SUBMISSION FROM SSE

SSE is a UK owned and based energy company. It is involved in the generation, transmission, distribution and supply of electricity and the production, storage, distribution and supply of gas.

SSE is currently investing the equivalent of £4m every day in low carbon sources of energy and the infrastructure to support it. Its investment plans to 2015 will see it invest more than it makes in annual profit.

This response considers the proposals in RPP2 which impacts upon SSE’s operations in the energy sector.

**RPP2 and the achievability of Scotland’s climate change targets**

SSE supports the Scottish Government’s intention to decarbonise the energy sector.

The RPP2 trajectory forecasts that if all proposals and policies are met, on time and in full, alongside the EU introducing a 30% emissions reduction target by 2030, all of Scotland’s future emissions reduction targets will be met. SSE fully supports the introduction of a tougher EU emissions reduction target, however in its absence the Scottish Government’s own predictions indicate that Scotland will fall short of its long-term emission reduction targets. In addition, there is a risk that predicted emission savings will not be achieved due to a delay in implementation.

The Scottish Government has set ambitious climate change targets. Looking at the sub-targets in the context of energy alone, SSE believes meeting these targets will be challenging. Energy policy is largely determined at a UK level and the current passage of the Energy Bill presents the industry with a significant degree of investor uncertainty, in particular the introduction of a new support mechanism for low carbon electricity generation, namely the Feed in Tariff Contract for Difference (CfD).

SSE believes the consequential effect of this uncertainty may lead to a worsening of the investment hiatus, in particular as the new developments find it increasingly difficult to first generate before March 2017 to secure access to the RO. This could have implications for Scotland’s 100% renewables target and subsequently, emission reduction targets. An extension of the RO until such a time that developers have confidence in the new support mechanism could mitigate this uncertainty and encourage the necessary investment for Scotland to realise its renewable and emission reduction ambitions.

To further improve the outlook for investors and the supply chain SSE also recommends that an EU-wide renewables target is set for 2030. Without this there is a limited level of investment certainty beyond 2020, when the legally-binding targets expire.

**Reducing energy demand and emissions**

SSE strongly supports the Scottish Government’s ambitions to reduce carbon dioxide emissions from its building stock and views energy efficiency as the best approach for households to reduce their energy costs and the most sustainable means of alleviating fuel poverty.
Household energy bills are dependent on the amount of energy used, therefore rising energy prices do not necessarily equate to similar rises in customer bills. Improved household insulation has reduced energy usage. So much so that if customers continued to use the same amount of energy as they did in 2005, a typical SSE customer bill would be around £400 higher using current prices (see figure 1 in annexe)\(^1\).

SSE therefore fully supports the principles behind the Green Deal and Energy Company Obligation (ECO), which it believes could - over time - have a transformational effect on the existing UK building stock and be a key contributor towards emission reduction targets.

One of the greatest barriers to Green Deal take-up continues to be consumers’ perceptions, as well as costs. To realise the full benefits of the policy action must be taken to educate and inform customers about the long-term benefits of improving their household insulation and to remove the non-financial hurdles which, in many cases, prove to be the main blockage.

It is essential however that ECO delivers value for money for bill payers and does not become counter productive in efforts to help alleviate fuel poverty. An independent report by economic consultancy NERA for Energy UK found that the annual cost of ECO could be £2.35 billion or more, significantly greater than the Department of Energy and Climate Change (DECC) estimate of £1.3 billion a year\(^2\).

Given the potentially huge variation in costs, SSE believes that the UK Government should place a cap on the total cost of the scheme, so that consumers, who will pay for it via their gas and electricity bills, do not pay too much if the costs escalate. The consequential effect of a cost cap however may result in ECO not achieving its proposed level of carbon savings which in turn, would have a knock on effect on Scotland’s climate change targets.

SSE believes the right balance needs to be struck between achieving the intended carbon reduction targets and ensuring consumers are contributing towards a cost-effective policy.

**National retrofit programme**

As highlighted previously, SSE believes that improving household energy efficiency is the most cost effective and sustainable way of mitigating increasing energy costs and alleviating fuel poverty.

It therefore welcomes the range of measures introduced by the Scottish Government to tackle fuel poverty, including the recently introduced National Retrofit Programme. The Scottish Governments intention to target NRP measures at areas with high instances of fuel poverty is welcome and in parallel with ECO and Green Deal, could, over time, have a transformational effect on Scotland’s existing building stock and help contribute to carbon reduction targets.

