

PLEASE NOTE – THIS DOCUMENT IS NOW PROVIDED FOR HISTORICAL INTEREST ONLY

The document was written to explain the work behind Friends of the Earth's 2004 green electricity tariff league table. In 2005 Friends of the Earth took the difficult decision to not update our league table because of a lack of resources.

We believe there should be a government led accreditation system, to help consumers make an informed choice. To find out more go to:

http://www.foe.co.uk/campaigns/climate/press_for_change/choose_green_energy/index.html

Friends of the Earth Guide to Green Electricity Tariffs 2004

Background document

The purpose Friends of the Earth's guide to green electricity tariffs is to provide customers with comparative information about renewable energy based products currently available on the market and to inform their choice of electricity tariff. By doing so, we hope to enable those wishing to use their consumer power to influence the development of the green electricity market, to do so with confidence.

1. Introduction to green tariffs

1.1 The green electricity market

The market for green electricity is a relatively complex one given that electricity is not a traditional product that is delivered to the door from a specific source. Renewably generated electricity, along with electricity from other sources, is pooled into the national grid which then supplies everybody via local electricity networks. Working out exactly what you are buying is therefore not straightforward.

1.2 The voluntary market

Signing up to a green tariff does not guarantee receipt of green electricity to power the home but you can assume that somewhere on the grid, your demand for electricity is being matched by the equivalent supply of green electricity. Customers choosing to go green in this way, either because they want to off-set the external environmental impacts of traditional electricity generation methods or to help subsidise the renewables industry, are known as the voluntary or consumer market.

1.3 The new obligatory market

Since April 1st 2002 energy suppliers have had to make sure that a rising proportion of the electricity they sell comes from renewable energy sources. The level of the obligation rises each year until it reaches 15 per cent in 2015.

For each unit of renewable energy that the power companies buy, they receive a certificate (which is referred to as a Renewable Obligation Certificate, or ROC). If companies fail to match their required percentage they may buy certificates from those companies that exceed the required level.

Alternatively, if the price of purchasing ROCs becomes too high, or there are simply not enough of them to go round, suppliers can pay a buy-out price to OFGEM – essentially a fine, currently set at 3p/kWh, for not meeting their Obligation. The money raised from this is redistributed to companies who do comply with the obligation.

This is the obligatory market.

1.4 The role of green tariffs in the new market

In 2001 the voluntary green market accounted for roughly 0.2% of total UK demand for electricity. There was no obligation on suppliers to buy green electricity so customers signing on to a green tariff helped to subsidise more expensive forms of electricity and in sufficient numbers could expand the demand for renewables. With the introduction of the obligation supply companies now have considerably more demand for renewables than there is supply. This is a deliberate action on behalf of the Government to stimulate increased prices for green power, thereby stimulating increased investment in new capacity.

The effect of this is that the consumer market has become a subset of the obligatory market (0.2% voluntary, compared to 3% obligatory in 2002). Before the new law, voluntary consumers of green electricity created the market for renewables, the obligation now creates that market. To put this in context, in 2002 Britain's total of 50,000 green customers would have had to increase to over 675,000 in order for their demand to have exceeded the level of the obligation. The true value of the voluntary market and the role domestic customers can play in creating **additional** demand for green electricity is therefore far from clear.

