

# Press release

Munich, April 27, 2021

## For a greener Finland: Siemens Energy seals largest order for SF<sub>6</sub>-free gas-insulated switchgear in Europe

- Finland's first SF<sub>6</sub>-free gas-insulated switchgear will enable climate-neutral power transmission
- Zero global warming potential due to vacuum interrupter and clean-air insulation technology

Siemens Energy has been awarded a contract to deliver ten bays of sulfur hexafluoride(SF<sub>6</sub>)-free gas-insulated switchgear (GIS) to Fingrid, Finland's transmission system operator. It will be the first GIS in Finland that replaces SF<sub>6</sub> as the most potent greenhouse gas in the world with "clean air", a pure mixture of nitrogen and oxygen with zero potential for global warming. It represents Siemens Energy's largest order for SF<sub>6</sub>-free high-voltage GIS in Europe to date.

SF<sub>6</sub> is a fluorinated gas (F-gas) with a potential for global warming around 23,500 times greater than carbon dioxide and a life span of 3,200 years in the earth's atmosphere. However, due to its unique physical properties, it is in most of the world's substations still the insulating gas of choice. Fingrid decided to modernize the 110-kilovolts(kV)-switchgear in Virkkala substation in Lohja, located 60 kilometers west of Helsinki, so that it operates without any climate-harming gases. The GIS of type 8VN1 from Siemens Energy's SF<sub>6</sub>-free Blue portfolio will ensure safe, climate-neutral, and reliable power transmission operation by using vacuum interrupters for switching and clean air as insulation medium, leading to an improved switching performance, simplified operation and maintenance while meeting highest health and safety standards. Commissioning is scheduled for summer 2022.

"Fingrid seeks to be a frontrunner when it comes to the replacement of SF<sub>6</sub> in transmission operations. Modernizing the existing SF<sub>6</sub>-insulated 110 kV switchgear in Virkkala with a new one operating without SF<sub>6</sub> gas is the first step on our strategic roadmap toward phasing out SF<sub>6</sub> as insulating gas. Total reduction of SF<sub>6</sub> gas at Virkkala substation will be 2.500 kg equal to 57.000 tons of CO<sub>2</sub>. With Siemens Energy we have found a reliable partner that offers innovative products

with absolutely zero climate-harming fluorinated gases,” said Timo Kiiveri, Senior Vice President at Fingrid.

“We at Siemens Energy are proud that Fingrid has chosen our technology for their first SF<sub>6</sub>-free GIS. With its zero global warming potential our Blue portfolio is the most environmentally friendly switching technology available and will reliably support Fingrid in systematically phasing out SF<sub>6</sub> as an insulating gas,” said Beatrix Natter, Executive Vice President Transmission at Siemens Energy.

Due to its high climate-harming potential and its long atmospheric lifetime, SF<sub>6</sub> is banned for most applications with exception of the electricity sector. However, as part of the European Green Deal, the European Commission is currently reviewing the regulation of fluorinated gases. Over the last decade Siemens Energy has invested in the development of chemical-free alternatives to SF<sub>6</sub> and as a result introduced the future-proof Blue portfolio which operates completely free of any F-gases and thereby goes beyond the common safety and environmental standards. It not only emphasizes the green aspect of the transmission technology, but also provides many other benefits for gas-insulated switchgear, circuit breakers and instrument transformers. Over the next years, Siemens Energy will implement their clean air technology at higher voltages as well.



## Siemens Energy 8VN1 Blue GIS

Fingrid decided to modernize the 110-kilovolts(kV)-switchgear in Virkkala substation in Lohja, located 60 kilometers west of Helsinki, so that it operates without any climate-harming gases using the GIS of type 8VN1 from Siemens Energy’s SF<sub>6</sub>-free Blue portfolio.

Siemens Energy AG  
Communications  
Head: Robin Zimmermann

Otto-Hahn-Ring 6  
81739 Munich  
Germany

## Contact for journalists

Christina Hümmer

Telefon: +49 152 07158923

E-Mail: [Christina.Huemmer@siemens-energy.com](mailto:Christina.Huemmer@siemens-energy.com)

This press release and a press picture are available at

<https://press.siemens-energy.com/global/en/pressrelease/greener-finland-siemens-energy-seals-largest-order-sf6-free-gas-insulated-switchgear>

For further information on Siemens Energy Blue Portfolio, please see

<https://www.siemens-energy.com/global/en/offerings/power-transmission/innovation/blue-high-voltage-products.html>

For further information on Siemens Energy Transmission, please see

<https://www.siemens-energy.com/global/en/offerings/power-transmission.html>

Follow us on Twitter at: [www.twitter.com/siemens\\_energy](https://www.twitter.com/siemens_energy)

**Siemens Energy** is one of the world's leading energy technology companies. The company works with its customers and partners on energy systems for the future, thus supporting the transition to a more sustainable world. With its portfolio of products, solutions and services, Siemens Energy covers almost the entire energy value chain – from power generation and transmission to storage. The portfolio includes conventional and renewable energy technology, such as gas and steam turbines, hybrid power plants operated with hydrogen, and power generators and transformers. More than 50 percent of the portfolio has already been decarbonized. A majority stake in the listed company Siemens Gamesa Renewable Energy (SGRE) makes Siemens Energy a global market leader for renewable energies. An estimated one-sixth of the electricity generated worldwide is based on technologies from Siemens Energy. Siemens Energy employs more than 90,000 people worldwide in more than 90 countries and generated revenue of around €27.5 billion in fiscal year 2020. [www.siemens-energy.com](http://www.siemens-energy.com).