradually increase the number of participating companies year-on-year.

EVALUATING AND ADDRESSING RISK

The second element of our annual sustainability assessment process is risk assessment, which identifies suppliers whose compliance with our set of sustainability criteria needs to be addressed in some way.

Depending on the supplier's risk classification as a result of this assessment – low, medium or high – a decision is made on carrying out a sustainability audit.

These take place at the supplier's premises and are aimed at identifying potential improvement actions we can carry out together and monitor how they are implemented. Although there are procedures that can be used in the case of non-compliance, the aim of the audits is primarily diagnostic and restorative.

In 2016, 70 audits were carried out, spread evenly across all four regions. Ultimately, 28 suppliers were involved in nearly 178 action plans for improvement.

Our goal for 2016 was to increase the number of audits carried out – a reflection of improvement and our growing expectations – and also to implement a program of sustainability training and information aimed at suppliers.

The process also requires an effective means of continuing a structured dialogue with our suppliers. We aim to create long-lasting relationships with partner companies, and everything we do is organized according to targets and priorities identified at the beginning of the year.

The audits focus on four key areas – Environment, Labor Practices, Human Rights and Impacts on Society – where we are continuously striving to enhance overall performance by identifying specific suppliers' needs, whether they be in training, communications, reviewing systems for verifying sustainability practices, emergency planning, or others.

COMMITMENT ON ENVIRONMENTAL IMPACT

As part of our commitment to moderate the environmental impact of our activities, for example, our suppliers are invited to optimize their use of resources and minimize polluting emissions and greenhouse gases.

We also encourage them to exercise the proper management of waste treatment and disposal, as well as adopting appropriate methods of logistics management. These aspects are also covered in the self-assessment questionnaire, in particular in a section dedicated to water management, which among other things covers behavior as it relates to wetlands or natural habitats affected by the water withdrawals or discharge from plants.

The 2016 assessment process – covering nearly 400 suppliers – confirmed that all of these environmental issues were being properly addressed. For CNH Industrial, water is a particularly crucial resource because its scarcity could affect the continuity of production, and we see its protection as increasingly important.

Another key part of our approach to supplier engagement is the CDP Supply Chain project, overseen by CDP, an international environmental non-profit organization, which focuses on suppliers' strategies for tackling climate change, and their current or future initiatives for reducing CO_2 emissions.

BUILDING AN ONGOING RELATIONSHIP

As part of the continuing dialogue with suppliers, encouraging collaboration and shared goals, we organize events such as the Suppliers Advisory Council. This gets together on a regional and global basis and provides a platform for sharing objectives and results, while spotlighting key projects and benchmarking best practice.

We also hold a number of Technology Days, providing opportunities through the year for suppliers to showcase innovation and cutting-edge products.

While our network of suppliers is crucial to securing continuity, it also influences how public opinion reacts to our company's social and environmental responsibilities. Everything we do in our relationships with suppliers therefore demonstrates that our values are as central to our partners as they are to us. ■

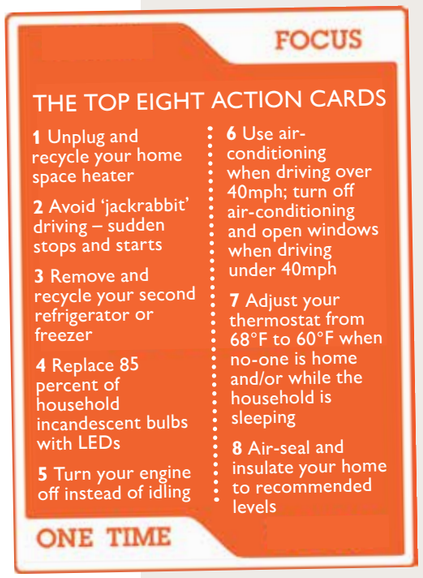
Players at the Benson site were issued with a deck of Cool Choices cards (above right)

COOL COMPETITION

Last summer, almost 100 employees at CNH Industrial's plant in Benson, Minnesota, USA, signed up to play a game on company time. But far from being a trivial pursuit, this turned out to be the sort of pastime that had some of the players shouting "Bingo!"

It's usually said that the way to improve our environment is for us to think globally and act locally. Then there's hyper-locally – the areas in one's immediate environment and behavior that can be changed quickly. Action there first can pay big dividends.

Staff across nine departments in Benson kicked off a challenge aimed at raising awareness of exactly how these small, individual actions can have a huge collective effect on the environment.



As part of the game, which was designed by Wisconsin-based non-profit organization Cool Choices, players are issued with a deck of cards, each showing a specific sustainable action and the corresponding number of points the player can earn for doing it. Our environmental health and safety team helped to customize some of the card choices to reflect the company's World Class Manufacturing program.

Players carried out the energy-saving tasks either at home or at work and entered the points on the Cool Choices website. The numbers were then crunched to show which of the nine teams had won. There were prizes on offer for the teams with the most points and random prize draws to motivate those involved.

The tasks carried out the most by employees ranged from measures for more efficient use of energy at home to creating an environmentally-friendly commute to work.

During the six-week game, a total of 6,451 individual sustainable actions were carried out, all of which contributed in some way to energy-saving or raising environmental awareness in our homes, workplace and community.

CNH Industrial got to know about Cool Choices through our participation in the Wisconsin Sustainable Business Council's Green Masters program – where we were honored for a third straight year.

At the end of the initiative, Cool Choices carried out a feedback survey that showed that a big part of the players' positive experience with the game came through interacting with their co-workers and discussing new sustainability ideas.

Seven out of 10 respondents said they were proud of the changes they had achieved as a result of the game and thought it formed an important part of the company's sustainability initiatives.

A majority of respondents also said that the game had made them more conscious of their energy-use behavior at home and reported an increase in sustainable behavior at work. Two out of three participants said that as a result of the game they would be more likely to turn out lights in rooms that aren't being used, for example.

Obviously, as we look at ways to extend this kind of initiative to other plants across the company, we're aware that different locations will have different priorities, but the outcomes from this first run have been positive.

Our aim was to plant a seed in employees' minds about the effectiveness of making one small change and seeing how it can make a difference in all our lives. The game proved a fun and successful step in our constant progress in raising awareness of sustainable behavior across the company.

FPT Industrial's Cursor 9 NG: the most powerful 9-liter natural gas engine to date. Biomethane produces almost none of the particulates that are produced by diesel engines and, when running on biomethane, a product's carbon footprint is virtually zero

The autonomous tractors offer a vision for the future of sustainable farming and the market potential is huge

LEADING THE WAY IN AUTONOMOUS VEHICLES

When unmanned tractors, trucks and buses become part of our lives they will bring improved fuel efficiency and safety. Technologies such as telematics and data sharing are driving this revolution – and will boost customer satisfaction

Goldman Sachs forecasts a rise in farm yields of 70 percent by 2050

In August 2016, CNH Industrial offered a vision of the future – the Case IH Magnum Concept Autonomous Tractor. Unveiled at the Farm Progress Agriculture Show in Iowa, USA, the concept tractor has no cab; instead it uses the latest technology in guidance, data sharing, telemetry and agronomic management to navigate and work the fields. It's highly efficient, and alongside the cabbed New Holland version offers a vision for the future of sustainable farming; the market potential is huge.

