

Ofgem Consultation: Improving consumer protection in the green and renewable energy offers market

14th February 2014

Summary

The Aldersgate Group supports the principles of transparency, evidence of supply and additionality that underpin Ofgem's guidelines for green tariffs. We also agree with Ofgem's analysis that "green and other renewable energy retail offers form a small part of the electricity retail market."¹ We believe that Ofgem's principles can and should be applied to the whole energy sector, which could be achieved through adoption of an electricity labelling scheme.

Labelling schemes in other sectors have driven transparency, informed purchasing decisions and been instrumental in driving demand for the best performing products. Learnings from these programmes should now be applied to the energy market.

We have identified three core issues with the current green tariff system. Firstly there is a lack of transparency, with business who purchase "green" electricity obliged to report it as grid average under the CRC Energy Efficiency Scheme, but not under the Climate Change Levy. Secondly, these inconsistencies provide relatively weak and complex signals, leading some Boards to retreat from investments in renewable technologies. Thirdly, the lack of transparency creates administrative burdens.

We propose that energy suppliers should display a label with the quantity and carbon content of the electricity they have sold, on each customer's bill, using an A-G ranking. This will provide accurate information on the carbon emissions for which each customer is responsible, standardise reporting of electricity use and increase transparency. A transparent market will favour innovation, create demand-pull, reward businesses that invest in low carbon energy and encourage the laggards to engage.

The Aldersgate Group supports Ofgem's principles of transparency and additionality, but disagrees with its proposals for how they should be implemented. Corporates most often purchase electricity on a green tariff for reputational reasons, but the impact is diluted by lack of transparency. Green tariffs currently carry emissions at the grid average rate, with their carbon saving aspect derived from carbon offsetting or green investment activities as a compensatory measure. Businesses may prefer to undertake such activities themselves, which would be more efficient, cheaper and more directly accountable. Ultimately, green tariffs must pass "the horsemeat test": by buying a product, consumers earn the right to understand the ingredients.

Reputational benefit can be quantified by a business and used to justify green purchasing policy. The transparency provided by the electricity label will facilitate communication with Board members, allow better informed procurement decisions, better communication of those decisions to stakeholders, better developed reputational benefits associated with responsible purchasing and better understanding of the energy market. Our research conservatively estimated that use of the electricity label will increase purchase of low carbon electricity by four times the rate that would be achieved under current programmes.

¹ Ofgem consultation document (4th December 2013) *Improving Consumer Protection in the Green and Renewable Energy Offers Market* p1

Transparency is increasingly important in the corporate sector, with transparency recently ranked fourth of out 16 “trust drivers.” Trust between domestic consumers and their energy suppliers has suffered recently, with energy falling to become the least trusted sector. Clear communication through the electricity label can start to rebuild some of that trust.

By providing confidence on the source of electricity, and electricity label can give a firm platform upon which to build statements about additionality. Additionality cannot be created from the outset, but a label is a new tool that can harmonise the reporting landscape, harness demand and drive greater uptake by embedding reputational benefit.

All forms of electricity generation, including nuclear and CHP, should be captured in the electricity labelling scheme. The label will make it unnecessary to categorise those forms of generation as ‘green’ or otherwise: they will simply be ranked by carbon intensity. This will increase transparency and understanding of the energy market.

The electricity label should be applied to corporate electricity users’ bills, and then rolled out to the domestic market.

We recommend that pilots be set up to trial usage of the electricity label. Ofgem’s support for this project would be an advantage. Once widely implemented, the label should be maintained and enforced by an independent and trusted organisation that must ensure there is no double counting. If the label is based upon FMD data, then this could be Ofgem.

Background

The Aldersgate Group is an alliance of leaders from business, politics and society that drives action for a sustainable economy. Its mission is to trigger the change in policy required to address environmental challenges effectively and secure the maximum economic benefit in terms of sustainable growth, jobs and competitiveness.

The views expressed in this document can only be attributed to the Aldersgate Group and not to individual members.

In 2013 the Aldersgate Group convened a Steering Group (Annex 1) of large UK-based corporate energy users, to oversee research (Annex 2) into the implications of labelling purchased electricity, using an A-G rating, according to carbon content.

This electricity label should be displayed on all energy bills to help tackle the complexity of existing energy bills. The label will display the quantity and carbon content of electricity sold on each customer’s bill, providing accurate information about the carbon emissions for which each customer is responsible, standardising reporting of electricity use and increasing transparency.

The research showed that existing demand for, and benefits from, a green purchasing policy, are hampered by the opacity maintained by current suppliers and the confused reporting systems available to purchasers.

