

Siemens and Northvolt partner in next generation lithium-ion battery cell production

- **Siemens to offer Northvolt its Digital Enterprise portfolio that enables the digitization of the entire value chain – from the design of the battery cell to production and services**
- **Siemens will support the technology partnership through an investment of EUR 10 million**
- **After production start, Northvolt will become a preferred supplier for lithium-ion batteries for Siemens**

Siemens and Northvolt today announced a partnership for the development of best-in-class technology to produce high-quality, green lithium-ion batteries. The partnership, which will be supported by Siemens through an investment of EUR 10 million, also includes the supply of lithium-ion batteries.

To mitigate the effects of climate change, Europe is accelerating its transition to renewable energies. Electrification and an increased use of batteries is one of the cornerstones of this transition, enabling the large-scale conversion to sustainable transportation as well as a deep integration of renewable sources in the energy mix. With limited current and planned capacity in place, Europe is now facing a major battery deficit of within the next few years.

“We are happy to support Northvolt in building the battery factory of the future. With our Digital Enterprise portfolio, we contribute to a competitive battery cell production in Europe that fully exploits the benefits of software and automation: greater flexibility, efficiency and quality with shorter time to market”, said Jan Mrosik, CEO of Siemens Digital Factory Division.

“Northvolt is driving the battery production to build a battery with very low CO₂ footprint. Our Digital Enterprise portfolio will support Northvolt in building a state-of-the-art battery plant. We are excited to go in as a partner in this project”, said Ulf Troedsson, President and CEO of Siemens Nordics.

Once completed in 2020, Siemens intends to purchase batteries from the factory, making Northvolt a preferred supplier. Siemens will support the partnership through an investment of EUR 10 million.

Siemens sees the Northvolt initiative as a reference project for the battery production of the future, which will rely on the integration and digitization of the entire value chain: from the design of the battery cell through production planning, engineering and production to services.

The technology partnership is set up around two main areas of collaboration:

- **Cutting edge technology.** Use of the Siemens' Digital Enterprise portfolio, encompassing everything from manufacturing planning and design software to automation, including industrial communications networks and cloud solutions, will allow Northvolt to optimize its battery production and sharpen its competitive edge.
- **Supply of lithium-ion batteries.** Siemens intends to purchase batteries from Northvolt once its large-scale production facility is up and running. The companies are also exploring potential areas for joint development programs.

“The European industry is moving rapidly towards electrification. With its world-class expertise within electrification, automation and digitalization, Siemens will become an important technology partner, supplier and customer to Northvolt in this coming transition. Once we begin large-scale production, our aim is to supply the greenest lithium-ion batteries in the world”, said Peter Carlsson, Co-Founder and CEO, Northvolt.

This press release is available at www.siemens.com/press/PR2018050201COEN

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Northvolt was founded in 2016 with the mission to build the world's greenest battery, with a minimal carbon footprint and the highest ambitions for recycling, to enable the European transition to renewable energy. Northvolt's team of experts is building the next generation battery factory focused on process innovation, scale and vertical integration. Once completed, it will be Europe's largest battery factory and produce 32 GWh worth of battery capacity annually. For more information visit www.northvolt.com

Siemens AG (Berlin and Munich) is a global technology powerhouse that has stood for engineering excellence, innovation, quality, reliability and internationality for 170 years. The company is active around the globe, focusing on the areas of electrification, automation and digitalization. One of the world's largest producers of energy-efficient, resource-saving technologies, Siemens is a leading supplier of efficient power generation and power transmission solutions and a pioneer in infrastructure solutions as well as automation, drive and software solutions for industry. With its publicly listed subsidiary Siemens Healthineers AG, the company is also a leading provider of medical imaging equipment – such as computed tomography and magnetic resonance imaging systems – and a leader in laboratory diagnostics as well as clinical IT. In fiscal 2017, which ended on September 30, 2017, Siemens generated revenue of €83.0 billion and net income of €6.2 billion. At the end of September 2017, the company had around 377,000 employees worldwide. Further information is available on the Internet at www.siemens.com.