"A well-functioning internal market in electricity should provide producers with the appropriate incentives for investing in new power generation, including in electricity in renewable sources, paying special attention to the most isolated countries and regions in the Community's energy market."

Preamble (at point 6) to Directive 2009/72/EC of 13 July 2009.

"The present integrated system, encompassing the single market and the shared regulatory regime and approach to investment in networks, brings benefits to both Scotland and the whole UK. It strengthens energy security and resilience, provides a larger, more attractive market for investors, increases competition, and underpins the shared approach to investing in low carbon generation."

Scotland Analysis: Energy, DECC, 2014.





"Any indicator of fuel poverty that has consistently reported figures of millions of consumers being affected clearly demonstrates the failure of our efforts to alleviate fuel poverty in the UK to date and underlines the requirement for a more drastic course of action."

Derek Lickorish MBE, Fuel Poverty Advisory Group Chair, Department of Energy and Climate Change May, 2014.

# EXPERT COMMISSION ON ENERGY REGULATION HIGH-LEVEL SUMMARY

**Energy Regulation in an Independent Scotland** 

#### BACKGROUND

In July 2013, the Scottish Government established an expert Commission of industry and consumer experts and academics, and asked them to offer independent advice on the operation and regulation of the energy market in Scotland and Great Britain in the event of independence. The Commission was also asked for its advice on policies to encourage renewables, improve energy efficiency and address fuel poverty in Scotland.

The Commission is independent and non-partisan, and has conducted its work and reached its conclusions in an unbiased manner. Commission members were chosen for their experience and depth of industry knowledge, ranging across power systems and market regulation to infrastructure and consumer issues. All Commissioners were unpaid and undertook this work voluntarily.

#### MEMBERS OF THE COMMISSION

- >> Robert Armour, Chairman, Smarter Grid Solutions; Senior Counsel, Gowlings; Director, Albion Community Power; Nuclear Liabilities Fund; Former Chair SCDI Chair of the Expert Commission.
- >> Simon Bucknall, Retired, Formerly Director of Regulation, Scottish Power.
- >> Tom Delay, Chief Executive, The Carbon Trust.
- > Audrey Gallacher, Director of Energy, Consumer Futures.
- >> Dr Robert Gross, Director, Centre for Energy Policy and Technology, Imperial College, Co-Director, UK Energy Research Centre.
- >> Gordon MacDougall, Managing Director, Western Europe, Renewable Energy Systems.
- >> Dr Fiona Riddoch, Managing Director, Cogen Europe.
- >> John Scott, Director, Chiltern Power, Formerly Director of Engineering National Grid and Technical Director, Ofgem.
- >> David Sigsworth, Chairman, SEPA, Chairman of the Scottish Fuel Poverty Forum, Former Board Director, SSE.
- >> **Dr Graeme Sweeney**, Special Advisor on CO<sub>2</sub> to Royal Dutch Shell, Executive Chair of Chop-cloc; Chairman of the Advisory Council of the European Technology Platform on Zero Emission Fossil Fuel Power Plants (ETP-ZEP).

The Commission was asked to consider five specific issues:

- 1. The role of a Scottish Regulator in the optimal operation of the UK energy market to deliver affordability, security of supply and environmental sustainability.
- 2. The market mechanisms necessary to ensure an independent Scotland can participate efficiently in an integrated GB market, addressing the unique requirements of energy generation, transmission and distribution in Scotland.
- 3. How a strategic energy partnership with the UK will operate its span of competence and the processes for cooperation with the UK.
- 4. Options for an optimal policy and regulatory environment to encourage renewable generation, including incentives for innovative technologies and the supply chain.
- 5. Advice on ways in which an independent Scotland can promote fairer, more affordable energy prices, given the need to address fuel poverty and measures to improve energy efficiency.

This short summary sets out the Commission's high-level conclusions and responses to each of these questions. It is intended to act as a companion to the Commission's full report, which provides considerably more background in each of these areas and on the Commission's conclusions.

### CHAIRMAN'S INTRODUCTION

Energy is an essential part of our modern world. Its ready availability underpins most aspects of our daily lives at home, at work and in our leisure time. Providing the heat and power we need on tap comes at an economic and environmental cost, and its efficient supply depends on a complex infrastructure that creates natural monopolies.

