

## **Annex A – NZET Committee programme of evidence sessions**

### **31 August**

The Committee took [evidence](#) from the Climate Change Committee, hearing from—

- The Right Honourable Lord Deben, Chairman;
- Chris Stark, Chief Executive; and
- Professor Keith Bell, Scottish Representative, Climate Change Committee.

### **7 September**

The Committee took [evidence](#) from former Just Transition Commission members, hearing from—

- Professor Jim Skea, Former Chair of the Just Transition Commission and Professor of Sustainable Energy, Centre for Environmental Policy; and
- Dave Moxham, Former Member of the Just Transition Commission and Deputy General Secretary, Scottish Trades Union Congress.

### **14 September**

The Committee took [evidence](#) from the Scottish Government, hearing from—

- Michael Matheson, Cabinet Secretary for Net Zero, Energy and Transport; and
- Kersti Berge, Director of Energy and Climate Change, Scottish Government.

### **16 September**

The Committee took [evidence](#) from the UK Government, hearing from—

- The Right Honourable Alok Sharma, COP26 President-Designate;
- Lee McDonough, Director General for Net Zero Strategy and International; and
- Peter Hill, COP26 Chief Executive Officer, UK Government.

### **21 September**

The Committee took [evidence](#) from the Scottish National Investment Bank and Scotland's Enterprise Agencies, hearing from—

- Eilidh Mactaggart, Chief Executive and Willie Watt, Chair, Scottish National Investment Bank;
- Audrey Maclver, Director of Energy and Low Carbon, Highlands and Islands Enterprise;
- Martin Valenti, Director of Net Zero and Claire Renton, Head of Area Operations, South of Scotland Enterprise; and
- Andy McDonald, Head of Low Carbon Transition and Ewan Mearns, Team Leader, Strategy, Scottish Enterprise.

## 28 September

The Committee took [evidence](#) from citizen stakeholders and key agencies, hearing from—

- Susie Townsend, Head of Secretariat, Jocelyn Richard, Assembly Member and Katie Reid, Children's Voices Programme Manager, Scotland's Climate Assembly;
- Liam Fowley, Scottish Youth Parliament's Transport, Environment and Rural Affairs Committee;
- Terry A'Hearn, Chief Executive, Scottish Environment Protection Agency;
- Iain Gulland, Chief Executive, Zero Waste Scotland; and
- Nick Halfhide, Director of Nature and Climate Change, NatureScot.

## 5 October

The Committee took [evidence](#) from Ofgem, and representatives from key organisations and sectoral experts (energy, infrastructure and transport), hearing from—

- Jonathan Brearley, Chief Executive, Harriet Harmon, Head of Transmission Charging Policy, Anna Rossington, Deputy Director, Retail Transition and Steve McMahon, Deputy Director, Electricity Distribution Networks & Cross Sector Policy, Ofgem;
- Brendan Callaghan, Interim Chief Executive Officer, Environmental Standards Scotland;
- Professor Karen Turner, Director of the Centre for Energy Policy, University of Strathclyde; and
- Tony Rose, former Director and Professor Iain Docherty, former Commissioner, Infrastructure Commission for Scotland.

## Annex B - key themes and questions from initial NZET evidence sessions

### Funding and achieving Net Zero

The Climate Change Committee told us that a conservative estimate of the costs of transitioning to net-zero by 2045 is less than 1% of Scotland's GDP over that period. They also told us that low carbon investment must scale up to £50 billion each year across the UK. The CCC's Chris Stark stated:

“The £50 billion figure is the total additional capex [capital expenditure] across the UK economy, and we expect about £5 billion of that investment to take place in Scotland.”<sup>1</sup>

The CCC noted that most of that investment will come from the private sector. They did not have a figure for how much state support will be needed.

The Cabinet Secretary for Net Zero, Energy and Transport highlighted that “Of the measures that we will need to take to achieve our net zero ambitions, 60 per cent involve behaviour change”.<sup>2</sup>

The Cabinet Secretary discussed the need for investment in skills and training and highlighted the key role of the New Jobs Green Academy. He also discussed investment in the north-east and Moray over the next 10 years by way of a £500m Just Transition Fund, alongside the creation of an energy transition zone:

“Regarding the just transition fund for the north-east and Moray, we have already begun engagement with the sector to look at priorities for the next 10 years as we support the transition. We have committed to taking that forward on a co-production basis. That is what we intend to do. That work has already begun. I cannot give you a specific date when it will be completed, but we do not want it to be open ended. We want to start making investment now.”<sup>3</sup>

The Cabinet Secretary also noted that the Scottish Government had commissioned the Fraser of Allander Institute to consider how future Scottish budgets can more transparently outline the impact that decisions made in them have on progress towards a net-zero economy. The Scottish Budget already includes a [carbon assessment of portfolio spending](#) and the [carbon assessment of capital expenditure](#) ('taxonomy'), which sets out each portfolio's impact on emissions, categorising instances of capital expenditure as having either a “high”, “medium” or “low” carbon impact.

