
LEITWIND®

HTI - High Technology Industries

LEITNER

Rope-hauled passenger transport systems for use in mountains and cities

POMA

Rope-hauled passenger transport systems for use in mountains and cities

BARTHOLET

Rope-hauled passenger transport systems for use in mountains and cities

AGUDIO

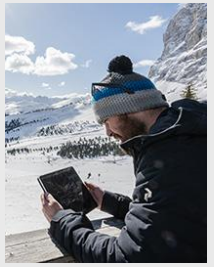
Material transport systems

PRINOTH

Snow grooming, tracked and vegetation management vehicles

DEMACLENKO

Complete solutions for fully automatic technical snowmaking



SKADII

Open digital resort manage-ment platform

TROYER

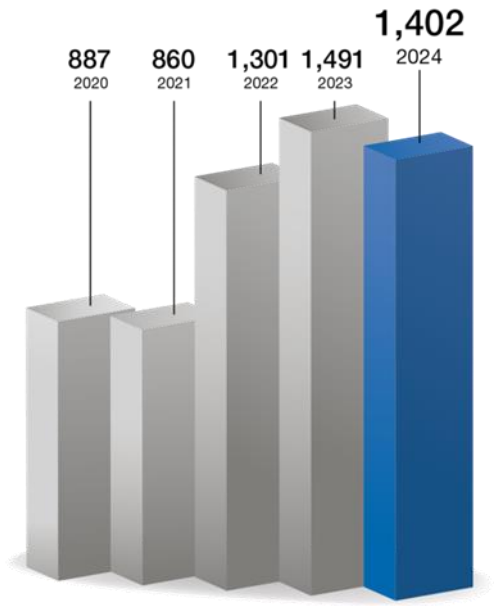
Complete electromechanical equipment solutions for hydroelectric power plants

LEITWIND

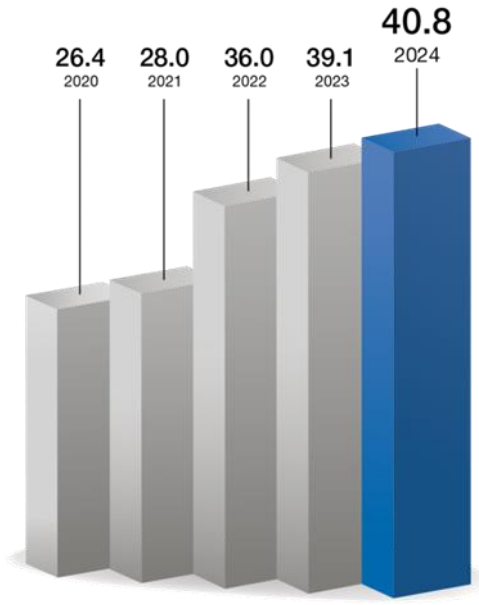
Megawatt-class gearless wind power plants

