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Scoping Note on a Scottish Publicly Owned Energy Company

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Executive Summary

This scoping note provides the Economy, Jobs and Fair Work Committee of the Scottish Parliament with evidence to consider in its review of proposals for establishing a Scottish Publicly Owned Energy Company (POEC). Conducted over a short period, the scoping note is based upon a rapid review of the literature on public and not-for-profit energy companies, the Scottish Government's Strategic Outline Case document, discussion with a number of interested stakeholders and the evidence and views presented to the EJFW Committee during its inquiry on the draft Scottish Energy Strategy in 2017.

In its consultation on the draft Scottish Energy Strategy (January-May 2017), the Scottish Government sought views on the potential role and remit of a publicly owned energy company to help the growth of local and community projects. In October 2017, the First Minister made a commitment to establish a not-for-profit, publicly owned energy company to supply energy to consumers at as close to cost price as possible. A Strategic Outline Case was published by the Scottish Government in March 2018 setting out a series of operating models for delivering on the core objective of providing competitively priced energy and helping to alleviate fuel poverty. The options set out in Strategic Outline Case centre around the establishment of an energy supply company (a retailer of gas and electricity to customers). This scoping note reviews the evidence on establishing a Scottish publicly owned energy supply company as well as wider evidence on what the purpose and model of a POEC could be.

A number of key points emerge. GB electricity (and to a lesser extent gas) supply is a low margin market, a point recognised in the Strategic Outline Case and reinforced by many sector stakeholders. The number of smaller suppliers in that market has grown rapidly in the past five years, and an increasing number of these are offering fixed rate or very low margin tariffs. The latest data suggest that the pre-tax margin on the

average dual fuel consumer bill is just under 5%. Importantly, this is almost all delivered by the gas component of bills. Average electricity pre-tax margins were below zero for 2016. In the current market, successful suppliers are those that can procure energy at lowest prices, have the most efficient billing and customer relations systems, and are best at hedging risk. This is the market into which a Scottish Government-owned supply company would be entering.

Taking a wider view of the purpose a POEC might ultimately fulfil, the review conducted here suggests four overarching objectives a Scottish POEC could have:

- Creating new energy infrastructure platforms
- Accelerating wider energy system transformation
- Increasing engagement and participation in the energy system
- Reducing costs to consumers

This review concludes that a Scottish publicly owned energy company can deliver on a number of these objectives. It also suggests that it is possible to integrate these wider objectives into planning for the POEC, even if the focus for the POEC is initially as an energy supply company. Further, it suggests that it is essential to consider these wider objectives in the context of how the POEC will interact with existing energy policy initiatives.

The EJFW Committee may wish to support further public debate on both the purpose of the POEC and how it will work alongside existing policy, by considering the following questions:

How might a Scottish energy supply company work best to support fuel poverty reduction?

How can the POEC be best designed to maximise alignment with wider Scottish energy policy objectives, and to remove all potential tensions with other policy objectives?

Should a new Scottish POEC be more than solely a licensed energy supply company? How might the POEC be designed to make space for objectives and functions beyond the retail of gas and electricity? What benefits might this have?

Table of Contents

Executive Summary	1
1. Introduction	4
2. Context.....	4
3. The GB Energy Markets.....	9
4. A publicly owned energy company	12
5. Conclusions.....	25
6. References.....	28
7. Appendices.....	31

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The views expressed in this report do not represent those of the Scottish Parliament, SPICe or the Economy, Jobs and Fair Work Committee. Any errors or omissions *remain the author's own*.

1. Introduction

1.1 The Scottish Parliament Economy, Jobs and Fair Work Committee (EJFW) commissioned the Centre for Energy Policy at the University of Strathclyde to produce a scoping note setting out the potential options for a Scottish Publicly Owned Energy Company (POEC), taking into account the content of the Scottish Government's own Strategic Outline Case (a report produced by Ernst & Young LLP (EY) for Scottish Ministers, dated 29 March), and the EJFW Committee's response to the draft Scottish Energy Strategy (letter to Mr. Wheelhouse dated 30 June 2017).

1.2 The purpose of the scoping note is to inform an EJFW Committee call for evidence on the POEC.

2. Context

Background

2.1 The commitment to explore setting up a Scottish publicly owned energy company first appeared in the Scottish National Party's 2016 Election Manifesto, which contained a commitment to "explore the potential to create a government owned energy company to help the growth of local and community energy projects. This will include empowering communities to use the income from energy developments to support other communities develop their energy potential" (SNP 2016, p.30). In its consultation on the draft Scottish Energy Strategy (which ran from January – May 2017) the Scottish Government included a question on the potential role and remit of "a Government Owned Energy Company to help the growth of local and community projects".

2.2 Following its inquiry on the draft Scottish Energy Strategy, the EJFW Committee recommended in relation to the proposal for a POEC that "in the interests of ensuring continuity of delivery for the strategy a long term framework be put in place; one which could include the establishment of an independent body" (EJFW Committee 2017, para 70). The Committee took a broad view of the role a new public entity might have, noting the "complexity of energy policy and the case for a national agency to oversee it" and referred to the UK Committee on Climate Change, the Danish Energy Agency, and the model of Transport Scotland for large infrastructure projects.

2.3 In October 2017, the First Minister made a commitment to set up a publicly-owned, not-for-profit energy company by the end of the current Parliament (March 2021), stating that “energy would be bought wholesale or generated here in Scotland – renewable, of course – and sold to customers as close to cost price as possible. It would give people – particularly those on low incomes – more choice and the option of a supplier whose only job is to secure the lowest price for consumers” (First Minister 2017).

2.4 Based on Scottish Government statements, the key rationale for establishing the company is the need to address fuel poverty, with the provision of greater choice for (Scottish) consumers, contributing to economic development, and helping to deliver broader Government energy ambitions – including the promotion of renewable generation and maximising benefits for local communities – also stated as objectives¹.

2.5 Based upon this rationale, the Scottish Government commissioned EY to generate a Strategic Outline Case (SOC) for the POEC. The SOC sets out a series of delivery options and operating models for delivering on the core objective to “provide competitively priced energy and help alleviate fuel poverty”, acknowledging that options and appraisal criteria may need to change if the fundamental objectives of the POEC are refined or expanded (EY 2018, p.2).

2.6 The Scottish Government is currently considering the SOC and is committed to public consultation as part of the process of further developing the case for the POEC (Scottish Government 2018). Following HM Treasury Green Book guidance, the SOC should be followed by an Outline Business Case that will explore in detail the shortlist of options generated in the SOC. This scoping note provides the EJFW Committee with a starting point to engage with the consultation processes around the further development of the case for a Scottish POEC.

2.7 Given that the Scottish Government’s stated rationale for establishing a POEC is to supply competitively priced energy to help address fuel poverty, this scoping note provides a brief outline of the drivers of, and policy context around, fuel poverty in Scotland.

¹ See <http://www.gov.scot/Topics/Business-Industry/Energy/POEC> and <http://www.gov.scot/Resource/0052/00529523.pdf>

Fuel poverty in Scotland

2.8 A household is defined as being in fuel poverty if it needs to spend more than 10% of household income to maintain an adequate heating regime². Extreme fuel poverty is defined as needing to spend more than 20%. (England adopted a new definition in 2013: the 'low income, high costs' definition.)