According to investment bank Goldman Sachs, autonomous technology could become a $240bn sector within five years. The big attraction for farmers is the promise of combining the better use of available skilled labor, the ability to exploit narrow weather windows for greater agronomic advantage and the enhanced efficiency generated by computers. It's computers that will calculate precise plowing, planting, harvesting, fertilizing, weeding and watering routes and send them to the automated machines to do the work. It means machinery will last longer as Big Data analytics allow farmers to keep their kit in optimum condition.

Farming today and tomorrow is about achieving more from less: increased yields, correct timing of operations – micromanaged to the square inch of every field – and tight controls on the use of fertilizer and water. While CNH Industrial's unmanned tractor is a concept vehicle, aimed at stimulating debate and helping the company to understand how the technology can best be applied, it's clear the benefits could be considerable.

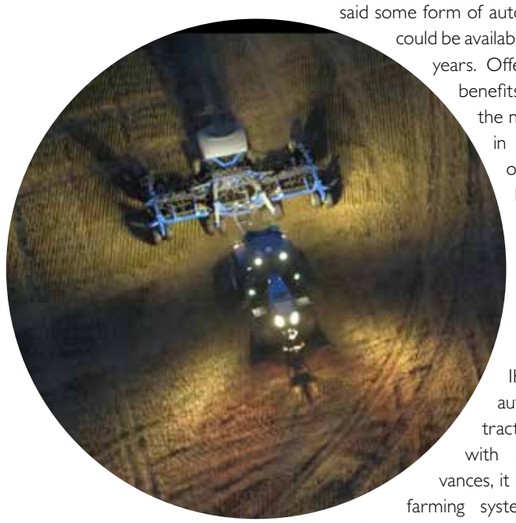
FREEING UP FARMERS TO DRIVE YIELD GROWTH

The Case IH and New Holland autonomous concept tractors use GPS and sensor technology to navigate a field, while cameras send live visual information to the farmer, who can remotely monitor and control operations on a tablet or desktop. The tractor can work round the clock, taking full advantage of optimal weather conditions. Meanwhile automated routes optimize inputs such as water, fuel, seed and chemicals and allow for the redeployment of skilled labor into value-added tasks.

Workers are freed from the restraints of normal working hours and can be redirected to tasks that robots can't perform. The optimized path planning reduces overall soil compaction, thereby increasing yield potential, and the work becomes more consistent, efficient and timely, further improving yields and crop quality. →

For farmers, all this means higher productivity. Goldman Sachs suggests that a fleet of smaller automated tractors could lift farm revenues by more than 10 percent a year, with bottom-line benefits further boosted by saved input costs. Goldman has also forecast a 70 percent rise in farm yields by 2050 – a big contribution to help feed a global population expected to reach 9bn by then.

Richard Tobin, our Chief Executive Officer, has said some form of autonomous technology could be available within three to five years. Offering such profound benefits, the tractors are the next big leap forward in farming, building on advances already brought about by precision technologies and telematics – in which we have played a significant leading role.



When the Case IH and New Holland autonomous concept tractors are combined with such precision advances, it results in a complete farming system – allowing the farmer to micromanage the land, using data to control precisely how to work a field. The most efficient courses can be mapped, taking into account multiple machines with simultaneous or consecutive tasks. The data is transmitted to the farm office, suppliers, consultants, mechanics – anyone involved in the growing cycle – in real time. This enables accurate decision-making from wherever the farmer is – in the field, on the road or in the office.

AUTOMATED TRANSPORTATION AND LOWER EMISSIONS

For CNH Industrial, the possibilities for automation go far beyond farming. IVECO, our truck brand, for example, has been working on how to apply automation and telematics to make freight transport more sustainable. It recently took part in the European Truck Platooning Challenge, which saw the world's first cross-border, smart truck demonstration.

Two heavy-duty IVECO Stralis trucks successfully drove on motorways in convoy from Brussels in Belgium to Rotterdam in the Netherlands, with the second truck following 10 meters behind the first using connectivity technology and automated driving support systems. The first truck acted as leader, with the subsequent truck automatically reacting. If the leader applied the brakes, the truck behind did so automatically. The follower truck, however, is not a mere 'copy and paste' of the leader. It is an 'intelligent' truck, as it continually evaluates the situation and can react differently to the lead truck if driving conditions necessitate.

The platooning system is designed to allow commercial trucks to follow one another closely, cutting drag, improving safety and fuel efficiency, and ensuring consistently efficient driving practices and optimal road use, thereby cutting congestion. Research suggests that CO_2 emissions could be cut by up to 10 percent as a result, with fuel savings of up to 10 percent.

Our technology is currently ahead of the regulatory framework needed to allow platooning on our roads. But our position is clear: we want vehicles ready for market as soon as the legislation is in place so that customers can reap the benefits immediately. The hope is that this will be within few years.

For freight companies, the technology promises to be a boon – not just cutting costs but reducing accidents and speeding up deliveries. With approximately 70 percent of European freight going by road and congestion set to increase by 50 percent by 2050, the platooning technology is an attractive and timely development. It can also be used in agriculture in a vehicle-to-vehicle format to coordinate the activities of combine harvesters and grain carts, for example.

URBAN DELIVERY WITH VISION

Where platooning is not an option – in built-up areas, for instance – IVECO has developed another concept vehicle, its Vision Van. The Vision integrates some of the most advanced technology into its design to monitor driver behavior, vehicle performance and fuel consumption. It also has a clever parcel management system that automatically holds loads secure and a space management system that speeds up loading and unloading.

The whole vehicle acts like a travelling sensor, sending data to the driver, fleet manager and even road infrastructure such as traffic lights and cameras, to maximize efficiency and safety. Central to its concept is to make as small an environmental impact as possible.

Our technology is currently ahead of the regulatory framework needed to allow platooning on our roads

Impressive features such as the Vision's dual energy powertrain allow it to run on electricity and in hybrid mode, cutting fuel consumption and CO_2 emissions by up to 25 percent and helping it to win the 2015 European Transport Prize for Sustainability.

Similarly, our work on bus technology will also make public transport more efficient and sustainable. Connectivity will allow bus operators to optimize frequency of journeys, monitoring the number of passengers on board, those waiting at stops, traffic and the distance between buses on the same route. It will improve passenger service and cut the inputs required by the operator. It's about doing more with less, being more efficient, being more sustainable.

