FuturEnergSystems
FES

Powering the Energy Transition for a Sustainable Future

Project Profile

Integrated Energy Systems Technology

FuturEnergSystems
FES

Part of the ExergInc Group of Companies

ExergInc Group

Enterprise Partners tbc

Project Location: Global

Project Status: Product Launch

Project Description: A leading Technology Provider with extensive expertise from the automotive and motorsport industries has successfully developed a uniquely designed wind turbine with an integrated energy platform - solar, battery and/or hydrogen as required. This forms the heart of decentralised microgrids, by making it possible to generate renewable and cost-effective energy day and night, summer and winter. In collaboration with a Formula 1 team the Technology Provider has developed innovative small wind turbine rotor blades made of carbon fibre that embody the principles of aerodynamics and lightweight construction.

The hyper-efficient small wind turbine is then produced in automotive series production processes from raw material to the finished product, thus fulfilling all quality and economic requirements for the necessary scalability and reliability. A scalable inverter structure has been engineered for the electrical system, mirroring those utilised in global automation lines. Complementing this, all essential components, including the generator, brake and gear motor for wind tracking are sourced from reputable industrial manufacturers, meeting strict reliability requirements.

Project Highlights: The core technology comprises modular small wind turbines and microgrid solutions, enabling renewable and cost-effective energy generation year-round. It presents the following benefits:-

- Reliability and Scalability: Industrial production and CE and UL-certified components ensure reliability and scalability for various applications.
- Design Features: Innovative ultra-efficient rotor blade design and modular inverter technology optimise efficiency and flexibility.
- Technical Benefits: Enhanced efficiency, reliability and environmental sustainability ensure long-term value.

The integrated technology represents an opportunity for FES in collaboration with the Technology Provider to participate in the forecast massive growth of Distributed Renewable Energy across the globe.

Key Milestones: The business plan is based upon an initial ‘Produce and Sell Financial Model (2024 to 2026)’ that transitions into a ‘Recurring Income Model (2027 to 2029).’