The Aldersgate Group supports the principles of transparency, evidence of supply and additionality that underpin Ofgem’s guidelines for green tariffs. We also agree with Ofgem’s analysis that “green and other renewable energy retail offers form a small part

of the electricity retail market.”² We believe that Ofgem’s principles can and should be applied to the whole energy sector, which could be achieved through adoption of an electricity labelling scheme.

Our research focused on the non-domestic sector where adoption of the electricity label will generate broad benefits, but we advocate the roll out of the label to domestic consumers’ bills in due course. This will ensure customers understand what they are paying for and the cost implications of various generation technologies or energy efficiency strategies.

Electricity labelling

Labelling schemes in other sectors, such as vehicles based on fuel consumption and white goods based on energy efficiency, have driven transparency, informed purchasing decisions and been instrumental in driving demand for the best performing products. They have ensured healthy competition between manufacturers on energy efficiency metrics. Learnings from these programmes should now be applied to the energy market.

The status quo

Many progressive businesses are leading the way in tackling climate change and are investing in low carbon energy to lower their carbon footprint. To do so, they frequently pay a premium for ‘green tariffs’ or on-site renewables. Our research (see Annex 2) found that 36% of respondents already pay a premium for a green tariff and a further 20% would consider doing so in future. But there is a barrier to further uptake, as one survey respondent outlined:

“While we have seen the premiums for ‘green’ and renewable sources reduce over time, greater value for this premium would be gained if there was a clearer, more transparent and readily understood communication and reporting approach”.

We have identified three core issues with the current green tariff system.

Firstly, there is a lack of transparency and a need for a simpler approach. For example, Government advises businesses to report the low carbon electricity that they use to their stakeholders as ‘grid average’. While green electricity is recognised as zero carbon for some regulations, such as the Climate Change Levy, it is not recognised as zero carbon for others, such as the CRC Energy Efficiency Scheme.

Secondly, these inconsistencies provide relatively weak and complex signals, leading some Boards to retreat from investments in renewable technologies. Inconsistency also represents a growing reputational risk for companies that often rely on their green purchasing power to meet their environmental targets.

Thirdly, this lack of transparency in reporting creates administrative burdens and makes it difficult to have a baseline against which performance can be benchmarked and compared.

There is a need for urgent reform. These three issues represent barriers to ambitious corporate low carbon energy strategies and the achievement of UK carbon budgets. The ultimate goal should be a transparent regulatory framework that provides clarity on

² Ofgem consultation document (4th December 2013) *Improving Consumer Protection in the Green and Renewable Energy Offers Market* p1

energy bills. This will stimulate demand for low carbon electricity.

How electricity labelling can work

Energy suppliers should display a label with the quantity and carbon content of the electricity they have sold on each customer’s bill using an A-G ranking (see example below). This will provide accurate information on the carbon emissions for which each customer is responsible, standardise reporting of electricity use and increase transparency. A transparent market will favour innovation, create demand-pull, reward businesses that invest in low carbon energy and encourage the laggards to engage.

Electricity Label	Kg/CO2/KWh	MWh Supplied	CO2 Emissions	Example Technology
A	0-20	950,000	0	Hydro, Nuclear, Solar, Wind (on/offshore)
B	20-100	-	-	Biomass, CCGT with CCS
C	101-250	450,000	90,000	ASC with CCS, Gas CHP
D	251-450	1,275,000	510,000	IGCC, CCGT
E	451-600	-	-	Gas OCGT
F	601-800	-	-	ASC
G	801+	-	-	Existing coal
Total Electricity CO2	225	2,675,000	600,000	

For such a system to be effective, it will be important for companies to report their overall electricity consumption, alongside the carbon content of their electricity. In this way, growing electricity consumption will not be masked by purchase of low carbon electricity. Carbon reporting should therefore continue to adopt a similar approach to the reporting of gross and net carbon emissions that is set out in the GHG reporting guidance by Defra.

Our research conservatively estimated that use of the electricity label would generate a quadrupling in demand for low carbon electricity by 2020. This additionality would be reliant upon the planned roll-out of the label.

Ofgem’s consultation focuses upon consumers at a household level. Our research and consultation response focus upon corporate consumers. We agree with Ofgem’s view that any system should ultimately be expanded to cover the whole market. We consider ourselves to be addressing similar problems, approached from different ends of the market.

Consultation response

1. Do you agree with our proposed updates to the principles of transparency and additionality?

The Aldersgate Group supports the principles of transparency and additionality but disagrees with Ofgem's proposals of how they should be implemented.

Transparency

Ofgem's research finds that consumers are confused about what they are buying in a green tariff. This is reflected in the corporate world.

