Scottish Renewables Briefing
Draft Energy Strategy

Introduction

The Scottish Government's draft Energy Strategy is a free-standing companion document to the draft Climate Change Plan (CPP). The draft Plan and Energy Strategy are designed to provide a long term vision to guide detailed energy policy decisions over the coming decades.

For more information on the draft CPP please see our Member Briefing.

Vision

The draft Strategy sets out a vision for a strong low carbon economy, which shares the benefits across communities, reduces inequalities and creates a vibrant climate for innovation, investment and high value jobs. It seeks to create a modern, integrated, clean energy system which delivers reliable energy supplies at an affordable price in a market that treats all consumers fairly.

Three themes are identified as policy drivers:

1. A whole system view
2. A stable managed energy transition
3. A smarter model of local energy provision

The draft Strategy does not specify a required or desired energy mix. Instead it focuses on the delivery of five policy priorities:

- continuing support for the recovery of North Sea oil and gas
- supporting demonstration and commercialisation of CCS and CO2 utilisation
- exploring the role of new energy sources
- increasing renewable energy generation
- increasing flexibility, efficiency and resilience of the energy system

Energy Generation

The draft Strategy emphasises the Scottish Government's support for a balanced electricity mix and reiterates a number of existing policy position including:

- maximising the economic recovery from oil and gas fields in the North Sea and west of Shetland
- taking an evidence based and measured approach to new technologies
- the proposition that Underground Coal Gasification will have no role in Scotland's energy mix
- strong support for the role of CCS, as 'critical for cost-effective decarbonisation'
- no replacement of nuclear facilities with current technologies

The strategy also states that the Scottish Government will consider proposals for repowering existing large-scale electricity generating sites and seeks views on the future of decommissioned thermal generation sites.

Increasing Renewable Energy Generation

- **2030 50% All Energy Target**
- **11 – 17GW of installed renewable energy capacity by 2030**
- **Challenges industry to make Scotland the first area in the UK to host commercial onshore wind development without subsidy**

In line with the draft CPP, the Strategy targets the complete decarbonisation of the electricity sector. It stresses the Scottish Government's support for the continued growth of the renewable energy sector as a key economic driver and an essential feature of the energy system.

It states that the Scottish Government's priority for the sector is cost reduction resulting in a lower cost to the consumer, and that continued deployment is 'imperative' to achieving this. It then sets a challenge to industry to make Scotland the first area in the UK to host commercial onshore wind development without subsidy.

In line with Scottish Renewables analysis, modelling indicates that by 2030, the equivalent of 44- 50% of Scotland's energy demand for heat, transport and electricity could be generated by renewable sources. **The Strategy therefore proposes to adopt Scottish Renewables call for the introduction of a 50% by 2030 'All Energy' target**.

It also invites views on setting targets to encourage the full range of low and zero carbon energy technologies to achieve the most cost-effective pathway to our long term emissions reduction targets.

The Scottish Government's modelling also indicates that between 11 and 17GW of installed renewable energy capacity will be required by 2030.

For a list of proposed policies directly relating to renewable electricity, please see Annex A. Commitments to individual technologies can be found in Annex B.

- **SR Initial Comments**

Scottish Renewables welcomes the proposed adoption of the 2030 – 50% 'All-energy' target. We also welcome the draft CCP's aim to completely decarbonise the electricity sector by 2027 and reduce CO_2 grid intensity to below 50g per kilowatt hour. In order to achieve this, we called on the Scottish Government to aim to double the current installed capacity of renewables by 2030 to around 16GW and therefore encourage them to target the top end of the proposed deployment range.

We welcome the challenge to industry in the draft Energy Strategy "to make Scotland the first area in the UK to host commercial onshore wind development without subsidy". We would therefore like to see greater detail in the draft CCP, Energy Strategy and Onshore Wind Policy Statement, on how devolved policy levers can enable this.

Heat

- **By 2032 94% of non-domestic and 80% of domestic buildings' heat is supplied using low carbon heat technologies**
- **Improvements to the fabric of Scotland's domestic and non-domestic buildings results in a 6% and 10% reduction respectively in their heat demand by 2032 (Interim targets of 4% by 2020, and 6% by 2025)**
- **Energy efficiency will be a priority until 2025, when low-carbon and renewable heat technologies will be stepped up**

The draft Strategy stresses continuation of the RHI or equivalent beyond 2021 will be critical and should not exclude key renewable heat technologies – such as solar thermal. The Scottish Government also commits to working closely with the UK Government to ensure adequate incentives are put in place to continue to encourage the uptake of emerging renewable heat technologies post 2021 when the current RHI will end.

It commits to considering the role for regulation in the development of District Heating Networks and alongside the Strategy a consultation on Heat and Energy Efficiency Strategies, and Regulation of District Heating has been published.

Commitments are also given to explore the role of hydrogen through the development of the UK hydrogen Routemap, explore the opportunity to combine bioenergy production and CCS, and develop a whole-system Bioenergy Action Plan.

