

INTRODUCTION

Scottish Renewables is the voice of Scotland's renewable energy industry. Our vision is for a 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. This election is pivotal for the future direction of this country and for our renewable energy sector.

While Scotland's renewables sector has delivered world-leading growth, our industry stands at a crossroads. While we meet the equivalent of almost three-quarters of Scotland's electricity needs from renewable sources, harmful policy decisions have seriously limited development of our large-scale onshore wind and solar PV industries and damaged our small-scale renewables sector, as well as progress towards our essential heat decarbonisation target. This has resulted in thousands of jobs and billions of pounds worth of investments being put on hold.

The recommendations contained in this manifesto would boost Scotland's economy.

The renewables sector has gigawatts of shovel-ready projects waiting which would deliver and protect thousands of jobs and billions of pounds in socioeconomic benefits, as well as displacing millions of tonnes of carbon emissions.

Scotland needs a vibrant renewables sector, and Scotland's politicians must support it.

SUMMARY OF RECOMMENDATIONS

The next UK government must:

- 1. Bring forward CfD Pot 1 auctions for onshore wind and solar as soon as possible
- 2. Commit to the provision of ringfencing for early-stage technologies within the CfD system and to innovative revenue support mechanisms for our world-leading wave, tidal and floating wind sectors
- 3. Act swiftly to secure a future for the small-scale renewable energy sector, recognising the unique benefits it offers
- 4. Provide Ofgem with the regulatory powers it requires to enable investment in the low-carbon infrastructure needed to deliver a modern energy system
- 5. Ensure it takes account of UK and Scottish climate targets in any future national or regional infrastructure investment packages and review its plans accordingly.
- 6. Extend the Renewable Heat Incentive (RHI) beyond 2021 and bring forward successor policies, including fair taxation of fossil fuel heating, in a timely fashion

ESTABLISHED TECHNOLOGIES

Some renewable energy technologies, like solar PV and onshore wind, have established themselves as reliable generators of electricity at a large scale. These established technologies sustain more than 6,000 jobs in Scotland and generate in excess of £5 billion in revenue. Onshore wind projects have also paid almost £20 million to local communities in the past year to spend on projects that matter to them.

Moreover, these technologies are good for consumers. Onshore wind is the cheapest form of new electricity generation, with solar a close second.

Thousands more jobs and billions of pounds of additional socioeconomic benefits are currently being locked out of Scotland's economy by the UK Government's decision to prevent the building of new onshore wind farms. Several gigawatts of shovel-ready renewables projects are unfairly prevented from participating in the energy system in the same way as all other electricity generation technologies: they are effectively banned from participating in Pot 1 auctions in the Contract for Difference (CfD) mechanism.

1. It is essential for Scotland's renewable energy industry, the UK's ambitious climate change targets and our economy that the UK Government brings forward CfD Pot 1 auctions for onshore wind and solar as soon as possible.

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ONSHORE WIND IS THE CHEAPEST FORM OF NEW ELECTRICITY GENERATION





LESS-ESTABLISHED TECHNOLOGIES

Some renewable energy technologies are at the early-to-mid stage of their development. These are some of our most innovative technologies and have enormous potential to generate significant industrial activity as they progress towards full commercialisation. The cost-reduction success of fixed-bottom offshore wind has demonstrated how to progress from early stage to mature technology. Others – such as floating offshore wind – are ready, with the right support, to do the same.

Scotland leads the world in wave and tidal energy development. Scotland's remarkable marine energy resource has placed us front and centre in the development of this industry, which has global potential. Despite a series of challenges facing the sector our members continue to break records, progress development and deliver economic and employment benefits to rural communities.

Getting the development pathway for these technologies right means being able to increase the benefits the sector delivers, help balance our energy system and export more of our knowledge abroad, as well as cutting the costs of these innovative energy solutions. A recent report from the Offshore Renewable Energy Catapult demonstrated that a properly-supported marine sector could create thousands

of jobs and generate billions of revenue in Scotland in the coming decades. The UK has 25% of Europe's tidal energy resource, but the absence of revenue support from the UK Government means that countries like Canada and France are catching up.

