HM Treasury
1 Horse Guards Road
London
SW1A 2HQ

22 September 2017

Dear Sir/Madam

**UK Budget 2017 Representation to HM Treasury**

Scottish Renewables is the voice of the renewable energy industry in Scotland, representing over 250 member organisations working to deliver a low-carbon, secure energy system, providing clean, affordable power, heat and transport while supporting tens of thousands of jobs in the sector's supply chain across the UK.

The implementation of policies supporting the continued development of renewable electricity from both the UK and Scottish Governments has seen renewable energy capacity in Scotland almost treble in the last eight years, now providing enough power to meet well over half of Scotland's electricity consumption[1]. This success has led the industry to displace more than 13 million tonnes of harmful $CO_2$ emissions[2] each year in Scotland, demonstrating the industry's ever-growing contribution to tackling climate change.

The sector in Scotland has also become an important driver of employment and investment with more than 26,000 people (full-time equivalent) employed in 2015 in businesses with a total turnover in Scotland of £5m, according to the latest ONS figures. In the same year, renewables projects commissioned in Scotland amounted to a total capital cost of almost £1bn, with much of this investment delivered in more remote areas of the country with lower productivity levels.

The socio-economic benefits of our industry are not just being felt in Scotland, as we continue to share our renewables services and products with overseas markets. Research conducted by Scottish Renewables in December 2016[3] revealed that renewable energy businesses here have been involved in projects worth £125.3 million in 43 countries in every continent bar Antarctica – and employ staff in 22 of those countries.

1 http://www.gov.scot/Topics/Statistics/Browse/Business/Energy
2 https://www.scottishrenewables.com/news/scots-renewables-sector-reduces-carbon/
3 https://www.scottishrenewables.com/news/global-reach-scot-renewables-revealed/

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And while the UK Government's most recent steps to help accelerate growth in green finance[4] is notable, there are still many practical policies that can and should be considered by HM Treasury in its forthcoming Budget to help the sector continue to grow. This growth will make a valuable contribution to Britain's economy, energy system and environment, while helping boost prosperity in local economies across the country.

Scottish Renewables' response focusses on the following actions:

1. Deliver continued growth for less established technologies
2. Unlock investment in lowest-cost forms of energy
3. Provide clarity and support for smaller-scale and community renewables development
4. Deliver a robust control framework
5. Build an Industrial Strategy that captures the opportunities created by the global low-carbon transition
6. Create the conditions to move from innovation to commercialisation
7. Accelerate the decarbonisation of heat and transport within an integrated energy system

We would be happy to contribute to any additional work that may arise from this Budget representation process. Please contact Rachelle Money, Director of Communications if you would like further information or to discuss the contents of our response in more detail: rmoney@scottishrenewables.com or tel. 0141 353 4980.

Yours sincerely

Jenny Hogan

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**Scottish Renewables**

[4] https://www.gov.uk/government/news/uk-government-launches-plan-to-accelerate-growth-of-green-finance

## Scottish Renewables' representation to HM Treasury on the UK Budget 2017

### 1. Deliver continued growth of less established technologies

The UK is the world's leading offshore wind market, with the growth of the sector supporting a significant supply chain across the country and driving down costs.

When the second Contract for Difference (CfD) allocation results were announced on 11th September[1] it demonstrated the successful cost reduction pathway in action when Moray Offshore Windfarm (East) and Hornsea Project 2 were both able to clear a strike prices of just £57.50, down 50% from the first auction in February 2015.

This dramatic reduction clearly shows how developers can drive down costs when a viable route to market is visible. The scale of innovation taking place across the sector and its growing supply chain shows the importance of continuing to ensure we do not lose our position as a leader in offshore wind technologies.

It is also remarkable that Grangemouth Renewable Energy Limited received a CfD for its dedicated biomass with CHP plant at a price significantly lower than the Government's administrative strike price.

Other 'less established' technologies, such as tidal energy and anaerobic digestion, also have the potential to grow in scale and reduce in cost if they see a meaningful route to market, as biomass CHP and offshore wind have done.