However, these existing measures have a number of limitations. In particular, they are not granular enough to help Parliamentarians have an informed understanding of the likely impact individual policy decisions may have on carbon emissions. This limits Parliament's ability to scrutinise progress towards meeting emission reduction targets. The taxonomy of capital expenditure in recent years shows a [reduction in high carbon spend and an increase in low carbon spend](#). But it does not set out what the impact of

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<sup>1</sup> Official Report, [31 August 2021](#), col. 14

<sup>2</sup> Official Report, [14 September 2021](#), col. 12

<sup>3</sup> Official Report, 14 September 2021, cols. 14-15

this trend is – how much does high carbon spending actually increase emissions, and how much does low offset/ reduce them? – or whether this is sufficient to meet emissions reduction targets.

A key aspect missing from both measures is the ability to model the future impact of spending decisions, in particular possible second order impacts through behavioural changes which reduce or increase future emissions. [SPICe published a briefing on climate governance of the Scottish Budget](#) which provides more detail on the tools available and their limitations and gives some examples of international best practice.

Questions:

1. What work has the Scottish Government done to identify the balance between private/public sector investment which will be required to meet the net-zero targets, and how will this be reflected in the budget? Is the rate and pace of investment commensurate with the scale of the net zero challenge?
2. The UK Climate Change Committee say that low carbon investment must scale up to £50 billion each year across the UK, with £5 billion of that investment to take place in Scotland. Does the Scottish Government agree with the CCC estimates?
3. In terms of increasing transparency of public financing for net zero, will additional information be included in the Budget to show (i) core budget (Revenue and Capital) in Portfolios and (ii) additional 'net-zero spend'?
4. If the Scottish Government considers that 60% of the measures needed to achieve net-zero emissions will involve behaviour change, is it confident that spending on public information and engagement on climate change in the 2022-23 budget will reflect this? How will the budget outline the actions that the Scottish Government plan to support communities across Scotland with behaviour change?
5. Will the Scottish Government be providing more detail on how the £500 million Just Transition Fund will be deployed, including the profile of spend over the 10 years and details about interim goals that this funding should achieve? Where will it sit within the budget, where are funds being directed, and how will they be allocated?
6. How will the Scottish Government ensure that Just Transition funding supports workers in acquiring the skills they will need to ensure that, as economic activity in carbon intensive industries reduces, they are able to quickly move into newer, greener fields of employment without facing a period of unemployment?
7. Will the forthcoming budget contain details on the amount of funding for the new Green Jobs Workforce Academy?
8. The Committee would welcome a breakdown of spend for the £100 million Green Jobs fund announced in the recent Programme for Government, and asks whether any further details about future spending in this area will be outlined in the forthcoming budget?
9. The Committee would welcome an update on the commissioned work from the Fraser of Allander Institute.

## **Adaptation funding and finance**

The Committee heard from NatureScot who highlighted climate change adaptation as an area of work that is critical in thinking about net zero. NatureScot set out the need

to ensure the resilience of Scotland's landscapes and habitats in future so that carbon stored in nature is at less risk of being re-emitted due to, for example, more weather extremes, pests and diseases, and long-term climate change trends.<sup>4</sup> The Climate Change Committee has highlighted this risk as one of eight "highest priorities" for immediate adaptation.<sup>5</sup>

The Committee also heard that nature can provide essential support to wider socio-economic adaptation that underpins net zero, for example through habitats reducing flooding of built infrastructure, or green infrastructure improving the health and resilience of local communities. We are aware that this links strongly to work done by one of our predecessor committees (the Environment, Climate Change and Land Reform Committee) in session 5 on 'preventative spending'.<sup>6</sup>

Questions:

10. Given that net-zero cannot be achieved without strong parallel action on climate change adaptation, how might we expect to see broader budgeting for adaptation, and funding for specific adaptation programmes evolve in the coming years to ensure maximum resilience?

## **Circular economy**

The Committee heard from Zero Waste Scotland about the importance of scaling up efforts to tackle food waste, both at household level and throughout supply chains. The Committee heard that food waste in Scotland has almost three times the impact on climate change as plastics.

