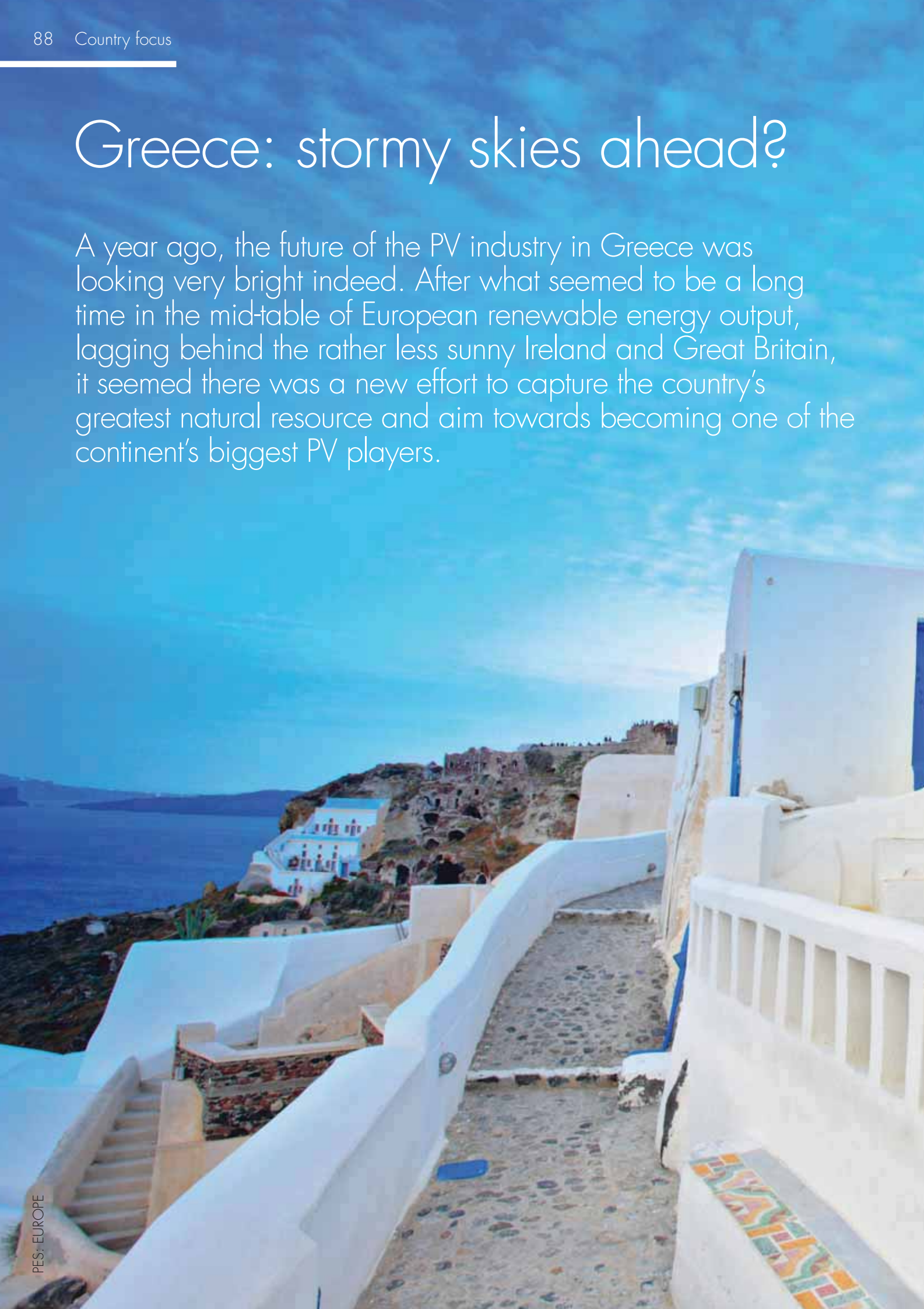
Greece: stormy skies ahead?

