

Scottish Government Budget 2020/21

December 9, 2019

Dear Mr Mackay,

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 industry. We represent around 260 organisations working across the full range of renewable energy technologies in Scotland and around the world, from large suppliers, operators and manufacturers to small developers, installers and community groups - and companies right across the supply chain.

Renewable energy is critical both to Scotland's economy and to meeting the Scottish Government's net-zero climate change target. Our supply chains already provide high-value skills, services, technology and solutions to the global renewables market, a contribution that is becoming increasingly critical to Scotland's inclusive growth aspirations.

Scotland generated enough renewable electricity to meet the equivalent of 74.6% of its electricity needs in 2018¹ and our renewable energy sector now supports around 17,700 jobs². Recent analyses show the industry is capable of delivering many thousands more skilled jobs and billions of pounds of investment, with substantial growth in exports, if it is given the right backing from government³.

A climate emergency response

This year's Programme for Government provided a welcome focus on the breadth of activities and interventions that will be required as the Government responds to the climate emergency. It also indicated that the next Budget would be used 'to assess how Government investment can be used to accelerate emissions reductions and tackle climate change'.

We welcome this aspiration and provide detailed proposals in our response on how the pace and scale of activity can be increased in those parts of the energy sector, particularly low-carbon heat, where progress to date has been limited. Three quarters of Scotland's energy use is for heat and transport, but only around 6% of heat and 4% of road fuels⁴ are currently supplied by renewables. Scotland has shown leadership in adopting an earlier net-zero emissions target and a transformational budget would cement this.

This letter sets out the funding requirements of rolling out key low-carbon heat technologies at the pace and scale required to meet Scotland's net-zero target. The UK Committee on Climate Change has suggested meeting the targets will require an annual resource cost of 1-2% of GDP – or about £150bn⁵ – of both public and private sector funding. We welcome recent calls from the First Minister regarding a potential £1bn to be set aside from oil and gas revenues for the energy transition and the Scottish Government's £3bn Green Investment Portfolio call, which are of the scale required.

¹ Scottish Government Annual Energy Statement 2019

² ONS Low carbon and renewable energy economy, UK: 2017

³ See e.g. 'OWIC Sector Deal Prospectus' (<https://tinyurl.com/ycryhotd>); ORE-Catapult 'Tidal Stream and Wave Energy Cost Reduction and Industrial Benefit' (<https://tinyurl.com/yc6kpwza>); ORE-Catapult 'Floating Offshore Wind: A Situational Analysis' (<https://tinyurl.com/ycx5for8>) and BVG Associates 'The Power of Offshore Wind' (<https://bvgassociates.com/the-power-of-onshore-wind/>)

⁴ Scottish Government Annual Energy Statement 2019

⁵ CCC, 2019, Net Zero - The UK's contribution to stopping global warming

The mainstreaming of renewable energy requires policies to level the playing field with fossil fuels, which in many sectors do not face the costs of their carbon pollution. Public support and carbon taxes in the electricity sector have enabled renewables like wind and solar power to deploy at scale and reduce costs. However, current public funding for low-carbon heat provided through the Renewable Heat Incentive (RHI) ends in 2021 and it is essential that a long-term framework be put in place to ensure continued decarbonisation and to enable Scotland to capitalise on its existing supply chains and manufacturing base and to realise wider socio-economic benefits such as warmer homes and cleaner air.

Continued progress across the energy sector

Scotland is home to a significant proportion of the UK's renewable electricity generation capacity but must continue to increase its capacity as more areas of the economy are electrified. The Scottish Government has an important role to play in ensuring the planning system can deliver the projects required, as well as supporting more innovative and emerging technologies like wave, tidal and floating offshore wind, where Scotland has clear opportunities from a first-mover advantage. Small-scale renewable systems can bring local economic benefits and engage communities, and we urge the Government to ensure that its policies are aligned with its ambitions for such systems as set out in the Energy Strategy⁶.