50%

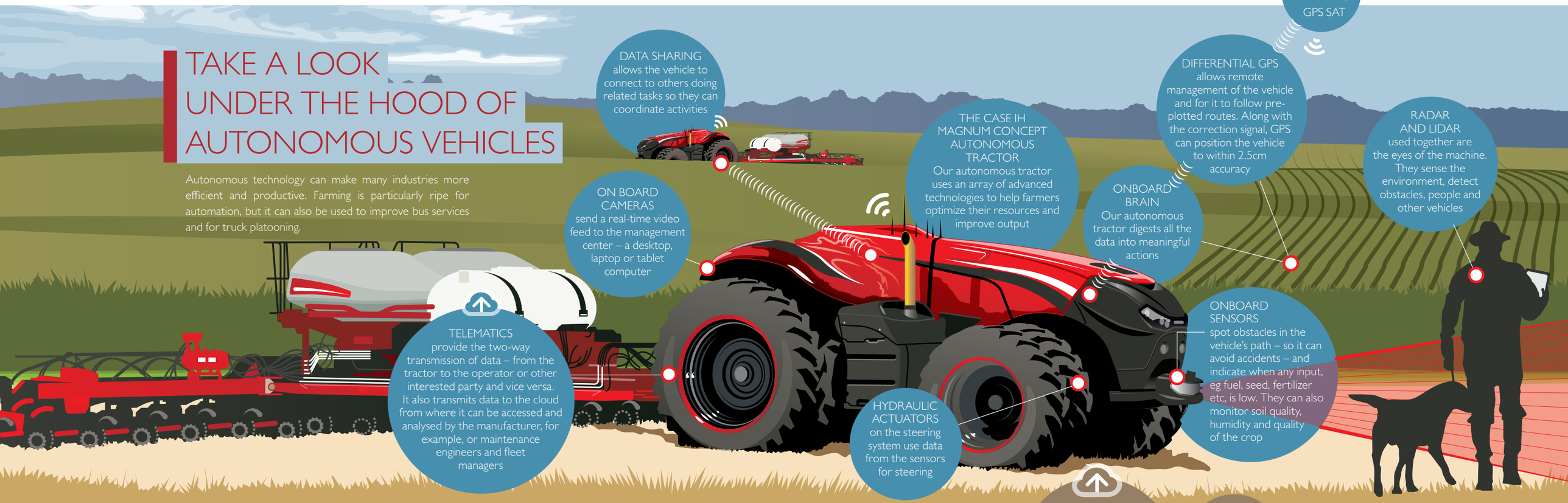
amount by which congestion is set to increase by 2050

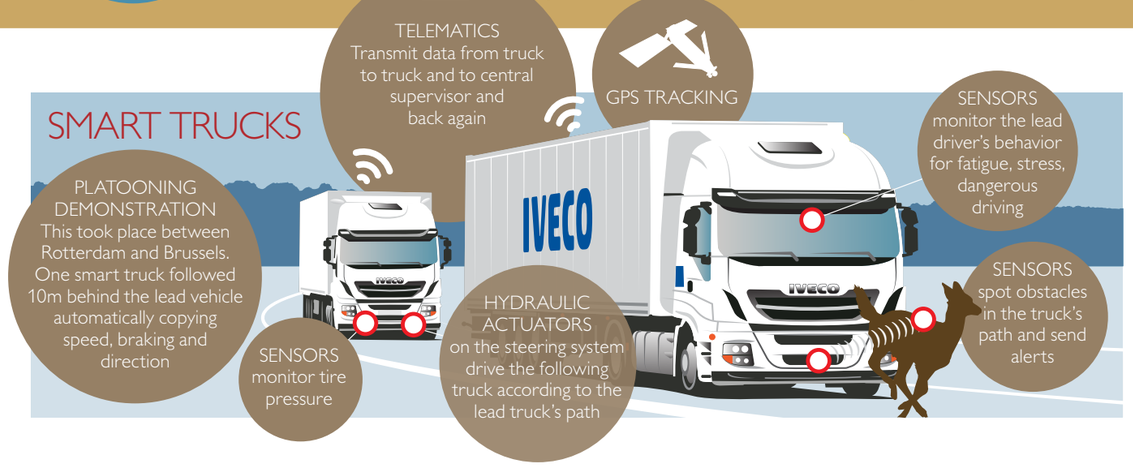
→

German publisher Huss-Medien has awarded the European Transport Prize for Sustainability to the Vision concept van from IVECO

TAKE A LOOK UNDER THE HOOD OF AUTONOMOUS VEHICLES

Autonomous technology can make many industries more efficient and productive. Farming is particularly ripe for automation, but it can also be used to improve bus services and for truck platooning.





BUILDING THE FUTURE

There are also applications for autonomous vehicles, telematics, connectivity and precision data analytics in construction to help build and maintain infrastructure. Such systems are particularly useful when the location is remote or involves harsh conditions. Our vehicles have already been successfully deployed in the some of the harshest environments: CASE Construction Equipment vehicles were put to work on construction sites in deserts and New Holland Construction machines helped with facility maintenance at the South Pole.

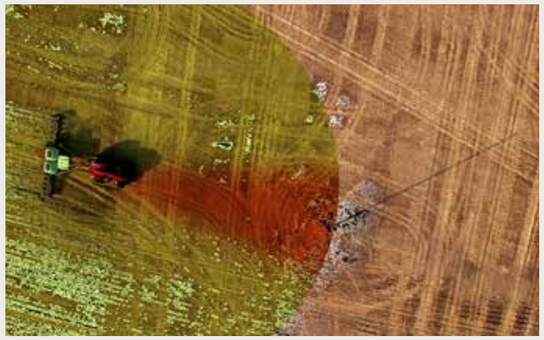
We take connectivity as far as we can. Not only do we attempt to ensure that our machines can work together as efficiently as possible, we also try to help all our customers.

For example, we are connecting our engines, the very heart of the vehicle, made by FPT Industrial, our in-house powertrain brand, to the Cloud so that their performance can be constantly monitored. Any customer will be able to receive reports throughout the life of the guarantee to help achieve optimum operational efficiency. This might comprise advice to reduce harsh braking to cut fuel consumption, or for third-party manufacturers that install our engines in their vehicles to alter the cab design to reduce drag. Every anomaly, problem and inefficiency can be logged and acted upon to maximize the life of the engine and its performance.

It is innovations such as the autonomous concept tractor, truck platooning, the Vision van, intelligent construction equipment and the connected engine that have contributed to CNH Industrial's reputation as a global leader in sustainable business. This has been recognized by Dow Jones, which named the company a sector leader in its Sustainability Indices for the sixth year running.

