

AGCO Power Unveils Next-Generation Sustainable Powertrain Innovations

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Highlights include the newest and next-generation CORE diesel engine family—the 8-liter, 252 kW CORE80 powering the new 5th-generation of the Fendt 800 Vario—alongside the AGCO Power CO₂ Calculator concept and a 150 kWh Future Battery Concept developed in-house by AGCO Power, and cost-effective remanufactured engines that extend machine lifespans while reducing environmental impact.

AGCO Power's innovations support farmers as they transition from fossil diesel to sustainable, low-carbon options—and address today's realities as well, from emissions reduction to continuous improvements in total cost of ownership.

AGCO Power designs and manufactures engines and power sources for AGCO's world-leading tractor brands—Fendt, Massey Ferguson, and Valtra—as well as for other off-road machinery and work equipment.

AGCO Power Future Battery Concept

Making its world premiere at Agritechnica, AGCO Power's Future Battery Concept is the company's latest product development project. The concept battery is based on NMC cell chemistry and offers 150 kWh of capacity. The battery is designed by AGCO Power.

AGCO Power is closely tracking advances in battery cell technology and evaluating multiple chemistries, including solid-state batteries. According to Director Engineering **Kari Aaltonen**, battery technology currently appears promising for agricultural applications.

Electric powertrains also offer clear advantages for work machines: lower operating costs than conventional powertrains and an almost service-free setup. Aaltonen estimates that powertrains based on the concept battery could reach production in 5-7 years.

New CORE80 powering the new Fendt 800 Vario Gen5

At Agritechnica, the newest member of AGCO's modern CORE diesel engine family, the CORE80, powers the new Fendt 800 Vario Gen5. As the biggest and smartest of the family, the 8-liter CORE80 delivers even more torque (1680 Nm) and power (252 kW).

AGCO Power CORE engines have already proven top-tier efficiency according to measurements by the independent DLG Test Centre. In the PowerMix Test 2.0 of the German Agricultural Society (DLG, Deutsche Landwirtschafts-Gesellschaft), tractors are assessed for fuel and AdBlue consumption under typical workloads on a rolling test bench to determine overall energy efficiency.

The smaller CORE50 and CORE75 engines will also be on display at Agritechnica. All CORE engines are manufactured at AGCO Power's Linnavuori site in Finland. The new, low-emission and energy-efficient CORE engines are already in use in leading Fendt models: the 5-liter, four-cylinder AGCO Power CORE50 powers the Fendt 500 Vario Gen4 and Fendt 600 Vario series, while the 7.5-liter CORE75 powers the Fendt 700 Vario Gen7 series.

AGCO Power CO₂ Calculator concept with Valtra

In collaboration with Valtra, AGCO Power will present its CO₂ Calculator concept at Agritechnica. The solution detects the type of fuel used and calculates the operational carbon footprint of agricultural machinery. It combines an engine-mounted fuel sensor with a cloud-based software solution that calculates accurate CO₂ emissions in real time. The visualized and stored data enables farmers to present verified figures to customers and supply chain partners.

Reliable data on the operational carbon footprint is a major competitive advantage for farmers. It enables more informed decisions and allows them to track, visualize, and verify their environmental impact," says **Jarno Ratia**, Director of Product Management of AGCO Power.

Agricultural traders also recognize the value of the solution. **Bianca Lind**, Managing Director of VERA VIS GmbH, a wholly owned subsidiary of *Agravis Raiffeisen AG* states:

VERA VIS GmbH is committed to supporting farmers in meeting the requirements of the EU Green Deal while ensuring sustainable and profitable crop production. By integrating the AGCO Power CO₂ Calculator, we enhance the accuracy of our site- and crop-specific Product Carbon Footprint calculations. Validated, site-specific fuel usage data strengthens the credibility of sustainability reporting and simplifies documentation for all stakeholders—especially the farmer."

Remanufactured engines: a cost-effective solution for older machines

AGCO will also demonstrate at Agritechnica how the company supports farmers by remanufacturing used diesel engines to new condition. For the end user, a factory-remanufactured engine offers fast availability as a replacement for a worn unit and significantly lower investment costs compared to a brand-new engine.

At AGCO Power's Linnavuori factory in Finland, a renewed remanufacturing production line has just been completed, increasing capacity from over 1,000 engines to 2,500 engines per year. This expansion supports the company's long-term strategy and Farmer First approach.

Remanufacturing can lower total cost of ownership and reduce the carbon footprint versus a new machine—and, crucially, it can minimize downtime when engine problems occur. Remanufactured engines extend machine lifespans and enable up to 80% of an engine's mass to be reused, including all cast-iron components," says **Jussi Rinne**, Director, Quality and Aftermarket.