



Blowing in the right direction?

Italy could be a “golden country” for the wind industry. But heavy bureaucracy and conservative lobbies are slowing down the development of a promising wind power market.

Italy is a beautiful country, with breathtaking places that all the world envies, and it is a country characterised by a strong and vital entrepreneurial spirit. But it is also a place with many contradictions, where new technologies, except for the ones related to communications and mobile phones, are often regarded with suspicion. This is the case for wind power in Italy. There is an enormous development potential that is unfortunately facing a heavy bureaucracy and there are some environmental conservation groups for whom wind turbines disfigure a landscape which is often already compromised by decades of building speculation.

According to ANEV, the Italian national wind power association, Italy has already installed 3,736 MW, with 1,010 MW in 2008 (BTM Consult: 1,066 MW). To understand the atmosphere in which wind power is trying to be developed, you only have to read a press release on a public demonstration against wind power

held last July and organised by Coldiretti, the Italian farmers’ trade union. The aversion to this renewable energy source is shared by “Friends of Earth Italy” and “Italia Nostra”, the latter being a very famous landscape conservation association. The battle is very fierce: wind power is accused of heavily damaging the landscape, flora and fauna, making easy money for the few, and producing only small amounts of green electricity, definitively not enough for Italian needs. But worst of all, wind power, according to Coldiretti, has already transformed more than 10,000 km² of land into a desert, taking away land from agriculture and pasture. On the other hand, Coldiretti would like to encourage wind turbines between 2 kW and 50 kW, because small turbines could be installed easily in remote areas with lower environmental and visual impacts. In addition, wind farms are being built without any serious checks by regional and local authorities, claims Coldiretti.

Installed capacity could reach 16 GW in 2020

For ANEV, these accusations are based on lies and inferences, but with a clear strategy behind them. In truth, in 2008 wind power supplied 6.5 billion kWh for Italy, avoided 3.5 million tons of CO₂ emissions and employed 18,000 people. According to an ANEV

Wind farm Cinque Stelle with three Enercon E-48 turbines in the Ligurian Apennines

Photos (2): Fera Group



survey, a capacity of 16,000 MW could be installed in Italy by 2020, with an annual generation of over 27 TWh, an equivalent of around 6.72 % of total annual electricity consumption, with the accompanying creation of around 70,000 new jobs.

What is the underlying strategy, ANEV wonders, when – based on national guidelines – all the wind turbines and installations are to be dismantled completely at the end of their productive life-cycles, and it is subsequently compulsory to restore all the original landscape conditions? According to ANEV, the point seems to be that some lobbies regret the fact that a non-fossil-fuel-based technology can demonstrate its competitiveness and can provide an interesting amount of green electricity, creating new jobs in the process, without expensive infrastructures and high maintenance costs for storage and transportation. Furthermore, the incentive scheme is based on effective green electricity production, other than past free grant incentives. This fierce battle does not help to encourage a mutual understanding, but rather furthers the NIMBY (“not in my back yard”) attitude against any potentially positive change in the country’s environmental and energy policy.

Green certificates and a feed-in tariff

The Italian incentive scheme is based on a green certificate (“certificati verdi” – CV) system, introduced in 1999 and modified in 2008, with the aim of developing the production of green electricity for national consumption. More importantly, the fossil-fuel-based electricity producers have a duty to get a rising annual percentage of electricity from green sources in order to achieve the EU emissions targets. If they do not produce enough green electricity, then they are obliged to buy green certificates on the market. Every green certificate corresponds to 1 MWh and was originally valid for 36 months until December 2008, when important changes were made.



Every producer can use the green certificates to fulfil its obligations or sell them to third parties, according to GSE (Gestore Servizi Elettrici: www.gse.it). The GSE is in charge of issuing green certificates and monitoring producers’ and importers’ compliance with related obligations. The modifications implemented in 2008 have introduced some important changes. Now it is necessary to register on a platform directly managed by GSE for all the transactions taking place outside the green certificate stock exchange. Green certificates are now valid for 15 years. For wind turbines the GSE recognises a fixed tariff according to the capacity installed.

