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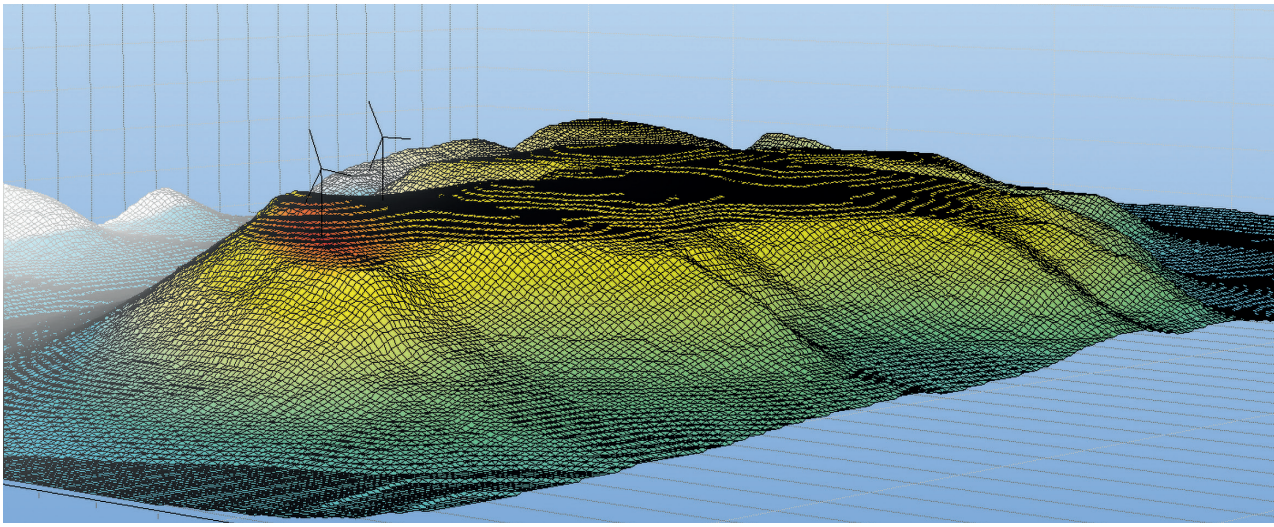
WIND MEASUREMENT AND WIND ASSESSMENT

A REALISTIC ASSESSMENT OF WIND POTENTIAL AND ENERGY YIELD IS A KEY COMPONENT OF A PROJECT'S ECONOMIC SUCCESS. BASED ON OUR ACCREDITATION TO THE DIN EN ISO/IEC 17025:2005 STANDARD, WE WILL SUPPORT YOU IN ALL ISSUES INVOLVING THE YIELD POTENTIAL OF YOUR PROJECT.



WIND MEASUREMENT WITH LIDAR

A wind measurement is the most reliable method for determining local wind potential. LiDAR measurement is a recognised procedure in accordance with the Federation of Wind and other Decentralised Energies (FGW) Technical Guideline 6 (FGW-TR-6).
It provides reliable results across the entire elevation profile up to 200 m and more.
LiDAR has additional benefits. It is easy to install and can be performed without a separate approval. The position of the device can be changed at any time. With its autonomous power supply, it can be operated at any site. We use our own, high-quality windcube v2 devices:

- Creation of a site-optimised measurement programme
- Annual measurement to determine the local wind resources, also in complex terrain
- Elevation profile measurement
- Measurement for determining the power curve and optimising operations

WIND ASSESSMENTS

Energy yield assessments are the basis for investment decisions. Under consideration of FGW-TR6/MEASNET guidelines, we provide the following services worldwide:

- Preparation of raw data from wind measurements or operation data from reference systems
- Long-term referencing of wind statistics using recognised indices and re-analysis data
- Wind field modelling with WAsP and three-dimensional flow (CFD) models
- Determination of wake losses
- Determination of reduced yields (ice, noise reduction operation, bat shut-downs, sector management, electrical losses, etc.)
- Analysis of the uncertainties in the yield forecast
- Determination of the expected energy yield (p50 gross), taking into consideration systematic loss (p50 net) and the probabilities of exceeding it (p75, p90, p99 values)
- Calculation of site quality in accordance with the German Renewable Energy Sources Act (EEG)

FURTHER SERVICES

- Noise emission assessment
- Shadow impact assessments
- Evaluation of existing energy yield assessments
- Site classification and determination of the wind turbine class
- Consultation on the selection of the most suitable wind turbine and the optimal configuration for the site

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