"We looked behind the green tariff and it appears relatively empty - so we are not sure how green it really is". Survey respondent

Corporates most often purchase electricity on a green tariff for reputational reasons, but the impact is diluted by the lack of transparency and thus not felt strongly by developers. That is why purchased electricity must pass what our Steering Group termed, "the horsemeat test³": by buying a product, consumers earn the right to understand the ingredients.

The lack of transparency is a significant missed opportunity: 56% of our survey respondents reported that they would be prepared to pay a larger premium for their green electricity, if they were able to report that electricity as zero carbon. This suggests that reputational benefit can be quantified by a business, and used to justify green purchasing policy.

The label is easy for all stakeholders to understand, not just professional energy managers, which will facilitate communication with Board members who ultimately decide on green purchasing. It will allow better informed procurement decisions, better communication of those decisions to stakeholders and better developed reputational benefits associated with responsible purchasing. It would not take long for the media and civil society to make comparisons between competitors, raising consumer awareness.

Inclusion of the electricity label can build understanding of the energy market. It provides a clear depiction of what has been bought and where that electricity sits in the landscape of carbon intensity in the energy market. This is easier to understand than the current system, which focuses upon the green / renewable element of the market and seeks to explain that in isolation.

There are also side benefits. For example, full transparency on electricity generation would enable those consumers (both domestic and non-domestic) who wish to refrain from purchasing certain forms of energy due to ideological or personal reasons (such as coal, shale gas or nuclear), to make those choices without necessarily paying a full premium for a "green" tariff.

³ In January 2013 leading supermarkets were found to be selling food products that contained horsemeat in place of beef. The scandal raised questions around the transparency of how food is produced and what confidence consumers can place on the ingredients label. The Steering Group applied this metaphor to the energy market: if you are buying energy, you want to know what's in it.

A standardised electricity label will allow corporates to report their energy consumption clearly and simply, internally and externally. This will deliver greater reputational benefit for those companies who are buying a green tariff and, our research conservatively estimated, will increase purchase of low carbon electricity in the industrial and commercial (I&C) sector by four times the rate that would be achieved under current programmes.

The electricity label should be designed to complement the existing mandatory carbon reporting scheme. This will allow it to help simplify the reporting process by ensuring that the same assumptions are used across the market. This will require harmonisation of carbon reporting rules across government policies, but a proven electricity labelling scheme will provide the foundation on which to build a simplified reporting landscape.

Clear communication is increasingly important in the corporate sector, with transparency recently ranked fourth out of 16 “trust drivers”⁴. Management consultant, McKinsey, reports that trust in business is extremely low⁵. FTSE 100 member, Diageo, has noted that a company’s level of disclosure and performance are now conflated: “There is an expectation that leading companies will be proactive in their disclosure of their carbon emissions. ... If our disclosure is to reflect our performance, then we need to continue to deliver that.”⁶

Transparency in energy usage will be important in the relationship between businesses and stakeholders and between domestic customers and their energy suppliers. Trust in energy companies has fallen over the past year and energy is now the least trusted sector⁷. Clear communication of the ingredients of an energy bill, can start to rebuild some of that trust.

Additionality

Under the current system, there is no direct incentive for customers to demand low carbon energy supplies. Businesses are sceptical about whether buying a green tariff, under the current guidelines and regulatory framework, makes any material difference to the type of electricity generated.

The electricity label will recognise the role of buying low carbon electricity and allow corporates to communicate their buying choices with confidence. By recognising the role of low carbon electricity outside policy-specific carbon reporting rules, the label will provide a simple and transparent system to report the carbon content of electricity they use.

By providing confidence in the source of electricity, an electricity label can give a firm platform upon which to build statements about additionality⁸. Additionality cannot be created from the outset and the electricity label is not a silver bullet that will solve the

⁴ Edelman (January 2014) *Edelman Trust Barometer 2014. Annual Global Survey*

⁵ See interview with Professor Michael Useem on McKinsey website

(http://www.mckinsey.com/insights/leading_in_the_21st_century/an_interview_with_michael_useem) and an article by Dominic Barton, Global Managing Director of McKinsey in the Harvard Business Review (March 2011) “Capitalism for the Long Term”. <http://hbr.org/2011/03/capitalism-for-the-long-term>

⁶ Michael Alexander, Head of Environment for Diageo reported in edie.net (23rd October 2013) “The naked truth: Building greater environmental transparency for shareholders.”

http://www.edie.net/library/view_article.asp?src=nl&id=6407&utm_source=weeklynewsletter&utm_medium=email&utm_content=feature&utm_campaign=weeklynewsletter

⁷ Edelman (January 2014) *Edelman Trust Barometer 2014. Annual Global Survey*

⁸ In principle, the concept of additionality could even be incorporated into the label; however this would also add a degree of complexity.

complexities of the UK energy market. But a label will be a new tool that, if designed to complement existing mechanisms, can harmonise the reporting landscape, harness demand and drive greater uptake by embedding reputational benefit, through improved transparency.

