Case Study
HopSol
Residential Installation Windhoek

Windhoek, Namibia

Thanks to the low temperature coefficient of Solar Frontier's CIS modules high output is even achieved in hot temperature regions like Namibia.

Site Overview

Location	Windhoek, Namibia
Coordinates	22.6° S, 17.1° E
Average global irradiance	2,363 kWh/m^2/yr
Average temperature	20.5 °C, 68.9 °F
Average precipitation	362 mm/yr, 14.3 in/yr

Technical Overview

Date onstream	November 2011
System capacity	7.2 kWp
Panel type	SF150-L (150 W)
Number of installed panels	48
Tilt angle, orientation	20°, -180° N
Output	16,186 kWh/yr
Total CO_2 reduction	9,113 kg/yr, 20,091 lbs/yr
Inverter	STP 8.000 TL-10

Financing Bank

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"Due to the officially announced power shortages in the country and the continuously increasing prices of electricity, we had to find a sustainable solution. Thanks to our solar power plant, with Solar Frontier CIS modules we will be able to produce our own electricity on an independent and economical as well as ecologically attractive way. And it looks really great!"

Bettina Janka, Houseowner

HopSol provides turn-key solutions for photovoltaic power plants. HopSol´s head office is located in Switzerland and the headquarter of HopSol Africa (Pty) Ltd has been established in Windhoek, Namibia, for its customers in southern Africa, where they have specialized in fulfilling the requirements of the solar industry for desert regions. Furthermore, HopSol acts as a wholesaler of all relevant parts for photovoltaic solar power solutions. Superior quality of modules and balance of equipment, along with engineering experience for desert conditions are crucial success factors.

This residential house has been equipped with a 7.2 kWp rooftop solar power installation and is expected to produce 16,000 kWh per year thanks to both, the high irradiation levels in Namibia and the very low temperature coefficient of Solar Frontier's CIS modules. The low temperature coefficient of CIS thin-film modules leads to a smaller loss in conversion efficiency at high temperatures compared to crystalline modules, thus leading to better yields. The installation, with its 48 modules, also reduces CO_2 emission by approximately 9 tons per year. Because of massive annual increases in electricity prices in Africa and high temperatures, Solar Frontier's CIS modules provide an attractive and cost-efficient solar energy solution. In addition, the homogeneously black appearance of the Solar Frontier modules adds an outstanding aesthetic look to the residential rooftop.

About Solar Frontier

Solar Frontier is committed to creating the world's most ecological, economical solar energy solutions, on the world's largest scale. 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