CNH Industrial believes sustainability-focused innovation is the right strategy. We believe the future is about optimizing all resources for the short, medium and long term. Our products will deliver us new revenue streams based on technology and data analytics that will make the whole market more sustainable. We are looking ahead to secure tomorrow. ■

The supervisor of the autonomous concept tractors can manage and track their operation in real time



A range of sensing and perception technologies are used to detect obstacles

Using tech to transform vehicles

For CNH Industrial, research and development is all about building more efficient, effective, safer machines that will help to make the world a more productive and sustainable place. Our 49 world-class R&D centers develop innovative technologies for all our vehicles, from tractors to delivery trucks, buses, construction equipment, vans and even fire-engines.

One big goal is to develop driverless vehicles for specific tasks that always run at optimum performance. Already we have two concept autonomous tractors – the Case IH Magnum and the New Holland NH^{Drive} – and have taken part in an international platooning challenge where a lead truck was followed by a second with fully autonomous capabilities.

Both see the rise of truly innovative technology, from sensors that monitor tire pressure and engine performance, and spot obstacles, to GPS that can be accurate to less than 2.5cm.

We believe driverless vehicles will be very much part of the future – many regulations, however, have yet to be brought up-to-date to deal with them – but a key element of our R&D strategy is to be prepared for the world that is being created.

There are gains to be made from cross-divisional synergies; we ensure that innovations are applied to all relevant situations across our segments. Sensors developed for the autonomous tractor could be quickly integrated into our trucks, buses and vans.

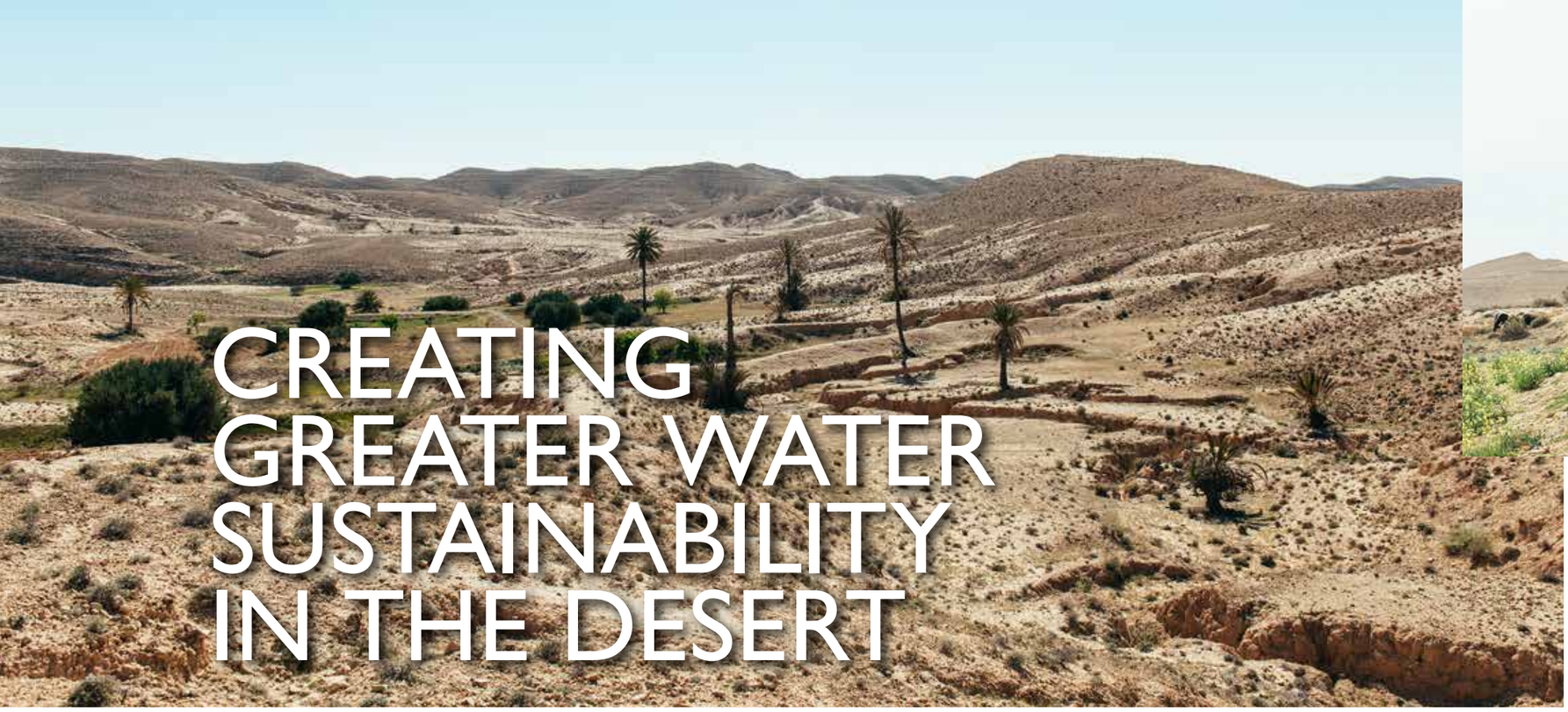
We also use technology to help keep drivers and passengers safe. GPS plots the most efficient course – a tractor's drilling route, a delivery van's order of distribution or even how to avoid traffic jams – while sensors monitor driver behavior for fatigue, excessive speed, sharp braking and lapses in concentration.

Under the hood, the engine's performance is monitored and the data sent back to the fleet operator or maintenance department by means of telematics, ensuring that it can be kept in peak condition. Similarly, such information can also be sent to the manufacturer to help refine and improve design and performance.

Enhanced, smart productivity is central to R&D. For example, should fuel be running low in a combine harvester, but it is about to start raining, the operator would know that it was not worth returning to the field once the tank was refilled. On a busy public transport route, it would even be possible to send another bus to pick up waiting passengers if the first was near to full capacity.

The Case IH Magnum Concept Autonomous Tractor challenges old assumptions about every process involved in agriculture

CREATING GREATER WATER SUSTAINABILITY IN THE DESERT



New Holland Agriculture is active in 34 African countries, including Tunisia. Here a three-year pilot project aims to help build and repair traditional water collection systems, improve agricultural practices and train farmers

Kébili is a small agricultural town in south-west Tunisia. It is the capital of the Kébili governorate, near the Algerian border. Palm trees provide shade and in non-drought years there is water to help cool off. It is an oasis in the desert with a population of 62,000. The region is prone to both extreme drought and devastating floods. In 2013 and 2014, strong storms damaged greenhouses and crops. In the Kébili region there are additional challenges, including a high rate of unemployment and poverty (about 29 percent, compared to 6 percent in the city of Tunis), economic isolation and a lack of quality infrastructure.

According to a 2015 report by the World Resources Institute, Tunisia will be one of the 33 most water-stressed countries by 2040, with up to 80 percent of its natural water resources potentially lost.

NEW GOVERNMENT, NEW OPPORTUNITIES

The Jasmine Revolution of 2011 led to a democratization of the country and a change in focus. The new government has made a priority of the management of natural resources and the development of an integrated and participatory approach, particularly with regard to water and soil conservation.

