

# Case Study

## PV Solar Project

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REXEL

ENERGY  
SOLUTIONS

### Project Overview

#### Company

Techfor Energy Ltd  
Guildford, Surrey

#### End Market/ Industry Sector

Residential

#### Financial Impact

Index-linked tax-free income  
profit £25,710.54  
Estimated FiT income and  
savings in 1<sup>st</sup> year – 1,000.93  
Cost of installation - £6.2k

#### Products

16 x Sharp 250W silver frame  
panels, Power-One Aurora PVI-  
3.6 string inverter

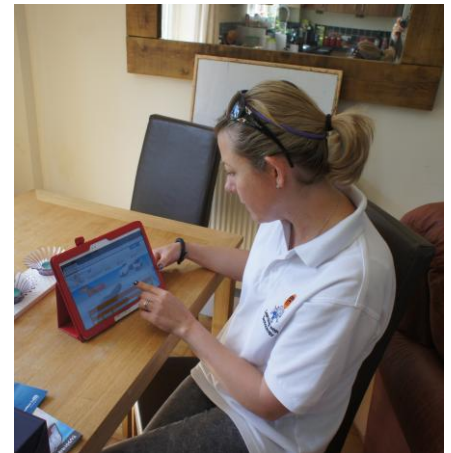
#### Timeline

2-3 days in Oct 2014

#### Rexel's added value

Rexel were able to offer the  
installer the means to give the  
client a 5 year Production  
Guarantee that gave them the  
reassurance they needed to  
invest in PV, knowing what their  
return would be.

## Cheam homeowners cut energy bills



**The McCue family had lived in their Cheam home for 8 years and were making energy efficiency improvements to become more environmentally friendly and reduce their energy bills.** They had researched the benefits of PV solar, seeking views of neighbours with solar, and using Rexel's **Enegeasy Solar** website to help them make the decision whether to invest. Via the site, they were soon linked with 3 local Rexel Enegeasy qualified installers. They selected Techfor Energy Ltd in Guildford as they were most impressed with their knowledgeable, professional and less price-focused approach, and knew that via Rexel's Production Guarantee, their return would be assured.

### The Challenge

The terraced property was partially floating leasehold, with a section of the roof being shared. The first floor rooms on one side of the house backed on to those of their neighbours, and therefore the top section of the roof 'belonged' to the McCues, and the bottom section to their neighbour. Partial shading from the chimney and trees was accounted for in the energy generation quotation, and an additional potential hazard was asbestos in the soffits which had to be circumnavigated.

### The Project

A comprehensive quote, roof design and estimate of predicted energy generation, FiT income and energy/cost savings was provided, along with Rexel's 5 year Production Guarantee. The McCues secured a renewable energy loan via their bank to finance the project, and work commenced in October 2014. The installation took just over 2 days. They were set up to access Rexel's online monitoring tool to help them track their energy generation, and the system's performance is also being remotely monitored so that any unusual drop in generation can be investigated and rectified.

## The Solution

A selection of quality products were offered for the 4kWp system, and Sharp 250W silver framed panels were chosen with a PowerOne Aurora PVI-3.6 string inverter. Owing to the roof leasehold issue, it was necessary to modify the design for the array as shown in the photo, and agree access to that roof section for the installation. A tricky cable run to the front of the house where the inverter was housed had to be devised, that would comply with regulations.



## The Results

A 5 year Production Guarantee was provided: in year one, it was estimated that system would produce 3,884,83 kWh, generating £1,003.90 in FiT income and savings. The McCues' were extremely surprised at the immediate impact on their electricity bill which had dropped in one month from £57 to £17! Monitoring the system helped identify times of peak production which encouraged behavioural changes, for example using the most power hungry appliances in the afternoon.

## Customer Quotes

*'Rexel gives peace of mind to customers who are unsure of the technology, and the 90% production guarantee and monitoring system really help consumers make the most of their system. As an installer, Rexel are also a great partner to work with and are always helpful and available.'*

**Glenn Ashby, Technical Director – Techfor Energy**

*'Right from the word go Glen Ashby was very knowledgeable and professional. He answered all our questions, and gave us a very competitive quote. The office staff always went above and beyond to help. I would definitely recommend!'*

**Lisa McCue - Homeowner**



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**Techfor Energy Ltd** is a renewable energy company based in Guildford, which designs and installs high quality solar photovoltaic and solar thermal systems for domestic and commercial clients. They are a Which? Trusted trader and member of CheckaTrade and have a Consumer Guide to Solar available for download from their website. They are a member of REAL, MCS & NAPIT, and guarantee the quality of their work for 10 years from the date of installation.