2. It is vital that there is a commitment to the provision of ringfencing for early-stage technologies within the CfD system for innovative revenue support mechanisms for our world-leading wave, tidal and floating wind sectors.

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SMALL-SCALE RENEWABLES

Scotland boasts a strong small-scale renewables sector. These solar, wind and hydro projects provide energy security to communities across Scotland, support energy resilience and allow communities to engage with and take control of their own energy systems.

This success has been built on the Feed-in Tariff (FiT), a scheme which provides revenue stability for the installation of small energy generation projects. Since its introduction in 2010 the equivalent of 360,000 solar panels have been installed every year across Scotland. These constitute 22,500 standard household solar power systems, worth £150 million.

In reality, the 700MW of renewable energy projects supported by the Feed-in Tariff have been far more diverse, with wind turbines, hydropower stations and more being used to support rural businesses, promote local economic growth and, in our most remote areas, bring sustainable, low-cost electricity to communities for the first time.

The FiT currently provides a means by which relatively small amounts of energy can be sold, providing stable revenue which allows for projects to be financed. **The FiT scheme** has now been closed. The UK Government has announced a

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partial replacement for an element of the scheme, but this will be inadequate to the task of securing Scotland's small-scale renewable future.

The closure of the FiT has made it very difficult for communities and companies across Scotland to finance small-scheme renewable energy projects. This means less renewable energy production in Scotland, less energy resiliency for Scotland's communities and fewer greencollar jobs.

Scottish Renewables is concerned about the impact that a number of changes to the policy landscape are having on the small-scale renewables sector.

3. The next UK government must act swiftly to secure a future for the small-scale renewable energy sector, recognising the unique benefits it offers.



INFRASTRUCTURE

The way we generate, transmit and use power is already changing, and will continue to do so. Our electricity network is infused with more small-scale distributed generation, and renewable sources account for more of our energy use than ever before. The toolkit used to manage our grid infrastructure is expanding and we are increasingly looking to decarbonise our heat and transport sectors, often by electrification.

If we are to provide secure, low-carbon energy supplies at a reasonable cost to the future consumer we must deploy advanced technologies and continue to develop innovative solutions. New methods of generating, managing and storing energy will be essential. These solutions are already being developed by our industry.

Westminster must recognise the need to renew an energy system which is not fit for purpose and which will cost UK consumers dearly in the long term unless action is taken today.

In addition; the next UK government should ensure it takes account of UK and Scottish climate targets in any future national or regional infrastructure investment packages and review its plans accordingly.

- 4. The next UK government must provide Ofgem with the regulatory powers it requires to enable investment in the low-carbon infrastructure needed to deliver a modern energy system.
- 5. The next UK government should ensure it takes account of UK and Scottish climate targets in any future national or regional infrastructure investment packages and review its plans accordingly.



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HEAT

Heating our homes and businesses is responsible for around half of the UK's carbon emissions each year.

Decarbonising the heat sector will be the next priority for both our economy and our society if we are to meet our climate targets and capitalise on the economic and social advantages of doing so.

Many powers relating to heat are held at Holyrood, but UK government policy plays a vital role in providing funding and strategic direction.

The majority of the 7,600 low-carbon heat projects in Scotland to date have been supported by the Renewable Heat Incentive (RHI). The scheme has funded installations in off-gas grid buildings, new builds and heat networks, as well as in biomethane production. The RHI scheme is due to close in April 2021, yet no successor policy has been put in place. This is already impacting projects and it is vital for the supply chain, and our climate targets, that this uncertainty be addressed.

MORE ACTION IS NEEDED TO
DECARBONISE THE UK'S HEAT
SUPPLY. THE UK GOVERNMENT
MUST EXTEND THE RENEWABLE
HEAT INCENTIVE BEYOND
2021 AND BRING FORWARD
SUCCESSOR POLICIES, INCLUDING
FAIR TAXATION OF FOSSIL FUEL
HEATING, IN A TIMELY FASHION



Additionally, low-carbon heat does not compete against fossil fuel heating on a level playing field as the carbon emissions from the latter are not currently taxed.

