Net Zero, Energy and Transport Committee
7th Meeting, 2021 (session 6), Tuesday, 28 September 2021

Determination of Committee priorities: Attitudes and actions towards net zero from citizen stakeholders and key agencies

Note by the Clerk

Introduction

1. The remit of the new Net Zero, Energy and Transport (NZET) Committee is to consider and report on matters falling within the responsibility of the Cabinet Secretary for Net Zero, Energy and Transport.

2. The NZET Committee has agreed to spend initial meetings in autumn 2021 hearing from a cross-section of major stakeholders whose interests are relevant to the Cabinet Secretary's main responsibilities. So far, the Committee has heard from the Climate Change Committee (the Official report for this meeting can be accessed on the Scottish Parliament's website), former members of the Just Transition Commission (the Official report for this meeting can be accessed on the Scottish Parliament's website), and the Scottish National Investment Bank and Scotland's Enterprise Agencies.

3. On 14 September, the Committee heard evidence from the Cabinet Secretary about the Scottish Government's priorities and how he intends to carry out his cross-cutting governmental role in relation to achieving net zero. The Official report for this meeting can be accessed on the Scottish Parliament's website.

4. On 16 September, the Committee heard from the Right Honourable Alok Sharma MP, President-Designate of COP26, on the conference's possible outcomes, and their likely impact on net zero policy in Scotland. The Official report for this meeting can be accessed on the Scottish Parliament's website.

Attitudes and actions towards net zero

5. On 28 September 2021, the Committee will hear evidence from two panels:

- Panel 1: representatives from Scotland's Climate Assembly and Members of the Scottish Youth Parliament's Transport, Environment and Rural Affairs Committee; and

- Panel 2: representatives from three Scottish agencies, NatureScot, the Scottish Environment Protection Agency (SEPA) and Zero Waste Scotland.

Evidence session and next steps

6. The first panel is an opportunity for the Committee to explore community perspectives, youth engagement, and public attitudes towards net zero.

7. Scotland's Climate Assembly is made up of over 100 citizens from all walks of life tasked with examining expert evidence and agreeing recommendations for tackling the climate emergency in a fair and effective way. Their report, with 81 recommendations, was published in June 2021. They have also submitted written evidence. This is available in **Annexe A**.

8. The Scottish Youth Parliament's Transport, Environment and Rural Affairs Committee focuses on sustainable development, natural heritage, island issues, wildlife, farming and fishing, and land reform. For the year 2019/20, they focused on youth participation with ferry companies, increasing the awareness of active & sustainable travel, increasing rural connectivity (internet) and raising awareness of mental health services in rural areas.

9. In panel two, the Committee will hear evidence on actions being taken by public bodies and agencies to contribute towards the transition to net zero.

10. NatureScot is the lead public body responsible for advising Scottish Ministers on all matters relating to the natural environment. Their purpose is to promote, care for and improve our natural heritage and influence others to manage our natural resources sustainably. They have also submitted written evidence. This is available at **Annexe B.**

11. SEPA's role is to make sure that the environment and human health are protected, ensure that Scotland's natural resources and services are used as sustainably as possible and contribute to sustainable economic growth.

12. Zero Waste Scotland is a not-for-profit environmental organisation, funded by the Scottish Government and European Regional Development Fund. Its goal is to inform policy, and motivate individuals and businesses to embrace the environmental, economic, and social benefits of a circular economy.

13. At future meetings in early October, the Committee expects to take evidence from:

- Ofgem;
- Other witnesses to be announced.

14. Once these initial evidence sessions are concluded, the Committee expects to consider and agree a work programme in late October. This will be published on the Committee's website once agreed.

Scotland's Climate Assembly

Scotland's Climate Assembly is Scotland's first citizens' assembly focused on climate change. Grounded in Scotland's Climate Change Act (2019), the Assembly brought together over 100 ordinary citizens from across Scotland to deliberate about the climate emergency. They were tasked with answering the question:

How should Scotland change to tackle the climate emergency in an effective and fair way?

What is a citizens' assembly?
A citizens' assembly brings together a group of people who are broadly representative of a population to learn and deliberate about a topic before they make recommendations. Scotland's Climate Assembly sent out 20,000 invitations to randomly selected households across Scotland. Of those who responded, 105 people were invited to take part in the Assembly. Assembly members were selected to be broadly representative of Scotland's population in terms of age, gender, disability, household income, geography, ethnicity, rurality and attitudes towards climate change.