2.9 The Scottish Government is about to introduce draft legislation for a new definition for Scotland. In 2016, the Scottish Fuel Poverty Strategic Working Group published its report 'A Scotland Without Fuel Poverty is a Fairer Scotland' (SFPSWG 2016). That report recommended a review of the definition of fuel poverty in Scotland, which was taken up by an independent panel of experts that published its own review of the evidence in November 2017. In that review, the panel states: "A major drawback of the Boardman-based [10% of income needed to maintain a certain heating regime] definition is that households which have quite high incomes can be classified as fuel poor – in Scotland especially, this group represents more than half of all those in fuel poverty, making this a very substantive problem." (Scottish Fuel Poverty Definition Review Panel 2017, p.12)

2.10 The Review Panel's recommendation was for a definition as follows:

"Households in Scotland are in fuel poverty if:

- they need to spend more than 10% of their after housing costs income on heating and electricity in order to attain a healthy indoor environment that is commensurate with their vulnerability status;
- and if these housing and fuel costs were deducted, they would have less than 90% of Scotland's Minimum Income Standard as their residual income from which to pay

² The complete definition is: if more than 10% of income (including any social welfare payments) is needed to maintain a heating regime of 21C in the living room and 18C in other rooms for a period of 9 h in every 24 (or 16 in 24 over the weekend); with 2 h being in the morning and 7 h in the evening. For elderly and infirm households, this is increased to 23C in the living room and 18C in other rooms, to be achieved for 16 h in every 24. The current method uses modelled dwelling energy performance to calculate the cost of maintaining the standard heating regime, alongside income data based on face-to-face interviews with residents (data are for the income of the highest earner in the household). Due to the small sample sizes, the results are reported as a three-year rolling average. (Mould and Baker 2017).

for all the other core necessities commensurate with a decent standard of living.” (Scottish Fuel Poverty Definition Review Panel 2017, p.15)

2.11 Recent research shows low income rural households in Scotland are spending significantly more on energy than their urban equivalents, and rural households on lower incomes may be spending more on heating than those on higher incomes (Mould and Baker 2017). The Scottish Fuel Poverty Strategic Working Group (2016) reported fuel poverty rates of 50% in rural areas compared to 32% in urban areas, due to limited access to mains gas, larger detached dwellings and more exposure to wind and weather, with fuel poverty rates highest in electric-heated properties at up to 60%, and in energy inefficient properties at 73% in dwellings rated in the two poorest performing bands.

2.12 As highlighted by the Competition and Markets Authority in its 2016 investigation into the energy markets, energy suppliers have tended to rely upon customer inertia to bulk out their profits - with large numbers of their customers failing to switch off their standard variable tariff (which is usually higher than alternative tariffs) and/or failing to switch to an alternative supplier (CMA 2016). There is likely to be a strong link between fuel poverty and non-switching although we did not find direct evidence of this in the time available for this scoping review.

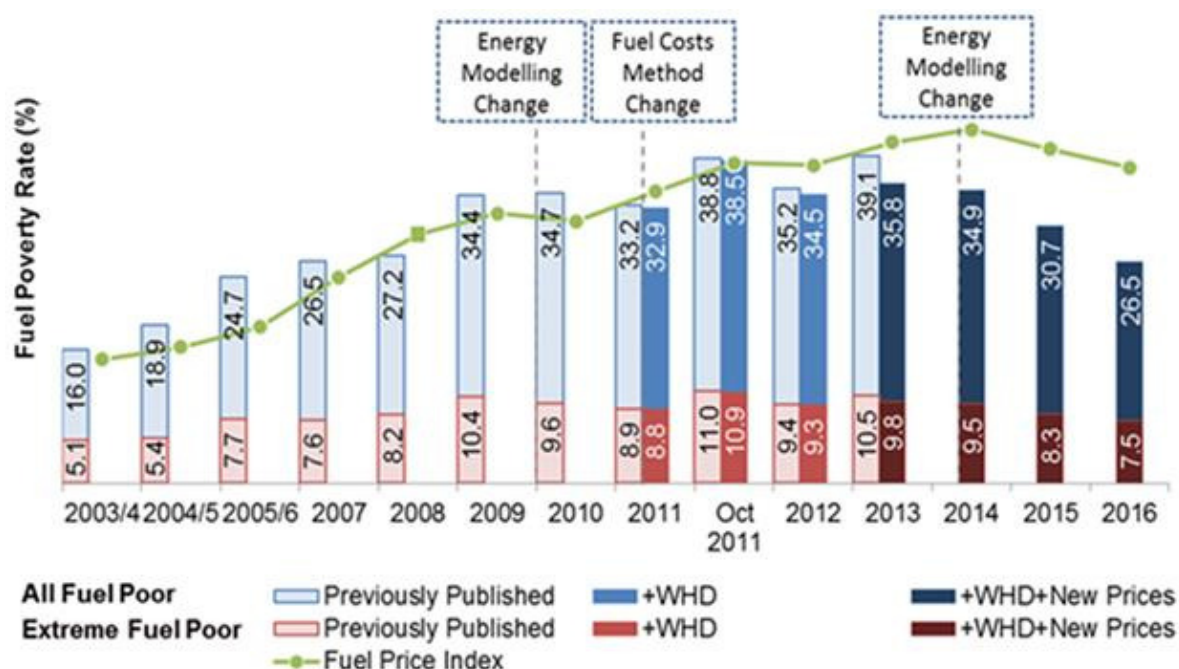


Figure 1 – Fuel poverty rates in Scotland 2003 – 2016 (WHD refers to the Warm Home Discount)

Source: <http://www.gov.scot/About/Performance/scotPerforms/partnerstories/HARO/Indicators/High-quality-sustainable>

2.13 As shown in Figure 1, average fuel prices have fallen since 2014, the main driver for a reduction in fuel poverty levels over the same period (with improved energy efficiency accounting for about a third of the reduction in fuel poverty).

2.14 Fuel poverty is a complex and multidimensional issue. Energy prices are clearly one important driver and a range of existing and emerging policies aim to offer protection to those most vulnerable to fuel poverty.

Existing consumer protection measures

2.15 A new 'safeguard tariff' was introduced by Ofgem (the electricity and gas markets regulator) in April 2017. The safeguard tariff applies to households that pay for gas or electricity in advance using a prepayment meter (and since February 2018, also to those households in receipt of the Warm Home Discount, which is a rebate on electricity bills). The safeguard tariff limits how much a supplier can charge per kWh. Ofgem sets the safeguard tariff level based upon an estimate of the true costs to supply energy: wholesale costs, network costs (these vary geographically), policy costs, operating costs, and costs specifically associated with prepayment meters. The tariff is due to expire at the end of 2020 in parallel with expected completion of the smart meter rollout (Ofgem 2017).

2.16 In February 2018, the UK Government introduced a Bill to Parliament for a temporary tariff cap for customers on Standard Variable (SVT) and default tariffs – the default tariff cap (UK Government 2018).

2.17 The proposed legislation:

- creates a new duty for Ofgem to design and implement the default tariff cap
- places a duty on Ofgem to implement the price cap as soon as practical.

2.18 The current safeguard tariff covers around 5 million customers across GB. In December 2017, Ofgem consulted on extending existing protections to cover an additional 2 million vulnerable customers in winter 2018/19 if the default tariff cap is not introduced by then. Ofgem has proposed that eligibility for the extended safeguard tariff will be assessed based upon factors such as: receipt of income-related government benefits; receipt of disability benefits; and being on a default tariff. Whilst fuel poverty and consumer vulnerability are not the same thing, an extended vulnerable safeguard tariff (or default tariff cap) that is based upon evidence of low

income and disengagement with the energy market will help to address some aspects of fuel poverty (Ofgem 2017). Appendix I provides more detail on how the safeguard tariff is applied in Scotland.

2.19 The Warm Home Discount itself is an obligation on energy suppliers to reduce electricity bills for those that meet the eligibility criteria by £140 per annum, paid as a one-off discount on electricity bills between September and March. The Scottish Government will consult on the new powers under the Scotland Act 2016 for the future design and implementation of the Energy Company Obligation and Warm Home Discount in Scotland. Other (non supplier) support is provided through two benefits: the Winter Fuel Payment scheme, essentially a pension top-up, and the Cold weather Payment, a payment made to eligible households (mostly poorer pensioners) in periods of very cold weather.

2.20 There are thus efforts underway to address the energy price element of the causes of fuel poverty and these must be seen alongside wider policies to tackle income inequalities, and to improve the energy performance of homes and the efficiency of their appliances and heating systems. The links between plans for a POEC and the wider provisions of forthcoming draft legislation on fuel poverty need to be strong if the aim for the POEC is to help alleviate fuel poverty. And if in seeking to address fuel poverty the POEC is to be mainly or solely an energy supply company, its operational effectiveness will be very heavily determined by the context of the current GB energy markets. This is the topic of the next section of this scoping note.

3. The GB Energy Markets

3.1 In Britain, electricity and gas generated by producers of energy are traded and sold on to end consumers in liberalised wholesale and retail markets. The Scottish Government's stated purpose for the POEC is to "sell energy, whether bought wholesale or generated in Scotland, to customers at as low a price as possible" (Scottish Government 2018). This role as a retailer of energy to customers will necessarily involve the POEC becoming an energy supply company that participates in the GB energy markets for gas and electricity, which are described here.

