

GE Vernova awarded a major contract to build 2 GW offshore grid connection in the German Baltic Sea

- GE Vernova and Drydocks World awarded Ostwind 4, the first 2 GW HVDC grid connection for offshore wind farms in the German Baltic Sea
- The project will transport renewable electricity equivalent to powering nearly two million households
- GE Vernova to provide advanced HVDC technology, including SF6-free gas-insulated switchgear

CAMBRIDGE, Mass. (December 16, 2024) – GE Vernova Inc. (NYSE: GEV) today announced that, in consortium with Drydocks World, it has been awarded the Ostwind 4 project by 50Hertz, a leading German Transmission System Operator (TSO). The project involves the design, construction, and commissioning of a 2-gigawatt (GW) High-Voltage Direct Current (HVDC) electric transmission system—the first of its kind in the German Baltic Sea—connecting an offshore wind farm to the German grid.

Located in the Arkona Basin, approximately 30 kilometers northeast of Rügen Island, the Ostwind 4 project will transport up to 2 GW of offshore wind energy via the HVDC system to the mainland, delivering renewable electricity equivalent to the amount needed to power [nearly two million households](#). Provisionally scheduled for completion by the end of 2031, the project is expected to feature an advanced bipolar HVDC transmission system operating at 525 kilovolts (kV), ensuring efficient energy transport with minimal losses over long distances.

Collaborating to Drive Germany's Renewable Energy Ambitions

The GE Vernova-Drydocks World consortium is responsible for delivering both the offshore converter platform and the onshore converter station, enabling seamless transmission of electricity from offshore wind farms in the Baltic Sea to the German transmission grid. As the consortium leader, GE Vernova will supply advanced HVDC technology, including voltage-sourced converters (VSC), high-voltage transformers, g³ gas-insulated switchgear (GIS), air-core reactors, as well as civil works for the onshore converter station and grid automation telecommunications equipment.

The project will also benefit from GE Vernova's new [HVDC Competence Center in Berlin](#), which is focused on developing leading-edge technology to improve grid stability and integrate more renewable energy.

Drydocks World will be responsible for designing, fabricating, and installing the offshore converter platform, including the jacket substructure and topside. This advanced infrastructure, built at Drydocks World's Dubai facility, features a U-shaped jacket substructure with integrated nature-inclusive scour protection to enhance marine biodiversity while minimizing environmental impact.

Germany's Energy Transition Goals

Germany is at the forefront of the global energy transition with its ambitious [Energiewende framework](#), which aims to phase out coal entirely by 2030 and achieve net zero emissions by 2045. As per the German Climate Law, 80% of electricity supply must come from renewable sources by 2030, with a target of 100% by 2035. Projects like Ostwind 4 are crucial in meeting these goals, enabling the efficient transmission of renewable energy from offshore wind farms to the national grid and reducing dependence on fossil fuels.

Stefan Kapferer, CEO 50Hertz, said, "The awarding of the contract to GE Vernova and Drydock World marks the beginning of a new chapter in the use of wind energy in the Baltic Sea. 50Hertz is the first transmission system operator to deploy 2 GW / 525 kV technology in this sea area. This is pioneering work. We want to ensure that the entirety of the technically and economically viable offshore wind

energy potential in the Baltic Sea is exploited, primarily with the help of direct current technology. To do this, we need to think and act in an even more networked way across national borders. One prerequisite for this is the creation of legal and regulatory conditions that enable wind farms in the waters of other EU states to be connected to the German transmission grid. “

Philippe Piron, CEO of GE Vernova's Electrification business, said, “Ostwind 4 represents a crucial milestone in our mission to electrify and decarbonize with the energy to change the world. By leveraging our advanced HVDC technology, this key infrastructure project underscores the essential role of offshore wind to ensure European energy security and to accelerate the global energy transition. This order also highlights the rapid growth in GE Vernova's Electrification segment, our fastest growing business, as our customers invest in the grid. We are very proud to collaborate with 50Hertz and Drydocks World to advance Germany’s renewable energy goals and set a new standard for a resilient and sustainable grid infrastructure.”