BUDGET DATA 2024

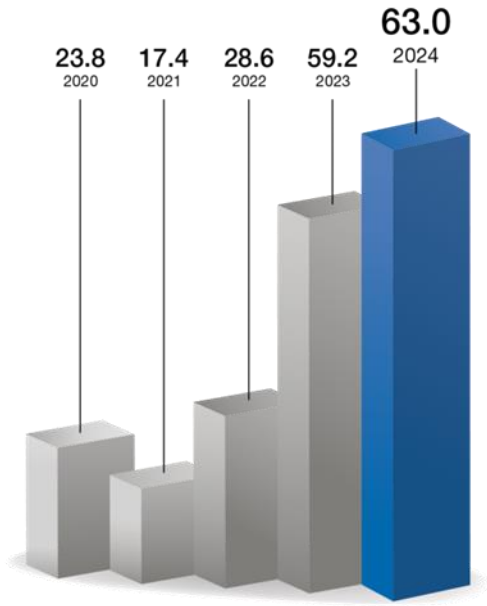
Turnover
1.402 million €



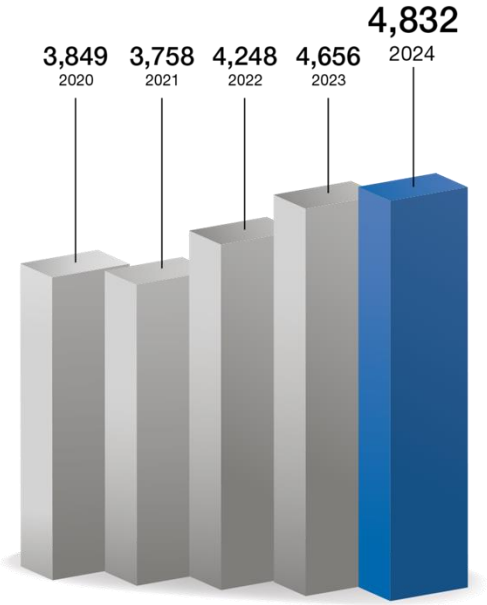
Research
40.8 million €

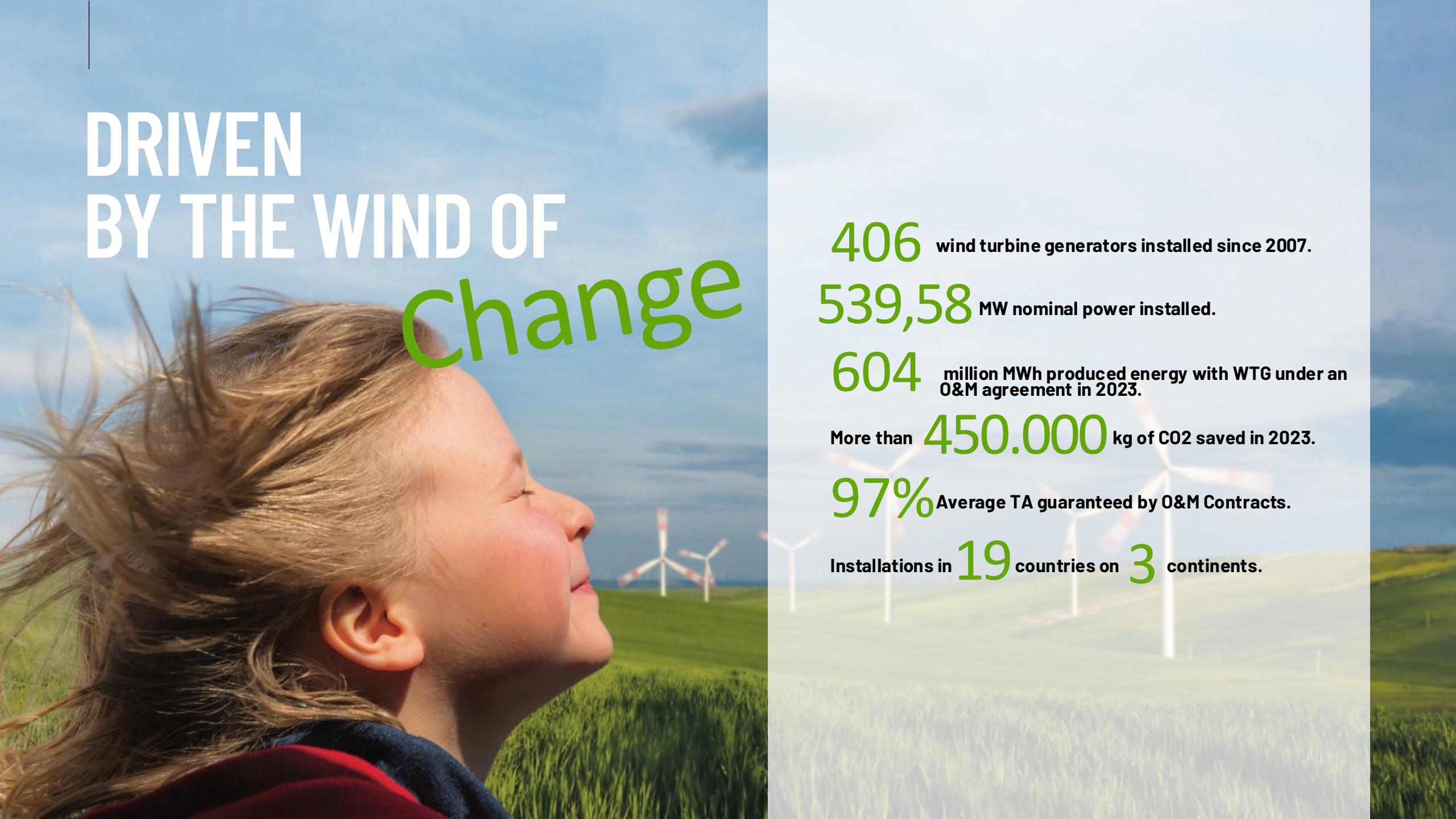


Investment
63 million €



Employees
4.832





DRIVEN BY THE WIND OF Change

406 **wind turbine generators installed since 2007.**

539,58 **MW nominal power installed.**

604 **million MWh produced energy with WTG under an O&M agreement in 2023.**

More than 450.000 **kg of CO2 saved in 2023.**

97% **Average TA guaranteed by O&M Contracts.**

