

Fully electric tractor: The Fendt e100 Vario

The agricultural sector and the public sector take their obligation to reduce CO₂ emissions seriously. Numerous farms and municipalities are already reducing their carbon footprint by generating renewable energy. After the Fendt e100 V Vario, Fendt is now introducing the standard Fendt e100 Vario tractor. Charged with green electricity, it is CO₂ neutral, for example in municipalities, on livestock farms or in vegetable cultivation.

A compact powerhouse

The Fendt e100 Vario was developed for use in the municipal sector, vegetable sector and livestock sector as well as a farm tractor on farms with their own energy production. An external width of 2.16 metres and a height from 2.64 metres with standard tyres, the compact Fendt e107 Vario model has comparable dimensions to the Fendt 200 Vario. The Fendt e107 Vario is available in the Profi and Profi+ equipment variants.

The drive train of the Fendt e107 Vario is made up of the battery with an electric motor and the Fendt Vario transmission. The Fendt e100 Vario has a powerful electric motor whose power is utilised highly efficiently in three driving modes. The maximum power range according to ECE R85 is 50 kW (68 hp) in Eco mode. In Dynamic mode, up to 55 kW (75 hp) is available and, as peak drive power, the machine provides up to 66 kW (90 hp) for short periods in Dynamic+ mode. Its maximum torque of 347 Nm ensures optimum pulling power and a dynamic driving experience.

With a battery capacity of 100 kWh, the tractor achieves an operating time of around 4 - 7 hours when used in the partial load range, such as for mechanical weed control or planting work. Energy-intensive operations like using a trailer in transport will reduce the operating time.

Technical information

Battery	100 kWh battery capacity
Electric motor	55 kW continuous power 66 kW peak power
Charging rate	22 kW AC/80 kW DC fast charging

Loading professional

The Fendt e100 Vario can be optionally equipped ex works with the Fendt Cargo 3X65 front loader. The design of the Fendt comfort cab is optimised for use with a front loader. The roof window in the Fendt e100 Vario ensures the best view with a 100° viewing angle. This facilitates front loader work at height, such as storing bales. The optional 3L-joystick can be used, among other things, to operate the front loader with integrated directional shift function and there is no need to change your grip.

Emission-free working

Numerous farms and municipalities are already equipped with an infrastructure for generating renewable energies and utilise sustainable energy sources such as photovoltaics, wind power or biogas. When charged with this green electricity, the Fendt e100 Vario is virtually CO₂ neutral - a closed energy cycle from generation to utilisation. This has two positive consequences: The farm's CO₂ emissions and the tractor's running costs are significantly reduced. Lower maintenance costs due to the elimination of technologies for exhaust gas after-treatment, engine filters and engine oil further reduce the running costs of the machine.

The combination of compact dimensions, the Fendt Vario transmission and emission-free operation means that, in addition to use in arable farming, grassland or vegetable cultivation, it can also be used in stables and greenhouses, as neither people nor animals are exposed to exhaust fumes. In tractors with diesel engines, the exhaust pipe can also heat up and damage the film in film tunnels, as the Fendt e100 Vario operates without an exhaust pipe and at significantly lower temperatures, these risks are gone. The electric tractor can also be used in the municipal sector for maintaining green spaces or for winter road maintenance.

The electrically powered tractor works more quietly than machines with a conventional diesel engine. This extends the operating time in noise-sensitive areas such as residential areas or urban parks, for tasks such as winter gritting. Approved for a speed of up to 40 km/h, the e-tractor can also be used for short-distance transport in municipalities and on farms.

Quick and easy recharge without additional investment

In line with the automotive standard, the Fendt e100 Vario is equipped with a CCS2 socket and is compatible with

standard wall outlets or public charging points. So far, agricultural farms and local municipalities do not have a comprehensive infrastructure with DC fast-charging sockets (superchargers). The Type 2 plug enables charging via alternating current up to 22 kW. The Fendt e107 Vario can also be charged via the widely used industrial socket with 32 A in combination with a mobile charger with 22 kW. With this charging capacity, the battery can be fully charged within approx. 5 hours.

Ready for future developments, DC fast charging with up to 80 kW charging power is possible via a CCS socket. The battery charges from 20 to 80 per cent capacity in around 45 minutes. Customers can use the corresponding charging system depending on the local infrastructure.

Optional Fendt charging infrastructure

Fendt also offers a mobile 22 kW quick-charging cable set including a wall bracket via the AGCO Parts division. The charging cable has adapters for 16 and 32 A so that it can be used for different initial conditions. There is also a wall socket with an option for invoicing in Fendt branding. The integrated software enables charging with 11 or 22 kW. In addition, the company also offers advice on and procurement of rapid charging stations.