As a result, all governments face the challenge — the energy trilemma — of providing their citizens with secure, affordable, and low carbon power. To deliver that, the electricity and gas industries require regulation to drive competition, safeguard the environment, protect consumers and the public and create the predictable market conditions that encourage necessary investment.

Historically, the UK's power industry has delivered reliable and competitive supplies. In recent years, the challenge of decarbonising the sector, incentivising innovation and new investment and addressing affordability has required new approaches.

The major political parties all support the proposals for Electricity Market Reform (EMR) being introduced to encourage investment. Where the parties differ tends to be in the areas of consumer protection and price regulation, the generation mix required to meet environmental and economic objectives and the level of intervention required to optimise market outcomes.

Those differences matter because they create uncertainty in a sector that requires circa £200 billion of investment across the UK in the coming decade to 'keep the lights on'. Worryingly, against a background of UK capacity margins declining to the lowest levels for decades, markets are failing to offer price signals that will justify new investment, while consumer trust in the industry

and its regulators to deliver just and affordable outcomes is at an all-time low<sup>2</sup>.

At the same time, the impact of the recent recession and climbing consumer prices has heightened the need to tackle energy efficiency and address fuel poverty effectively. The Commission has spent much of its time on this area, recognising the current imperative of affordability. However, concerns on security of supply both internationally and in terms of tightening capacity margins — and the need to mitigate climate change — are also clear priorities.

The Commission has primarily focused on the electricity sector given the complexity of the issues faced there. However, the question of the regulation and operation of gas networks and markets is important and raises a number of points — some are specific to gas, whilst others are germane to both electricity and gas markets.

Gas is a globally traded and storable commodity. Scotland's access to gas supplies, some of which lands at St. Fergus, should not be unduly affected in the event of independence. Continued regulation of the high-pressure gas transmission network, currently owned and operated across the whole of the UK by National Grid, will come under scrutiny and may require some restructuring. However, in principle, this should be relatively straightforward if there is sensible cooperation between the Scottish Regulators and their counterparts. Northern Ireland's gas originates from a supply point in Scotland. Other areas, such as regulation of low-pressure distribution network costs, storage and safety should be capable of being dealt with at a national level, albeit that cooperation amongst regulators to set common standards and arrangements would be beneficial.

<sup>&</sup>lt;sup>1</sup> https://www.ofgem.gov.uk/ofgem-publications/76390/ofgem-discovery-pr8-2.pdf

<sup>&</sup>lt;sup>2</sup> http://consumerinsight.which.co.uk/tracker

Oversight of gas quality and composition is also important for consumer protection. Retail market arrangements for gas in Scotland, like the electricity retail market, is an area that would need to be governed by the combined economic regulator along with oversight from the proposed Scottish competition authority to ensure retail competition and fair pricing.

Our Interim Report, issued in October 2013, set out key assumptions which we took as givens in addressing the questions posed. These assumptions included Scottish independence, the implementation of EMR, a multi-utility approach to regulation, and continuing integrated transmission networks and wholesale markets for gas and electricity. We also assumed that Scotland and the rest of the UK remain in the EU, bringing with it the current economic, social, environmental and structural requirements the EU places on independent regulators or member states as it drives greater market integration across Europe.

The EU provides a framework and indeed some protection for smaller member states, but it is not a straightjacket. The current devolved arrangements in the UK already allow for different energy-related policies, principally in the areas of energy efficiency, fuel poverty and renewables. Each jurisdiction will inevitably have different policy priorities, and over time they may change.

A multi-utility regulatory model makes sense for smaller nations. An independent regulator that is credible and able to respond to periods of stress while providing a consistent regulatory approach to underpin a stable investment climate is important for any nation, and particularly so given the prominence of energy in the Scottish economy.

Any regulatory system has to be designed to remain robust and effective through changes of administration and policy. In Scotland's case the administration in 20 years' time may have a quite different outlook on energy than that we see today. The power system it oversees will have radically changed as we move to decentralised generation and empowered consumers in a low carbon world.

In addressing the questions we took a longer-term view, beyond the necessary period of grandfathering existing arrangements through a managed transition, to consider the needs of a Scottish Government facing a markedly different energy system in the 2020s and beyond.

The issues we are considering will be important whatever the outcome of the referendum. Under any political scenario, markets, regulation and policy will change over time.

