

# **THE DAVID HUME INSTITUTE**



## **Energy Policy and Consumers in Scotland**

**Trisha McAuley**

**Andrew Faulk**

**May 2013**

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The David Hume Institute  
26 Forth Street  
Edinburgh EH1 3LH

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\*Consumer Focus is a statutory consumer group established by the 2007 Consumers, Estate Agents and Redress Act. We have specific duties to represent the interests of energy consumers in Great Britain.

## Foreword

We at the David Hume Institute were delighted to be awarded funds, in conjunction with Professor Charlie Jeffery of the University of Edinburgh, by the Economic and Social Research Council to organise four ‘conversations’ on issues related to constitutional change in Scotland. Previously we have published a number of research papers related to the first two conversations; (i) macro-economic policy issues and financial sector oversight and regulation and (ii) social security and welfare under alternative constitutional settlements. We are now very pleased to be able to publish the papers for our third conversation – on a range of energy-related issues. On this topic we have also benefitted much from co-operation with the Scottish Council for Development and Industry (SCDI). The fourth will be on competition policy and regulation, for which we have the full support of the Scottish Government. All four will be completed by end May 2013.

In each of these conversations we have sought papers from a range of informed and interested parties, drafts of which were discussed at a ‘Chatham House Rule’ seminar before being finalised and published in advance of a full and open seminar. For the energy conversation the round table was held at the Royal Society of Edinburgh on 18<sup>th</sup> March and the seminar will take place, also at the RSE, on 7<sup>th</sup> May. We are delighted now to make these papers available.

For the round table we initially commissioned three papers. One, by Professor Mark Schaffer and colleagues at Heriot Watt University covered the evolving global; energy landscape; one by Professor Peter McGregor and colleagues at Strathclyde covered primarily energy topics; and the third by Professor John Paterson and Greg Gordon from Aberdeen University covered oil and gas issues.

However, we determined at the round table that it would be most valuable to have a separate paper on consumer matters, and we were delighted that Patricia McAuley of Consumer Focus Scotland agreed to produce such a paper, in liaison with interested parties at Which?

There is also a fifth paper of significant interest and definite relevance, produced by and separately published by SCDI. This is available at [http://www.scdi.org.uk/pi/2013/SCDIFutureScotlandApr13\\_Energy\\_web.pdf](http://www.scdi.org.uk/pi/2013/SCDIFutureScotlandApr13_Energy_web.pdf)

All of the papers’ authors will be with us at the seminar, where we will also benefit from an introduction from Dr Andy Kerr of the University of Edinburgh. As always with our seminars, there will also be a full question and answer session, with the authors involved.

We at DHI very much hope that these papers, along with the debate at the seminar and other elements of the conversation, will assist to inform the policy debate on an evidence-based, objective and sceptical manner. However, while commending the papers to your attention, it is as customary necessary for me to stress that the Institute itself has no views on any of the matters discussed.

Jeremy Peat  
Director  
David Hume Institute

## **Energy Policy and Consumers in Scotland**

**Trisha McAuley and Andrew Faulk**

It would not be appropriate for us to take a view on the overall desirability of Scottish independence and nothing in this paper should be interpreted as either supporting or opposing that outcome. The intention is simply to highlight some of the practical effects on energy policy that should be considered if Scotland were to become independent, or were otherwise to acquire new powers in relation to energy.

### Key points

- At the simplest level, consumers want secure access to the services household energy provides – heating, hot water, lighting and appliances – at affordable and stable cost, with clear and accessible billing. Energy policy therefore needs to be set against a wider context which includes household incomes and, in particular, the energy efficiency of housing and appliances, as well as debates about unit prices, economic development and climate change.
- The single biggest influence on energy prices for dual fuel consumers in the current GB market is the wholesale price of gas. Gas prices influence heating costs for the majority of consumers directly, and also influence electricity costs as gas is burned to generate electricity. The price of gas is set by international markets and is therefore beyond the influence of either Scottish or UK Governments.
- Consumers without access to mains gas face different, but related price pressures in heating their homes; gas remains the most economic heating fuel, despite recent price increases.
- Over the longer term, however, governments do have influence over the cost of electricity as they are able to direct investment towards different methods of generation through a combination of regulation and / or subsidy. These are, very clearly, areas where the current Scottish and UK Governments are taking different approaches. The Scottish Government places considerable emphasis on development of renewable sources of electricity generation, while the UK Government wishes to see more investment in nuclear energy, alongside more limited development of renewables.
- The price of energy is also – increasingly – influenced by a range of other charges and subsidies over which governments have considerable influence. These levies fund energy efficiency, subsidise renewable energy developments, and provide lower tariffs for certain groups of consumers. The associated costs are passed on to consumers through their bills, and influence the cost of electricity to a much greater extent than gas. There are no levies on heating oil, LPG or solid fuels.

- In the context of continued pressure on energy bills and reduction of climate change emissions, energy efficiency programmes are increasingly important to consumers. Governments have considerable influence over the design and delivery of such programmes. This is also an area where Scottish and UK Government approaches are diverging, with the Scottish Government retaining publicly funded national energy efficiency schemes while the UK Government has recently ended them.

