



Kvarnbacken hybrid project, owned by the limited liability company Kvarnbacken Vind Ab, is located in the municipality of Kronoby in Ostrobothnia region.

The project has an approved land use plan proposal consisting of a project area of approx. 820 ha and a layout of 6 WTGs. An EIA has been conducted for the project. In addition to the wind farm, a photovoltaic plant and a battery storage system have been assessed during the EIA process and marked on the land use plan map. The land use plan proposal includes 25.7 MWp of photovoltaics as well as a 50 MWh battery storage area.

Project development is currently under the management of Etha Oy.

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#### Home Page

[kvarnbackenvind.fi](http://kvarnbackenvind.fi)

## Kvarnbacken Wind Farm

6 WTGs, 39.6 MW (Permitted for max. 60 MW) Hybrid Project in Kronoby, Finland

### Site Access

Land lease agreements have been secured for all WTG positions and planned infrastructure, and 99 % of the project area. The land lease agreements are valid until 31 December 2072. In addition to this, certain land lease agreements allowing for photovoltaics and a battery energy storage system have also been signed. When assuming an electricity price of 50 EUR/MWh, the wind farm's land lease level is approx. 5.5 % of the annual turnover. The operational land lease is estimated to approx. 34.4 kEUR/year for photovoltaic areas (49.1 ha).

### Grid

The primary alternative (ALT 6) considered is a grid connection at the Herrfors Oy Ventusneva - Evijärvi 110 kV overhead line, which runs through the project area. The DSO Herrfors Oy has confirmed that there currently is 50 MW of available capacity in the Herrfors Oy's Ventusneva - Evijärvi 110 kV overhead line. Grid connection is estimated to be available in 2027-2028, once Fingrid's planned investments in the grid are completed and the regional restrictions can be lifted.

### Permits

The second layout option of the EIA report and the land use plan proposal include a layout of 6 WTGs. The ELY statement on the EIA report was received in June 2024. The land use plan proposal was approved in September 2024, and final approval is expected to take place in April 2025. Nature studies for the EIA and the land use plan processes have been completed, and no critical issues have been identified. A flight obstacle permit has been received for one test WTG, and additional permits have been requested for the five other WTGs. Additionally, the project has received a positive statement from the Finnish Defence Forces. Met mast permitting was initiated in June 2024.

### Design and Performance

The permits allow for WTGs with rotor diameters of 180 m, total heights of 300 m and a maximum capacity of 10 MW each. When assuming a layout of 6 x SG170 6.6 MW 165 m HH WTGs, net production (P50) is estimated to 128 GWh/year. Production is for the photovoltaic plant estimated to 22.4 GWh/year.