That means setting our sights above the current political debate. The Scottish Government set out one vision of a new world in *Scotland's Future* in November 2013. The UK Government published its *Scotland Analysis: Energy* in April 2014. Both positions can be expected to adjust in the negotiation that would follow from a vote for independence. We have tried to address the questions posed to us rationally and without bias on the basis of sensible cooperation and mutual interest between the administrations that share our common island. This has been assisted by the cosmopolitan composition of the Commission, drawn from across the UK.

I would like to record my thanks to the members of the Commission who have voluntarily, diligently and generously committed their time and talents to the task we were set.

Similarly, I would also like to thank Rebecca Whyte, Neal Rafferty and particularly Chris Bronsdon, our secretary, for their support, forbearance and insight over the last nine months.

#### **Robert Armour**

Chair, Expert Commission on Energy Regulation June 2014

# The role of a Scottish Regulator in the optimal operation of the UK energy market to deliver affordability, security of supply and environmental sustainability

- Scotland will need an independent National Regulatory Authority (NRA)
- Scotland's Regulator for electricity and gas should be established with a clear mission, duties and responsibilities. At a minimum these should include:
  - ensuring that consumer interests are protected
  - delivering a regulatory framework which ensures system operability and security. This is an enabler for 'just, transparent and affordable' energy costs for current and future consumers
  - evaluating and advising on current and future system risks while providing advice and reports on Security of Supply, gas storage and Environmental Sustainability
  - certifying a Scottish Transmission System Operator (TSO) and assessing its investment plans
  - overseeing access to the transmission and distribution networks
  - encouraging innovation in the sector to promote cost-effective solutions to the disruptive challenges

- ahead, such as the integration at scale of low carbon technologies
- >> These roles can fit within a multi-utility regulatory structure
- >> The tendency to load non-regulatory and delivery functions on the Regulator should be resisted
- Scotland's Regulator should establish a comprehensive and constructive relationship and set of working agreements with its counterpart in the rest of Great Britain (rGB), including periodic review
- Scotland's Regulator should recognise underlying socio-economic, climatic and geographic differences in Scotland to the GB market and help deliver local solutions – including, for example, the regulation of heat networks and off-grid supplies
- >> There should be a settled set of principles for an agreed period governing the Scottish Regulator's duties, its reporting and accountability to the Scottish Parliament.

A multi-utility regulator covering electricity, gas and water is an approach adopted by many smaller nations. We think it makes sense in Scotland.

The Scottish Government's proposed combined economic regulatory (CER) model has a very wide scope and will require thoughtful design due to the potential for competing demands on the expertise and capacity of the Regulator and its governing board, especially at a time of energy system investment and change. The Commission has not addressed regulatory issues beyond the energy sector.

Scotland's energy regulator must have a clear mission statement and set of duties, plus sufficient resources (within the multi-regulatory model envisaged by the Scottish Government) to ensure that it can deliver. It must be properly independent of government, but operating with a clearly defined framework and working relationship.

Work should begin as a priority to explore the nature and content of the joint agreements and working practices that will need to be in place from the outset between the Scottish Energy Regulator and its rGB counterpart. This will be based upon trust and a high degree of technical understanding and competence.

This process should also recognise and establish from the outset areas (the retail market, for example) where Scotland's specific circumstances and the needs of Scotlish consumers might require a different approach to be taken.

The agreements and working practices developed with other jurisdictions must be robust and encourage cooperative and shared working. A strong framework will ensure that arrangements function well and prevent delays to the important energy industry changes that are already underway.

An effective response to the industry changes ahead will be facilitated by promoting innovation in the sector. As these changes form part of an international agenda, it is likely that high quality jobs and exports could be a further beneficial outcome.

The Commission encourages both Governments to tackle the resolution of complex issues as the regulatory arrangements are established. Experience in other countries shows that this is the best approach, rather than making changes once operations and market systems 'go live'.

The core focus of the Scottish Regulator should be on the economic regulation of electricity and gas networks and markets, with an appropriate level of resources to deal with the associated complexities. The tendency to load non-regulatory and delivery functions on the Regulator should be resisted and delivery functions which are not part of this core focus will need to be reviewed and potentially reallocated elsewhere.

Environmental objectives and ambitions will remain key issues for Scotland and could present opportunities for new approaches to be taken. In time, for example, regulation could potentially extend to include heat networks and off-grid supplies.

