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Community Wind Arrives in Italy
Wind Farms Become Domestic

American company, Northern Power Systems, launches in our country a technology for small wind generators, with reduced height and clutter, adapted to furnish energy to small communities, factories, and schools: in Irpinia, the first installations

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Commencing from Irpinia is the Italian voyage of Northern Power Systems, one of the principal US companies for design and production of wind turbines, founded in 1974 in Vermont. The journey will continue in other regions of southern and central Italy: Calabria, Sicily, Molise, Abruzzo, Puglia, and Tuscany are all regions where projects exist in the midst of authorization. Thanks to an accord between Northern Power and the Irpinia-based company, PurEnergy, the expansion of a new wind turbine system in the Italian market has begun. The first of five turbines planned for now by Northern Power in partnership with PurEnergy was inaugurated on the first of December in the town of Bisaccia (Avellino). It will serve a series of small local companies. It is an innovative installation. What is new? It's called "widespread (or diffuse) wind power": instead of enormous installations with hundreds of immense turbines in remote locations (these areas being always more difficult to find in our country), the idea is to make installations of wind turbines of a reduced size, positioned in places as close as possible to the consumer of energy, in a way that renders significantly more efficient the costs of transport of the electrical energy.

In the United States, this method, called "community wind," has already been adopted, with the positioning of wind turbines near (and where possible, inside) urban centers. In Italy, focusing on the more contained dimensions of the turbines (height not more than roughly forty meters, half of what is usually employed) with a maximum limit of production of 200 kW, community wind, called by us "mini eolic," proposes itself to small businesses, universities, hospitals and schools that want to become autonomous producers of energy. "We are pleased to introduce our concept of community wind in Irpinia, and we are confident in the continued development of our partnerships in Italy," declares John Danner, president of Northern Power Systems. "These installations are a demonstration of the investment opportunity in the Italian eolic market." The first five turbines of Northern Power have been installed under the jurisdiction of the Energy District of High Irpinia thanks to a complex investment of participating businesses of 1.5 million Euro. The local partner, PurEnergy, already has experience with large energy plants in Campania. Explains Salvatore Scifo, manager of the company: "We want to develop

smaller plants, those that have a simpler authorizing bureaucracy and that allow medium-sized businesses to make their own energy and lower their costs."

The collaboration between local institutions and entrepreneurs has been fundamental, continues Scifo: "Confindustria Avellino and the local administration have supported this project with pride." The Northwind 100 turbine installed in Bisaccia is the first to be put in production in the European territory, and in turn is the fruit of a research project for NASA and for the US Department of Energy started in 1978 and experimented with success in the extreme environments of Alaska. The Northwind 100 has a total height of 48 meters, it starts functioning in very low wind speed regimes (3.5 m/s), it has a SmartView Monitoring continuous control, and it costs less than 5,000 Euro a year to run, including the insurance policy against atmospheric damages. "In uncertain economic times, it is important to be able to count on a technology that will lower costs," says Gerardo Caradonna, CEO of PurEnergy. "The best kind of energy produced is the kind that is saved." A turn-key installation costs 350,000 Euro, a cost that is made lighter by the regime of governmental incentives that foresee the payment of .30 Euro cents/kW for a period of 15 years.

In bold:
The machines are the fruit of a research project by NASA and the US government.

Sidebar:
Technology

The Company
The wind turbines with reduced dimensions but suitable power are made by US company Northern Power Systems, based in Warren, Vermont.

Reduced Velocity
The Northwind 100 turbines are optimized for reduced-speed winds and also for rapid integration into the electric grid, one of the problems of wind energy.

Wind energy in Italy

The installed power by region, in MW
Puglia 946
Sicily 791
Campania 688
Sardegna 467
Basilicata 209
Calabria 192

The most important markets, in %
USA 20.8%
Germany 19.8%
Spain 13.9%
China 10.1%
India 8.0%
Italy 3.1%
The rest of the world 24.3%