This paper therefore explores these issues in more detail. In line with other papers in this series, it identifies areas – such as international gas prices – which impact on consumers, but concentrates on those policies over which governments have greatest influence. Key questions for consumers might therefore include:

- The Scottish Government has recently published initial proposals on the structure of industry regulation in the event of independence. Could a Scottish regulator better reflect consumer concerns in relation to energy tariffs and billing?
- Renewable energy generation in Scotland is currently subsidised by all GB electricity consumers. What might be the effect of independence on current and future subsidies for different sources of electricity generation?
- Energy efficiency programmes for consumers in Scotland are funded by a combination of levies on consumers' bills and taxpayer spending, but there is now no public funding for these programmes in England. Could the independence provide an opportunity to reduce this levy on bills in favour of public funding?
- How would energy efficiency programmes be delivered? How could programmes respond to consumers' needs and the opportunities associated with tenements, older houses with solid walls, and those without access to mains gas?

## **Introduction: Consumer Experience of Energy Markets in Scotland**

At the simplest level, consumers want access to affordable energy, at stable prices, with charges made through clear pricing and billing structures.

Current GB markets still provide energy at relatively low cost by comparison with other European countries. However, the pattern of energy prices in GB has been very volatile, with prices more than doubling in the last decade<sup>1</sup>, after initially falling following market liberalisation.

The scale and speed of recent price rises has had significant impacts on consumers, particularly since they have occurred against a background of flat or falling incomes: Consumer Focus Scotland research shows, for example, that the proportion of consumers reporting that they ‘sometimes or always struggle to pay for energy’ rose from 26% to 35% between early 2010 and early 2012<sup>2</sup>.

At the same time, both the number and complexity of energy tariffs has increased<sup>3</sup>, while consumers’ understanding of bills remains limited<sup>4</sup>. As a consequence, it is perhaps not surprising that the level of consumer trust in energy markets remains low<sup>5</sup>.

This is a critical issue because of the widely acknowledged need for investment in energy infrastructure, which will ultimately be paid for through consumers’ bills. In addition, some aspects of investment, such as the installation of smart meters, require consumers to engage directly with energy suppliers.

In both cases, lack of trust in energy suppliers is likely to make delivery of policy aims more complex and therefore expensive, even where the policies themselves provide benefits for consumers. While this is a central issue which faces all governments, recent polling evidence suggests that levels of trust are lower in Scotland than in England or Wales<sup>6</sup>.

While energy prices have a high profile across Great Britain, they have particular importance in Scotland, because Scotland has higher rates of fuel poverty (27.9% in 2010) than other GB countries (16.4% England, 26.2% Wales)<sup>7</sup>. The difference between Scotland and England is due to a combination of climate, creating greater demand for heating to meet agreed levels of comfort in Scotland. Although households in Scotland have lower average incomes than the UK, the overall figure is distorted by London. According to ONS, Scotland has the 4th highest average income of the 12 UK regions, and has a higher average income than 6 of the 9 English regions, Wales and Northern Ireland<sup>8</sup>.

While overall trends in fuel poverty and energy affordability are affected most strongly by energy prices, there is increasing recognition that a stronger approach to energy efficiency provides the most effective way of reducing consumers’ energy costs while at the same time cutting climate change emissions.

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<sup>1</sup> Ofgem Factsheet ‘Why are energy prices rising?’ October 2011. Gas price graph and international comparison table reproduced at end of this paper

<sup>2</sup> <http://www.consumerfocus.org.uk/scotland/publications/changed-lives-the-real-cost-of-fuel-bills>

<sup>3</sup> Ofgem, retail market review <http://www.ofgem.gov.uk/Markets/RetMkts/rmr/Pages/rmr.aspx>

<sup>4</sup> <http://www.consumerfocus.org.uk/scotland/publications/changed-lives-the-real-cost-of-fuel-bills>

<sup>5</sup> Customer Engagement with the Energy Market - Tracking Survey 2012

IPSOS Mori for Ofgem, 12 April 2012

<sup>6</sup> <http://www.ofgem.gov.uk/Markets/RetMkts/rmr/Documents1/Customer%20Engagement%20with%20the%20Energy%20Market%20-%20Tracking%20Survey%202012.pdf>

<sup>7</sup> <https://www.gov.uk/government/publications/fuel-poverty-annual-report-on-statistics-2012>

<sup>8</sup> [http://www.ons.gov.uk/ons/dcp171778\\_241497.pdf](http://www.ons.gov.uk/ons/dcp171778_241497.pdf)

It is therefore necessary to consider access to energy efficiency services, in addition to energy costs, when looking at the overall consumer experience in the context of constitutional change. This is an area where Scottish and GB approaches are increasingly diverging.

Each of these areas is explored below.

