

Case Study

A.F. KOPANITSANOS & CO.

Solar Power Plant Syros



Syros, Greece



The solar power plant with the black modules of Solar Frontier on the Greek island of Syros. (Image: A.F. Kopanitsanos & Co.)

Site Overview

Location	Syros, Greece
Coordinates	37.27° N, 24.55° E
Average global irradiance	1,843 kWh/m ² /yr
Average temperature	16.8 °C, 62.3 °F
Average precipitation	442 mm/yr, 17.4 in/yr

Technical Overview

Date onstream	July 2012
System capacity	99 kWp
Panel type	SF150-L (150 W)
Number of installed panels	660
Tilt angle, orientation	26°, 0° S
Expected output	137,698 kWh/yr
Total CO₂ reduction	101,346 kg/yr, 223,427 lbs/yr
Inverter	KACO Powador 14.0 TL3 INT

Financing Bank

75 % Bank Financing (by National Bank of Greece)
25 % Private Investment

"We, ideally, wanted to satisfy all challenges of the project in the best and most complete possible way and, at the same time, secure a reliable and high performance PV system. The "Made in Japan" modules of Solar Frontier supported by its highly efficient organization in Germany just made us feel happy for our choice."

Fotis Kopanitsanos,
General Manager A.F. Kopanitsanos & Co.

A.F. Kopanitsanos & Co., based on the Greek island of Syros, is a privately owned company which deals with the study and execution of technical works and projects mainly on the Cyclades islands. This initial installation of A.F. Kopanitsanos & Co. was their first solar power plant where the company did everything from planning, construction to operation and maintenance of their self-owned solar power plant.

This 99 kWp installation is located on the Greek island of Syros, which is located in the middle of the world famous Cycladic islands in the Mediterranean Sea. The ground-mounted solar power plant with 660 Solar Frontier CIS thin-film modules was installed in four weeks time and connected to the grid in July 2012. The installation, which encompasses five hectares of land, is expected to produce more than 137,000 kWh of energy annually and thus offset more than 100 tons of CO₂ emissions.

The special challenges for this installation were the climate conditions in this Mediterranean region, which is mainly influenced by the Aegean Sea. It is characterized by hot summer days and cool, rainy winters. Solar Frontier's CIS thin-film modules are suited perfectly for the hot summer climate due to their high temperature stability. This effect led to higher output under these challenging conditions compared to other technologies. In addition to these aspects, the aesthetic and environmental friendliness convinced the owner, although this is not a residential PV installation.

About Solar Frontier

Solar Frontier is committed to creating the world's most ecological, economical solar energy solutions. Our proprietary CIS technology (denoting key ingredients copper, indium, and selenium) has the best overall potential to set the world's most enduring standard for solar energy. For more information visit www.solar-frontier.com and www.solar-frontier.eu