The Committee also notes that there are ambitious 2025 targets approaching in the area of waste and circular economy – such as the food waste reduction target of 33%, the 70% recycling target, and the target (and legal requirement) to ban landfill of biodegradable municipal waste by 2025. The deadlines for these targets are no longer far away, and it is concerning to note that progress in recycling rates has slowed in recent years. The Committee therefore considers it important that the forthcoming Scottish budget should support necessary progress in these areas.

Zero Waste Scotland has hitherto had access to significant European Regional Development and Structural funding which has been distributed to over 240 businesses to support the transition to a more circular economy. The Committee heard that this funding will end in December 2022, and there is currently no agreed follow-on programme, which is a concern.

The Committee also heard that in the run-up to implementation of the Deposit Return Scheme there may be economic opportunities for investment in reprocessing infrastructure in Scotland.

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<sup>4</sup> Official Report, [28 September 2021](#), col. 36

<sup>5</sup> This is highlighted in the submission by NatureScot to the committee on 7 October 2021 - [Submission from NatureScot | Scottish Parliament Website](#)

<sup>6</sup> See, for example, the Environment, Climate Change and Land Reform Committee's [Pre Budget Report: Draft 2020/21 Budget \(azureedge.net\)](#), published 14 October 2019

Zero Waste Scotland told the Committee that for every £1 that it invests in businesses, another £3 or £4 comes in from the private sector. The Committee heard that there is a growing appetite from the private sector to support circular economy businesses.<sup>7</sup>

Questions:

11. Can the Scottish Government update the Committee on whether EU funding distributed by Zero Waste Scotland will be replaced, and on how circular economy funding can be best structured to leverage in further private investment?
12. Is the Scottish Government looking at new fiscal measures to enhance local government capacity to take positive action to promote a circular economy?
13. When will the Circular Economy Bill be introduced?
14. Does the Scottish Government agree that significant increased investment may be needed in the forthcoming budget to enable sufficient progress towards 2025 waste and recycling targets – for example to meet food waste targets and ensure the 2025 ban on landfilling biodegradable municipal waste are met?
15. What can be done in the forthcoming budget to maximise economic and circular economy benefits resulting from the forthcoming Deposit Return Scheme e.g. investment in reprocessing infrastructure?

## **Biodiversity and natural infrastructure**

The Committee asked the Cabinet Secretary about opportunities to mainstream the protection of biodiversity in government, as the Scottish Government seeks to do with climate action (e.g. in funding and governance). The Cabinet Secretary told us that the challenge is to make the biodiversity emergency as front and centre in the ongoing debate as climate change, and to be prioritised through legislation, in policy across different sectors, and in everyday practice. The Committee is interested to see how this can be reflected in future budgets.

The Scottish Government has committed to ensure that every local authority will have a Nature Network of new, locally driven projects to improve ecological connectivity across Scotland. NatureScot told us that models for both local Nature Networks and Regional Land Use Partnerships remain in development, and that clarity is needed in some key areas; for instance, identifying which species or habitats we might need to target within a particular land use partnership, and what public and private funding will be available to do so.

Questions:

16. How will the Programme for Government commitment for a Nature Network in every local authority be reflected in the forthcoming budget? And what is the expected funding mechanism for them?
17. Given that the Scottish Government agrees that protection of biodiversity needs to be more mainstreamed, how does the Scottish Government propose to do this in future budgeting?

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<sup>7</sup> Official Report, 28 September 2021, col. 47

## **SEPA cyberattack and public sector cybersecurity**

The Committee heard that the cyberattack on SEPA during the festive period of 2020 was very significant and required SEPA to prioritise its work in terms of environmental risks, critical services e.g. flood alerts, and legal obligations.<sup>8</sup>

SEPA also told the Committee that it is soon expecting to publish material from commissioned reviews (subject to some material being confidential, relating to the associated criminal investigation), and is working with the Scottish Government and the Scottish Business Resilience Centre to ensure that lessons are learned.

Questions:

18. Does the Scottish Government consider that further investment in cybersecurity is necessary in light of the cyberattack on SEPA? How will the forthcoming budget reflect this?

## **Scottish National Investment Bank and Enterprise Agencies**

The Committee explored the work and funding arrangements of the Scottish National Investment Bank (the Bank) and Scotland's three Enterprise Agencies.