## **Billing and Tariff Arrangements**

Surveys show consistently that consumers' understanding of energy bills remains lower than for comparable markets, such as telecommunications. While energy companies have scope to alter the presentation of bills, much of the information which has to be presented is governed by licence conditions which are set by the UK Government and enforced by Ofgem.

The detail and number of individual energy tariffs is set by energy companies. Both Ofgem, through the Retail Market Review, and the UK Government are seeking to reduce the number of different tariffs available to four tariffs for each fuel. The driver behind these actions is to simplify the market for consumers, and therefore encourage a competitive energy market by making it easy for consumers to switch tariff or supplier.

It is likely that independence would involve the creation of a new regulator, as part of a more general change in regulatory structures<sup>9</sup>, although discussion would be required on the role of different regulators if a single GB electricity market is maintained. A key question, should a new regulator be created, would be the extent to which simplification of bills and pricing structures were introduced in practice.

An additional question could arise which relates to the size of the consumer energy market in Scotland. It has historically been very difficult for small suppliers to gain a sufficient share of the market to increase competition at GB level, in part because of the barriers to entry. A smaller Scottish market could exacerbate this position, and this issue would need to be considered by the appropriate industry regulator in Scotland.

## **Energy Prices**

The chart below, published by Ofgem, shows the different elements of typical electricity and mains gas costs for consumers.

The charts show that bill elements include:

- Wholesale costs, including company profits and operating costs (billing, metering)
- Transmission and distribution costs
- Environmental and social charges, including subsidy for renewable energy generation, the cost of company-led energy efficiency programmes, EU carbon tax, and the cost of subsidy for vulnerable or disadvantaged consumers, such as poorer pensioners.
- VAT (currently 5% on all domestic fuels; this applies to non-metered fuels, including heating oil and LPG, as well as mains gas and electricity)

In addition, the UK Government has indicated its intention to facilitate construction of replacement nuclear power stations. While it is clear that these will also require significant levels of subsidy, it is not yet clear whether the Government intends that this is provided by the taxpayer or through an additional levy on bills. This is also discussed in this section.

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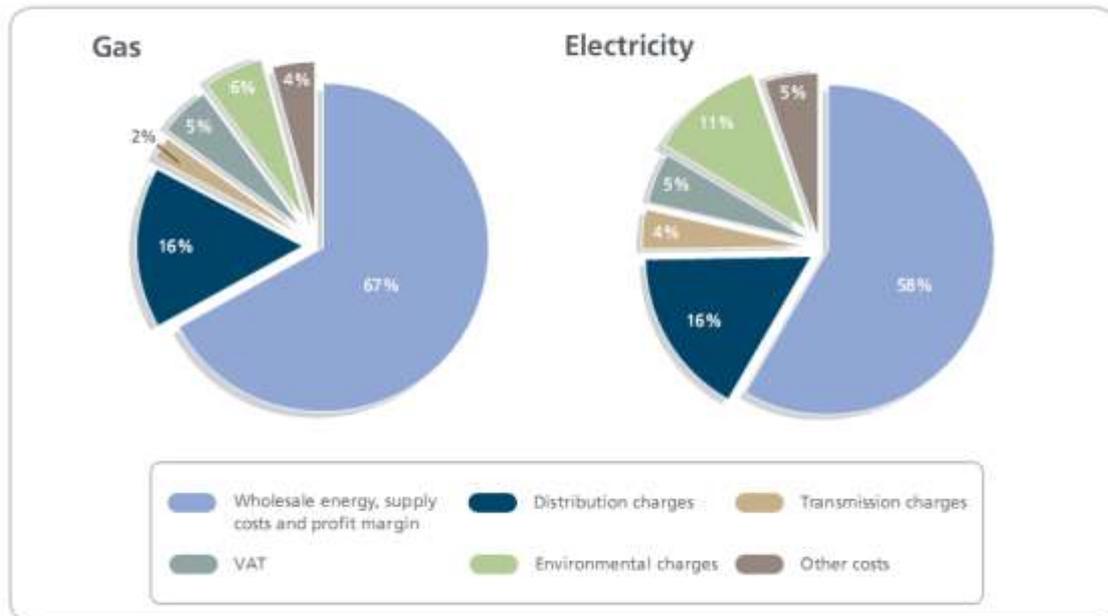
<sup>9</sup> The Scottish Government has published initial proposals covering this area.  
<http://www.scotland.gov.uk/News/Releases/2013/02/Regulation28213>

Consumer views of the various levies and charges on their bills are also discussed, summarising Consumer Focus research in this area.

Finally, this section of the paper outlines issues facing off-gas consumers.

### What makes up the typical energy bill?

Below are the breakdowns for gas and electricity bills. They reflect gas and electricity prices in December 2012. The average gas bill for a standard account is £811 and for electricity it is £531. These prices are based on average annual consumption figures, averaged across all the former incumbent suppliers, all payment methods and averaged across Great Britain.



The average bills above are based on average annual consumption figures of 3,300 kWh for electricity and 16,500 kWh for gas, averaged across all big six suppliers and across Great Britain. Please note that the numbers may not sum to 100% due to rounding.

