

Comprehensive outline of the advantages of the **EUROWINDINDEX**:

- Real time computation of the index for the past month
- Continuous calculation of the **EUROWINDINDEX** without the break of separated regions
- Calculation of site-related wind indices for Germany as well as for entire Europe
- Calculation of the index for individual types of wind turbines with any hub height
- Europe-wide climatologic referencing of annual measurements
- Climatologically representative prognosis of the power output, even for regions where no wind turbines have been built yet



EuroWind



EuroWind

- Wind power potential expertises
- Prediction of the power output of wind turbines
- Europe-wide Wind Index
- Weather consulting service

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EUROWINDINDEX

Europe-wide Wind Index
for a climatologic
assessment of
wind measurements
and energy yields



If you are interested in one of our products, please contact us. We would be pleased to personally demonstrate the features and advantages of our services.

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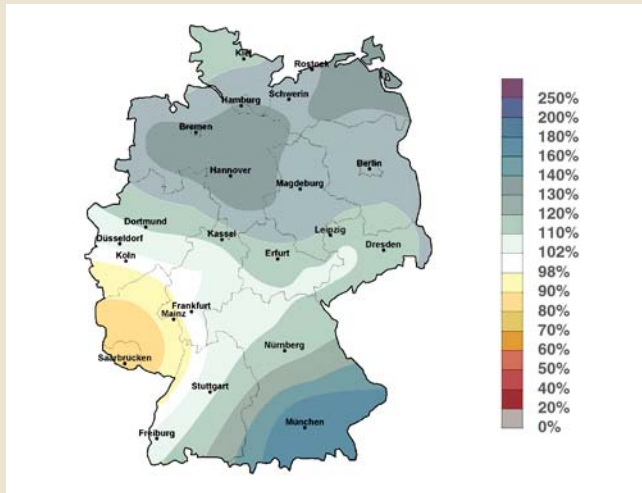
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EUROWINDINDEX

For enabling planners and operators of wind parks to get a climatologic performance rating of their wind turbines, the **EuroWind GmbH** offers a regionally orientated indexing of the monthly wind conditions for all of Europe.

Figure 1 Example for the spatial distribution of the **EUROWINDINDEX** in Germany



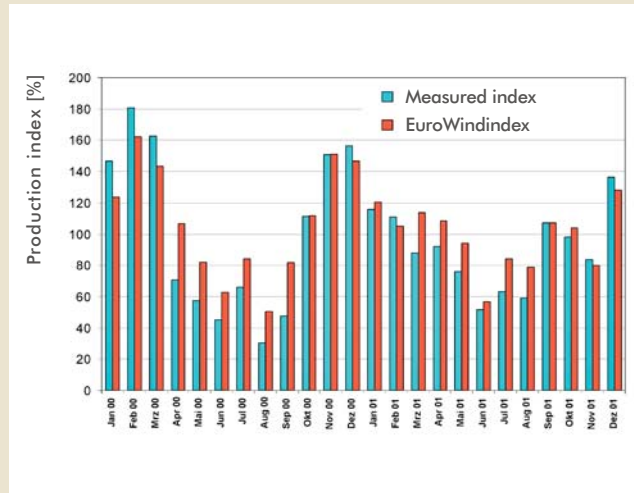
■ The **EUROWINDINDEX** specifies the monthly wind power production of the past, referring to the mean long-term power production and is calculated with a horizontal grid resolution of about 10 kilometres (**figure 1**).

■ The arithmetic technique of the wind index is based on performance data from selected stations. Thereby, high value is placed on the nationwide validity of the wind measurements. For this purpose, 74 synoptic stations of

the German Weather Service (DWD) are available. Moreover, approximately 300 additional stations are taken into account for the calculation of the Europe-wide index.

■ For each station, the hourly measured wind speeds for every month are statistically processed. Via this multitude

Figure 2 Measured and accordingly calculated production index



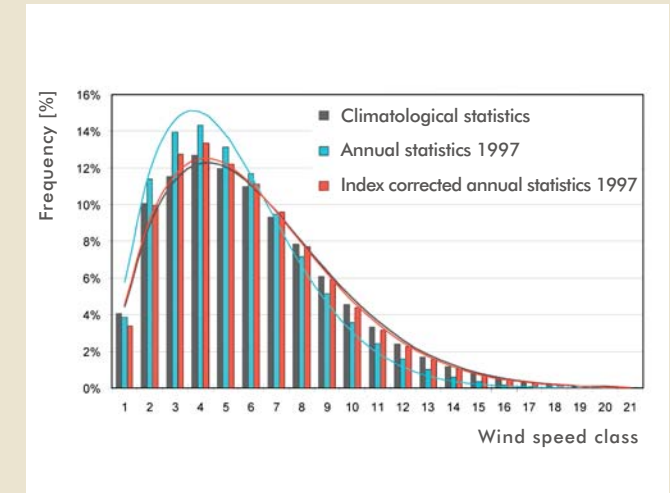
of wind statistics, the monthly power output is calculated for an individual type of wind turbine with any hub height. The **EUROWINDINDEX** is generated by the ratio of the ongoing monthly power production to the climatologic power production.

■ Exemplarily the production index for a wind park in Vogelsberg, Hessen, Germany - won by production data -

is compared with the **EUROWINDINDEX** over a period of two years (**figure 2**).

■ The wind index can also be utilised for the climatologic referencing of short time measurements, even if the reference site is in a larger distance to the next suitable meteorological

Figure 3 Climatological referencing of an annual statistic



station. In our example (**figure 3**), annual measuring data from 1997 were index-corrected. The verification shows a very good correspondence between the climatologically corrected annual statistics and the long-term statistics.

■ In particular for sites with only sparse utilisation of wind energy, the **EUROWINDINDEX** represents an economical and time-saving option for the prediction of the wind power production.