We therefore urge the UK Government to provide further investor certainty by giving clarity on timings of the next allocation rounds. This could have the dual benefit of helping to continue the growth of these important sectors while stimulating further cost reductions throughout their supply chains.

### 2. Unlock investment in lowest-cost forms of energy

UK Government analysis shows that onshore wind and solar power are on track to be the cheapest forms of new large-scale power generation.

Indeed, work by independent industry experts Baringa Partners[2] has shown that the UK's most competitive onshore wind sites could now be delivered at no additional cost to consumers over and above the long-term wholesale price of power.

However, that capacity will only be delivered if onshore wind and other mature renewables are allowed access to auctions for long-term contracts for clean power generation, which give certainty over long-term prices and enable developers to access finance at the lowest possible rates.

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[1] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/643560/CFD_allocation_round_2_outcome_FINAL.pdf
[2] https://www.baringa.com/getmedia/99d7aa0f-5333-47ef-b7a8-1ca3b3c10644/Baringa_Scottish-Renewables_UK-Pot-1-CfD-scenario_April-2017_Report_FINA/

And with more than 2GW of consented onshore wind sites in Scotland, established renewables are ready to deliver affordable energy for households and business now – if they can once again bid for a CfD.

This lack of a route to market has been damaging to those businesses working in these sectors. Earlier this year Scottish Renewables polled its members on employment levels and confidence over the next 12 months, with respondents predicting an average decrease in full-time equivalent posts in Scotland of 16.9%.[3]

These results suggest that changes to and closures of support schemes are having a detrimental impact on our members and on the numbers of employees within their businesses.

There is an opportunity within the forthcoming UK Budget to help deliver lowest-cost power for households and business, maintain or grow employment levels and strengthen local economies throughout the country by allowing established renewable technologies to compete for a CfD.

Scottish Renewables would also like to acknowledge the UK Government's support of onshore wind on the remote islands as reflected in the Conservative party manifesto.[4] We understand that an additional consultation will be launched in the coming months to explore more fully the community offer that is being made by those developers who are aiming to build projects on the islands.

We look forward to feeding into that consultation and continuing to work with colleagues in BEIS to help secure the economic, social and environmental benefits these onshore wind farms can bring to the islands and the wider UK supply chain.

### 3. Provide clarity and support for smaller-scale and community development

The Feed-in Tariff (FiT) for smaller-scale renewables has proven to a be a valuable mechanism allowing communities, householders and small businesses to take a stake in their own energy future. Since the introduction of this scheme, over 6GW[5] of capacity has been delivered and Scotland represents more than 10% of the capacity installed to date[6].

While a large majority of this capacity can be attributed to significant cost reductions in solar PV, the FiT is central to the business model for many technologies including small-scale wind, hydro, anaerobic digestion and micro-CHP.

In July 2015 the UK Government consulted on proposed reforms to the FiT system and, despite more than 90% of responses setting out concerns that the proposed cuts could render projects uneconomic,[7] the tariff levels introduced for wind and hydro schemes were reduced further than proposed.

While many have worked to adapt to this new environment, there has been an expectation that the UK Government would seek further input on supporting smaller-scale development beyond the closure of the FiT in 2019. We would strongly encourage UK Government to proceed with this planned consultation.

[3] https://www.scottishrenewables.com/news/one-six-renewable-energy-jobs-scotland-risk/
[4] Conservative Party (2017) Forward Together: Our Plan for a Stronger Britain and a Prosperous Future
[5] https://www.gov.uk/government/statistics/monthly-small-scale-renewable-deployment
[6] https://publications.parliament.uk/pa/cm201617/cmselect/cmscotaf/83/83.pdf
[7] https://publications.parliament.uk/pa/cm201617/cmselect/cmscotaf/83/83.pdf

## 4. Deliver a robust control framework

The Levy Control Framework (LCF) was designed to set out the scale of investment required to meet the UK's Fifth Carbon Budget, as well as reconciling the dual challenges of security of supply and affordability. While this control mechanism had the potential to serve as a cornerstone of the electricity market, the sudden and unexpected forecast budget overspend in April 2015[8] highlighted the limitations of this device, and the impact of market forces that were outwith the control of Government.

