

Green Efficiency in action



Get the
facts
on fuel
efficiency



Comparing tractor fuel efficiency is now as easy as it is for cars

It's now so easy to find out the fuel economy for tractors!

The DLG PowerMix test, introduced by the Deutsche Landwirtschafts-Gesellschaft (DLG), is the first fuel consumption test for tractors which is based on common working conditions. This test provides tractor buyers with a good guide to what they can reasonably expect to get in the field.

The DLG PowerMix total average

The DLG PowerMix total average is a measure of fuel consumption based on an average of 12 different cycles for draft, PTO and mixed (including hydraulic) applications. Although the test is performed on a test track they are designed to simulate common working conditions such as manure spreading, bale wrapping and ploughing.

The test track ensures consistency as every tractor operator knows that in the field, soil conditions, landscape and different machinery can cause significant variations in fuel consumption, making test comparisons meaningless.

DLG PowerMix versus OECD Test

Up until now the most common fuel efficiency test has been carried out in accordance with codes of the Organisation for Economic Co-operation and Development (OECD). There are 25 approved testing stations worldwide and many in the agricultural industry will be familiar with those published by the Nebraska Tractor Test Laboratory in the USA.

While the test still has a place, it only provides data for maximum drawbar, PTO and hydraulic power in static conditions. The DLG PowerMix total average does not aim to replace the OECD test but provides data that is closer to actual field operating conditions.



The DLG (Deutsche Landwirtschafts-Gesellschaft or German Agricultural Society) is dedicated to promoting technical and scientific progress in the agricultural and food sectors. Politically independent, it has over 20,000 members and shares expertise worldwide (www.dlg.org).

GreenEfficiency. That's John Deere

John Deere understands it's not any one single part of a tractor that determines its fuel efficiency. The most fuel efficient tractors are when all the different components work together in harmony.

John Deere manufactured components

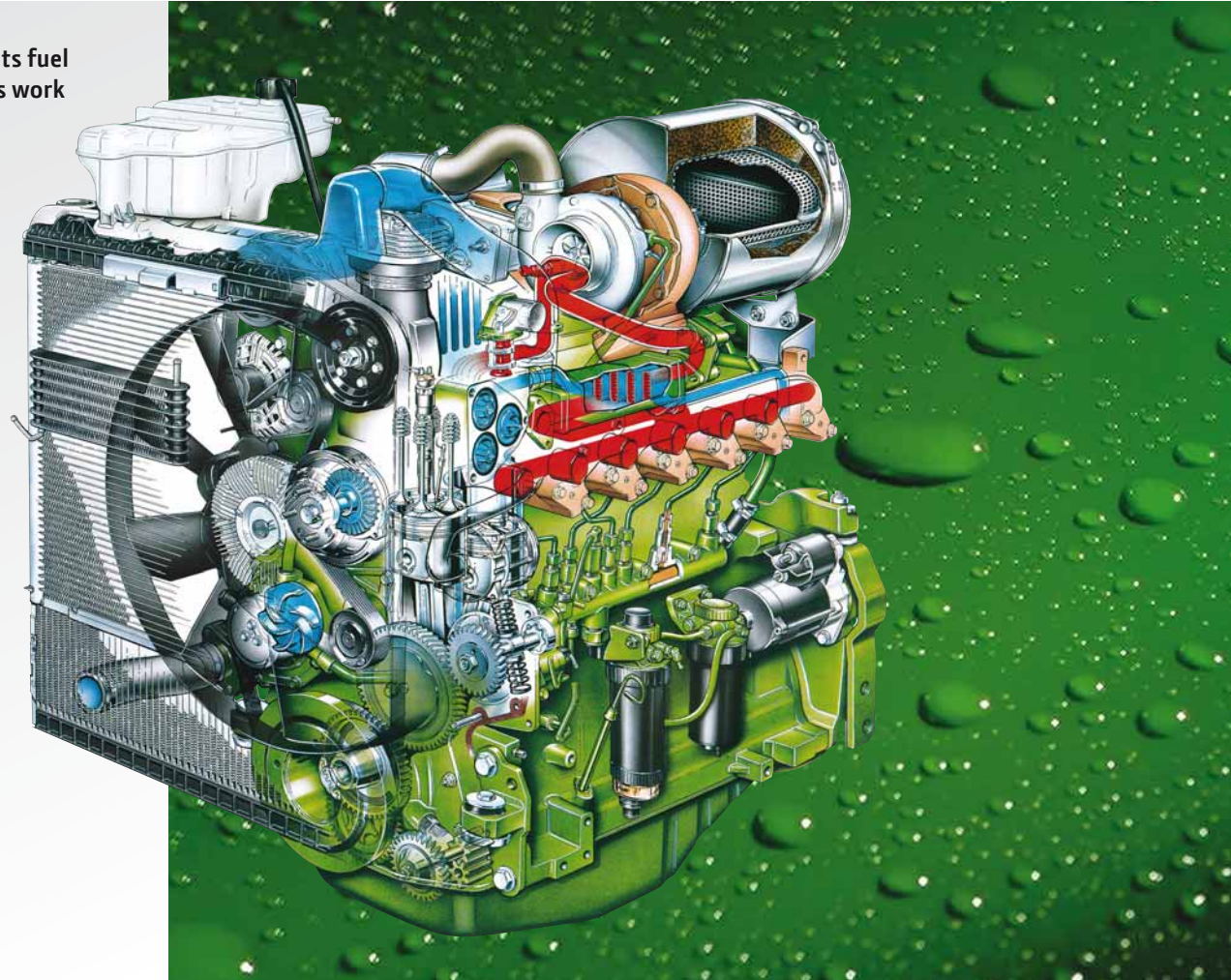
Our GreenEfficiency technology optimises all the tractor's key components from the cooling system to the engine, hydraulics and transmission systems. We're able to design and manufacture all the critical components so they work together in the most efficient way.

