



Scottish Government Response to EU Consultation: Future Climate and Energy Policy – a Strategy for long-term EU greenhouse gas emissions reductions

In order to achieve the goals of the Paris Agreement, further measures are required from all parties to the UNFCCC and non-party stakeholders to hasten the global transition to a low carbon economy and ensure that the transition delivers for all. The recent Intergovernmental Panel on Climate Change (IPCC) report on 1.5 degrees is a timely reminder of the urgency of this task. The new report makes clear that all countries, as well as businesses and individuals, need to act now if the Paris Agreement goals are to be met.

The Scottish Government commends the efforts of the European Union and its member states over many years to lead and innovate towards carbon emissions reductions. Much has been achieved to date, with the EU on course to achieve its 2020 targets and being considered a global leader on climate action.

The Scottish Government agrees with the conclusions of the Environment Council on 9th October - that in order to achieve the long-term goals of the Paris Agreement all countries must enhance mitigation action in coherence with, among others, sustainable development and the protection of biodiversity. We therefore also agree that in order to deliver a modern European economy, maintain its position of leadership and deliver on Paris commitments, now is the right time for the EU to look beyond 2030 and develop a longer-term strategic approach to greenhouse gas emissions reductions.

Global climate action is entering an important phase and the EU's role in supporting global effort must remain front and centre. It is essential that the EU's long-term GHG emissions reduction strategy provides both leadership and credibility, as well as demonstrating the benefits of concerted climate action - for the health of the economy, the environmental and the individual.

The observations and examples in this submission are not exhaustive but rather offer some reflections on Scotland's experience, which we hope will be helpful in informing the European Commission in its assessment of options for a long-term GHG emissions reduction strategy.

The Scottish Government will remain a constructive partner in the process alongside our European neighbours and looks forward to continued cooperation and sharing of best practice, regardless of the UK's departure from the European Union.

Long-term ambition

Long-term carbon emissions reduction strategies are necessary if Paris Agreement commitments are to be met. It is therefore important that the EU sets the right example by raising its own ambition to levels commensurate with Paris goals.

Scotland continually seeks to demonstrate international leadership in this regard, with ambitious, credible targets and plans that are deliverable. Like the EU's 2020 targets, our earlier measures, in particular our ground-breaking Climate Change (Scotland) Act 2009 under which we currently operate, have brought about momentous change and benefits. Scotland's emissions have almost halved since 1990.

We have also recognised the need to go further to deliver a low carbon society and to play our part in global efforts to limit global warming to 1.5C. In May 2018 we introduced the [Climate Change \(Emissions Reductions Targets\) \(Scotland\) Bill](#) to the Scottish Parliament. The Bill proposes -90% GHG emissions reductions (covering all sectors, including a share of international aviation and shipping) by 2050, which will mean achieving net-zero CO₂ by the same date. In addition, the Scottish Government is committed to achieving net-zero emissions for all greenhouse gases as soon as possible.

The new Climate Change Bill was introduced in direct response to the Paris Agreement and according to our independent expert advisors, the UK Committee on Climate Change, the goals we have set in the Bill are consistent with achieving the aims of the Agreement. The Bill also requires Scottish Ministers to regularly seek expert advice on the earliest achievable date for net-zero emissions of all GHGs and we will seek such advice even during the parliamentary progress of the new Bill. The target date will therefore be put into law as soon as it can be done credibly. By increasing long-term ambition, as well as introducing new interim targets for 2020, 2030 and 2040, the Bill makes it clear that action needs to increase immediately across every sector of the Scottish economy.

As a devolved nation within the UK, working in partnership with other national and sub-national Governments is of particular importance to Scotland in achieving high ambition. There are some aspects of decarbonisation that we cannot achieve without action by the UK Government – for example, we cannot unilaterally regulate to decarbonise the gas grid – so we are acutely aware that we can and will achieve more working together with our neighbours.

A Sector Approach

Success at strategic level requires action across all key sectors. This has been a key message from the EU on climate action and is highlighted clearly in the consultation. The Scottish Government agrees this is the right approach and that it should remain so in the next phase of EU emissions reduction measures.

