

## Update to the Climate Change Plan 2018-2032

This briefing summarises key points from the Scottish Government's **Update to the Climate Change Plan 2018-2032**<sup>1</sup>, which sets out the Scottish Government approach to delivering the climate change targets. This briefing provides summary information of the topics of interest for Scottish Renewables. Section 2 describes the role and key actions for the electricity sector to contribute to decarbonisation. Section 3 outlines the importance of decarbonising heating in buildings to reach net zero and provides the actions needed for the deployment of low and zero carbon heating. Finally, Section 4 describes the role of Carbon Capture Usage and Storage (CCUS) in the net zero pathway and the key actions for its deployment.

### POLICY MESSAGES

#### Electricity

- Support the development of a wide range of renewable technologies by addressing current and future challenges, including market and policy barriers.
- Support improvements to electricity generation and network asset management, including network charging and access arrangements that encourage the deployment and viability of renewables projects in Scotland.
- Publish a revised and updated Energy Strategy, reflecting the commitment to net zero and key decisions on the pathways to take Scotland there.
- Develop and publish a Hydrogen Policy Statement by the end of 2020, followed by a Hydrogen Action Plan during 2021.
- A new renewable, all energy consumption target of 50% by 2030, covering electricity, heat and transport.
- Support the development of technologies which can deliver sustainable security of supply to the electricity sector in Scotland and ensure that Scottish generators and flexibility providers can access revenue streams to support investments.

#### Heat

- 2024 New Build Zero Emissions from Heat Standard: requiring new buildings to have zero emissions heating systems.
- Heat in Buildings regulation: Put in place regulation to increase uptake of zero emissions heating systems and improve energy efficiency standards across all tenures, prioritising the raising of standards for households living in fuel poverty.
- Expanded £1.6bn Heat in Buildings capital funding over the next parliament building on the Low Carbon Infrastructure Transition Programme (LCITP) and existing energy efficiency and zero emissions heat support programmes.
- The Renewable Heat Incentive (RHI) - a GB-wide scheme created by the UK Government (with the agreement of the Scottish Government). UK Government is extending both the domestic and non-domestic RHI out to 2022.
- UK Clean Heat Grant - a GB-wide Clean Heat Grant is planned to come into force in 2022, supporting uptake of heat pumps (and limited biomass boilers) via up-front grants.
- Implement the provisions of the Heat Networks (Scotland) Bill to create a strong regulatory framework to support delivery by 2023.
- Continue to support the Heat Network Partnership – a collaboration of agencies focused on the promotion and support of district heating schemes in Scotland.
- Local Heat and Energy Efficiency Strategies (LHEES) will be in place by the end of 2023, setting out preferred heat solutions zones, guiding building owner decision making about replacement heating systems.
- Undertake work to identify the capacity and output of renewable electricity generation required in Scotland to support the projected roll-out of heat pumps.
- Support heat networks through:
  - Introducing a Non-Domestic Rates Relief for renewable and low carbon heat networks until 2023/24.
  - Working to identify how new buildings in Heat Network Zones could be made ready to connect to heat networks.
  - Including district heating within the Permitted Development Rights review.
  - Through National Planning Framework 4, ensuring that local development plans take account of where a Heat Network Zone has been identified
- Hydrogen for heat demonstrator – providing £6.9m support for SGN's H100 hydrogen for domestic heat demonstrator.
- Work with UK Government on product standards, with a view to making new gas boilers hydrogen-ready.
- Bring forward and support demonstrator projects, such as: hybrids and high temperature heat pumps and the use of hydrogen for space and water heating.
- Publish a 'Heat Network Investment prospectus' in 2021/22 - a first-cut of HN Zones across Scotland, combined with information on decarbonisation needs of existing networks.

#### Carbon Capture usage and Storage (CCUS)

- ACORN CCS Project: support the delivery of the CCS and Hydrogen capability at St. Fergus Gas Processing complex by 2025.
- Establish and deliver a CCUS Challenge Fund.
- Support the development of Negative Emissions Technologies (NETs) within Scotland.

## 1 Introduction

The report updates the 2018 Climate Change Plan and sets out the Scottish Government (SG) approach to delivering a green recovery, and the pathway to delivering the climate change targets. The focus is on the period up to 2032.

This draft plan update will be examined in the Parliament to provide recommendations to the Scottish Government. Once this process has concluded, the final version will be published. Additionally, this plan has been created with, and aligned to, a range of publications and will be built on and adapted through future strategies and other publications. These include: Net Zero Nation: Draft Public Engagement Strategy for Climate Change, National Planning Framework 4, Infrastructure Investment Plan, [Scottish Government] Housing Strategy, Energy Strategy, Heat in Buildings Strategy, National Transport Strategy Delivery Plan, Hydrogen Policy Statement, Hydrogen Action Plan, Climate Emergency Skills Action Plan, Previous monitoring reports on progress to the 2018 plan.