Willie Watt, Chair of the Bank, provided this overview:

“We offer both debt and equity and we can invest from as low as £1 million to as high as £50 million in green projects, green businesses and the greening of business, which is slightly different. The Scottish Government has said that it will capitalise the bank for £2 billion over 10 years. We have been active since our launch and have announced seven investments that total £120 million. In the first quarter of this financial year, we have made investment commitments of £62 million, of which £50 million has been drawn, so we are on track to invest the commitment of £200 million that was made in the Scottish budget for 2021-22.”<sup>9</sup>

We were interested in understanding how the Bank makes investment decisions and whether there were any sectors they would not support. They clarified that they would not invest in the extraction of oil and gas as this would not be compatible with the net-zero mission, but that they would be open to investing in companies and technologies which support the transition away from fossil fuel extraction.

We also questioned the Bank as to its practice of sometimes investing in managed funds, such as the Gresham Forestry Fund, which involve paying a fee to the fund manager, rather than investing in individual enterprises in that sector. The Bank noted that given the specialised nature and expertise required to allocate certain funds, in

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<sup>8</sup> SEPA provided more detail on the cyber attack in a follow up submission - [Submission from Scottish Environment Protection Agency | Scottish Parliament Website](#)

<sup>9</sup> Official Report, [21 September 2021](#), cols. 2-3

some circumstances “it is better to pay the fund management fee rather than hire an internal team to do the work.”<sup>10</sup>

We asked the Enterprise Agencies how they coordinate their work on the transition to net zero. All three highlighted the importance of the strategic direction set through the Ministerial Guidance letters each year, and their positive working relationship.<sup>11</sup> We also asked the enterprise agencies how they could ensure that their work stimulated the growth of a Scottish supply chain in order to deliver green jobs. Scottish Enterprise noted that: “Many commentators talk about the 2020s as being the decisive decade, so we need to focus urgently on early action.”<sup>12</sup>

Questions:

19. Is the Scottish Government confident that the Bank is on schedule to allocate investment funding within the timescale the Scottish Government anticipated when it allocated the funding?
20. Is the Scottish Government satisfied that the Bank’s approach to allocating some funds through indirect investment is compatible with the core mission it was allocated when it was set up? Would the Scottish Government prefer the Bank to make direct investments in priority areas whenever practicable?
21. How will the Scottish Government ensure that funding across the enterprise agencies is being deployed in a joined up way, to ensure the most effective support for the transition to a net-zero and nature-friendly economy?
22. How does the Scottish Government measure what impact interventions by our three enterprise agencies are making on progress to net zero?

## **Decarbonising heat in buildings**

The Committee heard from Professor Jim Skea, the former chair of the Just Transition Commission, that “some aspects of the transition to net zero need to be paid for, and the way in which those costs are distributed will be incredibly important”.<sup>13</sup> The issue of who bears the costs and where the burden falls cuts to the heart of how a just transition is achieved.

We heard that decarbonising heat in the owner-occupied sector, and finding ways to pay for it, will be difficult. Professor Skea stated:

“We have said that if people can pay for it, they should pay, but there are differences there and it will be good to work out how we get the incentives to work fairly. My view is that mechanisms such as grants or very low interest loans are potentially the way to encourage owner-occupiers to switch over, where you do not have the kind of regulatory levers that are in place for social housing or the private rented sector. The owner-occupied sector will be the toughest to move because

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<sup>10</sup> Official Report, 21 September 2021, col. 9

<sup>11</sup> Follow up evidence by the enterprise agencies to the committee on 19 October provided further detail - [Submission from Scotland’s Enterprise Agencies | Scottish Parliament Website](#)

<sup>12</sup> Official Report, 21 September 2021, col. 25

<sup>13</sup> Official Report, [7 September 2021](#), col. 5



you will be expecting people to reach into their own pockets to some extent to finance the transition.”<sup>14</sup>

Dave Moxham, a former member of the Just Transition Commission, also stated:

“We are not even in the right ball park at the moment when it comes to the levels of public investment that we need. It is easier to say it than it is to suddenly magic up the type of investment that we will require. We need to start from the position that we need massively increased public investment.”<sup>15</sup>

The Scottish Government has recently published its [Heat in Buildings Strategy](#), which states that emissions from heat in buildings must fall by 68% between 2020 and 2030 if Scotland is to be on target in meeting overall emissions reduction targets. The Strategy recognises the scale of the challenge and takes a fabric-first approach i.e. that “energy efficiency measures are a critical precursor to deployment of many zero emissions [heat] systems”, the aim is therefore that a “large majority of buildings should achieve a good level of energy efficiency” by 2030.<sup>16</sup>

The Strategy sets out that the vast majority of the 170,000 off-gas homes that currently use high emissions fossil fuels, as well as at least 1 million homes currently using mains gas must convert to zero emissions heating, as does the equivalent of 50,000 of Scotland’s non-domestic properties. Therefore, the pace of installation of zero emissions heating systems needs ramped up significantly; from around 3,000 to 25,000 per annum by 2026, peaking at over 200,000 new systems annually by the end of this decade.

