Suffolk's independent guide to The Clean Energy Cash-back scheme

Did you know the Government's 'Clean Energy Cash-back' scheme pays you to be green? Householders, community groups and businesses can get paid for generating renewable electricity using solar panels or wind turbines. This independent guide produced by Suffolk's Councils, explains the scheme as it relates to solar panels.

Suffolk
Creating the Greenest County

What is Solar PV?

Solar Photo-Voltaic (PV) cells are the large flat panels usually seen on roofs which convert light into electricity (unlike solar thermal panels which produce hot water). They come in a variety of shapes and colours, from roof and wall mounted panels to grey 'solar tiles' that look like roof slates. There are even semi transparent panels available which allow some sunshine through for conservatory roofing.

The technology is becoming more and more efficient at generating electricity. They have no moving parts and only need to be kept clean to generate electricity with no carbon emissions!

Over the last 5 years the price of electricity has doubled. Whilst no one can predict future costs with certainty, experts believe increases are almost inevitable in the medium to long term.

Why should I invest in Solar PV?

The Government has introduced an attractive Generation Tariff which currently provides a 5 – 8% p.a. return on your investment in installing the panels. This compares very favourably with other forms of investment.

If you install before April 2012 you receive 41.3p tax free for every unit you generate. This payment is index linked and guaranteed for 25 years.

If you install after April 2012 the amount paid per unit will be less, probably dropping by 8.5% for every year you delay installing; but once you start to receive the tariff it is index linked and guaranteed for 25 yrs (for example, if you install in April 2015 the rate is planned to have dropped to 28.9p per unit). The reasoning is that this reflects the likely reduction in purchase cost of the panels over time as the volume of panels produced increases.

How does it work?

Mr Jones has installed a 2.1kW solar system on his house while Mr Smith has no solar PV.

Both houses use 3,300 units of electricity per year. For his £12,000 investment in installing the system, Mr Jones is £880 per year better off than Mr Smith, as follows:

	Mr Smith No PV	Mr Jones 2.1kWp Solar PV £12,000 installation cost
Electricity bill (Import costs from the national grid)	3300 x 13p/unit £429 a year	2407 x 13p/unit £312 a year **(£117 saving)**
Generation Tariff Income Paid to the panel owner regardless of how much of this electricity is used	£0	1785 x 41p/ unit **£737 a year**
Export Tariff Income Paid for the unused electricity that's exported back into the Grid (currently deemed to be 50%)	£0	892 x 3p/ unit **£26 a year**
Payback	NA	**14 years (7% return)**
Payback is approximately 14 years, though this will be less when you factor in predicted rises in the price of electricity.		

How much does it cost to install?

Solar PV systems are sized in kilowatt-peak units (kWp) according to the maximum power they can generate at any moment in time. A typical 3 bedroom house which doesn't use electricity for heating or hot water, would use about 3,300 units of electricity a year. A well positioned 2.1kWp system on a south or south-west facing, un-shaded sloping roof, 8m by 4m in size would generate approximately half of this electricity and cost around £9,000 to £12,000 to install. For larger systems the installation cost per kWp is usually less.

Where can I get a Solar PV system?

You must ensure that both the equipment and the installer are certified under the Micro-generation Certification Scheme (MCS); otherwise you will not receive the generation tariff. When quoting to install the equipment, the installer will also provide you with an estimate of the number of units your system will generate each year.

Independent advice is available from:

- Energy Saving Trust: **Tel: 0800 512 012 www.energysavingtrust.org.uk**
- The Suffolk Climate and Energy Helpline: **Tel: 0800 02 88 938 www.greensuffolk.org**
- Suffolk County Council's "Trusted Trader" scheme has endorsed a number of local MCS suppliers and installers: **Tel: 01473 264859 www.suffolk.gov.uk/trustedtrader**

Frequently Asked Questions

Are the tariffs guaranteed?

