

Simple Guide to the new Feed-in-Tariffs based on Solar PV Technology installed after 15th July 2009.

NB: Different rates apply to other technologies such as wind turbines (26.7p) and vary according to the scale of the installation – see reference website below for full details)

Key terms:

To understand feed-in-tariffs you first need to understand the following key terms:

Feed-in-Tariff (FiT) = The FiT (also known as the Clean Energy Cash Back) is a collective term which covers everything related to the electricity your PV system generates and how much you get paid for it. Under the FiT there are two tariffs; the Generation Tariff and Export Tariff

Generation Tariff = This is a set tariff through which your electricity supplier pays you a fixed amount for every unit of electricity your PV system generates for 25 years, whether you use this electricity or export it to the national grid

Export Tariff = This is the amount you earn in addition to the Generation Tariff for any electricity you don't use and export back to the national grid, through your electricity supplier

Avoided Costs = These are the savings you make on your electricity bill by not having to import electricity from the national grid, and by generating your own electricity 'on-site'

Imported Electricity = This is the amount of electricity you import direct from your electricity supplier

What's the rush?

The Generation Tariff is not fixed – it drops every year after April 2012!

To encourage people to install solar electricity systems sooner rather than later (for the more immediate benefit of the environment) the Government has introduced a generous Generation Tariff for all solar electricity installs fitted before April 2012. The Generation Tariff is set at 41.3p/kWh.

By installing a solar electricity system now (and before April 2012) you are guaranteed to be paid this rate tax free for the lifetime of your system (set at 25 years). Plus the Government has ensured the Generation Tariff will track inflation, ensuring you get paid a fair price year on year.

But... the Generation Tariff will drop by 8.5% every year after April 2012. So if you wait until 2015 to purchase your PV system you'll only get 28.9 p/kWh for everything it generates, compared to 41.3p/kWh if you purchase before April 2012.

So to guarantee you get the highest possible price for every unit of electricity your solar electricity system generates over its lifetime, you should install your system before April 2012 when the Generation Tariff will decrease.

Example based on a 3.96KW System on a domestic house

House uses a total of 3300 kWh of electricity per annum.

House generates 3200 kWh of electricity per year from the solar electricity system (Generation Tariff) – conservative estimate

The occupants use 1600 kWh of the electricity they generate (Avoided Costs) and export 1600 kWh to the grid because it is generated at times it does not use it (Export Tariff)

House uses 3300 kWh of electricity so needs to import 1700 kWh of electricity from the grid to meet this, a reduction of 1600 kWh compared to the time before the panels were installed. Current price of imported electricity is 12.91p/kWh (Ecotricity New Energy Plus 100% Green Energy rate).(Avoided Costs)

The household receives annual benefits in three different ways:

1. **Generation Tariff:** A fixed price for each unit (i.e. kWh) of electricity generated by the solar electricity system, whether used within the home or exported, guaranteed for a period of 25 years at a rate of 41.3p/kWh for 3200kWh = **£1321.60**

2. **Export Tariff:** A price for each unit of electricity generated by the solar electricity system and exported to the grid, guaranteed for a period of 25 years at a minimum rate of 3p/kWh for 1600kWh = **£48.00**

3. **Avoided Costs:** The savings from reducing the import of electricity by using the electricity generated from the solar electricity system, thus providing lower bills and the benefit of being at least partially protected from future price rises in electricity 1600kWh @ 12.91p = **£206.56**

Total Annual Benefits = £1576.16

It should also be noted that the cost of purchasing electricity from the grid will inevitably rise in the future which will mean even greater savings!

Please note: the current approximate cost of installing a 3.96 kWp solar electricity system is about £14,000. The Government's reasoning for reducing the Generation Tariff from 2012 is that it expects the cost of PV systems to fall over time due to economies of scale.

Therefore the approximate payback time is **9 years** and the benefits will flow for a further 16 years.

Reference

<http://www.energysavingtrust.org.uk/Generate-your-own-energy/Sell-your-own-energy/Feed-in-Tariff-Clean-Energy-Cashback-scheme#tarifflevels>