

# SUSTAINABLE EFFICIENT TECHNOLOGY

# Your sustainable farming



Since 2006, New Holland is established as the Clean Energy Leader for its active promotion and development of renewable fuels, emissions reduction systems and sustainable agricultural technology. New Holland offers the farmers of today and tomorrow the widest choice of accessible solutions that improve efficiency and productivity, while respecting the environment.

Rooted in the belief that farmers can use technology to help them reduce their dependence on fossil fuels, the New Holland Clean Energy Leader® strategy is based on four key pillars: Growing Energy, Efficient Productivity, Sustainable Farming and being a Committed Company.







# partner

## ONE STRATEGY, FOUR PILLARS.

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# 01

## GROWING ENERGY



# Fields of energy

We are all familiar with growing oilseed rape and sunflowers for biodiesel, or in even simpler terms, for energy. But how about transforming sugar beet and sugarcane into bioethanol, or unlocking the energy potential inside wheat or maize to power your farm? Short rotation coppice and grasses such as miscanthus are also packed full of energy waiting to be released. How about rejuvenating sugarcane stover or even old straw bales to produce energy? New Holland is also at the forefront of research to create a methane/hydrogen hybrid tractor, as an intermediate step until 100% hydrogen powered machines are available. Moreover, methane powered tractors produce up to 80% lower emissions than their conventional diesel counterparts. What's more, methane can be produced on the farm, derived from biomass production. New Holland's advanced and efficient products will support you with production and handling in this virtuous, carbon neutral energy production cycle.







## BIODIESEL

### POWERING THE BIODIESEL REVOLUTION

New Holland was the first manufacturer to offer 100% biodiesel compatibility back in 2006. Its status as an efficient, reliable and productive alternative to standard diesel was confirmed by the 500-hour TM Extreme Endurance Trial, when a TM tractor worked non-stop for 500 hours while running on pure, 100% biodiesel. Today, New Holland has the Industry's largest range of 100% biodiesel compatible products. Moreover, all Tier 4A products, which use ECOBlue™ SCR technology, can run on 20% B20 biodiesel as long as the biodiesel blend fully complies with EN14214:2009 regulations.



**New Holland tractors run on 100% biodiesel transport visitors around the Eden Project's reclaimed site in the UK.**

### HELPING YOU GROW ENERGY

New Holland combines efficiently harvest oil seed rape, which can be turned into biodiesel, so you are effectively harvesting the fuel, which could be used to power your combine. The rape seeds are pressed to produce biodiesel, which can be used either its pure form, B100, or blended with conventional diesel to produce a biodiesel blend. A vast choice of tractors, planters and sprayers all compliment this energy harvest.





## ETHANOL

### BIOETHANOL: FUELLING THE FUTURE

Have you ever considered that your crops could be more than food stuffs for animals and humans alike? Have you ever thought that they could be used to power not just your farm, but your local community and even public transport? Well, if you answered no, then it is time we introduced you to bioethanol production. Quite simply, the crops that you grow in your fields can be transformed through a straight forward process to create energy. Ingenious, isn't it.

#### GROWING ENERGY. GROWING FARMS

Why bioethanol? It's quite simple really, it burns cleaner than petroleum based products and it also reduces dependence on oil. However, it's important that bioethanol is included within an overarching sustainable agricultural plan to ensure that enough of the essential food products for the world as a whole, and your livestock remain.



#### GROW THE ENERGY THAT SUITS YOU

New Holland is the premier equipment partner of Growth Energy and its 75 supported ethanol plants. Furthermore, the prestigious NASCAR series cars in the United States, which run on a blend of E15, 15% ethanol, will benefit from this alliance. A whole range of crops can be transformed from simple plants into essential energy. Sugar from sugarcane, sugar beet, cereal crops such as wheat, maize stover and miscanthus can all be converted into cellular energy and used to produce ethanol.





### **YOUR BIOETHANOL PARTNER**

Whether you're growing, harvesting or managing your bioethanol crops, New Holland has the right product for you. From tractors for a range of tasks to the right combine or forage harvester, you will receive professional support every step of the way.

### **SECOND GENERATION ETHANOL PRODUCTION**

Bioethanol production can be significantly increased, by up to 30 or 40% for the same cultivated area, when compared to standard production techniques, by using an enzymatic process to release ethanol from bagasse, the by product of mill production or from the sugar cane stover which remains in the field following harvesting. This form of bioethanol production is linked to cellulose, hemicellulose or lignin as opposed to the traditional sucrose-focused methods.

New Holland is actively involved in the promotion of bioethanol through its partnership with Growth Energy in North America. Customer are invited to attend conferences to find out more information on the benefits that bioethanol production could bring to their farm. Furthermore, New Holland offers a complete range of products to support bioethanol production.



### **GRANBIO: ENERGY FROM STRAW**

In North Eastern Brazil, sugar cane stover is collected from the fields, and using second generation cellulosic bioethanol production techniques, is transformed into useful ethanol. This process uses enzymes to break down the cellulosic fibre into simple sugar molecules which subsequently fermented and turned into ethanol and produces 30-40% more ethanol than traditional first generation techniques.



