



OFFICIAL REPORT
AITHISG OIFIGEIL

Net Zero, Energy and Transport Committee

Tuesday 28 September 2021

Session 6



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NET ZERO, ENERGY AND TRANSPORT COMMITTEE

7th Meeting 2021, Session 6

CONVENER

*Dean Lockhart (Mid Scotland and Fife) (Con)

DEPUTY CONVENER

*Fiona Hyslop (Linlithgow) (SNP)

COMMITTEE MEMBERS

Natalie Don (Renfrewshire North and West) (SNP)

*Jackie Dunbar (Aberdeen Donside) (SNP)

*Liam Kerr (North East Scotland) (Con)

*Monica Lennon (Central Scotland) (Lab)

*Mark Ruskell (Mid Scotland and Fife) (Green)

*attended

THE FOLLOWING ALSO PARTICIPATED:

Terry A'Hearn (Scottish Environment Protection Agency)

Tom Davy (Scottish Government)

Graeme Dey (Minister for Transport)

Liam Fowley (Scottish Youth Parliament)

Iain Gulland (Zero Waste Scotland)

Nick Halfhide (NatureScot)

Katie Reid (Children's Parliament)

Jocelyn Richard (Scotland's Climate Assembly)

Collette Stevenson (East Kilbride) (SNP) (Committee Substitute)

Susie Townend (Scotland's Climate Assembly)

Debbie Walker (Scottish Government)

CLERK TO THE COMMITTEE

Peter McGrath

LOCATION

Committee Room 2

Scottish Parliament

Net Zero, Energy and Transport Committee

Tuesday 28 September 2021

[The Convener opened the meeting at 09:31]

Decision on Taking Business in Private

The Convener (Dean Lockhart): Good morning, everyone. Sorry for the technical hiccup. Welcome to the Net Zero, Energy and Transport Committee's seventh meeting. I remind everyone that social distancing measures are in place across the Holyrood campus.

Agenda item 1 is consideration of whether to take items 5 and 6 in private. Do we agree to take those items in private?

Members *indicated agreement.*

Subordinate Legislation

National Bus Travel Concession Scheme for Young Persons (Scotland) Amendment Order 2021 [Draft]

09:31

The Convener: Agenda item 2 is consideration of a draft Scottish statutory instrument. I refer members to paper 1. We are joined remotely by the Minister for Transport and officials to discuss the draft order.

I welcome the minister, Graeme Dey. I also welcome: Tom Davy, the head of bus strategy and concessions policy at Transport Scotland; Debbie Walker, an operations and business manager at Transport Scotland; and Dorothy Cohen, a solicitor in the Scottish Government. This is the first time that the minister has appeared before the committee. We look forward to working with him in this parliamentary session.

The draft order is laid under the affirmative procedure, which means that the Parliament must approve it before it comes into force. Following the minister's evidence, the committee will be invited under the next agenda item to consider the motion to recommend approval of the order. I remind everyone that Scottish Government officials can speak under this item but not in the debate that follows.

I invite the minister to make a short opening statement. Over to you, minister. *[Interruption.]* It looks as though we do not have the minister online right now, so we will suspend briefly.

09:33

Meeting suspended.

09:39

On resuming—

The Convener: Welcome back to the meeting. Good morning, minister. Apologies for the brief technical interruption. As you know, this agenda item is consideration of the draft National Bus Travel Concession Scheme for Young Persons (Scotland) Amendment Order 2021. It is laid under the affirmative procedure, which means that the Parliament must approve it before it comes into force. I understand that you have an opening statement to make.

The Minister for Transport (Graeme Dey): Thank you, convener. Good morning, colleagues on the committee. I appreciate the opportunity to make a few opening comments on the draft order.

The Parliament approved the initial order to establish a national bus travel concession scheme for young persons earlier this year and the order came into force on 1 April. The draft amendment order will raise the upper age limit for travel under the scheme from age 18 to age 21. It will also amend the reimbursement terms for bus operators carrying concessionary passengers under the scheme, establishing a rate of 43.6 per cent of the adult single fare for journeys that are made by under-16s and 81.2 per cent for journeys that are made by 16 to 21-year-olds.

Free bus travel for people under the age of 22 will strengthen our response to the climate emergency and will support our green recovery by embedding sustainable travel habits in young people. If the Parliament approves the amendment order, it will come into force on 12 November, and we are working with our delivery partners to allow young people who are aged 21 and under to travel under the new young persons scheme from 31 January 2022.

I commend the order to the committee and I am happy to answer any questions that the members might have.

The Convener: Thank you for the opening statement. The first question is from Mark Ruskell.

Mark Ruskell (Mid Scotland and Fife) (Green): Good morning. How do we build towards a successful launch on 31 January? Up until now, the message has been not to use public transport during the pandemic. Through the introduction of the amended concessionary travel scheme, there will be a relaunch of bus travel in Scotland. How are you preparing for that and for getting the message out there that, on 31 January, buses will be open for business, with young people able to travel for free and to enjoy the opportunities that that will bring?

Graeme Dey: Mark Ruskell makes a fair point. There is a communications plan to build up awareness of the scheme's launch. Today is the first stage in that process. I might bring in Debbie Walker, because she is in charge of the implementation of the scheme and she can provide more detail on exactly what is happening.

Debbie Walker (Scottish Government): We have a marketing team and a marketing agency that are building the graphics, design and package that will be put in place. We are working with the 26th United Nations climate change conference of the parties—COP26—to do a soft introduction to the scheme, with a big kick-off in January. Does that help?

Mark Ruskell: That is useful. It would be good to see a bit more detail come through on that project when it is ready.

What do you see as an indicator of success for the policy? What would you expect to see in the first year if the policy is a success, as I am sure that it will be? On a related point, will the scheme increase the number of families who use bus travel? Although the focus is on under-21s, will the scheme drive more people on to the bus, including fare-paying passengers?

Graeme Dey: That is the ambition. We are all in the business of trying to increase the uptake of bus travel by all age groups. This particular age group is the one that relies most heavily on public transport. We are trying to embed bus travel as a preferred—[*Inaudible*].

Sorry, can you hear me?

The Convener: Yes, we can.

Graeme Dey: Sorry, I cut out there.

I was saying that, in part, the scheme is about embedding bus travel as a preferred means of transport for that age group. It is difficult to make projections with regard to success, because of the fact that, as you are right to point out, we are coming through the pandemic.

In the first instance, we will not see the levels of usage that we will ultimately see—there will be a soft period in which we will see some uptake, and we will have to build on that. We have estimates—guesstimates, to be frank—for levels of usage, but we are confident that the policy will be a major success.

09:45

Liam Kerr (North East Scotland) (Con): I have three very quick questions. First, given that the reimbursements to bus operators for the under-22s and over-60s schemes are significantly less than 100 per cent, what does your modelling show with regard to the impact on adult fares—that is, the fares for those between 23 and 59 years of age? Is there any risk that adult bus fares will have to increase to compensate for lost revenue?

Graeme Dey: Do you want to give me your other questions, Mr Kerr, or do you just want me to answer that one first?

Liam Kerr: Please answer that one first, minister.

Graeme Dey: That is fine. We do not believe that to be a risk, because we are working very closely with the bus operators on this scheme. The levels of reimbursement have been shaped very much on the basis of that dialogue, and we have committed to returning to the numbers if anything emerges to suggest that the levels are not appropriate. We therefore do not expect the type of issue that you have flagged up.

Liam Kerr: I am very grateful for that clear answer.

Secondly, correct me if I am wrong, but I believe that the funding for the over-60s scheme was cut in 2017. Given that people seem to be working longer, particularly as we recover from the pandemic, do you intend to reverse that cut? Is there a risk of some people feeling that you cut support for the over-60s scheme in order to pay for the under-22s scheme?

Graeme Dey: You will appreciate that 2017 was some time before I came into post, and all I can tell you is that the over-60s scheme is working effectively and efficiently. We have a very good working relationship with the bus operators, and I see all of these schemes sitting alongside each other but independently funding the various aspects of what is being delivered.

Again, I see no issue here. This scheme will enhance what we currently have and will certainly have no detrimental impact on anyone else. Apart from anything else, the greater the uptake of bus usage, the more sustainable some of the more endangered services will be.

Liam Kerr: Finally, what assurances do the bus companies have that the Government's on-going subsidy costs of £55 million to support the scheme will be sufficient, are baked in and cannot be reduced in future years? Do you know off the top of your head which budget this is going to come out of?

Graeme Dey: It is important to recognise the various aspects of this relationship, which involves the bus operators, the Scottish Government and the teams who work with the operators for us. The scheme is and will remain fully funded; it will develop as the numbers come to the fore and we get a clearer idea of how many of each age group are using buses. I can tell you that putting all this together has been very much a team effort.

Monica Lennon (Central Scotland) (Lab): Good morning to the minister and his officials.

The policy is very welcome, but what is the Government's response to the everyone aboard campaign, which is led by the Poverty Alliance and supported by 120 organisations and seeks to expand this scheme to everyone under 25 and people in receipt of benefits? Is that the direction of travel that the Government wants to go in? At what point will the scheme be reviewed after it comes into force next January?

Graeme Dey: We have a substantially good working relationship with the Poverty Alliance on a number of transport-related issues. As for extending the scheme, Ms Lennon will know that the priority in the scheme is under-22s, but I point out that we are planning a fair fares review that will

look at the whole raft of bus and other transport-related fares and the range of discounts and concessionary schemes. It would be wrong of me to prejudge that review. We are aware of many asks in relation to public transport fares, and we know that everyone would like the scheme to be expanded in a variety of ways, but the way to do this is to have a proper review that looks at the matter holistically and produces findings that we can reflect on.