We provide recommendations in four key areas: low-carbon heat, skills and innovation, planning and local energy. All of these actions require funding frameworks across multiple years which we believe will see Scotland continue to be recognised as a world-leader not only in developing and deploying renewable technology, but also as a nation at the frontier of tackling one of the most complex elements of energy demand in its fight against climate change.

Low Carbon Heat

- **Low-Carbon Heat Networks Fund:** capital support to complement the Scottish Government's 'Heat Networks Bill' and enable low-carbon heat networks to develop and grow in Scotland's towns and cities. **£19m in year one; £237m three-year commitment.**
- **Rural Heat Decarbonisation Fund:** establish a fund to support rural off-gas grid buildings to switch away from high-carbon heating systems. **£22m in year one; £233m three-year commitment.**
- **Climate Emergency Local Planning Fund:** support local authorities to produce their Local Heat & Energy Efficiency Strategies to kick-start the heat transition in Scotland's communities. **£3.5m in year one; £10.5m three-year commitment.**

Skills & Innovation

- **Wave Energy Scotland:** continue funding at present levels in recognition of its successful programme of collaborative and targeted support. **Maintain current levels of support.**
- **Saltire Tidal Challenge Fund:** continue to a second round in order to continue to support Scotland's world lead in this sector ahead of COP26 in 2020.
- **Offshore Wind Supply Chain Support:** provide support for investment in Scotland's ports and harbour infrastructure to improve the offshore wind supply chain's competitiveness.

Renewable Power

- **Resource the planning system:** ensure that Scotland's on and offshore planning systems are adequately resourced to deliver the increased generation requirements needed to hit the net-zero emissions target.

Local Energy

⁶ Scottish Government, 2017, Energy Strategy

- **Tretton Review for hydro:** conclude and act on the findings of the review within the next financial year.

1. LOW CARBON HEAT

With heat accounting for half of Scotland's carbon emissions, cutting emissions from buildings and industry through the installation of energy efficiency and low-carbon heat will be crucial to reaching net zero by 2045. The Scottish Government's Energy Strategy set an ambition to increase the use of low-carbon heat to 11% by 2020 and 35% by 2032⁷. The Committee on Climate Change has said that the Scottish Government must improve its approach by providing clarity 'on how low-regret options consistent with long-term decarbonisation will be supported'⁸.

Industrial opportunity

Investment in low-carbon heat is an opportunity to create new jobs and deliver socio-economic benefit across Scotland. Our increasing dependence on imported natural gas can be offset by the use of locally-produced renewable electricity and biomass, building on existing supply chain capability such as the manufacture of small and large-scale heat pumps in Livingston and Glasgow. The building of large, city-wide heat networks is an important opportunity for new capital investment – an ambitious programme of new networks that could serve up to 8% of Scotland's heat demand by 2030 would require an investment of at least £1bn⁹ with around 40% of this spend being on civil engineering¹⁰, creating opportunities for local construction supply chains. In Denmark, which has a mature heat networks industry that serves 3.5m homes (65% of the total) 2,000 people are directly employed by the industry, with 11,000 people employed indirectly¹¹.

Wider benefits – warmer homes and cleaner air quality

The transition away from fossil fuel heating is an opportunity to secure wider socio-economic benefits. Heat networks can address fuel poverty by providing more a more reliable and affordable form of heating, particularly in tower blocks with resistive electric heating. Home owners are no longer responsible for the upkeep and replacement of their boiler, and instead pay for heat as a service. The burning of natural gas in boilers produces nitrous oxide, a key contributor to urban air pollution¹², which is estimated to cause 2,000 deaths and cost the NHS £2bn per year in Scotland¹³. Heat networks delivering heat from electrically driven heat pumps, waste heat and geothermal will help cut these emissions and ensure that decarbonisation continues to lead to cleaner air in our towns and cities.