1.5 How to create additionality

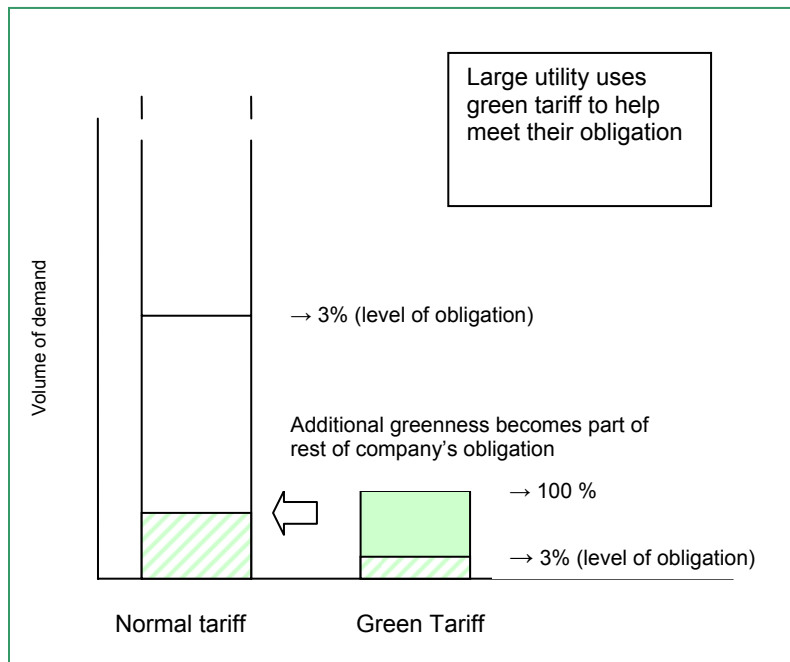
The voluntary market for green tariffs might still be considered to be having an effect on the market if it were able to create demand for renewables over and above the demand created by the obligatory market – this is described as 'additionality'.

1.6 Matching demand is not enough

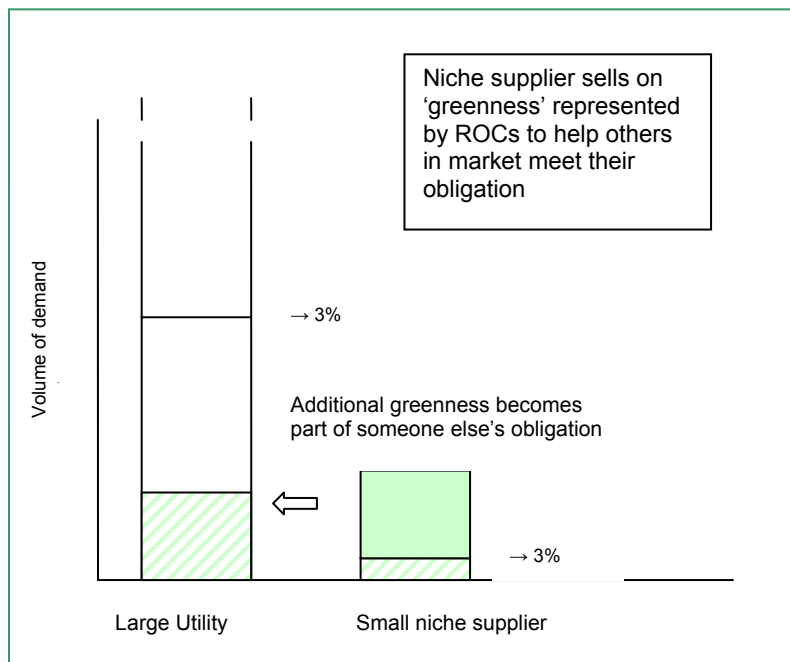
At present suppliers promising to match a green tariff customers demand by buying green electricity cannot be considered to be additional for the following reasons:

A large utility company offering both normal and green tariffs can use the

green tariff to help them meet their obligation. This is illustrated below – if 100% of the demand of customers on a green tariff is matched by green supply but this represents less than 3% of the total of all their customers' demand, then it is not additional to the utility's legal obligation.



