

# green electricity





one of two large turbines at Ecotech, at Swaffham, Norfolk. Its capacity is 1.5MW, enough to power 1,100 homes. It was installed by Ecotricity, and you can visit and climb to a viewing platform behind the blades.

## what is it?

It is obtaining the electricity that you use from environmentally-friendly sources. The electricity you use in your home is probably from the National Grid. There are ways of being 'off-grid', for example using a generator, solar pv, wind, hydro, or micro-chp, together with batteries. But the vast majority of people in the UK are connected to the National Grid. And most of the electricity put into the National Grid is 'brown' from power stations using fossil fuels (coal, gas,

But 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 research and build new renewable generation capacity, or to offset carbon by investing in projects to absorb or reduce carbon emissions in some other way.

Two more things that you need to know:

Firstly, there are two types of companies involved in providing green electricity suppliers and generators. Some companies (e.g. Good Energy) have no electricity generating capacity, but supply the public with electricity that they have purchased from generating companies. Other companies (e.g. Ecotricity) are both suppliers and generators. Ecotricity operate around 25 Megawatts of wind turbine capacity, and also sell direct to the public.

Secondly, if you switch to a green electricity supplier, you won't then be able to trace your electricity back to a wind turbine. It simply means that the more people switch, the greater the proportion of green electricity in the National Grid.

### what are the benefits?

This is not about home-scale micro-generation renewables. This is about contribution to large-scale renewable energy developments, like wind farms, large hydroelectric power schemes, and also wave and tidal power.

There is some opposition to large renewable energy projects, notably wind farms, and we respect people's opinions about the effects of wind turbines on the landscape. We wouldn't want turbines on every hillside, but we think that ultimately, ecology (which after all, supports human life on this planet) is more important than the view. And anything that mitigates the problems below has to be explored. It's too important not to.

If you switch to green electricity, you are helping develop large-scale renewable energy projects, which help counter the problems associated with the alternatives - which are:

climate change: there is no 'debate' any more. 99.9% of scientists recognise that climate change is happening, it's dangerous, and it's man-made. The media promote the idea of a debate to sell papers and put bums on seats. There is a direct link between CO2 in the



whether you think wind turbines are beautiful or ugly is subjective. Some think that turbines in their area will reduce house prices (they won't), others put the environment above selfinterest. But really, this is the alternative.



wind turbines following the contours of a road in Denmark, where there is very little negative visual impact. See <a href="https://www.windpower.org">www.windpower.org</a>.

atmosphere and average global temperatures, and CO<sub>2</sub> has gone up by about a third since the industrial revolution (and is rising rapidly). You may think this means warmer summers and milder winters (good), but it also means more deserts, melting ice-caps and large-scale coastal flooding, more hurricanes, environmental destruction, famine, and the deaths of millions of people (very bad).

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:** there's not enough uranium left for nuclear power to take over from fossil fuels for more than a couple of decades; fast breeder reactors could increase that, but they're not safe; and it's not at all sure that nuclear fusion (what happens inside the sun) can ever be harnessed, or at least in the near future. And there's the question of devastating accidents,

and nuclear waste, which is radioactive for tens of thousands of years (and we're still discovering Roman ruins from two thousand years ago!). And yet nuclear continues to receive billions in taxpayer subsidies while renewables receive next to nothing.

Maybe there's an invention coming that will solve these problems, but it's not looking likely, and it's too much of a risk to do nothing.

### what can I do?

You can switch to a green electricity supplier – today. It is probably the easiest and quickest way to have a significant effect in helping to reduce the damage to the ecology of our planet. The green electricity market is constantly changing as new players enter, new generating capacity is built, and prices change. Also, because suppliers are in direct competition with each other 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 you keep up with the changes, and to compare green electricity suppliers.

As mentioned, there are different kinds of green electricity, so price isn't everything. Having said that, you can compare the tariffs of green electricity suppliers in your area by visiting the Green Prices website (see below).

So, once you have checked out some of these websites, and 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.

#### resources

- www.greenelectricity.org sign up to a green tariff; international section too
- www.greenprices.com/uk/pricesbox.asp enter your postcode and compare green electricity tariffs in your area
- www.ecotricity.co.uk 08000 326100 first company in the world to offer green electricity; building lots of new capacity

Contact us or visit our website to find out more about our factsheets, books, residential weekend and one-day courses, home eco-audits and online shop. You can also become a 'Friend of LILI', and receive our biannual newsletter, discounts on our courses, and help us to make a difference.