Scotland has experience of adopting a sector specific focus to climate action. In February 2018, the Scottish Government published the third [Climate Change Plan \(CCP\)](#) setting out sector by sector how we will deliver our existing emissions reduction targets to 2032 (-65%) under the 2009 Climate Change Act. This is a requirement of our legislation and follows two previous plans in [2011](#) and [2013](#). These plans form an integral part of our approach, recognising that all parts of society have a role to play in delivering progress.

The Scottish Government will support continued EU effort to target action within the key emitting sectors.

Energy

The EU has been a pioneer in creating the conditions to drive down emissions in the energy sector, through strong policy frameworks and the targeting of resources for innovative technologies and public information.

The production and use of energy impacts all of society every day. It holds a critical place in economies, powering businesses and vital public services while keeping us mobile and our homes safe and habitable. We cannot do without energy but we can change the way it is harnessed and spent – sustainably, securely and efficiently.

In Scotland, alongside the new Climate Change Plan, we have produced a new Energy Strategy, '*The Future of Energy in Scotland*'. This 'whole system' strategy sets out the long-term vision for the future energy system in Scotland and sets a new commitment to extend our tremendous progress in electricity to delivering 50 per cent of our total energy needs, across electricity, heat and transport, from renewables by 2030. We believe this Strategy is in line with many of the Commission's aims under consideration in this consultation and the Scottish Government agrees that the EU needs to take a whole system approach to ensure a long-term strategy keeps energy central to carbon reduction measures.

As we develop our plans domestically, we will also seek to raise the profile of Scotland's transition to a low carbon economy internationally and work collaboratively with European partners, including, for example, through the European Commission's Clean Energy for EU Islands initiative, promoting our expertise on energy transition and identifying opportunities to share best practice with islands in the EU and beyond.

Energy Efficiency

The Scottish Government agrees the EU should continue to focus on efficient consumption of energy and build on its positive record in this area, working with governments, businesses and consumers across the energy spectrum. Actions that reduce the demand for heat for our buildings and industrial processes are some of the most important tools for transforming energy use across the whole system.

The Scottish Government has created a national infrastructure priority for energy efficiency and heat decarbonisation of our buildings. We have launched [Energy Efficient Scotland](#) – a 20-year programme that will see improvements in the energy efficiency and decarbonisation of the heat supply of all buildings across Scotland, backed by regulatory standards, government advice and access to finance. The programme will help to achieve our vision that all of Scotland's buildings should be near zero carbon by 2050.

Scotland is already collaborating with European neighbours in developing strategies to deliver heat decarbonisation and energy efficiency. Over the coming years we will also deepen co-operation with the Danish Government following the signing of a Memorandum of Understanding covering heat decarbonisation, district heating and

energy efficiency in buildings whilst continuing to develop links to other European countries to promote learning, policy and knowledge exchange in this area.

Innovation

The scientific evidence is compelling that new technology with the capability to reduce and remove emissions will be necessary if we are to meet Paris goals. Research and development must therefore be embedded in the long-term solutions to all key sectors emitting GHG, across the EU and globally.

In Scotland, we have experience of pursuing these same objectives. We are well known for our engineering and innovation skills. In energy innovation in particular, we are proud to have many world-firsts. The world's first floating wind farm, 'Hywind Scotland', is in Scottish waters and we have attracted projects like Atlantis Resources' 'Meygen' project – the largest tidal stream project in the world and aiming to grow to 400MW ultimately. This is aided by the presence of the European Marine Energy Centre on Orkney, where the world's most powerful tidal device is being tested.

Scotland also looks to future success. Facilities like the Oil & Gas Technology Centre, the National HVDC (High Voltage Direct Current) Centre, the Power Network Demonstration Centre (at Strathclyde), the Edinburgh Centre for Carbon Innovation, and the 92MW European Offshore Wind Deployment Centre. This underlines our research strengths and the critical role for academic excellence in this area.

The EU has a strong record of support in this area and this should continue to be a key commitment for the disbursement of EU funds – driving innovation, building partnerships of excellence and delivering break-through tools to aid climate action.

Hydrogen

Hydrogen could potentially deliver the lowest cost and least disruptive solution for decarbonising heat and for transport across Europe and globally. It also has a variety of industrial applications that can contribute to decarbonisation.