The National Audit Office, while recognising the value of the LCF in communicating cost to consumers, set out a number of shortcomings, including the following:

> "Government's forecasting, allocation of the budget and approach to dealing with uncertainty has been poor, and so has not supported value for money. In addition, a lack of transparency over the Framework and expected future energy bills has undermined accountability to Parliament and consumers."[9]

It is therefore important that, in setting the next cost control framework, the Government learns from recent experience. The Committee on Climate Change states that:

> "For an extended LCF to be an effective signal of the future low-carbon market it will need to be well-specified. That includes a clear understanding of the assumptions on which it has been set and how the Government will respond if the final outturn is different. For example, the presumption should be that if carbon prices turn out lower than expected, the LCF will be increased to compensate – this would preserve the low-carbon market, while still resulting in lower costs for consumers."[10]

Therefore, we would also encourage HM Treasury to consider whether the measure of the LCF value between an agreed strike price and the wholesale price of electricity is appropriate. For example, where wholesale prices are reduced, the overall cost of the LCF will be seen to increase while energy bills are likely to fall overall.

We would therefore recommend that HM Treasury assess whether a more sophisticated measure is possible in order to provide a more effective signal that can mitigate against movements in wholesale price and ensure that potential impacts on consumer bills are well understood.

## 5. Build an Industrial Strategy that captures the opportunities created by the global low-carbon transition

Scottish Renewables responded to the Industrial Strategy Green Paper in April[11] where we highlighted the key ways in which Scotland's renewables sector can deliver many of the objectives set out in the Paper,

[8] https://www.gov.uk/government/speeches/levy-control-framework-cost-controls
[9] https://www.nao.org.uk/press-release/controlling-the-consumer-funded-costs-of-energy-policies-the-levy-control-framework/
[10] https://www.theccc.org.uk/publication/technical-note-budget-management-and-funding-for-low-carbon-electricity-generation/
[11] https://www.scottishrenewables.com/publications/consultation-response-beis-industrial-strategy-gre/

and made the following recommendations as to how the Government can help secure and grow those industrial benefits, including:

- Provide a robust assessment of our future energy needs and a plan to meet them
- Ensure that the energy market is competitive and can deliver low-cost, clean energy supplies to replace retiring capacity and upgrade our infrastructure to meet future demand
- Ensure the lowest cost energy is delivered to businesses, factories and households by opening up markets for smart technology to develop the most efficient and cost-effective power network
- Progress regulatory and market reform to encourage energy storage, including defining how storage should be treated
- Invest in science, research and innovation in Scotland, and across the UK, so that new and emerging technologies continue to move down the cost curve and into commercial competitiveness.

Included in our response was an annexe, '*Industrial Impact: The Power of Scotland's Renewables Sector'*,[12] which featured case studies from more than 30 businesses at the heart of renewables' success which illustrated what the industry has already delivered to the Scottish and UK economy.

In the north of Scotland, businesses like Leask Marine, Green Marine and Aquatera are expanding to cater for the growth of renewables both onshore and offshore.

While on the Western Isles, BiFab's work at Arnish for the Beatrice Offshore Wind Farm is providing skilled work for 80 local people. In the north east, firms like Ecosse Subsea Systems are using expertise gained in the oil and gas industry to capitalise on the growing offshore wind market.

The cities of Glasgow and Edinburgh are home to large power utilities as well as some of our most cutting-edge science, research and innovation organisations; companies like Limpet Technologies and Neo Environmental are developing unique products which are already being exported across the globe.

Renewable energy in Scotland is, in many areas, a success story but it is its longevity that will really mark it out as being truly transformational. In order to fully realise our potential and make a successful and sustainable transition to a low-carbon economy, we must see a strong Industrial Strategy capable of capturing the full potential of the transition and spreading those benefits across the country.

We hope the forthcoming UK Budget can support these ambitions as set out in our response to the Green Paper.

## 6. Support Innovation – providing the conditions to take products from testing to commercialisation

The growth in Scotland's renewable energy sector over the last decade has been driven by onshore wind and other more mature technologies such as solar PV and hydro. While there is further growth to come from these technologies, achieving future climate change targets will also require an increased focus on new sources of energy and new forms of distribution, storage and management.