Substantial public investment is required in the low-carbon heat sector to level the playing field with fossil fuel heating and to enable the scale economies that will drive down costs. The end of current support provided through the Renewable Heat Incentive in April 2021 is already affecting investment decisions on larger projects (with longer development timescales). Recent Scottish Government support through the Low Carbon Infrastructure Transition Programme (LCITP) has been welcome, and clarity regarding the future of this scheme would be helpful. We set out a number of key recommendations for how the Scottish Government can build on its positive plans such as proposals to introduce Local Heat and Energy Efficiency Strategies and a Heat Networks Bill.

⁷ Scottish Government Annual Energy Statement 2019

⁸ Committee on Climate Change, Progress Report to Scottish Parliament

⁹ Scottish Renewables, 2019, [Piping Hot: Building Heat Networks to Tackle the Climate Emergency](#)

¹⁰ Energy Technologies Institute, 2018, Heat Networks In the UK: Potential, Barriers & Opportunities

¹¹ Danish Energy Agency, [The Green Transition in Denmark](#)

¹² See Scottish Government, 2015, Cleaner air for Scotland: the road to a healthier future and Public Health England, 2018, [Health Matters: Air Pollution](#)

¹³ Friends of the Earth, 2014, [Scotland's most polluted streets](#)

1.2 Low-Carbon Heat Networks Fund

Capital funding to enable low-carbon heat networks to develop and grow in Scotland's towns and cities.

Year one funding:	£19m¹⁴
Three-year funding commitment:	£237m

Scottish Government support is needed to help low-carbon technologies (large-scale heat pumps, biomass and geothermal) that heat buildings in city centres through heat networks. These systems are currently supported by the UK Government Renewable Heat Incentive (RHI) and the Scottish Government's Low Carbon Infrastructure Transition Programme (LCITP) which fund the higher upfront cost of low-carbon heat relative to fossil fuel alternatives, particularly in existing buildings. This combination has, to date, met the capital and revenue requirements needed to support the viability of these projects, which have then gone on to deliver wider social, economic and environmental benefits – recent examples include projects in Glenrothes, Stirling and Queens Quay in Clydebank. However, both schemes are ending imminently and clarity regarding long-term funding is needed.

As well as providing continuity to industry, Scottish Government funding can complement the recent and welcome announcement of a Heat Networks Bill. With policies to de-risk demand, this Bill should unlock the construction of new heat networks. However, if no public funding is available for new networks serving existing buildings, they will only be economically viable if they use fossil fuels (as they must provide heat at no more than the cost of natural gas to secure customers).

We therefore propose that Scottish Government provides public funding for large-scale heat generation (heat pumps, biomass, geothermal) serving existing buildings via heat networks. We set out indicative costs below using information we have recently gathered on potential heat network projects in Scotland¹⁵. These are estimated costs, intended to give a sense of the scale and nature of funding required.

Budget 2020/21: a budget of £19m in year one to fund approximately four new low-carbon heat networks. Scottish Government funding of c.£4m per project would support the infrastructure required for low-carbon heat extraction (e.g. water abstraction for water source heat pumps) and the heat networks themselves¹⁶ with the RHI providing c.£800,000 of support per year for the low-carbon heat inputs¹⁷.

Long-term funding: Government's long-term aim should be to support the deployment of a large pipeline of low-carbon heat networks that can expand and grow in city and town centres. Capital support will be required for the low-carbon heat inputs that feed these networks, either through an extended RHI or a new Scottish Government fund. We have identified around 40 potential heat network projects that could come forward if the right policies and funding are put in place¹⁸ and estimate that a total of c.£237m would be required to enable the delivery of an ambitious proportion of these over three years.

¹⁴ £3m of this would be from the RHI

¹⁵ See Scottish Renewables, 2019, [Potential Heat Networks in Scotland's Seven Cities](#). Subsidy costs are calculated using values for the average project in our database – 3.7MW low carbon heat generation, 13.6 GWh heat served per annum and a total capex (network & heat generation) of £15m.