In Scotland, we have supported a wide range of projects which demonstrate how hydrogen can be renewably produced, stored, and used when needed for local energy and transport. Many of the show-case projects on hydrogen in Europe are in Scotland (Orkney Islands, Aberdeen Buses, HYSEAS Hydrogen Ferries Project, Levenmouth)

Hydrogen, and its various uses, also features strongly as a theme of our energy decarbonisation options going forward and an illustrative hydrogen future pathway is set out in our Energy Strategy. Alongside the production of green hydrogen (produced from surplus renewable electricity), large volumes of natural gas (methane) as a source feedstock coupled with Carbon Capture Utilisation & Storage (CCUS) systems can also be deployed for low-carbon hydrogen production – Scotland has access to vast CO₂ storage potential in the Central North Sea.

We remain committed to supporting further research and development to support decision making in this area, including current live projects such as Scottish Gas Networks (Scotland's Gas Network Operator) H100 PROJECT to assess the viability

of constructing and operating the world's first 100% hydrogen domestic distribution network in Scotland. The Scottish Government agrees this is a valid area for the EU to explore further as part of long-term strategic planning.

Infrastructure

The EU has a key role to play in developing the necessary infrastructure to support a low carbon economy. Good infrastructure is essential to our economy and wellbeing and for the delivery of efficient, high-performing public services. It unlocks economic potential, supports jobs, skills development and allows our communities to flourish and businesses to grow. This is a key area of focus for the Scottish Government and we plan to increase investment significantly in Scotland's infrastructure by 2026.

Scotland's infrastructure has benefited directly from being part of the EU, from the numerous projects helped over the years by structural and cohesion funding to the more sector specific initiatives and partnerships that have benefited through innovation support. The EU must keep a regional focus on developing and building up the necessary infrastructure to deliver a low carbon economy.

Transport

The movement of people and goods is an essential feature of the global economy and will remain so. It is however a major source of emissions across the world and needs to be a priority for action at all levels. Road transport in particular requires early attention and the EU is already active on this issue, from support for zero and low emissions vehicles to addressing the CO₂ emissions from cars, vans and Heavy Duty Vehicles.

Progress has been made on international aviation and shipping, though more is possible and necessary. There are significant opportunities to develop further the rail network to support low carbon transport for people and freight with ongoing and future introduction of new, faster, greener and more efficient electric and hybrid rolling stock. New electric and low emissions buses continue to increase in numbers in our towns and cities while we opt for the bicycle and on-foot for shorter journeys.

In Scotland, we have set out a bold ambition to phase out the need for new fossil-fuel cars and vans by 2032 and will introduce thousands of new charge points, and increased funds to help people and businesses switch to Electric Vehicles. The Scottish Government is working with Network Rail and ScotRail on programmes to upgrade rail infrastructure, including expanding the electrification of key routes and modernising signalling and other systems.

Scotland also benefits directly from our EU membership on issues like active travel, where £5.3 million has been awarded from the Scottish Rural Development Programme to local authorities, a national park authority, a regional transport partnership and a registered charity, allowing more people to enjoy greener and sustainable travel and transport options.

The EU has a role to play in supporting all of these important aspects of transport policy and the Scottish Government agrees a long-term GHG emissions reduction

strategy is the right place to demonstrate that leadership alongside sector specific measures.

Agriculture

Agriculture is not the same as other sectors. Food cannot be produced without emitting greenhouse gases. However, we want Scotland to be a world-class producer of high quality food – and to produce it sustainably, profitably and efficiently. The EU aspires to do the same. It is therefore necessary and right to work with farmers, crofters and land managers to maximise efficiency and lower the emissions intensity of produce. This is a key focus within our Climate Change Plan.

The relationship between the EU's support for the agriculture sector and its climate action measures needs to be focused on the mutual benefits of efficient low emission farming.

Land Use, Land Use Change and Forestry

The LULUCF sectors have significant potential to remove and store, or sequester, greenhouse gases from the atmosphere. The EU has already made great effort to bring these sectors further into the frameworks of climate measures and the Scottish Government is pleased to see the role of forests and land use feature in this consultation. It is important that this work continues as part of a longer-term strategy.

In Scotland, we are committed to reversing the historic decline in woodland creation rates, protecting and expanding this important carbon sink. Scotland created 78% of all the woodland created in the UK in 2017-18 and we aim to increase future annual woodland creation rates up to 15,000 hectares from 2024-25.