Installations in 19 **countries on** 3 **continents.**

LEITWIND AROUND THE World

LEITWIND operates a world-class supply chain and has production facilities in several locations:

1 **South Tyrol, Italy**
Headquarters in Sterzing and offices in Bolzano. Research & Development, Product Care, Sales, Project Management and Customer Service

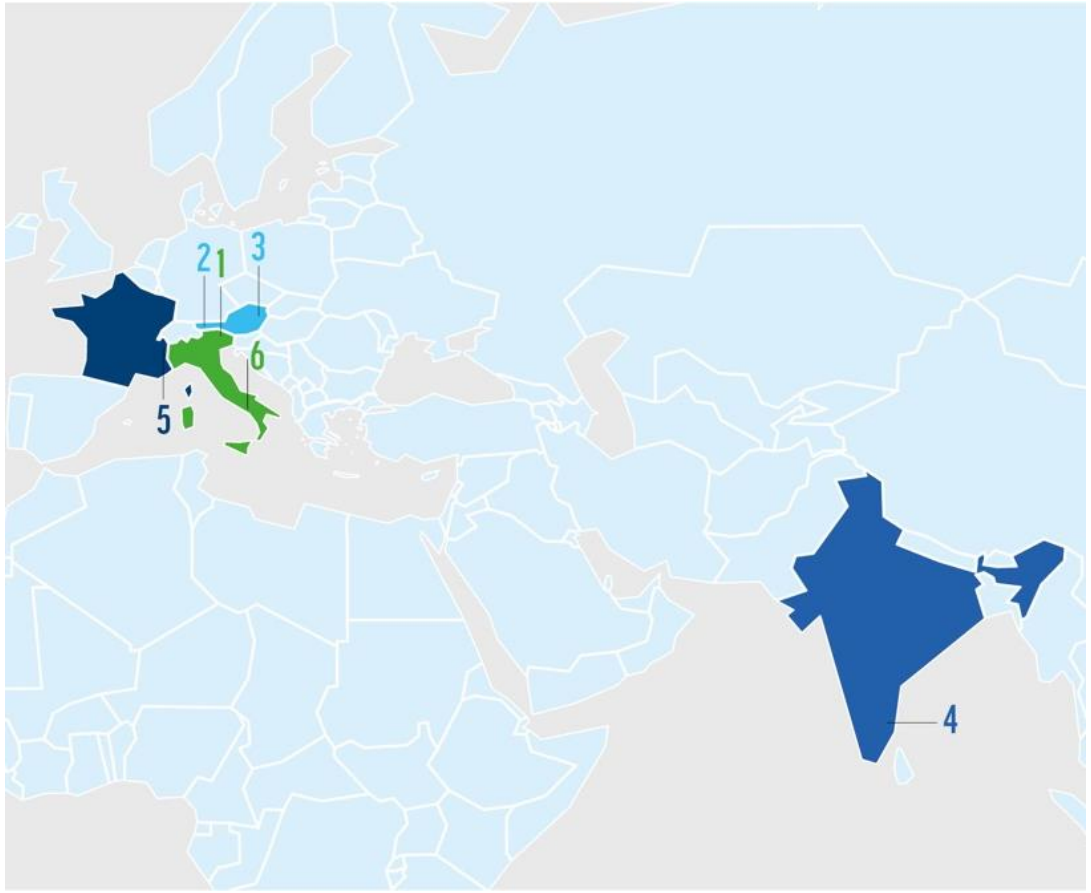
2 **Telfs**, **Austria**
Research & Development, Production of Major Components: Generators, Hubs and Frames. LEITWIND Test Center location

