

National Infrastructure Commission  
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15-17 Furnival Street  
London  
  
EC4A 1AB

12 April 2019

To whom it may concern,

### **Future of Regulation: Response from Scottish Renewables**

Scottish Renewables is the voice of Scotland's renewable energy industry, working to grow the sector and sustain its position at the forefront of the global clean energy transition. We represent around 260 organisations across the full range of renewable energy technologies in Scotland and around the world, ranging from energy suppliers, operators and manufacturers to small developers, installers and community groups, as well as companies throughout the supply chain.

The imperative to decarbonise our energy system has never been clearer. The recent IPCC<sup>1</sup> report gives a timeline of twelve years in which to take fundamental and drastic action to manage temperature increases globally. Even with mitigation, we will still see lasting damage to the world and its population. The UK, with ambitions and legally binding carbon targets, has made significant progress in decarbonising, however with Government's own analysis setting out we are likely to miss our fourth and fifth carbon budgets<sup>2</sup>, we must renew our ambitions.

Our energy system lies at the centre of a wider set of efforts to decarbonise the UK economy and its regulation will be key if we are to succeed in meeting our targets. Our members, working to progress these objectives, have led a fundamental transition in the GB energy system to date. As we increase our decarbonisation ambitions, embrace new technologies, and decarbonise not just our power system but our heat and transport infrastructure, we expect the pace and scale of change in our energy landscape to accelerate and grow.

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<sup>1</sup> <https://www.ipcc.ch/sr15/>

<sup>2</sup> [https://www.gov.uk/government/publications/updated-energy-and-emissions-projections-2018?utm\\_source=f33ba48f-e258-47f5-9eca-86c13dcd6e58&utm\\_medium=email&utm\\_campaign=govuk-notifications&utm\\_content=immediate](https://www.gov.uk/government/publications/updated-energy-and-emissions-projections-2018?utm_source=f33ba48f-e258-47f5-9eca-86c13dcd6e58&utm_medium=email&utm_campaign=govuk-notifications&utm_content=immediate)

It is crucial that our regulatory frameworks enable this transition. We believe this can best be achieved through a focus on four key areas;

**Effective regulation of the new energy system** – whereby regulation (from Ofgem in particular) should explicitly seek to enable the low-carbon energy transition, through a change in statutory obligations

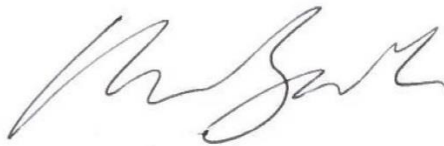
**Responsive regulation** – where mechanisms are in place that enable innovation to embed in the system quickly and regulatory challenges can be quickly dealt with

**Democratised regulatory change** – where complex change-making processes are simplified and made accessible to all players in the energy system

**Holistic, cross-regulator working** – where regulators work together to address issues spanning remits and regulate from a holistic, whole-systems and pan-industry perspective

We set out more detail below and we look forward to engaging further as this work progresses.

Yours Sincerely,

A handwritten signature in black ink, appearing to read 'Hannah Smith', written in a cursive style.

Hannah Smith  
**Senior Policy Manager**  
Scottish Renewables

### **Effective regulation of the new energy system**

It is impossible to quantify the potential future costs to businesses, citizens and consumers that will result from climate change. It is therefore vital that we deploy every tool and resource available to ensure that our response to climate change matches the scale of the threat it represents and that consumers are best protected from its impacts.

Ofgem's deployment of regulatory mechanisms will play a vital role in enabling the low-carbon energy transition and the decarbonisation agenda as a whole. In our view, decarbonisation should be captured within statutory regulatory obligations. For Ofgem, regulation should seek to enable the decarbonisation of our energy system, regulatory decisions should be assessed against their impact on carbon reduction targets, and Ofgem should regularly report to the Committee on Climate Change.

We see a fundamental need to improve energy regulation to accurately represent the realities of the low-carbon transition (which is largely already underway), enable new technologies to come forward, and to realise the ambition Ofgem and BEIS have set out.

To achieve the ambitions set out in the joint Ofgem and BEIS Smart Systems and Flexibility Plan, investment in our network infrastructure, the integration of new technologies and business models (such as DSR and energy storage) and an increase in flexibility services will be required.

Industry will look to bring forward some of the elements of our new energy system, helping deliver the benefits to consumers, but it is clear that we also need further investment in our network infrastructure (particularly enabling sizeable connections to Scottish Islands), a regulatory system conducive to investment with low barriers to market entry, and a system of regulation which is future-proofed to allow new energy use-cases and solutions to come forward, as well as the right price signals to drive activity to where it is most needed.

We cannot just decarbonise our electricity system. Our heat and transport networks require the same level of fundamental reform as our electricity networks are experiencing.

Scottish Renewables sees a clear need for a comprehensive regulatory approach across the heat sector. We support moves by both the UK and Scottish Governments to regulate district heating networks, to ensure adequate consumer protection and to support development through the use of proportionate regulation.

In the longer term, Government will need to consider regulating the carbon emissions from heating systems as a key policy to deliver decarbonisation of the sector. Given the timescales involved and the changes this could imply for consumers, work from the regulator should start now to define the trajectory and how this can work with other policy levers.