The Strategy commits to “at least £1.8 billion investment” [from public funding] through to 2026; increased funding in 2021 “for home energy programmes and measures to reduce poor energy efficiency as a driver of fuel poverty” and “£200 million for heat and energy efficiency projects in social housing” through to 2026.<sup>17</sup> A Green Heat Finance Taskforce is expected to be established by end 2021.

Questions:

23. The proposed £1.8bn investment is intended to “kick-start” the proposals in the Heat in Buildings Strategy (for both energy efficiency and zero carbon heating). It is noted that the total costs are estimated to be in the region of £33bn, so how does the Scottish Government plan to leverage private finance to achieve the total level of insulation and decarbonised heat?
24. What does the proposed £200m for energy efficiency projects in social housing deliver in terms of housing units insulated and heating decarbonised?
25. What new initiatives and funds will be put in place to support decarbonising heat in the owner-occupied sector?

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<sup>14</sup> Official Report, 7 September 2021, col. 15

<sup>15</sup> Official Report, 7 September 2021, col. 15

<sup>16</sup> [Heat in Buildings Strategy - achieving net zero emissions in Scotland's buildings - gov.scot \(www.gov.scot\)](#), p.15

<sup>17</sup> [Heat in Buildings Strategy - achieving net zero emissions in Scotland's buildings - gov.scot \(www.gov.scot\)](#), p.7

26. Will new initiatives and funds support improved energy efficiency and new heating technologies in one easily accessible package? Is support and advice to homeowners built into this package?
27. What is the expected annual take-up of this fund/loan? How is its uptake being monitored and evaluated?

## Transport

Transforming our transport and, in particular encouraging greater use of public transport, cycling, and transport by foot, was identified as critical to decarbonising the sector. Available and attractive public transport was viewed as a key feature of a wellbeing economy (as well as a crucial part of the journey to net zero) and poor public transport connections as a block to progress. Concerns in relation to the coherence and balance of spend within the transport budget were raised – for example, is current budgeting consistent with long-term policies to reduce demand for travel by car and encourage sustainable and active travel?

Professor Iain Docherty questioned whether the split in Scottish Government financial support between rail and bus was appropriate, as substantially more is invested in rail services – yet four times more trips are made by bus than rail annually.<sup>18</sup>

Many witnesses asked for greater investment in public transport, walking and cycling infrastructure and service provision, including Liam Fowley (Scottish Youth Parliament) and Jocelyn Richard (Scotland's Climate Assembly).<sup>19</sup>

The Infrastructure Commission for Scotland recommended that no new additional road capacity for private car travel be added to the network. Witnesses raised concerns about a significant rebound in the use of cars following the end of the last lockdown, which could undermine the wider effort on decarbonisation in Scotland and risked being a missed opportunity to embed long-term change as a positive legacy of the Covid crisis.

Professor Docherty highlighted that public transport patronage was still well below pre-pandemic levels and that there would likely be a need for additional ongoing financial support for the next 12-24 months.<sup>20</sup>

### Questions:

28. What process does the Scottish Government use to decide on the balance of investment between different modes of travel? In particular, how does it determine that the balance of investment in bus and rail is appropriate and properly reflects both the current balance of use and Scottish Government policies on future use?
29. Will the 2022-23 budget support the creation of additional road capacity for private car use, contrary to the recommendations of the Infrastructure Commission for Scotland?

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<sup>18</sup> Official Report, [5 October 2021](#), col. 43

<sup>19</sup> Official Report, 28 September 2021

<sup>20</sup> Official Report, 5 October 2021, col. 32

30. What plans (if any) does the Scottish Government have to continue to provide pandemic related financial support to bus and train operators over the next 12-24 months, as patronage levels recover? Is the Scottish Government actively monitoring whether new travel patterns are emerging that may require different types of financial support for public transport providers in the longer-term?
31. How will the forthcoming budget capture the opportunity lockdown has provided to do transport differently and to capitalise on new patterns of behaviour that reduce transport's carbon footprint, such as front-loading investment in active travel?
32. Does the Scottish Government intend to provide financial or technical support to local authorities wishing to establish municipal bus companies under the Transport (Scotland) Act 2019?