Johan Bindele, Leader of Grid Systems Integration at GE Vernova’s Grid Solutions business, added, “Ostwind 4 demonstrates the advancements in HVDC technology that GE Vernova delivers to support the integration of renewable energy sources at transformative scales. The use of our Voltage-Sourced Converters, g³ gas-insulated switchgear, and robust system design ensures not only efficient power transmission but also operational reliability over long distances. We are honored to lead this project in collaboration with our consortium partner Drydocks World and support 50Hertz in pushing the boundaries of energy innovation.”

Sultan Ahmed Bin Sulayem, Group Chairman & Chief Executive Officer, DP World, said: “ We are pleased to see Drydocks World playing a pivotal role in the Ostwind 4 Project, a testament to its technical excellence and commitment to advancing renewable energy infrastructure. This reflects DP World’s ongoing commitment to enabling a clean energy future by supporting innovative projects that drive sustainability and economic growth. As the global energy landscape

evolves, we remain dedicated to leveraging our expertise and innovative capabilities to support initiatives that drive clean energy transitions and economic development.”

Accelerating The Energy Transition Through Advanced Grid Technology

HVDC technology is critical in supporting the efficient and reliable transmission of renewable energy across long distances. Unlike the AC systems, HVDC can transmit three times the power with up to 50% fewer losses. HVDC systems equipped with Voltage-Sourced Converter (VSC) technology further enhance the controllability and stability of power flows, making them ideal for integrating variable energy sources such as wind and solar into the grid.

GE Vernova’s g³ gas-insulated switchgear further supports the energy transition by providing a more environmentally sustainable alternative to SF₆ gas, a potent greenhouse gas traditionally used in high-voltage equipment. The g³ technology is part of company’s GRiDEA portfolio, a suite of decarbonization solutions that empower grid operators to address their net-zero objectives. Launched in 2014, g³ shows an approximately 99% reduction of greenhouse gas contribution to global warming, compared to SF₆, aligning with the decarbonization goals of the global energy sector. Together, HVDC and SF₆-free solutions represent key innovations necessary to decarbonize and modernize the grid infrastructure for a more sustainable energy future.

-ENDS-

Image: After the symbolic signing of the contract: Standing f.l.t.r.: Stefan Hartge (GE Vernova), Marco Nix (50Hertz), Capt. Rado Antolovic (Drydocks World). Sitting f.l.t.r.: Johann Bindele (GE Vernova), Stefan Kapferer (50Hertz), HE Sultan Admed Bin Sulayem (Dubai Port World). 50Hertz / Kathrin Heller.

Forward Looking Statements

This document contains forward-looking statements – that is, statements related to future events that by their nature address matters that are, to different degrees,



uncertain. These forward-looking statements address GE Vernova's expected future business and financial performance, and the expected performance of its products, the impact of its services and the results they may generate or produce, and often contain words such as “expect,” “anticipate,” “intend,” “plan,” “believe,” “seek,” “see,” “will,” “would,” “estimate,” “forecast,” “target,” “preliminary,” or “range.” Forward-looking statements by their nature address matters that are, to different degrees, uncertain, such as statements about planned and potential transactions, investments or projects and their expected results and the impacts of macroeconomic and market conditions and volatility on business operations, financial results and financial position and on the global supply chain and world economy.

About GE Vernova

GE Vernova Inc. (NYSE: GEV) is a purpose-built global energy company that includes Power, Wind, and Electrification segments and is supported by its accelerator businesses. Building on over 130 years of experience tackling the world’s challenges, GE Vernova is uniquely positioned to help lead the energy transition by continuing to electrify the world while simultaneously working to decarbonize it. GE Vernova helps customers power economies and deliver electricity that is vital to health, safety, security, and improved quality of life. GE Vernova is headquartered in Cambridge, Massachusetts, U.S., with approximately 75,000 employees across 100+ countries around the world. Supported by the Company’s purpose, The Energy to Change the World, GE Vernova technology helps deliver a more affordable, reliable, sustainable, and secure energy future. Learn more: [GE Vernova](#) and [LinkedIn](#).

GE Vernova’s **Grid Solutions** business electrifies the world with advanced grid technologies and systems, enabling power transmission and distribution from the point of generation to point of consumption, and supporting a decarbonized and secured energy transition.



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