Gas

3.2 The GB wholesale gas market is where natural gas is traded after it has arrived in Britain. Sources include offshore production, liquefied natural gas (LNG) terminals,

storage sites, pipelines from other countries (e.g. Norway) and interconnectors with Belgium, the Netherlands and Ireland. There is a single price for gas on the wholesale market (irrespective of where the gas comes from), called the National Balancing Point (NBP) price. Shippers bring gas into Britain or transport it within Britain. Suppliers provide gas to consumers. Availability and demand are matched on a daily basis by National Grid Gas.

3.3 Energy suppliers purchase gas on the wholesale market and sell it on to their customers in the retail market. The gas retail market functions in the same way as the electricity retail market. The retail market is the market for the buying and selling of gas or electricity between consumers and gas or electricity suppliers (retailers). Consumers effectively engage a supply company to procure gas and electricity from shippers and generators on their behalf. Current trading arrangements allow consumers to choose their supplier and change supplier as often as they wish. Most suppliers offer both electricity and gas to their customers.

Electricity

3.4 With the 'functional unbundling' of the electricity market under liberalisation, generators, network operators and retail suppliers operate as separate entities, contracting with one another to provide electricity to end-users. Suppliers and generators pay network owners for the right to transport energy on their networks. In the current market, successful suppliers are those that can procure energy at lowest prices, have most efficient billing and customer relations systems, and are best at hedging risk.

3.5 Suppliers, generators and Non Physical Traders (for example, banks) trade electricity in the GB electricity wholesale market. Because electricity is currently not stored in significant volumes, generation and demand must be kept in balance at all times across the grid. Most electricity is traded bilaterally between generators and suppliers in advance to cover the minimum amount needed to match demand - often referred to as 'baseload'. National Grid Electricity Transmission (NGET) is responsible for real-time matching of generation and demand, using a trading system called the Balancing Mechanism. All Parties in the wholesale market are required to lodge a deposit, called 'Credit Cover', to reduce the risk that the rest of the industry will have to pay for a defaulting Party's liabilities.

3.6 Figure 2 provides a simplified illustration of how the wholesale and retail electricity markets function, together with generation and distribution of power. Appendix II provides more detail on the functioning of the electricity market.

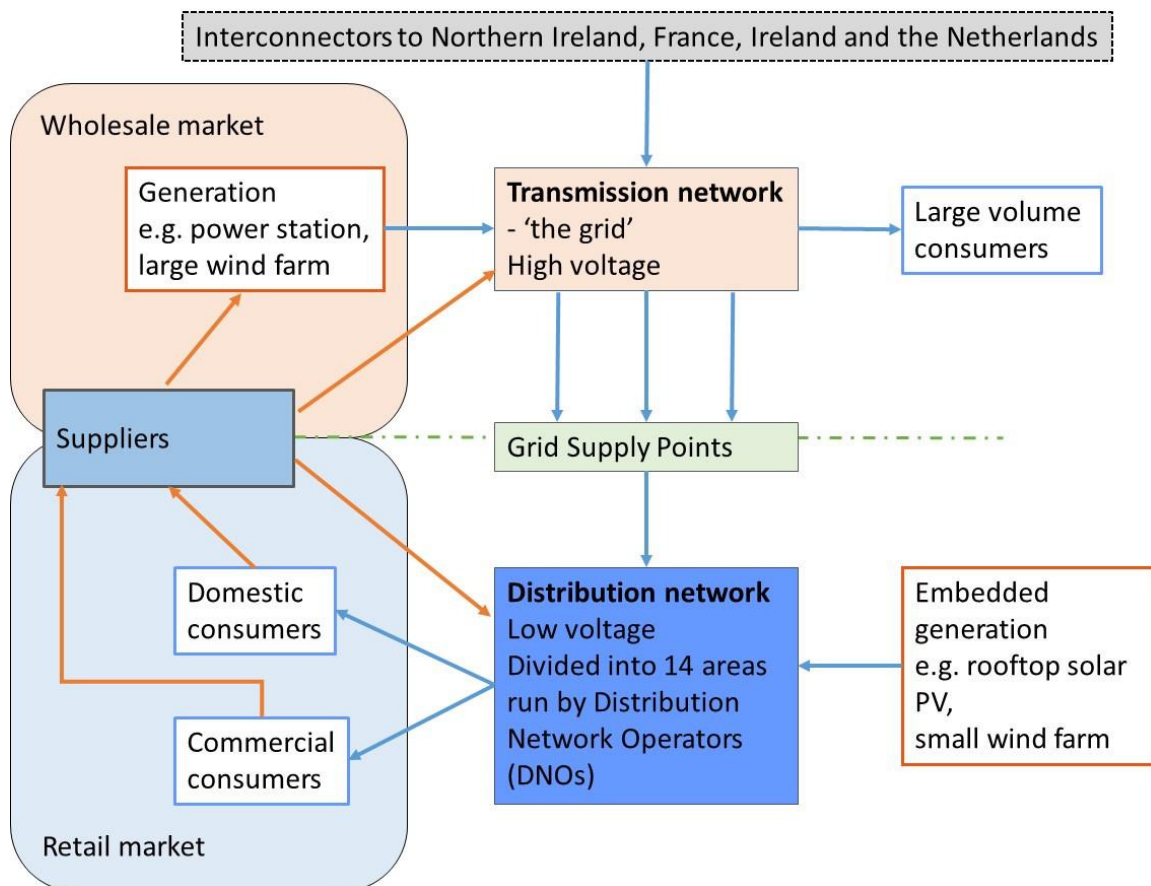


Figure 2 – Simplified GB electricity system – power flows (blue) and commercial arrangements (orange)

Sources: Ofgem website <https://www.ofgem.gov.uk/electricity/wholesale-market/gb-electricity-wholesale-market>, and Elexon's 'The Electricity Trading Arrangements: A Beginner's Guide' November 2017 https://www.elexon.co.uk/wp-content/uploads/2017/11/beginners_guide_v6.0.pdf

The relationship between consumer bills and system costs

3.7 Prices to consumers in the retail market comprise wholesale costs, network costs, policy costs, operating costs, VAT and pre-tax profits. The latest data from Ofgem, which are based on submissions from the six larger energy suppliers, suggest that the pre-tax margin on the average dual fuel consumer bill is just under 5%. Importantly, this is almost all delivered by the gas component of bills. Electricity pre-tax margins were below zero in 2016 (i.e. electricity supply was loss making for the 2016 period in which data were submitted), whereas for gas were almost 11% (Ofgem 2018). The point that margins are tight is reinforced by evidence from a series of expert

workshops held in response to the Welsh Assembly's Environment and Sustainability Committee recommendation for the establishment of a Welsh energy company (Darnton 2017).

3.8 Network costs vary regionally, reflecting actual costs of maintaining networks and of transporting energy across them from generators to consumers. This cost-reflective charging is intended by Ofgem as a stimulus to overall system efficiency, incentivising generation near centres of demand. Broadly speaking, the idea is that the price a consumer pays should reflect how much it costs to transport energy to the region they live in.

3.9 This is more an issue for electricity than for gas. In 2017, electricity consumers in the North of Scotland paid 7 - 9% more than the GB average (Scottish Government 2018b). Overall, Ofgem analysis shows that regional variations in household bills are largely (but not exclusively) driven by regional variations in national and local network charges. This is more pronounced for electricity than for gas³. Regional differences in energy bills that are not driven by network charges are likely to have a range of causes, including variations in cost faced by suppliers in different regions. Market share and customer behaviour (for example, willingness to switch supplier) may also contribute to regional differences in supplier bills (Ofgem 2015).

3.10 GB electricity (and to a lesser extent gas) supply is a low margin market, a point recognised in the Strategic Outline Case (EY 2018) and reinforced by many sector stakeholders. The number of smaller suppliers has grown rapidly in the past five years, and there are now 69 domestic suppliers (Ofgem 2018), an increasing number of which are offering fixed rate or very low margin tariffs (Cornwall Insight 2018). This is the market into which a Scottish Government-owned supply company would be entering.