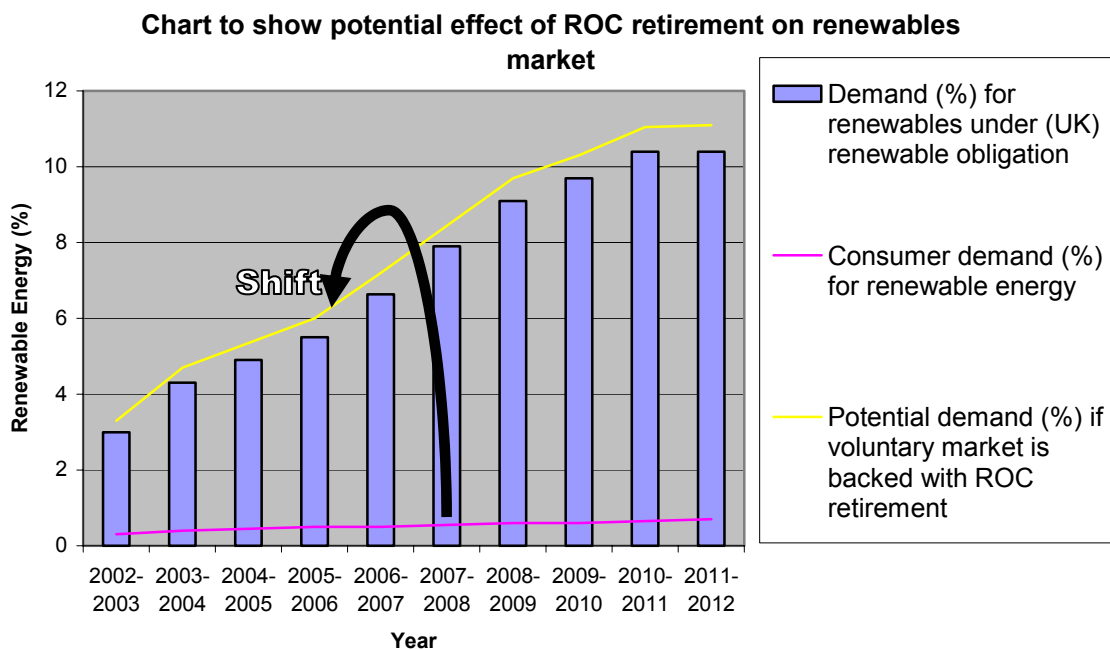
Similarly, small niche supply companies, though buying 100% green to match all their customers' demand, can sell ROCs to other companies to help them meet their obligation. If they do this there is no additional effect on the market.



1.7 ROC-retired Products

In these tariffs the act of selling the customer the green electricity alone has an additional environmental benefit. The clearest way to ensure that an energy based green tariff is achieving more than the obligation, is to guarantee that the trade in or transference of 'greenness' (represented by ROCs) described above does not happen – this can be measured by the removal or retirement of the ROCs from the system.

As the value of ROCs is high, it can be prohibitively expensive, although not impossible, for suppliers to do this for 100% of the renewable supply purchased. We therefore expect additional tariffs to continue to involve trade in a portion of ROCs, in order to reduce costs, and the retirement of a portion, to create additionality.



1.8 Fund based tariffs

As an alternative way of providing environmental benefit, suppliers have also developed products where contributions are made to a green fund. Contributions are deducted from a customer's bill either at a fixed rate or in the form of a premium. Suppliers can themselves make contributions either by match funding or as a separate donation. Though not immediately affecting the market, funds can be used to amass capital to build future renewable supply capacity.

Funds can also be used to provide grants for community or other off-grid renewable projects; to fund other environmental projects including energy efficiency, awareness raising and even land acquisition to mitigate the effects of climate change.

Different types of funds are administered differently and we would strongly recommend that customers wanting to know more about the use of funds should contact the company directly.

Friends of the Earth believes that although funds can have a positive and beneficial impact measuring and comparing the extent of that impact is not easy. We believe that green electricity tariffs should work in a way that is different from other forms of corporate expenditure (such as Community Giving or Research and Development) and that they should help to directly effect the commercial market for renewable electricity. We therefore only recommend products that incorporate ROC retirement as we believe this is the most easily auditable and directly effective form of additionality.

1.9 Alternative definitions of additionality

Friends of the Earth supports the development of one comparable measurement of additionality that can be easily audited across all tariffs. We believe this will give the green electricity market a solid foundation and ensure maximum clarity for consumers. We therefore only recommend ROC retired products. However, we accept that circumstances may exist where the number of customers signed to tariff could have some material impact on the market for new renewables without ROC retirement. An example might be where an integrated generation and supply company uses customer numbers to secure investment in, and local support for, new renewable capacity. However, the degree to which customer numbers achieve this over and above other considerations is very hard to measure and we would prefer that such tariffs also included an element of ROC retirement.

