



Windpark Blaiken

NER300

The project

Technology category: Wind energy

Location: Västerbotten county, Sweden

Max. NER 300 funding: EUR 15.0 million

Final investment decision: February 2014

Entry into operation: January 2015

State of advancement

The project has entered into operation in January 2015.

Outlook for coming year

The operation of the third stage of the Windpark Blaiken. Further, optimize the production of the whole wind park and the anti-icing technology.

Outlook for coming 5 years

Optimize the whole wind park.

Project sponsor

BlaikenVind AB

Project website

www.blaikenvind.se

Project summary

Skellefteå Kraft AB and Fortum Vind Norr AB have built a wind farm of 99 wind turbines in the county of Västerbotten. The construction of the wind farm has been handled by BlaikenVind AB. The operation of the wind power park is also handled by BlaikenVind AB, a company jointly owned and controlled by the aforementioned parties.

The wind farm is located in an area with arctic climate. Snow, ice and low temperatures make construction, transportation and operations challenging. The time frame for construction works during snow-free season is relatively short and construction during winter season demands adapted and more advanced methods. Further, the site is located in a very remote area with limited transportation possibilities; small access roads and a compressed construction area makes logistics very challenging.

Due to the above the Windpark Blaiken project has been granted funding under the NER300 programme due to its usage of innovative anti-icing technology

The accumulation of ice on the rotor blades can severely impact the energy yields and shorten the life expectancy of the wind power system. For instance the greater loads along the blade may cause rotor imbalance shortening the life cycles of the components. The resulting change in dynamics compromises the efficiency of the turbine, leading to lost yields. Noise emissions may also increase due to greater surface coarseness.

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