EXTRACT FROM
earthQuaker
The journal of Quaker Green Action issue 54 August 2006

Is Green electricity really green?

GREEN ELECTRICITY SUPPLIERS—HOW GREEN ARE THEY?

The following letter from a QGA member set me off on a voyage of discovery.

I recently came across *Green Electricity - are we being conned?* in the June 2005 issue of *The Ecologist.* In the article Jeremy Smith describes his researches on whether using a green electricity supplier is a good option. His immediate reaction had been "Of course", but as he investigated he concluded that buying from many of the green suppliers made not one whit of difference to the environment.

This is counter-intuitive, but the problem is that if a green supplier enters business by using an existing renewable source of power, and does not invest in new renewable generation capacity, nothing is different. That plant would have been generating anyhow, so there is no environmental benefit, indeed you might be paying a premium for electricity you could have had at a standard rate.

The article was accompanied by a table giving the value of investment in new renewable generating capacity per customer in 2004 by various suppliers. As you see, below one company stands out with a sum per customer over one hundred times that of its nearest rival, and is therefore recommended as the only worthwhile green supplier in the article.

Ecotricity £901.64; Powergen £8.33; Npower £7.20; Scottish Power £4.46; EDF Energy £0; **Good Energy £0**; Green Energy UK £0; Scottish and Southern Energy £0.

Roger Plenty
Ashleigh, Rodborough Hill, Stroud GL5 3RT

I read the article (1), consulted Laurie Michaelis, as he's a bit of an expert on these things, and contacted Good Energy and Ecotricity, the two suppliers of green electricity recommended in QGA's *Walk Cheerfully, Step Lightly* and also on www.greenelectricity.org (2). Both suppliers were helpful, Good Energy particularly, as they were somewhat aggrieved by *The Ecologist* article and glad of an opportunity to explain their policies. **It is significant that the figures in the table in the Ecologist article were obtained from a website, *Whichgreen*, which is an Ecotricity initiative ranking renewable energy suppliers purely on their funding of new generation.** You will find that figures for 2005 are different with the biggest change for Ecotricity which is now reduced to £117.19. Finally I obtained much helpful information from the sources listed on page 5. Revised guidelines for green electricity suppliers from Ofgem (see reference (5)) are due out later this year—watch www.ofgem.gov.uk. Unfortunately although good they are only guidelines and not compulsory.

To understand whether supporting a green electricity supplier is really going to help combat climate change you need to have a basic grasp of the current situation regarding green electricity suppliers. Obviously the electricity that arrives at your house could come from any source but by opting for a green supplier you are guaranteed that all or a given percentage of the units of electricity you use are matched by that number of units fed into the grid by a renewable generator (wind turbine, hydro power, photo voltaics etc). Beyond that simple fact it becomes rather complicated but I try to give a brief outline below with references to sources with more detailed information.

A Brief Guide to the background to green electricity supply in the UK.

The Friends of the Earth league table rating green electricity suppliers according to the environmental benefit of their product was discontinued after 2004 due to lack of resources. The situation had become complicated by the introduction of the **Renewables Obligation** (**RO)** ((3)(4) and (5))

The RO was introduced in 2002 by the government, to stimulate renewable energy production. Electricity suppliers became obliged to derive a specified proportion of electricity from renewable sources (3% in 2002 and due to rise gradually to 15% by 2015/16).

Consequently voluntary consumers of green supplies (0.2% of customers) became a subset of the 3% obligatory green supply. So the value of the voluntary market in creating **additional** demand for green electricity became unclear (3)

Each unit of renewable electricity has a **Renewable Obligation Certificate (ROC)** attached. Suppliers who don't meet the RO can buy ROCs from companies that supply more than the current obligation or pay a fine. Companies can opt to 'retire' ROCs rather than sell them. The idea of this is that with fewer ROCs available their market price will rise and those generating renewable energy could expect to get more money for each unit of electricity generated from renewable sources. This could bring about more investment in renewable generating capacity (e.g. wind turbines) in the long term ((3)(4) and (5))

Policies of 2 green suppliers recommended by QGA and www.greenelectricity.org

Good Energy (www.good-energy.co.uk) is currently the only company supplying only electricity from 100% renewable sources. See www.electricityinfo.org (6) They retire 10% of their ROCs which they believe will stimulate the building of new renewable generating capacity. Their policy is to promote growth in renewables by providing a stable market for renewable generators to sell to.

Good Energy explained that The Ecologist article and Whichgreen website fail to mention their parent company, the Monkton Group, who invest in renewable generating capacity. Monkton Generation exists to ensure that Good Energy has enough renewable supply for its customers in the future.

Good Energy also works with independent and community sites to enable them to develop their own new generation. For example they support ice cream makers Mackie's whose wind turbine generates enough electricity to make their ice cream and to power 220 Good Energy customers. Around three-quarters of the generation sites that Good Energy buys from have been built within the past 5 years.

Good Energy are particularly keen on promoting microgeneration, which they believe is the best option for the future of energy supply. They are offering to support domestic generators by paying them for everything they generate, including what the household uses themselves, at 4½p per kw.

Ultimately Good Energy want to provide a sustainable market for renewable power independent of any government mechanism.