A year ago, the future of the PV industry in Greece was looking very bright indeed. After what seemed to be a long time in the mid-table of European renewable energy output, lagging behind the rather less sunny Ireland and Great Britain, it seemed there was a new effort to capture the country's greatest natural resource and aim towards becoming one of the continent's biggest PV players.



PES: EUROPE

In fact, something of a PV gold rush was forecast for Greece. The Greek government offered one of the most generous feed-in tariffs (FITS), along with state subsidies for most commercial applications up to 40 per cent. Suddenly, home-grown and international PV firms were popping up everywhere. "After years of promises, I really believe Greece is now ready to become a major PV market in the world," said Stelios Psomas, a leading Greek PV consultant and author of the market report "The Greek solar PV market, the next Mediterranean PV tiger".

Did he speak too soon? A year on, and Greece is in the depths of a debt crisis that has the financial ministers of the Eurozone seriously rattled about the future of the single currency. At the time of writing, the Greek government has been warned by the rest of Europe that it must make further cuts to spending and public sector wages. If it doesn't, sanctions will be imposed on it and the threat of savage cuts looks likely to cause strikes and a subsequent loss of economic confidence in Greece across the world.

As yet, the Greek government hasn't given much indication of how and where it will cut spending. But if reductions are made in renewables investment, the optimism which has steered the country through its first phase of real solar growth could be strangled at birth.

If, however, the government takes a long-term view and sees solar power as a way out of the country's current woes, the potential for the sector is great. After all, the one thing Greece is not running out of is sunshine.

Over the last two years, potential investors have filed more than 8,000 applications for commercial PV systems, with a cumulated capacity of 3.7 GWp. Some 30 MWp had been realised by mid-2009, and over next two to three years the market is predicted to exceed 100 MWp annually. Grid parity is not expected before 2014-2018, as retail electricity prices are comparatively low in Greece.

The Greek PV industry has developed rapidly (both upstream and downstream). Hundreds of PV companies are already active in Greece, including major international players. New manufacturing facilities are being built, offering persuasive arguments in favour of continued political support.

Public and media support for solar PV is strong, especially since the introduction of the rooftop PV programme in June 2009.

Two years earlier, in 2007, the second Photovoltaic Mediterranean Conference, which took place in Athens, stated that by 2020 PV electricity would be able to provide power to more than 26 million households in the Mediterranean, with simultaneous creation of hundreds of thousands of new jobs.

The European Photovoltaic Industry Association (EPIA), which sponsored the conference, estimated that PV energy supplied 400 GWh of electricity all over the Mediterranean, while it predicted that it would reach 78 TWh in 2020.

In January last year the Greek parliament introduced a new version of its solar photovoltaic regulations, which includes the country's feed-in tariff, amending the legislation originally voted on and passed in mid-2006. The new PV law set a deadline for issuing permits for all PV projects currently in line. By the end of 2009, all applications that had been submitted so far of more than 3 GW, had to be dealt with and approved or rejected. The new regulations also abolished the unofficial cap of 800MW that was set by previous decisions on the amount of applications that could be accepted.

New FITs were also set. These tariffs are guaranteed for 20 years and will be adjusted annually for inflation. There will be a regression in the level of the FITs starting in August 2010 and tariff levels will remain unchanged until that date, although grid connection agreements can be signed prior to this deadline, with a subsequent 18-month timeframe within which to finalise the installation.

Government incentives started to move the previously moribund PV industry forward by several leaps. Last year, the largest PV plant in Greece, which was built by Phoenix Solar AG, was connected to the grid in Pontoiraklia, near Thessaloniki. Phoenix Solar was responsible for planning and construction of the plant as general contractor. Sunergy A.E. is the owner of the 944-KW capacity power plant.

The race to the sun also included investors from abroad. Companies such as New York-based Clear Skies Solar and Sustainable Energy Technologies Ltd, from Calgary, Canada, moved

into the Greek solar market in direct response to the feed-in tariff and grant programme.