That's where we at CNH Industrial come in. We agree that sustainable and consistent water supplies are necessary for sustainable and consistent economic growth. In 2015, to help improve Tunisia's water mobilization and irrigation, CNH Industrial (through our New Holland Agriculture brand) donated $150,000 to the Food and Agriculture Organization of the United Nations (FAO), in collaboration with the Government of Tunisia, for a three-year pilot water management project in Tunisia. This grant covers nearly half of the $340,000 dedicated to the initiative.

Through New Holland, we currently operate in 34 African countries, including Tunisia, producing and distributing customized tractors and agricultural equipment that can resist extreme climates. Our equipment protects cultivated soil, increases yield and decreases waste.

"The mechanization of African agriculture is one of the most crucial challenges of our time. Winning it means not only guaranteeing food self-sufficiency, but also work, peace and development for millions of people and future generations," declared Carlo Lambro, Brand President of New Holland Agriculture, at the first Italy-Africa ministerial conference in 2016. "Thanks to our firmly established presence in Africa, the widespread coverage of our network, the specialization of our equipment and the optimal relationships we have established over time with the local populations, we at New Holland are fully capable and firmly determined to contribute in a significant manner towards making African agriculture a model of productivity and sustainability in the near future."

CNH INDUSTRIAL LEADS THE FIELD

Sustainable management of water is also a strategic commitment for CNH Industrial across the whole company. Our top management and stakeholders recently identified 12 material topics for sustainability for the company. Water is one of these 12. The others are:

- Local community engagement
- Trade regulations and public debate
- Value-chain management
- Autonomous vehicles
- Self-sustaining food systems
- Digital workplaces
- Employee engagement
- Innovation-to-zero
- Renewable energy
- Reducing CO_2 and other air emissions
- Circular product life-cycle.

"We want to work in Africa and help develop projects that are in line with our own sustainability priorities," says Daniela Ropolo, Sustainability Development Initiative Manager, EMEA (Europe, Middle East and Africa) at CNH Industrial.

The project in Kébili demonstrates CNH Industrial's commitment to improving agriculture in Africa

FROM COLLECTION TO CULTIVATION

For this project in Kébili, we have teamed up with the Tunisian Directorate-General for the Development and Conservation of Agricultural Lands, part of the Ministry of Agriculture, Water Resources and Fisheries. Over the next three years, our partners will build and repair traditional water collection systems, improve agricultural activities, train local farmers on best practices and create vegetable gardens for families, orchards and new wooded areas.

80%

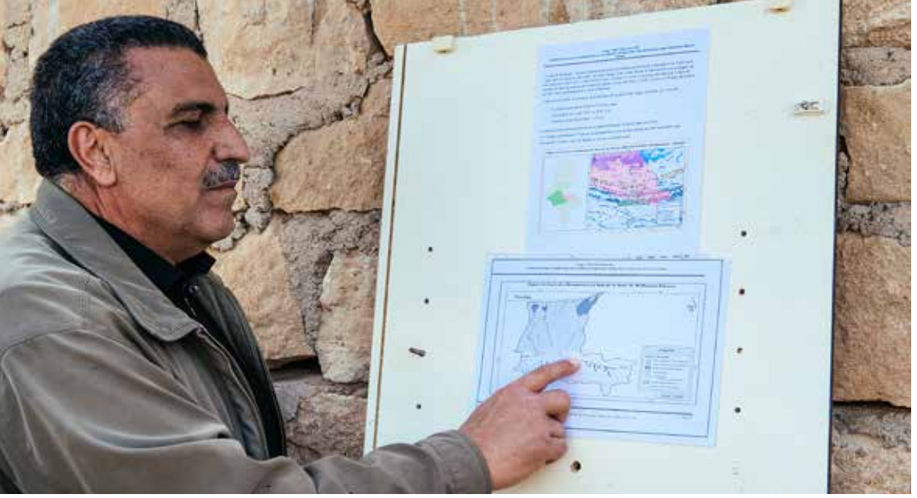
of Tunisia's natural water resources could be lost by 2040

During the first year, the FAO and Tunisian government will focus on the study and analysis of the social and economic impact of the project itself, followed by project implementation in the remaining two years. This will include the repair and creation of traditional water harvesting systems, rainwater mobilization works, family gardens, basic infrastructures and grazing lands, while training and raising awareness among local farmers. "We wanted to design and put in practice a project with a high level of sustainability and a synergy with one of our core businesses," says Ropolo.

> The mechanization of African agriculture is one of the most crucial challenges of our time

REDUCE POVERTY, STRENGTHEN CAPACITY, IMPROVE RESOURCES

The overall objectives of the project are to reduce rural poverty and food insecurity in this arid region by strengthening regional and local capacity to adapt →



Our partners work with local communities in planning and implementing projects

and improving sustainable incomes in Kébili. With our partners at FAO and the government of Tunisia, we hope to help develop a comprehensive participatory plan for economic and agricultural development in the area. This plan will focus on engaging with the local population to improve techniques and create simple, flexible solutions.

Runoff water is already an important resource in the region. There are several ways that runoff water is currently collected, including through small dams, such as *tabias* and *jessours*. Tabias are dams often constructed from soil, usually 2-5m high and up to 100m long. Jessours are dams constructed across a streambed. Such dams are typical of the arid, mountainous region of southern Tunisia. They trap soil particles and runoff water. Trapped soils are often more fertile and advantageous to crops than the local untrapped soils.

This project aims to rehabilitate existing tabias and jessours and create new ones to boost the network of water resources.

In addition, it aims to improve surface water collection through the construction and rehabilitation of *fesguias* or storm-water storage units built downstream, and to construct and rehabilitate private rainwater storage facilities. These act as supplementary irrigation and drinking-water supplies.

We will also be engaging, through partners, in dialogue with the local population so that they can share knowledge, learn new techniques and then apply certain principles to their agricultural practices to improve the sustainability of resources in arid zones. This multi-layered and participatory approach will help the region balance improvements in living conditions with the protection of water and other essential natural resources.

More than one-third of the population is engaged in agriculture as their main income generator. The main agricultural product of the region is the deglet nour (a cultivar of date), with more than 100,000 palm trees providing the sweet fruit to be exported around the world. In addition, many families in the region have some sort of family garden. Through this project, we plan to increase the number and robustness of vegetable gardens in particular. Our partners will work with the local population to establish a supply point for irrigation and the construction of raised tanks, and to strengthen the capacities of women and youth.

Other aspects of the grant include establishing a community network of good water and soil conservation practices, and producing and disseminating best practices and guidelines for sustainable natural resource management and agricultural development.

Our partners at FAO and the government of Tunisia have been reaching out to local and regional authorities to help implement these various initiatives, among them community leaders (such as women's unions) and regional farmers' unions, as well as other government partners, such as the Agency for the Promotion of Agricultural Investments and the Tunisian Bank of Solidarity (Banque Tunisienne de Solidarité). Part of the Ministry of Finance, the latter offers an alternative to the traditional banking system.