As noted above, energy prices have risen considerably in recent years. The main driver behind this trend has been the cost of gas, used both directly for heating by around 75% of consumers in Scotland, and also used by power plants as a fuel to generate electricity. Gas prices are determined internationally, and are therefore largely beyond the influence of both the UK and Scottish Governments.

In the longer term, changes to the electricity generation mix, which can be and are influenced by governments, are likely to reduce the influence of gas as a fuel for generation, although there may be an increase in generation from gas as a transition fuel in the short to medium term.

Longer term changes could have a profound impact on future consumers' electricity costs, as alternatives are, at present, more expensive than electricity generation using fossil fuels.

The other elements of bills are detailed below, as these are areas where constitutional change could allow different approaches to be taken.

Many of these charges provide funds for programmes which benefit less well off consumers. However, it is important to bear in mind that these levies and charges impact on all consumers, including those on lower incomes who may not be eligible for support.

Less well off consumers typically spend more on energy as a proportion of household budgets than do better off consumers.

Funding support programmes through charges on electricity and gas is therefore regressive compared to funding the same programmes through public / taxpayer programmes. This overall approach could be re-examined in the context of independence.

### *Renewables Obligation*

All governments agree that electricity should be generated from a range of sources, to avoid over-dependence on imports and balance costs and risks for consumers, while at the same time reducing climate change emissions. To help achieve this in practice, subsidy has been provided for renewable energy generators, paid for by levies on bills. This approach is also driven by a binding EU target which requires the UK to meet 15% of its energy demand from renewable sources by 2010.

Around one-third of GB renewable energy is generated in Scotland, but subsidised by all GB consumers. The subsidy stood at £37 per GB electricity bill each year in 2013<sup>10</sup>.

Given existing Scottish Government ambitions to generate the equivalent of 100% of Scottish electricity consumption from renewable sources by 2020, there are critical questions about both the extent to which subsidy would continue to be paid by all GB consumers in the event of independence, and also around the market for renewable power generated in Scotland.

However, the ‘rest of the UK’ would still be required to meet EU climate change targets which would, in turn, require electricity from low carbon sources to be purchased from other countries should Scotland become independent. The detailed negotiations around these issues could therefore have significant financial implications for consumers both north and south of the border.

These discussions would be likely to focus on the subsidies paid to generators. Traditionally, investments in energy infrastructure are ‘grandfathered’ – financial arrangements remain in place from the date of commissioning throughout the life of the infrastructure. This approach is taken because development of energy infrastructure requires very large investments, which pay back over many years. Grandfathering therefore provides security for investors to make long term decisions.

A key question for consumers on both sides of the border is whether this arrangement would change in the event of independence. If no changes were made to existing contracts, there could be political concerns (in England and Wales) that consumers in those countries were continuing to subsidise renewable energy generation in Scotland. At the same time, a change to the principle of grandfathering could affect investors’ confidence and thus raise the cost of capital needed to pay for necessary investment, regardless of the type of generation.

Even if funding for existing developments continued using the current model, there would be a question about how developments commissioned after independence were supported.

If all required subsidy were to be raised from consumers in Scotland, there could be marked implications for consumers’ bills; alternately, it would be open to the Government of an independent Scotland to use other sources of funding, such as economic development monies, to bridge the gap in cost between the energy produced by new renewable technologies and that produced by lower cost sources.

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<sup>10</sup> <https://www.gov.uk/government/publications/estimated-impacts-of-energy-and-climate-change-policies-on-energy-prices-and-bills>

### *Feed In Tariffs (FiTs)*

Like the renewables obligation, FiTs provide subsidies for the installation of small scale renewables generating both heat (such as heat pumps) and power (solar photovoltaic panels). Ofgem estimate this subsidy to cost £6 per electricity bill.

Take-up of these technologies in Scotland is roughly proportional to population<sup>11</sup>; it would therefore be possible to continue current arrangements without impacting on consumers' bills following a decision on independence.

### *Transmission and Distribution*

Transmission and distribution costs, both of which are recovered from consumers' bills, are also rising.

Transmission costs account for 2% of gas bills and 4% of electricity bills, and cover the costs of maintenance of the large scale electricity and mains gas networks. Transmission costs are in part driven by the need to upgrade the electricity grid to facilitate connection of new renewable generation. The Beaulay – Denny upgrade is perhaps the highest profile example of this in Scotland.

Distribution costs are much larger, at around 16% of bills for each fuel, and cover maintenance and extension of local networks. These networks operated by regionally based companies, and are natural monopolies. As there is no practical way to introduce competition in this area, network operators' costs are managed by Ofgem through a series of multi-year price controls. Distribution costs are likely to be affected by predicted increases in consumer demand for electricity in future from sources such as heat pumps and electric vehicles.

The costs of electricity distribution operations in the north of Scotland are higher than elsewhere, and have historically been subsidised by all GB consumers through the Hydro Benefit Replacement Scheme. It is likely that this subsidy would be under scrutiny should constitutional arrangements change, and costs for consumers in Scotland could increase significantly if the wider subsidy was no longer made available.