4. A publicly owned energy company

4.1 As the EJFW Committee heard in its inquiry on the draft Scottish Energy Strategy, there is a range of strategic and delivery functions that a new public energy

³ For gas transmission, Ofgem analysis suggests that differences are so small that they are unlikely to be picked up in bills. Gas distribution cost differences are reflected in bills. Scottish consumers generally pay lower gas network costs than the average across GB regions (Ofgem 2015).

body could fulfil, each with value in terms of meeting the objectives of the Scottish Government's long term energy strategy (EJFW Committee 2017). This section of the scoping note takes a step back from the specific potential objective of supplying competitively priced energy, to explore what wider potential objectives a POEC might have.

Potential Purposes for a POEC

4.2 Based upon a review of the evidence gathered by the EJFW Committee, the wider evidence presented in previous sections of this scoping note and engagement with stakeholders across the sector, at least four potential purposes emerge for a new public energy company:

Creating new infrastructure platforms

4.3 A public body would be well placed to support investment in new infrastructure which others, including private companies, could then 'plug in to' to innovate and provide new energy services to consumers⁴. Examples of the type of infrastructure that could be supported are heat networks, energy storage infrastructure and electric vehicle charging infrastructure. The Scottish and UK Governments are already providing this type of support but a new body could act to better coordinate existing schemes and provide additional capacity and specialist expertise, as well as to increase levels of investment, accelerate the rate of roll-out and broaden the geographical spread of these new infrastructures. A new body could promote complementarity between energy system infrastructure investment and investment in energy efficiency under the National Infrastructure Priority announced by the Scottish Government (Scottish Government 2017).

Accelerating wider energy system transformation

4.4 A public body could provide more strategic and direct support for energy system innovation. It could provide advice and guidance on programme and project management for other public bodies and social enterprises, as well as coordinating

⁴ The term 'public good' has crept in to the public discourse on how government can support such 'plug and play' energy infrastructure. Strictly speaking, a genuine public good resource is something that is cost-free to access and for which the benefits of access are not exclusive. For energy infrastructure, there **are costs** associated with connecting-in any new user and a new user can only benefit from the resource by **actively investing** in accessing it.

access to funding and/or finance for those projects. It could provide a data service for the benefit of a range of energy system innovators, by collecting, holding and curating data and leveraging value from it for a range of potential users. Working with Ofgem, it could provide a platform for new business models to be trialled by others (e.g. local supply models) including commercial actors.

Increasing engagement and participation in the energy system

4.5 A new public entity could take a stronger position in promoting and supporting customers to switch supplier. As the SOC notes, the Scottish Government has already part-funded Citrus Energy to provide an impartial switching service (EY 2018). This could be developed and expanded. The public entity could work to improve consumers' understanding of their bills, and support the use of smart meter and other data to empower consumers, increasing the potential for digital innovation to benefit consumers across society.

4.6 The public body could also work to increase consumers' engagement with energy efficiency and low carbon energy technologies and energy services, enhancing their potential role in demand side management. A further function could be to provide information and advice (and perhaps also financial support) to boost local (co-) ownership of energy assets and participation in decision making about energy developments and technologies.

Reducing costs to consumers

4.7 Aligned with the rather more focused aim set out in the SOC, the fourth potential purpose of a new publicly-owned body could be to recycle energy market profits back to consumers, lowering bills and helping to tackle the fuel bills element of the causes of fuel poverty. As well as involvement in the commercially competitive retail market, such an objective might also entail supporting generation cost reductions in order to lower the wholesale costs of power, or provision of alternative infrastructures and technologies to deliver heat at lower cost to consumers than they are currently paying. It might also involve supporting local supply models where local generation resources are linked more directly to local consumers, potentially avoiding them paying the full market costs of energy whilst being able to retain more value locally.

4.8 These four purposes are related and mutually reinforcing and if sufficient resource were available, several might be addressed at once. They are all being addressed to varying degrees through current Scottish Government policy, as well as

at UK level. The creation of a POEC provides the opportunity to better coordinate those existing policy initiatives and provide strategic oversight as well as various types of support for on-the-ground delivery.

4.9 These various potential purposes are already reflected to different degrees in existing not-for-profit and publicly owned energy initiatives. The next two sections review some of these, as instructive for how a POEC might develop in Scotland.

UK Experience of Publicly-owned and Not-for-profit Energy Companies

4.10 In a review of local authority engagement in UK energy systems, Webb et al. found a wide diversity of activities and business structures, with a mix of in-house, commercial and not-for-profit entities including municipal energy service companies (ESCOs), private sector-led ESCOs and community benefit societies. Motivations include decarbonising local energy, improving energy security and saving on energy costs. However energy provision and demand management are increasingly also being seen as a source of revenue (Webb et al. 2017). Three examples are reviewed here.

Robin Hood Energy

4.11 Robin Hood Energy is a licensed energy supply company wholly owned by Nottingham City Council, established in 2015. Robin Hood Energy's aim is to provide affordable energy, and was launched with pre-payment meter customers particularly in mind. Robin Hood succeeded in turning a profit this year, one of only very few small suppliers to reach break-even point in such a short period. It now offers eight white label⁵ products to other entities including several local authorities.

4.12 Robin Hood voluntarily participates in the Warm Home Discount scheme and offers smart meters (in spite of being below the compliance threshold in terms of customer numbers). The use of smart meter data in particular has allowed Robin Hood to provide evidence of customers' prompt payment and therefore enabled customers to move onto cheaper tariffs faster than otherwise. Robin Hood also works to ensure

⁵ White label products are provided by a licensed supplier (in this case Robin Hood Energy) to another entity that sells that product on, separately branded in line with the buying entity's objectives. Examples of white label contracts are Robin Hood's white labels with Islington Council ([Angelic Energy](#)) and with Liverpool Council ([LECCY](#)), and SSE's with Marks and Spencer ([M&S Energy](#)).

that as few customers as possible are on their standard variable tariff and is in discussion with Ofgem about ways of avoiding the standard variable tariff being the default. Robin Hood's Board is made up of City Councillors and staff have moved from being local council employees to being employed by Robin Hood.

4.13 Robin Hood's operating costs are around £2.8m per year⁶, with staff costs representing about £1.9m of this. Set up costs were just under £2m, which is low compared to comparable companies. Part of the reason for this is that Robin Hood spent relatively little on marketing, and less than most comparable companies on consultancy fees.

Bristol Energy

4.14 Bristol Energy began trading in 2015 as a licensed gas and electricity supply company owned by Bristol City Council. The company operates independently of the City Council. Staff are employed by Bristol Energy and the Board has a Bristol City Council representative as well as other Non-Executive Directors. The process of taking the company from initial proposal to fully licensed supplier took around five years. Objectives include generating revenue for the Council, addressing fuel poverty and providing a high standard of customer service. Bristol Energy is not yet profitable – something that is far from unusual for the smaller companies in the supply market, and in particular for socially motivated companies that emphasise compliance and affordability for their customers. The company expects to be profitable (and begin repaying Council loans) by 2021. It has around 60,000 customers across GB, including 13,000 in Bristol (7% of city households), to whom it offers the cheapest tariff in the city.

4.15 Bristol Energy runs the Fuel Good Fund, which supports Bristol charities working to tackle fuel poverty as part of a wider Council-led initiative. The Fund is financed from donations made each time a new customer signs up to Bristol Energy (£15 per fuel, £30 for a dual fuel customer). Bristol Energy trialled an at-cost social tariff, which was offered directly to fuel poor households via referrals from charities,

⁶ Borrowing, which includes commodity costs (to cover the purchase of gas and electricity), is around £5m per year.

but sign-up rates fell very far below projections – demonstrating the challenge of engaging with some of the most vulnerable and disengaged consumers.

Our Power

4.16 Our Power is not strictly speaking a publicly owned company, but it has many of the attributes of a publicly owned company. Established in 2015, Our Power is a Community Benefit Society with subsidiaries operating as a licensed energy supply company (Our Power Energy Supply Ltd) and engaging in renewable generation and district heating. It is owned by its 66 members and is asset-locked and non-profit distributing. Membership is open to Social Landlords, Local Authorities and Community Controlled Organisations who collectively own over 200,000 homes. Our Power offers a void management service to its members which includes a switch to Our Power during the void period (though residents can then choose whether to stay with Our Power or switch).