Ofgem currently works to a number of key principles, including;

- promoting value for money
- promoting security of supply and sustainability, for present and future generations of consumers, domestic and industrial users
- the supervision and development of markets and competition
- regulation and the delivery of Government schemes

Though implied with the reference to sustainability, decarbonising our energy system is not currently a specific regulatory consideration, and therefore it is not featured in analysis of major decisions. This has led to adverse, unintended consequences for the renewable energy sector and the decarbonisation agenda.

This is particularly clear in the case of the Targeted Charging Review, where impact assessments failed to consider implications on legally-binding decarbonisation targets. Ofgem notes that “there is a risk that these changes could lead to the cancellation of some projects, including renewable generators, which have been awarded CfD contracts and smaller generators which have been awarded capacity market contracts”<sup>3</sup>. To have the regulator minded to progress decisions with such a detrimental impact to renewable generators, entirely contrary to Government policy ambition is a matter of concern. The Targeted Charging Review is part of a body of work designed to fundamentally reform network costs, and its failure to consider decarbonisation will (based on current proposals) undermine the Smart Systems and Flexibility Plan, could result in consumers paying more for the electricity system as a whole (given wholesale price impacts), and lead consumers to face additional costs of having to reduce emissions more quickly in the future.

Additionally, setting decarbonisation out of scope, means that the regulator cannot factor non-monetised externalities (such as air quality) into decision making, arguably resulting in regulation failing to act in the overall best interest of the consumer – now and in the future. Scottish Renewables supports a system of independent, evidence-based regulation. We do however note that when applied, regulation and policy-making can overlap. Regulation provides a framework through which Government policy can be enacted – such as the recent introduction of an energy price cap, where Government ambition was implemented independently by the regulator. Joint policy ambitions are also common as demonstrated in the Ofgem/BEIS Smart Systems and Flexibility Plan.

In our view therefore, the regulator cannot disregard Government policy in its decision making, particularly in areas with Government has legally binding commitments, including on decarbonisation. Government should be made aware of regulatory work which impacts policy aims and appropriate mechanisms must be developed to resolve situations where independent regulatory decisions undermine Government policy. Again, in considering

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<sup>3</sup> <https://www.ofgem.gov.uk/publications-and-updates/targeted-charging-review-minded-decision-and-draft-impact-assessment>

Ofgem's Targeted Charing Review, this has been an area of concern, with regulatory proposals' impact on CfD projects and Government ambition are set in opposite directions.

### **Responsive regulation**

As Ofgem and BEIS set out in the Smart Systems and Flexibility Plan, the pace of change in our energy system has happened rapidly, and to meet our decarbonisation objectives while delivering savings for consumers an agile, interconnected and low-carbon energy system is required.

Regulation, however, has often played 'catch up' to operational realities. As the energy transition deepens, and we see new technologies and business models coming to market, regulation needs to be able to quickly respond to change.

For example, despite the success of trails such as the Regulatory Sandbox, the scope for Ofgem to enable innovation within existing supply licences is often unclear. In many cases, legislative change is required (going beyond the remit of the regulator). We would support greater alignment between Ofgem, BEIS and other stakeholders such as local authorities who are working through local energy planning to facilitate market access and innovation.

New technologies entering the energy system, such as battery storage devices, have often felt market distortions which the regulator has been slow to address. Consultation over the classification of battery devices has taken years and issues such as double network charging have been slow to be resolved.

### **Democratised regulatory change**

Our energy system is changing rapidly. Generators are increasingly small and decentralised, and this is again a trend we would expect to see continue. As set out in the Smart Systems and Flexibility Plan, a suite of decentralised flexibility providers will be critical to delivering consumer savings going forward.

Scottish Renewables however does have some concerns around the structure and accessibility of existing code governance systems. The CUSC and DCUSA, among other mechanisms are complex to understand. To engage in open governance, through raising code modifications – for example – or responding to consultations requires significant time and expertise. This makes it challenging for small players in the energy sector to engage in these processes, leading to a governance system which favours incumbents and large, well-resourced industry players.

As our energy system is already considerably decentralised, effective regulation will only occur if these mechanisms allow for appropriate representation of cross-stakeholder views. We would therefore welcome a review of these mechanisms to ensure that all participants in the energy system are able to actively engage.

### **Holistic, cross-regulator working**

As our energy system develops to become smart, flexible and low-carbon, it will depend increasingly on regulatory areas which are not within the traditional remit of the energy regulator, such as data, cyber security and communications.

Data and communications infrastructure in particular will be at the heart of our new, energy system, driving new cost-saving opportunities for consumers (through smart tariffs, smart appliances, household energy generation, storage and electric vehicles, and enabling low-carbon flexibility providers to participate in new service markets). Communications interfaces between an almost incomprehensible number of devices, to enable them to react in real time to price signals will be required, as will the collection and exchange of large quantities of data.

There is the potential for these data-driven energy markets to exist in multiple spaces – across several DNOs, for example.

Cross-regulator working will therefore be critical to ensuring effective regulation that enables decarbonisation, given its heavy reliance on access to and coverage of data networks. Rollout of these mobile and broadband networks to date has been non-uniform and driven by a commercial, market-first approach. Additionally, there are wider interdependencies that span communications and energy networks which mean that a deficit in one will result in a barrier in the other.

Electric and automated vehicle deployment will create a sharp increase in demand for data which will be contingent on our communications networks; and our new data system will need energy hungry data centres which should be supplied by further deployment of renewable energy technologies to ensure industrial and economic growth without emission growth. These issues will require intense coordination across regulators to ensure good consumer and societal outcomes.

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