For further information on policies relating to Heat, as well as the Scottish Energy Efficiency Plan consultation, please see Scottish Renewables member briefing on heat and Annex A.

- **SR Initial Comments**

Scottish Renewables supports the draft CCP's strong ambitions on heat, but recognise that the targets for both domestic and non-residential sectors are very challenging. We therefore believe the Strategy could put

more effort on the installation of existing renewable heat technologies during the 2017 – 2025 period to help smooth the emissions reduction pathway. Off-gas-grid properties and district heating schemes should be priority action areas.

It is critical that a detailed sector road map is delivered and implemented as quickly as possible. Scottish Renewables' recent papers '*A Vision for Low-Carbon Heat in Scotland*'[1] and '*Biomass Heat in Scotland: 16 Priorities for Action*'[2] provide further information on our recommended policies to achieve our targets.

Transport

- **Proportion of ultra-low emissions new cars and vans registered in Scotland annually to reach or exceed 40% by 2032**
- **Proportion of the Scottish bus fleet which are low emissions vehicles has increased to 50% by 2032**
- **Proportion of total domestic passenger journeys travelled by active travel modes has increased by 2032**

The draft Strategy states modal shift, increased efficiency of petrol and diesel vehicles and widespread adoption of ULEVs is needed to meet its targets. SG will fund active travel and behavioural change programmes at record levels until at least 2021 and refresh their Roadmap for electric vehicles by spring 2017.

The draft Strategy also highlights the challenges to decarbonisation of transport, including the sourcing of sustainable biomass and bioenergy. As a result, only incremental additional use of biofuels is expected in the medium term.

- **SR Initial Comments**

Scottish Renewables' interests in transport relate principally to the electrification of rail and road transport; the impact of electric vehicles as a form of storage on the electricity system; and the role of sustainable biofuels. We therefore welcome the draft Plan's focus on these areas.

Published analysis from Ricardo AEA shows that emissions from transport must fall by 40% by 2030. However, the draft CCP only envisages an emissions reduction of 31% by 2032. We therefore query why more effort is not being targeted in this area.

Consumption

- **Reduce demand and increase efficiency through SEEP**
- **Harness smart technology and support new business models in the retail energy market to help consumers manage their bills**
- **Support introduction of low carbon alternatives in transport**
- **Deliver enhanced competitiveness and efficiency in the manufacturing and industrial sectors**

The draft Strategy seeks views on a new 2030 energy efficiency target and seeks to make Scotland's buildings near zero carbon by 2050.

The Scottish Government commits to working with partners to secure the effective regulation of the retail energy market and support the development of robust new business models that offer reduced costs to energy consumers. They also commit to working with suppliers to help low income households with the energy bills and explore synergies between energy efficiency programmes and smart meter roll out.

The draft Strategy is supported by a consultation on the Scottish Government's Energy Efficiency Plan. Please see our member briefing on Heat for more detail.

Smart, Local Energy Systems

- **Direct support for demonstration and growth of new, innovative projects**

[1] https://www.scottishrenewables.com/publications/vision-low-carbon-heat-scotland/
[2] https://www.scottishrenewables.com/publications/biomass-heat-scotland-16-priorities-action/

- **Develop a strategy approach to future energy systems in partnership with communities, the private and public sectors**

The draft Strategy contains a vision for Scotland to be a leader in the development of local energy systems by 2050. Under the vision, management of local energy systems will be a significant Scottish export industry, communities will have the opportunity to influence energy planning from the outset and receive community benefit from renewable energy generation. Local energy plans will be drawn up by all local authorities.

The Scottish Government will continue to offer support to low carbon investors through existing schemes, and CARES will continue to support community and low carbon schemes. The Scottish Government will also explore the potential to create a Government owned energy company to help the growth of local and community energy projects.

Please see Scottish Renewables briefing on Storage and Systems and Annex A for further information.

Monitoring and Reporting

The Scottish Government will publish an Annual Energy Statement in the summer of each year outlining:

- the latest energy statistics
- GHG emissions statistics
- information on the effectiveness of Scottish and UK Government energy schemes

The Scottish Energy Advisory Board will be refocused to align with the new themes contained within the Strategy. The Scottish Government also aims to encourage a greater sense of ownership with control amongst communities and individuals as consumers, producers and investors in their energy system.

- **SR Initial Comments**

We encourage the Scottish Government to develop and implement a communications and education campaign to ensure that the public are aware of the Energy Strategy intentions, the benefits it will deliver, and how they can help meet Scotland's new ambitions.

Scottish Renewables welcomes the commitment within the draft Energy Strategy to publish an Annual Energy Statement which will take account of the Climate Change Plan monitoring framework and relevant energy indicators. Given the stretching targets proposed, we would suggest that interim milestones or targets are given due consideration.