BEYOND KÉBILI

Ideally, at the end of the third year, water and agricultural resources will be collected and managed more sustainably by local producers, and Kébili's soil reservoir capacity will be greatly improved.

If this pilot proves as successful as we anticipate, we will offer more water management projects in other governorates, and potentially beyond Tunisia. The need for successful innovations has never been more urgent, as rising temperatures and rising populations strain the world's groundwater supplies. Some 40 percent of global food production relies on groundwater irrigation and, according to new research from University College London, the volume of its depletion rose by 22 percent over the past 10 years.

Water is one of the most critical issues, not only for our company and not only for the United Nations. Water resource sustainability is critical for the future of the entire world. ■

WISER WATER PRACTICES BEGIN AT HOME

At CNH Industrial we practice what we preach. Our promotion of sustainable water development and improved water efficiency starts in our own manufacturing plants and offices.

We are dedicated to increasing water efficiency in our manufacturing processes, increasing water recirculation, and reducing water consumption and the volume of water discharged at plants.

As the world's population continues to grow and economies develop, demand for water increases. We believe sustainable management of water is critical from a business perspective as well as for the best environmental stewardship. By 2018, we aim to reduce water withdrawals per unit of production by 3 percent across all our plants compared with 2014.

In 2015, we introduced new water management procedures for all CNH Industrial plants in our EMEA (Europe, Middle East and Africa) division.

ALL EMEA CNH INDUSTRIAL PLANTS MUST:

- Analyze consumption, structure and management of water
- Identify and eliminate leaks
- Adopt changes and innovations to boost efficiency, reduce consumption and improve quality
- Promote water recirculation within manufacturing processes

All plants are also expected to raise awareness among staff about responsible water use not only at work, but also at home.

The results speak for themselves. From 2014 to 2016, all CNH Industrial plants reduced total water withdrawal by 626,000m^3 and reduced total water discharge by 727,000m^3. In 2016 alone, 27.5 percent of the water CNH Industrial used was recycled. That is equal to 812 Olympic-size swimming pools.

At our plant in Rorthais, France, recycled water is used for vehicle leak testing

For example, our plant in Rorthais, France, is recycling the water used for vehicle leak testing – a move that is expected to reduce consumption by 40 percent in 2017. And in water-stressed Plock, Poland, our plant improved its degreasing procedures and adjusted water flow in the degreasing tank, which led to a 36 percent reduction in water consumption per hour of production in 2015.

> In 2016, 27.5 percent of the water CNH Industrial used was recycled

Our drive for increased water sustainability has pushed us to adapt and innovate. We have saved resources, saved money and engaged our staff and communities in wiser water practices. It's one of the reasons why CNH Industrial continues to win accolades, such as being named a Green Master by the Wisconsin Sustainable Business Council, for leadership in environmental sustainability.

TECHNICAL MILESTONES

CNH Industrial can trace its evolution back over 175 innovation-packed years. Here are just some of the ideas to have changed the world in which we live…

▲1869 CASE produces the first steam-powered tractor
Brings mechanization to US farming – improving productivity and reducing effort. A fundamental tool for road building

◀1872 Magirus launches the sliding 'Ulmer ladder'
Enables firefighters to reach people higher up in burning buildings, saving countless lives

▶1907 Fiat produces its first bus
Improves mass transport, making it easier to get to work

▼1903 Fiat produces its first commercial vehicle
Offers a more efficient way to move goods around – boosting the local economy

▶1918 Fiat manufactures one of the first tractors in the world to be produced on an industrial scale
Mass production brings the possibility of global export, while the latest tractor technology makes farming more efficient and productive. More land can be brought into cultivation

▲1919 International Harvester invents the first commercial power take-off, which is premiered in the 8-16 model

▼1932 Fiat produces one of the first mass-produced agricultural crawler tractors
Allows more people to be fed and helps build communities

▲1940 New Holland develops the first self-tying pick-up baler
Improves harvesting efficiency while requiring less labor

▶1947 The SIMIT company produces the first hydraulic excavators – and was acquired by Fiat in 1970
Easier to operate, it made construction, faster and more efficient

The IVECO Z Truck concept has spawned 29 patents

A healthy blend of patents pending and granted

Any employee with an idea for process improvement or product design can submit it via the Innovation Portal. Around half of those received each year are eventually granted a patent – and contribute to the company's success

A company like CNH Industrial lives or dies by its ability to innovate. Thankfully, our prognosis appears to be extremely healthy, judging by the wealth of ideas our talented employees generate that move towards becoming registered patents.

Currently, we hold some 8,500 active patents, of which 1,100 were granted during 2016. There are another 3,750 patent applications pending, of which more than 1,000 were filed over the same period.

The entire patenting process starts with the internal filing of 'invention disclosures': proposals from engineers and developers to improve our products. To streamline the handling process of these disclosures and, as part of our corporate culture that encourages great ideas, a specific portal was developed that is the envy of our competitors.

This Innovation Portal, administered by our intellectual property team, is accessible from any company workstation worldwide and allows any employee in a technology-related area to submit an idea concerning product design and development, process improvement or any aspect of our activity. During 2016, some 850 disclosures were submitted to the Innovation Portal and were funneled into an evaluation process. In the majority of cases this resulted in a patent application

The concept of the portal goes back almost 15 years and is still a work in progress, being constantly adapted to changing needs, but it is recognized as being crucial to how we foster and promote innovation, and how we encourage our employees to unleash their creativity.

HOW THE PROPOSAL SYSTEM WORKS

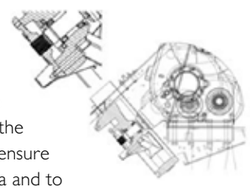
Employees who believe they have a patentable idea can enter their proposal by means of the portal, along with any supporting materials – such as drawings, videos and PowerPoint presentations. Once they formally submit the proposal it can't be modified, and the evaluation procedure begins.

Each new disclosure is assigned to one of our patent attorneys, who will determine if the idea is patentable, as well as to members of the review team, who will evaluate its potential technological, strategic and commercial merits. They can request additional information from the inventors at this stage.

Then come the official review and patent search phases, when after more intensive discussions with the review team, the attorney will conduct both due diligence to ensure there are no obstructions to using the idea and to verify its patentability.

Then, if it turns out that the idea is patentable, the patent protection process begins. When the final draft has been signed off by the inventor, a formal patent application is filed.