3 **Vienna**, **Austria**
Research & Development, Remote Monitoring

4 **Tamil Nadu**, **India**
Production of generators, hubs, frames and blades

5 **Gilly-sur-Isère**, **Francia**
Production of wind turbines (generators, hubs, frames) by sister company Poma

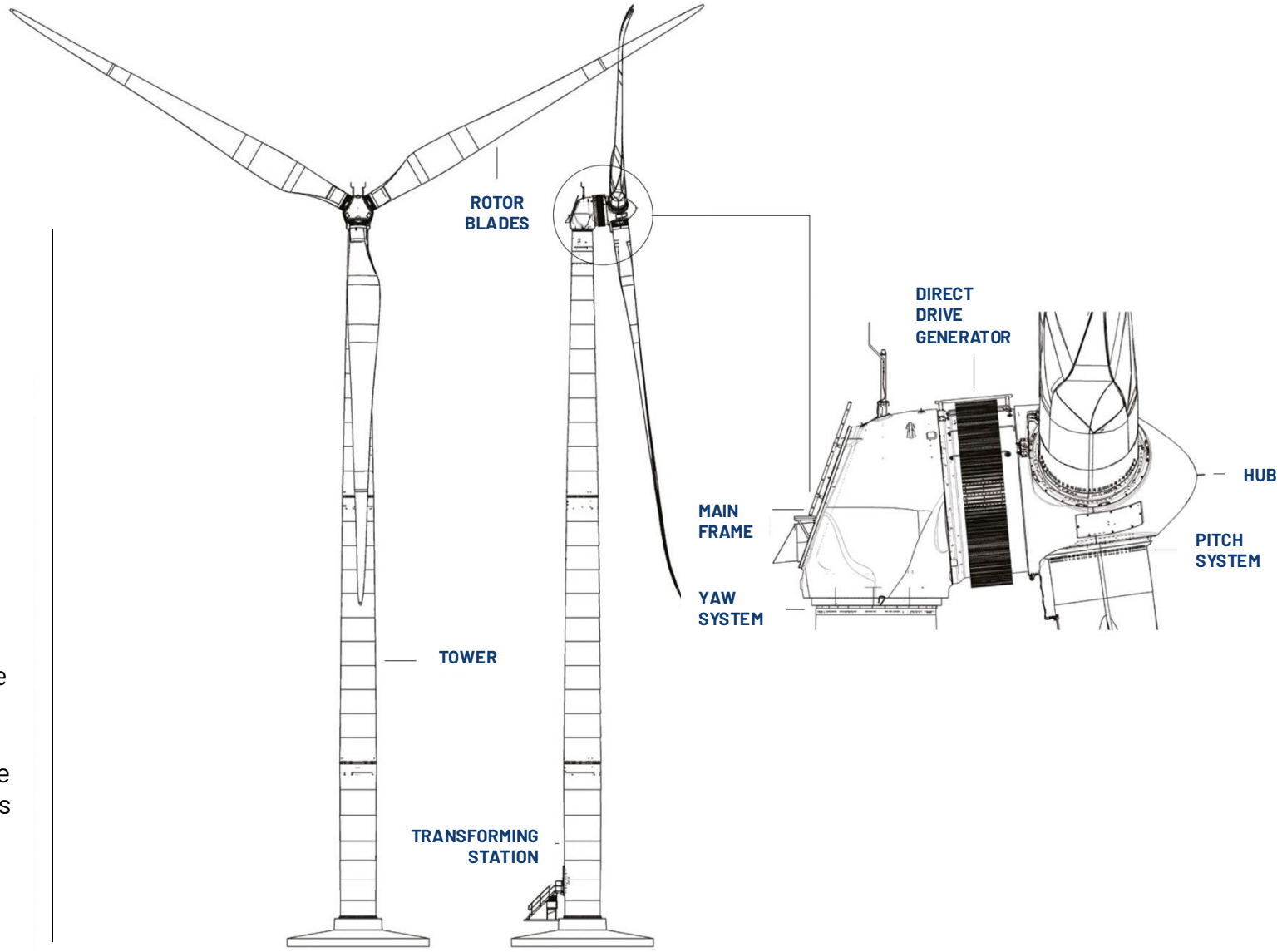
6 **Lacedonia**, **Italia**
Service and maintenance hub for southern Italy. Material storage, manufacturing, regeneration and assembly of components.



