

## Costs of the ECO: The impact on low income households

## Research Summary

**The forthcoming Energy Company Obligation aims to underpin the Green Deal, support the improvement of hard-to-treat homes, and assist in the eradication of fuel poverty. As with previous supplier obligations, the costs will be met through consumer bills. How can we ensure that these costs do not exacerbate the problems the policy will attempt to address?**

This report puts forward the options available to policy makers to ensure that the Energy Company Obligation (ECO) is funded as equitably as possible. It considers a range of factors but focuses on the impact upon low-income households as a whole, and those low income households with above-average energy consumption.

The study was conducted by Darryl Croft and Jack Carrington of the Association for the Conservation of Energy.

### Background

The competitive market has delivered energy tariffs that are broadly 'cost-reflective'<sup>1</sup>. This means that the costs borne by energy suppliers (usual either fixed costs, or per unit costs) are passed on to consumers in a manner most congruent to the way they are raised. To achieve this most energy tariffs have two components: a fixed element such as a standing charge, used to recoup costs that don't vary with consumption (such as billing and meter-reading), and a per kWh element which is used to recoup the costs

associated with each unit supplied (such as the wholesale energy costs).

Currently it is estimated that environmental charges account for 12% of a typical electricity bill and 4% of a typical gas bill. Future policy developments are highly likely to increase these proportions.

The way in which the costs of these policies are added to bills can significantly impact how equitable the policy is. If the costs are added to the standing charge or 'tier 1' units, each household will contribute the same amount, but the costs will account for a greater proportion of a bill as the amount of energy consumed reduces. If the costs are added to the unit price for energy or tier 2 units, households will pay for the policy in proportion to the amount of energy they consume.

### Method

The study combines quantitative and qualitative methods: interviews with eight stakeholders representing a range of interests (energy companies, NGOs, Ofgem, FPAG), a literature review, and modelling.

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<sup>1</sup> Energy companies are commercial organisations and as such we cannot truly know how they spread the cost of energy and climate change policies between their tariffs.

Different options for charging the costs of the ECO to consumers are modelled using a scenario from a complimentary ACE report on the design of the new programme, entitled 'A Future Obligation on Energy Companies'<sup>2</sup>. The scenario presents the English housing stock after four years of ECO measures have been delivered. It assumes that measures are targeted at a group that are low-income and either vulnerable or living in a solid walled property. Under-consumption of energy compared to an assumed 'energy need' is accounted for based on an accepted comparison within the Living and Food Cost Survey between income and consumption.

The updated housing stock model was then used to assess the impact upon consumers of different options for charging the costs of ECO – assumed to be £1.7bn per year.

### Options for ECO cost pass-through

Ultimately, there are two choices when considering how consumers pay for a policy: whether policy costs should be added to each unit of energy supplied or to the standing charge<sup>3</sup> (or both), and whether it should fall upon the gas or electricity bills (or both). We assess the current situation regarding supplier obligations.

### Standing charge or per unit charge?

At present the target under the current supplier obligation delivering energy efficiency measures - CERT - is split between suppliers based on the number of customer accounts each holds. Since we expect that energy companies pass costs through to consumers

<sup>2</sup> ACE (2011) A Future Obligation on Energy Companies  
[http://www.ukace.org/publications/ACE%20Research%20\(2011-06\)%20-%20A%20Future%20Obligation%20on%20Energy%20Companies%20revisions%20following%20consultation](http://www.ukace.org/publications/ACE%20Research%20(2011-06)%20-%20A%20Future%20Obligation%20on%20Energy%20Companies%20revisions%20following%20consultation)

<sup>3</sup> The Standing charge is also used to refer to Tier 1 unit charges.

in the manner they themselves face them, and since this is a cost associated with each consumer and not their consumption level, we assume<sup>4</sup> that the costs of CERT are currently passed on to consumers as part of the standing charge in an energy tariff. There are downsides to this approach:

- Since everybody pays the same regardless of consumption, it goes against the 'polluter pays' principle
- It is broadly regressive since low-income households consume less energy on average, but pay the same policy cost
- It reduces the incentive to save energy since doing so would not reduce the cost of the policy contribution

### Electricity or Gas bill?

The CERT obligation is split based on *total* gas and electricity accounts held by suppliers. As such, we expect that the electricity bill carries a slightly higher proportion of the CERT costs (since there are more electricity accounts than gas accounts). There are arguments for and against attaching the costs to each fuel:

- Practically all households have an electricity account, giving full coverage of the UK. 18% of UK households do not have a gas account.
- The ECO will largely be delivering measures that save energy associated with heating, most typically gas. One could argue that costs should be borne to a greater degree by gas consumers.
- Those heating with electricity would be heavily penalised by an obligation placed upon the electricity bill, yet not contribute to the costs if placed on the gas bill.