Degraded peat is also a source of carbon emissions. Restoring peatland can considerably reduce the size of the carbon source. Our National Peatland Plan published in August 2015 sets out a vision for protecting and managing our peatlands, and where required supporting their restoration. By 2030, we aim to have restored 250,000 hectares of degraded peatlands against 1990 levels – an improvement of valuable soils which represent around 20 per cent of Scotland's land mass.

Waste

The EU has been at the forefront of efforts to develop a circular economy. This is exemplified with the current vision for 2030 and the Circular Economy Package, including action on the use and impacts of plastics. This provides a strong point from which to consider longer-term objectives for waste as part of overall climate measures.

Scotland's approach complements the EU's - that products and materials should be kept in high value use for as long as possible, after which reuse, recycling and recovery should be maximised. Waste going to landfill should also be minimised.

In Scotland, we have a number of targets which underpin our policies on waste. By 2025, we have committed to reducing waste arising by 15%, recycling 70% of our waste and reducing the amount landfilled to 5%. We also have one of the most

ambitious targets in Europe to reduce food waste: a reduction of by 33% by 2025. We are also taking action on the use and impacts of plastics, including single use items and the threat that plastics pose to the marine environment so as to increase capture, collection and recovery.

Adaptation

The impacts of climate change are already with us, or are now inevitable. The EU will experience its share of this and therefore adaptation needs to be fully recognised in long-term planning. The Scottish Government is pleased to see the consultation recognise this, including on better scientific research, infrastructure, flood prevention and preparedness, the effects of extreme heat on water resources and wildfire risk, and on better communication.

Scotland is also experiencing the effects of climatic change and needs to be prepared for future events. Our Programme for Government, published in September 2018, committed to a new five-year cross-government statutory Climate Change Adaptation Programme by the end of 2019 to ensure Scotland's communities, economy and natural environment are resilient to climate change. The new Adaptation Programme will build on progress under our 2009 Adaptation Framework and our first five-year statutory Programme published in 2014. We will consult on new Programme outcomes linked to the UN Sustainable Development Goals and Scotland's new National Performance Framework.

Consumers

We are all consumers and all have a part to play in making change happen. Providing the right information in an easy to reach way is as central to altering behaviours as providing access to new products and services. It is equally important to stimulate conversation across society on what motivates individual and collective choice and behaviours.

The EU has a strong record of gathering and understanding data on consumer trends and providing them with information to help make good decisions. This is important for effecting meaningful behaviour change and will remain a key area for involving all of society in aiding and experiencing the transition to low carbon.

The Scottish Government agrees the long-term approach needs to be considered with consumers in mind – what their views are on issues like housing, transport, food, technology and goods and services.

The Scottish Government has also been active in understanding and influencing thinking and actions that impact on carbon emissions. Through our Climate Engagement agenda and [Low Carbon Behaviours Framework](#) we have looked across key sectors like energy, transport, food and consumption, considering the role of individuals and households. This has helped us understand key behaviour areas that will be central to transforming the way we respond as individuals to everyday activities concerning the consuming goods and the use of services, all of which contribute significantly to carbon emissions.

Just Transition

It is important we learn the lessons of the past where economic shifts have impacted negatively on communities and society at large. As a key theme of the Paris Agreement, Just Transition must be about transitioning to a low-carbon economy in a way that is socially inclusive. It is necessary therefore to ensure the transition to a modern European economy follows that principal.

On 13 September 2018 the Scottish Government announced the launch of a national taskforce to advise on how Scotland achieves a carbon-neutral economy. The Just Transition Commission will look at how to maximise opportunities of decarbonisation, in terms of fair work and tackling inequalities, while delivering a sustainable and inclusive labour market. This will help ensure that in Scotland we plan for, and invest in, a transition to environmentally and socially sustainable jobs, sectors and economies, leave no one behind, actively consider employment issues when developing climate policies, and design and deliver low carbon infrastructure with the aim of creating decent, high value work.

The EU has already been vocal on this front across all the institutions and as it rises further up the agenda globally it deserves to be a key consideration as part of long-term planning for the transition to a modern European economy.

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