Monica Lennon: As well as the ability to access buses for free, we need to make sure that everyone, including young people, has access to bus services in the first place. On Friday, I joined some of the thousands of youth climate strikers in Glasgow, who are marching ahead of COP26 and who all want sustainable travel. One issue that was raised with me was reductions in bus services. Having the free bus pass is great, but if there is no bus to get on, it is not much use to anyone. With regard to that holistic approach, what is the Government doing to make sure that communities, including students, have proper bus services? My area has lost the X1 bus and, on Friday, students from the University of the West of Scotland also told me that the special bus that was put on when the campus moved stops running at 5 o'clock, and that is not much good to students in Lanarkshire. Can the minister and his team take that away and look at it as well, please?

Graeme Dey: Ms Lennon knows that she and I have met to discuss, among other topics, the X1 bus, even though responsibility for the X1 bus does not sit with the Government. She also knows that I am passionate about developing access to bus services, because that will be pivotal as we respond to climate change. As she knows, the specifics of individual services sit with local authorities or regional transport partnerships, but I point her to the commitment that we have shown during the pandemic, with the additional support that we have given to bus operators, to ensure that there are as many services as possible. It varies from area to area, but north of 90 per cent of services are currently running normally, and she should take that as an indication of our view of the importance of buses. If Ms Lennon has specific issues relating to the area that she represents, I direct her to talk to the relevant local authority or regional transport partnership.

Monica Lennon: Thank you.

Jackie Dunbar (Aberdeen Donside) (SNP): Good morning, minister. The local authorities will be responsible for the roll-out of the scheme and, because I am still a councillor, you will probably not be surprised to hear me ask this question. What additional support will be needed or given to ensure that the local authorities have the scheme

ready to go when it comes into place in January 2022?

Graeme Dey: If Ms Dunbar is content, I will bring Debbie Walker in to give her some specifics around that, because she is dealing directly with the local authorities.

Debbie Walker: We are working with our delivery partners, which are the Improvement Service and NECPO—the national entitlement card programme office—and they manage the application process and work with the local authorities to deliver that. The Improvement Service has established an online portal—getyournec.scot—which the majority of the 32 local authorities have signed up to. We hope that that will take away the brunt of the application process, because people will be doing it online. We are also working with our delivery partners in the local authorities to make sure that they are aware of what needs to happen, that they have application processes in place and that they are ready for the launch date. We are getting feedback from local authorities and working through that with them. As yet, nobody has raised serious concerns, because we have the online application process, which we anticipate that the majority of people will use, so just a small percentage of the population will need to go in and do face-to-face applications. Therefore, we have procedures in place and we are working with the local authorities to make sure that the process is as painless as possible for them.

Jackie Dunbar: I have a quick supplementary question. Are we ensuring that we get the message out there for young people to apply now, so that we do not get a huge number of applications at the beginning of January?

Debbie Walker: At the moment, we are not pushing that message out there. Our marketing for that will launch in January, and we are looking at a more controlled manner of getting the message out. We do not want people to apply for cards now, because the application process that we will be promoting has not been fully tested. Because we want to ensure that the system is as tested and as streamlined as possible and that everything is ready to go, we are not pushing the message that people should apply now for their cards. We would prefer it if people waited until January, when we will have everything in place and ready for the launch.

Liam Kerr: Following on from Jackie Dunbar's question about local authorities, minister, I wonder whether you can clarify something. It says in our papers that, if the reimbursement is too low, bus companies might need support from a local authority. How do you plan to support what are already cash-strapped local authorities if they suddenly find themselves having to fund bus

companies because their reimbursement is too low?

Graeme Dey: First, I do not recognise that concern. As I have explained, there has been a lot of engagement around the rate of reimbursement, and it will be monitored very closely to ensure that we do not get into that situation. That said, we are working very closely with the local authorities on a variety of issues, and we will ensure that they are not put in that position. After all, the scheme is being funded through mechanisms that have been agreed with the bus operators.

Liam Kerr: I asked the question because, according to your documents, the local authorities will have to pick up the pieces if things get to that stage. However, I have heard your answer.

Finally, given that the bus companies will be carrying more passengers for, I presume, less revenue, what incentive will they have to add new routes, particularly in rural or outlying areas?

Graeme Dey: Mr Kerr is conflating two different issues. The scheme is designed to persuade more young people to use bus services, but alongside that lie the provisions in the Transport (Scotland) Act 2019 that empower local authorities and regional transport partnerships to work with bus providers on developing the provision of routes. There might be a degree of crossover, but they are separate things.

Liam Kerr: Hmm. I have no further questions, convener.

Fiona Hyslop (Linlithgow) (SNP): The policy will save young people cash and support behavioural change in order to tackle climate change and might provide sustainability for bus companies that otherwise might not have it. I know that, at the start of the pandemic, the Government moved rapidly to keep the companies afloat, but the issue of the finances involved needs a bit more detail. Given that the reimbursement rate will be a symptom of any success that we have in the first two policy elements that I highlighted, when are you expecting to review the scheme and assess its delivery against targets, and when will the committee get any report in that respect?

Graeme Dey: Tom Davy will deal with the specifics of that question.

Tom Davy (Scottish Government): We are committed to monitoring and evaluating the scheme, and we are in the process of commissioning evaluators to undertake a baseline study of what is happening before the scheme becomes operational at the end of January. We will return to the study in a year's time to find out whether the scheme is working as expected and whether anything is happening that we were not expecting, and we will, I think, come back to it

again in three and five years' time. In short, there will be the main evaluation, and then the first evaluation point will be one year into operation.

Fiona Hyslop: Which will be 31 January 2023.

Tom Davy: I am not promising that it will happen on that exact date, because fieldwork, surveys and so on will have to be carried out and then the report produced. That will tell us how we are doing.

Fiona Hyslop: The minister said that the provision of bus services is a separate and distinct issue, but clearly there is an interrelationship between success in getting young people to use bus services and the availability of services. In a constituency such as mine, it is easy to travel by bus east to west but difficult to do so north to south. I go back to the point that Monica Lennon made about the sustainability of services and the fact that many people want to travel in the early evening. Is there an opportunity during the year—not waiting for the year to be over—to get in better alignment with local government and its provisions? The sweet spot is getting more young people on buses while also getting sustainability and improved services in rural and semi-rural areas, in the evening in particular.

10:00

Tom Davy: I am not sure whether you want me to say a little bit on that, minister.

Fiona Hyslop: I would be interested in the minister's response.

Tom Davy: Am I audible?

Fiona Hyslop: I would be interested in the minister's response, because he can help make that work happen.

Graeme Dey: Fiona Hyslop makes a good point. I can see the same pattern in my constituency. A sweet spot might emerge in our work with bus providers, and we could of course consider the type of agreements to which the member has referred through the regional transport partnerships.

In the initial phase of the scheme, we might not see the level of uptake that we will ultimately see as we come through the pandemic. I suspect that, during the initial period, we will not really get the full picture of what will happen. However, I expect the scheme to take off and a year from now we will have a clearer idea of the opportunities that arise from the scheme.

Collette Stevenson (East Kilbride) (SNP): Good morning, minister. We have touched on the impact that the scheme might have on local authorities and regional transport partnerships. Do you envisage any impact on the procurement

frameworks for school transport when the scheme is rolled out?

Graeme Dey: It is a good question, and we are alive to the issue. We recognise that an impact on school transport is possible. As you will appreciate, it is difficult to quantify at this stage, which is why we are in close dialogue with local authorities to monitor the impact as we move into the roll-out of the scheme.

Collette Stevenson: Each local authority will have various different frameworks and tenders—there could be three-year or four-year frameworks—and there will be an impact on private transport providers as well. How can we align those frameworks?

Graeme Dey: The impact could be negligible in most places, but I recognise that it could be significant in others. I reassure the member that, in the bus space, the interaction between regional transport authorities, providers, local authorities and Transport Scotland is significant. Dialogue about those issues is on-going and we are on top of the matter.

The Convener: There are no more questions from members at this stage.

Item 3 is the formal consideration of motion S6M-00962. I invite the minister to move the motion and to speak further to it if he wishes.

Motion moved,

That the Net Zero, Energy and Transport Committee recommends that the National Bus Travel Concession Scheme for Young Persons (Scotland) Amendment Order 2021 [draft] be approved.—[*Graeme Dey*]

The Convener: Do members have any final questions for the minister?

Mark Ruskell: I just want to make the brief point that the policy will be brilliant and transformational for young people. The price of bus travel excludes so many young people, particularly in rural areas. On the wider issue of the quality of services, we have had constructive conversations with a number of bus companies that look forward to the scheme and are considering how to improve services on the back of it.

I was also pleased to hear from the minister about the commitment to a fair fares review. We will need to consider wider public transport at some point. I know that there is interest in ferries—free ferry tickets and so on. It will be important to consider the issues in the round, including any moves to extend the age limit further.

The scheme is welcome, and I hope that the launch at the end of January will be successful and that the message and the publicity can get out

there to young people and families that free bus travel has now arrived.

Fiona Hyslop: The policy is a very strong one for young people, the climate emergency and the sustainability of buses, but the devil will be in the detail of the reimbursement rate. Liam Kerr and Jackie Dunbar raised that issue. Keeping close alignment with local authorities will be key to the policy's success.

Collette Stevenson raised a very important point in relation to bus contracts. Some young people can get free bus transport because of the school transport legislation, but some do not. In many families, people do not live together. Sometimes a person who lives with one parent does not have access to free transport. Obviously, that has implications for the policy.

We welcome the broad thrust of the policy, but I encourage consideration of the sustainability of bus companies. What the policy means for individuals and how they live their lives will be an important part of the promotion of the policy and of the detail in working with local authorities on their transport contracts and with their education departments.

I encourage the minister to consider those things as the policy is—I hope—successfully rolled out.

The Convener: There are no further contributions from members. Minister, would you like to address those issues in summing up?

Graeme Dey: I will be brief, convener, because I know that quite a lot of time was taken at the start of the meeting because of technical problems.

The policy has enormous potential, and it is a fantastic opportunity. I reiterate that we are alive to the risk of unintended consequences. The policy has been developed closely with partners to ensure that we avoid any negative consequences.

Fiona Hyslop is right, and she has made a number of very good points. Obviously, we will be happy to engage with the committee further on the issue in the review process, assuming that the motion is agreed to today. The alignment point is a very good one. As I have said, we commit to taking all of that away and including it in our thinking.