The all-inclusive feed-in tariff is a new national support scheme for repowered, totally or partially renovated, new or reactivated turbines meeting the following requirements:

- nominal real power not exceeding 1 MW (200 kW for small wind turbines),
- commissioning after 31st December 2007.

Turbines in Tuscany made by “Leitwind”. Wind companies have to face such bureaucracy in Italy that some of them prefer to invest directly outside the country.

Photo: Leitwind





90 % of the wind farms are located in the south of Italy, like the Giarratana project, near the city of Ragusa in Sicily. The 46 MW park consists of 7 Vestas V90-1.8 MW and 11 V90-3.0 MW turbines.

The scheme, which supports electricity actually fed into the grid, has a 15-year duration. It represents an alternative to the green certificate scheme and is differentiated on the basis of the type of source used. The green certificate scheme applies to larger plants (> 1 MW). In a complex scenario such as the Italian one, management of these schemes calls for high economic and financial skills. To facilitate the construction of new plants and access to the required financial resources, GSE makes arrangements with banking institutions.

To benefit from the all-inclusive feed-in tariff, producers must fill in an application with GSE to obtain the approval of their plants as RES-E (electricity from renewable energy source). The all-inclusive feed-in rate is 0.30 €/kWh for wind turbines of less than 200 kW. Ac-

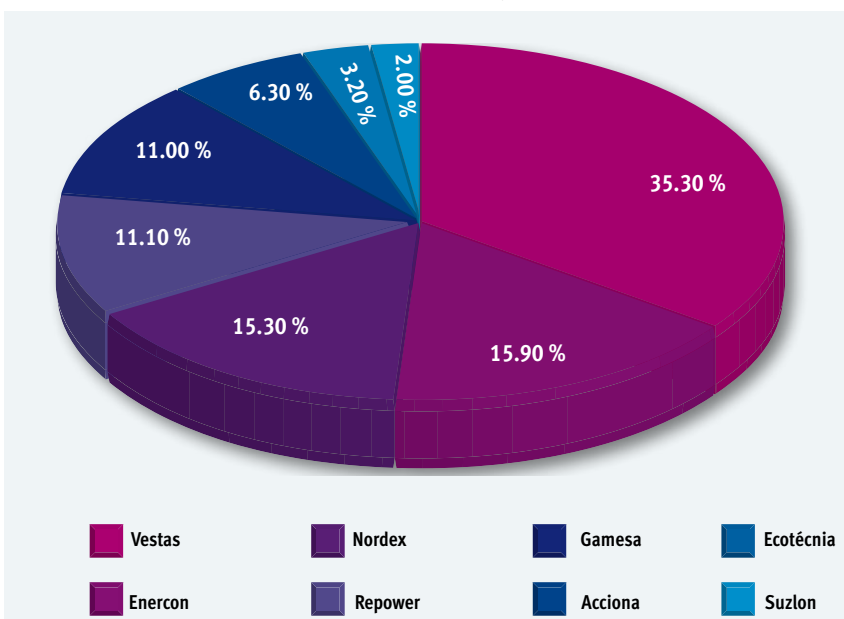
ording to GSE, in the period from 2004 to 2008 wind turbine installations in Italy grew by around 27 % per year; 90 % of the wind farms are located in the South of Italy: Apulia, Sicily, Sardinia and Campania.

Too many public authorities involved

The wind power sector has attracted many private groups in Italy, apparently coming from different industrial sectors. This is the case for Leitwind from Bolzano, part of Leitner Technologies, a group with more than 2,000 employees in Italy and the rest of Europe, India and North America. From 2003, Leitner has made use of the synergies available from ropeway and wind power engineering to develop the Leitwind wind turbine, in which the Leitner direct drive is used for the generator. Leitwind will supply a 1.5 MW wind turbine installation for the Winter Olympic Games that will take place in Vancouver, Canada, in February and it is characterized by a specially developed viewing platform.

