

Revolutionary energy
Clean, safe and efficient
In any climate and weather

We are your partners for clean and
efficient energy projects. Worldwide.



The Energy challenge: Wind power for every corner of the earth

For an increasing global demand for clean energy - even in poor and difficult to access regions on our earth. German SustainableS GmbH has the solution.

efficiency

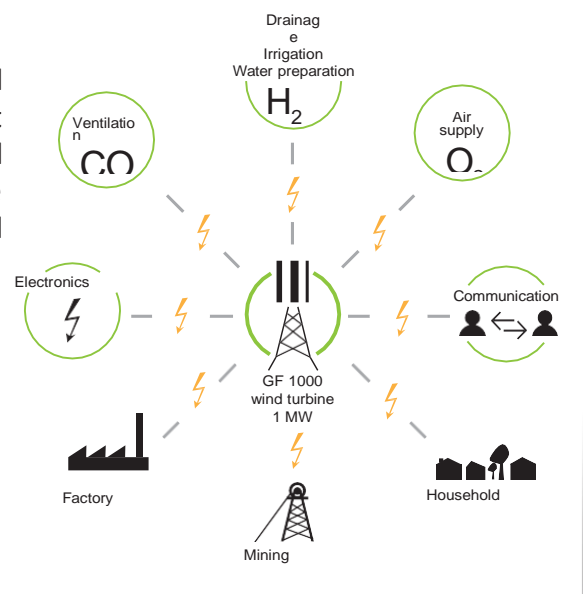
Wind power re-invented: Vertical Axis efficiency

In a recent field study conducted by the California University of Technology under Dr. John Dabiri, Professor for Aerospace and Biotechnology, wind parks equipped with vertical axis wind turbines (VAWT) have been proven to be up to ten times more efficient than traditional horizontal axis turbines (HAWT), for the same wind farm area. This is due to the large horizontal vortices created by HAWT installations, preventing close positioning of the units and therefore using more valuable land. VAWT's by contrast, can be placed at much closer proximity, increasing the wind farm's efficiency, thereby consuming much less acreage - or producing more electrical power per given area.

One technology: endless possibilities

GS-1000NT is a special solution for untapped wind zones. In many parts of the world with perfect wind conditions, installations of traditional wind generators (HVA) are uneconomical because of the lack of infrastructure or problematic geological conditions causing high costs.

GS-1000NT is a perfect solution. Simulations have shown that in these special locations the 10-year rate of return increases by more than 30 percent because of its strong-wind compatibility and low maintenance costs.



Combine the advantages with efficiency

The GS-1000NT system is a perfect solution for energy supply to remote areas, where electrical power is required. Then need for power has often resulted in the burning of fossil fuels or costly long high tension powerlines. Not only remote mines and self-sufficient desert settlements, mountainous or heavily forested landscapes, but also underdeveloped areas where residents had to either drill deep water wells or travel long distances for obtaining drinking water and fuel for generators. The GS-1000NT VAWT can improve the quality of life, saving hydro-carbon resources and enabling the growth of small industries at no negative impact to the environment.

Ease of transport, simple maintenance and high efficiency make GS-1000NT an ultimate power supplier.
Discover the possibilities.

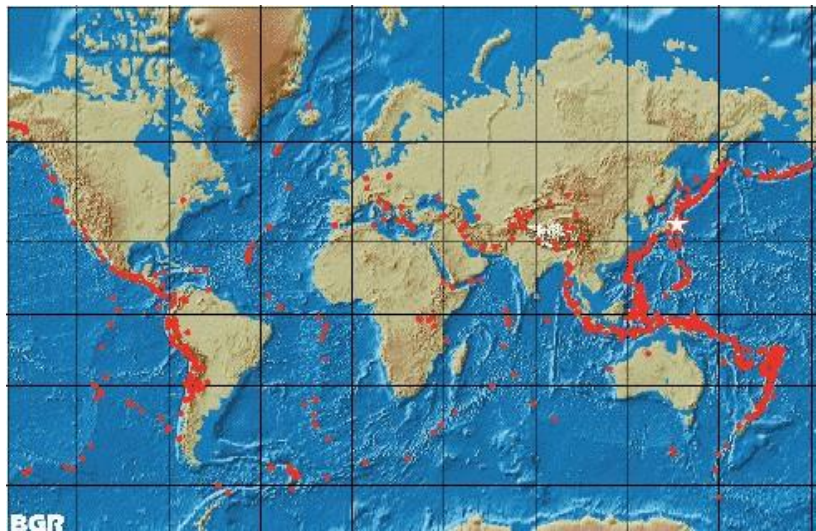
The peak of robust simplicity.

chances

A huge worldwide growth market

Geologist Stephan Grammel, foresees a promising future for the GS-1000NT in areas of strong winds, difficult geological and seismic conditions, problematic logistical conditions and where operating and maintenance costs are a decisive factor:

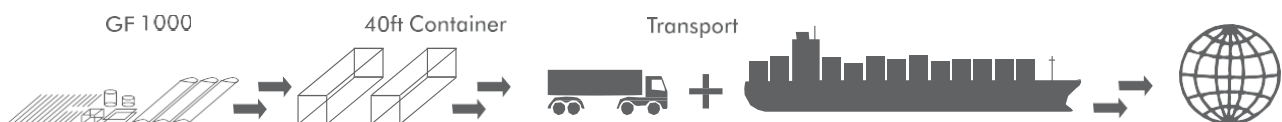
“The principles and design of the GS-1000 NT opens up new possibilities in areas of strong winds and seismic activity; mainly in the coastal regions of the continents but also in island regions like Japan and Indonesia, especially in remote or undeveloped areas, the system offers an economical solution due to its limited logistical and maintenance support requirements...”



Global areas with seismic

...German Sustainables' GS-1000NT provides an alternative to conventional horizontal axis wind turbines which cannot be implemented in many geographical regions which may now get access to clean, safe and affordable electricity”.

The light weight and efficient transportation of the GS-1000NT



All parts of the GF 1000 fit into 40 ft standard c o n t a i n e r s

We conquer the market in geologically problematic areas.

professionell

The company

German Sustainables GmbH offers economically and technologically advanced 1MW vertical axis wind turbines.

The conceptual design is completed. Construction of the prototype system commenced in 2016, however in 2017 it was decided to adapt a hydrostatic drive, which offers vast improvement over conventional solutions. The most expressed change is the ability to utilize synchronous generators, which are positioned in containers at ground level. Global demand is growing and discussions with potential customers are very positive.

The Flug Werk company was founded in 1996 by (now retired Flight Captain) Claus Colling, which built flying aircraft and developed the GF vertical axis wind turbine.

Dr. Volker Kassera and his CFD-Consultants company is the company's main source of scientific wind energy engineering expertise.

Hans-Jürgen Brandt, an outspoken specialist for all aspects of finances, is CEO of German Sustainables.



Claus Colling
Flight Captain
ret. **CTO**



Volker Kassera
Dr. Ing. **R&D**



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For us it's all about energy....