



Making a positive difference
for energy consumers

Energy Strategy Consultation
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Dear Sir/Madam

Consultation on a Scottish Energy Strategy: The future of energy in Scotland

Thank you for the opportunity to respond to your *Consultation on a Scottish Energy Strategy: The future of energy in Scotland*, published on 24 January 2017.

We support the long-term vision for a “modern, integrated energy system that delivers reliable, low carbon energy at affordable prices to consumers in all parts of Scotland”.

In the sections below, we set out our views on the Strategy, to help inform its development and delivery. In doing so, we draw on our experience as regulator of the gas and electricity markets. We are happy to discuss any of the areas outlined in the consultation in greater detail.

Chapter 3: Meeting our energy supply needs

The Strategy sets out an ambitious vision for Scotland in 2050. We agree that there are potential benefits in encouraging a balanced combination of energy sources that is adaptable to changing market conditions.

Low carbon heating

The Strategy commits to 80% of homes in Scotland having low carbon heating by 2032 and exploring the viability of alternative uses of the gas grid such as using hydrogen for heating. No-one knows the exact future technology mix for heating homes and businesses in Scotland.

We have set out our views on key issues to inform the development of any regulatory framework for district heating in our response to your *Consultation on Heat & Energy Efficiency Strategies, and Regulation of District Heating*.¹

We will be considering the implication of different future pathways for heat, including the role of hydrogen, for our core regulatory functions. We have already provided funding to

¹ <https://www.ofgem.gov.uk/publications-and-updates/response-scottish-government-consultation-heat-ee-strategies-regulation-district-heating>

understand the impact of novel sources of gas such as hydrogen on the network. This includes the £250,000 Leeds City Gate project (funded through the Network Innovation Allowance and supported by the Scottish Hydrogen Society), which reported last year on the practicalities of a switch to a 100% hydrogen gas network. In 2016, we also provided £6.8 million of Network Innovation Competition funding to the HyDeploy project, which is investigating the feasibility of using natural gas containing up to 20% hydrogen.

Scotland Gas Networks (SGN) recently concluded its Oban project, which received £1.9 million of Network Innovation Competition funding in 2013. It has demonstrated that wider gas quality can be safely distributed on the GB distribution network. SGN is now working with the Department for Business, Energy & Industrial Strategy (BEIS) and Ofgem to allow a wider range of gas standards. This should help enable gas suppliers to shop around for the best deals for consumers and facilitate the use of greener gases in the network.

Innovation will continue to be crucial to help address the challenge of decarbonisation while delivering value for money. We have pushed network companies to be more creative and develop new ways of delivering their networks. A recent independent evaluation expected our previous innovation scheme to provide net benefits of over £1 billion.²

Elsewhere, we are engaging with the Council of European Energy Regulators (CEER) in the work it is promoting to examine the future role of gas in the European context. We are also actively engaged with industry and other bodies on their work in this area including the National Infrastructure Commission, National Grid and gas distribution networks.

Overall, we see that there is a need to understand clearly the costs of different technologies before committing to a particular policy or pathway to decarbonisation. These costs will include not only financial costs but also the challenge of public acceptability. For this reason, we support trialling of different options to uncover additional information on costs, benefits and risks. We can also learn from projects in other countries; there may be value in further work to capture the lessons from such projects, specifically those that might be most applicable to Scotland.

Building competitive markets and a balanced generation mix

The energy sector needs very substantial long-term investment to transition to a low-carbon and more decentralised world. Mobilising investment at reasonable cost will be key to the success of the energy sector in meeting consumer and societal objectives. Developments such as Electricity Market Reform have successfully reduced the risks that investors in low-carbon generation face.

Subsidies and other forms of state support have played an important role in creating markets for new technologies and reducing costs. Competition for support under Contracts for Difference has already produced substantial benefits for consumers; the Competition and Markets Authority (CMA) estimated that consumers benefitted by around £110 million per year from the first competitive auction in 2015.