Motion agreed to,

That the Net Zero, Energy and Transport Committee recommends that the National Bus Travel Concession Scheme for Young Persons (Scotland) Amendment Order 2021 [draft] be approved.

The Convener: The committee will report on the outcome of the instrument in due course. Does the committee agree to delegate authority to me,

as convener, to approve a draft of the report for publication?

Members indicated agreement.

The Convener: I once again thank the minister and his colleagues for joining us, and I suspend the meeting before we take evidence from the next panel of witnesses.

10:07

Meeting suspended.

10:11

On resuming—

Committee Priorities

The Convener: Welcome back. The committee will now take evidence from a variety of important stakeholders. Today, we will hear from two panels on committee priorities for the session.

First, we will hear from representatives of Scotland's Climate Assembly and members of the Scottish Youth Parliament's transport, environment and rural affairs committee. We have, from Scotland's Climate Assembly, Susie Townend, head of secretariat; Jocelyn Richard, assembly member; and Katie Reid, children's voices programme manager. From the Scottish Youth Parliament's transport, environment and rural affairs committee, we have Mollie McGoran and Liam Fowley. Good morning. We are delighted that you have joined us. Thank you for taking time to be with us.

As we have a large panel, it would help broadcasting if members indicated who on the panel their questions are addressed to. Broadcasting will operate our witnesses' cameras and microphones. There is no need for them to do anything on their side.

I thank all the panellists very much for the tremendous amount of work that they have put in in the area and for the raft of recommendations and policy ideas that they have put forward. They are enormously helpful for the committee as we look at the transition to net zero. It is very helpful that the views and opinions that they have represented reflect a wide range of public views.

First, I want to explore the main areas of behavioural change that you think will be necessary in our journey to net zero. A lot of the recommendations that you have put forward will require behavioural change across a large number of areas—transport and business and consumer behaviour. When we had the Cabinet Secretary for Net Zero, Energy and Transport, Michael Matheson, before us a couple of weeks ago, he identified behavioural change as one of the greatest challenges for policy makers. I thought that that would be a good topic to bring up with you because you represent a wide cross-section of the public in Scotland and are well placed to comment on what you think behavioural change might mean in reality.

With that context and brief introduction, perhaps we could start with Scotland's Climate Assembly's views on the main areas of behavioural change that individuals across society should be looking at. Perhaps Susie Townend can start.

10:15

Susie Townend (Scotland's Climate Assembly): Thank you for inviting us to come before the committee. I will just note that the assembly is entirely embedded in the Scottish Parliament process, which is quite unusual for a citizens assembly. We are delighted to have the opportunity to talk further to the committee about our recommendations and to do so in a cross-party spirit, which we have had throughout the establishment and operation of the assembly. We feel that the committee has a very important role to play by helping us and acting as our champion and advocate. We are grateful to talk a bit more about the details of our recommendations and the principles that lie behind what the assembly has suggested. Jocelyn Richard will talk in more detail about some of the recommendations.

As a facilitator of the process, I was struck by the appetite that assembly members had for behaviour change. When they were provided with good evidence about what was needed across the range of activities that will have a key impact on reducing emissions in Scotland—whether related to travel, heating homes or diet—people really had an appetite to make the required changes. The members' very strong message was that they wanted everybody in Scotland to understand the impact of activities in the way that they now do. They felt that people in Scotland want to make a difference and want to be world leaders in reducing emissions, but that often people do not know how to do that. They felt that it was important that people come to understand how changes that they could make would make a difference.

Jocelyn Richard can also reflect on that, and then perhaps Katie Reid can talk about what the children said on those issues.

Jocelyn Richard (Scotland's Climate Assembly): What Susie Townend said is very true. Before I was an assembly member, although I was aware of climate change, I did not appreciate the extent to which everything around me and all the choices that I make affect the carbon emissions that I put into the environment. People in the assembly certainly had an appetite for change once we were presented with the information. That is the main point—people in Scotland first need to know the situation regarding the climate emergency, so that they can be aware of the potential that they as individuals have to change our carbon footprint.

There is a lot that we can do, and a lot of it is based on behavioural change. One thing that people are unaware of is how their general consumption affects our carbon footprint. So much of carbon emission in Scotland comes from the things that we buy and the services that we use—

the choices that we make in our daily lives about our diet and our general consumerism. Those are areas in which we need to try to make people see a new norm.

One area is our dietary choices. I do not think that many people realise the effects that those have on our carbon footprint. As an assembly, we looked at things such as carbon food labelling. Many assembly members were in favour of that and other measures that give people an opportunity to make their own choices and change the way that they eat.

Another important area is transport. We made a recommendation that public transport be developed, certainly in cities. That revolves around improving the bus systems and making active transport more available through cycling lanes. We recognise that the solutions to the problems will vary depending on where people live. We have a large urban population, but we also have rural areas, which can be classified as accessible or inaccessible. We will need different transport solutions depending on the areas that we look at. In cities, we need a very good, integrated bus system that provides services to everyone and reduces car usage. We also need to promote active transport by providing cycle lanes and increasing people's ability to walk to places. People are very interested in reducing our carbon emissions through transport.

Home improvements and retrofitting are also very important. Many of our homes are old and poorly insulated and do not meet the energy performance certificate rating of level C. That also contributes to people being in fuel poverty, the elimination of which is one of our recommendations.

Those are some of the things that we talked about in the assembly.

Katie Reid (Children's Parliament): Thank you for the opportunity to represent and give the perspective of the children who contributed to Scotland's climate assembly. It would be wonderful if the children could be here this morning, but that is not possible due to school hours. However, I will share some of their reflections with you.

I echo what Susie Townend and Jocelyn Richard have shared about the key points that came out. Many of those were echoed in the parallel but interconnected process that we went through with the children across Scotland who were involved in Scotland's climate assembly.

I will raise a few of the key points that are summarised in the children's report, which was laid before Parliament in June. The children recognised that not everyone in Scotland actively knows and/or cares about the climate emergency

and wants to be part of the solution. The children recognised that not everybody wants to make big changes to their lifestyle. A lot of that comes down to people's knowledge and understanding of the impact that their lifestyles have, but it is also about their understanding of the solutions and opportunities that exist, and the support that is in place for people to transition to having more environmentally friendly lives.

The children described their thinking about attitudes and popular trends. They want to feel included and accepted by their peers, but things such as popular lifestyle trends and the desire to have the latest toys, fashion items and technology often act as barriers to children—and by implication their families—being able to make sustainable choices. That desire to feel included and be part of something is often a barrier to that shift in lifestyles.

One of the key things that came out of the children's investigation was about education. Many of the children who were involved highlighted that they had very little understanding of climate change, the climate emergency or the solutions that are available to us—on a personal level, this really shocked me. Like the adults who went through the climate assembly process, the children learned about not only the science, but the solutions and opportunities. As a result, they have been on a huge learning journey. They can now look back over the past year and reflect on how much they have learned, and also reflect on their individual lives.

Last week, a child shared that, as a result of his involvement, he is now not littering in the playground and he is encouraging his friends not to litter when he sees them doing that. Not only are the children beginning to make their own, individual changes in their lives, but they are starting to have that wider effect on their peers as well.

The children's call to action addresses learning, education and making climate education mainstream not only as part of the curriculum but as part of the holistic ethos of how children are taught in schools and in their communities. That is important and will inspire and motivate people to make the necessary lifestyle choices.

However, we must also remember that children do not always have the capacity and agency to make those choices themselves. I will share a quote with you from one of the children because it highlights the relationship with adults and their responsibility to acknowledge children's rights when we are thinking about the climate emergency. It is from a child aged 11 from the Western Isles who was involved in the Climate Assembly:

"It can be very difficult for children [to make environmentally friendly choices] because usually their parents make them. They don't really get the choice and also, well, you can't really just say 'Right, I don't like what we're doing'."

I finish with that as a reminder that, although children are often very passionate about the climate emergency and being part of the solution, the responsibility often lies with adults to support them to bring about the changes.

The Convener: Thank you very much, Katie. Those are some fascinating insights into children's perspectives on the matter. I am sure that committee members will want to ask about some of those issues.

I address the same question to Liam Fowley of the Scottish Youth Parliament.

Liam Fowley (Scottish Youth Parliament): Thank you for inviting the SYP, which is the democratically elected voice of young people in Scotland. Everything that I will discuss with the committee we have discussed with young people as well. We have consulted them on the issues consistently over the past three or four years and all our national campaigns over the past years have included an element of climate change and environmental issues, which gives the committee a flavour of the importance that young people place on those issues.

Katie Reid and I will probably start singing from the same hymn sheet because a lot of children and young people have the same views, perspective and experience on such matters.

The main point that we hear when we talk to young people about the climate is the need for education on how to live sustainably. Young people do not always have access to that and, if they do, it is not consistent from local authority to local authority and even from school to school. Young people also wish to live sustainably and try to make sustainable choices but do not feel that those are accessible to them. The main highlights of that are that such choices are not affordable to them or they do not know where to start. Active travel is a massive part of young people's views on the matter as well. They really want to be able to use active travel but the infrastructure does not exist, especially in more rural communities, and they do not feel that it is affordable for them to try to get into active travel.

I will keep it short and sweet and not repeat anything that Katie Reid said.

The Convener: Thanks very much, Liam.

I thank all the panel members. That was a fascinating opening exchange. The witnesses have set the ground well for the committee to follow up on some of the issues.

Collette Stevenson: I say good morning to each of the witnesses and thank them for their contributions to Scotland's Climate Assembly. Its work is thought provoking.

It is timely that the witnesses are attending the meeting, given the fact that the United Nations youth climate conference is taking place today in Italy. Has Scotland's Climate Assembly or the SYP had any interaction with that conference? I know that two young people from the United Kingdom are attending it. Has there been any interaction with them on ideas or concrete proposals for the future? If you have not interacted with them, do you hope to do so on the back of the conference and share some good ideas? I put that question to Liam Fowley and Katie Reid.