## BIOMASS

### BIOMASS: THE ULTIMATE RENEWABLE ENERGY SOURCE

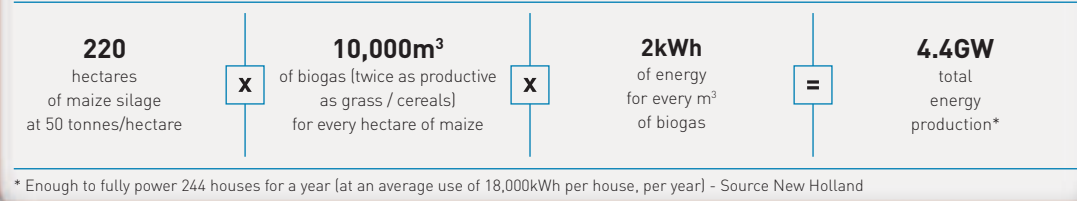
The never-ending cycle of sowing, growing and harvesting is as age old as farming itself, and means that agricultural biomass is the true embodiment of the term 'renewable energy'. Quite simply, it will exist as long as farmers continue to cultivate the land. No need to worry about dwindling resources or finite supplies. Biomass energy will be on tap today, tomorrow and for all future generations.







#### How much energy could you potentially produce?



#### BIOMASS: FITS FARMERS LIKE A GLOVE

What makes biomass and agriculture the perfect match?

**One:** farmers have the land to grow suitable crops.

**Two:** farmers have the machines to harvest and process these crops.

**Three:** farmers can provide for their own energy needs, and sell surplus energy back to the national grid.

Growing energy. As easy as 1-2-3.

#### CARBON NEUTRAL ENERGY

It's all very well and good producing renewable energy, but if by doing so you have a carbon footprint the size of an elephant you've simply shifted the problem from use to production. Agricultural biomass is a carbon neutral virtuous cycle. The carbon emitted during the utilisation of these crops, for example in combustion, is absorbed by the crops the following season during growth. The result? Energy one. Carbon neutral.

#### FARMING TECHNOLOGY FOR BIOMASS

**Biomass is at the heart of New Holland's product development cycle and you can choose between a range of machines to help you harness the energy you have grown.**



#### BIGBALER: BALES OF ENERGY

Turn sometimes unwanted harvesting by-products into bales of energy with the BigBaler range. Select the TwinCutter™ prechopper for a super fine chop. Uniformly dense bales with an optimised combustion profile are produced courtesy of SmartFill™ technology.



#### FR FORAGE HARVESTER: HARVESTING ENERGY

Choose the specialist biomass drum for guaranteed fine chopping for more efficient digestion. A complete range of headers for biomass applications include the 130FB coppice header with integrated saw blades that can slice through coppice stems of up to 150mm.



#### THE PARTNER OF CHOICE FOR BIOMASS

The Centro de Tecnologia Canavieira (Sugar Cane Technology Centre) in Brazil is the forefront of the Brazilian biomass industry, use New Holland's 360° product offering to transform energy rich sugarcane stover into bales that generate useful energy in specialist power plants.

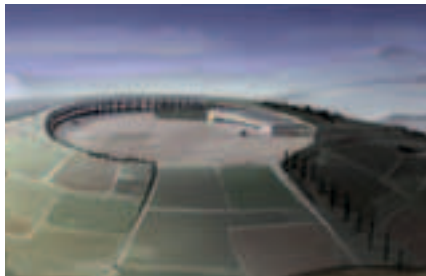
## HYDROGEN - ENERGY INDEPENDENT FARM

### TRUE ENERGY INDEPENDENCE WITH ZERO EMISSIONS

New Holland Agriculture is already imagining a zero emissions future, a world in which you will be able to meet all of your own energy needs. It might sound like a dream, but this is reality New Holland style. The logical progression from methane, methane-hydrogen hybrid machines, through to pure hydrogen tractors, encapsulated by the NH<sup>2</sup>™ tractor, is New Holland's blueprint for increasing agricultural energy independence. The NH<sup>2</sup>™ tractor runs on pure hydrogen, produced by you, the farmer, on your future 'Energy Independent Farm'. The NH<sup>2</sup>™ produces virtually zero emissions, just a little water. What's more, the second generation NH<sup>2</sup>™ tractor will soon be put to work in a field near you. New Holland always looks beyond the horizon to deliver you tomorrow's solutions today. Why? To improve the world we live in.



#### THE PATH TO ENERGY INDEPENDENCE



**2009**

The world's first Energy Independent Farm concept featuring the NH<sup>2</sup>™ zero emission tractors was unveiled at SIMA, France and promptly won a Gold Medal for innovation.