Leitwind

WIND TURBINES

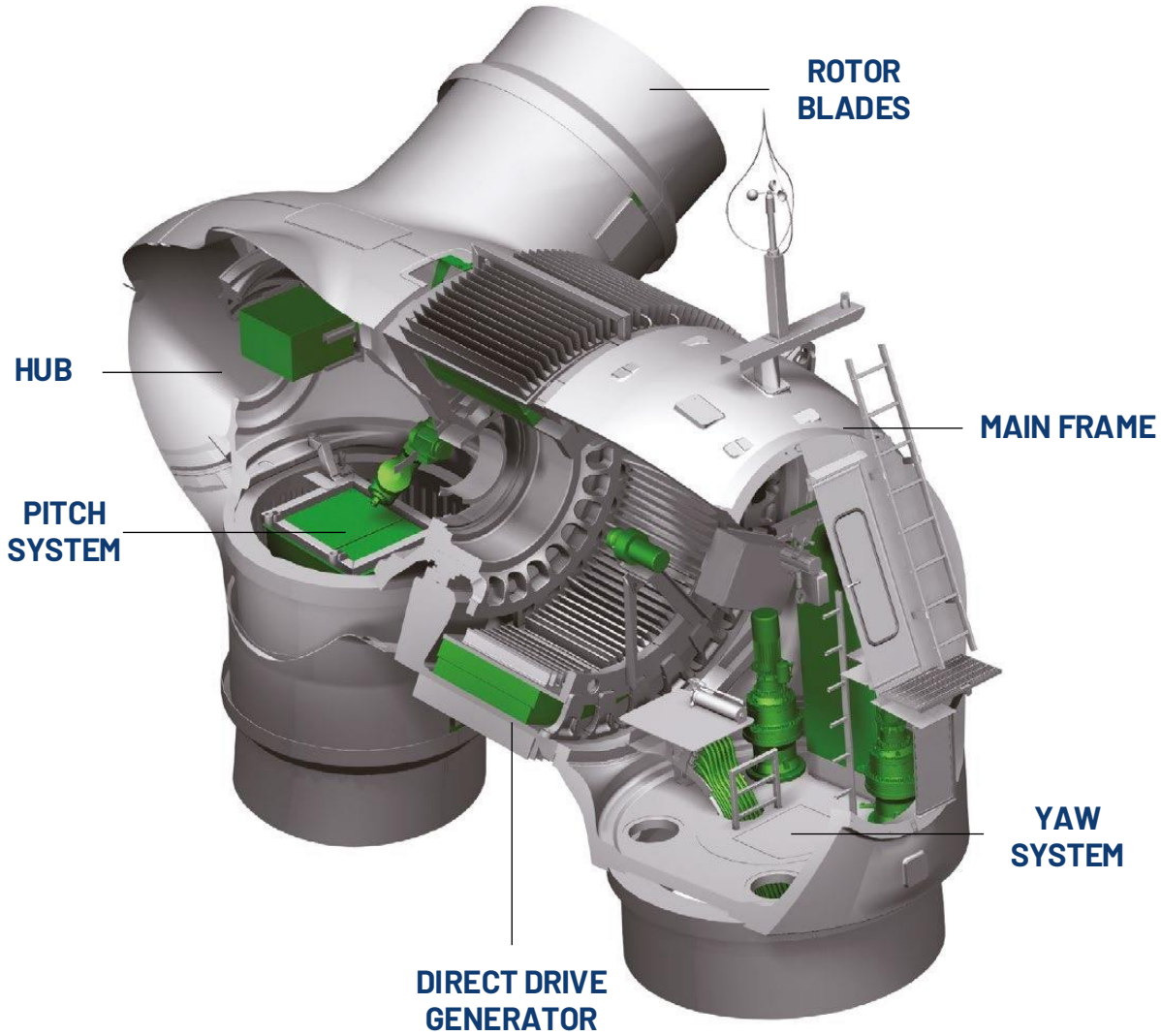
- The **blades** capture the power of the wind in their rotational motion.
- The **hub** transforms the motion of the blades into mechanical power. It also hosts the pitch system.
- The **pitch system** controls the power captured by the blades (by varying their angle of attack) and acts as the main braking system.
- The **Direct Drive generator** is integrated in the main structure and converts mechanical to electrical power.
- The **main frame** connects the Direct Drive generator to the tower, it carries the control system and the yaw system.
- The **yaw system** allows the nacelle to turn relative to the tower, keeping it upwind.
- The **tower** elevates and supports the rest of the structure into the wind. It grants access to nacelle and shelters the energy transforming station at its root.
- The **transforming station** accommodates the power electronic and the MV transformer for the connection to the electrical grid.