Katie Reid: Would you like to go first, Liam? I can come in after you.

10:30

Liam Fowley: Yes. We have not engaged with the event in Italy as an organisation, but we are doing work on the sidelines of it. There is a co-project coming up shortly called the moment, which is an event in which children and young people can get involved and have discussions with decision makers about climate change, the environment and sustainability, and how they want the world to change. We are promoting the idea of young people getting into such conversations, locally and nationally. We have not had anything in relation to Milan, but we are very supportive of the event, and we believe that children and young people should be at the heart of such decisions, because they will be the most affected by them.

Katie Reid: To add to what Liam Fowley has said, the participation of children in Scotland's Climate Assembly is, as far as we know, a world first. There has been a lot of international interest in the fact that children in Scotland have been brought into a deliberative, democratic process. As a result, we are working with the assembly to support children's participation in an influencing element of the assembly in the run-up to the report from the Scottish Government, which is due by the end of the year. Part of that involves supporting children as they also engage with the international forum around the climate emergency, connecting with other children and young people from around the world to talk about their experiences, and holding leaders to account over climate action.

To add to another point that Liam Fowley made, we are encouraging elected representatives in Scotland to reach out to children and young people in their communities and to support them in hosting a climate surgery in the week before COP26, on 29 October. Our intention behind that is to support decision makers in taking forward

children's calls to action when they are engaged in conversations at COP26.

Fiona Hyslop: Welcome to your Parliament and your parliamentary committee.

The Scotland's Climate Assembly report was very clear and very direct, and it set out clear actions that are expected to be delivered. The Parliament debated it with cross-party support, as was indicated previously. You are in a very powerful position.

Will you explain the journey that people were on as part of the assembly? Some people will have come in at the start with particular views, but there was an evidence base, and there was a great deal of consideration and understanding—and then your ranking. Will you give us an indication of what issues you think shifted most during the course of the assembly's work, so that we can get an idea of what we perhaps need to challenge most regarding people's understanding and how we can achieve the behavioural change that the convener talked about?

Jocelyn Richard: It was a very interesting journey. We were selected as a group of more than 100 people with a very broad range of experiences and opinions on the importance of climate change and how much we believed it to be an urgent issue. Over the course of seven weekends, expert witnesses discussed all different kinds of issues, including heating, transport, lifestyle, diet and land use.

We were broken up into different streams for that deliberative journey. There was so much expert information that we could not all listen to it all the time. The stream that I was in was on diet, lifestyle and land use. The amount of information that was presented by expert witnesses in each stream was phenomenal. Everyone almost certainly underwent an expansive experience in learning about climate change.

I think that a lot of people are unaware of the breadth of our carbon footprint. A lot of people think about fossil fuels, home heating and insulation, but they do not think about our general consumption—about the building industry, agriculture or food waste. As an assembly, we came to realise the complexity of the problem—it is not just about one or two things.

The key issues were the need to recognise the role of agriculture and food in the climate emergency, and the need to look at transport and travel, which is a very big sector that has not shown any decrease in emissions over the past few years. That needs to be tackled. Over the past 15 or 20 years, air emissions have increased substantially, as has private car use. Those are major issues that the assembly wants to tackle.

We also looked at how to reduce emissions through a more holistic approach. We were given the question of how Scotland could tackle the climate emergency in an effective and fair way, so that played a big role in what the assembly looked at. As a result, we considered issues such as how we measure happiness, rather than simply using gross domestic product as our index, and how we can develop 20-minute communities. We considered how, by addressing those issues, we might deal with the climate emergency by taking a more holistic approach.

One of the main aims in generating our recommendations and producing a comprehensive and ambitious report was to start a discussion. In the "Scotland's Climate Assembly: Recommendations for Action" report, we have given Parliament a set of recommendations and overarching goals that we identified. It is hard to pinpoint one or two recommendations, because they are so interlinked and so important. During the process, we were told that we should try to focus on the main issues and produce a report that was very focused, rather than too broad and a bit vague. However, it was almost impossible for assembly members to limit their considerations, because all the expert information that we gathered was so important.

There are a lot of overarching goals and recommendations in the report, but we realised how important it was for us to look at all the issues. We have given Parliament the report and said, "These are the things that we think are important. We would like you to look at them, and we would like the discussion to be about them."

The process was amazing—speaking personally, it has changed the way that I live my life and the choices that I make. It was very positive for everyone.

Fiona Hyslop: I know that my colleagues will pick up on a number of the areas that Jocelyn Richard has highlighted.

My other question is about communities. The report makes the strong recommendation that we should

"Empower communities to ... develop localised solutions to tackle climate change."

Jocelyn Richard or her assembly colleague might want to address that.

Jocelyn also talked about the importance of the process of learning and understanding for the assembly. Perhaps Liam Fowley would like to comment on progress on climate education for young people in particular.

I direct the question on communities to the assembly witnesses and the question on climate

education to Liam Fowley. You can go first, Liam, as the camera is on you.

Liam Fowley: As I mentioned, education is probably the biggest area that young people are discussing. During 2019-20, the Scottish Youth Parliament ran a national campaign called “Pack it up, Pack it in”, which was decided on by consulting 10,000 young people in Scotland. We consulted specifically with young people from all over Scotland. They came from a diverse range of backgrounds, not just the same areas, so we had a good cross-section of community experiences. We wanted to see what the differences were in each young person’s experiences of school and climate education.

One of the major calls from young people has been for education. Young people want to do something, but they do not know what to do or how to do it. That has not really changed over the period.

We recently had our manifesto consultation, which was another large piece of consultation work. Again, there was strong representation from children and young people that education has to be improved. Currently, there is only a small-scale, scratch-the-surface element, which does not cover the changes that have to be made. Climate change legislation and issues need to be included in household economics, as do elements to do with food and living sustainably. Active travel elements should be included in physical education.

There is always a call for a human rights-based approach to education as a whole, including in the climate sphere. There is a call to involve young people in co-designing the curriculum, because they know what they want to learn more about and maybe they know about areas in certain respects, as well.

One of the biggest points is about continuity. A young person in one local authority area gets a climate education experience that is very different from that of a young person in another local authority area. In some instances, there are differences within authority areas, from school to school. Consistency is key.

Young people do not always understand the importance even of smaller steps that they can take, such as picking up litter, because they have not been told about them. They might have been told that it is bad to drop litter but not why it is bad. They do not understand the negative effects.

Young people are calling for an education that will provide them with an understanding of such issues. Many young people are climate engaged and are doing their own research and making changes, but there are also young people who want to be engaged but do not know how to start,

because they are not being given the education that they need, and there is not a consistent approach.

Fiona Hyslop: Thank you.

I am conscious of the time, but perhaps we have time to hear Jocelyn Richard talk about the assembly’s recommendations about empowering communities and, in particular, the funding and resources that are needed to empower people to take action.

Jocelyn Richard: Our thinking behind those recommendations was, again, to do with the fact that one size does not fit all. It is important that local communities are enabled to take the initiative and do things that work for them. I am echoing much of what has been said. The issue might be local transport or local heating. Community low-carbon heating was discussed; it might be possible to develop heating systems for areas of social housing. Recycling is another issue. We discussed upgrading recycling centres into reuse centres, which is important, given that so much of our food and general waste ends up in landfill and produces large amounts of methane. We talk about our carbon footprint, but the issue is really our greenhouse gas emissions. It is about looking at aspects such as heating for social housing and active transport. It is also about the ability to develop skills for local businesses, given that we want people to shop and recycle locally.

I am not in a position to talk about funding—that was not my workstream, so I am not sure about it. We talked about funding for local reuse centres and an amount that is equivalent to what is currently given to recycling centres, to upgrade facilities.

There could also be initiatives on community land purchase. It is all about enabling communities to develop and put in place systems that help them, locally, to reduce their carbon or greenhouse gas emissions.

Fiona Hyslop: Thank you.

10:45

Monica Lennon: The discussion so far has been fascinating. Indeed, I have had the privilege of taking part in some Zoom events with climate assembly members and I have met some of the children involved here in the Parliament.

I have so many questions to ask, but I suppose that I have to start somewhere. I was struck by Jocelyn Richard’s earlier comment that people want to do the right things and that we need to tackle climate change in a way that is fair to everyone. Can you give me a sense of some of the barriers that were discussed by the assembly? I know that the 100 or so people involved in the

assembly came from different backgrounds but, aside from education and perhaps knowledge, what other barriers are people facing in making these behavioural changes? How concerned are people about the affordability of some of the proposals and the possible impact on people who are already experiencing, for example, fuel poverty, which has been mentioned?

Perhaps Jocelyn Richard can start. I am happy for others to answer, too.

Jocelyn Richard: I think that something like 25 per cent of households live in fuel poverty, and something that would greatly help in tackling that would be the ability to upgrade the energy efficiency of our homes. As I think I have already mentioned, a lot of Scotland's homes are cold; they are made of stone, are not well insulated and are damp. It is simply the type of housing that we have inherited over the years in Scotland.

I would identify two barriers that prevent people from doing things. First, they do not know what to do—[Inaudible.]—their home energy efficiency, and secondly, there is a financial problem in that respect. We therefore recommended that grants be made to all—[Inaudible.] That would be very costly, but considerable savings would be made through energy reduction. I think that we recommended that grants be given to home owners by 2025 and that energy efficiency in our homes be improved by replacing boilers. That would greatly help reduce fuel poverty, because people would not have to spend so much money on heating their homes.

Monica Lennon: Thank you, Jocelyn. I wonder whether Katie Reid has anything to add from the children's perspective. I remember a previous chat that we had when I learned that some of the children who came to Parliament had never been on public transport before and that politicians are in danger of making assumptions about people's living standards and knowledge. How do we ensure that everyone can play their part in tackling climate change and that issues such as poverty and lack of awareness are not holding young people back?

Katie Reid: I missed the first part of your question due to a slight delay with the camera and audio, and I am not sure that I managed to catch it. Would you mind repeating your question about the barriers that children are facing?

