

Garrett Highlights Next-Gen Electrification and Connected Vehicle Innovations at Vienna Motor Symposium

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Next generation powertrain E-Boosting technologies and software solutions on display at major European auto event

VIENNA, Austria, April 26, 2022 (GLOBE NEWSWIRE) -- Garrett Motion Inc. (Nasdaq: GTX), a leading differentiated automotive technology provider, will be showcasing cutting-edge electricboosting technologies at the Vienna Motor Symposium as the automotive industry accelerates toward safer, more connected, efficient and environmentally-friendly vehicles.

The technology line-up in Vienna showcases Garrett's in-house capabilities to design and manufacture highly engineered and differentiated technologies, leveraging advanced mechanical, electric and power electronics expertise. The display includes the award-winning E-Turbo and advanced E-Compressor for mild and full hybrids – plus the first ever public showing of Garrett's new generation modular compressor for 400-volt fuel cell electric vehicles.

"There is great interest from automakers around the world in our electric-boosting and software technologies. Over the last several years we have heavily invested in our people, design labs and manufacturing facilities to further expand our electrification and software expertise," said Craig Balis, Garrett Senior Vice President and Chief Technology Officer. "Our constantly growing range of in-house capabilities in high-speed motor, high-power density motor and motor control software allow us to create cutting-edge differentiated technologies for electrified powertrains and connected vehicles. As one example, we have accelerated the development of our Fuel Cell Compressor lineup, with several second-generation launches planned throughout 2022, while our third generation E-Compressor is strongly positioned to support the predicted rapid global growth in hybrid vehicles."

Garrett's highly engineered <u>E-Boosting products</u> enhance performance across all powertrains while enabling fuel economy and reducing emissions in hybrid vehicles to help automakers meet strict environmental regulations. At the same time, the company's advances in automotive software solutions are adding value to the growing connected vehicle market through proprietary predictive maintenance and diagnostics, cybersecurity, and advanced controls tools.

In Vienna, Garrett will be highlighting technological innovations in turbochargers, electrification and connected vehicle software:

E-Compressor for Fuel Cell: Garrett's second-generation E-Compressor for hydrogen-powered passenger vehicles and commercial vehicles supplies the necessary air flow into the fuel cell stack. The company's new modular fuel cell compressor operates above industry standard speeds up to 150,000 rpm, improving efficiency and within a more compact packaging. The technology can be configured with an optional turbine expander, offering a 20% electric power consumption reduction over non-turbine systems, reducing hydrogen consumption and increasing range.

48-Volt and 400-Volt Electric Turbo (E-Turbo): Garrett's award-winning 48-volt and 400-volt E-Turbo technology integrates a high-speed electric motor directly on the turbo shaft to provide electrically assisted boosting for both mild and full hybrid vehicles focused on achieving EU7 emissions targets and fuel economy challenges. The complex motor system with power electronics runs at more than 200,000 rpm and significantly improves transient response from idle across the entire engine speed range. Rooted in Formula 1® technology and transferable to mass production, Garrett's E-Turbo also provides energy recuperation to the vehicle's electrical system. The 48-volt E-Turbo is currently in production and will launch with a global automaker later this year.

Electric Compressor (E-Compressor): Garrett's next-generation E-Compressor electrifies the boosting system in combination with a turbocharger. The result of advances in Garrett's electric capabilities, the E-Compressor is smaller and lighter than previous generations while providing greater power and faster response with optimized fuel economy and reduced emissions. The

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Photo: Garrett Motion Inc. New generation modular compressor for fuel cell electric vehicles



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Photo: Garrett Motion Inc. 48-volt E-Turbo for passenger vehicles



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technology supports 48-volt systems on mild hybrids and 300-400-volt systems on plug-in hybrids, further expanding Garrett's presence in the rapidly growing hybrid passenger vehicle market, including SUVs.

Gasoline Variable Nozzle Turbine (VNT) Technology: Garrett's third generation VNT technology for CO2-optimized gasoline applications offers diesel-like fuel economy with impressive power density. VNT turbos control the exhaust flow against the turbine wheel by using inlet vanes that adjust

to match the exact boost requirements of the engine at different speeds. This helps deliver superior CO2 efficiency and improved transient response, notably in modern gasoline engines benefiting from Miller-cycle combustion and operating at temperatures up to 1,020 degrees Celsius.

Connected Vehicle Software: Garrett has leveraged its expertise in advanced software solutions and close customer partnerships to develop a wide range of connected technologies that will be on display during the Symposium.

Energy Management: Garrett is accelerating the fuel-to-electric transition by applying Model Predictive Control (MPC) systems to optimize system performance and efficiency. MPC uses a physics-based model to create a mathematical representation of core powertrain systems. This output is calibrated and embedded within vehicle electronic control units (ECUs) to optimize real-time performance that is robust to real-world conditions. MPC supports complex multivariable system control, automates calibration and enables connected vehicle predictive capability across all powertrains.

Vehicle Cybersecurity Solutions: Garrett's cybersecurity solutions address significant security and safety-related challenges facing the automotive industry resulting from increasing vehicle complexity and connectivity. The company's systems can safeguard against on-board intrusion, protect multi in-vehicle networks (can, ethernet), identify traffic abnormalities, analyze cyber alerts and drive action-cantered remediation. This helps customers and partners achieve regulatory compliance, manage on-board resource constraints, identify attack root causes and defend against evolving and emerging threats. As a result, Garrett's production-proven automotive cyber security expertise is trusted by major automotive OEMs.

To discover more about Garrett's technologies on display, please visit the company's booth in the Gartensaal Display Area.

About Garrett Motion Inc.

Garrett Motion is a differentiated technology leader, serving customers worldwide for more than 65 years with passenger vehicle, commercial vehicle, aftermarket replacement and performance enhancement solutions. Garrett's cutting-edge technology enables vehicles to become safer, more connected, efficient and environmentally friendly. Our portfolio of turbocharging, electric boosting and automotive software solutions empowers the transportation industry to redefine and further advance motion. For more information, please visit www.garrettmotion.com.

Forward-Looking Statements

This press release contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. All statements, other than statements of fact, that address activities, events or developments that we or our management intend, expect, project, believe or anticipate will or may occur in the future are forward-looking statements including, without limitation, our statements regarding: our plans with respect to the development and launch of new products and the anticipated benefits and impacts thereof; anticipated demand for our products; anticipated shifts in the automotive industry, including our expectations for growth including in the hybrid vehicle market; and the compatibility, scalability and performance of our products. Although we believe forward-looking statements are based upon reasonable assumptions, such statements involve known and unknown risks, uncertainties, and other factors, which may cause the actual results or performance of Garrett to be materially different from any future results or performance expressed or implied by such forward-looking statements. Such risks and uncertainties include, but are not limited to: uncertainties regarding our expectations of industry conditions, including growth and demand for our products; risks associated with our ability to develop new technologies on anticipated timelines or at all and with the outcomes we anticipate; and the risks and uncertainties described in our annual report on Form 10-K for the year ended December 31, 2021, as well as our other filings with the Securities and Exchange Commission, under the headings "Risk Factors" and "Cautionary Note Regarding Forward-Looking Statements." You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date of this document. Forward-looking statements are not guarantees of future performance, and actual results, developments and business decisions may differ from those envisaged by our forward-looking statements.

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Photos accompanying this announcement are available at

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