According to Leitner CEO Anton Seeber, although wind power is subsidised sufficiently, most of the constraints arise from the approval processes. There are too many public authorities involved, from the national level to the local one. Another constraint is related to the inadequate rate of development of the national grid that sometimes prevents wind turbines from being connected. As the market is considered as limited, Leitwind is oriented towards achieving exports all over the world whilst pursuing growth within the Italian market. For Seeber, the Italian market could potentially be a “golden country” for renewable energies, with wind and solar at the same level, because the development potential is almost limitless. But private companies involved in installing wind turbines and farms have to face such bureaucracy, plus protracted and muddled procedures, that sometimes companies prefer to invest directly outside the country, for example in South America or India.

Manufacturers' market shares in Italy 2008



Market shares in % of 1,066 MW new installed capacity in 2008

Graphic: BTM Consult ApS, March 2009

These opinions are shared by Agostino Re Rebaudengo, owner and CEO at Asja, an international group with its headquarters in Italy as well as other offices in Europe and South America that produces electricity from renewable sources. Rebaudengo highlights the same constraints pointed out by Leitwind. Asja opened up the wind power department 7 years ago. Now, 50 employees – engineers and lawyers – work for the company. The annual turnover is around € 60 million. Despite the Italian bureaucracy, in 2011 there will be new development in the wind power market, due to the big investments that Asja wants to make here. According to Asja, the company is developing a wind power capacity of 770 MW all over Italy.

As Rebaudengo states, wind power in Italy is under the uncertainty of the law. In fact, the authorities involved, mainly regional and local authorities, should respond within 90 days to proposals for wind farms or simple wind power installations (between 2 and 10 MW). The problem is that nothing occurs in terms of sanctions if authorities do not meet the deadline. Almost 100 % of authorities only respond after 12 to 15 months. The company involved sometimes needs to wait up to 2 or 3 years in order to close the approval procedures in a positive way. And sometimes, in order to accelerate the procedures, companies are “invited” to use local technical consultants. Local connections are very important to understand and submit the right documents and avoid a further wasting of time and money.

Boosting public relations for wind power

Wind power is a great business opportunity for Italy, and not just one of the tools necessary to reach the ambitious EU target of cutting greenhouse gas emissions (20 % in 2020). Yet, according to Rebaudengo, the oil and coal lobbies are still very powerful in Italy and slowness characterizes the wind power market development. What entrepreneurs ask of the present government, as they used to ask of the former government as well, is that it define a clear legislative procedure and some long term strategies in order to foster growth in the wind power industry. With more support for research and development, university departments should be able to attract public and private investments to establish a more local supply

chain including wind turbine producers – at the moment turbines are still imported in almost 100 % of cases.

Cesare Fera, President at the Fera Group, says that his group will invest € 18 million in a new research centre in the Liguria region. This research centre will open a branch as a museum for renewable energies in which it will be possible to see, study, compare, measure and verify the different types of energy sources, wind power included. The centre will host around 100 engineers, students, researchers and volunteers interested in these fields. The energy will be provided by three wind turbines producing 10,000 MWh per year, and part of this energy will supply the villages around the centre.

Fera is convinced that the Italian Wind Power Association (ANEV) can also play a key role in discussing common solutions with environmentalists and natural landscape conservation groups. Towards this aim, ANEV has signed an agreement with the three most important environmental groups in Italy (Legambiente, Greenpeace, WWF), according to which all the wind farms in Italy will be installed in total respect of the landscape, and will guarantee a harmonious integration with the surrounding countryside. The agreement contains some voluntary commitments such as, for instance, a preliminary study on the visual impact and the exclusion in advance of highly valuable landscapes as wind farm sites, even if they are not under any national protection. Furthermore, wind turbines will be installed, when possible, out of sight, and preliminary studies will also take in account the kind of wind turbines to choose, even the single components and their colors, in order to camouflage them as much as possible.

The carefulness and the attention that ANEV and its members are paying in Italy in order to develop wind power in the right manner shows that the foundations are solid and probably not affected by speculative investments. Wind power will play a key role, along with solar power, in all Mediterranean areas. Despite all the difficulties, the Italian wind power market is still attractive for many entrepreneurs who deeply believe in the green economy and who are convinced that in Italy, too, the wind will blow in the right direction, sooner or later.

Christina Barbero

Wind farm in Alia Sclafani Bagni, a village near Palermo, Sicily Photo: Asja