Consideration of market mechanisms to ensure an independent Scotland can participate efficiently in an integrated GB market, addressing the unique requirements of energy generation, transmission and distribution in Scotland

- >> Continuation of the single GB electricity wholesale market, transmission and distribution arrangements post-independence will be the most rational outcome for consumers and investors
- ➤ Experience shows that single energy markets can withstand degrees of difference in energy policies adopted by the respective national governments
- >> Generation operating, or projects committed across the GB system at the point of independence and supported by existing market mechanisms, should be grandfathered - current commercial arrangements should be honoured, with the historic costs spread across all GB consumers as at present
- >>> For new generation post-independence, the eligibility of Scottish generators for support under UK-wide market mechanisms will need to be agreed by an independent Scottish Government and its rGB counterpart as an early priority

- ≫ An independent Scottish Government will have trade-offs to consider within the single market structure between support for new Scottish generating capacity and greater interconnections with rGB and continental Europe, in the context of the market signals which presently discourage new thermal capacity in Scotland
- >> An independent Scottish Government should evaluate the scope for (and effect on interconnections and system operability arising from) diverging approaches to network access, system capacity and investment, and transmission charging
- >> Clarity will be needed on the future of schemes designed to protect consumers from high energy infrastructure costs in parts of Scotland (such as the Hydro Benefit replacement scheme and cross subsidy arrangements for the Statutory Independent Undertakings in gas) and where these costs are allocated.

On 4 February 2014, the electricity markets of the North West region of Europe (covering 75% of the European power market and 15 member states including GB) were coupled for the purposes of day ahead trading. "This move will significantly enhance the development of the single EU energy market by favouring price convergence, which fosters competition and therefore leads to a greater choice of services and tangible benefits for European electricity consumers."3

Electricity wholesale markets regulated by multiple jurisdictions operate in Europe. These have been implemented in recognition of the benefits to all parties of doing so, and are backed by a strong drive within Europe arising from EU Directives implementing moves toward a single, integrated electricity (and gas) market.

Within Great Britain, a single wholesale market has operated since the introduction of BETTA in 2005, when the New Electricity Trading Arrangements (NETA) were extended to Scotland. By maintaining the established GB wholesale electricity market, and a single synchronous electricity system operating across GB, the larger economies of scale minimise the costs to all parties of any transition in the event of a vote for independence.

The advantages of a single market are wide-ranging. The use of existing business infrastructure (for example, balancing and settlement services) maintains operability and reduces potential delays in implementation.

This Commission believes that it is sensible and cost-effective for consumers in Scotland and the rest of GB, and for investors for the single GB wholesale electricity and gas markets, to continue in a fully effective form, and that all parties should work hard to deliver such an outcome in the event of a vote for independence.

Operating under the current UK policy framework and the embodied renewable energy targets, energy supply companies have established a significant level of long-term supply contracts for renewable energy from Scotland. The Commission agrees with the Scottish Government position that generating capacity and contracts for all operating or committed projects at the point of independence should be grandfathered. This should apply reciprocally for both jurisdictions.

Scotland and rGB may choose to pursue differing policies within the retail market, where there is merit in doing so in terms of providing greater choice and improved services to consumers. Evidence from other jointly regulated markets in Europe demonstrates that different policy approaches can be applied in the retail sector for different jurisdictions, although the introduction of new mechanisms in one retail market that are not adopted by the counterpart retail market may lead to some additional costs and system issues for supply businesses which ultimately could be borne by the consumer. These are factors that can be assessed at the time of any policy change.

Industrial, technological and social policy are not core to the role of the Regulator and could be delivered through other agencies although oversight of the balance between incentives and investment requirements would be beneficial. The incidence and priority of social interests in Scotland often differs from rUK – such as in social support, fuel poverty etc. where differing policy priorities could be accommodated.

<sup>&</sup>lt;sup>3</sup> Alberto Pototschnig, Director of the Agency for the Cooperation of Energy Regulators (ACER), 4/02/14.

To consider how a strategic energy partnership with the Government of the UK will operate – its span of competence and the processes for cooperation with the UK

- >> The benefits of single markets for electricity and gas to all parties are generally acknowledged
- >> An effective energy partnership is important to ensure the best operation of market arrangements and security of supplies to all parties
- >> The negotiation and settlement of the strategic energy partnership needs to be kept separate from the arrangements for its ongoing governance and operation 'settle as counterparties, govern as equals'
- A clear governance framework, and institutional relationships that tackle the difficult issues will help ensure robust and enduring arrangements

- >> Mechanisms and processes need to be designed to accommodate change in an efficient way
- >> Safeguards protecting the rights and interests of all parties must be agreed
- Any policy changes intended to influence behaviours within a geographic part of the market will take place in the context of an integrated GB electricity system that cannot escape the laws of physics.