<sup>4</sup> Energy suppliers are not obliged to be transparent about the way these costs are charged per consumer.

### Assessing the equity of options

These options are assessed by how regressive the new costs are as a form of taxation – which income deciles contribute most to the costs under the different approaches?

The research shows that, on average, there is little difference between a policy paid for via the gas bill or the electricity bill.

However, there is a large difference depending on whether the policy is paid through a unit charge or a fixed cost. Since all households contribute the same under the fixed cost approach, it is regressive, with low income households contributing to the new policy to the same extent as high incomes. Were the charge to be met by a levy on each unit however, the policy would be less regressive, since low income households tend to consume less energy: The poorest 20% of households would contribute around 12% to the overall costs.

Even this approach is not as ideal as the least regressive option: a Warm Front-type policy, funded by taxation.

### Going further: customer credits

The supplier obligation could go further than the simple approach of levying costs on each kWh of energy, and begin to reverse the regressive nature of the underlying energy tariffs themselves<sup>5</sup>.

One mechanism would involve a ‘consumer credit’ – a credit placed on the energy bill of each consumer. The costs of this credit would be added to the policy costs, and repaid by all consumers in the unit price of energy. The effect would be a greater saving by those

<sup>5</sup> Tariffs contain fixed costs so as the amount of energy consumed reduces, the average cost per unit increases.

households under-consuming energy. A credit set at the same level as the average policy cost per household would mean those in the poorest 20% of households would contribute less than 5% to the overall cost of the ECO on average.

### Protecting Low Income High Users

Whilst a move to a per kWh charging for the ECO is more equitable on average, there are some low-income households that would be worse off, since they consume more energy than the average household.

These ‘low-income high-users’ may have large, inefficient houses or have greater heating demand due to occupancy issues. Those that heat their home electrically are particularly hard hit if a levy is charged upon each kWh of electricity.

If the levy was placed on each unit of electricity, 10% of low income households would pay more than average, with 4% paying 50% more than average. If placed on gas, 15% would pay more than average, and 2% pay 50% more than average. A consumer-credit would only accentuate the negative impact for this group.

### Recommendations

#### Sharing the obligation

- Putting **the costs of the ECO onto each kWh of electricity** and/or gas would help reduce costs for the majority of low income households.
- The excessive burden on certain households that comes with the costs being placed on only one fuel can be diluted by retaining a spread of the burden across both electricity and gas. An assessment of energy and climate policies in the round may suggest ECO costs should fall entirely upon the gas bill. However, we do not recommend using

ECO costs to address an imbalance caused by other policies, particularly given the uncertain policy environment.

- Placing the costs on each kWh of gas and electricity supplied could be achieved in two ways: an equal 50% share of the obligation (and hence costs) between the two fuels, or based on the total sum of kWhs supplied by both fuels. The latter would mean that the obligation would fall to a greater extent upon gas consumption (with a greater number of kWhs supplied), broadly congruent with the measures supported by the policy.
- Customer credits could be used to further reduce the burden upon the lowest income deciles, though these can amplify the negative impact upon the low income high consuming households.

#### **Support for low-income, high-users**

Consideration needs to be given to those low income households that consume a large amount of energy. We suggest a few options to mitigate the impact:

- Target ECO support on low income households, particularly those in inefficient properties
- Consider equity release options for owner-occupiers in large homes
- Target the Warm Home Discount on those households meeting a disproportionate share of policy costs. This might include energy inefficient homes, large properties, households using electricity for heating, and households that spend a large portion of their time at home (such as the elderly, young families, the unemployed).

#### **Ofgem's Retail Market Review**

In March, Ofgem published their initial proposals for regulating the energy market to ensure a better deal for consumers. As part of their work to improve the transparency of costs, the review included proposals to simplify

tariffs: within each region, each supplier would set one 'per kWh' cost per payment type for a standard tariff. For these tariffs, a standardised charge (potentially either a standing charge or a unit charge) would be set by Ofgem.

With particular relevance to this project, the proposals suggest that the standardised charge would be "designed to cover pass through costs, such as T&D charges and some environmental and social charges". Whilst the simplification of tariffs would be helpful, it is vital that Ofgem's proposals do not embed the costs of energy and climate change policies within a standing charge or tier 1 rate, since this would work against the recommendations within this report by creating higher costs for the majority of low income, low consumption households.

Instead, we recommend that Ofgem entrench our recommendations, by ensuring that they do not include within a 'per account' charge, the costs of those policies split between suppliers based on the volume of energy sold. This would help remove the uncertainty that exists at present, over whether energy suppliers pass through their costs in the manner that would be expected.

#### **For more information**

The full report can be downloaded from the eaga Charitable Trust [www.eagacharitabletrust.org](http://www.eagacharitabletrust.org) and ACE [www.ukace.org](http://www.ukace.org) websites.

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