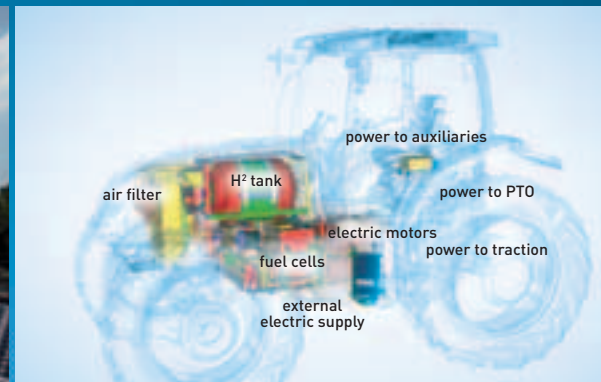


**2010**

Theory became reality, and the La Bellotta farm, just outside Turin, Italy, was chosen as the pilot Energy Independent Farm.



## ENJOY AN ENERGY INDEPENDENT FUTURE



**True energy independence.** Think about a world in which you did not have to worry about fluctuating energy prices and the negative impact they have on farm incomes. The Energy Independent Farm means you can cater for your own energy needs; a self-sufficient world that puts you in control.

**Renewable energy.** Imagine waking up every day and knowing you had energy on tap, not just for today but for tomorrow, and all of your children's tomorrows. The Energy Independent Farm uses renewable sources of energy that never run out including wind, solar, biomass and biogas. Low environmental impact and a never ending supply.

**Zero emissions tractor.** The NH<sup>2</sup>™ hydrogen tractor is truly revolutionary. It uses a hydrogen tank and fuel cells that generate electricity to run the electric motors, which power the machine and any implements. It condemns smoky noisy machines to the past, and offers a zero emissions future producing just a little water. You'll have to strain your ears to hear it as it's virtually silent too! The world's cleanest tractor produced by the Clean Energy Leader.

**2011**

The second generation, NH<sup>2</sup>™ tractor took centre stage at Agritechnica, Germany.

**2013**

Working methane tractor launched, the first step along the road to a hybrid methane/hydrogen machine.

**Future**

Keep your eyes peeled for a NH<sup>2</sup>™ machine working in a field near you!

**02**

**EFFICIENT PRODUCTIVITY**



# More productive farming. More efficient farming

Want to consign the age-old trade-off between environmentally friendly farming and productive agriculture to the history books? Then choose New Holland. If you are looking for tractors and harvesting products that are more productive whilst consuming less fuel, choose New Holland. If you want to reap the benefits of precision guidance which keeps your environmental credentials and productivity on track, choose New Holland. If you want productivity boosting features such as SuperSteer™ front axles, Auto Command™ continuously variable transmissions or IntelliCruise™ technology, choose New Holland. Or if you simply want to tread a little more lightly on the land where you farm, choose New Holland.







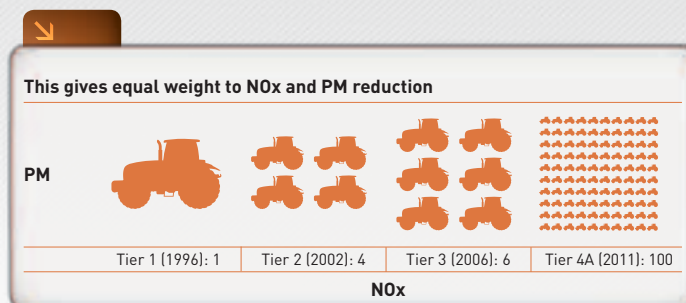
## TIER 4 TECHNOLOGY

### MORE PRODUCTIVE FARMS. MORE PRODUCTIVE FARMERS

New Holland is committed to providing easily accessible agricultural solutions which make farming more productive and efficient whilst respecting the environment. That has always been our mantra, but what does it mean for you? Put simply it means increasing your farm's productivity whilst reducing the emissions you create to achieve it. But it also means going a step further: increasing agricultural mechanisation, freeing people from the grinding drudgery of farm labour that still characterises many farms today, and upskilling the workforce whilst providing them with support to unlock the full potential of modern agricultural machinery.

#### INGENIOUS SOLUTIONS FOR MORE EFFICIENT FARMING

Here at New Holland we never adopt a one size fits all approach to farming. That is why we commercialise machinery of the appropriate emissionisation level for your country. In Europe, North America and Japan stringent Tier 4A norms have been brought into force, and both Australia and New Zealand voluntarily adhere to this code. Yet our flexible approach means that you will always benefit from the most efficient technology required in your country.



#### TIER 4A: 100 TIMES BETTER OFF THAN OVER A DECADE AGO

New Holland has reduced emissions 100 times over the last decade to improve the lives of farmers and their families. In real terms, this means you can run your Tier 4A compliant machine for over 100 days and produce the same amount of emissions as a Tier 1 machine would have in just one day.