The Scottish and UK Governments recognise the shared benefits that the single market provides. Post-independence, the retention and operation of single energy markets for electricity and gas will need a strategic relationship and agreement between Scotland and rUK, which will extend to structural and governance arrangements between the Scottish and rUK Governments and the relationships between the National Regulatory Authorities.

The agreement between Scotland and rUK will need to be governed effectively to ensure robust protection of majority and minority rights. Both jurisdictions need to be confident the arrangements agreed cannot be unilaterally altered or nullified by the other party.

The interface between government and the Regulator in each jurisdiction should be clearly defined on a range of issues, including the role of government in setting policy, the relationship of government to the Regulator, and the role of the Regulator. It will also require an in-built capacity for review of the operation of the market and the effectiveness of the energy partnership after specified periods of time.

Scotland is presently a consistent net exporter of electricity to the rest of the UK, and in 2012 exported 13TWh, or over a quarter of all the electricity generated in Scotland. Under current forecast scenarios of high renewable generation installation in Scotland and closure of current coal and nuclear generation, Scotland is likely, at times of low renewables availability, to import electricity from rUK in order to continue meeting demand and for necessary network ancillary services.

The integrated nature of the GB electricity system highlights the need for a collaborative relationship between governments, Regulators and TSOs such that any changes which may affect its operation are developed by mutual agreement.

There is a variety of international comparators of joint regulatory models where two or more countries cooperate in the operation and regulation of a single market. Each of them has features tailored to their specific circumstances, and differs in scope.

These models could usefully be applied to a jointly regulated market for Scotland/rGB and demonstrate that a cross-border single market can be made to work effectively. Experience suggests that it is preferable to address the important issues and accountabilities including governance at the outset to avoid gaming or uncertainty later when joint arrangements are commercially operational.

An agreed change management process will be required to accommodate lessons from operation and changed circumstances.

If Scotland wished to operate the electricity system 'more independently', for example to achieve greater security of supply, this would be technically achievable and could be agreed within the limits of a jointly regulated system. However, any changes would require an evaluation of the costs and lead-time for implementation.

Options for an optimal policy and regulatory environment to encourage renewable generation, including incentives for innovative generation and network technologies and the supply chain

- Scotland's long-standing commitment to renewable generation and emissions reduction targets have provided a consistent signal to encourage investors
- The ability to trade and export Scottish renewable power across UK and European markets will be crucial to delivering Scotland's renewable aspirations
- >> Continuity of existing support mechanisms will reassure investors
- Any support will need to remain consistent with developing European targets and policy, including the role of competitive forces to reduce and determine technology costs
- The Scottish Government could tailor existing or new mechanisms to better reflect priorities and circumstances, subject to addressing the costs and

- potential complexities involved for generation, networks and consumers
- >> The Commission supports the joint efforts being undertaken by the Scottish and UK Governments to encourage the development of the energy resources of the Scottish Islands
- The Scottish Government could develop a wider range of tools which could be used to provide financial and structural support for technology, infrastructure and supply chain development
- >> Renewable generation requires connection and transmission capacity to reach its point of use
- >> Continuing development of the transmission and distribution networks will be important, including smart grid innovation technologies

The renewables industry has made significant investments, both in Scotland and across the UK, in response to the incentives and obligations put in place by both Governments, and the need to deliver economically efficient generating capacity.

EU targets for 20% of energy supplies (heat, transport and electricity), to be provided from renewable sources by 2020, are binding on member states and the UK still has much to do. Future proposals set out by the EU as part of their 2030 climate and energy package have not been finalised, but provide greater flexibility for member states to contribute to an overall EU target likely to be 27% of energy supplies. Investment in renewable energy supplies will take place where it is economically efficient to do so.

The prolific growth of renewables across Scotland, in particular over the past decade, reflects the huge natural resource that exists and the consistent commitment shown by Scotlish Government to support ambitious renewable energy targets. It has also taken place against the backdrop of a UK market for renewable electricity with Scotlish Government autonomy to set the same, or different levels of support, where warranted<sup>4</sup>.