4.17 Our Power now has over 27,000 customers, with tariffs available to the wider market to help to gain scale, with the objective of becoming profitable by 2021. Tariffs do not vary by payment method and Our Power has one of the lowest prepayment tariffs in GB. Our Power introduced the first alternative tariff for customers with restricted meters (i.e. households on Total Heat Total Control or ComfortPlus tariffs) offering significant savings for the majority of these customers. It also has a number of partnerships with local authorities and community-controlled organisations (including Hebrides Energy to offer a range of local tariffs in the Hebrides) and is engaged in renewables development and exploring ways to use renewable generation to benefit fuel poor customers. 90% of its electricity is from renewable sources.

4.18 Our Power has benefited from Scottish Government support, including an initial grant for feasibility work and repayable loans of £2.75m and £3.25m million from the Scottish Government and loans of £1m and £.6m from Social Investment Scotland. Investment support has also come from the Joseph Rowntree and Esmee Fairbairn Foundations, and Tudor, Barrow Cadbury and Robertson Trusts. Further working capital was raised in 2017 via a social purpose bond which raised £4.5m.

Overseas Experience of Publicly-owned Entities

German municipal energy companies

4.19 German municipal energy companies are often cited as examples of successful publicly owned companies. In fact the motivations and structures of these companies vary widely and some are more commercially successful than others. In Germany there is a legacy of small, local grids and legal structures available for municipal services. Unlike in Britain, although privatised, the sector is subject to concessions which are issued by local municipalities⁷ and re-municipalisation has been relatively more straightforward to achieve where concessions were up for renewal. Even then, there have been cases of the incumbent operator taking legal action against the municipality that is trying to take on the energy assets. Depending on local circumstances, the result is a mix across municipalities of private-public partnerships and wholly public entities. Public backing (e.g. via a referendum in Hamburg) has been key.

The Swedish Energy Agency

4.20 The Swedish Energy Agency works largely as an energy policy delivery agency, and innovation and R&D funder covering renewables, smart grids and low carbon vehicles and transport fuels. It was formed in 1998 to support uptake of new energy technologies and its research funding is targeted in particular at industry and supporting commercialisation. The agency produces evaluations, national statistics and consultation responses. It manages instruments such as the Electricity Certificate System and the EU Emission Trading System. The Swedish District Heating Board is an independent unit within the agency and acts as a mediator between district heating companies and their customers regarding district heating contracts and network access and management, to support compliance with Sweden's District Heating Act.

The Danish Energy Agency

4.21 The Danish Energy Agency is similar in many respects to the Swedish Energy Agency, but acts more as a regulator, for example administering subsidies and supplier obligations, designing and enforcing energy labelling schemes for buildings

⁷ The networks themselves are publicly owned by regional/local government and municipalities tender concessions competitively to operators for fixed periods (much like the rail sector in Britain).

and products, managing the EU Emissions Trading System in Denmark, and regulating the biogas industry. It has a regulatory role in relation to energy generation, supply and consumption, including in buildings. It was established in 1976 and has 360 staff. It runs a range of low carbon partnership programmes overseas, and is responsible for managing energy systems models and providing analysis. The Swedish and Danish agencies are examples of the value of an independent body that can take a longer-term, strategic view (beyond political cycles) of energy policy delivery.

General Issues, Opportunities and Challenges

Targeting fuel poverty

4.22 As noted above, one fifth of Scottish homes are off the gas grid and off-grid areas tend to have higher rates of fuel poverty than on-grid areas. The Scottish Fuel Poverty Strategic Working Group's 2016 report recommended that the Scottish Government identify specific measures to support customers in rural and off-gas grid areas who suffer from higher energy prices on average than the rest of Scotland. The role of a POEC in relation to tackling off-gas grid fuel poverty merits further consideration, in particular in relation to consumers with electric heating, given the low margins in the electricity supply market and the likelihood of a publicly owned supply company being able to offer significant tariff reductions for electricity compared to other suppliers. For these consumers, providing support for switching may be as significant as offering a new tariff in the market⁸.

4.23 The Scottish Fuel Poverty Strategic Working Group's report also recommended that a new fuel poverty strategy should include direct support for the fuel poor on managing their energy use, switching to better tariffs, ensuring correct billing and debt relief. If its purpose is considered in broader terms than simply as a not-for-profit retailer of gas and electricity, the publicly owned energy company presents an

⁸ The 400,000 customers with restricted meters in Scotland – such as those on Economy 10 tariffs – have traditionally been subject to additional constraints on their ability to switch. At present, few mid-tier or small suppliers are able to supply these customers. In practice, some are more expensive to supply than others, and as a group, they are difficult for suppliers to price. The CMA has imposed new conditions on suppliers, requiring them to make all their single-rate electricity tariffs available to all domestic electricity customers on restricted meters (CMA 2016b).

opportunity to provide exactly this sort of support. Such a role for the POEC could be articulated under the provisions of forthcoming fuel poverty legislation.

Interaction with local initiatives

4.24 The business or operational objectives of a new national energy body could support local initiatives explicitly or equally might be in tension with them if it set up in a way that effectively competes for resources and customers. As local authorities across Scotland become increasingly active in establishing ESCOs, investing in energy projects and delivering on energy efficiency objectives, there is likely to be an increasing diversity of approaches taken across Scotland. A national entity has the potential to provide a central resource to support these various initiatives, but there is a risk it could stifle local innovation if it were too centralising and directive. If the POEC were solely a supply company, it might support local initiatives through white label arrangements – alternatively it could, potentially at least, end up in competition with other emerging not-for-profit supply company initiatives.

4.25 One potential impact of the establishment of a POEC could be increased local employment in the area in which the POEC is headquartered, and through local supply chains if the POEC had a role in investing in energy generation or infrastructure (for example heat networks or through supplier obligations on energy efficiency). Increased local employment would be expected in turn to have a positive effect on incomes and thus potentially on local fuel poverty levels.

Interaction with other policy initiatives

4.26 As highlighted above (paragraph 4.23) there are clear linkages with the forthcoming Fuel Poverty Strategy.

4.27 The objectives of the Energy Efficient Scotland programme⁹ also clearly align with those of a POEC: as energy efficiency improves under the Energy Efficient Scotland programme, this will reinforce the positive effects of efforts to make energy more affordable spearheaded by the POEC (Scottish Government 2018c). However, thought will need to be given to the POEC's role (if any) in delivering the Energy

⁹ The Energy Efficient Scotland programme is the suite of policies and projects aimed at delivering the National Infrastructure Priority on energy efficiency. The ambition is for a step change in the energy efficiency of Scotland's domestic and non-domestic buildings over the next 20 years.

Company Obligation, given that the ECO is also a major source of funding under Energy Efficient Scotland.

4.28 Further policy developments in relation to the objectives set out in the Energy Strategy that are expected soon are expected to include, at least, a strategic statement on local energy as well as statements on electricity and gas policy and market development. Again, these Scottish Government policy statements could have a direct bearing how the POEC develops and the effectiveness of its operational design.

Period of rapid change in the energy system and market regulation

4.29 There are many new small suppliers in the market and some are experimenting with extremely low margin tariffs and fixed bills. The effect on the supply market of this is yet to play out. Over the past two years, Ofgem has been moving to introduce a series of regulatory changes that aim to strengthen competition and increase consumer protection in the supply market. This includes reforming the ‘supplier hub’ model (in which suppliers are the primary interface between consumers and the energy system, acting as the ‘hub’ of the market), and moving to half-hourly settlement (use of half-hourly smart consumption data to settle consumers’ bills), as well as considering how time-of-use tariffs may be rolled out (where the prices consumers pay per unit of energy change across the day, and are cheaper when the system needs more demand to balance and more expensive when demand is high and the system would benefit from demand being ‘dialled down’). There are also very recent moves by Ofgem to review supplier licensing in relation to the safeguards for customers of failed suppliers and the conditions for market entry for new suppliers.

4.30 Further change is occurring in the market in relation to finding innovative ways to link local generation and demand. The Scottish Energy Strategy sets out a vision for local energy, the full delivery of which implies some change in the relationships between, and responsibilities of, generators and suppliers to enable greater matching of local generation (and other energy assets such as storage) with local demand. Ofgem’s Innovation Link¹⁰ was set up to test new business models in the market, including peer-to-peer electricity trading.

