

# Clean and green

Wind energy is the world's fastest-growing source for electricity production. With three wind farms now up and running, our Milan, Italy, operation has achieved a key milestone: 100MW of wind farm capacity in operation.

Our Milan operation started its wind energy journey about five years ago, with the development of the 22.5MW Vallesaccarda wind farm in Italy, followed by Pietramontecorvino (48MW) and Scampitella (32MW) wind farms, also in Italy.

Renewable energy is seen as an attractive option in Italy owing to the high value of green certificates and the price of electricity. Green certificates represent the environmental value of renewable energy production and can be traded separately from the energy produced.

Key to our Milan team's success was its expertise in development, financing, design, construction and operation of power facilities, combined with a good deal of flexibility in overcoming new challenges.

"Understand the wind resource, establish a dialogue with the local community, secure access to land, understand wind energy's economics and ensure stable operation of the wind farm. These are the key factors for a successful wind power project."

Andrea Belloli  
Manager of Wind Farm Development, Foster Wheeler Italiana

Wind turbine technology has made major strides forward in recent years, allowing the installation of more efficient and more powerful turbines, bringing down the cost of renewably-generated electricity. The Pietramontecorvino and the Scampitella wind farms are based respectively on 24 and 16 wind turbines, 2MW size each, supplied by Repower AG, with a rotor diameter up to 90 metres.

The increase in the size of the wind turbines meant more challenging construction activities. But again, this was not a problem for our project execution team.

"Whatever the hill gradient, a way to install the turbine has to be found. For Pietramontecorvino and Scampitella, this involved the transportation of components up to 45 metres in length and the site assembly of a 100-metre-high lattice boom crane. Brand new heavy traffic roads totalling a thousand metres in length were built and huge crane hardstands had to be erected on the hill slope."

Andrea Scricciolo  
Project Manager, Foster Wheeler Italiana

The completion of the two latest wind farms has consolidated our wind energy business and forms a sound basis from which to plan future investments in this field.

"100MW of installations was our original target and thanks to the experience gained, we are now actively pursuing opportunities in Italy and abroad. In fact, in January 2009 we also established a new company, Foster Wheeler Arcadia M.E.P.E., based in Athens, Greece, to pursue the first wind project development in the Peloponnese."

Giovanni Brustia  
Director, Power Division, Foster Wheeler Italiana

And a final word on the environmental benefits: wind energy means clean energy. The three wind farms mentioned here, with an overall total installed capacity of 102.5MW, will be able to produce about 200 GWh/year of electricity, displacing more than 120,000 tons of carbon dioxide per year, equivalent to planting 120 square miles of forest!