



Special case

In Corsica, the clocks tick differently than on the French mainland. Compared to other regions in France, the fourth largest Mediterranean island enjoys a high degree of autonomy. This fact is also felt by the representatives of the solar sector.



On the day that PV gained momentum in France, Corsica started to become attractive for the solar sector. The island enjoys exceptional solar radiation levels and offers feed-in tariffs comparable to the French overseas departments and territories. Suddenly, the industry representatives took off to Corsica with plans for new projects. But the Corsicans are quite proud of their autonomy, says Angela Saade, PV expert for Hespul, an association for Renewable Energy and Energy Efficiency. Local authorities have a strong influence on the licensing of solar parks. “The so-called Assemblée de Corse consists of representatives from the different regions who participate in the political decision-making, including when it comes to permits for a solar park”, explains Saade.

White Owl Capital, a company based in Berlin, Germany, is currently realizing solar power plants with a total annual production capacity of 5 MW in Corsica.

Photo: White Owl Capital

Regional restrictions

According to Saade, the Corsicans have developed a healthy skepticism towards foreign companies. The representatives of the Assemblée de Corse are no exception. “It did not take long until the representatives had come up with a whole catalogue of criteria for the installation of new solar parks”, says Saade. These criteria concern, for example, the environmental impact of the project or the adjustment to local

conditions and infrastructure, including the project’s consistency with regional landscapes and the economic benefits for the region. “An important aspect is also whether the planners want to install the system on an agricultural surface. Based on this catalogue, a number of 20 solar projects have been approved by the Assemblée de Corse in the past.”

However, more compliance with the required criteria does not imply that the project will be successful. In a next step, the project has to be presented to the authorities of the relevant municipality, which has to approve of the construction plans. “This is where things can get tricky. Understandably, the municipalities are interested in taking an advantage out of the project as well. This sometimes leads to absurd obligations, which can make the system integrators tear their hair out and even cause the project to fail”, says Saade. For example, the authorities may request that the installation of the solar park is done by a local company even though that installer may have no expertise whatsoever in the area of PV. “Being successful with a





PV project on Corsica requires a strong local network. There has to be someone who is familiar with the region and who knows the locals.”

Federal regulation

Besides such hurdles on the regional level, there are also federal regulations slowing down the ambitions of PV developers in Corsica. “There is a rule in France that wind or solar parks cannot feed in more than 30 % of the electricity consumed in the region where they are installed. This rule applies to all systems with a capacity of more than 3 kW”, says Saade. During the months when the island is visited by tourists, the rule is usually not a problem. “The situation is different in spring and fall, when the tourists are missing and the electricity consumption drops down to 150 MW. If that happens, the share of 30 % is quickly reached.” The total capacity of the wind and solar parks feeding into the electricity grid in Corsica may then not exceed 45 MW. If it does, the first systems will have to be taken off the grid. “According to legislation, the solar park that was last connected has to be taken off first, followed by the second last and so on.” The problem is that, if a system is taken off the grid too often, it ceases to be profitable. However, PV growth in Corsica is not only kept at bay by regulations and legal provisions. There are also topographical and environmental limits on the island. “Corsica is for most part mountainous and covered with forests. This makes it difficult to find suitable locations for establishing utility-scale solar parks”, says Saade.

Nevertheless, the solar industry has not been scared away by the special conditions on the island and birth place of Napoleon Bonaparte. One success story comes from White Owl Capital AG (WOC) based in Berlin, Germany. The company, which has specialized on renewable energy investments, and recently obtained licenses for the construction of two solar power plants that arrive at a total annual capacity of 5 MW. The systems will be built in the commune of Bonifacio, Département Corse-du-Sud, which makes

them the most southern PV systems in France. The projects will incorporate a number of about 21.800 polycrystalline modules supplied by Trina Solar and be built on a surface of 11 hectares. The inverters for the system come from SMA Solar Technology. With the investments in Corsica, the German issuing house is continuing its international expansion course. “Corsica is a great example of the acquisition know-how of our group. Our activities in this area will be further strengthened in the future”, explains Tobias Pehle, CEO of White Owl Capital AG.