We continue to encourage the UK government to allocate future support competitively as far as possible, so that all technologies compete with each other. These are extremely important decisions, and the scale of the investment decisions involved in technologies such as nuclear, tidal lagoons and CCS is such that the implications of decisions will be felt on consumer bills for a significant amount of time. We should treat with caution arguments about needing to invest early in building supply chains and locking-in to the roll-out of particular technologies a long way into the future. There are substantial potential benefits from agility, from learning over time before making decisions and from commercial decision-making in competition with other options.

² https://www.ofgem.gov.uk/system/files/docs/2016/11/evaluation_of_the_lcnf_0.pdf

Competition between different technologies could potentially result in savings of billions of pounds on energy bills over the long run. Affordable decarbonisation with the lowest long-term costs for consumers can be achieved through fostering competition between technologies as well as careful modelling and analysis of their impact on consumer bills.

There is also a continuing need to ensure that network charging arrangements facilitate competitive markets. Our work on charging arrangements is a response to the ever-changing way in which the network is used. We are consulting on reviewing and changing some of the charges that electricity transmission and distribution network users pay for using the networks. We think that the current way the 'residual' charges are applied could lead to potentially detrimental differences in costs for different groups of consumers, and inefficient investment decisions resulting in increasing costs for consumers overall.

We agree that resilience and flexibility must be key considerations in energy system design and planning. National Grid is obliged to ensure the security and quality of electricity supply across the GB transmission system, using tools including the Balancing Mechanism and contracts for balancing services.

As the consultation suggests, we recognise that some energy system decisions may affect the achievement of wider Scottish government objectives, such as the desire for a balanced regional generation mix. We consider that there are significant benefits in promoting a predictable framework for investment based on market signals and economic efficiency, which will lead to secure and sustainable outcomes at least cost to consumers. Where this does not meet other objectives, in our view customers' interests are best served by interventions being explicit and ideally outside the scope of customer energy bills.

Flexibility

The energy system is already undergoing significant change. In Scotland, the potential for further electrification of heat and transport could place additional pressures on electricity networks. The Strategy rightly highlights that there is great potential for investment in a range of smart technologies that will enable a more flexible and resilient energy system. New ways of matching supply and demand in real time will need new rules and regulations.

As the regulator, our job is to create the right environment for this to happen. We are committed to ensuring the energy system works for people and businesses. If we do this in the right way, we will ensure that Great Britain has a secure, affordable and clean energy system now and in the future.

In November, we issued a joint call for evidence³ with the UK Government setting out our thinking in a number of key areas. We received a large number of responses to this call for evidence, which demonstrates the importance and level of interest in the area. We hope to publish a plan setting out the steps that we and the Government will now take later this year.

The call for evidence also examined issues such as how we can ensure that the uptake of lower carbon modes of transport is managed in a way that works for consumers yet also contributes to a flexible energy system.

We welcome the Scottish Government's intention to work in collaboration with BEIS and Ofgem in developing a plan to address the issues highlighted in our call for evidence.

³ <https://www.ofgem.gov.uk/publications-and-updates/smart-flexible-energy-system-call-evidence>

Chapter 4: Transforming Scotland's energy use

We support the focus on continuing to improve the energy efficiency of Scotland's building, transport, manufacturing and industrial sectors, alongside a retail market that delivers fair outcomes for all consumers.

Energy Efficiency

We note that the Scottish Government designated energy efficiency to be a National Infrastructure Priority in June 2015 and will seek to create a supply chain for energy efficiency services and technologies through Scotland's Energy Efficiency programme (SEEP).

Improving the energy efficiency of existing buildings and setting high standards for the performance of new-builds will be a key component in the decarbonisation of heat. Energy efficiency can also help to reduce bills, tackle fuel poverty and improve health and wellbeing. Where possible, opportunities for improved energy efficiency and switching to low carbon fuels should be coordinated in order to minimise disruption to end users. We agree that with the right tools and expertise, local authorities could play a role in identifying appropriate solutions and coordinating connections for heat networks.

