



## **Freesource Energy Feed-in Tariff Factsheet**

From April 2010 the UK government is launching a special scheme to pay renewable energy generators more money for their electricity they produce.

Currently some power companies offer to purchase your renewable electricity provided it has been installed correctly and metered appropriately. This includes grid connected installations and in some cases off grid systems.

From April the government scheme is set to increase the amount of money you will receive beyond what is currently available to try and help incentivise people's investment in renewable technology by reducing the time it takes to pay back.

In this factsheet we have outlined a couple of scenarios to show a wind turbine feed in tariff and a Photovoltaic (PV) feed in tariff scenario. In addition to this we have also enclosed various direct quotes and useful diagrams and tables from the governments consultation document.

**PLEASE NOTE: THE INFORMATION IN THIS FACTSHEET IS BASED ON DATA AND PROPOSED POLICY AND IS NOT GUARANTEED, IT IS MERELY AN INDICATOR.**

The financial details of the feed-in tariff are due to be formally announced in the coming weeks as a result of a wide scale public consultation process. The scheme is due to launch in April 2010 and the exact mechanism for how it will work will also be clarified. What we do know is this:

- Customers will need to use Microgeneration Certified Installers and Products in order to qualify for the feed in tariff – This is in line with grid connected installation requirements from many network operators.
- The government has legally bound itself to hit carbon reduction targets with the European Union and this scheme is one of several mechanisms which have been proven to work in many other European countries in recent years.

To find out where our information comes from, please follow this link to the DECC web pages containing the full range of consultation documents relating to the feed in tariff:

[http://www.decc.gov.uk/en/content/cms/what\\_we\\_do/uk\\_supply/energy\\_mix/renewable/policy/feed\\_in\\_tarriff/feedin\\_tarriff.aspx](http://www.decc.gov.uk/en/content/cms/what_we_do/uk_supply/energy_mix/renewable/policy/feed_in_tarriff/feedin_tarriff.aspx)

## Tariff structure

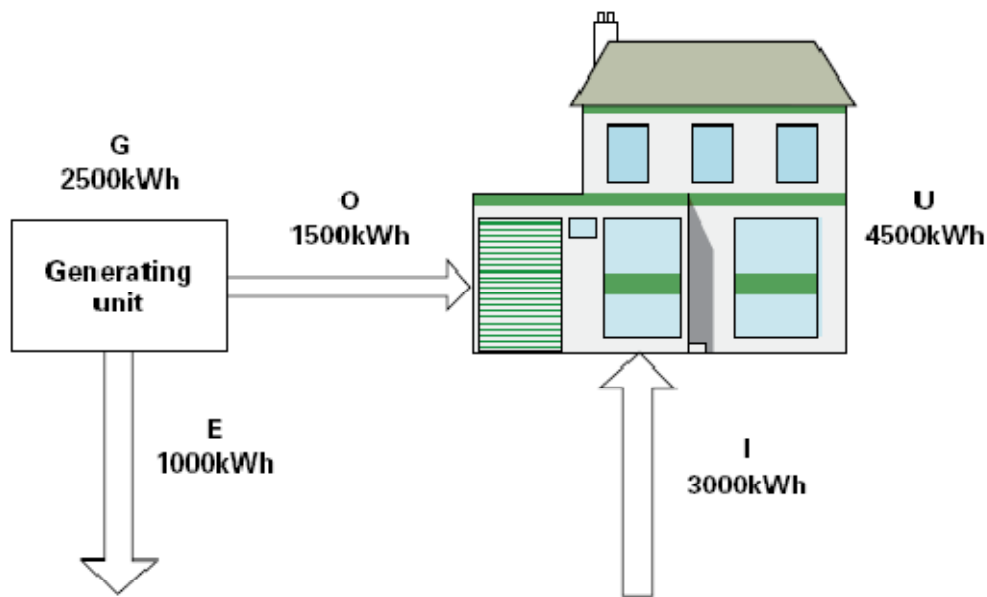
The following information is taken directly from the DECC web pages, to assist those of you looking at investing in renewables with some of the more pertinent answers to your most common questions. Please note again, this is not policy set in stone, it is an indicator and yet to be confirmed. You can find all the following data and text in this link:

[http://www.decc.gov.uk/en/content/cms/consultations/elec\\_financial/elec\\_financial.aspx](http://www.decc.gov.uk/en/content/cms/consultations/elec_financial/elec_financial.aspx)

*“3.5 We propose the following basic structure for FITs:*

- *A fixed payment from the electricity supplier for every kilowatt hour (kWh) generated (the “**generation tariff**”).*
- *Another payment additional to the generation tariff for every kWh exported to the wider energy market (the “**export tariff**”). Generators will be guaranteed a market for their exports at a long-term guaranteed price. The generator may choose whether to sell exported electricity to the supplier at this guaranteed export tariff, or negotiate a price for exported electricity in the open market.*
- *In addition, generators will benefit because they will have the opportunity to use that electricity on-site to offset some or all of the electricity they would otherwise have had to buy. “*

**Figure 5:**  
**Illustration of potential electricity flows for an on-site generator**



**Key**

- G = Generation = O + E
- O = Onsite use
- U = Usage = I + O
- E = Export
- I = Import

