More Than One Way to Reduce Agricultural Emissions - AGCO Power Reveals Results of Years of Research and Development

November 01, 2023

AGCO Power, part of the AGCO Corporation, unveils a wide range of solutions from alternative fuels to electric systems at the Agritechnica trade fair to be held in Germany in November.

This press release features multimedia. View the full release here: https://www.businesswire.com/news/home/20231031438108/en/

The research and development work done at the engine production plant of AGCO Power in Nokia, Finland, has reached a historic point. “We are developing off-road solutions to sustainably meet the farmers’ needs including solutions using battery electric, hydrogen, methane and methanol,” says **Kelvin Bennett** , Senior Vice President of Engineering at AGCO. “Sustainable agriculture development calls for radical reduction of machinery emissions, and these engines are the most significant power generation prototypes in our history.”

From HVO to hydrogen

All existing AGCO Power engines, which power the world’s leading tractor brands such as Fendt, Valtra and Massey Ferguson, are fully compatible with Hydrotreated Vegetable Oil (HVO) diesel fuel that can reduce greenhouse gas emissions by 75%–95% compared to traditional diesel fuel. The latest engine product family, AGCO Power CORE, is designed from ground-up with future fuels in mind. The next model in the CORE engine series, the economical and low-emission **CORE50,** is unveiled at Agritechnica.

The flexible CORE platform is also used in the **eHydrogen prototype mild hybrid engine** , also displayed at the trade fair. In hybrid technology, the continuous power from hydrogen-powered engine is dynamically complemented by the extra power and torque from electricity.

Double the range with fuel cell range extender

AGCO Power will also showcase the fuel-cell-based **e100 Vario Range Extender Concept** that will double the operating time of the existing electric tractor by Fendt from four to eight hours. The system reforms fossil-free green methanol into hydrogen, which is further converted into electricity that charges the tractor batteries while working. “As liquid, the green methanol can be stored in a tank much like diesel fuel, which means storing it does not require the same complex arrangements as storing hydrogen, for example,” says **Kari Aaltonen** , Director of Engineering at AGCO Power. “Our R&D must focus on a variety of options since the most suitable solutions depends on the unique needs of farmers.”

Private grid for storing and distributing electricity

Electricity plays an increasingly important role in the future of agriculture. The **Microgrid Concept** presented by AGCO Power at the trade fair is helping farmers build their own smart electrical grids. It provides uninterrupted power from the source that is the least expensive at a given time – the power grid, a wind or solar power plant, a generator powered by its own energy source or a battery pack. The Microgrid Concept contains the intelligence that controls the power sources and storage.

Cleaner agriculture also involves storing renewable power for later use. For example, the Microgrid Concept can connect to a charging station for electric vehicles. To showcase this, the AGCO Power stand at the trade fair will display the **Battery Pack** designed for the Fendt e100 Vario electric tractor. The liquid-cooled battery pack of 700 volts and 100 kWh offers high performance and capacity for agricultural needs.

Images for media

About AGCO Power

Located in Linnavuori, Finland, and with manufacturing units in China, Brazil and Argentina, AGCO Power is one of the world’s leading manufacturers of diesel engines. AGCO Power has been bringing reliable power to where it is needed for over 80 years.

About AGCO

AGCO (NYSE:AGCO) is a global leader in the design, manufacture and distribution of agricultural machinery and precision ag technology. AGCO delivers customer value through its differentiated brand portfolio including core brands like Fendt®, GSI®, Massey Ferguson®, Precision Planting® and Valtra®. Powered by Fuse® smart farming solutions,

AGCO's full line of equipment and services help farmers sustainably feed our world. Founded in 1990 and headquartered in Duluth, Georgia, USA, AGCO had net sales of approximately $12.7 billion in 2022. For more information, visit www.AGCOcorp.com. For company news, information, and events, please follow us on X (formerly Twitter): @AGCOCorp. For financial news on Twitter, please follow the hashtag #AGCOIR.

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