

## The problems with using non-renewable energy

Burning fossil fuels is the main source of 'greenhouse gases', carbon dioxide and others which affect the atmosphere and are altering the climate. New Internationalist magazine notes that 2002 was the second hottest on record, 3250 square kilometres of Antarctic ice shelf collapsed and sea levels could rise by 27 centimetres by 2100.

Nuclear power is extremely expensive to produce, requires great attention to safety because of the risks from radioactivity, has the potential for catastrophic accidents and produces waste products which require looking after for thousands of years. While it has the potential to generate a lot of electricity the risks are high and the same investment in insulation, energy efficiency and renewable sources of energy would produce great benefits and fewer risks.

Solar, wind and wave power have the major advantages of being renewable but still require capital investment to harness them and still have environmental impacts.

## Purchasing Green Energy (information taken from the Green Choices website)

Since the government opened up the domestic energy market to competition in 1998, allowing users to choose which company to buy electricity from, it has been possible to switch over to green electricity.

Green electricity is generated from renewable sources such as wind, wave and solar power, which do not generate pollution and are infinitely renewable. Government statistics show we could be meeting almost 40% of the country's electricity needs from green sources by the year 2025 and legislation now requires all suppliers to buy some green energy (currently 3%). By 2010 they will be required to buy 10% of their electricity from renewable sources.



Changing to a green electricity company from your existing provider involves no new meter, wiring or even a visit from an electrician, and you receive exactly the same service through the National Grid as before. Because all energy companies feed the electricity they generate into the National Grid it is impossible to say how a particular unit of electricity was generated. What the green energy companies who supply renewable energy guarantee is that they buy as much electricity from renewable sources as they supply to their customers, generally on a yearly basis.

## Green Tariffs

Green tariffs often involve the payment of an additional premium, though some companies have made their green tariffs the same as their other tariffs. Additional premiums may be justified because renewable energy sources are new and more expensive and it can be argued that the higher charges more accurately reflect the environmental as well as financial costs of generating electricity. You may feel it is worth paying a bit extra to know that the energy you are buying is from green sources.

Green electricity schemes can be one of two types, or a combination scheme.

- Some companies put the money from their green tariff customers into green energy funds which go towards renewable energy projects.
- Other companies guarantee to buy energy only from renewable sources with a few even running their own wind farms.
- Some companies offer combination schemes where they guarantee to buy some electricity (over and above their obligation to buy 3%) from renewable sources and also put money into green energy funds.

### Green energy companies

Many electricity supply companies have introduced green schemes and tariffs of some sort. Green prices can provide details of green tariffs in your area. The following are some of the major schemes:

**Good Energy** is an independent supplier and producer of renewable electricity to homes and businesses throughout England and Wales and across Europe. It supplies only 100% renewable energy and, over 12 months, for every unit of electricity supplied to a customer, Good Energy will buy a unit of electricity from a renewable generator in the UK.

They source their energy from wind farms across the UK including West Beacon Farm in Loughborough.

For more information check out the website at [www.good-energy.co.uk](http://www.good-energy.co.uk) or telephone them on 0845 456 1640.

**Ecotricity** build and supply new sources of renewable energy to homes and businesses and its profits are ploughed straight back into building new sources of green electricity. They currently have five operational wind parks (Lincolnshire, Gloucestershire, Scotland and two in Norfolk) and plan to build more than 500 MW of new wind energy capacity by the end of 2010, including more in Norfolk. **Ecotricity** won't cost more than normal electricity because they will match the price of your local supplier.

For more information check out the website at [www.ecotricity.co.uk](http://www.ecotricity.co.uk) or telephone them on 08000 326 100.

**Juice** has been developed by npower in partnership with Greenpeace and will deliver 100% clean electricity from the North Hoyle offshore wind farm which will be built in 2003. **Juice** doesn't cost any more than normal npower electricity. Every unit of electricity that a **Juice** customer uses is matched by an equivalent amount of electricity generated from renewable sources.

For more information check out the website [www.npower.co.uk](http://www.npower.co.uk) and click on 'Juice' or telephone 0845 120 2755.

**Green Energy (UK) PLC** wants to create an environmentally responsible electricity supply industry and offer two green electricity tariffs. Green Energy 10 provides 10% green electricity at prices set at the same level as your regional electricity supplier while Green Energy 100 is 100% pure green electricity at small premium over your regional electricity supplier. They plan to reinvest up to 50% of their profits back into UK renewable electricity generation projects and buy all their renewable energy from British sources.

For more information check out the website [www.greenenergy.co.uk](http://www.greenenergy.co.uk) or call on 0800 783 8851.

**RSPB Energy** is a green price plan from Scottish and Southern Energy. It does not cost more than your local electricity supplier and donations are made to the RSPB when you switch your electricity supply and for each year you remain in the scheme. The electricity you use will be matched with generation from renewable sources.

For more information check out the website [www.rspbenergy.co.uk](http://www.rspbenergy.co.uk) or telephone 0800 0288 552.

### References:

[www.greenchoices.org/energy](http://www.greenchoices.org/energy) - The GreenChoices website is about the choices we can make in our everyday lives to protect our environment, for the benefit of all. They aim to empower people with simple, direct information on green alternatives which make a real, lasting difference.