We recommend that pilots be set up between businesses and their energy suppliers to trial usage of the electricity label. Ofgem's support for this project would be very welcome.

3. Do you agree that our updated green supply guidelines should apply to any electricity tariff whose proposition relates to the supply of renewable energy alongside additional environmental benefits at tariff level?

No, we believe that reporting mechanisms should be applied across the market, including all electricity tariffs. Fracturing the market into silos of alternative reporting methods may increase the level of information available, but will not drive transparency.

This is why an electricity label should be displayed on all electricity bills, providing clarity for customers and reducing administrative costs for suppliers.

4. Do you agree with our proposals for nuclear and CHP tariffs?

Our survey responses are congruent with Ofgem's findings. We asked respondents what types of electricity they would expect to see on a 'green' tariff, and the top three were wind, solar and biomass. However CHP and nuclear are ranked fourth and fifth, ahead of hydro and biogas / gasification.

Current low carbon generation predominantly comes from nuclear (16.8% of total generation), with a growing proportion from renewables (15.4%)⁹. By 2020, carbon capture and storage (CCS) is only expected to play a small role (4.7TWh or 1.4% of forecast 2020 generation capacity). Energy users looking to buy zero carbon electricity will still have to rely primarily on renewables and nuclear.

Nuclear and CHP will remain important in the energy market for the foreseeable future. They should be captured in the electricity labelling scheme, but the label will make it unnecessary to categorise nuclear and CHP as 'green' or otherwise: they will simply be ranked by carbon intensity. This will increase transparency and understanding of the energy market. However nuclear power can be an emotive issue and to reflect that, a decision must be taken at a later date on whether to split nuclear into a category of its own, allowing greater transparency and choice for consumers who prefer 'pure' renewables.

Ofgem's proposals for green tariffs should also seek to clarify objectively carbon content of electricity (and technology sources) rather than make subjective decisions about what should constitute "green".

5. Do you agree that environmental bundles should avoid broad terms such as green or environmentally friendly when marketed to consumers?

Different suppliers use different terms and phrases to describe the 'greenness' of electricity:

⁹ The DECC projection is based on the aim to reach 30% of total supply from renewables by 2020.

- ‘Green’ – renewable energy plus low carbon sources, e.g. good quality Combined Heat and Power CHP (GQCHP). ‘Green’ may even include less direct environmental benefits such as carbon offsets, tree planting or donations to environmental causes. It is the least strictly defined of all of the terms.
- ‘Low carbon’ – energy sources that produce or cause significantly lower carbon emissions in operation than conventional fossil fuel technology. Typically includes renewables as well as high efficiency fossil fuel technology (e.g. gas fired Combined Heat and Power (CHP) or tri-generation). Nuclear power is included as low carbon.
- ‘Renewable’ – energy from a source that is continually or readily replenished, that will not deplete in human time horizons if exploited in a sustainable manner. This includes climatic (sun, wind, hydro, marine), geological (geothermal) and biological sources (biomass, biogas etc.).
- ‘Zero carbon’ – energy sources that do not create emissions in operation. Typically includes renewable such as solar, wind, hydro and marine. Biomass may be included depending on the source of the fuel. Zero carbon is commonly used in the Planning and construction industries, in relation to Zero Carbon Homes^{10,11}.
- ‘Carbon neutral’ – any energy source from which the emissions are subsequently netted off by purchasing carbon credits or ‘offsets’.

There is much disagreement over what constitutes ‘green’, for example whether nuclear generated electricity could truly be thought of as ‘green’ or whether certain biomass fuels would be considered lower carbon than others. This confusion can affect how end users source and purchase their energy and disclose those decisions.

An electricity label could help rationalise this complex landscape by creating a single, transparent definition for ‘green’, thereby helping organisations to understand and disclose where their energy originates.

6. What do you think are the pros and cons of all, or some, of our proposed principles for green tariffs being extended to large non-domestic consumers? Is 100,000 kWh an appropriate threshold?

We agree that green tariff guidelines should be applied across the energy market, but they are not fit for purpose in their current form because they fail to tackle the lack of transparency discussed above. Businesses will not be attracted to “green” tariffs under the current definition. The existing framework allows green tariffs to carry emissions at the grid average rate, with their carbon saving aspect deriving from carbon offsetting or green investment activities as a compensatory measure.