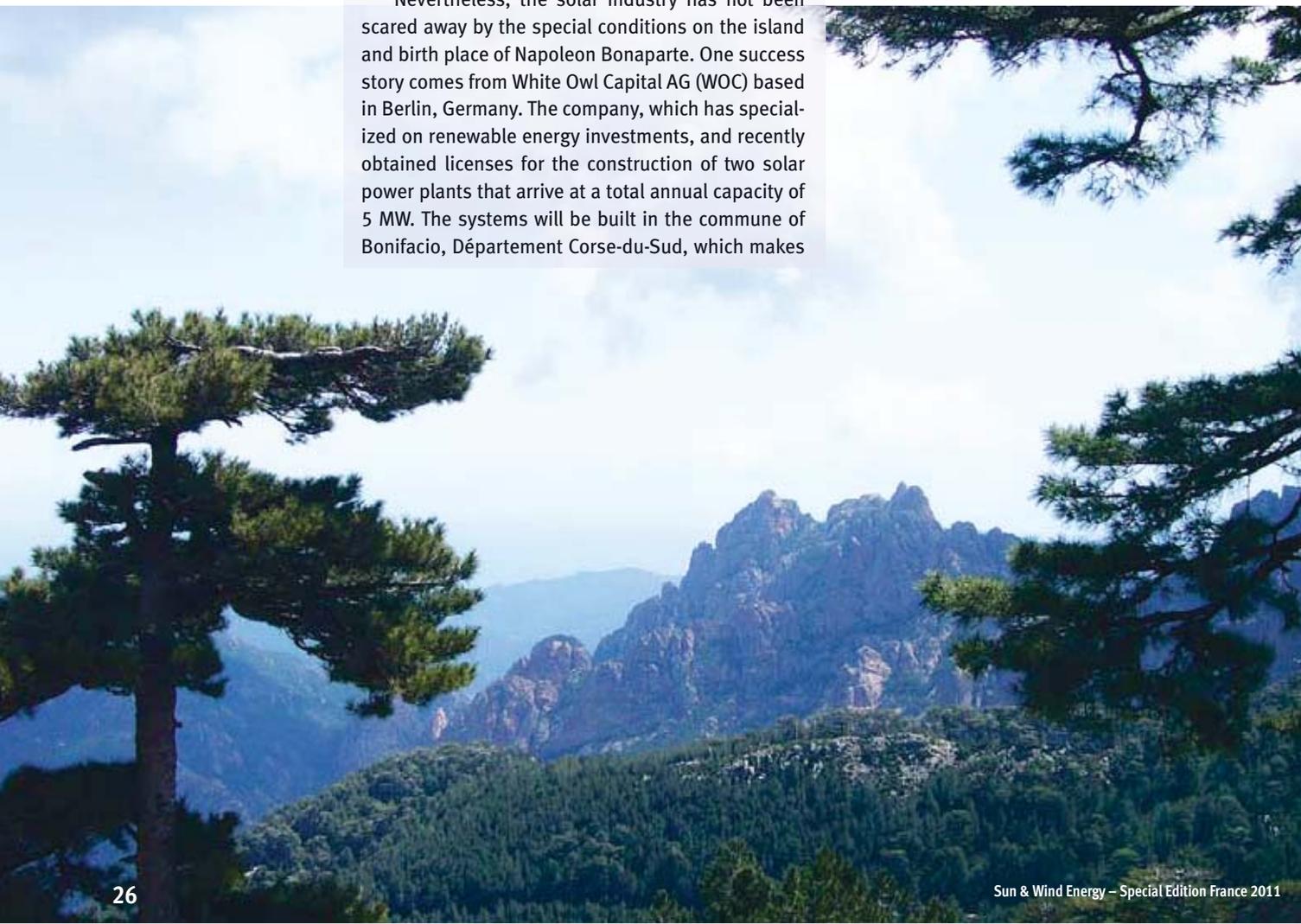
According to Pehle, WOC is a global player and able to provide financing for solar projects in the short-term. In the past two years, WOC had acquired PV assets in the range of about € 400 million for its associated companies. Responsible for the project development is Kloss Nouvelles Énergies EURL (KNE), a company based in Marseille. With selling the solar plants in Corsica, KNE is continuing its growth in the area of PV and strengthening its foothold in France. “In the realization of the solar plants in Corsica, we focused on local stake holders from the very beginning. This included municipalities, environmental, construction and self-rule authorities as well as development partners oriented at long-term relationships”, says Nikolai Brombach, CEO of Kloss New Energy.

Pioneer juwi

One of the first solar companies that became active in Corsica is the project developer juwi Solar. High solar radiation levels make Corsica an attractive location for

Corsica is mostly mountainous and covered with forests, which makes the installation of a solar park a difficult undertaking.

