

Renzo Piano Building Workshop

ENEL - MEDIA RELATIONS P +39 06 83055699 - F +39 06 83053771 e-mail: ufficiostampa@enel.com

enelgreenpower.com



## ENEL GREEN POWER AND RENZO PIANO TEAM UP FOR MINI-WIND TURBINES

The prototype for an innovative wind turbine blade developed by the renowned Genoese architect, in collaboration with the renewables company, unveiled today in Rovereto (Trento);

It represents a new concept of a wind turbine, more sensitive to lower altitudes and more diffused winds.

**Rovereto**, **October 17<sup>th</sup>**, **2011** – The prototype for an innovative mini-turbine blade was unveiled today at Rovereto. In attendance were local authorities, Enel Green Power CEO Francesco Starace and renowned Genoese architect Renzo Piano, who developed it in partnership with the Enel company devoted to renewables.

Taking advantage of research into new, lighter, more resistant materials and new technological solutions, a new concept for the wind turbine which is more sensitive to low-altitude and more diffused winds was developed.

In fact, the new wind turbine developed by the Renzo Piano Building Workshop has a capacity of 55 kW and is capable of continuously generating electricity since it can take advantage of winds travelling as slow as 2 meters/second.

The project also seeks to achieve a more "natural" integration of the turbine with the area in which it is located through a low environmental impact. A two-bladed turbine was viewed more favourably than a three-bladed turbine since it throws one-third less flicker and, when there is a complete lack of wind, it offers a silhouette of a thin vertical line (the tower) and two vertical blades that are aligned and that hang horizontally.

The contribution of north-eastern Italy's creative and innovative business and cultural fabric to the project was made through Studio Favero & Milan (Venice), responsible for the final design, and Metalsistem (Trento), which saw to the construction.

The prototype was in fact created in Rovereto, home of Metalsistem, in a special laboratory set up specifically for this purpose called the "giraffe house". The wind turbine does indeed look like a giraffe, whose blades sprout from the open roof of its home.

Mass production for the Italian market will begin once testing is completed. Testing will be carried out over a 12-month period at the Molinetto test field in Pisa, which is also home to the Enel research centre.



**Renzo Piano Building Workshop** 



As to distribution, the innovative turbine will be used at Enel Green Power plants in Italy and abroad, and will also be marketed in Italy through the franchise network of the Enel Group retail company, Enel.si.

The mini-wind turbine created by Renzo Piano is also expected to be used outside of Italy, in the United States, where the mini-wind turbine has a long tradition, and in France, Spain and Greece.