

Case Study

CO2PRO

Residential Rooftop Vissenbjerg



Vissenbjerg, Denmark



48 Solar Frontier CIS modules were installed on the east- and west-facing roof of the house in Vissenbjerg. (Image: FreeEnergy)

Site Overview

Location	Vissenbjerg, Denmark
Coordinates	55.39° N, 10.13° E
Average global irradiance	1,060 kWh/m ² /yr
Average temperature	8.1 °C, 46.6 °F
Average precipitation	639 mm/yr, 25.2 in/yr

Technical Overview

Date onstream	October 2011
System capacity	6.96 kWp
Panel type	SF145-L (145 W)
Number of installed panels	48
Tilt angle, orientation	45°, -90° E/ 90° W
Expected output	5,000 kWh/yr
Total CO ₂ reduction	2,815 kg/yr, 6,206 lbs/yr
Inverter	SMA SB3000TL

Financing Bank

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"We at Co2Pro have chosen to work with Solar Frontier because of the high quality of their products and their flexibility. Due to their unique properties, the Solar Frontier modules are also great in conditions considered to be less than optimal. With Solar Frontier our dealers can always find the best possible solution for their customers."

*Michael Grey Schuster
Chief Technology Officer Co2Pro*

Co2Pro is a Danish wholesaler for photovoltaic systems, located in the town of Ikast. The company supplies high quality photovoltaic systems to a nationwide network of installers. Co2Pro offers their customers all photovoltaic components including modules, inverters and mounting systems, which are selected only from well-known manufacturers.

This 6.96 kWp installation in the Danish town of Vissenbjerg was installed by the Co2Pro partner Free Energy Limited, which is one of the most experienced installers in Denmark. The installation on the residential rooftop, consisting of 48 Solar Frontier CIS thin-film modules, was connected to the grid in October 2011. The homeowner wanted to add additional PV capacity to their existing installations on the south- and north-facing roof, so he decided to install additionally 24 modules each on the west- and east-facing roof of his house. The new installation with Solar Frontier modules is expected to generate about 5,000 kWh per year and will together with the existing installation cover most of the energy needs of the homeowner. Additionally about three tons of CO₂ emission can be offset with this installation.

Due to the good low light behavior, Solar Frontier CIS modules can also be installed on east- and west-oriented rooftops because of their high output even under these conditions, which are considered to be non-optimal. The customer chose Solar Frontier thin-film modules as the best combination of quality, power output and sustainability.

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.eu