Contact Us
Lindsay Roberts
Senior Policy Manager
0141 353 4987
lroberts@scottishrenewables.com

Annex A - Renewable Energy Policies

Scottish Government will:

- review the role for new technologies and energy sources as transitional fuels for use in transport, heat and industry, with practical demonstrations where necessary
- consider how planning can support the future energy system, through policies within the current and future iterations of SPP and NPF
- collaborate with UK Government, local government, industry and academia on the UK hydrogen routemap, establishing the strategic basis for hydrogen in the energy system, whilst continuing to fund innovative projects involving hydrogen
- explore the opportunity to combine bioenergy production and CCS with a view to maximising the benefits for the energy system as a whole
- call on the UK Government to provide a stable, supportive regulatory regime to provide certainty to renewable investors and developers – giving appropriate support for investment in renewable energy, establishing a route to market for onshore wind, and clarifying the future for the LCF
- seek to address grid constraints in Scotland for distributed power generation at local, regional and national level, through engaging with the NIC and working with local authorities, Ofgem, National Grid and DNOs
- put in place measures which ensure that at least half of newly consented renewable energy projects will have an element of shared ownership by 2020
- support the future development of a wide range of renewable technologies through addressing current and future challenges, including market and wider policy barriers
- building on the successes of REIF, design future support to meet energy priorities
- begin work on a Bioenergy Action Plan to enhance understanding of the opportunities of bioenergy for Scotland's energy system
- continue to offer financial support and advice to domestic and business customers of all sizes to uptake renewable heat technologies and ask that the RHI continues to cover a wide range of technologies including biomass, heat pumps and solar thermal renewables to allow all potential Scottish investors and customers to obtain the benefits of the RHI scheme
- work closely with the UK Government to ensure adequate incentives are put in place to continue to encourage the uptake of emerging renewable heat technologies pot 2021 when the current RHI will end
- carefully consider with local government the role for regulation in the development of District Heat Networks on a large scale, and for the development of Local Heat and Energy Efficiency Strategies as part of SEEP
- work with the UK government to ensure the RTFO provides an important long term contribution to the decarbonisation of transport
- work in collaboration with BEIS and Ofgem in developing the Smart Energy Plan for the UK. seeking fair treatment for storage and flexibility mechanisms, including pumped hydro storage
- reiterate the proposal for the UK Government to implement a 'cap and floor' regime to provide a more appropriate regime for PHS and work with key stakeholders to realise the opportunities and overcome the barriers to deploying new PHS capacity in Scotland
- support innovation and demonstration of new forms of storage – including support for the PNDC and work under the ETP
- work with industry, academia, local authorities and environmental groups to consider proposals for re-powering existing large-scale electricity generating sites – recognising their potential strategic role in future system design and planning as part of the transition to a low carbon system
- continue to support low carbon investors through a variety of existing Scottish Government grant and loan support schemes – including REIF – carefully assessing projects in order to maximise the wider system benefits of low carbon investment
- under CARES continue to support community and local renewable energy schemes
- explore the potential to create a Government-owned energy company to help the growth of local and community energy projects

Annex B - Renewable Energy Technology Commitments

- **Onshore Wind**

Recognised as a mature technology, offering the lowest cost renewable electricity at scale, with current and consented capacity enough to power every household in Scotland twice over. Scottish Government will:

  - consult on onshore wind policy statement
  - work with industry to meet the challenge of delivering onshore wind without subsidy, including the scope for use of public sector and corporate PPAs
  - continue to work with industry and island councils to make the case for remote islands wind being a distinct technology
  - support a more proportionate and affordable approach to mitigating impacts from onshore and offshore wind development on aviation radar.

- **Offshore Wind**

Highlights optimism for further development in Scotland as a technology with potential to play a pivotal role in our energy system. Innovation, especially in floating, will play a significant role in positioning Scotland as a world centre for energy innovation. Scottish Government will:

  - support innovation and cost-reduction through enterprise agencies and partners such as the Carbon Trust and ORE Catapult
  - continue to deliver support under the RO until closure

- **Hydro**

Recognised as a mature and reliable technology. Scottish Government state they are keen to work with the UK Government to ensure hydro's sustainable future. Scottish Government will:

  - reinforce its commitment to encourage and promote hydro power, and continue to create a supportive environment for small scale and community hydro in Scotland

- **Marine Renewables**

Highlights significant Scottish resource, and world leading achievements including EMEC, MeyGen, ScotRenewables and Nova. Scottish Government will:

  - work to demonstrate to the investment community the strong industrial potential of marine energy and continue to push for UK Government support
  - continue to offer support through REIF and other financial mechanisms
  - support innovation and cost reduction through continued funding of WES

- **Solar PV**

States combining storage with wind and solar assets presents the most valuable solution for the energy system as a whole, allowing demand to be managed locally. Scottish Government will:

  - consider the on-going role for solar as part of a further review of energy standards within building regulations
  - ensure that good practice guidance for shared ownership developments fully recognises the opportunities for solar

- **Bioenergy**

Scottish Government will:

  - commit to the development of a whole-system Bioenergy action plan, following the publication of the final Climate Change Plan