Learning Journey
The Assembly's Evidence Group created a learning journey ensuring that members heard balanced, accurate and comprehensive evidence about the climate emergency, and different ways of tackling it. The Assembly learned about climate change, mitigation, adaptation, fairness and how change happens before splitting into three streams to consider Diet, Land Use and Lifestyle; Homes and Communities; and Travel and Work.

Assembly members also heard from children in the Children's Parliament. As Scotland's Climate Assembly members were aged 16+, the Assembly worked closely with Children's Parliament to integrate their activity into the Assembly. The children's work was regularly fed back to Assembly members, which helped to shape the Assembly's final recommendations. Assembly members and the children also met in an online workshop to share their views and experiences. The children's calls to action are integrated with the Assembly's recommendations in Scotland's Climate Assembly full report.

Recommendations
Scotland's Climate Assembly laid its 'Recommendations for Action' report in the Scottish Parliament on 23rd June 2021. The report begins with a Statement of Ambition, calling for radical and decisive action, then details 16 goals and 81 recommendations. The recommendations were supported by an overwhelming consensus of Assembly members. The Assembly is embedded within the Scottish Parliamentary process and Scottish Ministers are required by law to respond to the recommendations within six months of the report being laid in Parliament.

The report's Statement of Ambition called for immediate action at all levels of society, decisive leadership and strong, impartial cross-party collaboration and accountability. Assembly members called for politicians and policy makers to have the courage to act now to bring emissions down to net zero, drawing on the science and evidence to drive rapid and fundamental behaviour change across society.

The report includes recommendations on **reducing consumption and waste** including: support for sustainable manufacturing, banning single-use plastics, reducing food waste by changing food packaging, a National Reuse Charter, extending producer responsibility legislation and resource libraries.

It includes recommendations on **improving the quality of Scotland's buildings** including: updating building standards so all new housing and non-residential buildings are built to Passivhaus standard within five years whilst also considering embodied carbon, ensuring planning decisions consider climate change, designing buildings so the materials used for their construction can be reused and recycled, and introducing a new environmental impact assessment for existing and new homes which adapts SAP/EPCs to measure all aspects of sustainability, which should be used in the assessment of Council Tax. The Assembly also recommends that **the majority of existing homes be retrofitted to be net zero by 2030** and, to support this, that there is investment in construction workforce development and retraining, the introduction of robust quality standards, the decarbonisation of home heating by 2030 and provision of grants to all homeowners by 2025. Recognising the potential impacts this could have on fuel poverty, the Assembly also recommended that the Fuel Poverty Strategy is implemented immediately.

The Assembly made further recommendations that the Government **introduce mandatory standards and regulation** including: strengthening building and trading standards to quality assure energy efficiency work carried out by private companies, strengthening planning restrictions so brownfield sites are developed and existing buildings repurposed ahead of greenfield development, that the public sector reach net zero by 2030 and absolute zero by 2035, that all public sector procurement include sustainability criteria and all public service vehicles have zero tailpipe emissions. In addition, they recommended that benchmarked standards are created for reaching net zero which public organisations and private companies would be required to reach, that a green paper is produced to contrast different methods of electricity generation and their climate impact, that a Climate Change Business Bill is enacted and an independent regulator is established to set climate impact standards and ensure compliance, and that government and public services procure plant based and low carbon food for all public sector catering.

The Assembly recommended action on **public transport** to reduce the need for cars and support active travel including: making public transport cheaper or free, introducing an 'Oyster card for Scotland' and placing rail travel at the core of an integrated transport system by subsidising rail infrastructure to make it more affordable and resilient than air travel. To reduce **travel emissions**, the Assembly recommended that regulations on ferry and vessel emissions were improved and that investment be made in research and development of alternative green fuels and zero carbon air travel. They also recommended that the Government should commit to working towards all internal flights within Scotland being decarbonised by 2025. To help people understand the climate impact of their food, travel and the products they buy, the Assembly recommended that labelling be introduced so people can make informed decisions about what they buy and how they travel.

Education was another focus of the Assembly's recommendations. Recommendations on education include: changing home energy efficiency culture, initiating public information campaigns on transitioning to a sustainable diet and green jobs, including education on reducing greenhouse gas emissions in education programmes, providing education to support the transition from car use to public and active transport, and increasing public awareness regarding the climate benefits of a four-day week.

