

Master the QHSE Risks on Wind Farm Projects with Bureau Veritas as your Partner

■ Synergies of competencies and expertise

To meet the challenges and complexities of your wind farm project, Bureau Veritas can bring a wide array of competencies to bear on all aspects of your project, notably in the following areas: aero-elastic, structure, mechanics, electrical, civil engineering, marine engineering, infrastructure, laboratory expertise, etc.

■ Customized web-based record programs

With Bureau Veritas customized web-based programs, record all construction inspection activities and plan reviews, and track environmental mitigation measures imposed in the project license.

■ Solid experience

For the past ten years, Bureau Veritas has been intervening on many onshore and offshore wind farm projects with a global scope.

■ A group with international reach

With offices in 140 countries, Bureau Veritas is able to guide you through all of your projects around the globe.



Americas

- 200 offices
- 10,800 employees
- 30 countries



Europe, Middle East & Africa

- 520 offices
- 20,500 employees
- 78 countries



Asia - Pacific

- 210 offices
- 16,700 employees
- 37 countries



Move Forward with Confidence

67-71, boulevard du Château
92571 Neuilly-sur-Seine - France
Tel: + 33 (0) 1 55 24 70 00 - windpower@bureauveritas.com
www.bureauveritas.com



**Ensure the Success
of Your Wind Energy Projects**



Move Forward with Confidence



Our solutions for safe, long-lasting and compliant installations

Wind farm projects, onshore, offshore or floating, pose a certain number of challenges. Installations are complex and each site has its specific characteristics, often with many stakeholders involved in the approval process.

At Bureau Veritas, we specialize in finding solutions for our clients during the entire wind farm life cycle. We assist you in ensuring your wind installations are **compliant with all regulatory requirements** regarding health and safety. Whether your company is a wind farm operator, developer or wind turbine manufacturer, Bureau Veritas offers a wide range of **customized services** for each phase of your wind farm project.

Discover in this brochure Bureau Veritas offer with our top requested services.

1- Project Definition: Ensuring the reliability of your project studies

Third-party risk management advisory services and support are increasingly beneficial, to ensure that the decision to go ahead with a project is made taking all facts into consideration and from an informed stand point.

- Assistance in conformity with local regulations
- Danger studies
- Environmental impact studies
- Meteocean studies or reviews
- Collision risk studies

2- Design: Ensuring the safety of your wind farm structure

To determine the suitability of the wind farm location, we **evaluate the site's characteristics**, looking at factors such as wind speeds, nature of the landscape, environmental designations and distance from dwellings. We ensure that all site-specific requirements are taken into consideration.

- Wind farm design review
- Site condition evaluation
- Design basis evaluation
- Site-specific design evaluation

3- Manufacturing: Managing the supply chain and ensuring quality

Our experts visit and inspect the manufacturers, supervise and examine the production of components and undertake assembly checks. The overall aim is **to remain compliant with the approved design** and to ensure consistent high quality during fabrication, thereby avoiding the potential for unplanned costs arising further down the line for your project.

- Sourcing & technical evaluation - HSE audits of suppliers
- Expediting - Quality assurance - Quality control
- Civil engineering
- Laboratory analyses - Monitoring of the fabrication of parts - Non-destructive testing

4- Installation and Commissioning: Managing transportation and ensuring construction site safety

The objective of this phase is to **ensure** that **quality and safety** of the projects are maintained, from components leaving their manufacturing facilities through to their correct and on-time installation.

- Quality assurance - Quality control
- Coordination of health and safety - Technical control of construction
- Regulatory controls (elevators, electrical installations, protection against lightening, etc.)
- Assistance in the performance of tests
- End-of-warranty inspections

5- Operation: Maintain the safety of your installation over time

Ensure that the condition of the wind farm is maintained over time and that the project certificate remains valid. Installations must remain compliant with current regulations.

- In-service inspections (elevators, shaft tests, etc.)
- Maintenance monitoring and optimization
- Non-destructive controls (metallurgy and composites) - Laboratory expertise (corrosion, aging)

6- Certification: Get solid recognition from your clients

- Thanks to its Technical Center network, Bureau Veritas provides **type certification** according to international standards and other related requirements; we are accredited by COFRAC (n°5-0051 Attestation) for the type certification through assessment of the wind turbine design and components.
- Bureau Veritas also provides **project certification**, including the wind turbines (which have obtained a type certificate), the foundations and the specific equipment of the farm, to ensure it is compliant with external conditions, applicable codes, as well as other relevant requirements for a specific site.
- Bureau Veritas offers classification services for floating wind turbines.