LEITWIND WIND TURBINES: SIMPLICITY, EFFICIENCY AND PRODUCTIVITY

The Direct Drive is at the heart of the LEITWIND wind turbine and simply consists in connecting directly the rotor to the generator, eliminating the gearbox. Less parts rotating at high speed and therefore less friction leads to greater efficiency, increased reliability as well as decreased wear and maintenance costs.

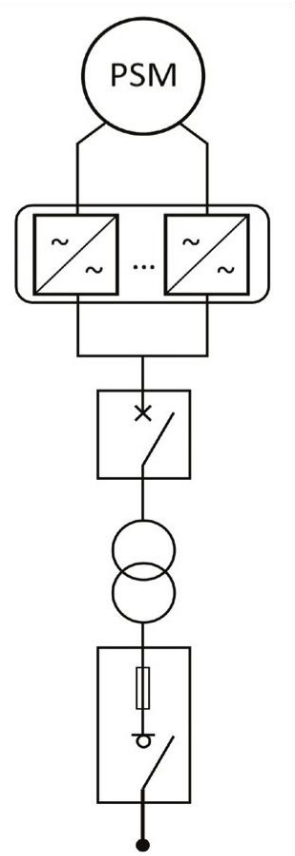
This patented technology, combined with exceptionally low specific power, make the LEITWIND wind turbines especially suitable for low wind sites.



MODULAR FULL POWER Converters

The combination of LEITWIND's synchronous generator with permanent magnets , the full power converters named **LEITDRIVE** and the cutting-edge system control unit ensure optimal grid compatibility.

LEITDRIVE full power converters developed by LEITWIND can be adapted to complex and differing requirements of grid operators. Full power converters and their control unit contribute to maintaining the voltage and frequency in the grid and can thus dynamically support weak or unstable grids.