2. The Friends of the Earth Guide to Green Electricity 2004

There are some basic entry level requirements which power companies must fulfil in order to be entered into the Guide to Green Electricity:

1) The first entry requirement is proof of active promotion of the tariff. Friends of the Earth requires copies of marketing literature as proof of this.

2) The second entry requirement is that power companies must have a minimum of 25 people signed up to that tariff. Friends of the Earth require a written statement as proof of this.

3) Thirdly power companies must pledge to market the tariff for a minimum of 1 year. Friends of the Earth require a written statement as proof of this.

The Guide for 2004 is split into two categories: 'Recommended' and 'Other'. Within these categories products are listed alphabetically.

2.1 Recommended Category

Friends of the Earth seeks to rank products from the perspective of the individual consumer (i.e. we recommend products which enable the consumer to have an impact on the market for renewables, over and above, the impact of the Renewables Obligation).

To be recommended by Friends of the Earth the tariff must:

- **Retire a percentage of Renewable Obligation Certificates (ROCs) on behalf of the customer.**

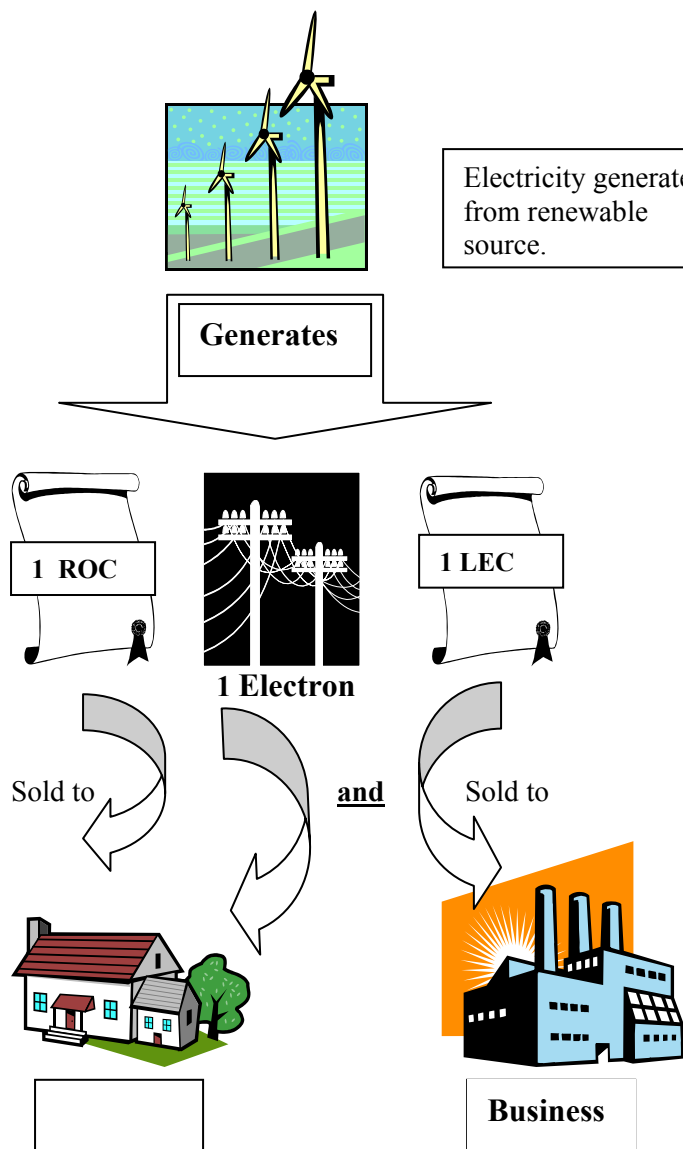
The retirement of ROCs is the most transparent and easily auditable way of enabling customers to create a higher demand for green electricity than is created by the Government's legal obligation on suppliers to source a percentage of their total supply from renewables. Friends of the Earth therefore considers ROC retirement to be the most effective proof of additionality and only those tariffs which retire ROCs on behalf of the consumer will be recommended in the Friends of the Earth Guide.