¹⁶ This funding can be scaled back once the Scottish Government introduces regulation that de-risks investment in heat networks through the Heat Networks Bill

¹⁷ Using Non domestic RHI tariffs for ground and water source heat pumps.

¹⁸ Scottish Renewables, 2019, [Piping Hot: Building Heat Networks to Tackle the Climate Emergency](#)

Proposed spend: Low Carbon Heat Networks Fund

	2020/21	2021/22	2022/23	Total
Number of projects	4	8	16	28
Capital & network support	£16m	£20m ¹	£20m	£56m
Heat capex support²	£3m (RHI)	£56m	£112m	£171m
Heat price support³	n/a	£3m	£7m	£10m
Total	£19m	£79m	£139m	£237m

1. We reduce support for heat networks in this year on the assumption that regulations in the Heat Networks Bill reduce the need for public funding of these.
2. Value in 2020/21 is the total 1 year payments received by four projects through the RHI. Values for 2021/22/23 are calculated differently to provide indicative costs for a Scottish Government fund, with more support upfront for capex costs and a lower ongoing per heat unit price support (the RHI ends in April 2021)
3. Cost of providing subsidy per kWh unit of heat (0.015p/kWh), to enable projects to compete against heat from natural gas. Values are the funding required per year (both existing and new projects commissioning in that year).

1.3 Rural Heat Decarbonisation Fund

Capital funding to enable rural, off-gas grid buildings to switch to low-carbon heat and end this sector's emissions by 2040.

Year one funding: £22m
Three-year funding commitment: £233m¹⁹

The Scottish Government's Energy Strategy identified the switching of off-gas grid buildings (mostly found in rural areas) away from fossil fuel heating as a near-term priority, due to their use of higher carbon and higher cost fuels (coal, oil and LPG). However, current support to help households and businesses switch through the Renewable Heat Incentive will end in April 2021 and there is currently no clarity from either the UK or Scottish Governments regarding the future policy framework.

A long-term, funded approach to decarbonising the 260,000 homes²⁰ and 23,500 non-domestic buildings in these areas would lower heating bills and end these buildings' carbon pollution by 2040. The installation of heat pumps and biomass systems in these buildings would play to Scotland's natural strengths. We support a 'Sector Deal' approach²¹ of partnership working between industry and Government, with the latter providing long-term clarity on deployment volumes to enable industry to deliver cost reductions and utilisation of local supply chains. Initial evidence suggests that supply chain expansion would enable installation costs to fall by at least 20%²², reducing the volume of public funding required over time.

Funding is required to cover the additional upfront cost of renewable heating systems (heat pumps, biomass and hybrid systems) that can be used in these buildings. For homes, the costs of these systems range between £8,500 and £16,000 which is higher than coal, oil and LPG (typically £1,500 to £2,500)²³. Households will benefit from lower running costs (worth between £1,000 and £8,000 over ten years) but will still require public support

¹⁹ This does not include costs for non-domestic buildings as our estimates are uncertain, but we provide these figures as this sector is important to the supply chain

²⁰ We include electrically heated homes as the high cost of resistive electric heating is a key driver of fuel poverty in rural areas

²¹ See Climate Emergency Response Group, 2019, '[12 immediate actions for Scotland's response to the Climate Emergency](#)'

²² See DECC, 2016, Potential Cost Reductions for Air Source Heat Pumps / Potential Cost Reductions for Ground Source Heat Pumps

²³ <https://www.scottishrenewables.com/publications/case-studies-low-carbon-heat-gas-grid-homes/>

to ensure that they are paying no more than they would with the equivalent fossil fuel heating system. Non-domestic buildings vary greatly in size, energy performance and use and any estimate of the costs of making them zero carbon is more uncertain than for homes; we base calculations here on providing funding for 70% of the cost difference between heat pumps and fossil fuel heating.

In 2020/21 we provide suggestions for additional support alongside the RHI with the initial aim of doubling per year installation rates of renewable heating systems; beyond this the RHI will no longer be available and the Scottish Government should consider extending the scheme in collaboration with the UK Government or replacing it with a 'Rural Heat Decarbonisation Fund'.