Although distribution costs are currently a much higher proportion of consumers' bills, with the exception of the Scheme outlined above, there is less likely to be variation in distribution costs as a result of independence. In contrast, transmission costs are more contentious.

The costs of building and operating the GB transmission system are recouped through a range of charges. Some of these are applied on a uniform basis, with all parts of GB paying the same, while some are charged on a locational basis, with the scale of the charge varying dependent on geographic location.

Examples of uniform charges include the treatment of energy lost on the transmission network and the cost of balancing the system ('Balancing Services Use of System' charges, or 'BSUoS'). At the same time, the cost of accessing the system ('Transmission Network Use of System' charges, or 'TNUoS') is partly locational.

Locational charging encourages supply and demand to be proximate because this reduces the need for investment in the network to transport electricity.

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<sup>11</sup><http://www.ofgem.gov.uk/Pages/MoreInformation.aspx?docid=42&refer=Sustainability/Environment/fits>

It should therefore reduce the total cost to society of providing energy, but creates regional winners and losers in the course of doing so. By definition, favourable zones for generation tend to be unfavourable for demand (i.e. consumers) under locational charging regimes.

This creates challenges for each constituent nation of GB as the interests of generators and consumers within its borders may not align. For example, the ‘Western Highland & Skye’ zone of the transmission network has the most expensive TNUoS charges in Great Britain for generation<sup>12</sup> - but at the same time, the ‘North Scotland’ zone has the cheapest TNUoS demand charges in GB<sup>13</sup>.

The debate on locational charging has resulted in tension between the Scottish Government and the GB regulator, Ofgem. The Scottish Government has highlighted that although Scotland only has 12% of the UK’s generation, it pays 40% of its generation transmission charges, and has argued for the need for ‘a more equitable regime’<sup>14</sup>.

Ofgem has responded by suggesting that if locational charges were scrapped, this would increase consumer bills GB wide, but that ‘average bills would rise most in the north of Scotland where fuel poverty is highest and least in London where fuel poverty is lowest’<sup>15</sup>.

It is worth noting that while tension on the question of whether locational or uniform charging should be adopted has been most prominent in Scottish politics, it has arisen in England and Wales too. There have been several unsuccessful attempts by southern generators to replace those charges that are currently uniform throughout Great Britain with locational charges, most notably in relation to the treatment of transmission losses. These attempts have been blocked by judicial reviews brought by northern generators. It is possible that Scottish independence could re-ignite attempts to reform network charging on both sides of the border, with impacts on both consumers and generators in each.

### *Warm Home Discount (WHD)*

The WHD provides a reduction of £130 (through a credit on electricity bills) to consumers at greater risk of fuel poverty. Poorer pensioners are a particular target group. It is paid for by a levy on the bills of all other consumers, and is estimated to add £7 to each average electricity and gas bill at present.

The approach to the WHD could be varied in Scotland should constitutional arrangements change: closer examination of the distribution of beneficiaries would be necessary to understand whether there would be a significant impact on bills as a result.

### *Energy Company Obligation*

Energy bills have for some years been used as a means of raising funds to deliver energy efficiency programmes. At the start of 2013, a new programme, the Energy Company Obligation (ECO), was introduced, replacing the previous Carbon Emissions Reduction Target (CERT).

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<sup>12</sup> The cheapest generation connection charges are in England’s Cornish ‘Peninsula’ zone.

<sup>13</sup> The most expensive demand charges are in the ‘South Western’ [England] zone

<sup>14</sup> <http://www.scotland.gov.uk/Topics/Business-Industry/Energy/Infrastructure/TransmissionCharging>

<sup>15</sup> <http://www.ofgem.gov.uk/Networks/Trans/PT/Documents1/TransmiT%20SCR%20conclusion%20document.pdf>

Ofgem estimates that ECO will account for some £27 on each GB gas and electricity bill in 2013. However, energy companies have suggested that costs could be significantly higher given the complexity of the new programme<sup>16</sup>.

The operation of successive schemes is such that energy companies are incentivised to deliver measures which meet their carbon targets at the lowest possible cost. Historically, companies achieved this by co-funding investment in social housing, as social landlords also had targets for energy efficiency and could generate economies of scale through bigger projects. CERT funding was also directed towards the ‘easy to engage’ parts of private sector housing.

Delivery of CERT in Scotland was initially lower than was proportional to the population.

In response, the Scottish Government took a number of actions, including the development of publicly-funded energy efficiency schemes which sought explicitly to maximise take-up of CERT in Scotland. This approach proved successful in drawing in CERT, and a similar approach is being developed with the aim of maximising ECO funding at least proportional to Scotland’s population.

A change in constitutional arrangements could open the possibility of Scotland developing a different mechanism to raise funds for energy efficiency. This is explored in more detail in the section on energy efficiency schemes, below.

#### *EU Emissions Trading Scheme*

Although not identified as an explicit levy like those above, the EU Emissions Trading Scheme also contributes to increasing electricity bills, and will drive further increases in future. The ETS adds costs to the wholesale generation of power on the basis of its carbon intensity; the intention is to driver reductions in climate change emissions through market mechanisms.

