Power forecasts for wind and solar power plants for the successful direct marketing of electricity from renewable energies

Precise solar and wind power output forecasts enable optimal marketing of the generated electricity volumes on the EPEX SPOT power exchange.

Benefits for direct marketers

- Accurate location-specific wind and PV forecasts for intraday and day-ahead trading
- Problem-free integration into existing IT landscapes
- Fully automated master data importers for regular master data updates
- No additional hardware or software installation
- No further license costs

www.enercast.de
Challenge
According to the German Federal Ministry of Economics and Energy (BMWi), renewable energies are now covering a steadily growing share of Germany’s electricity supply, a share which, according to the Federal Ministry of Economics and Energy (BMWi), accounted for more than 30 percent of gross electricity consumption in 2016.

It is therefore important for direct marketers of electricity from renewable energy sources such as BayWa r. e. Clean Energy Sourcing GmbH, BayWa r. e. CLENS for short, to know where and when sun and wind will supply energy and how much. Supply and demand must be coordinated. This is the only way to successfully integrate fluctuating energy sources such as sun and wind power while ensuring a reliable supply.

Precise forecasts also help direct marketers to achieve optimal revenues on the electricity market. The more accurately the amount of electricity produced can be predicted, the less balancing energy has to be purchased on the electricity exchange.

Solution
The enercast solution creates site-specific wind and PV forecasts for intraday and day-ahead trading and thus supports the portfolio managers of BayWa r. e. CLENS in their daily tasks of energy procurement.

These forecasts form the basis for important decisions regarding the direct marketing of renewable energies and the determination of trading and risk positions. In this way, costs for the purchase of expensive balancing energy can be avoided and higher marketing revenues achieved.

„The forecasts provided reduce the uncertainty of the risk position, which is an important basis for our trading decisions,“ explains Catharina Helbig, portfolio manager at BayWa r. e. CLENS.

In addition, a fully automated master data importer allows regular master data updates from enercast to BayWa r. e. CLENS, so that portfolio changes can be reacted to immediately.

Benefit
In this way, solar and wind power output forecasts from enercast flow into the forecasting and energy data management system of BayWa r. e. CLENS and into the trading system, especially intraday trading.

As the operator of a virtual power plant, BayWa r. e. CLENS uses the precise forecasts from enercast to enable it to calculate the volatile energy production from wind and solar energy. In addition, BayWa r. e. CLENS summarizes the next day forecast data into an internal meta forecast.

Direct marketers have to calculate in advance the amount of energy to be fed into the grid as precisely as possible in order to be able to trade optimally the following day, on the Dayahead market of the Central European Energy Exchange, and the European Power Exchange (EPEX SPOT).

In the intraday market, which also allows the trading of electricity volumes in 15-minute contracts, the short-term forecasts of enercast BayWa r. e. CLENS help direct marketers to react quickly to feed-in changes. Shortfalls and surpluses can thus be corrected by short-term purchases and sales of electricity and therefore kept as low as possible. Direct marketers minimize
their need for expensive balancing energy through optimal marketing on the electricity exchange.

In order to avoid loss of revenue and high costs, enercast’s forecasts also take into account night and noise shutdowns, maintenance alerts and shutdowns of wind turbines. The latter are often required in the context of nature conservation, for example during the migration of bats or during harvesting on agricultural land, which temporarily attracts bird species such as the red kite.

“We value both courteous, prompt customer service and reliable data delivery. With enercast we have a competent partner at our side, who is able to support our daily business of energy procurement with stable, precise and reliable solutions”.

Catharina Helbig
Portfolio Managerin
BayWa r.e. CLENS

Customer | BayWa r.e. CLENS

BayWa r. e. CLENS has been one of the leading direct marketers of electricity from renewable energies and green electricity suppliers to industrial and commercial customers for many years. The company currently manages a sales portfolio of around 3 billion kWh and a direct marketing portfolio of 2,700 megawatts. Through the operation of a virtual power plant, BayWa r. e. CLENS contributes to the grid integration of renewable energies and to the optimized marketing of electricity prices for controllable generators, flexible industrial consumers and electricity storage facilities. BayWa r. e. CLENS currently employs around 65 people at its locations in Leipzig and Frankfurt am Main.

www.baywa-re.com
Services

Power forecasts for energy providers and municipal utilities
With enercast city you can render renewable energy sources projectable and integrate them into your processes.

Direct marketing of forecasts for wind- and solar electricity
If you want to behave optimally on the electricity market, you need to know the direction from which the wind blows and when the sun shines.

enercast Smart Energy
Power forecasts and extrapolations for Virtual-Power-Plants, PV-Monitoring-Systems, Smart Home and the e-mobility.

Solar Forecast
The online service enercast offers power forecasts by the hour up to 72 hours ahead.

Wind Power Forecast
The online service enercast.de offers precise forecasts for wind energy, using the wind-power-forecasting model.

With its forecasting services for the energy sector, enercast GmbH is one of the 365 „Selected Landmark 2012“.

The WRG (Wirtschaftsförderung Region Göttingen) conferred enercast GmbH with the Innovation Award 2011. enercast GmbH came in third in the services category.

The web service enercast placed third for the Innovation-IT Award 2011 in the category industry software which is awarded by the Initiative Mittelstand.