¹⁰ See <https://www.ofgem.gov.uk/about-us/how-we-engage/innovation-link>

4.31 The importance of data in the energy system is increasing. A new POEC will face a rapidly growing set of opportunities and challenges around the collection and use of data. There is an opportunity from the smart meter rollout to better target support to vulnerable and fuel poor consumers, and to supplement this with increasingly sophisticated data collection, monitoring and analysis techniques. New intermediaries are emerging in the market, offering novel data services. The protection and proper use of data will become even more salient.

4.32 There is a wider move in the electricity system towards a Distribution System Operator (DSO) model, where the distribution network operators would have a greater role in managing the system at the distribution network level. There are different potential ways in which this will work and the benefits and costs will fall differently depending on which model (or models) are eventually adopted. This shifting landscape in the electricity system may have implications for a Scottish public energy company. Similarly, the new energy service models that are emerging, including around providing low carbon heat, may prove to be significant market disruptors. Again, the implications for customers (and different groups of customers) and the wider market are still uncertain.

4.33 Taken together, these changes – and the uncertainties they bring – suggest a need for the POEC to have a very clearly defined purpose, against which its business model can be designed in a way that enables adaptation to changing circumstances whilst maintaining delivery of its core aims.

Governance and democratic accountability

4.34 Governance and accountability are concerns for any new public body. There are a number of approaches that might be taken, some of which are described in the SOC (EY 2018). Municipal energy companies on the continent may provide good examples of how local democratic structures can be integrated with energy company governance to ensure accountability. Statoil (now Equinor) is a further instructive example – for its first decade of operation, the company was obliged to take strategic decisions to Parliament for democratic scrutiny, which was critical to a more social and environmental remit for Statoil (Cumbers et al. 2013). The Scottish Fuel Poverty Strategic Working Group recommended that the Scottish Government should involve people who are experiencing fuel poverty in the development of the new fuel poverty strategy and its delivery and evaluation (SFPSWG 2016). The same principle should

apply to the publicly owned energy company, where those whom the company is being established to benefit should be consulted on its mission and operation. A public company that has a direct role in supplying customers with services and charging for those will need particularly robust governance arrangements, transparently managed.

Particular issues and challenges related to setting up an Energy Supply Company

Customer acquisition

4.35 Prudent targets are sensible given the relatively low switching rates in the market. Robin Hood Energy set a target of 30,000 customers per year initially, for example. As the Scottish Fuel Poverty Strategic Working Group put it: “Advice on switching will require a concerted and sustained effort to achieve better engagement with the fuel poor to overcome the propensity not to switch – especially in rural Scotland” (SFPSWG 2016, p.28). Given state aid rules, which would suggest that the Scottish Government would have to be cautious in its promotion of a government-owned supply company, the company itself might have to invest in a concerted customer acquisition campaign. As noted in the SOC, the social enterprise Citrus-Energy offers an existing impartial switching service, and is working in partnership with the Scottish Government programme Home Energy Scotland (EY 2018).

Customer retention

4.36 Customer retention is perhaps even more important than initial acquisition, because by definition these acquired customers are customers who have switched at least once before to a new supplier (and are therefore more ‘mobile’ and less easy to retain than customers who have never switched).

Consultancy costs

4.37 These are inevitable and may be substantial irrespective of whether a White Label or full Licence model is chosen. Due diligence is therefore vital, but takes time (which in turn may be a challenge given the timescales implied by the commitment to have the POEC operational by 2021).

Hedging strategy

4.38 Complex and essential, hedging refers to the ability to buy power over different timescales at set prices to manage risk of exposure to changes in price. It is critical to profitability, and a key source of risk.

Credit cover requirement

4.39 Some early non-Big 6 suppliers were caught out by high credit cover costs when wholesale prices suddenly escalated in the late 2000s. For any supply company, estimation and provision of credit cover must be well managed to reduce risk.

Customer relationship management

4.40 This is key to the ability of a supplier to provide good customer service, which in turn directly affects reputation. Reputation is an important factor in customer acquisition and retention. Customer service is arguably particularly important for a publicly owned company where expectations may be higher.

Settlement and billing

4.41 It is essential to get the right IT in place to deal with customer billing and the off the shelf options are not necessarily the most cost effective in the medium-term, implying complex procurement processes (specifying precisely the system requirements and then performing due diligence on suppliers).

Compliance costs

4.42 Various supplier obligations become relevant as a supply company grows. For example, above 250,000 meter supply points (which with dual fuel customers could mean 125,000 customers), the Renewables Obligation will apply to a supplier. The Energy Company Obligation, smart meter roll out and other schemes will also apply over certain thresholds. These schemes can add significant costs to a supply business and tipping just over thresholds is a risk that needs managing. Thresholds are changing for some of these schemes, implying a degree of uncertainty in the medium term about which compliance costs will be applicable (see for example BEIS 2018).

Transparency

4.43 A publicly owned energy supply company will inevitably be subject to greater scrutiny than private supply companies, including through Freedom of Information requests and media attention. This has been the experience of local authority owned

supply companies in the UK to date. As well as reacting to externally-driven requirements for transparency, a publicly owned company would be very likely to wish proactively to make information available to the public about the operation and performance of the company. Managing the flow of information for transparency purposes will cost more for a publicly owned supply company than for its private competitors.

State Aid restrictions and potential conflicts of interest

4.44 Because the supply market is a fully competitive one, a Scottish Government-owned supply company would need to be sufficiently independent from the Scottish Government to avoid any potential breach of rules aimed at preventing anti-competitive behaviour. This means, for example, that public resources could not be used to promote a government-owned supply company in the market, and the company would have to compete on equal terms with others if it were tendering for public sector contracts. (The recent example of Bristol Council procuring energy from a supplier other than its own Bristol Energy is instructive.) Potential conflicts of interest would need attention too – for example with respect to the powers over the implementation of supplier obligations (the Energy Company Obligation and Warm Home Discount) that are now devolved to Scotland.

5. Conclusions

5.1 This scoping review highlights many of the same issues raised by stakeholders in relation to a POEC at the EJFW's inquiry on the draft Energy Strategy. Those stakeholders wanted to see a POEC that could take a strategic oversight role in the energy sector, driving innovation and supporting investment in and deployment of low carbon energy technologies, coordinating energy efficiency activities to achieve a step change improvement in Scotland's housing stock, and supporting local energy systems and helping to drive down the cost of energy¹¹.

5.2 The focus on consumer bills and fuel poverty in the SOC takes the POEC in a particular direction, away from having this more strategic role, and narrows down its purpose to that of an energy supplier. As the SOC shows, there is scope for a Scottish

¹¹ These stakeholder responses are set out in detail in Appendix IV.

publicly owned energy supply company to save customers money by returning the profit that private companies make back to consumers. Profit margins in the supply industry are low, and there is already a wide range of tariffs and small suppliers available to consumers. These two factors mean that customer switching to the POEC is likely to make as large a difference to consumers' bills as the fact that POEC may be able to offer new competitive tariffs. This puts emphasis on the POEC's potential for customer acquisition, and for driving up switching rates. The existing not-for-profit supply companies reviewed here exhibit a range of rates of success in the market, although they do demonstrate that a socially-minded supply company can make a difference to fuel poor and vulnerable consumers.

5.3 The other models of public energy company reviewed here, for example state energy agencies and municipal energy companies, provide additional examples of what a POEC could achieve in terms of supporting strategic action in the energy sector and public development and ownership of energy assets. However, this review has focused more on the potential purpose of a POEC in the Scottish context, setting out four overarching objectives a POEC might have:

- Creating new infrastructure platforms
- Accelerating wider energy system transformation
- Increasing engagement and participation in the energy system
- Reducing costs to consumers

5.4 The review of evidence and stakeholder views presented here suggests that a Scottish publicly owned energy company can deliver on a number of these objectives. It would also suggest that it is possible to integrate these objectives into planning for the POEC, and that it is essential to consider these in the context of how the POEC will interact with existing energy policy initiatives.