Permanent magnet synchronous generator

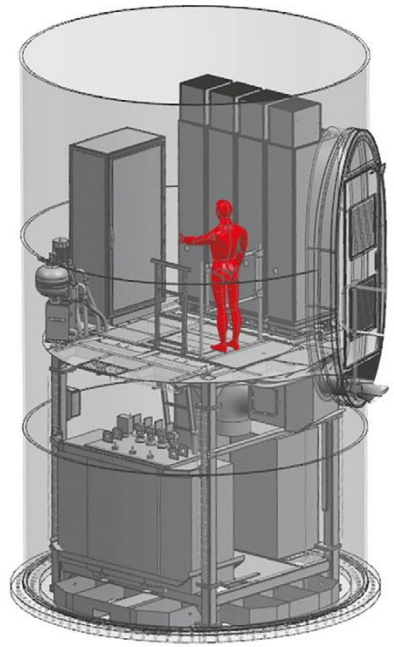
Power converter

LV master switch

Power transformer

MV main switch

TOWER BOTTOM ARRANGEMENT*



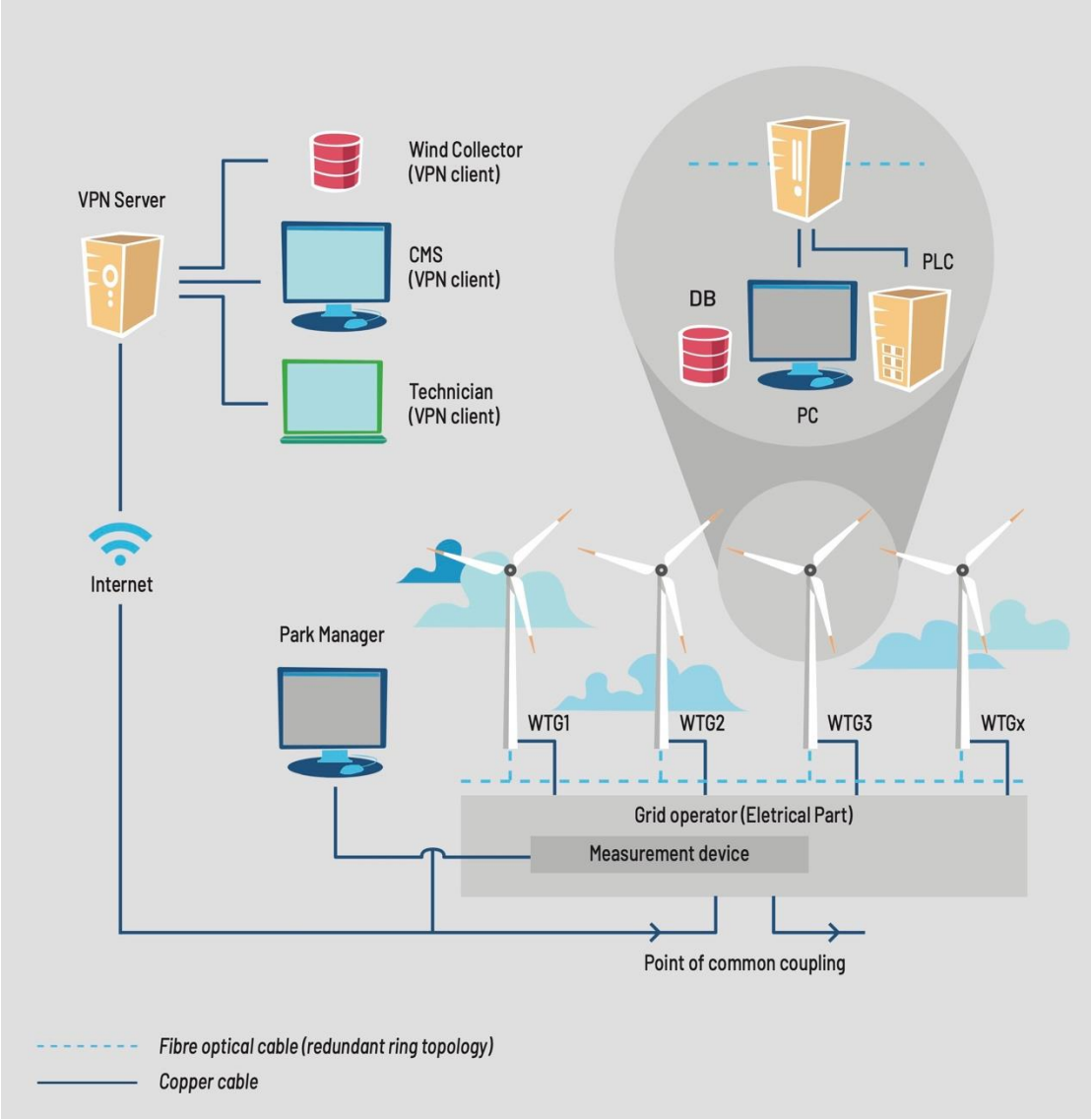
** The image represents the concept of LEITWIND wind turbines.*