## 2 Electricity

The SG states that they will ensure that both the technology and system challenges of the electricity sector are reflected in the new framework of support for energy research, development and innovation.

By the start of 2021, the Scottish Government will publish an Energy Strategy Update, outlining the role of the electricity system to increase decarbonisation in other sectors such as buildings, industry and transport. Furthermore, the first tranche of funding from the £180 million Emerging Energy Technologies Fund will also be available. Additionally, the process of introducing new requirements for developers to include supply chain commitments when applying to the ScotWind leasing process run by Crown Estate Scotland should be completed.

In autumn of 2021, the draft National Planning Framework (NPF4) will be laid out in Parliament and full public consultation on the draft NPF4 will run alongside Parliament's consideration, with NPF4 expected to be adopted in Spring/Summer 2022. At the end of 2022, an updated Electricity Generation Policy Statement will be reviewed and published ahead of the next Climate Change Plan.

By 2030, offshore wind in Scotland is expected to expand between 8 and 11 GW and the 2017 commitment to ensure renewable energy accounts for the equivalent of 50% of the energy demand across electricity, heat and transport should be successfully delivered.

### Key actions

- **Onshore wind**

The Government will continue to review the energy consenting processes, making further improvements and efficiencies where possible, and seeking to reduce determination timescales for complex electricity generation and network infrastructure applications. Faster determinations will enable any projects awarded consent to develop more quickly, which will benefit onshore wind in particular.

The interaction of wind turbines with aviation radar can sometimes present a barrier to development. For this, SG will continue to work with aviation and energy, exploring best practice for collaboration through the Aviation 2030 Vision Taskforce, tackling the technical, regulatory and financial barriers which will ensure that all radar is wind turbine tolerant/neutral, and freeing up much more capacity for development.

- **Offshore wind**

The actions from the Offshore Wind Policy Statement, published in October will be delivered. These actions, ranging from support for supply chain, planning, innovation and skills, will support the development of between 8 and 11 GW of offshore wind capacity by 2030.

The first ScotWind leasing round will be completed, granting property rights for the seabed in Scottish waters for new commercial scale offshore wind energy projects. We expect a second round to follow by 2023.

- **Pumped Storage Hydro Capacity**

Pumped Storage Hydro (PSH) will continue receiving support, following the recent SG consent for major projects at Coire Glas in the Highlands, and Glenmuckloch in Dumfries and Galloway. The SG has asked the UK Government to bring forward mechanisms, potentially similar to those available for interconnectors, which will enable the substantial investment needed to develop PSH; SG will work with the developers to ensure that this can deliver sustainable and secure jobs and supply chain benefits to Scotland's rural areas.

- **Marine Energy**

The report states that SG will continue to press the UK Government to make targeted and effective support available for wave and tidal generation. They mentioned that they have also campaigned hard for changes to the CfD which strengthen the requirement to use Scottish and UK supply chains, with measures on this front now subject to further consultation. Scottish Government believes there may also be a role for the CfD in supporting the production of green hydrogen from renewable energy sources.

- **Developing Scotland's Hydrogen**

SG will support the development of hydrogen linked to the electricity system during the 2020s, building on the outputs of the Hydrogen Assessment Project and hydrogen policy development process. This will identify and develop the opportunities for generating hydrogen from renewable electricity generation in ways that can support the integration of new wind, solar and marine capacity.

- **Clean Power Plan, security of supply, and infrastructure improvements**

- An updated Electricity Generation Policy Statement will be published by 2022, in line with the recent Climate Change Committee (CCC) recommendation.
- SG will also continue to ensure sustainable security of electricity supply, enabling renewable electricity to provide vital network services and including this component within future Scottish Government energy innovation funding programmes
- Support for the required infrastructure improvements to the ports and harbours will be provided as well. This is to ensure that Scotland's supply chain companies can benefit from the continued growth of renewable energy.

### 3 Heat

In 2020 the Scottish Government announced £1.6 billion Heat in Building to be invested over the next parliament and supported the investment in Heat Networks through the District Heating Loan Fund. It was also announced £6.9 million support for the H100 hydrogen for domestic heat demonstrator. Additionally, the Heat Pump Cashback schemes for households and the Renewable Heat Scheme for Scotland's small and medium-sized businesses (SMEs) were initiated. SG also consulted on a skills plan for heat in buildings.

In early 2021, a Net Zero Public Sector Buildings Standard for new builds is expected. Additionally, a Public Engagement Strategy for heat decarbonisation should be developed. The government is also funding via CARES for community zero and low emissions heat projects aimed at supporting off-grid communities to transition to net zero and Scottish Cities' Action Plans on heat and energy efficiency are expected to be implemented. In the middle of 2021, the government expects to release a consultation on the use of existing powers to regulate for the connection of non-domestic buildings to heat networks. At the end of 2021 a Supply Chain Strategy for heat and energy efficiency is expected to be developed.