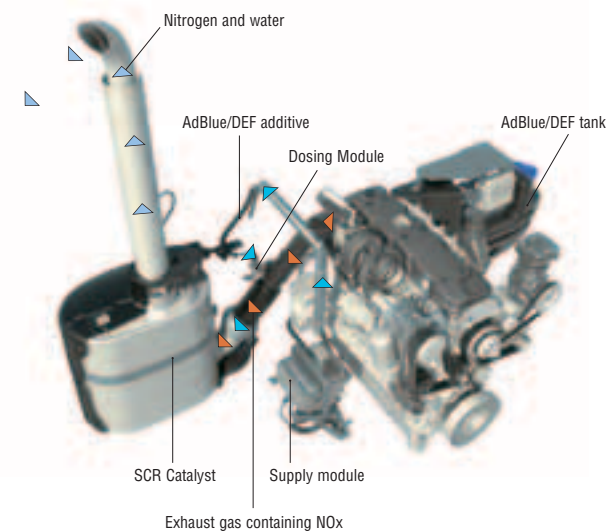


## TIER 4 TECHNOLOGY

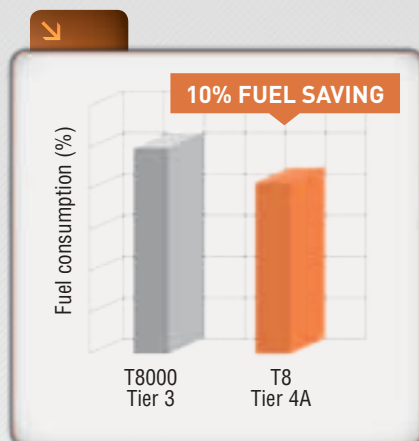
### A CLEAR PRODUCTIVITY AND EFFICIENCY ROADMAP

New Holland was at the forefront of the introduction of Tier 4A emissions technology. The result: today, you benefit from the Industry's widest range of Tier 4A compliant products: 34 tractors and 18 harvesting products. But we've also got our eye fixed on the future, and we were the first manufacturer to lay out a clear roadmap for Tier 4B compliance using ECOBlue™ SCR technology.

It might surprise you to know two things: firstly, operation will remain unaltered on all high horsepower products; secondly at Tier 4B, NOx emissions will be reduced by up to 95%! Furthermore, all technology is tailored to perfectly match the usage profile of each and every machine. Once again these bespoke solutions mean you'll reap the rewards.







Note: Proven by independent testing

### LOWER FUEL BILLS. HIGHER OUTPUTS

All ECOBlue™ SCR Tier 4A products will do more with less. That should be music to any farmers' or contractors' ears. Across the entire Tier 4A tractor range, average fuel savings of 10% mean that you can slash your fuel bills, and of course your carbon footprint, whilst increasing your productivity and subsequent profits. It's a win-win situation!

**ECOBBlue**

Nef Engine	Tier 3 (T7070)	Tier 4A SCR (T7.270)	Improvement
Max Power	185kW / 252hp	198kW / 269hp	+ 7%
Torque	1025Nm	1160Nm	+ 13%
Torque Backup	30%	40%	+ 33%
EPM Band	19kW / 27hp	30kW / 41hp	+ 52%

### REFRESHING BREATHABILITY

ECOBBlue™ SCR engines used on high horsepower products breathe clean fresh air instead of hot, dirty recirculated 'smog' to ensure optimal combustion conditions. The result: up to 7% increased maximum power and up to 13% higher torque on the T7.270. You'll keep going when the going gets tough thanks to significantly improved engine power management bands. When transient response is added to the equation, which means your tractor reacts even quicker when placed under load, you've got productivity all sewn up.

### COMMON RAIL. COMMON SENSE

As the old adage says: good things come in small packages. That's why lower powered Tier 4A products enjoy all of the benefits of Common Rail technology, namely precision fueling and enhanced response. When combined with advanced cooled exhaust gas recirculation technology, to provide you with the most efficient and easy to use package, you'll reduce harmful emissions all within the same compact dimensions as before.



### FPT INDUSTRIAL. THE PERFECT PARTNER

FPT Industrial is New Holland's sister company, and engine development specialist. With over 350,000 SCR engines produced to date, their industry-leading SCR system has been extensively developed and tested in the agricultural, construction and haulage sectors. The result: optimised performance and ultimate reliability.



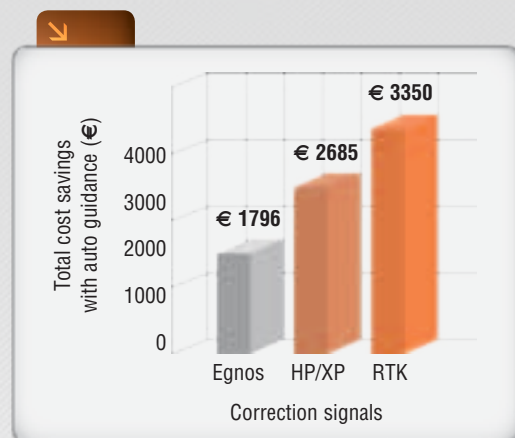


## **PRECISION LAND MANAGEMENT (PLM) FARM WITH PRECISION WITH NEW HOLLAND**

New Holland offers a full range of guidance solutions that can be tailored to suit your individual needs. With a full range of correction signals, New Holland's modular solution can be used on any machine. Intuitive, user-friendly interfaces mean you can use guidance with confidence. PLM® software analyses and plans your in-field tasks so you can enjoy the benefits of more efficient farming. You'll be reducing inputs, saving you money, as well as benefiting the environment. Reduced inputs mean reduced energy-intensive manufacturing and also less wastage and run off. More efficient coverage of your land boosts your profits and gives Mother Nature a helping hand.