At present, money generated through the ETS goes to the UK Treasury, and could potentially raise £4bn each year by 2020. The Energy Bill Revolution<sup>17</sup>, a wide-ranging coalition including Consumer Focus and a number of Scottish organisations, is campaigning for a significant proportion of the revenues to be ring-fenced and recycled towards energy efficiency.

A change in constitutional arrangements could open up the possibility of developing such an approach in Scotland, and of reducing or eliminating the money raised from consumers through ECO.

#### *Subsidy for Future Nuclear Generation*

Current subsidies for the decommissioning and management of waste from past nuclear generation are met directly by the taxpayer, through the UK Department of Energy and Climate Change.

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<sup>16</sup> <http://www.energy-uk.org.uk/press-releases/new-energy-efficiency-scheme-could-add-over-p94-to-energy-bills.html>

<sup>17</sup> <http://www.energybillrevolution.org/>

The UK coalition government wishes to see new nuclear power stations constructed as a means of delivering low carbon electricity; the Scottish Government does not. A high level of subsidy – comparable to that currently required for offshore wind power - will be needed to enable nuclear generation to meet its costs<sup>18</sup>, and the UK Government’s intention is that this subsidy will come from an additional levy on consumers’ bills.

It is obviously not yet possible to quantify the impact on consumers’ bills. However, these impacts are likely to become clearer as plans are further developed.

### *Consumer Views of Levies and Charges on Bills*

In 2012, Consumer Focus undertook a suite of research<sup>19</sup> to explore consumers’ views of the environmental and social charges which contribute towards their bills.

The majority of consumers were not aware that these charges existed. However, full-day discussions carried out in Scotland, England and Wales as part of the research suggested that consumers:

Accept the case for closely targeted subsidies for both energy costs and energy efficiency for certain groups of consumers; and

Understand the need for investment in new technologies, as long as government and industry are also seen to be paying their share. As with other surveys, our research found more enthusiasm for renewable energy than for nuclear power. Interestingly, energy security (because of the cost and sources of gas), rather than climate change, is the main driver for investment in low carbon generation.

Are less sympathetic towards subsidies they perceive as benefitting other consumers to a lesser extent, such as Feed In Tariffs, or which offer no benefit at all, as is the case with the EU Emissions Trading Scheme charges.

### *Off Gas Consumers*

Consumer Focus research<sup>20</sup> shows that, although the majority of consumers in both Scotland and other GB countries use mains gas as a heating fuel, Scotland has a higher proportion than England (as does Wales) of consumers using other heating fuels. In Scotland, electric storage heating is much more common than other GB countries, accounting for some 15% of all consumers. Changes in electricity prices affect these consumers to a greater extent; electric heating is more commonly used by lower income consumers.

The next most common off-gas fuel is heating oil, used by around 9% of households in Scotland. No levies are applied to this fuel; the only additional cost, beyond those determined by the market, is VAT at 5%.

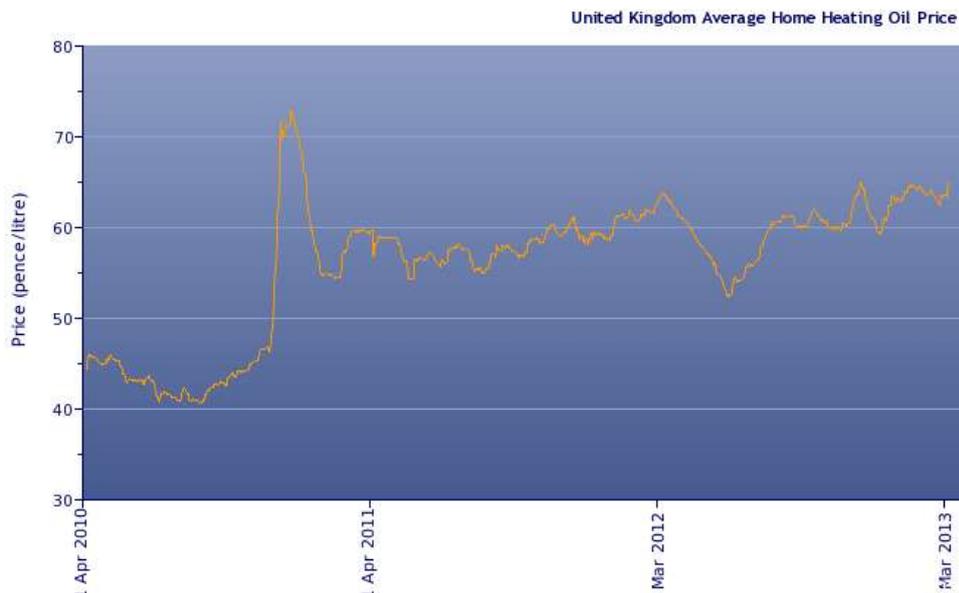
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<sup>18</sup> <http://www.bbc.co.uk/news/uk-england-somerset-21774652>

<sup>19</sup> <http://www.consumerfocus.org.uk/publications/who-pays>

<sup>20</sup> <http://www.consumerfocus.org.uk/publications/off-gas-consumers-information-on-households-without-mains-gas-heating>

Research by the Office for Fair Trading<sup>21</sup> found a very clear link between the wholesale price of crude oil – over which governments have no control - and the price of domestic heating oil. The chart below shows how higher oil prices have changed over the last three years.