Advanced engine technology

The PowerTech Plus engine takes performance to a whole new level. Designed and built by John Deere, the combination of four valves per cylinder a Variable Geometry Turbocharger (VGT), externally cooled Exhaust Gas Recirculation (EGR) and Charge Air Cooler ensure every drop of fuel counts.

Proven

So it's perhaps not surprising that most of our tractor series show excellent fuel efficiency. Of course, you don't have to take our word for it either. On the following pages you can read about PowerMix and other test results which prove that John Deere tractors can give you more hectares for fewer litres.



John Deere PowerTech Plus engines with Intelligent Power Management (IPM) give you both fuel economy and additional power when you need it most – up to 18 additional kW (25 hp) over rated levels during transport and mobile PTO applications

Save up to 8% fuel with the 6030 Premium Series.

Greater output. Less fuel consumption.

We have boosted the power of the new 6030 Premium Series by up to 4 kW (5 hp) while simultaneously lowering fuel consumption. So you can do more while using less fuel.

Work more effectively.

Compared to its predecessor, the new 6430 Premium achieves a remarkable 8% reduction in fuel consumption, as proven by a recent DLG PowerMix test¹.

4-cylinder delivers 6-cylinder performance

Logic tells you that changing a 6-cylinder engine for a lighter, 4-cylinder engine won't give you more power and better traction? But the new 6534 with 92 kW (125 hp) does..

A test from the University of Madrid

A test from the University of Madrid² also showed the different weight distribution improved traction as well as delivering more than 7% lower fuel consumption on uphill transport compared to its 6-cylinder predecessor. So now you can enjoy the power and productivity of a large frame tractor with lower running costs and better performance.



¹ DLG-PowerMix test, DLG-Testzentrum (11.2009)

² Comparative field test between 6534 and 6530, Polytechnic University of Madrid (UPM) published in MAQ-Vida Rural (15.04.2010)

³ DLG-PowerMix test, DLG-Testzentrum (01.2010)

Model	DLG PowerMix total average (g/kWh)
6430 Premium	292 ¹
6534 Premium	294 ³

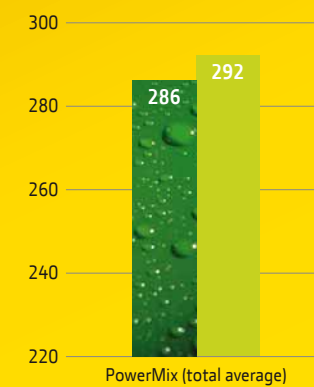
6-cylinder power

Further tests by the DLG⁴ show the excellent performance of John Deere 6030 Premium Series tractors. On average the 6630 Premium had a low fuel consumption of 298 g/kWh⁴.

In a comparative test the 6930 Premium delivered a lower fuel consumption of just 286 g/kWh⁵ compared to 292 g/kWh for the Claas Arion 640 Cebis⁶ with the same engine but different vehicle concept.