- **Back 100% of the consumers demand with purchases from renewable energy sources**

This is because if the level of demand from consumers were to expand significantly the requirement that renewable electricity is purchased to meet that demand could theoretically create a demand over and above the level of the Renewable Obligation. In addition it is important that a market for renewable electricity is maintained alongside the markets ROCs. Tariffs which cap the number of customers they will accept are not considered to fully meet this requirement.

- **Retire 100% Levy Exemption Certificates (LECs)**

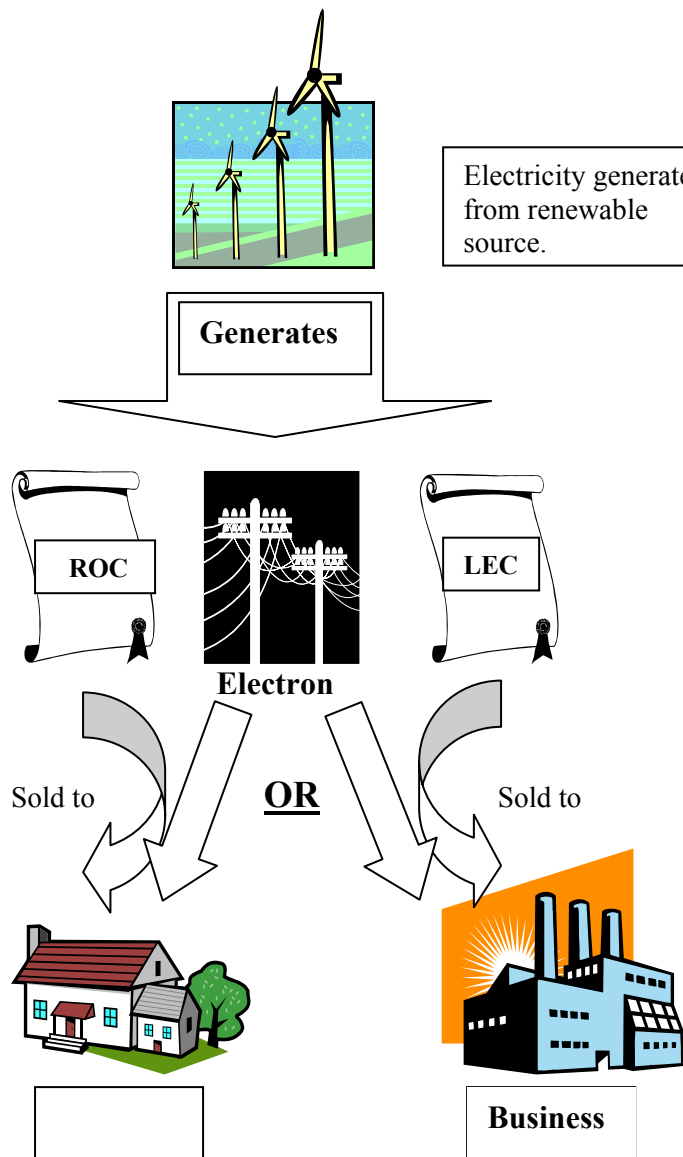
Companies can claim an exemption from the Climate Change Levy if they buy green electricity. As proof of this they must buy a product which is backed with Levy Exemption Certificate (LECs). These certificates, like ROCs, are issued to generators as proof of the 'greenness' of the electricity purchased. LEC retirement is important to demonstrate that the green electricity being purchased by domestic customers has not also been sold to a company. This is possible because for every green electron that is generated two certificates are awarded – a LEC and a ROC. LECs can be separated from the renewable electricity they relate to and sold into the business market. If this occurs two customers can claim an environmental credit when in fact only one has received the green electricity.