Monica Lennon: I was just briefly reflecting on how, when we met some young people at the Parliament, some of them said that that had been the first time they had been on a train, and I suggested that we often make assumptions about people's living standards and backgrounds. How do we ensure that this activity is really inclusive and that all children can participate? We have

talked about the importance of education, but what else can we do?

Katie Reid: Thank you for repeating the question. The joys—or, I should say, challenges—of digital working can make things difficult.

Your question is important, because it allows us to reflect on both the climate crisis and the children's rights crisis. Children are acutely aware that children and adults in Scotland have completely different lifestyles, experiences and circumstances; throughout the climate assembly, they not only reflected on some of the challenges that they experience day to day in their own lives and how those can be barriers but thought in a compassionate and empathetic way about how other children will be impacted by the climate crisis and the barriers that they will face in bringing about the changes and solutions that we need in Scotland.

Some of the things that you highlighted around education are interesting. We need to ensure that children from all walks of life have that opportunity to engage in conversations and be part of the solution in their schools, their homes and their communities. In the evidence that came through the process, it was clear that children want to be part of the solution and want to find opportunities to connect with people in their schools and homes in order to share the ideas that they have. Essentially, we need to ensure that children's participation is at the heart of community-led action and supports an intergenerational approach to the climate crisis, in which children's rights are upheld.

Some of the specific calls to action around how children and adults can work together might be of interest to you. Children are passionate about the wellbeing element of the climate crisis. There is a surge in evidence that shows that the climate emergency can be incredibly anxiety inducing, and there is a lot of concern about the impact that the debate on climate change in the media and the news is having on children, who are absorbing all that information. However, when children are able to engage in the issues in a hope-based and children's rights-based way, they feel empowered and supported to be part of the solution. That can extend into how they build relationships with adults and their communities, their schools and their homes and how they can be part of those conversations.

Some of the calls to action, such as finding opportunities for shortening school and work hours so that children and adults can come together and be part of community-led projects such as community gardens and sharing libraries and creating spaces for recycling centres and other types of initiatives that can support those kinds of relationships, can also help to create an

intergenerational approach to tackling the climate crisis.

Monica Lennon: Thank you. I wish the Children's Parliament well with the launch of the Climate Changemakers scheme.

I have a question for Liam Fowley. Earlier this morning, we took evidence from the transport minister, and I am pleased that the committee supported the statutory instrument on increasing the national bus travel concession scheme to include 19 to 21-year-olds. I know that many people would like that to go further, so that it includes people up to the age of 25, and I know that there is a wider campaign to go further again. From the point of view of the Scottish Youth Parliament, how important is it that those under 25 have access to that scheme? You talked about some of the challenges in rural areas about access to bus services. How much of a problem is that? If we do not have good public services, can people really play their part in decarbonising transport and helping to address climate change?

Liam Fowley: It was fantastic to catch the approval of the statutory instrument earlier. That is an amazing step in the right direction, which young people are incredibly grateful for. It will make a difference in how we can all play our part. Of course, there is always more to do in that regard, such as extending the scheme to everyone under 25, and including the rail networks, too. Further, although it is a useful measure, if there is no access to public transport or the infrastructure is not there, people cannot use it as much.

The issue is a massive one not only in rural areas but elsewhere, too. To be quite selfish about it, I will tell you about my situation. There is no hope of me getting a train to my place of work on a Sunday; I have to drive or use an alternative such as a lift-share or something along those lines. Of course, the problem is greater in rural communities, where the journeys are longer and the buses are less frequent.

Young people want to make these changes. Frankly, it can be easier to get the bus or train, but it is often not a viable option.

We hope that the affordability aspect will now change, too. In rural areas, affordability can make the public transport option a no-go.

Safety on public transport is an issue that is regularly brought up—safety not only on public transport in general but on buses that are contracted for school transport. There are issues to do with whether the seat belts work or the buses are overcrowded, for example. In particular, young people who identify as female will probably want to get a taxi home after they have been on a night out rather than a bus, because they do not feel safe on public transport.

Concessionary transport will make a great difference in relieving the safety and infrastructure barriers. It will also help with affordability, because train fares and bus fares have made public transport an option that is not viable for young people, especially if they are in low-paying jobs or part-time employment, which they tend to be. However, there is still a long way to go in making transport more equitable and accessible for young people and ensuring that they can access it and make the right decisions.

Monica Lennon: Thank you.

Collette Stevenson: Katie Reid, you touched on climate education. That was thought provoking, as were the young people's reactions about how they could be involved. The deposit return scheme will soon be rolled out. In my East Kilbride constituency, we ran a pilot scheme with a reverse vending machine. The 20p return fee was an incentive to collect litter. There was an incentive for the young people to share the money with the whole school, rather than keeping it for themselves, and it was made into a competition. Have you seen anything like that in your work with the Children's Parliament? Have you seen incentives being used to promote local action against climate change?

Katie Reid: That has not come up in my conversations with the children. In this instance, it would be worth speaking to children and young people directly. I am not in a position to answer on their behalf.

Last week, we had an event with the children at which they reflected on the climate assembly process. We will launch a recording of that online tomorrow, and I urge those who are here today to watch that to hear directly from young people.

Collette Stevenson: That is good to know. Thank you.

Mark Ruskell: I was struck by a what Liam Fowley said about how to get a public voice into public services. We are rolling out free bus travel for the under-22s, but young people still have concerns about safety and the quality of services. Is the deliberative democratic process valuable in bringing people's voices into how public services are managed? If so, what does that process look like? Is it an assembly? Does it look like a citizens jury? I am interested in your perspective. That seems to have been a successful process and I am delighted that it has produced a substantial report with much for Government to consider. How do we more deeply embed that deliberative democracy as we tackle the climate emergency and reform public services?

Liam Fowley: That is an important question. Young people feel strongly about that, and it is something that we discussed with them a lot.

Young people should be at the heart of all decisions, not just those on climate change. They should be involved in a meaningful participation process, not a tokenistic one. During the Covid-19 pandemic in the past 18 months or so, young people have felt ignored. Our organisation has seen that young people want their voices to be heard more and more, which is fantastic to see.

Processes must be meaningful and should be co-designed with young people, which ends up taking longer. You cannot just crack a young person into a meeting—that is not meaningful participation, which is all about ensuring that young people are actively listened to; feeding back on what they have said by telling them what you have done or why you cannot do something; and getting them to make recommendations and review things for you. It is about giving them the feeling that they have the power; indeed, they do have that power. Their power is equitable to yours and that of the other people in the room.

11:00

Young people want to be engaged in this work. You are not going to struggle to find young volunteers and hear their views, because they are very active not just in the climate sphere but in decision making in general. Any process must involve meaningful engagement with them and ensure that we get a broad range of ages, voices, races, sexualities and experiences—and in that respect I am thinking, for example, of young refugees.

Such an approach will provide good insights and thought-provoking opinions. I should also point out that there can be no one-size-fits-all arrangement here, and I could not give you a specific example of what would be required for a specific discussion. The overarching statement that I would make is that, whatever happens, it should be meaningful.

Mark Ruskell: Perhaps I can bring in Katie Reid here. Who should lead on this work? It has come from an amendment to climate change legislation and has been commissioned by the Government, but does this sort of thing have to start that way? Could it be driven by schools or councils, or should it be driven by, say, public service operators themselves? Where is the starting point?

Katie Reid: I guess that the starting point is the commitment here in Scotland with regard to the forthcoming incorporation of the United Nations Convention on the Rights of the Child. That is about realising children's rights, part of which is the right to participate in decision-making processes, and Liam Fowley has spoken powerfully about young people's contribution to

decision making in Scotland and the appetite to be part of the decisions that are made here.

Younger children—in other words, from birth right up to the teenage years—have less opportunity to have a say in these processes, and we have to think about what will work for those children of that age. Liam Fowley has alluded to the fact that these things take time—and that is certainly true. It also takes a lot of creativity and a commitment from adults to doing things a bit differently. When we were invited by the secretariat to support children's meaningful participation in the climate assembly process, it gave us an opportunity to rethink what deliberative democracy can look like if you involve all generations. I think back to the period from October to March, when the children, like the adults, were going through their deliberations; their contributions were fed in through short films and then, towards the end of the process, there was a back-and-forth dialogue between the children and the adults when they were forming their recommendations and calls to action.

What has happened since has also been interesting, because the children are now seen as playing an equal part in all this. I would love to hear Jocelyn Richard's reflections on this, if possible, but what we saw throughout the process was that many of the adults' attitudes changed as a result of the children's participation. The children actually encouraged adults to take some of their recommendations further; because the children's calls to action were stronger than theirs, the adults had to reflect on their own calls and to strengthen them before they were laid before Parliament.

By bringing all generations together, we accurately represent the mini-Scotland that assemblies seek to achieve. It sets us on a very positive path. The question is whether, if we are to realise children's participation rights, we can use the citizens assembly model, whether at national, local, community or even school level, improve on it and work to include all generations.

As part of the current phase, the children have been meeting the adult assembly members, cabinet secretaries and ministers to discuss their calls to action and their recommendations. They are far from child-friendly spaces, but the children have loved it and have said that being part of those conversations has shown them that their contribution to the climate assembly has been just as important as that of the adults. There is much to reflect on and learn from this past year, and I know that the Scottish National Party manifesto, for example, contains a commitment to making children's contributions part of the citizens assembly process. I am keen to see how all of that will progress and, with our own experience at the Children's Parliament, we are happy to advise on

what has worked, what can be done better and how we can work with children to ensure that this process works for them.

Mark Ruskell: I wonder whether Jocelyn Richard has any reflections on Katie Reid's comments about the involvement of young people and the exchange—indeed, cross-fertilisation—of ideas between generations.

Jocelyn Richard: It was excellent—and I agree with everything that Katie Reid has said. Having the children as part of the assembly experience was amazing. We often saw videos that they had produced about what they were thinking and how they were dealing with things at their own assembly. Everyone at the adult assembly was inspired and encouraged after watching those videos. If we were having a day when we were hearing particularly gloomy evidence on the future of our climate emergency, we were all uplifted by hearing from the children. That was partly because of how they were willing and able to deal with the situation, and they were willing to engage with the solution, too. We really felt that there is hope. The generation that is coming up is willing to tackle the situation, and we were all inspired. That influenced our thinking in a lot of ways.