1,134
patents were registered in 2016



Technical drawing in support of the patent application for an improved breakbolt setup on a flywheel baler

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▼1947 New Holland introduces the first haybine mower conditioner

▼1957 CASE introduces the first factory-integrated tractor loader backhoe

Easy to use and highly versatile – backbone of the building industry

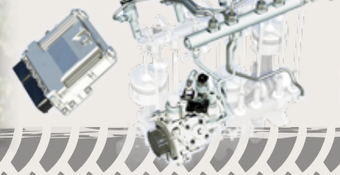
▼1972 Magirus develops the first specific 8x8 aircrash vehicle for use in airports

▶1975 Braud introduces its first self-propelled grape harvester

Represents a technological leap forward – offering efficiency and better working conditions

▼1999 Fiat introduces and patents Common Rail engine technology

Brings improved operating efficiency, fuel saving and responsiveness



▲2009 New Holland unveils its innovative NH²™ hydrogen tractor

▶2013 New Holland produces a working prototype of the T6.140 Methane Power tractor

Brings sustainability to the farm – highly efficient and with lower emissions

▶1977 International Harvester introduces Axial Flow single-rotor technology for combine harvesters

◀1996 CASE IH launches the Quadtrac – the first tractor on four triangular tracks

HI-eSCR

▲2012 FPT Industrial becomes the first manufacturer to introduce an SCR-only solution to meet the latest emission regulations in both on- and off-road applications

▼2016 Case IH and New Holland unveil concept autonomous tractors

Advanced 3D modeling is used when developing new projects

From time a disclosure is entered on the portal, we aim to have an application filed in 6-12 months, depending on the complexity of the original proposal and the level of review required. Naturally, if there is an urgent requirement, the whole process can be reduced to a single week, or even less.

Normally we will file a priority application, located in one country, say the USA, Italy or Belgium. This gives us an official start date and from then we have one year to file in other countries. Sometimes, depending on circumstances, we can drop the first application and just continue with subsequent applications filed within that priority year.

The examinations take place in the patent offices of the relevant countries and when approved by the examiner, a patent may be granted. From start to finish the process can take two years or more, depending on the jurisdiction. In some countries, such as Brazil, it is not unusual for it to take 10 years or more to obtain a patent.

From start to finish the process can take two years or more

One hugely successful idea that came through the Innovation Portal, and is now in use on all our New Holland Agriculture BigBaler – large square baler – products was a technical proposal to solve the problem of a breaking flywheel shear bolt, an issue that can be expensive and time-consuming to deal with. The idea proposed changes to the flywheel bearings to reduce wear and avoid unnecessary stoppages. It took just five days between the idea being filed to the portal and a patent application being filed in Belgium; one of the fastest ever transitions between those phases. But even when filing moves quickly, it still takes a long time – up to two years in this case – for the patent to be granted.

Another innovation, which took a more conventional route through the process, was to create a more efficient coupling mechanism in the hitch apparatus used to connect implements to tractors. The improvement saves the operator time and hassle in switching between different attachments.

This application was filed in Italy and, again, took about two years before it was granted. Corresponding cases for both these examples are still pending in the USA and Europe.

Of the 850 disclosures submitted in 2016, about 50 percent have a realistic chance of getting through the initial review, so we expect about 400 of those will eventually make it to a formal patent application. In 2015, we filed around 350 new applications; an upward trend that we expect to continue.

A sign that the project is expanding is that this year's disclosures are spread well across our geographic locations – and the range of topic areas is also well distributed.

We know we have some of the smartest people in the industry working for us, so we try to encourage them to bring that knowledge and expertise to the fore. In the past few years we've worked hard to go to all our 49 engineering facilities to provide training on what it takes to prepare an idea for the patenting process and tell people about our awards system.

REWARDING INNOVATIVE THINKING

The Patent Award Program works slightly differently in each region. In the EMEA (Europe, Middle East and Africa) region, for example, a pre-set monetary award is split between the inventors in proportion to their contribution – something that is set out when they file the initial disclosure. In the NAFTA (North America) and LATAM (Latin American) regions an initial monetary award is given to the inventor upon filing, then a second, larger amount is paid upon grant of a patent.

There are plans for a revamped policy that will be consistent worldwide and reward people sooner in the process. We think that if you want to keep the inventive fire burning then it's crucial to reward the spark of an idea quickly.

It's also important that we celebrate our colleagues' success, so yearly patent award dinners are organized for the eligible inventors and their partners, creating plenty of local publicity. This all helps to promote the portal and encourage our people to bring forward their new ideas.

Obviously just looking at raw numbers doesn't reflect the complexity of individual ideas, but there are some people who over the course of their career have more than 50 patents to their name.

A SECURE ENVIRONMENT

When the portal initially started in Europe, it was seen as a collaboration tool, allowing people to look at ideas their colleagues were working on. But over time we realized that there needed to be a more secure environment for our intellectual property. Now a person's access is limited to tracking their own submissions, while people on review boards can only see the ideas that are allocated to them. Only the patent attorneys can see everything.

Each week a status update appears on the portal, generated by the patent management system of the IP department. Thus all investors are kept up-to-date on the progress of their disclosures – and specifically whether their case has advanced.

We believe our Innovation Portal is second to none and has allowed us to make the most of the inventiveness of our remarkable employees. ■

WHERE DOES CNH INDUSTRIAL – AND THE WORLD – GO FROM HERE?

In seeking to identify and address the most important global trends, we've had to develop a new way of thinking – one that is allowing us to shape the future in line with the needs of employees, suppliers, dealers and customers

Climate change, food scarcity and security, and an innovative and digital world. These are among the most important issues shaping not only our business, but the world we live in today – and its rapidly growing population. As a global company with a big role to play, they shape the way CNH Industrial operates, too.

In fact we are committed to mitigate and limit the impact of the megatrends, or exploit and enhance their positive effects, focusing on the topics that we have identified as most material. These topics are assessed by our stakeholders in terms of how important it is for us to manage the impact, in a positive way, for each of them. We have identified key long-term targets within these topics, and the targets have – and will continue to have – a profound effect on everything we do. They cover everything from the design of our products to the way we conduct ourselves at our plants and facilities around the world.

> Everything we do is part of a drive towards greater sustainability

These powerful, inter-related megatrends create serious challenges as well as amazing opportunities.

At CNH Industrial we have a vital role to play in feeding the world's growing population, which is estimated to hit 9bn people by 2050. Our products not only prepare and plant the fields, then harvest the crops, but they also transport food to processing plants and provide the logistical support that delivers it to the local store or the consumer's front door. Our construction machines build the vital infrastructure that underpins the entire operation – from roads and bridges to schools and warehouses. Our alternative fuels program and drive to power our plants using renewable energy is just one aspect of our contribution to combating climate change.

In a world of finite resources, it is important that everything we do is part of a drive towards greater sustainability. This applies to the entire value chain, from the behavior and contribution of our suppliers to the lifetime environmental impact of our products.

Our efforts are recognized in the Dow Jones Sustainability World and Europe Indices (DJSI) and in the numerous awards that our products collect. The IVECO Stralis NP – the first natural gas truck for long-haul operations – was voted Project of the Year at the European Gas Awards of Excellence 2017. The Case IH OPTUM 300 CVX was elected Tractor of the Year® at the prestigious awards of the same name. These are just two from a long list of winners, each one a contributor to the challenges of feeding, housing and sustaining the world, but there is a lot more to be done. The road to increased efficiency and sustainability is long, challenging but rewarding.