Specific Fuel Consumption (g/kWh)



John Deere 6930 Premium AQ+ Eco
(DLG-PowerMix test, DLG-Testzentrum (03.2010))

Claas Arion 640 Cebis
(profi 10.2009)

⁴ DLG-PowerMix test, DLG-Testzentrum (03.2010)

⁵ DLG-PowerMix test, DLG-Testzentrum (03.2010)

⁶ Claas Arion 640 Cebis (profi 10.2009)

Model	DLG PowerMix total average (g/kWh)
6630 Premium	298 ⁴
6930 Premium	286 ⁵

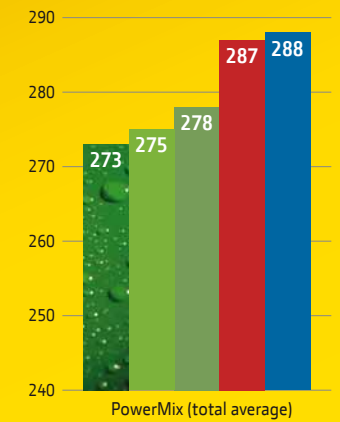
The competition has stopped: to refuel

Once again, John Deere leaves the competition behind. In the DLG PowerMix test (total average), the 7530 Premium can save you up to 5 % compared to its main competitors.⁷

It's all down to John Deere **GreenEfficiency** technology. It includes a Variable Geometry Turbocharger and Intelligent Power Management which reduce engine load without compromising on power output.



Specific Fuel Consumption (g/kWh)



- John Deere 7530 Premium (DLG-PowerMix, DLG-Testzentrum 05.2010)
- Deutz-Fahr Agrottron M 640 ProfiLine (profi 03.2009)
- Fendt 820 Vario TMS (profi 10.2007)
- Case IH Puma 180 (profi 05.2008)
- New Holland T7040 (profi 12.2008)

⁷ John Deere 7530 Premium (DLG PowerMix test 05.2010); Deutz-Fahr Agrottron M 640 ProfiLine (profi 03.2009); Fendt 820 Vario TMS (profi 10.2007); Case IH Puma 180 (profi 05.2008); New Holland T7040 (profi 12.2008)

Outstanding performance at drawbar power

Fuel efficiency, productivity and innovation:

Compared to its predecessor, the new John Deere 8R Series tractors achieve a remarkable reduction in fuel consumption:

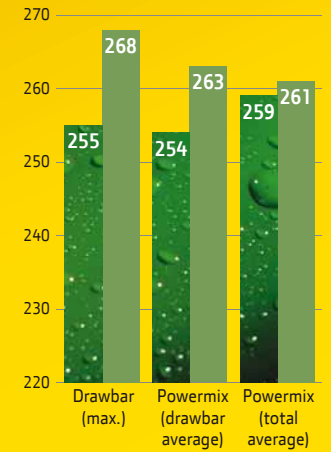
DLG PowerMix tests in max drawbar conditions have shown that the 8345R delivered a fuel efficiency advantage of up to 5% compared to one of its main competitors.⁹

Award winning innovation

The results come on top of a series of awards for the 8R including gold medals at Agritechnica (2009) and FIMA (2010) for Active Command Steering and a silver medal at FIMA for the new AirCushion suspension system.



Specific Fuel Consumption (g/kWh)



John Deere 8345R (DLG Test Report Nr 5926F)

Fendt 936 Vario (profi 07.2008)

⁹ 8345R (DLG Test Report 5926F March 2010); Fendt 936 Vario (profi 07.2008)

3 steps to better fuel efficiency

Even if you're not ready to buy a new John Deere tractor with Green Efficiency, you can still maximise the fuel efficiency of your current tractor by following these 3 simple steps.

Contact your John Deere dealer for more tips and advice on improving fuel efficiency and find out how our range of **Green Efficiency** tractors cover more hectares for less litres.

1

Check your tyre pressures

The wrong tyre pressures can result in loss of power, excessive tyre wear and soil compaction. Take a few moments to check the pressures for the task you're performing in your Operator's Manual.

And remember:

20% over-inflation = 30% performance loss*

20% under-inflation = 26% performance loss*

2

Optimise your ballast

Over-ballasting is the most common mistake. After all, it's easy to leave those weights on when switching from one application to another. Correct ballasting depends on the type of implement you are using and the speed of travel. You'll find all the information you need on the correct weight combinations in your Operator's Manual.

3

Change your driving style

Over the years most of us slip into bad habits that unnecessarily burn up fuel, so why not monitor your driving style for a few days. Engine monitoring shows that a large part of a tractor's hours are spent idling. Simple actions like switching off the engine if you're not working, selecting the most appropriate gear and avoiding unnecessary journeys will help to cut your fuel bill further.

* Farmers Weekly Interactive (23rd March 2008)

www.JohnDeere.co.uk
www.JohnDeereInternational.com
www.JohnDeere.co.za
www.Deere.com.au



This literature has been compiled for worldwide circulation. While general information, pictures and descriptions are provided, some illustrations and text may include finance, credit, insurance, product options and accessories NOT AVAILABLE in all regions. PLEASE CONTACT YOUR LOCAL DEALER FOR DETAILS. John Deere reserves the right to change specification and design of products described in this literature without notice. "John Deere's green and yellow colour scheme, the leaping deer symbol and JOHN DEERE are trademarks of Deere & Company."