Generally, businesses will prefer to undertake such activities themselves, which would be more efficient, cheaper and more directly accountable.

An electricity label must be applied across the market to tackle these problems. We propose that it be made available to large non-domestic consumers first and then rolled out across the energy market.

¹⁰ Zero Carbon Homes create no net carbon emissions over the course of the year; though a number of offsite solutions are allowed within this definition. www.zerocarbonhub.org

¹¹ For example, in Building Regulations, Low and Zero Carbon (LZC) technologies includes: biomass, CHP, ground source heat and cooling, photovoltaics, solar thermal, wind energy. Building Regulations, Low or Zero Carbon Energy Sources: Strategic Guide (2006)

8. What is the best method of ensuring that the principles are consistently applied in the market?

All forms of electricity generation should be represented on a customer's energy bill, allowing them to make fully informed purchasing decisions and communicate those to their shareholders and stakeholders.

The label should be established, maintained and enforced by an independent and trusted organisation that must ensure there is no double counting. We recommend third party auditing of the proposed electricity label be enforced, to ensure robustness and integrity of the label.

The best delivery organisation will depend on the data used; if it is the FMD, then it could be most efficient for this to be Ofgem, since it already holds the data and has the supplier relationships¹². It would also mean that the method by which the FMD avoids double counting¹³ could be employed to avoid the same for the electricity label.

¹² Ofgem enforcement of the FMD is implemented through the licence conditions which are a legal requirement placed on the supplier. Ofgem has an option to audit the information provided by the supplier.

¹³ As a protection against double counting, the total electricity covered by all REGOs and/or generator declarations from a particular generator used for fuel mix disclosure must not be greater than the total output of the station.

Annex 1

In 2013 the Aldersgate Group convened a Steering Group of large UK-based corporate energy users, to oversee the research into electricity labelling and the subsequent influencing strategy. Steering Group members are:

- BSkyB
- BT
- EY (formerly Ernst & Young)
- HSBC
- Reed Elsevier
- Retail Energy Forum

The Aldersgate Group commissioned Utilyx to work in partnership with the Aldersgate Group project Steering Group to assess the structure and impact of an effective electricity labelling scheme in the UK. The project examined the likely impacts and benefits of electricity labelling for businesses. Utilyx worked in partnership with the Steering Group, a forum of large, UK-based corporate energy users.

In addition, Utilyx chaired a roundtable at The Crowd¹⁴ to discuss the electricity labelling concept with business representatives.

In June 2013, the electricity labelling scheme was entered into the Idea Idol competition¹⁵, which seeks to find “the world’s best carbon and energy ideas.” Presented to an audience of corporate energy users¹⁶, “Enable the Label” came second overall.

¹⁴ <http://www.thecrowd.me/>

¹⁵ For further details about the competition, visit the Green Corporate Energy website:
<http://www.greencorporateenergy.com/2013/idea-idol/>

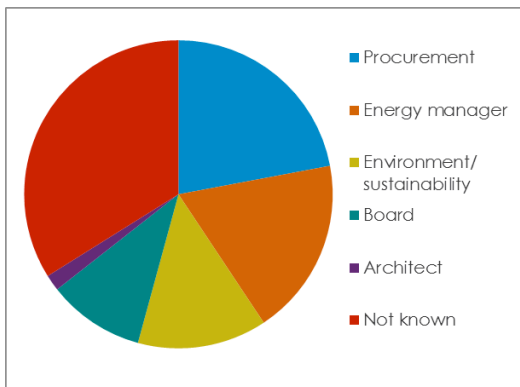
¹⁶ The full attendee list can be found here: <http://www.greencorporateenergy.com/2013/about-green-corporate-energy-2013/the-2013-crowd/>

Annex 2

The report that has informed this consultation response, was commissioned by the Aldersgate Group and researched and written by Utilyx.

The research included a literature review, an online survey and in-depth interviews with experts in the field. The Steering Group oversaw the work and contributed their own expertise, where appropriate.

The online survey was shared via email with corporate energy managers. In total, 72 respondents engaged with the survey, and 44 completed it in full. The research that was conducted (see Annex 2) included an online survey, undertaken by 72 respondents and fully completed by 44 of them. Thirty-nine respondents provided their contact details, which allows the break-down adjacent, of respondents by sector.



Ten in-depth interviews were held with experts in the field and the Steering Group's expertise was fully utilised. Of these, three were developers who had questions tailored to their field.