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\(^1\) [http://www.sse.com/MarketOutlook/](http://www.sse.com/MarketOutlook/)

To maximise ECO delivery in Scotland it is essential that it is cost effective, particularly as GB energy consumers will ultimately pay for ECO through their energy bills. The Scottish Government’s NRP has the potential to bridge the gap in areas where ECO may be more expensive to deliver, particularly remote areas including island communities.

Another way in which the Scottish Government could help maximise ECO and Green Deal delivery in Scotland would be to relax the planning rules for solid wall insulation, the main measure required for the communities aspect of ECO. Planning rules in England were recently relaxed so that in many cases, solid wall insulation is now classed as ‘permitted development’ and therefore does not require planning permission\(^3\). This is an extremely positive move and is likely to encourage a greater uptake of ECO and Green Deal measures as a result. SSE strongly urges the Scottish Government to adopt this approach to ensure Scotland is as attractive as other parts of the UK for ECO delivery.

**Energy Bill Revolution**

SSE was the first major energy supplier to join the Energy Bill Revolution campaign, which calls for public revenues from carbon pricing such as the European Emissions Trading Scheme (EU-ETS) and the Carbon Floor Price to be reinvested in homes, providing billions of pounds to help insulate the UK’s homes\(^4\). This would clearly have a massive impact on both reducing emissions and energy costs. SSE will continue to call on the UK Government to reinvest revenues from carbon pricing to make a lasting impact on improving the efficiency of consumers’ homes as well as helping efforts to tackle climate change.

**Measures for assessing the energy performance and energy efficiency of existing non-domestic buildings**

SSE supports efforts to reduce emissions from all property types, both domestic and non-domestic and as noted previously believes reducing energy demand is one of the most cost effective ways of reducing emissions and energy costs. Whilst we do not have a particular view on how this should be measured, it is essential that a consistent energy performance measurement is adopted across the UK, particularly as the same businesses (SSE prime example) operate in all parts of the UK.

**Renewable energy – electricity and the promotion of the use of heat from renewable sources**

SSE is the UK’s leading generator of renewable energy with an installed capacity in Scotland of over 2300MW and has significant renewable developments planned in Scotland. Scotland clearly has enormous renewables potential with some of the most abundant natural resources in the world.

Realising this potential is ultimately dependent on an attractive investment climate; in particular ensuring investors have confidence in the long-term remuneration of their investment. The Scottish Governments proposed decarbonisation target is a welcome signal to the renewable energy industry and supply chain but the


uncertainty regarding the Energy Bill, which sets the framework for low carbon investment post 2017, should not be underestimated.

**Electricity storage**

The intermittent nature of renewable generation means there will be an ever increasing role for electricity storage facilities in order to ensure Scotland’s electricity demand requirements can be met at all times.

SSE is developing two pumped storage hydro electric schemes, Balmacaan and Coire Glas, both of which will have an installed capacity of up to 600MW and a storage capacity of up to 30 GWh each. SSE believes the role of pumped storage will play an increasingly crucial role in helping balance Scotland’s electricity needs.

Given the critical importance of pumped storage developments SSE believes that greater support should be afforded to their development. The capacity mechanism currently being legislated for in the Energy Bill must be used to provide greater support for pumped storage.

Other forms of electricity storage are relatively untried and tested on a large scale. SSE is trialling the connection of a large lithium ion battery to the Orkney electricity network to investigate how large-scale batteries could help with connecting new renewable energy generation to the grid, and help better understand how large scale batteries may help provide future security of supply.

**Renewable heat**

As Scotland moves towards decarbonised electricity generation electric heat will have an increasingly important role to play in meeting Scotland’s heat requirements. SSE has been working with Dimplex to produce new, state of the art, energy efficient storage heaters. The next generation of storage heaters not only offer reduced running costs and lower emissions, they also offer a genuinely flexible way of controlling demand, which will be crucial in addressing the intermittent nature of renewable generation.

SSE also provide renewable heating systems such as Air and Ground Source Heat Pumps, Solar Thermal Water Heaters and Biomass Heating Systems, offering consumers an affordable, low carbon alternative, to conventional heating systems. The UK Government’s Renewable Heat Incentive is a welcome support mechanism to encourage the uptake of renewable heating solutions.

To maximise the uptake of renewable heating solutions in Scotland, SSE strongly supports a change to the permitted development status of Air Source Heat Pumps (ASHP) where MCS noise standards are met. In England and Wales where this challenging noise level is achieved, installations can proceed without further approval. Where this standard cannot be met the full planning process is invoked, which reviews the impact and any mitigation before a decision is made. In SSE’s experience, very few issues have arisen following the implementation of this policy.

