

Buying Power

SWITCHING OUR SUPPLIES OF ELECTRICITY TO GREENER SOURCES IS AN IMPORTANT WAY OF REDUCING OUR ENVIRONMENTAL FOOTPRINT, SAYS STEVE ALLEN

A significant proportion – one third – of the UK's carbon emissions come from the electricity supply system. There are a few things we can do as individuals to reduce these emissions, both at home and at work. Primarily these are to reduce our demand for electricity wherever we can, and switch to a greener tariff or source.

REDUCE

In the power stations that currently provide the majority of our electricity, three units of energy are required to produce one unit of electricity (see box). Therefore any reduction at our end results in a three-fold reduction of the total energy input and its associated environmental impact. So it's all the more important to turn off appliances when not in use, and use the most efficient appliances that we can. The Energy Saving Trust provides lots of advice about energy efficiency and conservation, and you can find contact details in the Information box.

SWITCH

Switching to a green electricity tariff can be an effective way of supporting a greener electricity system. But at present the process is confusing – far more so than it needs to be. This is because the information provided by suppliers is not always transparent, and the environmental benefits of some tariffs are dubious. Furthermore, there is currently no accreditation scheme to verify the tariffs on offer.

HOW IS ELECTRICITY GENERATED?

'Thermal' power stations use their fuels (e.g. coal, gas, nuclear) to boil water and produce steam. The steam is forced through turbines to drive generators that produce electricity. These huge 'centralised' power plants are situated a long way from communities, and so there is no use for the heat in the exhausted steam. It is therefore emitted via cooling towers (the big, bell-shaped structures). This represents a massive waste of energy, particularly when you consider that over three-quarters of the energy we use in our homes is for heating. On average in the UK, 58% of the total energy input for electricity generation is lost as heat, followed by 7% during transmission and distribution to our homes and workplaces. This means that only 35% arrives to us as electricity, or put another way, three units of energy are required for every unit of electricity that we use.



Green columnists Steve Allen (left) and Duncan Glendinning

But fear not! This doesn't mean that you have to sit on your hands while waiting for the situation to improve. With a few tips and tricks you can make an informed jump to a greener supply of electricity.

There are currently three types of green tariff: 'green source', 'green fund' and 'carbon offset'. If you have a GREEN SOURCE tariff, a unit of renewably generated electricity enters the grid for every unit that you buy. It is important to note at this point that suppliers are required by law to source a specified and growing proportion of the electricity they sell from renewable sources. This is currently about 8%. For your tariff to provide an environmental benefit, it needs to be supporting new renewable generators that are ADDITIONAL to this legal requirement. Suppliers commonly pass on some or all of this extra cost to you as the consumer, meaning that your tariff is slightly more expensive. You should not be paying such a premium for a tariff that does not provide more than the legal minimum percentage of 'greener' power.

GREEN FUND customers donate money to support the construction of new renewable generators, environmental causes or new research and development projects.

CARBON OFFSET tariffs aim to offset the emissions associated with electricity, for example by planting trees (which absorb carbon during growth). In the cases of green fund or carbon offset tariffs, it is important to note that you are not paying directly for renewable electricity.

You also need to be clear about where exactly the funds go and what guaranteed and verifiable benefit they have – a controversial topic without independent accreditation of the tariffs.

The Environmental Change Institute at Oxford University recommends that the ideal form of green tariff would be 100% renewably sourced and provide benefits that are additional to the supplier's legal obligation. When this is guaranteed by a supplier you are getting green electricity and supporting the development of new renewable generation capacity.

The National Consumer Council (NCC) published a useful report in January 2007 on green electricity, which is free to download (see Information

box) and has a section succinctly outlining many of the different tariffs available. It suggests that if you are looking for a green electricity supply, the tariff offered by Good Energy is "probably the closest [you] will get to it" in the current marketplace. When the report was published the tariff costed about 12% more than the price of the average standard tariff. To give you an idea of what this roughly represents, Good Energy's website currently states that its tariff typically costs £4 per month more than those offered by the largest electricity suppliers.

There are a number of price comparison websites that can help you compare electricity tariffs. The gas and electricity watchdog 'Energywatch' recommends a number of these. It's also worth keeping an eye on the Energywatch and NCC websites for news about better guidelines and an independent accreditation scheme for tariffs, as they are pushing for these.

Next Month: Recycling and Reusing – part one.

Send your questions and comments on green issues to Steve and Duncan at: green@thebathmagazine.co.uk

INFORMATION

- The Energy Saving Trust has a very useful and clear website and advice line – www.est.org.uk or tel: 0800 512 012.
- The report 'Reality or rhetoric: green tariffs for domestic consumers', produced by the National Consumer Council (NCC) and Energywatch, can be found within the 'Energy' section of the NCC website: www.ncc.org.uk
- Energywatch also has an online green tariff guide that can be found at: www.energywatch.org.uk. This is a good source of up-to-date information about many of the tariffs available. Navigate to 'Help and Advice' on the left hand side of the screen, then 'Green tariffs'. To find reliable price comparison websites, visit Energywatch's website, go to 'Help and Advice', then 'Finding the right deal for you', then 'Price comparison services'.