It is important to have the children involved, because they are the next generation, and they are the link between the two generations. Children learn about climate change at school, they go home and they say, "I want to plant a garden," or "I want to eat different food." Much of what we have been talking about, such as the behavioural change, is about changing the norm.

For instance, what I do as an adult is greatly influenced by what I did as a child. In the west we eat a lot of meat, and we do that because our parents did that, and their parents did that. We have the opportunity, however, to break that link and create a behavioural change. Children can do that. They can grow up in a new norm in many ways: in their expectations of travel, in their dietary expectations and in their attitudes towards consumption—and they can extend that link into the adult population. That is a really important way in which we can all tackle climate change together effectively.

Mark Ruskell: I will ask you about something specific on how we change the places where we live. There has been a big discussion during the Covid crisis about changing road space: perhaps losing some car-parking spaces, extending footpaths and changing the urban environment. Did that come up during your conversations? What was the thinking about the need for that change? Was it supported, or was that issue ducked in the conversations?

Jocelyn Richard: It did come up in relation to 20-minute communities, which is a system that has been used successfully in places around the world, such as San Francisco. The idea is about making an environment where we have everything at hand. In an environment like that, there is less of a need for cars, and we can move more towards active transport.

We need to move away from private car use. That was one of the things that we discussed. We need to provide a local infrastructure that enables us to go about without needing cars. The two things are linked together. Even if we all use electric cars, there is still a huge carbon output from the cars themselves. The overall goal that we want to move towards at the assembly is active transport. We would like more space in our urban communities to be devoted to cycling and to paths, and we could promote active transport in that way.

Jackie Dunbar: I have a question for Liam Fowley and Katie Reid. I am keen to hear what you think the top priority is that young people want us to hear today. What is the strong message that you want to be ringing in our ears by the end of the discussion? It is important that we hear that.

Katie Reid: One of the resounding messages that has come through from children is about the need to involve them—including younger children and young people—in decisions that are made about the climate emergency, and to actively listen to them and ensure that they get feedback so that they know what contribution they have made and what it has led to. That is fundamentally important. That links back to what Liam Fowley and I have said about the importance of children's rights and ensuring that their right to a healthy environment is seen within the context of children's participation.

Liam Fowley: My answer is in a similar vein to Katie Reid's: make decisions with young people and not for them, and do not leave them—or, I should say, us—as an afterthought.

The Convener: I have one final question for the panel. COP26, which is coming up in Glasgow in about four or five weeks, is a unique opportunity to raise awareness about climate change and, I hope, to highlight some of the behavioural change that will be required. How much public awareness do you think that there is of COP26 being held in Glasgow? What more can be done to promote not only the conference but some of the issues of behavioural change?

Susie Townend: I think that there is a reasonable level of awareness. There is perhaps also a bit of scepticism about how much action will be taken. That goes back to the question that Mr Ruskell asked about citizens assemblies more generally. The assembly members have done the most amazing things and have made incredibly

detailed and specific recommendations as well as general recommendations, but they now need to see some action. That is perhaps where the public more widely are with COP26. There is ambition, but people are waiting to see how that transforms into action.

Jocelyn Richard might be better able than I am to speak about the public view, so I will let her come in.

Jocelyn Richard: I agree that there is a fair level of awareness. People are interested in what happens at COP26 because, following the Paris agreement, the progress on meeting the commitments that were agreed to has been varied. I think that the public in general feel that the global community is very good at signing up to targets, and they need to see action to actually meet the targets and real timetables for delivering on the pledges.

Hosting COP26 in Glasgow is certainly an amazing opportunity, and I hope that one benefit of having the meeting there will be to ignite a certain enthusiasm in the public to tackle the climate emergency. People need to know why they are being asked to change. I do not think that people will be against the changes if they understand why they are needed. We need to have a clear link between what we are asking people to do—the behavioural changes that we are asking them to make—and the reasons why it is necessary. It is very worth while to pursue the strengthening of that link.

The Convener: I will bring in Liam to get his perspective on the question.

Liam Fowley: I agree with Susie and Jocelyn that there is a fairly reasonable amount of awareness of COP26, but there is perhaps not so much awareness of what will happen after COP26. There is awareness that a two-week large-scale event is happening and that the roads will be closed, but there is not awareness of what will happen next and what will actually come of the event, as Jocelyn said.

I would say that there has been an element of young people feeling disheartened, because they have not felt as engaged as they could have been with the event. A lot of organisations are doing good work on it—I mentioned the event called the moment, which is part of that and is engaging young people. I am sure that other organisations are doing things locally, too. However, what is the plan for large-scale engagement with children and young people? Although lots of great things are going on and Scotland is really good at engaging young people, there is probably more opportunity for engaging with young people in a constructive manner.

There is awareness that COP26 is happening. As Jocelyn said, the fact that it is happening in Glasgow is really spurring on conversation nationally.

The Convener: Unfortunately, that brings us to the end of our allotted time for the session. I thank each of our panel members for being here and for their fascinating insights into the area. I am sure that we will meet again as the committee takes forward our work programme.

I now suspend the meeting to allow a panel changeover.

11:16

Meeting suspended.

11:22

On resuming—

The Convener: I am pleased to welcome our second panel of witnesses. They are: Terry A'Hearn, chief executive of the Scottish Environment Protection Agency; Iain Gulland, chief executive of Zero Waste Scotland; and Nick Halfhide, director of nature and climate change at NatureScot. Good morning, everyone, and thank you very much for joining us this morning. Thank you to NatureScot for your written submission to the committee. We have around 60 minutes for the session.

We will now move to questions, and my first question is to all members of the panel. What practical steps will your organisations take to achieve the transition to net zero? What do you plan to do, and how do you plan to do things differently? What are the key challenges that you will face in the transition to net zero?

Let us start with SEPA, moving on to Zero Waste Scotland and then NatureScot.

Terry A'Hearn (Scottish Environment Protection Agency): Could I ask you to clarify the question? Are you talking about net zero in our operations, or in the work that we do to influence others?

The Convener: That is a good question. Both, actually—but primarily the latter: your role in implementing policy towards net zero.

Terry A'Hearn: SEPA has two fundamental roles. We have a role in flooding as the warning alert and strategy organisation for the flooding system, and we regulate about 34 sectors of the economy. The main way in which we will help with net zero is through our regulatory work. Under our one planet prosperity strategy, while environmental protection agencies have traditionally dealt with individual site issues—

which was right in what I call the first phase of EPAs—those issues have tended to be about local pollution. The most high-profile one over the past few years has been the flaring incidents at the Exxon-Shell site at Mossmorran. We will continue to be tough and hard on those, and to work with businesses to solve those problems. We have added something that we think few EPAs do, which is to have a big focus on systemic issues such as the climate emergency and the nature emergency.

We have a sector planning approach. For example, our most compliant sector in the past few years has been the whisky sector. Most distilleries are highly compliant. The whisky industry itself has objectives about decarbonising, about using fewer materials and about using water. Water scarcity, particularly in the part of Scotland where the majority of distilleries are, is an increasing issue, partly because of climate change.

Under our new approach we continue to focus on the site issues, but the big thing that we are doing differently is to work with the various sectors on how to decarbonise, not just at their sites but through their supply chains. In the whisky sector, for example, one of the biggest impacts of climate change concerns the fact that whisky is a boutique, high-quality product in very heavy bottles, which are very energy intensive to produce and then to transport. The industry gets that, it understands the future and it is trying to innovate. We see our role as a regulator as asking how we can work with the industry and other bodies such as Zero Waste Scotland to support it in that innovation.

Continuing with another example from that sector, we regulate both the whisky sector and the barley growers. They both face water scarcity because of climate change. How do we work with them, not distillery by distillery or farm by farm but with the sectors together, to come up with systemic solutions for reducing water use? Using less water tends to mean using less energy, which cuts greenhouse gas emissions, and it deals with one of the consequences of climate change. I could go through many examples, but there is a key theme.

There are lots of other things that we could do involving education programmes and so on but, when I got to SEPA, I said that we would contribute to the programmes that are run by Keep Scotland Beautiful and others, but that we should not duplicate or double up. We are a regulator. We should take a strategic approach with industries and help them to innovate to reduce their carbon emissions.

I will give one other example. In the Grangemouth area, Government officials from the

industry side have asked us to head up a regulatory hub. We regulate a number of businesses at the Grangemouth complex, which needs to decarbonise over time to achieve a just transition. How does regulatory innovation, not just by SEPA but by the range of regulators—Scottish, UK and from the local council—support innovation towards net zero? How do we make powerful, quick, nimble decisions that get behind business innovation while quickly saying no to the wrong things for the environment and quickly saying yes to the things that will help Scotland to make that transition? That is our main way of focusing on net zero: it is through the way in which we regulate in a more strategic and innovative way.

The Convener: I address the same question to Iain Gulland.

Iain Gulland (Zero Waste Scotland): Thank you for the opportunity to come along today.

On the immediate focus on emissions, certainly territorial emissions, Zero Waste Scotland is very much focused on supporting existing recycling and reuse operations across Scotland, both at local authority level and in the private sector. That includes increased performance, and we are working closely with the Scottish Government on the waste and circular economy route map, which will set out ambitions to hit the targets in 2025 and beyond—that is, the 2030 targets. We are very much focused on that.

We are also very much focused on reducing food waste, not just at household level but through the whole supply chain. From a household point of view, food waste in Scotland has almost three times the impact on climate change as plastics. Most people are very animated around taking action on plastics, but food waste is one of the big challenges that we still need to address.

Zero Waste Scotland provides support to all businesses in Scotland, not just to reduce their use of resources but to achieve energy efficiency. On behalf of the Scottish Government, we run an intensive programme especially for small and medium-sized enterprises. We also provide low-carbon heat expertise for a number of the large-scale projects that are now being developed and put in place in Scotland, and we have been working with a number of public bodies and agencies on developing their own net zero plans and on deploying strategies using our experience and tools.

