



Talanoa Dialogue - Scottish Government Response

In order to achieve the goals of the Paris Agreement, further measures are required from all Parties to the UNFCCC as well as from non-party stakeholders to hasten the global transition to a low carbon economy. It is equally important that the transition delivers for all, taking into account the Sustainable Development Goals. 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 we all need to act now if the Paris Agreement goals are to be met.

The Scottish Government commends the efforts of the Fijian Presidency to the UNFCCC over the past year by focusing on thinking through the Talanoa Dialogue. This facilitative process, conducted in the spirit of Talanoa, is central to bringing greater understanding to what has been achieved and to help point the way forward. We look forward to a successful and meaningful conclusion to the process at COP 24.

Global climate action is entering an important phase. It is essential that global momentum and political leadership on the issue remains strong and credible, as well as demonstrating the benefits of concerted climate action - for the health of our economies, the environment and our citizens.

The observations and examples in this submission are not exhaustive but rather offer some reflections on Scotland's experience of dealing with climate change, which we hope will be helpful in informing the global debate.

The Scottish Government remains a constructive partner on global climate action and looks forward to continued cooperation and sharing of best practice with our international partners.

Question One - Where are we?

On 8 October the IPCC published its special report on the evidence around the Paris Agreement aim of limiting global warming to 1.5 degrees Celsius.

The report highlights that limiting warming to 1.5 degrees, as opposed to 2 degrees, would reduce risks to global economic growth, food and water security, human health and species loss and that, while it remains technically possible to achieve this, it will require "rapid, profound and unprecedented cross-sectoral transformation of global energy, land, urban and industrial systems". Limiting warming to 1.5 degrees will require global carbon neutrality, defined as net-zero emissions of carbon dioxide, by 2050.

Current national pledges under the Paris Agreement are expected to lead to around 3 degrees warming. The best available scientific evidence is therefore clear on the challenge.

Scotland was one of the first countries to legislate for climate action when the Scottish Parliament voted unanimously for the Climate Change (Scotland) Act 2009. In response to the Paris Agreement and in pursuit of higher ambition the Scottish Government has proposed a new Bill to build on the previous legislation, which was introduced to the Scottish Parliament in May 2018.

In Scotland, our low carbon transition is well underway. As a result of measures already taken, emissions have almost halved since 1990, down 49%, and in 2017 69% of electricity was generated from renewable sources. In 2016, the low carbon and renewable energy economy supported 49,000 jobs in Scotland and generated £11 billion in turnover.

Question Two – Where do we want to go?

Delivering the Paris Agreement is the ultimate objective. Action at all levels of society must be focused on this and we must work collectively to reach that goal.

Furthermore, we must ensure that the transition to a modern global low carbon economy follows Just Transition principles and delivers economic, social and well-being benefits for all.

As highlighted by the IPCC report, carbon neutrality will be required by mid-century if we are to limit global temperature rise to 1.5 degrees . This major challenge requires both strong leadership and credible examples that demonstrate it is achievable.

It is also important that Parties respond to the latest scientific evidence and consider whether further action is needed. For example, as a response to the IPCC special report, the Scottish Government, alongside the UK and Welsh Governments, has commissioned fresh advice from our independent advisers, the UK Committee on Climate Change, on our current targets and we await their response.

In Scotland, the new climate change Bill ([Climate Change \(Emissions Reductions Targets\) \(Scotland\) Bill](#)) will ensure that Scotland is carbon neutral by 2050. The Bill proposes -90% total 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 GHG as soon as this can be done credibly and responsibly. The Bill allows us to make provision for this, as soon as it is supported by evidence. Alongside our existing annual reports on progress, the proposed increase in long-term ambition, and the introduction of new interim targets for 2020, 2030 and 2040 make it clear that urgent action is needed across every sector of the Scottish economy.

Question Three – How do we get there?

Long-term carbon emissions reduction strategies are necessary if Paris Agreement commitments are to be met. It is therefore important that ambition continues to rise so as to come into line with Paris goals, through the effective functioning of the stock-take and ratchet mechanisms of the Agreement.

Scotland continually seeks to demonstrate international leadership in this regard, with ambitious, credible targets and plans that are deliverable. In addition to what has already been achieved under existing legislation and our commitments under the current proposed legislation, a sector approach is central to delivery.

A Sector Approach

Success at strategic level requires action across all key sectors. This has been a key message from the UNFCCC on climate action. The Scottish Government agrees this is the right approach and that it should remain so in the delivery of Paris goals.

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.

Energy

Much has already been done globally to create the right 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 across the world. 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.

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 global partners.

Energy Efficiency

The Scottish Government agrees that there needs to be a continued focus on the efficient consumption of energy. 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.

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 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 Scottish Government believes it is important that national and multi-lateral resources continue to be made available to drive 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 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 Network's (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 to be explored further as part of long-term strategic planning.

Infrastructure

The low carbon economy of the future will need the right infrastructure. 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.

The Scottish Government believes there must be a national, regional and local 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.

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 supports active travel, programmes run by local authorities, national parks, regional transport partnerships and charities, to allow more people to enjoy greener and sustainable travel and transport options.

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

global community 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 public support for the agriculture sector and 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.

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

Development of a circular economy and effective waste management, including action on the use and impacts of plastics, has a key role to play in cutting emissions and protecting the natural environment. It is necessary therefore that this sector features in long-term strategies.

Scotland’s approach promotes the concept 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.

Other Areas of Interest

Adaptation

The impacts of climate change are already with us, or are now inevitable – impacting some more than others across the world with catastrophic consequences. Climate adaptation therefore needs to be fully recognised in long-term planning.

The Scottish Government believes planning should focus 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.

It is important that there is effective collection and understanding of data on consumer trends and that consumers are provided with the right information to help make good decisions. This is key 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 consumption of 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 global low carbon 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.

Climate Justice and support for developing countries

Climate justice is based on a simple and powerful message: the poor and vulnerable - at home and overseas - are the first to be affected by climate change, and will suffer the most, yet have done little or nothing to cause the problem. Finding solutions to the challenges posed by climate change is often framed by economics, technology and behaviour change. This can be limiting, however, and can ignore real inequalities between and within countries, as well as the multifaceted dimensions and impacts of climate change. What is required is a people-centred approach to tackling climate change.

We have been championing climate justice since 2012 when we launched our dedicated Climate Justice Fund. Between 2012 and 2021, we have committed to making at least £21m available for climate justice-related activity in some of the world's poorest countries. This is largely delivered through our Climate Challenge Programme Malawi, and the Climate Justice Innovation Fund (CJIF).

In addition to our climate justice fund we gave £330,000 in support to the UNFCCC for their Gender Action Plan to strengthen gender responsive climate policy development, and £50,000 to the Women's Environment and Development Organisation (WEDO) for their Women Delegates Fund to increase the capability and participation of women in global climate action. We have also supported the Under 2 Coalition's Future Fund with £90,000 over two years to help developing regions build capacity on climate issues and engagement with the global debate.

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