5.5 The EJFW Committee may wish to support further public debate on both the purpose of the POEC and how it will work alongside existing policy, through its work on the POEC. Based on this scoping review, the EJFW Committee may wish to consider the following questions in any call for evidence or further inquiry it may make in relation to the POEC:

- How might a Scottish energy supply company work best to support fuel poverty reduction?
- How can the POEC be best designed to maximise alignment with wider Scottish energy policy objectives, and to remove all potential tensions with other policy objectives, (for example around creating integrated local energy systems that link local supply and demand and retain value locally, or around decarbonising heat through a differentiated and locally appropriate suite of policy interventions)?
- Should a new Scottish POEC be more than solely a licensed energy supply company? How might the POEC be designed to make space for objectives and functions beyond the retail of gas and electricity? What benefits might this have?
 - The POEC could be purposefully designed to accommodate objectives and functions beyond energy retailing. This could be achieved for example by the supply company becoming a subsidiary of a wider group of companies with complementary roles. Or the mission and activities of the supply company could be purposively aligned with those of a strategic oversight body established in parallel with the supply company (and which might have a governance relationship with the supply company e.g. through representation on the supply company's Board). Or the supply company could be designed with flexibility and growth built in at the outset, as suggested in the Strategic Outline Case.

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7. Appendices

Appendix I: The Safeguard Tariff

Data on the current levels for Ofgem's vulnerable safeguard tariff are provided below.

For the **North of Scotland** region, based on a simple prepayment meter:

Gas – standing charges are 26.96 pence/day; unit price is 3.31 pence/kWh

Electricity – standing charges are 28.97 pence/day; unit price is 14.61 pence/kWh

For the **South of Scotland** region, based on a simple prepayment meter:

Gas – standing charges are 26.96 pence/day; unit price is 3.31 pence/kWh

Electricity – standing charges are 28.97 pence/day; unit price is 13.65 pence/kWh

For comparison, the average (arithmetic mean) for the safeguard tariff across all GB regions is 3.36 pence/kWh for gas and 14.19 pence/kWh for electricity.

Source: Ofgem's Prepayment Price Cap FAQ document, April 2018, available at: <https://www.ofgem.gov.uk/publications-and-updates/safeguard-tariff-prepayment-reporting-template-and-faq>

Appendix II: The Electricity Market in More Detail

Suppliers, generators and Non Physical Traders (for example, banks) trade electricity in the GB electricity wholesale market – they are called Parties in the Balancing and Settlement Code that governs the market. Elexon is the company that administers the Code on behalf of Parties, providing and procuring services to implement the Code and ensure the wholesale market runs efficiently and accurately.

Electricity is currently not stored in significant volumes and generation and demand must be kept in balance at all times across the grid. Electricity is traded in half-hour blocks called Settlement Periods, for which suppliers assess demand (from their customers) and strike contracts with generators or on power exchanges¹². Contracts for electricity can be struck well ahead of delivery, sometimes several years, right down to the time of delivery (the Submission Deadline).

Electricity is usually traded far in advance to cover the minimum amount needed to match demand - often referred to as 'baseload'. This tends to be contracted for bilaterally between generators and suppliers for example directly through Power Purchase Agreements. Power exchanges tend to be used to adjust baseload to meet the expected demand on a specific day, usually closer to the delivery time and based on things like the weather forecast for that day.

Within each Settlement Period, National Grid Electricity Transmission (NGET) manages the real-time matching of generation and demand. One of the main tools it uses to do this is the Balancing Mechanism, where generators and suppliers that are flexible enough can make 'Offers' to increase generation or reduce demand for a given price, and 'Bids' to reduce generation or increase demand for a given price, at very short notice. NGET uses the Balancing Mechanism to match supply and demand in each half hour, in real-time, by accepting Bids or Offers depending on whether the system needs more or less generation (or demand) to stay in balance.

After each Settlement Period, imbalance charges are payable by Parties (suppliers, generators and Non Physical Traders) that have failed to use, generate or sell exactly the amount of electricity they contracted for, taking into account any Bids and Offers

¹² A note on power exchanges: buyers and sellers of electricity buy and sell anonymously – i.e. buyers do not know which seller they are buying from and vice versa.

accepted. The differences between what they contracted for and what actually occurred are called imbalances.

Where any Party does not meet its imbalance charges (i.e. defaults on payment), all the Parties pick up the cost proportionally. However, all Parties have to lodge a deposit, called 'Credit Cover', to reduce the risk that the rest of the industry will be required to pay for a defaulting Party's settlement liabilities. Credit Cover levels are set by Elexon based on a calculation of imbalance exposure.

The following diagrams show in more detail how the physical infrastructure of the electricity system (in blue) interacts with the commercial arrangements of the electricity market (in orange), as well as how electricity flows are physically controlled (green). Figure 3 shows this in simple terms:

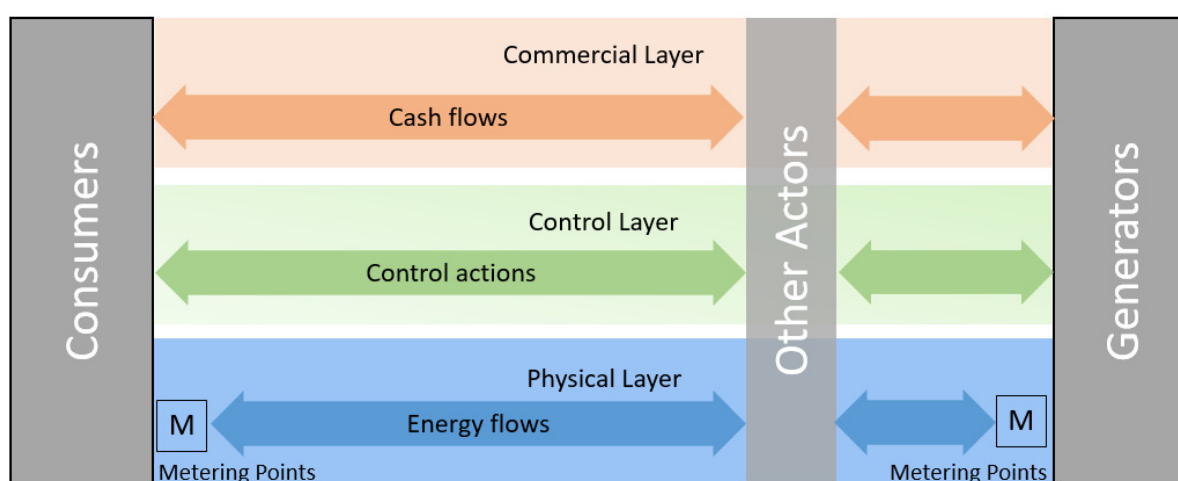


Figure 3 – Simple model of the energy system and market

Figure 4 below shows the current – or incumbent – model of the GB electricity system in more detail than provided in the body of this report.

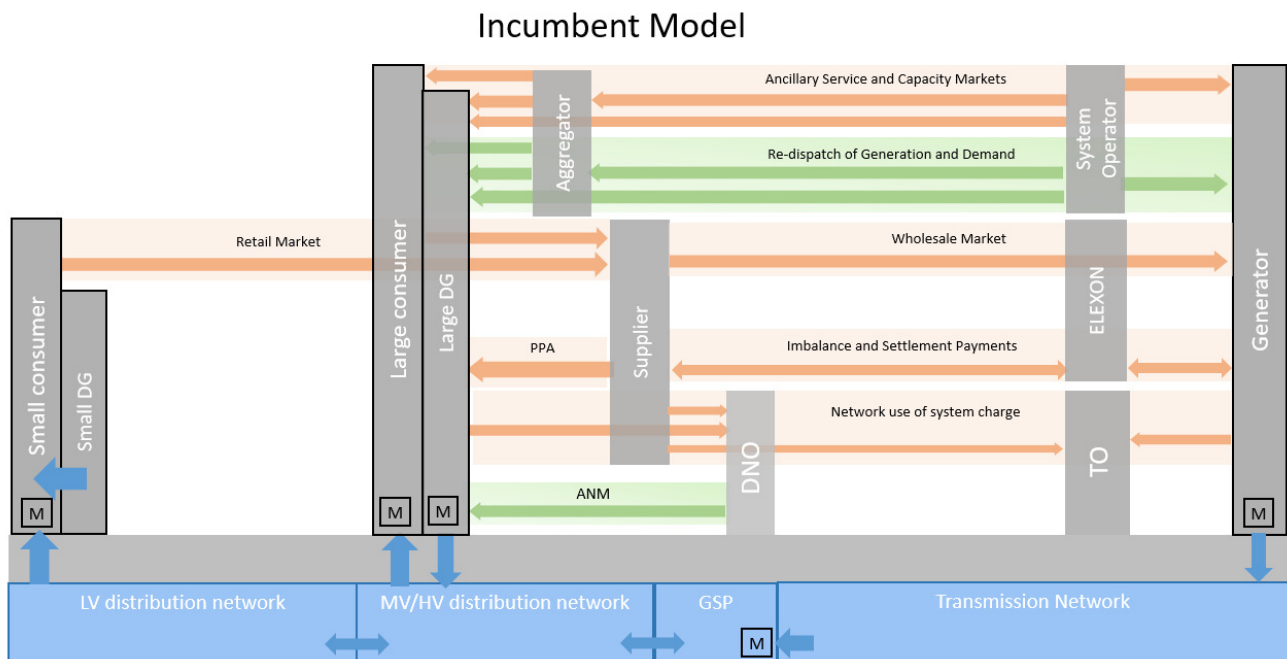


Figure 4 – Detail of the incumbent electricity system model

Source: Ongoing research by Damien Frame, Electronic and Electrical Engineering, University of Strathclyde