11:30

We are focused not just on territorial emissions but on consumption emissions. Eighty per cent of our carbon footprint comes from the production and use of materials and products, half of which come from outside Scotland. That contributes

significantly not just to climate change but to global biodiversity loss. Globally, 90 per cent of biodiversity loss and water stress is attributable to the extraction of raw materials for products and materials. In a recent report, Zero Waste Scotland highlighted that for every person in Scotland we consume 18.4 tonnes of materials per year. That is something that we are keen to address. We need to embed the circular economy not just in our everyday lives but in every business and sector in Scotland.

We offer a range of support to individual companies and to sectors. You asked what we are doing differently. We are working very much in partnership with the likes of SEPA and Scotland's economic agencies to target impactful opportunities in key sectors in Scotland, where we know that there is not just a carbon saving but, more important, an economic gain to be made, through job creation and inward investment.

At Zero Waste Scotland we have an ambitious zero waste plan ourselves, to reduce the organisation's impact and achieve our targets. We are already at net zero and we know that we can go further. During Covid, working at home reduced our operation's footprint by almost 75 per cent, so on the back of that we have decided to embed home working and agile working.

What do we need to do differently? We need to continue with the partnership approach with Government agencies, sectors, local authorities and communities. We cannot do this alone; there is quite a queue at our door of people from the private, public and third sectors looking for support, so we need to upskill other agencies and parts of society so that member organisations, individuals and communities can support themselves. A big part of our focus needs to be on how we upskill and embed the knowledge and expertise that we have in as much of Scotland as possible, so that we can hit the targets.

Nick Halfhide (NatureScot): Good morning. Our starting point at NatureScot is that the climate change crisis is inextricably linked with the nature and biodiversity crisis and we have to tackle the two together. There is no point in tackling one without the other; we must do both.

At the moment, our work in relation to climate change could be characterised as being in three areas, all of which are predicated on the restoration of nature and natural systems. The first is about reducing emissions from nature. We are working hard to restore peatland and to retain and increase the carbon in our soils and marine sediments, to reduce the amount of carbon that they release into the atmosphere.

The second area is action with nature to sequester carbon. That involves work not only with

trees—conifers and native woodlands—but across all our habitats. For example, we are working to improve coastal habitats, not just so that they sequester carbon but to help to protect our coastlines from erosion. We are looking to expand our native woodlands, for example the Scottish Atlantic rainforests, and to improve soils in our farming areas, which are potentially big sequesters of carbon.

The third area, which is often the Cinderella of climate change work, is our adaptation work. We know that an amount of climate change is embedded in the system and will happen, so we need to make our natural systems more resilient and thereby help to reduce the impact of climate change, such as the increased drought that we are expecting, particularly in the east of the country, the more dramatic rainfall and flooding that we expect further to the west and very significant coastal erosion.

We are tackling all three areas simultaneously. We know that nature-based solutions have a time lag, so we need to implement them quickly to ensure that we get the benefits as soon as possible.

What we are doing differently in NatureScot is ramping up the scale and reach of our work. We have been active for many years on the restoration of nature but we need to move much more quickly. For example, we need to upscale our work on peatland restoration, work much more quickly with local authorities on coastal protections through sand dunes and salt marshes and work closely with Scottish forestry and landowners to improve the rate at which native woodlands and conifers are planted.

There are many challenges around that. One is the scale. Although we are ramping up the amount of work that we are doing, we need to ensure that all our partners are also able to do that. That refers to the public sector—we work with local authorities and other public agencies—but also, crucially, to communities, and we can increase the skills and capacity within communities to take action locally, take advantage of the advice and funding that agencies such as NatureScot can provide and activate that at a local level.

Like most public bodies, we are on a rapid journey to net zero in our buildings, our transport and the way that we manage our land. We own about 30,000 hectares of land. That already sequesters a considerable amount of carbon—more than 7,000 tonnes a year—so we are asking how we can increase that amount and help the resilience of the communities that are in the immediate vicinity of our land.

The Convener: I have a brief follow-up question for each member of the panel, and brief answers

would be welcome, if possible. Do you have targets or metrics that you use to track, follow or measure the progress and impact of your actions?

Terry A'Hearn: I did not talk about our own performance. We have targets that track our greenhouse gas emissions. We have reduced those by more than 50 per cent over the past 10 years, and we will set targets for the following years.

We have measures and targets for a couple of programmes in which we run mandatory regulatory activity: the emissions trading scheme and the carbon reduction commitment. We regulate a number of businesses on carbon, and we have measures in that work.

In the other work that I talked about, we do not have targets because it is voluntary work on the businesses' part. We can regulate a distillery, which will have to meet legal limits for local discharges. We would not have targets for the voluntary work on how that business decarbonises its supply chain, but we comment and report on it.

In all that work, we look at the Government's targets for each sector and try to align our effort to contribute to achieving the Government's target for the sector. That is one of the advantages of our taking a sectoral approach for the first time.

Iain Gulland: All our work is framed by existing Government targets, whether it is the recycling target for 2025, the waste prevention target for 2025 or the food waste reduction target of 33 per cent by 2025. We work with businesses to support them in achieving those targets and the energy efficiency targets that the Government has set.

On the circular economy, I mentioned the material flow account numbers that we produced in the summer. An active conversation is going on, not just with Zero Waste Scotland but with the Government, on what metric could be used to describe Scotland's circularity. There is a global index for circularity, and a number of countries are considering that as a way of enshrining our circular economy activities in target setting.

We have set an internal net zero target to reduce the organisation's absolute emissions, which our board has approved, and we have an action plan in place, which we launched before Covid. The Covid experience has shown us that we could go faster in reducing our wider footprint, so we are reviewing that target now.

Nick Halfhide: We have existing Government targets and metrics, particularly for woodland expansion and peatland restoration. Beyond those, we will develop clear metrics and targets for a more general restoration of nature, which will be presented by October next year in the new Scottish biodiversity strategy. As a minimum, they

will match the international targets that will, we hope, be agreed at the COP15 UN conference on biodiversity in Kunming in April and May next year. We have strong internal targets and metrics to get us to net zero as soon as possible.

Liam Kerr: Nick Halfhide, you talked in your opening remarks about the nature crisis and biodiversity loss. You have just spoken about biodiversity targets. Do you have plans to mark the current baseline for biodiversity to ensure that the impact of any new policies or of your work to achieve those targets can be measured?

Nick Halfhide: Monitoring is already in place across a range of biodiversity indicators, and that will be our baseline. We are also undertaking some internal work. In the coming months, we will engage with stakeholders to find out what success for 2030, when we will have halted the loss, and for 2045, when we will have restored what has been lost, would look like. We have an agreed understanding about what a successfully restored nature would look like. We also expect targets to be embedded within legislation by the third year of this parliamentary session.

Monica Lennon: We are all concerned about biodiversity loss. I have heard that organisations are concerned about the loss of expert biodiversity officers and staff from local government. Are you aware of that? Is the workforce available to advise local government on biodiversity declining? If not, what can be done to address that?

Nick Halfhide: It is difficult for me to speak on behalf of local authorities because I do not have a full picture. Local authorities will be absolutely key in driving forward local nature networks and in bringing together local partners to drive forward more integrated local land use planning. We must ensure that all the parts of a very complex system work together as smoothly as possible, which would have local benefits and would lead to a clear national drive to halt the loss of biodiversity.

Fiona Hyslop: When the cabinet secretary appeared before the committee, he said that we are facing a twin crisis: a climate crisis and a crisis in nature and biodiversity loss, which is just as important as climate change.

Nick Halfhide, what does NatureScot think the Government should do more of to ensure that biodiversity loss is not overshadowed by the climate crisis? What are SEPA and Zero Waste Scotland doing to ensure that those twin crises are treated with equal importance?

Nick Halfhide: Any actions that we take to halt biodiversity loss will be beneficial in dealing with climate change. If we restore nature, that will help to sequester carbon and stop it going into the atmosphere, and it will make us more resilient.

11:45

The two aspects are closely interlinked, but we must be careful, because some things that we can do to solve the climate change problem are not necessarily good for biodiversity. We need to be careful when we do a lot of monoculture or growing crops to burn to generate electricity, because that is not necessarily good for biodiversity. How we do that is really important.

To answer the question about what the Government can do, the Government has set out a series of ambitious actions for NatureScot and others to take forward, which include developing local nature networks; putting at least 30 per cent of our land and seas in some form of protection for the nature that is there; and reforming what was the common agricultural policy, to help farmers. If we add up all those things, that represents a powerful way forward.

However, we could possibly move more quickly in the agricultural space, and we will need to do more to help our upland areas, where there is a lot of peat and a lot of potential for native woodlands to regrow. How can we reduce the pressures that keep those peatlands in poor condition? We can restore them, but how do we maintain them in good condition? How do we allow our native woodlands in the uplands to flourish? That relates to dealing with the numbers of deer and other herbivores, as well as incentivising our land managers and communities to engage in the possibilities that such areas offer.

That must be done with a just transition. Understandably, many rural communities feel threatened by the changes that are coming, because they will affect businesses and because many such communities rely on people working in the countryside. We need to upskill people and show that there is an opportunity and hope from managing the land differently to meet the broad biodiversity and climate change objectives.

Terry A'Hearn: The targets that are set are critical for SEPA. Behind your question is the point that the history of environmental management—in any of our areas—has largely been about particular points in a system, whereas the biodiversity crisis and the climate emergency are about systems problems that need systems solutions.

The more the Government sets clear targets and aims, the more it allows agencies such as mine to style our programmes to deliver against the systems challenges. The Parliament has given us a set of powerful responsibilities to mandate things and to help people on a voluntary basis. It is most useful for the climate emergency, the nature emergency and the biodiversity crisis if the targets and goals are set with clear policy aims and if we

are allowed to get on and play our role in a co-ordinated way.