### CONTROLLING TRAFFIC IN YOUR FIELDS

Use pre-set guidance paths to ensure the most efficient coverage of every field with the minimum number of passes. When combine harvesting you save fuel and reduce CO<sub>2</sub> emissions by guaranteeing your header is 100% full 100% of the time. When spraying you prevent wasteful over spraying, saving on inputs and also preventing potentially harmful run off. When fertilizing you reduce in-field runs and again save on inputs. Help yourself. Help the environment.



### TARGETED APPLICATION. UNIFORM YIELDS

All combine and forage harvesters can offer advanced yield monitoring techniques. By precision analysing yields, you can pinpoint underperforming areas and focus inputs to enhance your productivity as well as keeping a tight control on them. Your pocket will say thank you. The environment will say thank you.

### PRECISE APPLICATION

When spraying, fertilizing or seeding, use advanced IntelliRate™ Control and Field IQ™ technology to precision place inputs to ensure maximum returns. Uniform planting and crop protection activities guarantee the highest yields, but also help to prevent potentially harmful and wasteful surpluses from damaging your agri-businesses's environmental profile.

### SOIL RESPECT AND PROTECT

You need to look after your soil, after all, it is your farm's lifeblood and it holds your agricultural future within. Damaged soils are one of the key factors which impact on farm profitability and yields. Advanced PLM® mapping enables you to control field traffic to reduce the area which is driven over and that suffers from productivity-impacting compaction. Furthermore, advanced drainage programs can unlock the potential in waterlogged areas, and bring marginal land back into cultivation through efficient irrigation.

## MECHANIZATION

### MECHANIZING WORLD AGRICULTURE

New Holland's history is one of continuous innovation, pioneering firsts and education to make agriculture easier and more productive for the world's farmers, wherever and whatever they farm. Abe Zimmerman's very first corn grinder removed the drudgery from this laborious task. Henry Ford and Giovanni Agnelli are the true founding fathers of global agricultural mechanization, and Leon Claey's mechanized the harvesting process. Today, mechanised harvesting can reduce waste by up to 15 times when compared to traditional, manual harvesting techniques. New Holland has been responsible for freeing millions of agricultural labourers from the back-breaking toil of tilling, sowing, cultivating and reaping by hand, and in the process contributed to massive gains in terms of productivity, efficiency and skilling up the workforce.



#### MECHANIZED HARVESTING BOOSTS PRODUCTIVITY

New Holland is dedicated to increasingly mechanizing the world's harvest with significant benefits. Losses can be reduced from 15%, typical of manual harvesting, to a mere 3% when using state-of-the-art machines. In real terms, that means more valuable grain is harvested to feed the world's ever-growing population.



#### GROWING AGRICULTURAL KNOWLEDGE

In order for local people to unlock the full potential of their New Holland machines they need on-the-ground training. New Holland has undertaken an extensive grass-roots training programme, which covers both operator and service training in emerging countries to provide local people with the skills they require to operate and maintain their equipment in tip-top condition.







## INNOVATIONS

### NEW PRODUCTIVITY AND EFFICIENCY SOURCES



#### HARVESTING INNOVATIONS

New Holland has taken harvesting efficiency to a whole new level. The PowerCruise™ technology, available on the FR range of forage harvesters, optimises engine and ground speed in relation to crop throughput, and can reduce fuel bills by up to 15%. SmartTrax™ rubber tracks, available on the CR and CX7000 and CX8000 combine ranges, reduce soil compaction for enhanced yields.



#### TRACTOR INNOVATIONS

New Holland has developed a range of agricultural solutions to enhance your productivity. Super tight turning from SuperSteer™ front axles can improve productivity by up to 10%. Renowned New Holland innovations such as Auto Command™ continuously variable transmissions and IntelliCruise™ technology all enhance all round productivity.

03

## SUSTAINABLE FARMING



# Sustainable farming. Enhanced profits

The world's rapidly expanding population means that farmers are under intense pressure to produce more to feed an ever growing number of hungry mouths. However, if you want to continue to keep productivity rates sky-high then it is important that the environment is kept in top condition to support you. By reducing the impact of farming on the agricultural environment, you ensure that it stays healthier for longer, and your children and their children will be able to farm the same land just as efficiently. Want more? Use advanced tools to calculate the impact your farm has and find ways to reduce it.







## CARBON FOOTPRINTING

### HOW MUCH CARBON DO YOU PRODUCE? FIND OUT WITH NEW HOLLAND

#### CALCULATE AND REDUCE YOUR FARM'S CARBON FOOTPRINT

Consumers are increasingly demanding farm produce with a reduced carbon footprint. In an effort to support farmers in facing this new challenge, New Holland has developed a carbon footprinting method. Visit [www.carbonid.newholland.com](http://www.carbonid.newholland.com) to discover the exact carbon emissions of your fleet and see just how much you could reduce your carbon footprint by replacing some of your equipment with ECOBlue™ machines.

