

## **Scottish Renewables written evidence to the House of Lords Industry and Regulators Committee inquiry into Ofgem and net-zero.**

### **About Scottish Renewables**

Scottish Renewables is the voice of Scotland's renewable energy industry. Our vision is for Scotland leading the world in renewable energy. We work to grow Scotland's renewable energy sector and sustain its position at the forefront of the global clean energy industry. The sectors we represent deliver investment, jobs, social benefits and reduce the carbon emissions which cause climate change. Our members work across all renewable energy technologies, in Scotland, the UK, Europe and around the world. In representing them, we aim to lead and inform the debate on how the growth of renewable energy can help sustainably heat and power Scotland's homes and businesses.

### **Executive Summary**

Scottish Renewables welcomes the opportunity to provide written evidence to Industry and Regulators Committee inquiry into Ofgem and net-zero.

Renewable energy is already providing the equivalent of 97.4% of Scotland's electricity consumption, and as we move towards net-zero it is essential that the level of generation keeps pace with electrification of heat, transport and industry if we are to meet the Scottish Government's 2045 net-zero target. Ofgem role as the energy regulator makes the organisation a key actor in our efforts to reach net-zero, whilst securing the energy supply at lowest cost for consumers.

It is essential that Ofgem performs its regulatory functions in a manner that is consistent with net-zero. It is evident reforming Ofgem's remit is an immediate priority for government, so that its primary duty aligns consumer protection with the delivery of Net-zero on an equal footing. In the light of the government's legal commitment these can no-longer be viewed as competing objectives, but as intimately linked.

### **Our submission focuses on four key areas:**

- 1) The role of Ofgem in the transition to net-zero
- 2) Ofgem responsibilities in relation to balancing environmental objectives and affordability for consumers
- 3) Ofgem management in relation to both securing energy supply and the transition to net-zero.
- 4) Ofgem duties and powers and whether these conflict with Ofgem objectives.

### **Response to questions**

#### **What role should Ofgem play in the transition to net-zero? What changes, if any, should be made to its remit, responsibilities, and resources?**

1. Ofgem current powers and duties state the authority's principal objective<sup>1</sup> is to protect the interests of existing and future consumers, including "*their interests in the reduction of greenhouse gases [and] in the security of the supply of gas and electricity to them...*".

The linking of the reduction in greenhouse gases to security of supply to energy consumers gives Ofgem an ambiguous relationship to the achievement of net-zero. It has led Ofgem to take a short-term approach that includes emissions reduction year by year rather than taking a long-term view, which is required to achieve our climate targets and protect consumers from any increased costs association with our energy transition. Given the Scottish Government's and UK Government's legal requirement to meet net-zero by 2045 and 2050 respectively, it is no longer optimal to separate consumer protection and decarbonisation into a principal and a secondary duty.

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<sup>1</sup> [Our powers and duties | Ofgem](#)

A primary example which Scottish Renewables has evidenced is that the current grid charging methodology used by Ofgem is not fit for purpose to meet either the Scottish Government or UK Government's net-zero climate targets. This is also damaging to consumers and providing barriers to the deployment of renewable energy across the UK and especially in Scotland, where the charges to generators are higher than elsewhere in the UK. The UK Government must assign Ofgem responsibilities and resources to consider net-zero in its remit in order to allow a proportional deployment of renewable energy across the whole UK whilst securing energy supply at lowest cost for consumers.

2. In the 2020 Energy White Paper<sup>2</sup>, the UK Government committed to consult during 2021 on a Strategy and Policy Statement for the regulator. This document will require the Secretary of State for Business, Energy and Industrial Strategy and Ofgem to carry out their regulatory functions in a manner which is consistent with securing the government's policy outcomes. This includes net-zero as well as securing energy supply at lowest cost for consumers. Whilst the Strategy and Policy Statement (SPS) will be an important document to provide guidance to Ofgem, Scottish Renewables remains concerned that the document alone will not be sufficient to ensure Ofgem takes full account on the need to achieve net-zero in the delivery of its remit. By its nature, the SPS reflects the objectives of the government of the day. It is essential that Ofgem's mandate to support decarbonisation does not wane with changing governments and is tied to commitments that are enshrined in law.
3. To ensure that Ofgem plays a full role in enabling the achievement of net-zero and adopts a long-term approach to securing energy supply at the lowest cost to consumers, a change in legislation is essential. As the scope of net-zero extends across our society and economy, putting in place legislation that requires all regulatory bodies to enable the achievement of net-zero in the delivery of their remits would prevent the need to amend the legislative framework for each regulatory body.