Consistently efficient energy utilisation

Compared to an internal combustion engine, an electric motor generates significantly less energy losses, for example through waste heat. As a result, it achieves a higher degree of efficiency and the energy provided is utilised much better. The Fendt e107 Vario has been consistently developed with sustainable energy utilisation in mind. The start-stop function significantly reduces energy consumption and the number of operating hours of the tractor. Energy is also recovered through regeneration. This can be further increased with a dedicated foot pedal for increased recuperation. In addition, three operating modes – Eco, Dynamic and Dynamic+ – are available to adjust energy use according to the work application.

The Eco driving mode is particularly suitable for applications with a low power requirement, such as spreading in winter or planting vegetables, while Dynamic is used for more power-intensive applications such as mowing work. For a short time, Dynamic+ mode releases additional energy for a limited period of time, for example to overcome inclines.

Fully integrated thermal management: ready for use at any time

Thanks to integrated thermal management, the battery always operates at the optimum temperature, regardless of the season or weather conditions. This protects the battery and extends its life. If the timer is activated the day before, the machine is at operating temperature in time for the start of work. A completely newly developed, energy-saving fan concept with a reversing function is integrated into the thermal management.

Specially developed tyres

The Fendt e107 Vario is equipped with 340/70R24 tyres for the front axle and 480/70R30 tyres for the rear axle, as standard.

Fendt and Trelleborg have jointly developed the TM1 Eco Power tyre especially for this series. During development, the focus was on the interplay between performance and energy efficiency and 65 per cent of the components come from renewable or recycled sources. The tyres feature a particularly low rolling resistance in order to be energy-saving and thus extend the battery life. In addition, there is optimum traction, stability and driving comfort on different surfaces, as well as a self-cleaning tread for agricultural applications.

The Fendt e107 Vario will be available to order from autumn 2024 and will be produced at the Marktobendorf tractor plant from the second quarter of 2025. In addition to the pilot markets of Germany, Norway and the Netherlands, further markets are now being added:

- Austria
- Switzerland
- Denmark
- Sweden
- Italy
- Spain

The machine is available from qualified dealers. Availability will be gradually expanded, depending on the infrastructure in the regions as well as in the trade.

About Fendt

Fendt is the leading high-tech brand in the AGCO Group for farms with the highest demands regarding quality of machines and services. The customers benefit from innovative technology that increases their performance, efficiency and profitability. Fendt tractors and combines operate globally on professional farms as well as in non-agricultural fields. Resource-saving and smart Fendt technologies support farmers and contractors in successfully working sustainably and economically worldwide. At its German sites in Marktobendorf, Asbach-Bäumenheim, Hohenmölsen, Feucht and Wolfenbüttel, Fendt employs more than 7,800 people in research and development, sales and marketing as well as

production, service and administration.

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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 \$14.4 billion in 2023. For more information, visit www.AGCOcorp.com. For company news, information and events, please follow us on X, formerly known as Twitter: @AGCOCorp. For financial news on X, please follow the hashtag #AGCOIR.

Safe Harbor Statement

Statements that are not historical facts, including the projections of earnings per share, production levels, sales, industry demand, market conditions, commodity prices, currency translation, farm income levels, margin levels, strategy, investments in product and technology development, new product introductions, restructuring and other cost reduction initiatives, production volumes, tax rates and general economic conditions, are forwardlooking and subject to risks that could cause actual results to differ materially from those suggested by the statements. The following are among the factors that could cause actual results to differ materially from the results discussed in or implied by the forward-looking statements.