The Assembly's recommendations on **land use** include: supporting marine carbon sequestration, committing to higher levels of peatland restoration and native woodland planting, incentivising landowners to maximise the land available in order to meet net zero targets and developing a

subsidy regime that encourages farmers to transition to more sustainable land management practices.

The Assembly also wanted **communities** to be empowered to take local action on climate change. Here, recommendations include: supporting community low carbon heating systems; providing government support for community engagement to empower local communities to take action; land ownership reform to empower communities to take ownership of underused, underutilised or unproductive land to be managed to tackle the climate emergency; funding for community climate action projects; and enhancing Community Right to Buy legislation to make it easier for communities to take ownership of unproductive land for climate action.

The Assembly made recommendations on developing Scotland's **circular economy** including: introducing sustainable business loans for companies investing in reuse and reprocessing in Scotland, setting targets to reduce the use of high carbon construction materials and increase the use of carbon neutral materials, setting targets for shops to sell local produce, and de-incentivising imports to support Scottish low carbon and innovative businesses.

On **work and volunteering** to tackle climate change, the Assembly recommended: a National Nature Service to contribute to rewilding, land restoration and adaptation; a green training and apprenticeship scheme; and flexible working conditions. The Assembly supported the development of more sustainable **business** models and recommended that: the elimination of frequent flyer and air mile bonuses; cooperative models of land use and green business models are incentivised; and funding should be prioritised for businesses who look after wellbeing before profit, provide community benefits, and/or are staff owned or cooperatives. They also recommended the exploration of the introduction of a Universal Basic Income and a four-day working week.

To reduce the need to travel, the Assembly supported the principles of **20-minute communities** and recommended: improving broadband connectivity; investing in public spaces to support walking and cycling; converting existing buildings rather than building new out of town developments; reforming planning laws to enable governments to require developers to include community infrastructure and local facilities that can be reached by 'active travel'; guaranteeing access to services to support rural localised living through remote, digital and mobile provision; creating new and supporting existing work hubs; and working towards free wifi for all and supporting access to smart devices to close the digital divide.

The Assembly supported the development of a fair, equitable and transparent **tax system** that drives carbon emission reductions and recommended: introducing tax incentives for training for green jobs; taxing high carbon resources; introducing a carbon land tax which taxes emissions created through land use and penalises land currently emitting more carbon than it captures; introducing a frequent flyer levy; introducing a carbon tax on food, based on the carbon intensity of food production, and using the revenue to subsidise sustainable foods; introducing a carbon tax and dividend scheme; taxing high carbon aviation fuels; and increasing road taxes for private car use to subsidise public transport.

Finally, the Assembly also supported reframing the national focus and vision for Scotland's future away from economic growth and Gross Domestic Product. This aims to reflect climate change goals towards the prioritisation of a more person and community centred vision of thriving people, thriving communities and thriving climate. They recommended businesses and government adopt a measurement framework for success that incorporates sustainability, well-being and happiness alongside profit.

NET ZERO, ENERGY AND TRANSPORT COMMITTEE – BRIEFING FROM NATURESCOT FOR MEETING ON 28 SEPTEMBER 2021

Thank you for inviting NatureScot to give evidence to the Net Zero Energy and Transport Committee to help inform the priorities for its work programme. In advance of the oral evidence session, below are some key points that we would like to make in relation to the Committee's remit. Overall, we want to emphasise the important role nature has in tackling Climate Change and how we must address nature decline now, if we are to reach Net Zero.

The twin Climate and Nature Crises are coupled and must be tackled together: we tackle both or we tackle neither.
- Nature is not a "nice to have"; it is fundamental to human life; we are part of a complex ecosystem and if the foundations begin to crumble, it has implications for us all. Our economies must be embedded in nature. We are part of nature, not apart from it. The latter view has fuelled both climate change and over-exploitation of nature.
- In their *Global Assessment* (2019), The International Panel on Biodiversity and Ecosystem Services (IPBES) found that up to 1,000,000 species are at risk of extinction due to five main drivers of biodiversity loss, namely (in order): habitat loss and fragmentation, overexploitation of species, climate change, pollution and non-native invasive species. Of these, climate change is especially problematic because as well as being a driver in its own right, it intensifies all of the others.