Yes, they were introduced through and protected by the Energy Act 2010. You must also remember that the Government is legally obliged to hit the EU's 15% renewable energy commitment by 2020 and the tariffs are an important means for achieving that.

Who can apply for the tariffs?

The tariffs are for virtually everyone with a property – house owners, tenants, landlords, businesses, schools, hospitals, parish councils, churches, sports clubs or other community groups.

Who pays for the tariffs?

Everyone pays towards the cost of the 'Clean Energy Cash Back' scheme through their energy bills. By installing PV you get to claim your money back!

Would we be able to apply for the tariffs if we are not connected to grid?

Yes. You would receive the payment for each unit you generate; but you would not be able to in addition sell the electricity you don't use back to the grid.

Will my existing renewable energy system qualify?

As it stands, only systems installed after July 15th 2009 (and who are not in receipt of a Low Carbon buildings Programme Grant) will qualify for the full tariffs.

I am a tenant, can I still benefit?

Yes you can. Many landlords allow tenants to make superficial alterations to buildings and this could include the installation of renewable energy systems, especially if you are a long-term leaseholder. If this is not possible then ask your landlord to consider installing renewable energy systems as you would still save money on your energy bill.

I am a landlord, can I still benefit?

Yes you can. If you have the money, installing Solar PV can offer a good return on your investment. It will also allow your tenants to benefit from lower electricity bills.

What is the ideal location for a PV system?

Good performing PV systems need to be placed on an un-shaded, south (or south-east or south-west) facing pitched roof (ideally 35-40 degrees or less). A typical 2.1KWp system will require a roof area of 8m by 4m.

What do I do if my house is listed or has other planning restrictions (such as being in a Conservation Area)?

You will have to seek planning permission from your local council.

What if I move home?

The PV system and tariff income will transfer over to the new owner. Many people are concerned that they will lose out on their investment but in the same way that a new kitchen or bathroom adds value, so will a renewable energy system.

Are there grants available to purchase and install the panels?

All such central government grants have ceased. Some district and borough councils in Suffolk still offer grants, but receipt of these may disqualify you from receiving the new tariff.

What do I do if I am offered 'free PV' by a company that allows me to use the green electricity generated in return for them keeping the generation tariff?

Various commercial organisations are now offering to pay for the equipment and its installation, allowing you to keep the electricity generated, on a lease type arrangement. Look carefully at the details of these offers and work out the cost and liabilities for yourself. A useful guide to the issues can be found at:
http://www.energysavingtrust.org.uk/Generate-your-own-energy/Solar-electricity/Consumer-guidance-on-free-solar-PV-offers

What other issues should I consider?

PV systems are relatively maintenance free, however the inverter that converts the generated electricity into domestic 240v electricity may need replacement after 8-12 years and this could cost around £1000. You also need to consider insurance to protect against damage to the PV panels. If you have to borrow money to pay for the up front installation cost, the cost of interest on any loan must be factored into your calculation of the savings.

Glossary

Clean Energy Cash Back

The scheme introduced by Government and funded by energy supply companies to encourage people to produce different forms of renewable energy such as electricity, biogas and heat.

Feed-in-Tariffs (FiTs)

These are the payments made under the above scheme; i.e. the generation tariff and the export tariff (see below).

Generation Tariff

The amount paid for every unit of electricity generated (whether you use it on site or not).

Export Tariff

The much smaller additional payment for each unit that you don't use and export into the grid.

Avoided Costs

The savings you make on your electricity bill by not having to buy so much electricity from the grid.

Imported Electricity

The electricity you buy from your electricity supplier that you import from the grid.

Solar PV

Solar Photo-Voltaic cells are the large flat panels usually seen on roofs which convert light into electricity (unlike solar thermal panels that use sunlight to create hot water).

This leaflet has been produced by the Suffolk Climate Change Partnership, that includes all Suffolk local authorities and many other key partners, working together to create Suffolk as the Greenest County.

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www.greensuffolk.org

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