Case Study
ENGENSA
Residential Rooftop Bournemouth

Bournemouth, UK

Traditional English Cottage with Solar Frontier modules mounted on a slate roof.

Site Overview	
Location	Bournemouth, United Kingdom
Coordinates	50.77° N, 1.73° W
Average global irradiance	1,066 kWh/m^2/yr
Average temperature	11.1 °C, 51.98 °F
Average precipitation	592.6 mm/yr, 23.33 in/yr

Installation Overview	
Date onstream	September 2011
System capacity	2.9 kWp
Panel type	SF145-L (145 W)
Number of installed panels	20
Tilt angle, orientation	30°, 132° south
Expected output	2,383 kWh/yr
Total CO_2 reduction	1,329 kg/yr, 2,930 lbs/yr
Inverter	SMA 3000 HF

Financing Bank

Private Investment

"Engensa has a long-standing relationship with Solar Frontier and we had been waiting for their MCS accreditation to be granted as we believe Solar Frontier is the clear leader in the next generation of thin film technology. As a forward thinking company, Engensa is keen to embrace any new technologies that we believe to be worthwhile."

Toby Ferenzi, CTO Engensa

Founded in 2009, Engensa is the UK's fastest growing provider of residential solar systems. The company was set up by a team of solar advocates to make switching your home to the sun as simple and pleasurable as possible. The goal of Engensa is to offer a full service to the customer including planning, installing and maintenance of solar modules combined with excellent customer service. Bournemouth is a 160,000 inhabitant town in the County of Dorset close to the Poole Bay in the south of England. It is famous for its mild climate as the warmest, driest and sunniest part of south England.

The solar system was designed for a 100 year old traditional English cottage with a slate roof and was installed over two days at the beginning of September. The homeowner wanted to benefit from the UK Government's Feed-in-Tariff scheme and contracted Engensa to install the 20 Solar Frontier CIS thin-film modules with a total capacity of 2.9 kWp. The Solar Frontier modules were selected for this system design in particular because of their aesthetic uniform black appearance. The homeowners will also profit from better performance from the Solar Frontier CIS thin-film modules compared to crystalline modules due to their efficiency in low light conditions which are typical in cloudy british weather.

This rooftop installation is expected to generate 2,383 kWh/yr to provide the houseowners with solar energy and also reduce CO_2 emission by 1,329 kg per year. Solar Frontier CIS thin-film modules are well suited for coastal installations because they are certified against salt mist corrosion by TÜV Rheinland in Cologne. Salt mist corrosion appears in coastal regions with high humidity and salt water, affecting the surface and the frame of solar modules.

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