Financial Incentives and Mechanisms to Support Low Carbon Technologies

This leaflet provides information about current government incentive schemes and financial support mechanisms available for renewable energy technologies and energy efficiency measures. The information given here is aimed at small scale (less than 5MW) installations. Larger scale installations are supported through the ROCs scheme. Information is available from OFGEM http://www.ofgem.gov.uk/Sustainability/Environment/RenewablObl/Pages/RenewablObl.aspx

Feed-in Tariffs

Feed-in tariffs (FITs) are a government scheme to help promote small scale, low carbon, energy generation.
For qualifying technologies, you get paid a **generation tariff** for generating electricity even if you use that electricity yourself. If you export the electricity to the National Grid you also get paid an **export tariff**. This is all on top of the money you save by not having to buy as much electricity from your electricity supplier.

Tariff Levels

The generation tariffs depend on the technology and the scale of the installation. Tariff levels change over time as government support for different technologies change and as equipment and installation costs go down but once an installation is registered it gets that rate guaranteed for 20 years (or 25 for some technologies). At the moment the tariff levels are being reviewed and PV tariff changes have been rushed through due to an explosion in the number of installations. The Generation tariffs for installations registered from **March 4th 2012 – July 31st 2012** are shown below. Properties installing solar panels on or after 1st April 2012 will be required to produce an **Energy Performance Certificate** rating of 'D' or above to qualify for a full FIT. From August 2012 it is likely that the tariff period for PV will be reduced to 20 years.

PV Tariffs

Energy Source	Scale	Generation Tariff (p/kWh)	Export Tariff (p/kWh)	Duration (years)
Solar PV	4kW (new build)	21.0	3.1	25
Solar PV	4kW (retrofit)	21.0	3.1	25
Solar PV	>4-10kW	16.8	3.1	25
Solar PV	>10-50kW	15.2	3.1	25
Solar PV	>50-100kW	12.9	3.1	25
Solar PV	>100-150kW	12.9	3.1	25
Solar PV	>150-250kW	12.9	3.1	25
Solar PV	>250kW-5MW	8.9	3.1	25
Solar PV	stand alone	8.9	3.1	25

Tariff rates for all technologies are likely to change from August 2012. FITs have changed so much since they were introduced, that they have been quite hard to keep up with. You can keep up to date with current developments via http://www.decc.gov.uk.

Other Technologies

Energy Source	Scale	Generation Tariff (p/kWh)	Export Tariff (p/kWh)	Duration (years)
Anaerobic digestion	≤500kW	12.1	3.1	20
Anaerobic digestion	>500kW	9.4	3.1	20
Hydro	≤15 kW	20.9	3.1	20
Hydro	>15 - 100kW	18.7	3.1	20
Hydro	>100kW - 2MW	11.5	3.1	20
Hydro	>2 kW - 5MW	4.7	3.1	20
Micro-CHP	≤2 kW	10.5	3.1	10
Wind	≤1.5kW	36.2	3.1	20
Wind	>1.5 - 15kW	28.0	3.1	20
Wind	>15 - 100kW	25.3	3.1	20
Wind	>100 - 500kW	19.7	3.1	20
Wind	>500kW - 1.5MW	9.9	3.1	20
Wind	>1.5MW - 5MW	4.7	3.1	20

Future

As part of the most recent government review of FITs it has been decided that future tariff changes will be pegged to cost reductions of the technology and industry growth. This is to try and make the tariff levels more predictable and transparent.

Renewable Heat Incentives

This scheme is basically FITs for low carbon heat generation. The introduction of the RHI is split into two phases. Phase 1 was introduced in November 2011 and is for non-domestic installations. Phase 2 will cover domestic installations and is expected to be introduced towards the end of 2012 but anyone who has installed an eligible technology since 15th July 2009 will qualify.

Tariffs

The current tariffs for phase 1 installations are shown. All technologies except Solar Thermal are only eligible if the site is currently not able to have a mains gas supply. This allows the scheme to maximise the reduction of carbon emissions by prioritising the replacement of more polluting heating systems running on coal and oil. Support under the scheme lasts for 20 years. Note that for tiered tariffs the scheme pays at the higher level for all generation up to a particular total energy output and then drops to the lower level for any further generation.

Tariff name	Eligible technology	Eligible sizes	Tariff rate (pence/kWh)
Small biomass	Solid biomass; Municipal Solid Waste (incl. Combined Heat and Power)	Less than200 kWth	Tier 1: 7.9
			Tier 2: 2.0
Medium biomass		200 kWth to (but not including) 1,000 kWth	Tier 1: 4.9
			Tier 2: 2.0
Large biomass		1,000 kWth and above	1
Small heat pumps	Ground-source heat pumps; Water source heat pumps;geothermal	Less than 100 kWth	4.5
Large heat pumps		100 kWth and above	3.2
Solar thermal	Solar thermal	Less than 200 kWth	8.5
Biomethane	Biomethane injection and biogas, except combustion from landfill gas	Biomethane all scales, biogas combustion <200 kWth	6.8

Energy Efficiency

Carbon Emissions Reduction Target (CERT)

CERT is the current mechanism for supporting energy efficiency measures. Under the scheme, electricity and gas suppliers are obliged to promote energy efficiency and renewable energy generation in order to reduce CO_2 emissions. Energy suppliers provide grants and offers to help you pay for energy efficiency measures. Most energy suppliers provide loft and cavity wall insulation for free to those aged over 70 or those in receipt of certain benefits.

Green Deal

This is a new government initiative which, along with the new Energy company Obligation (ECO) will replace CERT. It is designed to help meet the upfront cost of energy efficiency improvements to homes and businesses. Costs are paid back through your fuel bill out of the savings you will get from more efficient energy use.
The scheme also aims to help vulnerable households and tackle hard to treat houses, such as those that need solid wall insulation.
Details are yet to be announced but it is estimated that the scheme will start towards the end of 2012

Links

The Alternative Technology Centre provides Renewable Energy Factsheets about the technologies mentioned in this leaflet. These are available via the website http://www.alternativetechnology.org.uk

Energy Saving Trust: http://www.energysavingtrust.org.uk

Office of the Gas and Electricity Markets: http://www.ofgem.gov.uk

Dept. of Energy and Climate Change: http://www.decc.gov.uk

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