**Scottish Renewables will answer the following two questions collectively:**

**How well does Ofgem balance environmental objectives against its responsibilities in relation to affordability for consumers?**

**How well does Ofgem fulfil its obligations to consumers? Does Ofgem take consumer views into account sufficiently, particularly those of vulnerable consumers?**

4. Ofgem is not taking a long-term view when it comes to "net-zero at least cost to the consumer". Their current short-term approach lacks strategic ambition, meaning that over time consumers' costs will increase. A clear example of this is the variability of the current Transmission Network Use of System (TNUoS) charging regime, which undermines the benefits of the Contracts for Difference (CfD) scheme in stabilising cashflows. This pushes up the costs of financing large-scale renewables projects, costs that will ultimately be placed onto energy consumers to pay.

Ofgem has not yet indicated how it will address TNUoS charging or mitigate its impact on consumers and decarbonisation. We would recommend that the UK Government introduces a review of TNUoS charging and its impact on Scotland. The recent OFTO Review can act as an exemplar in how to deliver this.

5. According to National Grid ESO's Modelled Constraint Costs Network Options Assessment (NOA) 2020/21<sup>3</sup> constraint costs of the transmission network could increase up to £2.5bn/year this decade,

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<sup>2</sup> <https://www.gov.uk/government/publications/energy-white-paper-powering-our-net-zero-future>

<sup>3</sup> <https://www.nationalgrideso.com/research-publications/network-options-assessment-noa>

costs that will be ultimately paid by consumers through their electricity bills. This is a result of the changing generation mix, which will require significant amounts of new renewable generation connecting to the grid, and the fact that the transmission network will not be built quickly enough to accommodate this new generation. Instead the focus has been on short-term cost minimisation through building as little grid as possible, as late as possible.

This is another consequence of the short-term approach from Ofgem. In the last 8 years, the regulator has spent its time on the RIIO-1 price control, building as little grid infrastructure as possible, as late as possible, in the name of keeping consumer costs down. Now, this will only bring increased costs for consumers in the next decade, although these constraint costs will fall again as new infrastructure will be finished between 2029-2031. This demonstrates that the short-term approach from Ofgem needs to be changed as this is having a significant impact on consumer's bills.

As stated in the National Grid FES<sup>4</sup> scenarios, by 2050 we will need to almost double the renewable capacity installed from 2030. This means that if Ofgem does not change its short-term approach, consumers will be continually paying for it. We suggest that Ofgem incorporates a long-term strategic vision in its remit that considers delivering the renewable capacity needed by 2050 while ensuring secure supplies at the lowest cost for consumers.

**Scottish Renewables will answer these two questions collectively:**

**What implications will the transition to net-zero have for the security of the UK's energy supply?  
How does Ofgem currently manage issues relating to security of supply?**

**Is the current system of governance for the UK energy market appropriate to secure the transition to zero? What improvements could be made and what role should Ofgem play?**

6. As stated by the Committee on Climate Change<sup>5</sup> and National Grid FES scenarios 2021<sup>6</sup>, a sharp increase in renewable energy capacity installed is needed by 2050 alongside a smarter and more flexible energy system that secures the energy supply of the country.

Achieving progress on renewable energy targets will require the UK Government to reform Ofgem and energy markets. Ofgem's remit does not oblige it to consider the achievement of net-zero and its current reforms of network charging, which will reform electricity transmission and distribution network charging and access, will undermine the further deployment of renewables in Scotland where much of the UK's best wind resource is located.

Based on the deployment targets indicated by the Climate Change Committee in the Sixth Carbon Budget we would expect at least 40GW of offshore wind in Scottish waters, plus a substantial increase in the deployment of onshore wind in Scotland if we are to achieve net-zero. If Ofgem does not include the need to achieve net-zero in its reforms of grid changing, then the achievement of net-zero will be put at risk and costs will increase, with these costs ultimately being borne by consumers.

7. The recent publications 'TNUoS – Key issues and explainer'<sup>7</sup> from Scottish Renewables and 'Transmission Charges - An overview of charges for use of the GB transmission system,'<sup>8</sup> from

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<sup>4</sup> [Future Energy Scenarios 2021 | National Grid ESO](#)

<sup>5</sup> <https://www.theccc.org.uk/publication/sixth-carbon-budget/>

<sup>6</sup> [Future Energy Scenarios 2021 | National Grid ESO](#)

<sup>7</sup> <https://www.scottishrenewables.com/publications/861-tnuos-key-points-and-explainer>

<sup>8</sup> <https://www.ssen-transmission.co.uk/media/5261/ssen-transmission-tnuos-paper-february-2021.pdf>

Scottish and Southern Electricity Networks, clearly demonstrate that the current charging methodology guiding TNUoS is not fit for purpose to meet either the Scottish Government or UK Government's net-zero climate targets. The way that TNUoS is designed encourages generators to locate close to the demand. This was appropriate for a fossil fuel-based system but now leads to disproportional charges by locations as we move to a renewables-based system.

