

VENTUS EWC Wind Energy Solutions



ANALYSIS FOR:

- Wind energy experts and project developers

WIND POTENTIAL ANALYSIS

Efficient and global site planning based on wind time series in hub height

The Wind Potential Analysis supplies ideal baseline information for the evaluation of planned global sites of wind parks based on historical GFS (Global Forecast System) data. The service provides time series for wind speed, wind direction and air density at three-hour intervals and their means, for use in on- and offshore projects. In addition, EWC supplies statistical calculations such as wind direction categories and Weibull distributions. Our customers have the option of placing requests for multiple heights and defining the extent of the wind direction sectors used to calculate the Weibull distribution.

Your benefits from the Wind Potential Analysis:

- Estimation of the potential wind distribution for a specific location, based on historical data
- Reasonably priced and rapid solution for the assignment of an appraisal
- Can be incorporated into wind simulation software, e.g. WindPro and WindFarmer

- Simplified data collection in form of a report and wind time series
- Online archive function for data access requests
- Payment based on data access requests
- Complements other resources such as NCEP reanalysis and wind atlas data

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
- Analyses are easily integrated into all EDM (energy data management) systems



EWC uses the following database:

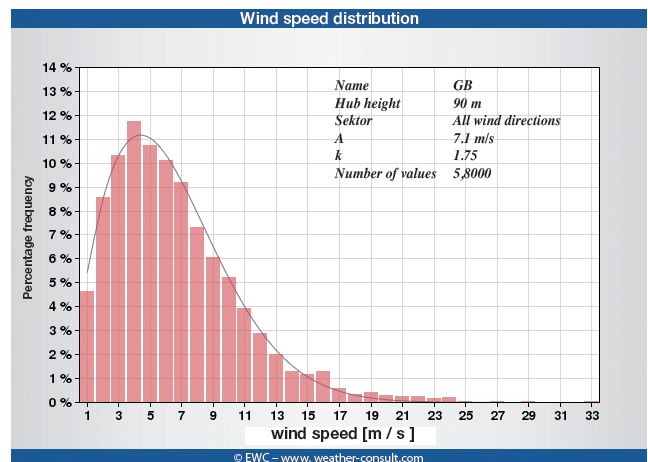
The Wind Potential Analysis is based on historical GFS (Global Forecast System) data from 2005 to the present.

Our standard data processing:

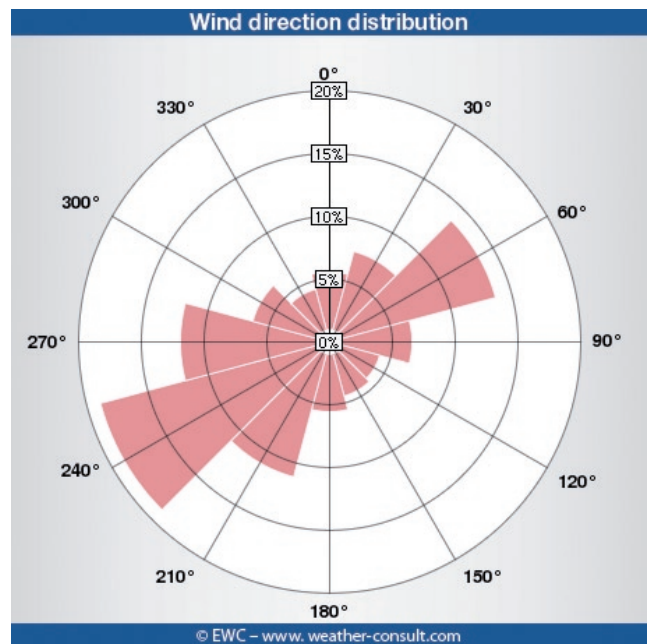
EWC's in-house method interpolates wind speed, temperature and other variables from the GFS data between the model grid points at the requested site. The custom calculation incorporates the projected hub height, any site-specific features such as vegetation cover, roughness and the influence of atmospheric stability. EWC applies a verified downscaling method to estimate orographic effects at medium-height mountain locations. For optimum results, the EWC method undergoes a continuous advancement and quality control by including actual data from existing wind parks.

Customised and flexible data provision

- Visualisation: time series, charts
- Formats: PDF, CSV
Data is presented in report form, giving all key calculations such as the Weibull distribution
- Supplied as: e-mail, EWC Website www.weather-consult.com



Example of a sector-based Weibull distribution



Example of a wind direction frequency distribution

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.



Weather. Data. Management – Yesterday. Today. Tomorrow. Worldwide.

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