Ecotricity (www.ecotricity.co.uk) will supply 100% renewable electricity (Old Energy or Ecotricity 121) but no longer retire any ROCs (cf info in FoE's last league table (3)). This, like Good Energy, costs more than your conventional local electricity supplier but is no longer available to sign up to on their website. Now they promote New Energy which has a variable renewable component, around 25% in 2005, and costs the same as your local supplier. They have not yet complied with a new regulation obliging suppliers to disclose their total fuel mix (6).

Ecotricity's policy is to create more renewable generating capacity by investing much of their profit into building new wind turbines. They have 22MW of wind power installed and plan to build a further 21MW during 2006.

Ecotricity no longer reitre ROCs. They wrote to me: *The big problem with ROC retiral is that it doesn't actually make any difference to the amount of renewable MW that get built and we believe that is the most important thing to achieve. Economic theory would suggest that if you remove ROCs from the marketplace, demand for them will increase relatively and therefore more renewable projects will get built to supply the ROC demand. In practice, it is not investment capital but the UK planning system that dictates renewable project build. For example, one of our projects, for a single wind turbine, has just been given planning consent. However, this took five years and we had to go to appeal - at significant cost to us. Local parish planning committees are dictating, or at least hindering, national energy planning policy. No amount of retired ROCs would rectify that*.

Regarding the last point made by Ecotricity, Laurie Michaelis reckons that the main new initiative from the **government energy review** (7) is to "streamline and simplify" the planning process for energy projects. This may make a difference. The basic idea is that energy technologies will get generic approval, so that local planning inquiries can't argue about whether the technology or energy source is actually needed—they'll only get to look at local suitability and impacts. That means a local inquiry can still argue that a wind turbine would spoil the view, but can't spend years arguing about things like variability of supply.

What about the Guidelines on Green Supply Offerings from Ofgem?

The 2002 Guidelines are being revised and a draft is available (5). Ofgem rightly states that consumers must be satisfied that choosing a green supply is making a difference to the environment over and above that caused by the RO—**additionality**. The revised guidelines propose three types of additionality.

- ensuring **generation** and sale of energy from renewable sources that would otherwise be sourced from other sources
- ensuring an increase in renewable generation **capacity**
- provision of **environmental benefit** not directly related to renewable energy supply e.g. by offsetting emissions or improving biodiversity

The revised Guidelines also propose that suppliers should identify which forms of additionality are delivered by their green supply offerings as well as those aspects of additionality that are not. That 's a good idea!

What conclusions did I come to?

The new Ofgem Guidelines might make it easier in the future to choose companies who are making a real difference to the environment through their green supply offering. Even better would be a proper accreditation scheme–full discussion of this in reference (4) Meanwhile I have decided that despite the conclusion of The Ecologist's article, choosing Good Energy as a supplier will certainly make a positive contribution to the environment.

I would happily recommend Good Energy and Ecotricity but as I want to buy 100% renewable energy and not support nuclear or coal sourced power and I fully support their policy of encouraging microgeneration, I am staying with Good Energy. Ecotricity's policy of charging the same as the local conventional supplier could be of value if costs are important, as for example in recommending an alternative supplier for your Quaker Meeting House.

References:

(1) *Green Electricity - are we being conned? The Ecologist* June 2005 (5 pages). Download available from archive section on www.theecologist.org

(2) The Green Electricity Market Place—with details of suppliers for each region and recommendations—*www.greenelectricity.org*

(3) *Friends of the Earth Guide to Green Electricity Tariffs 2004* (14 pages) Available as an historical document only. I can email you a pdf.

(4) *Green Electricity Code of Practice. A scoping study*. (31 pages) May 2006. Environmental Change Institute, University of Oxford. www.eci.ox.ac.uk/lowercf/greenelectricity

(5) *Revision of 2002 Guidelines on Green Supply Offerings – Consultation Document* . Available from www.ofgem.gov.uk

(6) An independent website providing customers with environmental information on the UK electricity supply industry–*www.electricityinfo.org*

(7) *The Energy Challenge. Dti Energy review. A Report (216 pages)* July 2006 Can be downloaded from www.dti.gov.uk/energy/review/ or hardback copy from Dti (020 7215 5000) at £22. Executive summary is 14 pages.

Those without internet access can ask me for a paper (100% recycled) photocopy of most of the above references for cost of paper and postage.

Anne Brewer
6 Phoenice Cottages
Chapel Lane
Bookham KT23 4QG

01372 456421 or 0845 456 0334

Renewables Grants for householders and community organisations

From 1 April 2006, the DTI's low carbon buildings programme will run for three years and replaces their Clear Skies and Solar PV grant programmes. Grants are available for householders, public, not for profit and commercial organisations across the UK (except Channel Islands and Isle of Man),

Two streams of grants are available:

Stream 1: for householders and community organisations. Apply now.

Stream 2: for medium and large microgeneration projects by public, not for profit and commercial organisations. Apply later this year.

The programme covers technologies such as solar photovoltaics, wind turbines, small hydro, solar thermal hot water, ground source heat pumps and bio-energy. Some energy efficiency measures must be in place already to be eligible - at least 270mm loft insulation, cavity wall insulation, energy efficient light bulbs, and basic heating controls.

For more information on these technologies, plus case studies and likely costs, or to download an