Budget 2020/21

Homes: £22m²⁴ to fund 2,000 installations²⁵ in fuel poor households, and £1m for additional consumer engagement (though Home Energy Scotland, further LHEES pilots and further engagement of the social rented housing sector) to drive uptake in this and future years. Approximately 1,000 oil heating systems are replaced through Scottish Government fuel poverty schemes each year – ensuring that double this number are provided with heat pump or biomass systems would help build the supply chain.

Non-domestic buildings: £1m funding in year one for additional engagement to double the c.100 non-domestic installations²⁶ currently funded through the RHI each year in Scotland.

Long-term funding

In the long-term, the aim should be to ensure that all high-carbon heating replacements (in rural off-gas grid areas) install renewables. Beyond 2020/21 funding should be provided either through an extended RHI or a new Scottish Government grant. Ideally, any new grant would offer an upfront cash discount to households, a simpler approach than through the RHI (which repays the capital cost over the lifetime of the system). A fixed grant for households would not be regressive as it would cover a higher proportion of a small home's costs, the assumption being that smaller households are likely to have a lower income.

Homes: to support a doubling of installations year on year, funding would need to increase to c.£140m in year three, supporting a total of c.14,000 domestic installations per year, which is roughly equal to the number of oil and LPG heating replacements that take place in Scotland per year²⁷.

Non-domestic buildings: the non-domestic building stock is much more variable, and it is therefore difficult to provide an estimate of the funding requirement to support long-term decarbonisation. We suggest that the annual installation rate could need to increase from c.130 today to 1,000 per annum, which would require with funding of between £50m to £100m per year out to 2045²⁸.

Other measures (regulation or further incentives) will be required to drive consumer uptake alongside funding – at present, less than 1,500 domestic installations take place through the RHI per year in Scotland²⁹. We believe that regulation is the best approach – phasing out new installations of the highest carbon boilers (coal, oil and LPG) from 2025³⁰. Funding alone is unlikely to drive the scale of activity required; even if low-carbon technologies had the same upfront cost as fossil fuels, low awareness and familiarity would remain a barrier to

²⁴ We assume installation costs of between £6,000 and £15,000 above that of an oil or LPG equivalent.

²⁵ This is roughly a doubling of the oil and LPG boiler installations currently funded through Scottish Government fuel poverty schemes; increasing this funding is the most appropriate way to increase deployment given availability of RHI in 2020/21.

²⁶ Scottish share estimated from BEIS RHI statistics.

²⁷ Delta EE, 2016, Electrification of Heat and the Impact on the Scottish Electricity System

²⁸ Assuming an average system size of 150 kW and subsidy requirement of £90,000 if given as an upfront grant; range reflects limited data regarding the characteristics of these buildings. If funded through an extended RHI the annual value would be different as per the above.

²⁹ Includes retrofit systems in privately and socially owned homes, and new-builds.

³⁰ CCC, 2017, Next steps for UK heat policy

take up. Combining financial support with proportionate regulation can allow financial support levels to be set lower as the aim is to reduce costs to consumers rather than incentivise them to act.

Indicative costs for a Rural Heat Decarbonisation Fund

	2020/21		2021/22		2022/23		Total
	Cost	Number ¹	Cost	Number	Cost	Number	
Fuel poor homes	£21m	2,000	£42m	4,000	£84m	8,000	£147m
Self-funded homes²	RHI	1,500	£26m	3,000	£51m	6,000	£77m
Engagement, advice & support³	£1m		£4m		£4m		£9m
Totals	£22m	3,500	£72m	7,000	£139m	14,000	£233m

1. Number of installations.
2. RHI provides funding in 202/21; beyond this we provide indicative costs for a Scottish Government upfront grants. These are split 50/50 between £6,500 for ASHP and £10,500 for GSHP/biomass. If funding is through an extended RHI the annual figure will be different as this provides subsidy spread over seven years.
3. This figure includes £2m for consumer engagement in the non-domestic sector. We do not include long-term figures for the non-domestic building stock as this is much harder to quantify, but continuing funding for this sector beyond the end of the RHI in 2021 will be equally crucial to meeting climate change targets and ensuring supply chain continuity.