Source: [www.boilerjuice.co.uk](http://www.boilerjuice.co.uk)

There may be some scope for the introduction of subsidies for target groups using heating oil. However, in the absence of a sustained fall in the price of crude oil, a combination of energy efficiency and introduction of renewable heating systems is likely to be needed to provide affordable warmth for consumers using this fuel.

### Energy Efficiency Programmes

The context of recent energy prices during a period of flat or very limited economic growth increases the importance of energy efficiency as the long term solution to reduce energy costs for consumers, while also contributing towards reduction of climate change emissions. As noted above, this is an area where there is increasing divergence between the UK and Scottish Government approaches.

The UK Government has progressively reduced its commitment to publicly funded energy efficiency / anti-fuel poverty schemes, and, from April 2013, no national public funding will be available. Instead, the UK Government has introduced the Green Deal, a pay-as-you-save scheme under which up-front costs of energy efficiency are covered by a Green Deal Provider, with costs being recouped through a charge on the consumers' electricity bill.

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<sup>21</sup> [www.offt.gov.uk/shared\\_offt/market-studies/off-grid/OFT1380.pdf](http://www.offt.gov.uk/shared_offt/market-studies/off-grid/OFT1380.pdf)

Critically, Green Deal measures will only be available where they meet the golden rule: that lower energy costs plus payback charges should be, lower or equal to current energy costs. The Green Deal was launched relatively recently, and it is as yet too early to assess whether the new approach will be successful.

The UK Government has recognised that the Green Deal will not be appropriate for all consumers. In particular, those in fuel poverty who already under-heat their homes are likely to take savings through higher levels of comfort, rather than generating a surplus to pay back the investment costs. The Government is relying on the delivery of ECO, outlined above, to cover the necessary costs for these consumers.

In contrast, the Scottish Government has maintained its commitment to public funding of energy efficiency / anti-fuel poverty schemes. As they evolved over time, these programmes increasingly sought to maximise take-up of CERT by linking publicly-funded measures with those provided by energy companies. There has also been a shift from emphasis on closely targeted energy efficiency programmes which provide a high level of assistance to a relatively small number of consumers, towards area-based programmes which provide lower levels of assistance to many more consumers.

At its simplest level, area-based programmes work through local authorities to engage consumers, initially targeting those communities where incidence of fuel poverty is higher. The delivery of insulation measures is then funded largely by energy companies. This model helps overcome the recurring problem for energy companies of identifying individual consumers who qualify for free energy efficiency works. Scottish Government figures<sup>22</sup> show that the approach was very successful in widening take-up of low cost loft and cavity insulation measures.

A similar approach is planned to integrate new Scottish Government programmes and ECO, although these are at an early stage of delivery at present.

This is an area where further distinction between approaches could take place. As noted above, ECO has been criticised for contributing to increases in energy bills, while providing benefits for a relatively limited number of consumers.

At the same time, Consumer Focus research suggests that recycling the EU Emissions Trading Scheme levy towards energy efficiency would provide significant resource to deliver energy efficiency programmes. Adopting this approach would allow government to direct such programmes much more clearly, while at the same time using a funding stream which would allow ECO to be reduced or eliminated, so reducing bills.

## **Conclusions**

At the simplest level, consumers want access to affordable energy, at stable prices, with charges made through clear pricing and billing structures. Communications and tariffs remain confusing for consumers, although work is currently underway to address both areas. These issues, combined with volatile and rising prices, and have reduced consumers' trust in energy markets.

Some of these areas provide more opportunity for government action than others. As such, it is possible to identify these as the key issues for energy consumers in relation to constitutional change.

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<sup>22</sup> Scottish House Condition Survey 2011, <http://www.scotland.gov.uk/Topics/Statistics/SHCS>

There is potential for direct government action to improve the clarity and content of information presented on bills, in the event that a new regulator, covering the energy sector, was created in Scotland: there is also, of course, potential for the UK Government to direct the existing regulator in this way.

Energy prices remain a central and growing concern for consumers. The main driver for rising energy prices is the price of gas. Gas prices influence heating costs directly, for the majority of consumers, and also influence electricity prices indirectly, as gas is burnt as a fuel in generation plants. Gas prices are set at international level, and there is therefore little prospect of constitutional change having any impact on these.

Other aspects of energy costs for consumers are more heavily influenced by government decisions. These can be divided into two categories:

- Charges and levies introduced onto bills to fund social or environmental programmes
- Long term decisions on electricity generation, which seek to maintain security of supply and affordability for consumers, while at the same time reducing carbon emissions.