Smart Technology

The UK Government's commitment to roll out 53 million smart meters by the end of 2020 will form the basis for enabling consumers to play an active role in managing their energy needs. Along with other system changes, such as half-hourly settlement, it will also allow domestic consumers to become providers of system services in new ways.

We are committed to smart meters and think that they can have positive impacts for consumers and competition. BEIS are responsible for the policy but we have an active programme to monitor how suppliers deliver on their obligations. We want to support the benefits that smart meters can bring to consumers and emphasise our determination to protect consumers' interests in the rollout.

We are supportive of the Scottish Government's intention to explore opportunities to achieve synergies between energy efficiency programmes and the smart meter rollout. Together these can give consumers greater control in both managing and reducing their energy demand.

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.

Achieving the benefits from such technological developments will require a regulatory and policy framework that supports innovation while recognising the need to protect consumer interests. We are committed to delivering such a framework.

Protecting consumers in the retail market

In response to our referral, the CMA has put forward a package of remedies to free-up competition and innovation in the market in order to drive down bills and improve service for all consumers. Combined with other changes already happening, such as smart meters and faster switching, these remedies provide an opportunity to transform the energy market and give consumers a new, better deal.

One area of particular relevance to Scotland is that the CMA identified specific detriment for customers on restricted meters. The CMA has put forward two remedies to improve this, requiring suppliers to make their single rate tariffs available to these customers without a costly meter replacement, and to improve access to information and advice, where suppliers and Citizens Advice have been given a particular role.

These types of interventions demand a new approach from suppliers. Continuing with the status quo is not an option. This also applies to our regulatory role. Removing rules that may restrict competition and innovation is part of our move towards a more principles-based approach to regulation. We are also 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.

Chapter 5: Delivering smart, local energy systems

Local energy systems

We note the Scottish Government's commitment to support the development of local energy economies in conjunction with the wider transformation of Scotland's energy system. We feel that the emergence of local energy is a welcome development and one that has the potential to increase consumer engagement and choice. Much of the leading edge innovation in this area is already happening in Scotland.

Local schemes need proportionate treatment and, where practical, entry barriers should be reduced. We believe that the viability of local energy models should be founded on improving consumer outcomes and not on avoiding fair contributions to the system's shared infrastructure. The regulatory framework will need to evolve to ensure consumers' interests are realised in the future energy system. We discuss some of the issues raised by local energy schemes in our future insights paper, *Local energy in a transforming energy system*.⁴

Our *Forward Work Programme 2017-18*⁵ sets out what we plan to do in the near term. This includes our work on flexibility, the development of our high-level strategic approach to energy system and network regulation, and our continued work on future retail market arrangements. These developments are about creating a regulatory environment that enables the emergence of business models that are in the long-run interests of consumers.

⁴ <https://www.ofgem.gov.uk/publications-and-updates/ofgem-future-insights-series-local-energy-transforming-energy-system>

⁵ <https://www.ofgem.gov.uk/publications-and-updates/forward-work-programme-2017-18>

A Government-owned energy company

The Strategy proposes to explore the development of 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 Link⁶ 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.

Chapter 6: Delivery, monitoring and engagement

The transition to a low carbon economy will require clear roles and responsibilities of the various bodies involved in the energy system including local authorities. We highlight the potential role that local authorities could play in our response to your *Consultation on Heat & Energy Efficiency Strategies, and Regulation of District Heating*.

We are supportive of the Energy Strategy being designed for the long-term and seeking to respond flexibly to technological developments and consumer preferences over time. We believe that there are substantial benefits to allowing principles of agility, trialling and innovation to inform decision-making.

Thank you again for the opportunity to respond to this consultation. We are happy to discuss any of the areas outlined in this response in greater detail. Should you wish to do so, please contact energy.futures@ofgem.gov.uk.

Yours sincerely

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⁶ <https://www.ofgem.gov.uk/about-us/how-we-engage/innovation-link>