#### WHY REDUCE CARBON EMISSIONS?

As everyone knows, carbon emissions are one of the key contributors to the greenhouse effect and global warming. With the potential to wreak havoc on established weather patterns, which are a prerequisite for productive farming, it is in all of our interests to reduce our carbon footprint to safeguard the climate for the future of our farms.



#### SAVING FUEL MEANS A REDUCED CARBON FOOTPRINT

Emissions released from burning diesel are a significant contributor to farms' overall carbon footprints. ECOBlue™ SCR technology for Tier 4A compliance reduces NOx emissions and agribusinesses' fuel consumption by up to 10%, bringing about a substantial cut in their carbon emissions.





## **ECOBRAUD**

### **NEW HOLLAND AND BRAUD. YOUR SUSTAINABLE FARMING PARTNERS**

Wine adds a touch of luxury to any occasion, whether it is gracing the finest tables or if it is simply a glass shared with friends. Just take a moment to think, by buying and producing wine with a reduced carbon footprint, you can enjoy one of the finer things in life whilst reducing the impact it has on the environment. ECOBraud is New Holland's Sustainable Viticulture programme and comprises the complete range of viticulture equipment, including Braud grape harvesters and speciality tractors. It is aimed at increasing productivity and profitability whilst reducing the environmental impact of viticulture. ECOBraud has three main pillars: Intelligent Management Systems, managing variable rate inputs and row tracing technology.





### WELCOME TO INTELLIGENT HARVESTERS

The Intelligent Management System enables the harvester to control hydraulic flow and engine speed based on the actual load on the machine. For example, at row ends, when manoeuvring, the shaker system is automatically switched off. This can reduce fuel consumption by as much as 31%, and reduces its carbon footprint significantly.



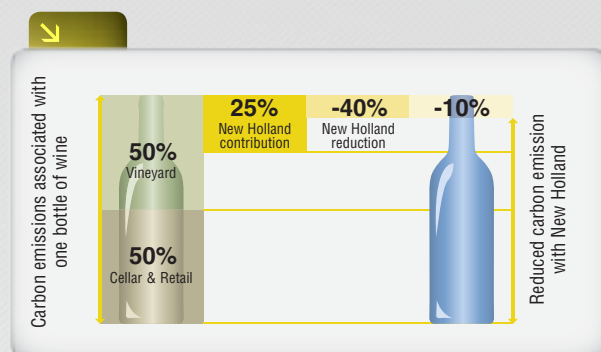
### THE CLEAR PATH FOR SUCCESS

Row tracing technology uses guidance correction signals and a machine mounted antenna to ensure that each and every row is covered just once. This consigns duplicated rows and wasted inputs to the history books, increasing harvesting productivity and efficiency as well as reducing the environmental impact of viticulture.



### MANAGING VARIABLE RATE INPUTS

Fertilizer production is a massively energy-intensive process and any reduction in the energy required to produce it will significantly reduce the environmental impact of farming by default. The speciality spreader kit uses Field IQ™ technology to enable inch perfect fertiliser placement. The system reads pre-prepared yield maps, and only applies fertiliser where it is needed to reduce input costs whilst maximising yields.



### ECOBRAUD REDUCES YOUR CARBON FOOTPRINT

Consumers are increasingly demanding farm produce with a reduced carbon footprint, and the ECOBraud strategy that encompasses the complete range of New Holland viticulture equipment, including Braud grape harvesters and speciality tractors will directly contribute to a 10% reduction in the overall carbon footprint of each and every bottle of wine produced. When fuel savings from IMS and fertiliser savings from spreader management are combined, a reduction in the carbon footprint of vineyards by up to 40% is achievable. This is composed of a 31% reduction thanks to fuel savings through IMS and spread management contributes a further 9% reduction, well ahead of the 2020 targets set by professional bodies, which mandate a 20% overall reduction.



## CONSERVATION AGRICULTURE WORKING WITH NATURE TO ENHANCE YOUR PROFITS

Conservation. Agriculture. These words have often been considered in direct opposition to each other. Thanks to state of the art farming techniques, however, they should be considered as perfect partners. By combining sustainable management of the soil, residue and inputs with advanced crop diversification techniques, the environmental impact of agriculture can be significantly reduced, whilst substantially enhancing your profitability and productivity. You no longer need to make a choice: from conservation or agriculture to conservation agriculture, New Holland has the tools to support you.



### MINIMUM SOIL DISTURBANCE

Excessive cultivation can lead to irreparable soil damage, fracturing layers of organic matter and destroying natural soil structure. The no-till approach leaves soil virtually undisturbed after the growing season, enabling it to lock in nutrients and moisture to benefit next season's crops, all whilst combatting erosion. Moreover, water preservation substantially improves as the soil structure is maintained. Rain water is preserved within the soil as run off and evaporation losses are reduced.

A wide range of direct drilling and seeding equipment has been engineered by design to deal with the rigors of direct drilling. Controlled traffic also limits the amount of damaging compaction and ensures that tractors, combines and sprayers all toe the same line.