- 3.25 In this diagram, the site generates 2,500 kilowatt hours (kWh) per annum (e.g. from a solar PV panel). They use 1,500kWh of the electricity they generate. 1,000kWh is exported, because it is generated at times when the household does not use it. The household uses a total of 4,500kWh per annum. Therefore, they need to import 3,000kWh from their electricity supplier.
- 3.26 Under our proposal if the tariff for generation is, for example, 30p/kWh, the generator will receive a FITs payment of £750 per annum (2500kWh x 30p) for the electricity they generate. They will also receive a payment for the electricity they export; assuming a price of 5p/kWh this would be £50 (1000kWh x 5p). They also derive a benefit from the 1,500kWh they generate and use on-site as that will offset 1,500kWh they would otherwise have had to buy from their electricity supplier. Assuming an import price of 10p/kWh this would be a saving of £150 (1500kWh x 10p).

## Off-grid and private wires

- 3.32 Remote communities and dwellings are potentially areas where small-scale generation can deliver major benefits. These communities currently have high energy costs and depend on carbon-intensive generation. We therefore intend that off-grid electricity supply will be eligible for FITs. There are however potential issues with how the electricity generated by off-grid generators is used. Therefore, we intend to replicate some of the procedures currently used under the RO and require off-grid generators to declare that the electricity generated has been used. Such premises would be subject to checks and audits.
- 3.33 We propose that off-grid generators would receive a generation tariff. Like on-site generators, they will also receive benefits from avoiding the cost of generating electricity by other means, e.g. diesel.

## Multiple technologies at the same site

- 3.43 There will be instances of generators installing two types of technology on the same site (e.g. a school may install a wind turbine and solar PV panels). Each technology will receive its own tariff so the generator will receive different payments per unit generated from the different technologies.
- 3.44 In order that the differentiated tariff payments are possible, the generator will have to have a generation meter for each technology in order to measure the output individually. Should a generator choose to meter the total of their generation, they will only be able to receive the lowest tariff from their multiple technologies.

So you can see the intention is to reward generation AND allow you to benefit from using the units AND allow you to sell any spare to export as well.

The attached table on the next page shows the current proposed tariff levels, which as you can see breaks down by technology and also by size of installation. The reasons for breaking it down are to help all technologies recover their investment roughly in the same time and achieve a payback within 10 years (and in some cases better). Once again, this table is a guide and the numbers are subject to confirmation once the government announces its final policy.

## Initial proposed generation tariff levels

### Generation tariff levels

**Table of generation tariffs for first year of FITs (2010-11)**

Technology	Scale	Proposed initial tariff (p/kWh)	Annual degression (%)
Anaerobic digestion	Electricity only	9	0
Anaerobic digestion	CHP*	11.5	0
Biomass	<50kW	9	0
Biomass	50kW-5MW	4.5	0
Biomass	CHP*	9	0
Hydro	<10kW	17.0	0
Hydro	10-100kW	12.0	0
Hydro	100kW-1MW	8.5	0
Hydro	1-5MW	4.5	0
PV	<4kW (new build)	31.0	7
PV	<4kW (retrofit)	36.5	7
PV	4-10kW	31.0	7
PV	10-100kW	28.0	7
PV	100kW-5MW	26.0	7
PV	Stand alone system	26.0	7
Wind	<1.5kW	30.5	4
Wind	1.5-15kW	23.0	3
Wind	15-50kW	20.5	3
Wind	50-250kW	18.0	0
Wind	250-500kW	16.0	0
Wind	500kW-5MW	4.5	0
Existing microgenerators transferred from RO <sup>34</sup>		9	N/A

### Tariff lifetimes

3.94 We propose that tariffs will be paid for 20 years for new projects\*. We recognise though that some technologies may have lifetimes that are shorter than this period, and that there may be advantages to providing shorter tariff lifetimes.

\* 25 years for PV

34 See Section 4 of this document.

## Export price

3.95 As discussed above we are looking to implement a tariff scheme where there is a tariff for all electricity generated and the value of exported electricity is fixed for the generator. Various options exist for considering what the fixed export price should be, but the range is considered to be between the minimum price paid for unplanned exports to the electricity system (the "spill price") and the retail price. We will continue discussions through the consultation period on what the fixed export price should be and the level will be reflected in final tariffs. The generation tariffs in this document have been developed based on an assumed guaranteed export price of 5p/kWh. Final tariff proposals will be adjusted accordingly.

## Freesource View on Proposals

We believe the government should set its targets to allow commercial investors to realise a return on their capital investment within 5 years for all technologies. In addition, those organisations buying the electricity should offer clearer pricing policy on their normal tariffs' as well as clear pricing for this tariff by law and in a standard transparent format in order to protect the customer.

Finally as a Microgeneration Certified installer using Microgeneration certified products we believe this standard should be applied to all installations in order to qualify for access to the feed in tariff for the following reasons:

- Protection for the customer with warranties on workmanship and quality
- Rigorous testing of products and on-site inspections to ensure safe use of the technology
- Fair and safe design, quotation and aftersales process
- Solid customer service standards in place.