



# green electricity



## what is it?

This topic is about choosing suppliers that get their electricity from renewables. There are ways to produce your own green electricity – e.g. using solar PV, wind, hydro etc. - together with a battery system if you want to be 'off-grid'. But the vast majority of people in the UK are 'on-grid' - i.e. connected to the National Grid - and most of the electricity put into the Grid is 'brown', from power stations using coal, gas, oil or nuclear.

Now some companies are feeding the National Grid using renewables - for example large wind turbines or hydro-electricity. This is 'green' electricity. Also included in the 'green' category is electricity from companies that use your money to build renewable generation capacity, or invest in projects to absorb or reduce carbon emissions.

There are two types of company involved in providing green electricity – suppliers and generators. Some companies have no electricity generating capacity, but supply the public with electricity that they have purchased from generating companies. Others (e.g. Good Energy and Ecotricity) are both suppliers and generators.

If you're with a green electricity supplier, you can't trace your electricity back to a wind turbine. It means that the more people switch, the greater the proportion of green electricity in the Grid.

We particularly favour community energy, where communities set up co-operatives to generate electricity or heat from renewables. Ownership of our energy supply is very important. We don't think it should be concentrated in just a few corporations - we don't think that's good for energy security or democracy. Plus the corporate system is based on perpetual growth, which will continue to damage nature whatever the source of our energy. This is not often addressed by energy experts who understand terawatts but not necessarily political philosophy.



*Electricity from renewables enters the National Grid with electricity from coal/gas-fired, and nuclear power stations. The more people who switch to green electricity, the greater the proportion of renewable electricity in the Grid.*



*Hillsides are good locations for wind turbines; but there's no reason they can't be in other locations where they will have very little visual impact, such as industrial estates, agricultural or urban area, or alongside motorways.*

## what are the benefits?

This isn't about home micro-generation - it's about your contribution to large-scale renewable energy projects like wind farms, hydro-electric schemes, and wave / tidal power. There's some opposition to large projects, notably wind farms, and we respect people's opinions about the effects on the landscape. We wouldn't want turbines on every hillside, but we think that ultimately, ecology (which supports human life) is more important than the view. And anything that mitigates the problems below has to be explored. If you switch to green electricity, you're helping develop renewable energy projects that help counter the problems associated with the alternatives - like:

**Climate change:** there's no 'debate' about climate change. All independent, peer-reviewed climate scientists tell us that it's happening, it's dangerous, and it's anthropogenic. Opposing this position is politically-motivated, not scientific. The media promote the idea of a debate to sell newspapers and get viewers. There's a direct link between CO<sub>2</sub> in the atmosphere and average global temperatures, and CO<sub>2</sub> has gone up by a third since the industrial revolution (and is rising rapidly). You may think this means warmer summers and milder winters, which sounds quite nice - but it also means desertification, melting ice-caps, loss of biodiversity and famine, which isn't quite as good.



**Peak oil:** oil is a finite resource, and its use is increasing dramatically. This can only mean one thing – it's not going to be around for much longer. 'Peak' oil' means the point of maximum production, after which prices increase and production tails off to (eventually) tiny amounts as we try and find the last drops from currently uneconomical fields. As most of our food (especially in the West) depends on oil for fertilizers, machinery and transport, unless we have alternative energy supplies, or you produce your own food (and manage to hang on to it), you're going to go very hungry.

**Nuclear power:** peak uranium is happening too, although thorium from sea water, in liquid fluoride thorium reactors, means that nuclear power can be around for a long time - even longer if financially viable nuclear fusion can ever be harnessed. But should we move that way? The nuclear option is potentially extremely dangerous - the fact that Chernobyl and Fukushima are now household names attests to that. And there's the question of nuclear waste, which is highly dangerous for tens of thousands of years (and we're still discovering Roman ruins from a couple of thousand years ago!). And yet nuclear continues to receive billions in taxpayer subsidies while renewables receive next to nothing. Also, nuclear can't be owned by communities and individuals, only corporations or states, and as mentioned above, we don't believe that it's good for our energy supply to be concentrated in the corporate sector. Who knows, there may be an invention around the corner that will solve these problems, but it's not looking likely, and it's too much of a risk to do nothing.

Whether you think large wind turbines are ugly or beautiful is entirely subjective. However, large turbines do involve access roads and lots of metal and concrete that may not be advisable in particularly beautiful, remote or environmentally-sensitive areas. Some people claim that house prices are reduced in the vicinity of large wind turbines, but a report by the Centre for Economic & Business Research concludes that they're not. Also, this argument doesn't really wash with us, as we feel that houses should be homes rather than investments, and anyway, what happens to the price of houses next to pylons, motorways, coal-fired or nuclear power stations etc?

## what can I do?

Switch to a green electricity supplier. The market is constantly changing as new players enter, new capacity is built, and prices change; and because suppliers are in competition for your custom, there is a huge amount of marketing information out there, which can be daunting and confusing.

Fortunately, there are websites to help compare the tariffs, like Green Electricity Marketplace.

So, once you've decided which supplier is the one for you, as regards their activities and the price of their electricity, simply go to their website and switch online, or give them a call. It can be done immediately, with no interruption to your supply.

We strongly recommend community energy, and there are two ways you can help. First, you could invest in a community energy scheme, and secondly, you can switch energy provider - to Coop Energy, which commits to buying the output of community renewables schemes to sell to the public. You can even stipulate what type of generation your money goes towards.

## resources

- see [lowimpact.org/green-electricity](http://lowimpact.org/green-electricity) for more info, links & books, including:
- Dieter Helm, *Burn Out*
- Chris Goodall, *The Switch*
- J N De Figueiredo, *Green Power*
- [greenelectricity.org](http://greenelectricity.org): Green Elec. Marketplace
- [whichgreen.org](http://whichgreen.org): investigating the claims of companies offering green electricity generation
- [noncorporate.org/energy-utilities](http://noncorporate.org/energy-utilities): get green electricity from a co-op



*Large wind turbines - love 'em or loathe 'em, but really, this is the alternative.*

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