Given existing policy commitments there will still be a strong demand for renewable power in the event of independence — both across the UK and potentially Europe, where the energy will be needed, subject to the required connections, network capacity and investments being equitably apportioned. Future renewable development requires an increase in grid access and capacity

as well as interconnection to provide a route to market. The EU Commission's ambitious plans for expansion of trans-European networks to provide energy security within the union will be particularly relevant to Scotland. This demand will extend from onshore wind, which is proven, and on a path towards grid parity with non-renewable alternatives to offshore technologies, where Scotland has unique potential.

The Scottish Government should prioritise the development of a supply chain and support for the development of offshore renewable technologies in deeper waters, where innovation and cost reduction could have real significance for global export markets. There is greater opportunity for Scotland to benefit from EU support for renewable expansion while aligning with guidance on minimising market distortion.

Serious efforts to encourage the development of gas storage is necessary for security of supply. To achieve objectives in a reliable, robust low carbon electricity supply, energy storage and smarter network management must be introduced. Scotland can access international markets and meet growing domestic needs and demands by aligning itself with Energy and Climate initiatives at the European Union level. Technology and industrial policy will be crucial enablers in all of this.

The Commission considers that there is a need to look at the implications on system security of the shifting balance between renewable and thermal electricity generating capacity as Scotland's existing power stations are retired, taken in the context of whole system operability and environmental objectives.

http://www.scotland.gov.uk/News/Releases/2008/09/19111827 http://www.scotland.gov.uk/Resource/0040/00401801.pdf

Advice on ways in which an independent Scotland can promote fairer, more affordable energy prices, given the need to address fuel poverty and measures to improve energy efficiency

- >> The Scottish Government must retain a concerted approach to tackling fuel poverty
- >> The establishment of a Fuel Poverty Agency would help drive strategic and structural changes aimed at tackling fuel poverty issues across Scotland
- The Scottish Regulator could review the structure and operation of the retail market across Scotland in view of Scotland's varied customer needs
- Screater competition in energy supply, and a new set of responsibilities for gas and electricity distribution businesses, can deliver better deals for Scotland's homes and businesses

- >> Certain 'social' and environmental policy costs should be removed from consumers' bills as long as funding for those initiatives is maintained
- Area-based delivery and trusted local intermediaries can help ensure that vital energy efficiency efforts and funding are tailored to reach and benefit more difficult and costly households and businesses
- >> There is scope for improvement in the roll-out of smart meters which will help realise their potential benefits to Scottish customers
- >> The wider use and penetration of both district heating and Combined Heat and Power (CHP) should continue to be widely and actively explored in Scotland.

Our ability, or inability, to pay for the energy we need has seldom had such a high profile. The rise in energy costs and bills over the last decade, allied with the poor condition of some housing stock, has had a significant impact on business competitiveness and household budgets, upon the number of homes and families living in fuel poverty, and on the importance and effectiveness of policies and programmes aimed at reducing demand for energy.

These issues are particularly acute in Scotland where there is greater concentration in the retail market, higher average consumption due to the colder climate and nature of the building stock, fewer customers with access to a gas supply and a concentration of expensive allelectric heating in rural areas, away from the gas grid — all of these things lead to unacceptable levels of fuel poverty.

While different criteria are used between Scotland and the rest of the UK to calculate the number of people in fuel poverty, any measure which consistently results in high numbers of consumers (2.4 million households were fuel poor in England in 2011), or a high percentage (27.1% of households in Scotland were in fuel poverty in 2012) demonstrates the need for a more radical approach to tackle fuel poverty.

Policies dealing with fuel poverty and energy efficiency are only partially devolved at the moment. The Scottish Government has the power to set its own targets — these include a target to eradicate fuel poverty, as far as is reasonably practicable, by the end of November 2016, and to reduce total final energy demand by 12% by 2020 — it

has also introduced new measures and programmes for Scotland. However, the devolved powers do not extend to measures requiring wider energy market regulation.

In the view of the Commission it is apparent, that under the current powers of the devolved Parliament in Scotland, there has been a significant effort to address fuel poverty and delivery of energy efficiency as a priority. However, due to a combination of factors including the recession, increases in energy costs, and changes to the Energy Company Obligation (ECO) announced in the Chancellor's 2013 autumn statement, the Scottish Government's target to eradicate fuel poverty will not be met. It is important to acknowledge this, and to ensure that sufficient financial resources and strategic direction remain focused on tackling this issue.

Establishing a Fuel Poverty Agency with the correct legal structure and powers to deal with information and data discontinuities, and coupled with Local Authority partnership to integrate social security information and vulnerable consumers, would provide a significant step forward in dealing with fuel poverty.