Globally, nature can contribute to more than 30% of our net zero targets.
- Global emissions in 2020 were about 36 billion tCO_2. The global potential contribution of nature to net zero is widely agreed to be about 10 billion tCO_2 p.a., comprising 40% *protecting* intact nature, 40% *managing* lands (crops, grazing, timber) and 20% *restoration* (wetlands, forest etc) - i.e. all land, everywhere, contributes.
- In Scotland, nature – all use of the land and sea - must contribute to at least 40% of the transition to net zero. This is based on about 40% of the latest greenhouse gas inventory (June 2021) being concerned with land use, namely wetlands, woodlands and farming. Scotland's total emissions were 47.8$MtCO_2e$ in 2019. The net emissions from land use of 2.7 $MtCO2e$ include removals by e.g. forestry (-11.5 $MtCO2e$) and emissions including degraded peatlands (14.2 $MtCO2e$). Agriculture contributes 7.5 $MtCO_2e$ emissions.
  - Agricultural emissions are predominately from the livestock sector. It can reduce these through the development of more efficient and sustainable livestock systems which, when included in agro-ecological systems such as agro-forestry, can deliver much greater nature benefits than climate based actions alone.

- o Through the adoption of agro-ecological systems, agricultural land as a whole could reduce emissions in the order of 2.7 $MtCO_2e$ by 2045 including agroforestry [0.57 $MtCO_2e$/year], rotational grazing with legumes [0.54 $MtCO_2e$/year], conservation agriculture and reduced compaction [0.13 $MtCO_2e$/year]
- The forest removal sink is expected to decline over the next few years as a result of low rates of planting in the 1990s and harvesting of forests planted in the 1970s.
- The rate of reducing the peatland source depends on the rate and pace of peatland restoration and this is likely to require both public and private investment.
- The relative importance of land use in both transitioning to and maintaining net zero will magnify as emissions from other sectors decline.
- The CCC's 3rd Climate Risk assessment noted that without "action on adaptation we will struggle to deliver key …goals, including Net Zero itself. We cannot rely on nature to sequester carbon unless we ensure our peat, our trees and our wetlands are healthy, not only today but in the future".
- For land use, we have a triple challenge in that management of the land and sea must simultaneously reduce emissions of greenhouse gases, build resilience for a changing climate and enhance the state of nature.
- The key to resilience is diversity. The transition to net zero must involve more integration of land uses at finer scales to maximise multiple benefits for people, nature and climate. Regional Land Use Partnerships offer an opportunity for this.
- Actions to improve nature, including those required to bend the curve of biodiversity loss, will almost always have a beneficial climate impact but the reverse isn't necessarily true – some actions for climate could degrade nature (e.g. intensive crop management for carbon sequestration).
- Ensuring that this is a just transition is essential. This is a significant challenge given that most uses of the land and sea are predicated on fossil fuels and are mainly extractive rather than regenerative or circular.

Involvement of people from across all society in developing and delivering nature based solutions will lead to a just transition
- A nature-first approach, i.e. nature as the first-best solution to societal problems, can help to diversify skills and jobs in both rural and urban areas. Our green skills work covers the following main themes:
  - o Strategic Engagement
  - o Engaging and inspiring young people.
  - o Understanding demand.
  - o Peatland restoration and nature-based solutions.
- In addition, we are supporting 37 modern apprenticeships, student and graduate placements through our own internal £1m Programme for Youth Employment.
- An economy embedded in nature requires us all to be stewards of nature in both personal and work roles, and will result in much higher rates of climate-nature literacy across society. There's no better place to learn about nature than outdoors, with a challenge to extend this beyond the 3-18 curriculum to all skills, training and live-long learning.

- o The *Beyond your Boundary: easy steps to learning in local greenspace* toolkit helps schools to use local greenspace and supports teachers' professional learning.
  - o The *Greenspace Map for Outdoor Learning* helps schools to find places to learn outdoors.
- Embedding the economy in nature will require a natural capital approach, making explicit the elements of nature - species, habitats, soils and fresh waters, air and seas - that provide benefits to people.
  - o NatureScot was the first public body in Scotland to prepare experimental natural capital accounts for land (including National Nature Reserves) we own and manage. They showed that this land generates over £28m worth of benefits each year.
  - o We are leading on behalf of SG the Natural Capital Pilot Programme, a suite of projects to test natural capital and outcomes-based approaches to inform future rural policy, which includes a natural capital assessment template for landholdings, and a method for natural capital assessment at landscape scale to inform regional land use partnerships.
  - o We maintain and update the Natural Capital Asset Index, an economic indicator in the National Performance Framework.