



Integrated financial and technical services for onshore wind power plants

Risk assessment, quality assurance, certification and insurance solutions



Your single source for insurability, bankability and investability of wind farms

The global market for onshore wind farms is growing – according to the International Energy Agency, 2.5 wind turbines are expected to be erected every hour! It is estimated that nearly 60 GW of wind capacity are going to be built in 2017 in the face of continuing declines in cost and the steady progress towards achieving grid parity.

Mature markets are facing decreasing internal rates of return and a decline in the availability of projects, and therefore long-term growth is mainly expected to take place in developing and emerging markets. However, a myriad of challenges are starting to emerge: new markets often do not have established quality assurance and financing mechanisms yet, and developing high quality projects which are attractive to investors,

commercial banks and insurance companies is becoming increasingly difficult in such environments.

Through VDE Renewables' knowledge platforms and ongoing dialogues with the finance and clean energy industries, Allianz Climate Solutions' (ACS) risk assessment and transaction know-how, and Evergy's long-term international track record in the technical consultancy of wind farms, the three organizations were able to identify the main hurdles leading to the lack of insurability, bankability and investability in emerging markets. With these challenges in mind, VDE, ACS and Evergy have partnered up to offer a comprehensive portfolio of solutions for onshore wind farms to bridge the transaction gap between the investment and the asset side by maximizing performance and minimizing overall project risk.

Differentiation in the competitive market environment through premium quality, proven through the stringent evaluation carried out by partners widely recognized in the field of renewable energy

Support in securing better insurance conditions and financing terms

Optimized returns and increased liquidity for developers

Streamlined development processes can be standardized and adopted

Verified system performance and minimized financial and technical risks

Requirements from all stakeholders are accounted for in the project assessment

Our comprehensive solutions portfolio



COMPREHENSIVE RISK ASSESSMENT:

- Construction and completion risk
- Technical risk
- Commercial risk
- Operational risk
- Regulatory and macroeconomic risk
- Financial risk

PROFESSIONAL ASSESSMENT of the erection of the wind turbines and the setup of wind farm infrastructure

CONTRACTS: Technical evaluation of project and construction contracts; in particular the purchase contract of the wind turbines

DOCUMENTATION: Ensuring the completeness of the documentation, including maintenance and operation manuals that are important for long-term operation and a potential change of the wind farm operator



ENERGY YIELD: Testing and evaluation of the yield prediction in order to establish a reliable basis for the commercial viability of the wind power plant. It is also checked that all key parameters that influence the yield were taken into account.

PROFITABILITY: Verification of the critical technical parameters required for calculating project profitability.

PERFORMANCE: Verification of the performance data of the wind turbines and the overall wind farm based on operating data



GRID INTERCONNECTION: evaluation of the grid environment and the potential impact on power plant operation



STRINGENT TESTING PROCEDURES: Risk reduction of technical failures for all project stakeholders and close support during the various stages of project execution



COMPREHENSIVE INSURANCE

- Based on AllRisk Policy Wording
- Includes construction and operational phases

PERFORMANCE GUARANTEE*

- Up to 10 years coverage
- Covers volatility of wind



INDEPENDENT PROJECT RATING**

- Offered by Euler Hermes Rating GmbH, internationally accredited agency within the Allianz Group



VDE CERTIFIED ONSHORE WIND FARM: Awarding of a certificate from the independent certification body VDE which is based on a well-defined and comprehensive criteria that meets the quality requirements from banks, investors and insurance companies

* Further conditions apply

** Wind farm must meet eligibility requirements from Euler Hermes Rating GmbH



A well-rounded partnership

This partnership brings together leaders from the financial and technical fields of renewable energy. Allianz Climate Solutions has analyzed nearly 10 billion Euros worth of projects, Evergy has performed technical consulting services for nearly 2,000 turbines in Europe, North Africa and Asia, and VDE Renewables is a pioneer in the certification of renewable energy projects.

About Allianz Climate Solutions

Allianz Climate Solutions (ACS) serves as the Allianz center of competence for climate change with a focus on renewable energies. ACS offers insurance solutions and advisory services on financing issues for renewable energy projects to both external clients and Allianz entities. Furthermore, ACS is responsible for the climate-related strategy development of Allianz and serves as a catalyst for climate-related product development.

About Evergy

Evergy Engineering GmbH ("Evergy") is a dedicated and trusted consultancy company based in Munich specialized in

technical due diligence services for investors and lenders in the renewable energy sector. Evergy is fully independent and internationally active. During the past 13 years, Evergy has worked on more than 4 GW of successfully closed wind project transactions worldwide and has gained industry-wide recognition for technical excellence in the power sector. Evergy's international team provides technical consultancy services in all stages of development and execution of renewable energy projects.

About VDE Renewables

VDE Renewables is 100% owned by VDE. It conducts the marketing, business development, and project management for certification and non-certification activities in the area of quality assurance for the global renewable energy sector. VDE Renewables is partnered with the VDE Testing and Certification Institute. VDE Renewables works closely with leading institutions around the world to carry out testing of components and systems according to the highest levels of quality.



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