6. The next UK government must extend the RHI beyond 2021 to avoid an industry cliff-edge, replacing it with new policies to phase out high-carbon heating in existing off-gas-grid buildings and fund low-carbon heat generation where this is feeding district heat networks, for example large-scale heat pumps and biomass.

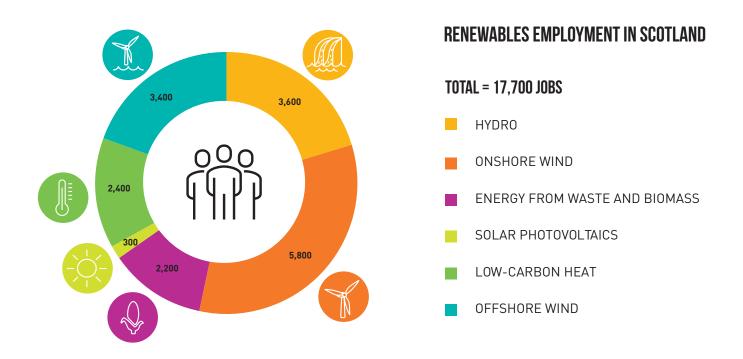
It should also ensure that fossil fuel heating systems bear the costs of their carbon pollution.



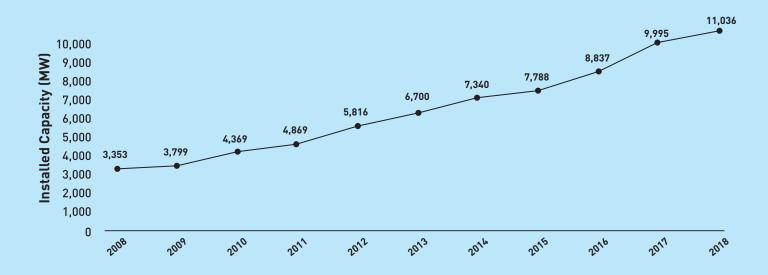
RENEWABLE ENERGY IS A SCOTTISH SUCCESS STORY

Our energy system must be ready to accommodate the seismic shifts in the generation, transmission and consumption of gas and electricity which are already underway. The step-change from fossil fuelled to electric vehicles, for example, will significantly alter the demands placed on the electricity grid, and it would be self-defeating for this shift to be powered by anything other than renewables.

In terms of wider economic benefits, Scotland-based renewable energy companies are already working in more than 70 countries. Renewables is an industry which has the potential to provide billions of pounds worth of exports across the globe.



TOTAL INSTALLED CAPACITY OF RENEWABLES ELECTRICITY IN SCOTLAND 2008-2018



SKILLS AND INNOVATION

Scotland has unique international strengths in offshore and subsea engineering, project development and innovation and offers the best opportunity for industry coordination with the oil and gas sector. Scotland's offshore wind capacity has grown from only 3% of the UK's total to 16%, and there is now a clear pathway to 20% by 2030. We have clear expertise in successful renewable project development as well as active engagement in international markets spanning 72 countries globally. Moreover, as home to the Offshore Renewable Energy Catapult and with more world-class universities per head of population than anywhere else on the planet, Scotland is at the forefront of the UK's innovative drive to reduce the cost of energy.

Almost 13,000 people are currently studying courses related to renewable energy at Scotland's universities and colleges, giving us access to a phenomenal talent base which will support more of the sorts of innovations that have generated the cost reductions we have seen across all renewable energy technologies deployed to date. More than a third (36%) of those 12,885 students are female, showing renewables for the inclusive, forward-looking sector which it is.

Supporting the renewable energy sector to deliver more with its established generators and to develop new energy technologies more quickly will see investments in skills, technology and innovation that will help the UK and Scotland make the most of their natural resource advantage while meeting the urgent challenge of climate change.



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