However, in Scotland both permitted development (>100m from neighbour) and projects that meet the MCS standard are still required to have full planning packs submitted. This increases the costs for the consumer and the Scottish taxpayer in addition to elongating the installation process for between 1 and 3 months.
In addition to this, the imminent launch of the domestic RHI scheme will put increased volume and pressure on the planning departments to process these applications in a timely manner.

Consumers often decide to change their heating system when it reaches the end of its useful life or breaks down. The delays caused by the planning process therefore restrict these customers from taking advantage of an ASHP, one of the most cost effective forms of renewable heat.

SSE strongly urge the Scottish Government to relax the planning rules in this respect to help maximise the uptake of air source heat pumps and ensure a consistent approach is adopted across all local authorities in Scotland.

**Biogas and Hydrogen**

With gas likely to remain a main source for domestic and commercial heating, at least in the medium term, SSE believes biogas and potentially hydrogen will have a vital role to play to help meet emission reduction targets. Prolonging the use of the important gas infrastructure can avoid the need for investment in alternatives. SSE has a 50% share in Scotia Gas Networks (SGN), who is already involved in a number of biogas and hydrogen projects in the UK and are actively looking at opportunities for biogas development in Scotland. See the annex for more details.

**Interconnection and grid upgrades**

SSE owns and operates the electricity transmission network in the north of Scotland. As the licensed transmission company for the area it has to ensure there is sufficient network capacity for those seeking to generate electricity. Due to the increasing demand from renewable generators in the north of Scotland to connect to the network, SSE is undertaking a number of projects to upgrade the transmission network. Our plans for the transmission network for 2013 to 2021 have been approved by Ofgem with a proposal for up to £1.1bn capital investment programme, with the flexibility to increase this by up to a further £4bn if required.

SSE supports the role of interconnectors in meeting future demand requirements, particularly in providing capacity to mitigate the intermittent nature of wind generation.

**Transmission charging**

SSE have long argued for a fairer transmission charging regime for electricity generators in Scotland and we welcomed Ofgem’s initiative back in September 2010 to start a process of looking at changing the transmission charging arrangements. We further welcomed Ofgem’s conclusions in May 2012 to take forward change and instruct National Grid to raise a Modification to bring forward the required changes.

However, SSE remains concerned that the process is taking an overly long time and that whilst Ofgem initially envisaged new charging arrangements potentially coming into force from April 2012, we are concerned that we may not have new arrangements in place even for April 2014. This would be a travesty, potentially affecting investment decisions across Scotland and is particularly disadvantageous to the process of cabling the Scottish islands for new renewable generation thereon. It is essential that the new charging regime is introduced without any further delay,
providing industry with the confidence they need to take forward investments in electricity generation.

**Fuel prices and fuel poverty**

SSE, through its supply business Scottish Hydro, supplies energy to around 1m customers in Scotland.

SSE takes very seriously its role in helping customers who struggle to pay for their energy needs. This year SSE intends to spend over £50m to support customers who need help. This help includes the Warm Home Discount, benefit entitlement checks and offering free or discounted energy efficient appliances.

One of the greatest challenges to addressing fuel poverty is targeting those customers in need and tailoring the available support to their needs. SSE has long advocated the creation of central ‘agency’ to co-ordinate the support available to those customers who need it. Any solutions to fuel poverty must address this issue. It is for this reason that customers are actively encouraged to contact SSE to find out about the various forms of help available – it can always find a solution to help a customer who is struggling.

**Fuel prices**

There are a number of costs which feed directly into customers’ energy bills. The wholesale costs of energy make up around half of the average bill and the rest is largely made up of the costs of using the energy networks and funding Government mandated schemes.

Around 90% of the costs in the average energy bill are out of suppliers’ control.

In recent years three principal factors have increased energy prices: the wholesale costs, the costs of using and improving the energy networks and the costs of Government mandated schemes, particularly those intended to improve household energy efficiency.

The UK’s energy prices are, on average, cheaper than in comparable EU countries. UK Government statistics show that in the first six months of 2012 the UK had the cheapest gas prices and the fourth cheapest electricity prices in the EU 15 (including taxes)\(^5\).

SSE supports the long term decarbonisation of the energy sector, reducing our dependency on fossil fuels, and believes this should help stabilise prices and result in significantly lower costs to consumers. SSE’s price tracker demonstrates the historical volatility of wholesale prices and the impact this has had on energy prices (see figure 2 in annexe)\(^6\).

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\(^5\) DECC (2013) - DECC Energy Price Statistics

Annexe

Figure 1

Reductions in energy demand for SSE customers

![Graph showing demand reduction for Standard Domestic Electricity]

Figure 2

How the factors making up energy prices have changed over time

![Graph showing SSE Price Tracker - Jan 2013]