1.4 Climate Emergency Local Planning Fund

Fund local authorities to produce their *Local Heat & Energy Efficiency Strategies* to kick-start the heat transition in Scotland's communities.

Year one funding: £3.5m
Three-year funding commitment: £10.5m

The Scottish Government's proposed Local Heat and Energy Efficiency Strategies (LHEES) will be a crucial part of decarbonising heat in Scotland, providing a local assessment of options and enabling the delivery of energy efficiency and low-carbon heat upgrades. The Strategies should be a key enabler of heat networks; identifying exclusive zones for operation to de-risk investment and encourage network expansion. However, investment into heat networks will not flow until these plans are produced and implemented. Local authorities should be provided with two members of staff to manage their LHEES as well as the heat network deployment that flows from them. This approach would mirror the successful implementation of zero-waste regulations where a dedicated member of staff from Zero Waste Scotland was placed within each local authority.

2. RENEWABLE POWER

2.1 A planning system fit to deliver

Scotland has installed over 11GW of renewable generation capacity, which provided around 75% of electricity demand in 2018. The planning system plays a crucial role in identifying suitable sites for new projects, which will become even more crucial as deployment rates ramp up to meet Scotland's net-zero energy needs. The capacity of statutory bodies to assess applications in a timely manner will be vital, and we would welcome additional resources to be made available to make immediate improvements to the planning system to facilitate more timely consent decisions to support delivery of the 2030 emissions reduction targets. This should include provision of additional resources for Local Planning Authorities and key stakeholders such as Scottish Natural Heritage to allow quicker and more efficient decision-making for new and repowered renewables projects, and to enable the training and development to build the required skills. Planning fees for renewable projects were recently raised, and although industry supports these timely reforms, we would welcome greater clarity on the improvements that might result from improved resourcing.

3. SKILLS & INNOVATION

3.1 Marine Energy Support

Scotland has a global lead in the development of wave and tidal technology and the Saltire Tidal Energy Challenge Fund has been a very welcome source of support for companies which are based in Scotland, manufacture equipment here and produce energy from Scotland's tidal energy resource. A recent study by the Offshore Renewable Energy Catapult detailed the socio-economic impact of the full development of these technologies³¹. It estimates the tidal sector alone is capable of generating a net cumulative benefit across the UK of £1,400m by 2030, with the right support in place. Scotland is already a world leader in marine energy technology, testing and demonstration, so is perfectly placed to capture a large share of this benefit. The Catapult's analysis also details that up to 60% of the economic benefit in developing the sector is expected to be created in coastal areas, providing a catalyst for economic generation in our peripheral communities, which are often most in need.

We welcome the Scottish Government's support to the sector and would like to see the next budget continue to deliver funding – at least at existing levels – to the Wave Energy Scotland Programme, which has been hugely successful in developing a collaborative, targeted and programmed approach to overcoming technical, engineering and operation challenges in the development of wave energy converter devices. We would also request that funding for the Saltire Tidal Energy Challenge Fund, which has already awarded £3.4m to Orbital Marine Power to develop its O2 turbine, continues to a second round in order to continue to support Scotland's world lead in this sector ahead of COP26 in 2020.

3.2 Offshore Wind Supply Chain Support

Invest in Scotland's ports and harbours to maximise the benefits of the offshore wind opportunity.