By 2025, the zero emissions heating systems (including connections to heat networks) must account for at least 50% of new systems being installed each year. By 2030, At least 50% of Scotland's building stock should be heated using zero emissions systems.

## Key actions:

- **Early actions to 2025** will focus on increasing deployment rates of zero and low emissions heating through three broad mechanisms: A. standards and regulation; B. significant investment, including scaling up delivery programmes; and C. supply chain support.
- Principles for actions include: taking a whole system view, protecting consumers, working closely with citizens, driving innovation, exploring innovative finance and service models and using tax-based incentives to drive change.
- Key enablers will be: Creating the conditions to secure growth of heat networks in Scotland; Local Heat & Energy Efficiency Strategies for all of Scotland by the end of 2023 to ensure a place-based approach; and working with the Heat Pump sector.
- The Government will invest £1.6 billion in heat and energy efficiency over the next Parliament. Investment commitments include:
  1. £50 million Green Recovery Funding Invitation to support low carbon and zero emissions heat projects in Scotland (already in progress)
  2. Up to £95 million for heat decarbonisation and energy efficiency of the public estate;
  3. £25 million to support zero carbon energy infrastructure and heat networks for residential and commercial premises in the Clyde Mission region;
  4. Up to £4.5 million over the next six months in a cashback scheme for households, providing 75% cashback for zero emissions heating and 40% for domestic energy efficiency measures, with a total of £13,500 available per home;
- Key enablers for the growth of heat networks in Scotland will be the passing of the Heat Networks (Scotland) Bill, updates to the planning system, and the roll out of Local Heat and Energy Efficiency Strategies.
- The Scottish Government will work with local authorities and developers to implement the provisions of the Heat Networks (Scotland) Bill by 2023.
- Where there is new development, including where infrastructure is required, the planning system will support the heat transition. Heat Network Zoning and development planning will need to work together. Through National Planning Framework 4 it will be ensured that local development plans take account of where a Heat Network Zone has been identified.

- The Scottish Government will decide whether to extend Permitted Development Rights (that remove the need to apply for planning permission) for zero-emission heat networks and micro-renewable technologies.

#### 4 Carbon Capture, Utilisation and Storage

Scotland will have benefitted from the development of new, pioneering infrastructure such as that used for CCUS, which will bring significant opportunities for investment and employment, as well as sustainable industrial innovation.

A key element of securing the net zero transition is to create and protect employment while decarbonising industries. Looking ahead, emerging energy technologies such as CCUS and Hydrogen have the potential to safeguard employment and create value in hard to decarbonise industries, as well as gearing up the supply chain in terms of manufactured goods and services. In the 2020-2021 Programme for Government, the commitment is to expand the evidence base on CCUS and have commissioned an economic assessment of CCUS in Scotland which will consider the associated jobs within a broad range of scenarios for the development of CCUS.

The extensive potential for renewable energy generation, the presence of major subsurface CO<sub>2</sub> storage sites, and the availability of existing offshore pipeline infrastructure in the North Sea, combine to offer a unique opportunity to develop a Scottish economy where renewables, hydrogen and CCUS coexist and complement each other.

#### Key actions

- Support for commercialisation of CCUS, which is essential to reach net zero emissions, as identified by the CCC, and is a key to industrial decarbonisation. It is expected to be the most cost-effective decarbonisation technology for key sectors of Scottish industry.
- Support for the Acorn CCS Project located in the North East of Scotland at the St. Fergus Gas terminal. This project is uniquely placed to be the least cost opportunity to deploy a full chain CCS project in the UK.
- SG is also announcing a new Emerging Energy Technologies Fund of £180 million that will support the development of hydrogen and CCS, and which will add new impetus to the development of Negative Emissions Technologies (NETs) in Scotland. £100 million will be available to support hydrogen projects in line with the Hydrogen Policy Statement, and a further £80 million of this funding will be directed to projects supporting the development of a CCS transport and storage network that will further enable NETs projects to develop in Scotland.
- Grant funding of up to £300,000 to NECCUS, an industry-led alliance drawn from industry, academia, membership organisations and private sector bodies established to promote CCUS and support industrial decarbonisation in Scotland.
- SG will work with agencies to develop a £5 million Carbon Capture and Utilisation Challenge Fund to boost early-stage work and explore technologies and innovations that can capture and create value in CO<sub>2</sub>, reduce emissions and develop new income streams for Scottish businesses in this emerging market.

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<sup>1</sup> <https://www.gov.scot/publications/securing-green-recovery-path-net-zero-update-climate-change-plan-20182032/>