#### **NO-TILL BENEFITS**

No-till farming delivers numerous benefits including the preservation of forested land, the world's green lung, and in 2011 saved up to 36 billion trees! Fuel savings of up to 66% are possible, as each section of field is covered only once, which also reduces soil compaction. Want more? How about impressive yields which are up to 72% higher when compared with traditional cultivation techniques.

#### **PRECISION MANAGE INPUTS**

A whole range of advanced farming technology is easy to access and available at your fingertips to precision manage inputs to optimise both their application and usage. Keep an eagle eye on just how much fertilizer or spray you apply thanks to IntelliRate™ control. Prescription maps can be easily generated using advanced PLM® software, and monitor application in real time thanks to PLM® Connect telematics.

#### **VARIETY IS THE SPICE OF LIFE**

Efficient and varied crop rotation is the key to maintaining soil vitality. By planting a variety of different crops the soil is never stripped of essential nutrients. Crop rotation has numerous benefits including nitrogen fixing, easier pest management and it can even lead to a reduction in pesticide application. Precision seeding can be managed using the full range of planters and PLM® software that optimise application.



04

COMMITTED COMPANY



# At the forefront of sustainable farming

The Clean Energy Leader® strategy influences every decision we take here at New Holland. It might be termed walking the talk or even leading by example, but what it really means is that we have put the Clean Energy Leader programme at the heart of our business, and it characterises what we do every day. From giving used parts a second lease of life, right through to reducing the environmental impact of our production, we are committed to safeguarding our planet to ensure that you can keep reaping the rewards of your hard work.







## PLANT CERTIFICATION

### PRODUCED NEAR YOUR FARM, FOR YOUR FARM

New Holland's global footprint spans all five continents and keeps in touch with almost every agricultural reality in the world. By concentrating production, where possible, close to the end user, transport of products is reduced, saving valuable fossil fuels and reducing the carbon footprint. Local suppliers are contracted, where possible, to reduce the part-kilometres that go into producing every machine. Finally, by using local suppliers and local factories that employ local people, New Holland is contributing to the local economy, not only through agriculture, but also through production.

#### CERTIFIED PRODUCTION PLANTS

##### **29** plants

have achieved OHSAS 18001 health and safety certification, keeping employees safe and well at work.

##### **28** plants

have been awarded ISO 14001 environmental management certification, which rewards their unceasing quest to reduce the environmental impact of production.

##### **26** plants

are ISO 9001 certified for quality management systems, to ensure the highest build quality.

##### **13** plants

are ISO 50001/BS EN 16001 energy management compliant, which recognises their substantial achievement in reducing emissions produced.

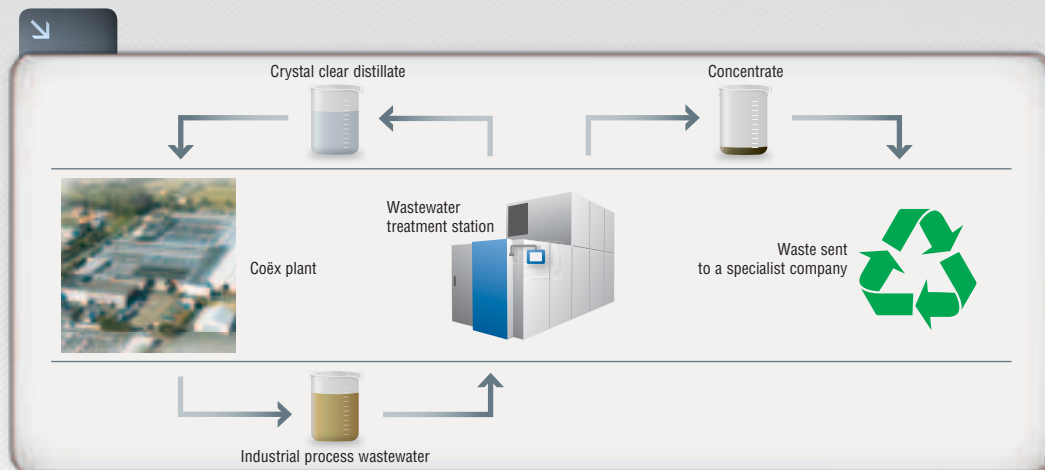
## RECYCLING

### GIVING USED PARTS A SECOND LEASE OF LIFE

When you visit any farm, it does not take long to realise that farmers are very inventive people, and above all they hate throwing things away. A whole host of equipment is given a second lease of life once its first lifespan has come to an end. Here at New Holland we've copied that principal from farmers and we remanufacture used components, restoring them to 'as new' quality, which means that they have a second lease of life too, ready to go back into tractors, combines and forage harvesters.

## INTELLIGENT WATER MANAGEMENT

New Holland is committed to conserving the most precious agricultural commodity: water. In Coex, France, water management techniques enable up to 90% water recovery. In Plock, Poland, a new water consumption monitoring system has reduced water consumption by 37% as well as reusing a high percentage of water within the production process. It even enables the plant to produce demineralised water following the painting cycle.



