

# Renewable energy

## Factsheet 2

### Green electricity

#### Introduction

Energy plays an indispensable role in modern society. We all depend on a constant and reliable supply of energy - for our homes, businesses and for transport. But have you ever thought about the source of the energy you use?

The majority of the UK's electricity comes from burning fossil fuels (e.g. coal, oil and gas) which is a major contributor to climate change. The mix of fuel sources has changed significantly in the last 50 years. In 1950, about 90 per cent of our electricity came from coal; but today, coal accounts for only about 33 per cent. Gas now provides a large proportion, with oil and nuclear making up the rest and renewable energy accounting for only about 3.5 per cent. However, Scotland already has a high level of hydro output meaning approximately 8 per cent of our electricity is generated from renewable sources.

In the future, the amount and proportion of renewable energy generated is set to rise, largely because of scarce supplies of gas and oil and also because of government policy and programmes to support renewable energy generation.

#### Green supply offerings

The electricity grid network is supplied by power stations, mostly fossil fuelled. Now, some smaller renewable power stations are supplying electricity to the national grid. Put simply, green electricity is produced from renewable sources, as opposed to 'normal' electricity which is from fossil fuel generation. Often also referred to as 'green power', green electricity is frequently given specific brand names by the energy companies.

You can purchase green electricity from current renewable sources i.e. a 'green tariff' - or support a fund for the development of future renewable energy generation i.e. a 'green fund'. Green funds and green tariffs are collectively known as green supply offerings. A number of companies also have offerings that are a combination of the funds and tariff offerings.

#### Green tariffs

When you choose a green tariff, your supplier is obliged to source for you an amount equal to some, or all of the electricity you consume, from existing renewable energy sources (such as a wind farm). Electricity is supplied to your



home in exactly the same way - it is a matter for the energy company to buy the same amount to match your energy consumption (and that of all their green electricity customers) from a green energy source.

#### Green funds

Another option is a 'green fund'. This involves you paying a premium to contribute to a fund that will be used to support new renewable energy developments. The cost of generating electricity from renewable energy sources is usually higher (although the difference has reduced significantly in recent years). Under this option, your existing electricity supply continues as normal, but your involvement will help to alter the mix of energy sources in future toward renewable sources.

#### Legislation - the renewables obligation

The Government has a policy to increase the amount of renewable electricity produced in the UK and therefore reduce greenhouse gas emissions. Supported by legislation known as the Renewables Obligation, it requires electricity suppliers to source a percentage of the electricity that they sell from defined renewable energy sources. The target in Scotland is 18 per cent from renewables by 2010. So, even if you do nothing, your electricity should be 18 per cent green by 2010. It is important to note that green supply offerings are voluntary activities undertaken by various electricity suppliers - the Renewables Obligation is a mandatory legislative requirement.

#### How do I choose?

There are a number of factors to consider and questions you should ask your electricity supplier. See over to find out where you can get further information and advice.

## Cost

Because generation from renewable sources is more costly, you often pay extra for green electricity. This varies from company to company depending, for instance, on which renewable source is being used. The cost is usually no more than a few pounds per month, although some companies do not charge a premium at present.

## Additional generation?

It is important to reiterate that green supply offerings are voluntary activities undertaken by various electricity suppliers - the Renewables Obligation is a mandatory requirement. Many people are therefore asking, if my electricity company is required by law to purchase electricity generated from renewable energy sources, why should I participate in a green supply offering?

It is a valid question but by opting for a green supply offering you are making a commitment to supporting energy generation from renewable sources. If you do decide to do this we recommend that you ask several questions of your potential green electricity supplier (including any 'doorstep' sellers):

- Is the green electricity you are considering buying part of that which is legally required by the supplier to purchase - or is it additional generation?
- Similarly, if you are considering contributing to a green fund, will it be used for new renewable energy generation equipment to meet their legislative requirements? Or is it additional to those requirements and thus a voluntary decision to support more renewable energy generation?

If it is additional, you should ask how it is verified and if it is clearly labelled on your electricity bill.

It is likely that greater impact will be gained from offerings additional to legislative requirements. In all cases, electricity suppliers should be clear to consumers about what they are offering.

## Regulation in green supply offerings

The Office for Gas and Electricity Markets (OFGEM) is responsible for administering the Renewables Obligation legislation, but does not directly regulate green supply offerings. However, it has produced guidelines for the operation of green supply offerings and whilst not mandatory, they do clarify suppliers' obligations to ensure that green offerings are credible and defensible.

## So what should I do?

Even if you do nothing, a small part of the electricity you purchase will be from a renewable source, as a result of the Renewables Obligation legislation. However, you can choose to purchase more or all of your electricity from green sources and assuming it is additional, you will be contributing to new renewable energy generation. You may not think this makes a difference, but it will send a message to the energy companies that renewable energy is the preferred consumer option. Just think of the impact, if we all opted for a green tariff.

## Where can I get more information?

The Energy Saving Trust offers a one-stop shop that provides funding, advice and project support to further the development of small-scale renewable energy projects. To assist community projects there is a network of Development Officers which the Energy Saving Trust co-manages with the Highlands and Islands Community Energy Company; these officers provide an advisory and project management service to community groups within their local region. To find your nearest Development Officer call the helpline on 0800 138 8858.

The Energy Saving Trust also provides information and advice for householders via its Energy Efficiency Advice Centre (EEAC) network which provides householders with free and impartial advice on how to improve energy efficiency in the home. EEAC advisors have been trained to provide advice about renewable energy and will be able to advise you on the issues you need to consider when installing a renewable energy technology. To contact your nearest EEAC call 0800 512 012.

## Useful links

- The Energy Saving Trust renewable grants for Scottish householders and community groups: [www.est.org.uk/schri](http://www.est.org.uk/schri)
- For advice and information about renewable energy technologies and other energy saving measures for your home: [www.est.org.uk/myhome](http://www.est.org.uk/myhome)
- Green Prices independent web site dedicated to green electricity tariffs: [www.greenprices.co.uk](http://www.greenprices.co.uk)
- OFGEM; electricity and gas regulator: [www.ofgem.gov.uk](http://www.ofgem.gov.uk)