The issue of ROC and LEC retirement:

Bad Practice

The sale of renewable electricity to the domestic sector without the retirement of LECs essentially means two customers believe that they have bought a green product when in fact only one actually bought the electricity. This reduces the total demand for green electricity.



The issue of ROC and LEC retirement:

Good practice

Two certificates are issued for every one unit of green electricity; the LEC which business customers require to ensure exemption from the climate change levy and the ROC which suppliers can use as proof of a green product in either market. To ensure the green aspect of the electricity is not sold twice suppliers must retire LECs if they are selling the green electricity to domestic consumers.

2.2 Company Performance

In addition to considering the qualities of the tariff in order to recommend a product Friends of the Earth believes it is important to also consider the environmental performance of the company offering the tariff.

We have used two indicators as a measure of company performance:

Amount invested annually in renewables (expressed as a percentage of annual turnover)

Proportion of renewables owned (expressed as a percentage of total generation)

For more information about other aspects of company performance we recommend 'The Good Energy Guide' produced by the Ethical Marketing Group which uses information on a range of aspects of company behaviour compiled by the Ethical Consumer Association. For a copy visit www.thegoodshoppingguide.co.uk

Not all power companies are equal....

In August 2003 we launched a campaign to expose the environmental impact of the UK's remaining 16 coal fired power stations which still provide approximately 35% of our electricity. These stations are old and inefficient and we are calling for half of them to be shut down by the end of the decade and replace with cleaner, more modern technologies. To find out more about these stations including who owns them please visit:

www.foe.co.uk/campaigns/climate/press_for_change/carbon_dinosaurs

2.3 Additional information in the Guide

We seek to provide customers with as much information as possible to help inform their choice of tariff. In the on-line guide we have included information relating to the types of renewable electricity purchased to fulfil the tariff, and the cost of the tariff, together with a brief description. We do not however take price or sources into account when deciding whether or not to recommend a product.

2.4 and even more information

Lack of space meant that we could not include all of the information we received from companies in the on-line guide. The following pages contain additional tariff information, including the number of customers signed to a tariff and whether the tariff enables you to sell your own renewable electricity back to the company.

Ecoenergy	Demand is matched with renewables and because there is no legal obligation to buy renewables in Northern Ireland at the moment signing up to this tariff increases demand. However, 25,000 customers are needed before new renewables will need to be built.					
£315 per annum	LEC Retirement: N/A	ROC Retirement: N/A	1-5000 Customers	Sources: 100% wind	Fund: No	
Northern Ireland Electricity	Ownership: No	Investment: No	Buy-back: No			
Ecotricity 121	This product is for the really committed green energy supporter. Rather than sell on renewable credits to help other companies meet their legal obligation Ecotricity holds on to them and actual buys a further 21% from the market on your behalf. This shortens the supply of credits and pushes up the price of renewables.					
£410 per annum	LEC Retirement: 100%	ROC Retirement: 121%	Customers <250	Sources: 100% wind	Fund: No	
Ecotricity	Ownership: 100%	Investment: ?	Buy-back: Yes			
RSPB Energy	This product is a good combination product. Demand is matched from renewables and rather than sell on renewable credits to help other companies meet their legal obligation SSE hold on to 10% on your behalf. This shortens the supply of credits and pushes up the price of renewables. Money is also put into a fund and spent on environmental projects including some investment in renewables.					
£250 per annum	LEC Retirement: 100%	ROC Retirement: 10%	Customers >20,000	Sources: 90% large hydro 5% wind 5% landfill	Fund: Yes - £30 in the first year and then £5 per annum after that is also put into a fund and spent on environmental projects	
Scottish and Southern	Ownership: 26.5%	Investment: 5% pa	Buy-back: 'in development'			
Unit-e	Demand is matched from renewables and rather than sell on renewable credits to help other companies meet their legal obligation Unit-e hold on to 7% on your behalf. This shortens the supply of credits and pushes up the price of renewables.					
£277 per annum	LEC Retirement: 100%	ROC Retirement: 7%	Customers: 5-10,000	Sources: 75% wind 25% small hydro	Fund: No	