³¹ <https://s3-eu-west-1.amazonaws.com/media.newore.catapult/app/uploads/2018/05/04120736/Tidal-Stream-and-Wave-Energy-Cost-Reduction-and-Ind-Benefit-FINAL-v03.02.pdf>

Offshore wind is a rapidly-maturing technology with huge potential in Scotland and the UK. This potential has been recognised through the UK Offshore Wind Sector Deal, with an ambition to deliver at least 30GW of capacity by 2030. This will represent a £48bn investment with the potential to create 27,000 skilled jobs around the country³². It is vital that Scotland capitalises on this opportunity and we welcome the Scottish Government's support in creating the Scottish Offshore Wind Energy Council (SOWEC) to help coordinate the sector and ensure that opportunities arising from the Sector Deal, such as funding through the Offshore Wind Growth Partnership, are maximised.

Scotland's offshore wind sector is growing, with the commissioning of the first large-scale wind farm in the Moray Firth increasing Scotland's share of the UK's offshore wind capacity from 4% to 10%. A further four projects³³ have obtained Government contracts and will see Scotland hosting 3.5 GW, or 17% of the UK total, by 2025. With most early projects built in English waters, the sector in Scotland is now ramping up, meaning this is a critical time to secure increased local content and contracts. Interest is also building in the potential to deploy floating offshore wind turbines in deeper waters, to harness the significant deep-water potential in Scotland. Recent industry research shows that this represents a significant opportunity for Scotland³⁴.

Work is ongoing to identify strategic investments to improve the competitiveness and productivity of Scotland's supply chain. We encourage the Scottish Government to explore with industry the opportunities to invest in ports and harbour infrastructure to improve the domestic supply chain's competitiveness for both fixed and floating offshore wind installations.

4. LOCAL ENERGY

Small, distributed forms of renewable energy have enabled households, small businesses and communities to take control of their energy use and share in Scotland's renewable electricity success story. We welcome the Scottish Energy Strategy's support for small-scale technologies and ambitions for community-led projects and ownership.

Despite large potential for further development of small-scale renewable energy projects, this part of the industry is facing a great deal of uncertainty. The principal market support mechanism delivered by the UK Government, the Feed-in Tariff, closed earlier in 2019 and industry has yet to receive clarity from the UK Government on when a successor scheme will be implemented. Although cost reductions and battery storage are making some scales of technology commercially viable without subsidy, this varies greatly on a project to project basis. In this context it is vital that the Scottish Government use the levers at its disposal to remove additional barriers that may make projects unviable.

4.1 Business rates

- **Conclude and act on the Tretton Review for hydro projects within the next financial year**

Non-domestic rates are a key fiscal lever in the Scottish Budget and can be used to create a competitive economic climate in Scotland which supports the objectives set out in the Energy Strategy to support small-scale and local energy generation.

³² https://cdn.ymaws.com/www.renewableuk.com/resource/resmgr/publications/offshore_wind_industry_counc.pdf

³³ Neart na Gaoithe, Kincardine, Moray Firth East and Seagreen 1 wind farms

³⁴ [SR & RUK, 2019, Floating Wind: The Industry Ambition](#)

We welcome the work of the Tretton Review on addressing the impacts on the hydro sector following the 2017 rates revaluation, which saw rates for some projects increase by 650%. The Review is yet to conclude however, creating ongoing uncertainty for the sector. We would therefore welcome a commitment from the Scottish Government to publish and act on the Review by end of the next financial year.

Business rates are also a major barrier to the development of heat networks, a key enabler for greater use of low-carbon heat. The current rating system can lead to very high rates for projects due to their high upfront capital costs – costs that are typically repaid at low margins over many decades. Business rates are such that they can make projects economically unviable and, in particular, higher cost when compared to alternative (but higher-carbon) heating sources. The Scottish Government implemented a 50% discount on the rates paid by heat networks in 2017 pending formal evaluation within the Plant and Machinery Review (which has yet to launch). We would want this approach, which recognises the valuable role that heat networks have in Scotland's decarbonisation efforts, to be the principle on which future financial frameworks are based while the technology establishes and grows.

Yours sincerely

A handwritten signature in black ink that reads "Claire Mack". The signature is written in a cursive, flowing style.

Claire Mack
Chief Executive