

Case Study

CO2PRO

Residential Rooftop Ikast



Ikast, Denmark



Solar Frontier CIS modules on the south- and west-facing roof of a Danish house in the town of Ikast. (Image: FreeEnergy)

Site Overview

Location	Ikast, Denmark
Coordinates	56.14° N, 9.27° E
Average global irradiance	980 kWh/m ² /yr
Average temperature	7.5 °C, 45.5 °F
Average precipitation	781 mm/yr, 30.7 in/yr

Technical Overview

Date onstream	December 2011
System capacity	4.21 kWp
Panel type	SF145-L (145 W)
Number of installed panels	29
Tilt angle, orientation	25°, 0° S/ 90° W
Expected output	3,500 kWh/yr
Total CO ₂ reduction	1,971 kg/yr, 4,345 lbs/yr
Inverter	SMA SB2500HF

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 4.2 kWp installation in the Danish town of Ikast 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 29 Solar Frontier CIS thin-film modules, was connected to the grid in December 2011. To cover the energy needs of the homeowner, the installer split this installation into a 20 module sub installation on the west-facing roof and a 9 module sub installation on the south-facing roof of the house. The total installation is expected to generate about 3,500 kWh of energy per year and will offset about two tons of CO₂ emissions.

Due to their good low light behavior, Solar Frontier modules are also a good solution for east and west oriented rooftops especially compared to silicon modules. The homeowner also decided on Solar Frontier modules due to their black appearance, which integrates perfectly with the roof of the brick house.

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