Governments have strong direct influence on charges and levies. The majority of the funds raised support the deployment of renewable energy, energy efficiency programmes, and social support programmes targeted at those at greatest risk of fuel poverty.

However, less well off consumers tend typically spend more of their income on energy bills. Funding these programmes from general taxation would be more equitable. A fundamental decision open to government is the extent of the balance between levies on bills and public sector funding; there are then subsequent decisions on the levels of levies and charges and the uses of the money.

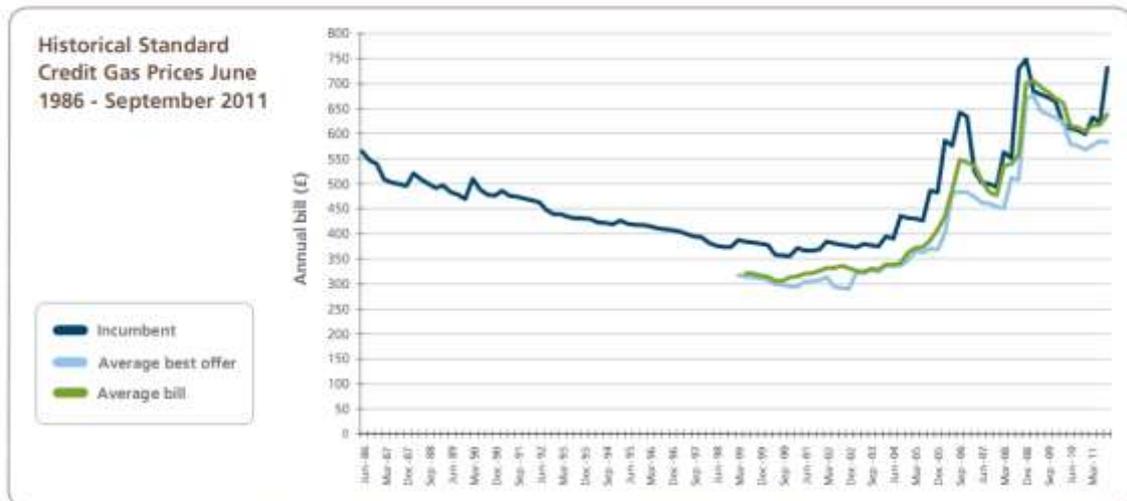
In the medium to longer term, however, there is general agreement that much greater focus on energy efficiency is needed to reduce costs for consumers, while at the same time reducing climate change emissions. There is already increasing distance between UK and Scottish Governments on this issue, with Scotland seeking explicitly to use public sector funding to maximise take-up of available private sector funding.

It is much more difficult to assess the likely impacts of decisions on the source of electricity generation. This is because costs for consumers depend on the source of generation, which changes over time. For example, a fall in gas prices would make renewable energy less competitive; conversely, increasing gas prices could mean that onshore wind was competitive without subsidy. This issue is examined by other papers in this series.

Appendix:

Information from Ofgem ‘Why Are Energy Prices Rising?’ Factsheet, October 2011

Gas Prices 1986-2011



Updated graph based on revised average consumption level of 16500 kWh per customer, per year for a standard tariff. Ofgem analysis on data from TheEnergyShop.com from 2003 – 2011, data prior to this date is owned by Ofgem.

Consumer Energy Prices in European Cities, 2011

Total Price Rankings (Prices including energy, distribution and taxes) as of September 1, 2011					
Electricity (all tax included)			Gas (all tax included)		
Ranking	City	Price (€ cent/kWh)	Ranking	City	Price (€ cent/kWh)
1 (dearest)	Copenhagen	30.46	1 (dearest)	Stockholm	20.84
2	Berlin	25.11	2	Copenhagen	12.16
3	Brussels	23.03	3	Rome	8.17
4	Madrid	20.91	-	<b>Average</b>	<b>8.03</b>
5	Dublin	19.85	4	Brussels	7.52
6	Vienna	19.39	5	Vienna	7.33
-	<b>Average</b>	<b>18.99</b>	6	Berlin	7.07
7	Stockholm	18.34	7	Athens	7.01
8	Lisbon	18.09	8	Madrid	6.88
9	Luxembourg City	17.84	9	Amsterdam	6.58
10	Amsterdam	17.82	10	Luxembourg City	6.41
11	Rome	16.59	11	Paris	6.47
12	London	15.32	12	Lisbon	6.16
13	Helsinki	15.17	13	Dublin	5.13
14	Paris	13.92	14 (cheapest)	London	4.74
15 (cheapest)	Athens	12.95			

Source: E-Control and ViasaETT

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## **REGISTERED OFFICE (Registered in Scotland No. 91239)**

26 Forth Street, Edinburgh,

EH1 3LH

Tel (0131) 550 3746

Scottish Charity Number SC009579

Email: [enquiries@davidhumeinstitute.com](mailto:enquiries@davidhumeinstitute.com)

Website [www.davidhumeinstitute.com](http://www.davidhumeinstitute.com)