To achieve our respective net-zero targets, we will need a steep increase in renewable energy installation by 2050 in all parts of the United Kingdom, not just the south. According to the Sixth Carbon budget<sup>9</sup> from the CCC, the renewable deployment by 2050 should be between 95 and 125GW of offshore wind, between 75 and 85GW of solar PV, and between 30 and 35GW of onshore wind. Scotland has the resources to supply a big proportion of this deployment, but with TNUoS disadvantaging Scottish projects in the CfD, there is a risk these projects may not be built, reducing our ability to reach net-zero. It is important to move forward at pace with a strategic review between Government and industry about how best to use regulation to allow a proportional deployment of renewable energy across the whole UK.

8. As the energy regulator Ofgem should play a central role in the energy transition that must be consistent with the government's policy outcomes. The current system of governance for the UK energy market is not appropriate to secure the transition to net-zero. At the start of this year, Ofgem released a document<sup>10</sup> that reviews the GB energy system operation. In this document, the regulator recognises that net-zero requires a step-change in whole system coordination and planning. It also pointed out that the system operators play a critical role and there is a strong case to enhance its roles and functions. Additionally, the document suggests that an Independent System Operator (ISO) with enhanced functions will be required to enable and facilitate an integrated, flexible energy system.

The Strategy and Policy Statement that we are expecting in Q4 of 2021 will aim to consult on system operation governance arrangements and we expect that this could shape the actions of the regulator to ensure consistency with government policy. However, we are concerned that this document will not deliver the sufficient strength of remit change necessary for the regulator to make all the changes needed.

**Is Ofgem current system of price controls appropriate? Does it provide sufficient incentives to invest in the context of the transition to net-zero?**

9. The current system of price control is not appropriate. For the country to reach its net-zero obligations which are now enshrined in law, there must be more than just an incremental shift in the delivery plan. At least 40GW of renewable energy must be connected efficiently in the next 10 years and millions of electric cars, vans and buses need to be able to plug in easily. The electricity network infrastructure needed to support this seismic rollout has to be ready to transport the increasing volumes of low carbon electricity which will fuel a zero-carbon economy. The opportunity presented is vast, both economically and environmentally. This is why we believe that net-zero should be baked into Ofgem price control mechanisms and not treated as a subsequent "uncertainty" as is currently the case.

Without a significant increase in renewables along with the expansion of flexibility (such as storage, demand response and interconnection) and the enabling infrastructure, decarbonising heat, transport, and other key sectors of the economy will not be possible.

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<sup>9</sup> <https://www.theccc.org.uk/publication/sixth-carbon-budget/>

<sup>10</sup> [https://www.ofgem.gov.uk/sites/default/files/docs/2021/01/ofgem - review of gb energy system operation 0.pdf](https://www.ofgem.gov.uk/sites/default/files/docs/2021/01/ofgem_-_review_of_gb_energy_system_operation_0.pdf)

Ofgem price control mechanisms must at least be in step with, and ideally ahead of, government ambition. It must empower, not delay, investments in Electric Vehicle (EV) charging infrastructure as well as the grid connections and reinforcements needed to transport growing volumes of renewable energy. It must also have the agility and flexibility to adapt to keep pace with a pathway to net-zero.

Regulation does not exist separate to policy. If the Government's preference is to increase the deployment of cost-effective renewables and flexibility as a key element of achieving the net-zero target, regulatory processes and network price control must not constrain this. Ofgem price control mechanisms must facilitate the journey to meet net-zero while delivering long-term value for money for energy consumers and stimulate a green economic recovery, something they do not currently do effectively.

**Are Ofgem duties and powers appropriate and sufficiently clearly defined? Do Ofgem objectives conflict and, if so, how should any conflicts be managed?**

10. Ofgem duties and powers were established before the UK adopted a legally binding target to achieve net-zero climate change emissions by 2050. The decarbonisation of our energy systems will be an essential part of achieving this target.

Ofgem's current relationship to the achievement of net-zero and how this is factored into their decision-making processes is ambiguous, unclear and lacks a clear legal basis. If this decarbonisation of the energy system is to be achieved it is essential that Ofgem, as the energy system regulator, has as a clear, unambiguous and legally binding duty to ensure its activities actively support the achievement of net-zero at least cost to consumers.

**Are there any other aspects of Ofgem's work that the Committee should consider?**

11. The achievement of our net-zero target will require a significant increase in the pace of change, particularly in the energy sector. The long-time frame of Ofgem's current decision-making processes are incompatible with the speed of change net-zero will require. For example, Ofgem launched its Significant Code Review in December 2018 and this process has still not been completed. Experience indicates that code reviews take a minimum of five years. As significant progress will have to be made in decarbonising the energy sector by 2030, timeframes of five years or more to implement regulatory change in an environment where key targets need to be achieved in eight years' time is untenable. As such there needs to be significant changes in how Ofgem operates if it is to have the agility and pace the achievement of net-zero will require.

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