The Commission agrees with the Scottish Government that a Scottish Regulator would be better placed to deliver Scottish solutions. A suite of changes to energy supply functions, coupled with a greatly enhanced role for electricity and gas distribution businesses, could result in a stronger focus on local needs and better outcomes, identify those most vulnerable, and do much more to cut fuel poverty.

### **KEY MESSAGES**

#### Regulation

- An independent Scotland would need to put in place an independent energy regulator and an independent system operator. A multi-utility regulator covering electricity, gas and water is an approach adopted by many smaller nations. We think it makes sense in Scotland.
- 2. The Regulator will, as a minimum, have the core duties required under EU law. Increasingly, regulatory requirements encompass social and environmental aspects as well as purely economic regulation.
- 3. The non-core and delivery functions of the Regulator should be reviewed these can diffuse the focus of the Regulator which should be on its regulatory role.
- 4. There are working European models for combined regulation of single electricity and gas markets across EU member state boundaries. Experience from these regulators demonstrate ways in which to meet the challenges and complexities of multiutility regulation.
- 5. In the event of a vote for independence, the task of establishing new regulatory arrangements while maintaining a single market will extend beyond the creation of an energy regulator and an independent system operator (ISO).
- 6. They will also entail the establishment of authorities to oversee the financial and competition law applicable to energy markets, and the operational, health and safety regimes essential to good practice and maintaining public confidence.
- 7. Scotland will need new regulators and institutions to licence the continuing operation of existing nuclear stations and coal mining, and new operations in fracking and unconventional gas. Arrangements will be needed to regulate the safe decommissioning of nuclear, coal and other energy-related facilities on and offshore, and

- the funding arrangements to secure adequate provision for these and similar liabilities. It will also encompass appropriate health and safety regulation. These are significant projects and planning for these should commence early, if not already underway.
- 8. The new regulatory arrangements should be flexible and capable of adaptation. This will be to the benefit of all Scottish consumers and the Scottish economy.

## Making a Single Market Work Effectively

- There is an overwhelming consensus that the current integrated markets for electricity and gas, which provide benefits for the UK and Scotland, should be maintained.
- 10. The European Commission is driving greater integration of wholesale markets and regulatory cooperation across the EU member states. We can learn from single markets operating across borders in Ireland, Scandinavia and the Iberian peninsula to create an effective structure for cooperation and governance.
- 11. There will be difficult issues of cost socialisation and apportionment to be negotiated. These must be tackled from the outset and be supported by robust governance arrangements. This will give confidence to investors and governments that the settlement will endure, and that processes are in place to accommodate periodic change.
- 12. The operation of a single market implies relying on market signals and economic efficiency to drive investment. The benefits of a single market go hand in hand with countries accepting limitations on their rights to influence the arrangements within their geographical borders.
- **13.** Appropriate transitional arrangements and grandfathering of support arrangements for existing generators and committed projects is important to maintain investor confidence.

## **Encouraging Renewables**

- 14. Scotland is seen as the most economically attractive place within the single market to locate wind, wave, and tidal generation due to its natural resources. This has driven a rapid growth in renewables capacity, and is coupled with a strong and enduring policy commitment to encourage renewables, which has been an important factor in Scotland's success in attracting investment in green energy.
- **15.** Future renewable development requires an increase in grid access and capacity as well as interconnection to provide a route to market.
- 16. Scotland could tailor new mechanisms to promote renewable expansion, preferably designed to accommodate the European Commission's guidance on using mechanisms which are least distortive to markets. Priority areas should include energy storage, smart grids, and offshore wind as well as community scale projects.

# Addressing Fuel Poverty and Energy Efficiency

- 17. Scotland has a real opportunity to make a difference to fuel poverty and in energy efficiency. Historically, the issue of fuel poverty has been more acute and the focus on it greater. Scotland can already, under existing devolved powers, choose to tackle fuel poverty and move towards a just and affordable system.
- **18.** Removing certain social policy costs from domestic power bills and funding these from general taxation is sensible provided that funds are made available to address the new accountabilities.
- **19.** A fuel poverty agency could help drive a targeted and cost-effective means of delivering positive outcomes.
- 20. Faster deployment of smart meters might help realise the benefits to consumers sooner. The division of responsibilities and rights between supply and distribution businesses deserves to be revisited.

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