**Wind Energy** 

Solar Energy Biomass, Biogas Grid Integration Quality, Health, Safety & Environment

**Technical Inspection of Wind Turbines** 

# We clarify all technical issues with respect to your wind turbine

Sooner or later every wind turbine has to be inspected. Even the building permit stipulates regular technical examinations to be carried out but, in general, also the operator, the respective insurance company or the financing bank requires a technical status report for the plant.

The team of 8.2 experts is one the most experienced in evaluating and clarifying all technical issues regarding wind turbines. The work of our 8.2 experts already starts with the review of contracts before construction.

During the construction phase we carry out the construction support. As neutral experts we will monitor the nacelle, rotor blade and entire structure during production and assembly. Thus, we will reduce possible quality defects to an absolute minimum.

Before an operator takes over his new wind park from the manufacturer, he must be sure that all requirements have been fulfilled and, equally important, that the manufacturer has delivered in accordance with the contract. We will control these issues optionally after commissioning or – preferably – prior to acceptance and thus prior to the transfer of risk.

Frequently, damage to central and expensive components such as gears, rotor blades or generators may occur already during the first years of operation. During the guarantee and warranty period, the manufacturer will be liable for any damage. Therefore, an operator is well advised to have the plant examined in time prior to the expiry of the guarantee and warranty period, and to request the manufacturer to carry out any necessary repairs. Following expiry of guarantee or warranty, the operator will be required to pay the repair costs himself



# Our services

Wind turbines are subject to recurrent examinations by a neutral expert. This inspection should take place usually every two to four years as stated in the construction documents. The 8.2 experts will proficiently carry out inspections that are independent of manufacturers and operators.

Insurance companies and banks require status-oriented examinations during operating time in order to ensure permanently the insurability and financial feasibility of the facility. The 8.2 Group will take care of these inspections and measurements and, in addition, will examine the quality of every system component requested such as gear box or lightning protection system. These examinations will provide the basis for a long-term reliability.

However, damage and repairs to wind turbines cannot always be avoided during operation. Before an operator hires a service company to carry out the repairs, he should obtain a repair or damage report from an expert. With this data, it will be easier to find the best offer provided by several companies. Here, 8.2 also helps to save money.

### Services at a glance:

- · Inspection after commissioning
- · Periodic / condition based assessment
- Assessment before end of guarantee / warranty period
- Assessment and inspection for lifetime extension
- Damage analysis for insurance companies, owners and banks
- · Inspection before purchase, sale and repowering
- Inspection of individual components e.g. gear box, generator, rotor blades etc.
- HSE tests

### About us

The 8.2 Group brings together experts with decades of experience and young thinkers dedicated to the sustainable value of renewable energy projects. For onshore and offshore wind energy, photovoltaics, biogas, grid integration and QHSE. The 8.2 network offers a comprehensive range of technical consulting services and inspections with independent expertise.

From the first tender, through quality assurance, to lifetime extension assessments, our services cover the entire life

cycle of renewable energy projects. The expertise generated over the last 20 years is based on around 40,000 inspections of wind turbines, 20 GW due diligence projects on- and offshore as well as photovoltaic projects. Furthermore, the 8.2 Group has been involved in almost all German offshore wind projects right from the start.

As a client, you benefit from this unique wealth of experience through our broad knowledge base and the guaranteed quality level of our work.













## Contact

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