	Ownership: 100%	Investment: ?	Buy-back: Yes		
GreenEnergy 10	10% of demand is provided from renewable sources. GreenEnergy invest 50% of their profits in new renewable projects and subscribers become shareholders.				
£240 per annum	LEC Retirement: 100%	ROC Retirement: 0%	Customers: Not supplied	Sources: 50% Wind 49% Hydro 1% Solar	Fund: No
Green Energy	Ownership: N/A	Investment: 3-5%	Buy-back: Yes		
GreenEnergy 100	100% of customer demand is met from renewable sources. GreenEnergy invest 50% of their profits in new renewable projects and subscribers become shareholders.				
£273 per annum	LEC Retirement: 100%	ROC Retirement: 0%	Customers: Not supplied	Sources: 50% Wind 49% Hydro 1% Solar	Fund: No
Green Energy	Ownership: N/A	Investment: 3-5%	Buy-back: Yes		
Green Energy Fund	Demand is not matched with renewables but up to £15.75 is put into a fund each year and then matched £ for £ by Scottish Power. Money is spent on a range of environmental and renewable projects.				
£246 per annum	LEC Retirement: No	ROC Retirement: No	Customers: 10-15,000	Sources: Standard sources including fossil fuels	Fund: Yes - Contributes to Green Energy Trust, which has donated £320,000 to more than 40 small-scale renewable projects in UK
Scottish Power	Ownership: ?	Investment: 5.8%	Buy-back: No		
Green Energy H2O	Scottish Power matches your demand with electricity from existing hydropower schemes that are not eligible for Government subsidies.				
£246 per annum	LEC Retirement: N/A	ROC Retirement: No	Customers: 10-15,000	Sources: 100% Hydro power	Fund: No
Scottish Power	Ownership: ?	Investment: 5.8%	Buy-back: No		

Green Plan	This is a good fund based product - demand is matched with renewables and £9 per year per per customer is put into a fund and then matched £ for £ by Powergen. The fund is invested in small scale renewable projects - where these projects qualify for renewable credits Powergen pledges to hold on to them on the customers behalf and not use them themselves or sell them to others to help meet their legal obligation.				
£238 per annum	LEC Retirement: Yes	ROC Retirement: Yes – from eligible small scale renewables installed from fund	Customers: 1,000-5,000	Sources: 100% Hydro	Fund: Yes Additional new renewable generation projects in communities, also an environmental fund
Powergen	Ownership: 1.35%	Investment: 0.5%	Buy-back: No		
Green Tariff	A fund based product where demand is matched by renewables and each customer puts in £13.50 per annum and this is matched £ for £ by London Energy. Money is spent on renewable projects.				
£257 per annum* NB As the incumbents in the London region London are not allowed to undercut competitors so prices will be more competitive in other areas.	LEC Retirement: 100%	ROC Retirement: No	Customers: 10-15,000	Sources: 55% Wind 30% Landfill 15%small hydro	Fund: Yes - Each customers pays in £13.20/ annum into a fund. This amount is matched by the company
London Energy/SWEB Energy	Ownership: 0.09%	Investment: “modest”	Buy-back: Yes		
Juice	A fund based product where demand is matched by renewables and each customer puts in £10 per annum. Money is spent on research and development into off-shore wave and tidal technologies.				
£236 per annum	LEC Retirement: 100%	ROC Retirement: No	Customers:	Sources: 93% Large hydro 7% wind	Fund: Yes - invested in cutting edge renewable technologies (up to £500,000 / annum)
Innogy	Ownership: 1.36%	Investment: ?	Buy-back: Yes		

New Energy Tariff	10% of customer demand is provided from renewable electricity from wind which Ecotricity themselves generate. This will increase by 10% each year. Increases in customers numbers are used to secure investment in new wind farms.				
£263 per annum	LEC Retirement: No	ROC Retirement: No	Customers: 15-20,000 (capped at 50,000)	Sources: 100% Wind	Fund: No
Ecotricity	Ownership: 100%	Investment: ?	Buy-back: Yes		