SUSTAINABILITY: A NEW WAY OF THINKING

To ensure we fully understand the impact of the megatrends we have identified – and to then respond in a dynamic and strategic way – we realized we needed a new way of thinking. The result was the introduction of a materiality analysis; the material topics are our response to these megatrends. They will have a direct impact on our operations, and form the basis for long-term targets.

We also updated our system of governance to better reflect the critical role of sustainability. Our Sustainability Steering Committee has been established to identify strategies, integrate sustainability into our everyday activities and provide a forum for our four operating regions and 12 brands to come together to share what they are doing and to benchmark their activities. We have also appointed a Chief Sustainability Officer, who is also the Chief Financial Officer, reporting to the Chief Executive Officer.

As we set about identifying the most important global trends, one of the most crucial sources of information has been the UN's Sustainable Development Goals. Published in 2015, they define goals to be achieved by 2030. At CNH Industrial we are making our contribution to achieving them.

MEGATRENDS: THE BIG THREE

The first mapping we carried out identified 61 trends that were then grouped into 20 megatrends. They were presented to members of the Sustainability Steering Committee who, via an online internal survey, narrowed them down to three: climate change, food scarcity and security, and the innovative and digital world.

CLIMATE CHANGE

A broad theme, this encompasses political, judicial, ethical, economic and scientific factors, and goes far beyond the literal definition of natural climate variation. It has a severe impact on ecosystems – flooding and desertification are more obvious examples – and influences worldwide economies, consumer purchasing decisions and quality of life.

FOOD SCARCITY AND SECURITY

Meeting the rise in demand for food is the first challenge; the second is to meet that demand in a way that is safe and can be sustained. To do this will depend on successful coordination of hugely complex supply chains that incorporate agricultural, processing, transport, manufacturing and logistics.

INNOVATIVE AND DIGITAL WORLD

Technology can help, too. Constant connectivity, Big Data, sensor technology and the evolution of mobile devices are rapidly changing the way people work and communicate. This revolution gives us an incredible opportunity to harness new ways of thinking and working. From the introduction of precision agriculture to the use of automated vehicles, there is a wide variety of new products and systems that will have profound effects on the way we operate, boosting agricultural yields.

THE MATERIALITY MATRIX

Last year we took the materiality analysis to a new level. No longer simply a reporting tool, rather it has been transformed into a core business tool to help identify real priority actions in those day-to-day parts of running a global business that are affected by the big three megatrends – and through which we can shape the future and achieve our goals. Employees as well as suppliers, dealers, customers and other stakeholders were all asked what they considered to be the most important issues. Twelve were identified, ranging from renewable energy to CO_2 and other air emissions to local community engagement and autonomous vehicles.

The process helps us to identify the material ways we can respond to the global challenges ahead. Ultimately, this will mean we can set meaningful long-term targets, in the Sustainability Plan, or our 'Vision 2022', that are based on potential risks and opportunities linked to our operations around the world. For example, the plan has a target to reduce →

Award winners: the IVECO Stralis NP (opposite) and the Case IH OPTUM 300 CVX (above)

2016

IVECO successfully demonstrates truck platooning technology

PLATOONING: BOOSTING LONG-HAUL EFFICIENCY

Automation will also transform the costs of long-haul logistics. As we have seen in this report, our innovative IVECO brand has been trialling platooning, an autonomous system that enables several trucks to travel in line with only a driver in the front cab making decisions. Each connected truck has GPS, a sensing platform based on radars and cameras, and enhanced safety systems such as co-operative adaptive cruise control.

With congestion set to increase in coming years, platooning will help mitigate the problem. Wind resistance is also reduced because the lorries can run closer together, so fuel efficiency rises by up to 10 percent. Research suggests that CO_2 emissions could be cut by up to 10 percent. IVECO's Z Truck sums up what new technology can achieve. Protected by 29 patents, this sleekly-shaped vehicle has enhanced aerodynamics, will run on Bio-LNG and have a waste-heat recovery system. It can travel 2,200km while producing almost zero CO_2 emissions. And the cab is a lifestyle pod where driver comfort is key.

In addition to long-haul efficiency, some commercial vehicles must be able to deliver into an urban environment where emissions – and noise – controls will increasingly demand the use of alternative fuels or electric engines. That is why we are so proud of the IVECO Vision, a hybrid vehicle that can adapt its power source to the environment, employing a more traditional engine on inter-city routes where speed is needed but switching to its zero-emission electric mode in cities.

The development of efficient powertrains that use conventional and alternative fuels in all market segments will help us to achieve our objectives of sustainably increasing efficiency. Tractors that run on biomethane, delivery vans that run on compressed natural gas (CNG) and other vehicles relying on hydrotreated vegetable oils (HVO) will all have a role to play in the vehicle fleets of the future. As well as satisfying new regulatory frameworks and helping us move towards a more sustainable future, these vehicles must also be designed to reduce total operating costs for our customers.

All of us at CNH Industrial are excited by the challenges ahead. Our materiality analysis is helping us to interpret significant megatrends and to respond to them in a sustainable way. These megatrends are giving us strategic thrust; as the world around us changes, so all of us at CNH Industrial are ready and able to change, too.

To see the full 2016 Sustainability Report and find out more about all of the projects covered here, visit www.cnhindustrial.com ■

CO_2 emissions by 20 percent by 2022 compared to 2014; other targets include increasing by 20 percent the number of employee volunteer hours in the USA, Canada and Mexico, as well as involving 100 percent of employees in Latin America in campaigns aimed at promoting healthy lifestyles.

AUTONOMY: AN EXCITING CHALLENGE

By combining Big Data, connectedness, new software programs, sensing technology and telematics we can create pioneering products – innovative blends of hardware and software – that deliver whole new levels of performance to help feed the planet.

One of the 12 topics identified during the materiality analysis, for example, was autonomous vehicles, which have huge potential to boost efficiency. We believe that they will appear first in agriculture, where there are fewer human variables to manage and fewer regulations than on the public road network. Used with telematics and precision farming techniques, they could lead to rises in farm yields in coming decades.

> All of us at CNH Industrial are excited by the challenges ahead

1995

Case IH is the first manufacturer to introduce precision farming technology, known as AFS

At CNH Industrial we are very excited by the work we are doing with our Case IH and New Holland autonomous concept tractors – not least because they give us such a fantastic insight into the farm of the future. GPS and sensor technology allows them to navigate a field while cameras send live information to the farmer who can remotely monitor and control operations on a tablet or laptop. The tractor can work right round the clock, taking full advantage of good weather while automated routes optimize inputs such as water, fuel, seed and chemicals. Skilled labor can be used instead to focus on value-added tasks.

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