## INCREASING THE QUALITY LIFESPAN OF PARTS

Remanufactured parts are frequently cheaper than buying brand new replacements. This makes it especially attractive for farmers to choose New Holland quality guaranteed parts when replacing high cost items such as engines and turbo chargers. Up to 80% of products can be recycled! When genuine parts are used machines run more efficiently and are more productive.



## MORE EFFICIENT TRANSPORT

New Holland always selects the most efficient and lowest emissions transport solutions possible, to reduce the impact of its products. This includes selecting modern, fuel efficient trucks, alongside using intermodal solutions for both component shipping and final product distribution.





#### WORKING FOR A BETTER WORLD

New Holland is committed to improving not only the working environment through ergonomic analysis, but also the environment, and is actively involved in biodiversity projects in Brazil and Canada. It is also at the cutting edge of greenhouse gas emissions reporting.

MEMBER OF

**Dow Jones  
Sustainability Indices**

In Collaboration with RobecoSAM

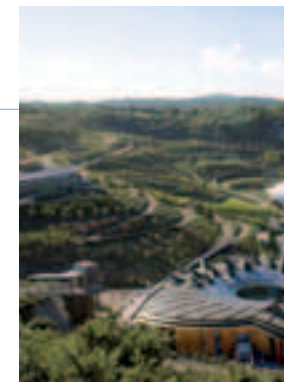
#### SECTOR LEADER IN DOW JONES SUSTAINABILITY WORLD AND EUROPE INDEXES

For the third consecutive year, CNH Industrial has been named Sector Leader in the Dow Jones Sustainability Indices (DJSI) World and Europe. The pillars of the New Holland Clean Energy Leader® strategy played a significant role in obtaining this position.

## REDUCING THE IMPACT OF PRODUCTION

All plants participate in the stringent World Class Manufacturing programme, which is focused on increasing the quality of production through ten key pillars. Energy reduction is a key requirement. To date, 13 plants have achieved the prestigious ISO 50001 certification in energy management. All New Holland plants are working towards the ambitious target of reducing energy consumption by 15% by 2014.





## Discover the virtual Clean Energy Leader® world

The Clean Energy Leader website **[www.thecleanenergyleader.com](http://www.thecleanenergyleader.com)** is your open all hours, one stop shop to find out everything about sustainable agriculture. We know that your busy farming schedule means you need access to information when it's convenient, so the Clean Energy Leader website is perfect for you. It has become the place to go for information on sustainable agriculture. Browse through exciting and interactive sections dedicated to sustainable farming, watch expert videos and hear what farmers themselves have to say about sustainable farming. Keep up to date with the latest comments from social media and keep your finger on the pulse and find out what is trending now with the continuously updating tag cloud. Finding out what environmentally friendly means in real terms, and what it could mean to you is just one click away.







## The road to becoming the Clean Energy Leader

**May 2006**

- New Holland is the first manufacturer to approve the use of 20% biodiesel in all products and the TM Extreme endurance trial proves the feasibility of 100% biodiesel usage.

**April 2007**

- New Holland is chosen as the official partner for Eden Project in Cornwall, UK, thanks to its eco-friendly image.

**November 2007**

- All products with New Holland engines are compatible with 100% biodiesel.

**February 2009**

- The world's first NH<sup>2</sup>™ zero emissions, hydrogen powered tractor is unveiled within the Energy Independent Farm concept at SIMA, France, and wins a Gold Innovation Medal.

**May 2010**

- New Holland embarks on a strategic collaboration with CTC biomass in Brazil.

**September 2010**

- The La Bellotta farm outside of Turin, Italy, is chosen as the first pilot Energy Independent Farm. A clear roadmap for Tier 4B compliance, with SCR only for high horsepower tractors is announced.

**November 2011**

- ECOBraud and sustainable viticulture win a silver medal at Agritechnica, Germany. The second generation NH<sup>2</sup>™ fully functional hydrogen tractor is unveiled. The Carbon Calculator and carbon footprinting programme is launched.

**January 2012**

- New Holland has the largest range Tier 4A compliant machines, with 34 tractors and 18 harvesting products.

**September 2012**

- New Holland entered into strategic partnership with Growth Energy, to promote the production and use of ethanol in the United States of America.

**November 2013**

- New Holland's methane tractor is launched.

**Future**

- Pushing the boundaries of sustainable farming to enhance agricultural productivity and efficiency across the globe!



[www.newholland.com](http://www.newholland.com)  
[www.thecleanenergyleader.com](http://www.thecleanenergyleader.com)  
[www.cnhindustrial.com/en-US/sustainability2013](http://www.cnhindustrial.com/en-US/sustainability2013)



The data indicated in this folder are approximate. The models described here can be subjected to modifications without any notice by the manufacturer. The drawings and photos may refer to equipment that is either optional or intended for other countries. Please apply to our Sales Network for any further information. Published by New Holland Brand Communications. Bts Adv. - Printed in Italy - 05/14 - TP01 - (Turin) - **138000/INB**

New Holland with