- Our financial results depend entirely upon the agricultural industry. Factors that adversely affect the agricultural industry, including declines in the general economy, adverse weather, tariffs, increases in farm input costs, lower commodity prices, lower farm income and changes in the availability of credit for our retail customers, will adversely affect us.
- We maintain an independent dealer and distribution network in the markets where we sell products. The financial and operational capabilities of our dealers and distributors are critical to our ability to compete in these markets. Higher inventory levels at our dealers and high utilization of dealer credit limits could negatively impact future sales and adversely impact our performance.
- We recently announced the proposed acquisition of the ag assets and technologies of Trimble through the formation of a joint venture of which we will own 85%. This is a substantial acquisition for us, and it will require us to incur substantial indebtedness. All acquisitions involve risk, and there is no certainty that this acquisition will close, that we will be able to obtain the desired financing, that our increased leverage will not adversely impact our remaining business, or that the acquired business will operate as expected following closing. Each of these items, as well as similar acquisition-related items, would adversely impact our performance.
- A majority of our sales and manufacturing takes place outside the United States, and many of our sales involve products that are manufactured in one country and sold in a different country. As a result, we are exposed to risks related to foreign laws, taxes and tariffs, trade restrictions, economic conditions, labor supply and relations, political conditions and governmental policies. These risks may delay or reduce our realization of value from our international operations. Among these risks are the uncertain consequences of Brexit and tariffs imposed on exports to and imports from China.
- We cannot predict or control the impact of the conflict in Ukraine on our business. Already it has resulted in reduced sales in Ukraine as farmers have experienced economic distress, difficulties in harvesting and delivering their products, as well as general uncertainty. There is a potential for natural gas shortages, as well as shortages in other energy sources, throughout Europe, which could negatively impact our production in Europe both directly and through interrupting the supply of parts and components that we use. It is unclear how long these conditions will continue, or whether they will worsen, and what the ultimate impact on our performance will be. In addition, AGCO sells products in, and purchases parts and components from, other regions where there could be hostilities. Any hostilities likely would adversely impact our performance.
- Most retail sales of the products that we manufacture are financed, either by our joint ventures with Rabobank or by a bank or other private lender. Our joint ventures with Rabobank, which are controlled by Rabobank and are dependent upon Rabobank for financing as well, finance approximately 50% of the retail sales of our tractors and combines in the markets where the joint ventures operate. Any difficulty by Rabobank to continue to provide that financing, or any business decision by Rabobank as the controlling member not to fund the business or particular aspects of it (for example, a particular country or region), would require the joint ventures to find other sources of financing (which may be difficult to obtain), or us to find another source of retail financing for our customers, or our customers would be required to utilize other retail financing providers. As a result of the recent economic downturn, financing for capital equipment purchases generally has become more difficult in certain regions and in some cases, can be expensive to obtain. To the extent that financing is not available or available only at unattractive prices, our sales would be negatively impacted. In addition, Rabobank also is the lead lender in our revolving credit facility and term loans and for many years has been an important financing partner for us. Any interruption or other challenges in that relationship would require us to obtain alternative financing, which could be difficult.
- Both AGCO and our finance joint ventures have substantial accounts receivable from dealers and end customers, and we would be adversely impacted if the collectability of these receivables was less than optimal; this

collectability is dependent upon the financial strength of the farm industry, which in turn is dependent upon the general economy and commodity prices, as well as several of the other factors listed in this section.

- We have experienced substantial and sustained volatility with respect to currency exchange rate and interest rate changes, which can adversely affect our reported results of operations and the competitiveness of our products.
- Our success depends on the introduction of new products, particularly engines that comply with emission requirements and sustainable smart farming technology, which require substantial expenditures; there is no certainty that we can develop the necessary technology or that the technology that we develop will be attractive to farmers or available at competitive prices.
- Our expansion plans in emerging markets, including establishing a greater manufacturing and marketing presence and growing our use of component suppliers, could entail significant risks.
- Our business increasingly is subject to regulations relating to privacy and data protection, and if we violate any of those regulations, or otherwise are the victim of a cyberattack, we could be subject to significant claims, penalties and damages.
- Attacks through ransomware and other means are rapidly increasing, and in May 2022 we learned that we had been subject to a cyberattack. We continue to review and improve our safeguards to minimize our exposure to future attacks. However, there always will be the potential of the risk that a cyberattack will be successful and will disrupt our business, either through shutting down our operations, destroying data, exfiltrating data or otherwise.
- We depend on suppliers for components, parts and raw materials for our products, and any failure by our suppliers to provide products as needed, or by us to promptly address supplier issues, will adversely impact our ability to timely and efficiently manufacture and sell products. Recently suppliers of several key parts and components have not been able to meet our demand and we have had to decrease our production levels. In addition, the potential of natural gas shortages in Europe, as well as predicted overall shortages in other energy sources, could also negatively impact our production and that of our supply chain in the future. It is unclear when these supply chain disruptions will be restored or what the ultimate impact on production, and consequently sales, will be.
- Any increase in COVID-19, or other future pandemics, could negatively impact our business through reduced sales, facilities closures, higher absentee rates, and reduced production at both our plants and the plants that supply us with parts and components. In addition, logistical and transportation-related issues and similar problems may also arise.
- We recently have experienced significant inflation in a range of costs, including for parts and components, shipping, and energy. While we have been able to pass along most of those costs through increased prices, there can be no assurance that we will be able to continue to do so. If we are not, it will adversely impact our performance.
- We face significant competition, and if we are unable to compete successfully against other agricultural equipment manufacturers, we would lose customers and our net sales and performance would decline.
- We have a substantial amount of indebtedness (and will incur additional indebtedness as part of the Trimble transaction), and, as a result, we are subject to certain restrictive covenants and payment obligations that may adversely affect our ability to operate and expand our business.

Further information concerning these and other factors is included in AGCO's filings with the Securities and Exchange Commission, including its Form 10-K for the year ended December 31, 2022 and subsequent Form 10-Qs. AGCO disclaims any obligation to update any forward-looking statements except as required by law.

Additional assets available online:  [Photos \(5\)](#)

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