Photo: Beyer



the realization of solar projects, says Konstantin Nörenberg, Project Manager for juwi. In fall 2009, the company had given the go ahead for the construction of a new solar park on the island. "The system with a nominal capacity of 7.7 MW was built on a surface of more than 30 hectares in the village of Rapale, 20 km south-west of Bastia, in the Département Haute-Corse. The project had such special characteristics that it needed to be authorized by the Corsican National Assembly", says Konstantin Nörenberg. What makes the project also stand out is the idea to use small, decentralized inverters to allow for an uncomplicated and most of all fast maintenance on the island. "In the event that an inverter should fail, the device can be replaced by a local installer", explains Nörenberg. In total, Juwi used a number of more than 900 inverters of the Germany-based manufacturer SMA in the project. "The system arrives at an annual production of more than 11 million kWh, produced by 102,800 thin-film modules by First Solar." The plant was put in operation in August 2010. One of the investors has been the company S.C.A. Sicar. Another company active in Corsica is Solar Euromed, which operates a test plant called "Alba Nova" near the town of Ghisonaccia. According to Solar Euromed, the system is based on a combination of Concentrating Solar Power (CSP) and biomass. The CSP system has an annual production capacity of 12 MW.

Internal consumption

Taking into account that the electricity fed into the grid by wind or solar power plants cannot exceed 30 % of the consumption on the island, the development of PV has a natural limit in Corsica. Since there is no direct electricity connection to continental France, Corsica has no access to the cheap nuclear power produced on the mainland. Of course, this would be an argument in favour of using the benefits of renewable energy systems on the island. What is more: a large share of the energy needed is imported from Italy. The transformer station near Bastia and a submarine cable connection with Sardinia provide Corsica with 20 % of its electricity. Electricity is not cheap in Sardinia though nor in southern Italy. Corsica faces the same problem, as the energy production is 50 % controlled by the state-owned utility giant Électricité de France (EDF). EDF runs hydro and thermal power plants on the island, of which the latter is fired with fossil fuels that first have to be shipped to the island. This makes it even more difficult to produce cheap electricity in Corsica. But probably the best argument in favour of internal consumption of renewable energy in Corsica is that it enjoys exceptional solar radiation levels. With between 1,750 and 1,900 kWh/m², they are the highest in all of Europe.



Advertorial

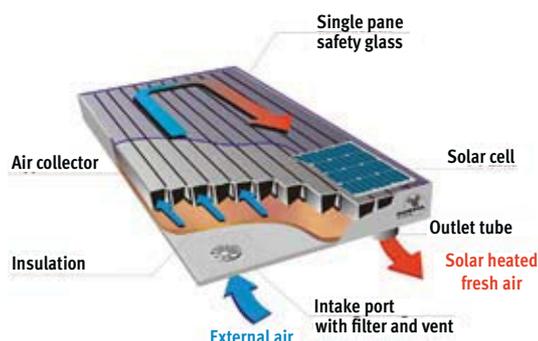
GRAMMER SOLAR

COMPANY PROFILE

Using solar power twice

Grammer Solar is a specialist for combined use of PV and solar thermal. Based on 30 years of experience in the area of solar air technology, the company is an expert for hybrid systems today. Hybrid collectors provide an ideal solution wherever heated and dry air is needed: in storage and drying of biomass or on farms – always connected to solar power generation.

It's a simple concept: an intelligent design enhances the ventilation of the PV modules and leads to increases of the energy yield. The air flow is virtually a free source of pre-heated external air, which makes a solar thermal use of up to 200 kWh per m² possible at almost no additional costs.



Grammer Solar has been active in the segment for solar thermal air systems in France for five years. In 2009, the company broadened its activities towards the PV market where it can rely on an extensive network of local distribution partners. Grammer's first subsidiary in the Grande Nation was established at the beginning of 2010.

The main focus is on turnkey, rooftop-integrated systems. Grammer Solar has partly adjusted its products to the specific requirements of the French market. For its product Grammer BIPV 10-2, the company has already received the CSTB certification. In order to meet the specific demands of large-scale rooftops on farm buildings, Grammer Solar has included a PV system for trapezoidal panel roofs to its portfolio. Solar air systems for specific use in holiday homes, indoor swimming pools, gyms and public buildings round off the product line-up.

"Only the best solutions will be able to survive on today's solar market, which is growing increasingly competitive", says Almut Petersen, Sales Director at Grammer. "This is why we expect a lot of opportunities that will help us strengthen our position on the market as an expert with long-standing experience and a highly interesting product."

SASU GRAMMER SOLAR France
 La Grand'Cour
 69770 Montrottier
 France
 Phone: +33 4 74 72 26 26
 Fax: +33 4 74 26 13 72
 info@grammer-solar.com
 www.grammer-solar.com

