PRACTICE ABSTRACT NO. 17

T6 METHANE POWER

Main results / outcomes

The New Holland T6.180 Methane Power is the world's first 100% methane powered production tractor and is key to CO_2 reduction without compromising performance. Farmers can make use of agricultural or animal waste (as well as specifically-grown energy crops), to generate biomethane, which powers the tractor, which, in turn, helps to grow those energy crops. Alternatively, refilling can be performed directly from the gas grid network or at specific biomethane stations. New Holland can provide an eco-friendly solution to all business needs.

Practical recommendations

With the same levels of power and torque as its diesel equivalent, farmers also benefit from up to 30% lower running costs. It produces 99 % less particulate matter, cuts overall emissions by 80% and when using methane - reduces CO_2 emissions by 10-15%. When running on biomethane - near-zero CO_2 emissions are achievable. When using Fugitive methane, the carbon footprint is negative. The tractor is powered by the FPT 6-cylinder engine similar to the ones in the current T6 and the T7 range, with no difference in pulling power between the two fuel sources allowing the same range of field operations.

The T6 Methane Power tractor provides valuable economic and practical advantages to biogas plant operators, farmers with access to the gas network, and governments looking to reduce their emissions footprint by expanding their fleets of Compressed Natural Gas vehicles. Not only does the methane tractor have the potential to reduce polluting emissions by 80% and cut the fuel costs by a significant amount, it directly contributes to a lower carbon footprint.

Figure 1. The New Holland T6 Methane Power tractor (Copyright CNHi)

Further information

T6 Methane Power info

About this abstract

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Date: March 2022

AgroFossilFree is a H2020 multi-actor project that will evaluate the current status in EU agriculture regarding energy use and assess existing needs, allowing farmers to optimize agricultural production through more efficient energy use and reduced GHG emissions, resulting in economic, agronomic and environmental benefits. AgroFossilFree will create a framework under which critical stakeholders will cooperate to evaluate and promote the currently available Fossil-Energy-Free Technologies and Strategies (FEFTS) in EU agriculture. The project is running from October 2020 to September 2023.

Website: www.agrofossilfree.eu

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement ID 101000496