"We are extremely enthusiastic about entering a country that represents one of the fastest-growing markets for solar energy," said Ezra Green, Chairman and CEO of Clear Skies Solar, which established a corporate office in the city of Larissa, in Central Greece. Partnering with Larissa-based Aspen Energy, whose focus is the procurement of solar energy business opportunities throughout Greece, Clear Skies Solar aimed to provide Aspen with solar technologies and installation services.

Inverter company Sustainable signed a distribution agreement with ACE Power Electronics (ACEP) of Athens, to allow ACEP the non-exclusive right to distribute sustainable products and services for the turnkey development solar PV systems throughout Greece. The initial projects totalled 5.8MW.

Among the many other companies that have invested in Greece's solar sector are Conergy and WPD from Germany, EDF-EEN from France, Babcok and Brown from Australia, Greece's PPC, and the Greek-Spanish alliance of Rokas-Iberdrola.

Christos Kaliviotis, president of HELAPCO (Hellenic Association of Photovoltaic Companies) said last year that despite broken promises in the past, the Green PV market had finally found its pace.

"Had it not been for the bureaucracy," he said, "the Greek PV market would have been booming and would possibly have been overheated, even more so than Spain. This is not going to be the case though. Those experienced with the Greek market foresee a rather smooth and relatively healthy and steady growth."

That's one view. Another was taken late last year by the residents of the Greek town of Megalopoli, whose resistance to environmental arguments blocked a scheme to build a 50MW PV project on a nearby hillside. Local gamehunters, angry that an earlier plan to grow a forest on the site was scrapped, went to court to try to stop the construction of a 50MW solar panel park.

"Under no conditions will we accept sacrificing even one tree ... we are not bowing to these interests," Kostas Markopoulos, president of the Hunters' Association of the Peloponnese, said. However, environmentalists, investors and local authorities disagreed, saying the hunters and others lacked information and were missing the big picture of environmental, health and economic benefits.

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"Building photovoltaics there is going to be better for the environment than a few trees," said PPC Renewables chief executive Tassos Garis.

Despite this, and the on-going problems with Greece's economy, interest in the country's potential as a leading source of PV power remains high. Last month, Satcon Technology Corporation, a leading provider of utility scale power solutions, announced that it had been selected by EasyPower S.A. to supply 2.5 MW of its 100 KW solar PV inverter solutions across 25 installations on the island of Rhodes.

The solar power plants will be developed and constructed by EasyPower S.A. and are expected to generate enough solar energy to supply 1.2 per cent of the island's electricity demand. The installations will be owned by EasySolar S.A., RNA Power S.A., and Diachrisi Iliakis Energeias S.A. as part of a 2.5MW project.

At present, the island's power is made by diesel generators which can produce up to 194.4MW during peak demand periods. Rhodes' energy consumption surges during the summer months as the population of the dodecanese island swells by 300 per cent. The solar installations will provide critical peak demand support, enhancing grid stability while delivering cost-effective renewable energy for the population in addition to supporting the island's year round base load demands.

"The project in Rhodes presents unique design challenges that require we develop a complete solution that can be scaled across 25 distributed locations," said Nikos Savouris of EasyPower. "Each power plant can directly contribute to the stability of the entire island's power grid. With this in mind, and with the responsibility of providing reliable and cost-effective energy for community of the island, we designed a system that will enhance each plant's performance, along with its stability and durability, while reducing the carbon footprint from electricity production on the island throughout the years."

"These installations demonstrate the increased penetration of large-scale solar power generation into today's island and urban energy grids," said Peter Deege, Satcon's General Manager for Europe. "Our experience in utility scale and island grid solar solutions combined with EasyPower's design, engineering and construction expertise will ensure that these solar plants are a secure and cost-effective renewable energy source for the island. We are honoured to be selected by EasyPower." ■