



# Gaia-Wind Turbines



your own  
WIND TURBINE

# Gaia-Wind Energy

**Gaia-Wind develops and manufactures small and efficient wind turbines for supplying electricity to properties such as private houses, farms, offices, companies and swimming pools. With 150 wind turbines already installed, Gaia-Wind has more than 1,000 years of operational experience. From our establishments in Århus, Denmark and Glasgow, Scotland, we can supply you with 'your own wind turbine', which in turn will provide you with reliable, abundant and clean energy.**



Stuart Goodale

It doesn't have to be so difficult - only four months after making the decision, Stuart Goodale could inaugurate his own household wind turbine. The two-bladed Gaia-Wind turbine stands 18 metres high up to the nameplate, and when the blade points up to the sky its tip stands 25 metres above the ground.



## Wind energy for a cleaner environment

News items appear on an almost daily basis, highlighting how CO<sub>2</sub> emissions cause climate change, and how this can affect the environment. Generating electricity with wind turbines significantly reduces CO<sub>2</sub> emissions. The electricity from a Gaia-Wind turbine (typically 30,000 kWh per year) not only delivers clean electricity for everyday use, but the surplus of clean energy compensates for the carbon footprint created by heating, cars, air travel and other carbon emissions through the use of fuel-based energy. A single Gaia-Wind 11 kW turbine will bring the carbon footprint of a four-person household back to zero.



To us 'environment' means even more than just clean energy. The design of wind turbines is a high priority at Gaia-Wind. Our turbines are mounted with reflection-free light grey blades, which match the sky and the clouds. With the slim line design of the nacelle, together with its extremely low noise output, enables the wind turbine adapts easily into the surrounding countryside.

### **Reliability of an established design**

Gaia-Wind turbines have been developed according to 'Danish design'; the design basis for most of the large wind turbines on the market. Our products are based on a modular design using components that have been carefully selected to provide high quality, maximum reliability and low maintenance requirements. Our products have been approved according to the official HB-standards laid down by the Danish Government. Gaia-Wind is the only manufacturer of small wind turbines to have achieved this approval, which ensures top product quality to our customers.



independant energy - environmental friendly energy

### **Putting your application first**

The wind turbine is connected to an electrical installation at the owner's property when a grid connection is available, thereby enabling the electricity to be used directly by the owner. Any surplus can then be sold on to the electricity board. When using stand-alone wind turbines, the turbines work in parallel with a diesel generator or a battery bank, providing clean electricity to remote installations without a public grid. Electricity from the wind turbine can also be used for direct heating purposes. Energy produced by the turbine, but not used on site, can be directed back to hot water tanks, storage heaters or under-floor heating, instead of being sold back to the electricity board.

your own  
**WIND TURBINE**

## Everything under control

The control system has been developed from the controllers of large turbines. It contains multiple sensors which continuously monitor the status and performance of the turbine. The internet connection for the controller means the wind turbine can be monitored online. With every internet-connected computer or PDA, you can check the energy production and the operational status of your Gaia-Wind turbine. You will also be able to view historical production overviews. With this particular function, a grey windy day becomes a bit more enjoyable when you can monitor the amount of energy being produced by your own wind turbine.



It is only during periods with very little wind that Stuart has to buy electricity. "If both the oven and washing machine are running simultaneously and the wind is "lazy", we can immediately see from our meter that we have to buy electricity from the electricity board," he says. Normally, Stuart's wind turbine produces more electricity than he can use, which means that he sells around 24,000 kWh of green electricity back to the electricity board on a yearly basis.

## Independent and competitive

Nowadays the supply of oil and gas is not always secure and certainly not predictable; energy prices fluctuate and increase on a daily basis. A Gaia-Wind turbine allows you to create your own independent source of energy. Good wind conditions are the key to economic success for a wind turbine. Other factors include the position of the turbine, available grants, and finance conditions. Our ambition is to supply you with a wind turbine at a competitive price. A Gaia-Wind turbine is an economically attractive asset, and will become even more attractive in the immediate future.

## Can we be of service?

Gaia-Wind offers a wide range of services, including assistance in the selection, installation and operation of your own wind turbine. From first contact, we provide information and practical support, and can help answer the following questions:

- What are the local wind conditions?
- Are there grants or financing schemes available for wind turbines?
- Is a wind turbine on your site a competitive solution?
- Which position is the most advantageous?

We can also provide support with:

- The Planning application
- Project management and installation
- Service, maintenance and online monitoring
- Upgrades and re-marketing of turbines



independant energy - environmental friendly energy

Our website guides you through these steps and documents are provided, which makes the whole procedure much easier to understand. However, if you would like us to undertake these tasks on your behalf, then this service can be arranged at a competitive price.

[www.gaia-wind.com](http://www.gaia-wind.com)

your own  
**ELECTRICITY**



[www.gaia-wind.com](http://www.gaia-wind.com)