REMOTE Monitoring AND CONTROL

LEITWIND PARK MANAGER offers the opportunity to control and manage both the individual wind turbines and the entire wind farm in real time.

Find below an overview of the features implemented in LEITWIND PARK MANAGER:

- **Real-time monitoring of the wind farm and individual wind turbine generators**
- **Control of active and reactive power generated by the wind farm**
- **Interface to the grid operator**
- **Data acquisition and reporting**



LTW42
250 – 500 kW

The smallest wind turbine in the LEITWIND portfolio, it was developed specifically to safeguard the environment, aiming for decentralised production of low-cost renewable energy and its direct consumption right where it is produced. Its compact size and low visual impact are just some of the many features that make this turbine model a real success.

CHARACTERISTICS

- **Ideal for low-wind areas**
- **Streamlined authorisation procedure Short installation times**
- **Low visual impact**
- **Suitable for self-consumption**
- **Average technical availability of up to 97%**

LTW42 250 kW
Ketzin, Germany

LTW42 500 kW
Marra, Italy

LTW80
500 – 1.800 kW

The LTW80 model, one of the most reliable wind turbines on the market, was developed to deliver high power production even in very windy areas. In 2020, LEITWIND also built a version of the LTW80 capable of withstanding tropical cyclone conditions and extreme wind speeds, with gusts of up to 250 km/h.

CHARACTERISTICS

- **Ideal for high-wind areas**
- **Excellent performance even in high winds**
- **LEITWIND's most installed turbine in the world**
- **Typhoon version available**
- **Suitable for powering Energy Communities**
- **Average technical availability of up to 97%**

LTW80 1.500 kW
Salzstiegl, Austria

LTW90
500 – 2.000 kW

The LTW90 wind turbine was specially designed for low-wind sites. Thanks to the large rotor surface area, it ensures significant power generation and is perfectly suitable for a wind class of up to IIIA+.

CHARACTERISTICS

- **Ideal for low-wind areas**
- **Excellent performance thanks to large rotor diameter**
- **Ideal for single-turbine projects**
- **Suitable for powering Energy Communities**
- **Average technical availability of up to 97%**

LTW90 900 kW
Vallata, Italy

LTW90 1.000 kW
Avigliano Santa Tecla, Italy

LTW101
2.000 – 3.000 kW

The LTW101 wind turbine is the largest wind turbine model in the LEITWIND portfolio, it was developed to meet the needs of customers who require a turbine that can deliver high power outputs, while ensuring high efficiency and reliability.

CHARACTERISTICS

- **Ideal for moderate wind areas**
- **Excellent performance thanks to large rotor diameter**
- **Ideal for single-turbine projects**
- **The largest turbine in the LEITWIND portfolio**
- **Average technical availability of up to 97%**

TOOELE – LPOA Facility

TOOELE, UT USA

- 1 LTW42
- 250 kW
- 42 m
- 28 m

THANK YOU

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