Appendix III: Relevant Scottish Energy Facts and Figures

Total energy consumption in Scotland breaks down roughly to 50% for heat, and 25% each for electricity and transport. Gas consumption in Scotland's domestic properties has gone down 30% since 2006. 20% of Scottish households are off the gas grid. The energy efficiency of Scotland's housing stock has been increasing, with at least 100 mm of loft insulation is installed in an estimated 94% of lofts (up 12% on 2010 levels) and a high standard of insulation (300 mm or more) now in 30% of homes (up from only 5% in 2010). Levels of insulation (both loft and wall) are higher in the social sector than in the private sector. 53% of walls (all types) are insulated in the private sector compared to 71% in the social sector. 62% of lofts are insulated to 200 mm or more in the private sector compared to 78% in the social sector.

Overall, domestic energy consumption (heat and electricity) has fallen 20% since the 2005-2007 baseline period. The change in average direct debit bills in Scotland since 2004 has followed wider GB trends, increasing 84% for gas and 52% for electricity.

Sources:

Energy in Scotland 2018 Key Facts

<http://www.gov.scot/Resource/0053/00531699.pdf>

and

Scottish House Condition Survey Key Findings 2016

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Appendix IV: POEC Evidence from the EJFW Committee's Inquiry on the draft Scottish Energy Strategy

In responding to the EJFW's inquiry, [WWF](#) stated: "Internationally, government agencies and energy companies have had an important role in overcoming market failure, capacity building, and driving forward the transition to clean energy and energy efficiency. There is a role for a similar body with a broad suite of responsibilities in Scotland."

[Ofgem's response](#) to the Scottish Government's consultation on the draft Energy Strategy included the statement: "The vast amounts of data that the smart transition will generate should also permit greater diversity in tariff offerings. However, as the retail environment becomes more diverse and complex, providing an appropriate level of service for those not able to navigate the market could become more challenging. Whilst many of the changes we are witnessing with regards to new business models and products are potentially positive, it is important that the less engaged and those in vulnerable situations are also able to benefit." And: "We are reforming the rulebook to future proof our regulation and put responsibility on suppliers to understand what is right and fair for their customers. This will ensure that customers can benefit from technological change and innovation in the market, while protecting them from new risks. We will ensure that energy suppliers who fail to put the needs of consumers at the heart of their business will continue to face tough action. We welcome the Scottish Government's commitment to engage with the UK Government, Ofgem and consumer groups to secure effective regulation of the retail energy market."

And specifically:

"A Government-owned energy company: There are already various public sector models emerging in the energy supply market. For example, Nottingham City Council have set up Robin Hood Energy and Bristol City Council created Bristol Energy. In Scotland, we see "Our Power" which is rooted in the social housing and local government sectors. As such, public sector ownership per se is consistent with and enabled by current regulation. If the Scottish Government wanted to act as a supplier, a Government-owned energy company would, of course, have to comply with regulatory arrangements like any other. State aid matters would also be a consideration for the Scottish Government as they would be in any other publicly supported intervention that could affect competitive markets. Strategic support for

innovation can be crucial in overcoming the market failures in developing new technologies and approaches. We have set up the Innovation Link to provide a space where innovators can come to us and seek advice on the regulatory implications of their ideas and would be very happy to talk to the Scottish Government about the models they are looking at and expertise we can provide.”

[COSLA's response](#) noted “Elected members may wish to consider, based on local policy of councils, an increased role for local authorities in a new Scottish energy supply system. Examples of municipal energy companies such as in Sweden, Denmark and parts of the UK could be of relevance here.” And: “Committed to the principles of local democracy and community action, members may also wish to explore a more formal and strategic role for local authorities in facilitating community/local ownership of renewable energy sources, to ensure that greater financial benefit is retained in communities. Local authorities can potentially provide important skills and resources, such as technical expertise, project development, finance and political support. This topic requires further exploration, not least to determine which types of renewable schemes would lend themselves to such an approach.”

Community Energy Scotland's [Nicholas Gubbins observed](#): “We feel — certainly from a community perspective — that if there are going to be more and more extensive community-owned or community-engaged energy developments, we are going to need much better economies of scale. We also think that a number of collective and facilitative roles could be undertaken by some form of co-ordinating organisation. It does not necessarily have to be a Government one, but if there were to be such an organisation, it could assist in a number of quite useful ways—both in developing new projects and in helping to underwrite or guarantee or in assisting with the various things that are necessary to generate such economies of scale.”

[Lindsay Roberts](#), Scottish Renewables said: “We agree that, if it is created, it must add value and should not duplicate things that are out there already. We are coming round to the view that it could be a very useful mechanism as a front door. There are a huge number of projects and organisations out there to help communities, but because there is so much support, it is sometimes very difficult for them to know who to go to first and which door to knock on. A one-stop shop begins to open up options for communities and to help them to travel through the project development process

or whatever it is that they are looking towards to get them involved with renewable energy.”

[Joan McNaughton](#), Climate Group said: “We cannot have oversight through a piece of policy machinery at the political level. We need something that is closer to the practical side. If my memory serves me correctly, some of the examples that were cited in the chapter are designed to do that. In particular, the Swedish energy agency is there to help oversee execution and to make sure that it is delivered in an integrated way across all the different sectors. For me, there is a question mark over that area; there might be a gap that needs to be filled. There is a case for a bit of machinery that is distinct from the economic regulator and from Government, but which has the accountability to report on what is actually delivered and to spot problems before they become a matter of post hoc accountability because they have not been solved.” And: “I had in mind the Committee on Climate Change when I was talking about post hoc accountability. It is not there to spot problems early on and to help people to devise solutions. Although it is doing great work, it is not quite the kind of body that you need for the kind of role that I would like to see, which is around implementation and separating that from the policy development process.”

The EJFW [Committee’s letter](#) of 30 June 2017 to Mr. Wheelhouse stated interest in better understanding: “the balance of policy between local and national (plus the suggestion of a gap between national policy and local reality), and complexity of energy policy and the case for a national agency to oversee it.” And stated: “Given the scale and complexity of the many policy strands covered by the strategy, it will be important to ensure good governance, policy expertise, cross-party buy-in (as there has been for climate change) and long-term ownership. Sitting on the edge of a few civil servants’ desks, we were told, will not be enough. This is a strategy the lifespan of which extends beyond the usual electoral and budgetary cycles. The Committee on Climate Change was mentioned, as was the Danish Energy Agency, and the model of Transport Scotland for large infrastructure projects. Another witness underlined the importance of a body to spot problems before they became “a matter of post hoc accountability”. In the interests of ensuring continuity of delivery for the strategy, the Committee recommends a long term framework be put in place; one which could include the establishment of an independent body.” (para 70).

In [responding](#) to the committee, Mr. Wheelhouse did not address POEC explicitly, but said “We remain resolute in the task to eradicate fuel poverty from Scotland’s

communities and ensure that we reach the most vulnerable in society and those least able to afford to adequately heat their home. That's why we plan to introduce a Warm Homes Bill to set a new statutory target for fuel poverty. We will consult on the new powers for the Scottish Parliament for the future delivery of the Energy Company Obligation and Warm Homes Discount, to ensure they are used most effectively to deliver on our dual objectives on fuel poverty and climate change.”