

Wind Engineering

Applus+ wind engineering services assist our clients in ensuring that their wind farm design meets the highest quality standards, a key element in guaranteeing their long-term performance. We also support them throughout all the stages of their wind power plants, from the project design to its development, construction, and management.

Our technical advisory experts from Enertis Applus+ and Barlovento Applus+ offer thorough wind engineering services internationally, supported by more than two decades in wind project management.



THE Applus+ SOLUTION

In recent years, governments are promoting clean energy with the aim of reducing CO₂ emissions. For this reason, the renewable energy auctions, as well as the policies to promote PPAs (Power Purchase Agreements), are being driven by most countries. Thus, producers or developers participate in a more competitive market with the aim to get the lowest LCOE (Levelised Cost of Energy), without sacrificing the quality of their onshore and offshore wind farms.

Applus+ team of wind engineers has worked on wind energy projects in more than 20 countries. We offer wide global expertise in the industry, as well as deep knowledge of wind technology.

In recent years, Applus+ has specialized in Owners Engineering, providing engineering review and construction supervision in Spain, South Africa, Australia, and Colombia.



Applus+ wind engineering solutions include both wind offshore and onshore:

- **Conceptual and Basic engineering** to ensure that wind projects meet the technical requirements to obtain the permits needed.
- **Detailed engineering** to review and approve the selected equipment and designs submitted by various suppliers and contractors.
- **Owners' engineering** services are provided during the design, planning, construction, and commissioning phases in order to ensure the projects' quality throughout their lifetime.
- **Feasibility studies** that aim to maximize the use of the available capacity at the points of interconnection via hybridization of technologies, such as solar and wind, or other possible configurations with the use of BESS (Battery Energy Storage Systems) technologies.
- **Qualified technical back-office services** that provide valuable support to site wind engineers.

Applus+ wind engineering solutions are accredited by ISO 9001, the world's most popular standard for quality management, which certifies its high-standard services and solutions.

Additionally, our experience in [energy storage](#) enables us to provide specific technical support also on this rapidly expanding technology.

Target customers

Applus+ provides independent and specialized wind engineering services for developers, utility firms, or operators, across all phases of a project's lifecycle for both, onshore and offshore, namely:

1. Pre-planning phase
2. Planning and development phase
3. Implementation and construction phase
4. Operation and asset management phase

Key customer benefits

With more than 40 years in the power market and more than 20 years in renewables, we are qualified to provide our worldwide customers, a trustworthy engineering service throughout the entire wind farm lifecycle.



The company's wind engineering experts identify the best solutions that suit their client's needs in every particular case. They ensure adequate risk management and the maximum performance of their projects; as well as reaching the maximum profitability, meeting quality standards, and securing life extension of their wind turbines and wind farms.