

## VENTUS

EWC  
Wind Energy Solutions



### FORECAST FOR:

- Cross-regional and local power providers
- Energy traders (electricity & gas)
- Wind energy experts and project developers
- Power plant operators in the renewables sector

# WIND FARM FORECAST

## Forecast of the wind power feed-in for wind farms and standalone wind power plants worldwide

Our Wind Farm Forecast provides hourly and daily mean information on wind power, wind speed and direction for up to 6.5 days (24h–156h) in advance, thus supplying expected values for the wind power production by wind farms and standalone wind power plants worldwide.

### Your benefits from the Wind Farm Forecast:

- High predictability of the power production
- Tool for effective management: maintenance work can be postponed to take advantage of high-yield strong winds
- Information tool for direct marketing of wind power

### Your service benefits with EWC:

- Fast and customised handling of your requests
- Industry-specific consultancy
- Outstanding price/performance ratio
- Secure and reliable service guaranteed by the use of flexible and continuous data interfaces
- The Wind Farm Forecast is easily integrated into all EDM (energy data management) systems

### EWC uses the following database:

The Wind Farm Forecast is based on GFS (Global Forecast System) data, measurements from wind power plants and operator databases. Periods of low and high wind are taken into consideration by means of the specific cut-in and cut-out wind speeds resulting via the power curve.



## Our standard data processing:

The spatial aggregation is performed by using a down-scaling procedure with a resolution of 1km x 1km, the temporal aggregation is based on hourly or daily mean values. Site-specific features, the thermal stratification of the atmosphere or the roughness length in relation to land use and orography are calculated individually for each wind farm site. The forecast accuracy is improved by statistical correction methods and by incorporating wind farm-specific live power generation data provided by the customer.

## Updates:

- Hourly updates for the next 12 hours
- Up to four updates per day for the next 156 hours (6.5 days)

## Available on request:

- All available meteorological parameters
- Historical forecasts (from 2005 onwards)

## Customised and flexible data provision:

- Visualisation: spreadsheet
- Formats: TXT, CSV, EXCEL, XML
- Supplied as: e-mail, SFTP, pull and push, Web services, ISDN, P2P

Date	Time	Output in kW determined by EWC
13.01.11	13:00	5594
13.01.11	14:00	6660
13.01.11	15:00	8524
13.01.11	16:00	9057
13.01.11	17:00	10389
13.01.11	18:00	10922
13.01.11	19:00	10922
13.01.11	20:00	11188
13.01.11	21:00	10922
13.01.11	22:00	10922
13.01.11	23:00	10656
14.01.11	00:00	10389
14.01.11	01:00	10656

*Example of a wind farm in Germany  
Excerpt from a power output time series*

## We offer custom solutions for:

- Wind experts, wind project developers, wind power plant operators
- Local power providers (municipal utilities)
- Cross-regional power providers
- Electricity and gas traders

## EWC Weather Consult GmbH

Enhancing efficiency, making risks calculable and minimising them, saving costs – all these energy market goals can be achieved with the help of EWC's meteorological data solutions and services. We provide high-quality global location- and time-specific forecasts, weather measurement data, simulations and analyses for customers in the energy sector. We cater to our customers' individual needs by offering a range of categories of standard products and custom solutions. For information on our extensive portfolio of products and solutions, visit [www.weather-consult.com](http://www.weather-consult.com).