

70 MW PV PLANT

SOLAR POWER

AT THE EDGE OF THE ARCTIC



SG350HX



**ARTIC
TEMPERATURES**



**NORTHERN-
MOST PV**

BUILT FOR THE NORTH: LARGE-SCALE PV MEETS ARCTIC DEMANDS.

Solar power park projects have been progressing rapidly in recent years. This particular site represents a significant milestone, as it is the first D-type power plant constructed this far north. The scale of the project reflects its importance, with a total capacity of 70 megawatts.

The project team has collaborated closely with Sungrow to address the specific challenges of operating a D-type power plant in a northern climate, particularly concerning the functionality and efficiency of the inverters.

PVO International has served as the main supplier, delivering Sungrow inverters and solar panels for the installation.

Location

Simo, Lapland,
Finland

Systems

180x SG350HX
ground-mounted PV

EPC

Solarigo

PARTNER

PVO

BENEFITS

A 95-hectare site in Simo is currently under development for a 70-megawatt solar park. The project will feature the installation of approximately 120,000 solar panels and 180 Sungrow inverters.

Challenging weather conditions, including excess rain and freezing cold, put pressure on equipment reliability during the Simo project.

Sungrow's SG350HX inverters proved ideal for the Arctic environment, offering stable performance in sub-zero temperatures, IP66 protection, and reliable operation despite ice and moisture. Their modular, weather-protected design helped keep the project on schedule - no matter the climate.



Inverters are installed under the PV module structure. Enclosure surface is frozen but doesn't affect functionality.



**installation in progress*

INTERVIEWS



"Solarigo Systems is involved in solar power projects, and at the moment, we are focusing on large-scale solar parks"

We chose the Sungrow 350 inverter mainly because we've had good experiences with it in previous park projects. When the updated, larger version came out, we thought we'd introduce it here. What's good about Sungrow, from our perspective, is that the equipment has proven reliable, and they also offer favorable warranty terms for us."

Jere Graf

Project Manager, Solarigo

"The modular system improves the reliability and maintainability of the power plant. Additionally, the inverters meet strict local system technical requirements. The wide input voltage range and numerous connection options allow for flexible configurations in different conditions."

Henry Särkisilta

Key Account Manager, Sungrow Finland



ABOUT SUNGROW

Founded in 1997 by Professor Cao Renxian, Sungrow Power Supply Co., Ltd. is a global leader in renewable energy technology. With over 740 GW of power electronic converters installed worldwide, Sungrow is dedicated to clean energy solutions.

Entering the energy storage sector in 2006, Sungrow specializes in integrated ESS solutions, including PCS, lithium-ion batteries, and energy management systems. Its turnkey solutions serve residential, commercial, and utility applications.

With 19 years of growth and zero security incidents, Sungrow is a top ESS provider. In the first half of 2024, it shipped 8 GWh worldwide and was ranked the most bankable ESS and PCS company by BloombergNEF.

ABOUT SOLARIGO

Solarigo is a Finnish energy company specializing in large solar power projects. Since 2015, Solarigo has supplied their business customers with solar electricity and installed more than 250 local power plants. In the construction of solar parks, Solarigo operates in all phases, from project development to electricity sales. Since the foundation, Solarigo has followed two basic ideas, which we work towards every day: we want to be the most reliable solar power operator in Finland and a good place to work. We now have around 40 permanent solar electricity professionals in Pirkkala, Jyväskylä and Seinäjoki.