Winner designated in competition for small wind turbines

Competition for suppliers of small wind turbines

Last fall, the Swedish Windpower Association (Svensk Vindkraftförening) announced a competition with the purpose to obtain better information to potential buyers of small wind turbines by international consumer labeling, which in turn will hopefully lead to better products our members can buy.

Companies registered in Sweden, which supply small wind turbines with the consumer label in accordance with IEC standard to the Swedish market could participate and try to win the prize money. The contest was prolonged and lasted until the end of June, 2016.

We are now pleased to announce the results:

First prize: InnoVentum AB – Giraffe 2.0 Hybrid Wind-Solar Power Station

The jury says:

InnoVentum has a clear vision and ambition to utilize natural resources in the best way and create greener solutions. They have engaged SP to consumer label their product Giraffe 2.0 and was the first to submit an entry that met all the requirements of the competition announcement.

Giraffe 2.0 has a unique design and functionality in an innovative way, combining solar and wind energy. The wind turbine is a Windspot 3.5 from Sonkyo Energy, which InnoVentum has created an innovative total solution from with their self-designed wooden tower.

It is also well done by InnoVentum to find a place to demonstrate Giraffe 2.0 in an urban environment that has good wind conditions, to carry out the tests necessary for consumer labeling and provide great electricity production. Otherwise, it's mostly in open countryside areas where and small wind turbines find their applications.

As the consumer label shows, the electricity production from wind turbine can be 4760 kWh/year at an average wind speed of 5 m/s at hub height. An additional 5911 kWh/year comes from the solar panels during a normal year’s production at the test site in Malmö. The declared sound power level is only 85 dB(A). In the international consumer label this value is comparable to the sound power level that is usually stated on other products sold in Europe. One can see for example that Giraffe 2.0 is significantly quieter than modern electric
lawnmowers, which are typically over 90 dB(A). This is the emitted sound power, directly at the source.

**Honorable mention: Solid Wind Power A/S – SWP-25**

*The jury says:*

Solid Wind Power has created a traditional wind turbine in the size, which is in Sweden usually called a "farm turbine", that has been shown by independent measurements to have high performance for its size class. As part of the MCS certification they made for the UK market, the wind turbine has been consumer labeled by Intertek according to international standards (because RenewableUK now has harmonized its standards in this area with the IEC).

Since the competition is only for Swedish companies, we could not assign the Danish company a price, but we in any case want to give them an honorable mention. What we understand they may be the first in the world with a complete consumer labeling in accordance with IEC 61400-2. We believe they are on track to meet the requirements of the competition with a Swedish company that represents their turbines in this market, because a wind turbine from them was recently set up in Trelleborg.

The wind turbine SWP-25 can, according to the consumer label, produce 57 000 kWh/year at an average wind speed of 5 m/s at hub height. Top efficiency is over 40 % according to the test result, which is better than many other small wind turbines.

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