[12] https://www.scottishrenewables.com/publications/industrial-impact-power-scotlands-renewable-sector/

Scotland and the UK are already leading the way in terms of innovation and R&D in areas such as floating offshore wind, wave and tidal power, but we need a new level of focus if we are to accelerate the development of the latest forms of generation. Similarly, Scotland is one of the countries at the leading edge of the challenge we face in managing electricity networks as we transition to a low-carbon economy, and in optimising investment in and the operation of the grid.

There are global opportunities for the countries and businesses that develop the solutions to these problems. Our ambition should be no less than to become a world-leading centre of excellence and expertise in energy systems and storage, just as our oil and gas sector is for subsea engineering. Driving innovation in the areas outlined below can enable the development of a flexible, secure, cost-effective and low-carbon energy system.

**Flexible Networks:** The Committee on Climate Change states that achieving our carbon budgets with a 'more flexible power system' has the potential to save consumers £3bn-3.5bn per year[13]. Securing this flexibility will require a range of new technologies such as Active Network Management (ANM) systems, demand side response, storage and will encompass efforts to better operate networks, including transitioning to a DSO.

**Energy Storage:** Significant volumes of energy storage have been awarded contracts in both the Enhanced Frequency Response services and the Capacity Market tenders. However, storage technologies have a number of other benefits which are not currently aren't priced in the market (including enabling increased renewables capacity and potentially deferring network upgrades). Innovation, both directed at storage technologies themselves and in the mechanisms to encourage storage technologies to market will be required to realise these benefits.

**Energy Systems Integration**: A whole systems approach will be required to facilitate a transition to a smart and flexible energy system. Holistically considering electricity, heat and transport will allow us to drive efficiencies in our system and tackle the energy trilemma. Developing new technologies, market structures and business models will be essential[14].

**Low-Carbon Heat:** Heat accounts for 46 per cent of UK energy demand[15], supports 32,600 jobs[16] and had a turnover of £4.9bn in 2013 alone[17]. However, only 4.9 per cent of total heat demand was renewable in 2014[18]. Decarbonising the sector will mean fully developing new technologies, supporting their large-scale deployment and integrating them into our wider energy system. Innovative Renewable Generation: If we are to meet our climate budgets, and deliver a secure, low-cost and low-carbon energy system, increased renewable generation capacity will be required.

[13] https://www.theccc.org.uk/wp-content/uploads/2015/10/Power-sector-scenarios-for-the-fifth-carbon-budget.pdf
[14] https://documents.theccc.org.uk/wp-content/uploads/2015/10/Power-sector-scenarios-for-the-fifth-carbonbudget.pdf
[15] http://www.policyconnect.org.uk/cc/sites/site_cc/files/policy_for_heat_-_transforming_the_system_online.pdf
[16] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/416240/bis-15-206-size-and-performance-of-uk-low-carbon-economy.pdf
[17] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/416240/bis-15-206-size-and-performance-of-uk-low-carbon-economy.pdf
[18] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/437953/Renewable_energy_in_2014.pdf

## 7. Accelerate the decarbonisation of heat and transport within an integrated energy system

While substantial progress has been made in cleaning up Britain's power sector, we have only begun to decarbonise our heat and transport systems, which together constitute by far the largest proportion of the UK's energy consumption and greenhouse gas emissions.

The UK therefore needs a new focus on the way we produce, supply and use energy to heat our homes, businesses and industry, and to power our transport systems. This low-carbon transition requires a 'whole system' approach, integrating heat, transport and electricity while harnessing new, smart technologies.

Given the significant role played by the decarbonisation of heat in Scotland's emissions reduction pathway, it is critical that a detailed sector road map outlining the technologies considered 'low-carbon' and 'renewable', while considering funding requirements, is delivered and implemented as quickly as possible.

Building a clear pathway to delivery is much overdue as there has been continued frustration within the renewable heat sector around the lack of certainty and progress made to date. We would therefore urge for steps forward to be taken quickly to maximise the uptake of renewable heat projects supported by the Renewable Heat Incentive scheme and delivered between now and 2021, in addition to longer-term sight of a route to market for renewable heat suppliers beyond 2021.