Iain Gulland: To echo what I have said, 50 per cent of global climate emissions and 90 per cent of biodiversity loss and water stress come from the abstraction of materials from the earth. That is the real issue that we need to think about if we are to solve the two crises, and it comes down to us, as a global community, using too much stuff. We need to do something about that—hence our circular economy approach.

More important, we are doing work to reduce demand. The circular economy reduces demand for virgin materials, so it eases pressure on some troubled parts of the world where biodiversity loss is more pronounced. I am thinking, in particular, about reducing demand for textiles such as cotton and about food. A third of all the food that is grown globally is wasted. If we did not waste as much food, there would be less pressure on land for intensive agriculture.

Like SEPA, we feel that, by reducing and eliminating the waste that is going to landfill, in particular, and addressing the throwaway culture of fly-tipping and littering, we will reduce pollution as well as the distribution of items in the environment, which also contributes to biodiversity loss. Indeed, a lot of our work on circular solutions for organic material—both organic waste and by-products from industry—is about re-utilising that material in, for example, regenerative agriculture or other applications on land to increase the carbon sink as well as soil fertility. Such an approach will not only reduce biodiversity loss but increase biodiversity.

In short, our work directly impacts on biodiversity loss.

Fiona Hyslop: What, for you, are the priorities in the programme for government, particularly with regard to land use?

I also have a small, though meaningful, supplementary to that question. There is an increasing tendency for people in urban areas to pave over their gardens, and I would be interested in getting from you a sense of what short-term or longer-term impact that sort of very local land use issue will have.

However, the big-picture question is about the land use priorities in the programme for government. Perhaps I can take the witnesses in the same order as before.

Nick Halfhide: Could you clarify your question about the programme for government, Ms Hyslop?

Fiona Hyslop: What, for you, are the big priorities in the programme? I am particularly interested in what it will require you to do about

land use. What are the priorities, and are there any pressures associated with them?

Nick Halfhide: Thank you very much—that was very clear.

On the priorities for us in the programme for government, the first thing to say is that, although we are often thought of as the people who do the protected stuff, we actually have to work across all land and sea, and how we manage all of that is important in dealing not just with the biodiversity crisis but with the climate crisis.

With regard to protected areas, we will be looking to increase the amount of land and sea that is protected for nature to 30 per cent and to have meaningful management in place to ensure that nature is restored and revitalised as much as possible. Just as important, though, is our work with the farming and forestry sectors and the marine environment to encourage changes in practice. For example, in the agricultural sector, we are moving to a far more regenerative type of agriculture to protect and enhance soils and to make space for wildlife, and we are doing the same sort of thing in forestry.

As for our urban areas, we want to continue the work that we have been doing for a number of years but to scale it up massively in order to bring nature into our cities. Just a couple of weeks ago, I was on site to see the work that we are carrying out with communities in a couple of tower blocks on greening the two hectares of land and the car parks around and about them to bring in wildlife, including pollinators such as butterflies and bees, and to deal with localised flooding issues by making the land more porous. If we can do that across urban Scotland, we will not only increase the amount of wildlife coming into our cities but make our communities much happier and more fulfilling places.

For example, on a visit last week to a site on the south side, a little girl came up to me and said, “I’m just so excited that you’re redeveloping the car park, because I’ll have a place to ride my bike. I’ve never had that before.” In the transformation of land use from our cities right up to our mountain tops—and out to sea and back again—the human element, like the wildlife element, is really important.

Fiona Hyslop: Before we hear from SEPA about its priorities, I have to say that I was really interested in your comment about turning concrete to green space, although my concern is about people turning green space to concrete in some areas.

Terry A’Hearn: The overlay of the programme for government, with its focus on creating a circular and net zero emissions economy, provides

us with a basis with regard to land management in rural areas.

I do not have much to add to what Nick said about farming. We have had a lot of success. When I ran the Northern Ireland Environment Agency, the Ulster Farmers Union used to ask me to look at how SEPA works with NFU Scotland and try to introduce some of that innovation.

SEPA has a good record of working with the farming community, and a lot of that work has been about reducing individual impacts. As Nick said, it is about how we use the strength of that relationship and the success that we have had to make systemic change—as in farming practices that create a more regenerative form of farming that can not only reduce impacts on the environment but regenerate and repair environmental damage. Our main focus will be on working with the farmers union and some other interests on those sorts of changes in the rural area.

In the urban area, we have tried to radically change how we play our role as a planning consultee. We have around 80 staff who are dedicated to commenting on planning applications. We have environmental experts that Scotland has paid for, and, if they contribute when all the ideas are being formed and comment towards the end of the process, we might get a bit of change. We have tried to shift the flooding experts that we have so that they are at the front of the process.

Glasgow is a great example of a place where there is still a lot of redevelopment opportunity—for example, along the Clyde, although all of that area is potentially at risk of flooding. You could just say, “Well, don’t develop it,” but we want economic and social prosperity if there is the opportunity for it. We told our flooding and planning experts to sit down with Glasgow City Council, other councils, Scottish Enterprise, communities, developers and businesses and try to help people to come up with innovative and creative ideas to use urban land in a different way. Scottish Water is another partner in that work.

We still retain our right at the end of the process—we are very clear about this, so that it is fair and open for people—to recommend to a council that we do not think that something should go ahead. We reserve that right, which is proper, but why do only that? Why not put the expertise that Scotland has invested in at the front end of the process?

I have made a bit of a distinction between our rural and urban approaches. Some of the things that we do cross over, but I hope that that explains how we are trying to contribute to those processes.

Fiona Hyslop: Scottish Canals has also done a lot of work on development in relation to flood management in Glasgow.

Terry A'Hearn: Yes.

Fiona Hyslop: We might want to come back to land use and flooding at some point. Iain Gulland, is there anything that you want to add on the programme for government's priorities or on land use?

Iain Gulland: I do not have anything to say on land use directly but, as I have said, a lot of our work supports land use more generally. Our focus is on accelerating and scaling up progress on the circular economy. The proposed circular economy bill will be a focus for us, and we will support stakeholder engagement on that. Government colleagues mentioned the route map, in relation not only to achieving the targets by 2025 but to the ambitions that come after that.

We are involved in the £70 million investment programme for local authorities. We are looking at that as an opportunity to supply materials for the circular economy opportunities here in Scotland. As we have mentioned, continuing to tackle single-use plastics and our work on textiles will, I hope, have an impact on land use, as will further commitments to support producers to roll out the deposit return system in Scotland.

Collette Stevenson: Good morning—I was just checking the time, but it is still morning. I will zone in on net zero and ask Iain Gulland a few questions about waste. I had a brief look at what your submission says about the European regional development funding that Zero Waste Scotland gets. For how long will that funding continue? Has it had any impact? Will you get support from the Government when that funding stops?

12:00

Zero Waste Scotland's submission also mentions circular procurement, which—if I put my accountant's head on—is about visibility in procurement, where our waste goes and who deals with it as it moves from the household to the local authority. There should be an audit trail for our waste as it moves to its final destination. Is that visible? Should local authorities have a bigger role in where their waste goes? Local binmen pick up waste that might then go to a Viridor site, for example. How is that made visible? What role do you play and what advice do you give in relation to recycling and reuse of products such as steel?

Iain Gulland: You have covered quite a few issues. Our circular economy programme is supported by European regional development funding and European structural funds. We have been investing that funding in supporting

businesses for a number of years. The ERDF was one of the first European funds to support the circular economy. When Scotland applied for that funding, we were seen as pioneering. That has been a success. We have learned from it and we have a healthy pipeline of businesses approaching us for support. That shows that the circular economy is alive and thriving here in Scotland.

That funding will come to an end. Our European structural funds will end in December next year. We are in discussions with colleagues within and beyond Government, but there is no follow-on programme as such. The UK Government has proposed a shared prosperity fund, but it is not clear how that will be deployed. That is a concern for us because businesses in that healthy pipeline will be looking for support if funding is not available.

Circular procurement of what we buy is important. We could use public sector procurement in rental or leasing to create a market for circular economy businesses here in Scotland.

The question was about what happens to resources after they have been collected by local authorities and about where they end up. That is a valid point. There are concerns. We have seen television programmes that show UK plastics ending up abandoned next to jungles in other parts of the world or finding their way into the marine habitat. What happens to our waste—its end destination once it has been collected for recycling—is a concern. More people are asking those questions.

A lot of people also now want to know where their stuff is coming from. There is growing demand from consumers and businesses to know where materials come from and what the implications are for the supply chain. Issues include child labour, the use of critical materials and areas of conflict in the world, particularly regarding clothing.

Where does our stuff go? There is a responsibility on all of us—local authorities and the private sector—to make that transparent. Householders want to know where materials go and what they are being recycled into. There is a great story to tell if we engage more people in doing more recycling. SEPA might have a view on the legality of what happens to waste and how transparent, or otherwise, that system is.

I sometimes use the analogy of fair trade. We are always conscious of where our coffee comes from and so on, and every supermarket in Britain now sells Fairtrade products. In the same way, I talk about what I call fair waste. We need to understand the implications of our waste. From not only an environmental point of view but a moral point of view, we need to realise that shipping our

waste overseas might not help developing countries with the situations that they find themselves in. Also, we should think about exploiting opportunities to reprocess that material and do much more with that waste resource here in Scotland, which would have economic benefits.

Collette Stevenson mentioned steel. We see that as being one of the opportunities that presents itself in the circular economy. Currently, we export quite a lot of steel as a result of decommissioning in the North Sea. We do not reprocess steel in Scotland; instead, we cut it up and ship it off to steel manufacturers in other parts of Europe and beyond. However, there will be demand for steel in our infrastructure, particularly—[*Inaudible.*] That clearly presents us with an opportunity to use the electric arc furnace approach to reprocess our own steel in Scotland. That would create jobs and would be beneficial in reducing carbon emissions, because Scotland uses renewable power—it has the third-greenest grid in the world—so it would be more advantageous in terms of the climate to use steel produced here than it would be to use steel that is shipped in from abroad, which might have been made in coal-fired furnaces.

Thinking about that system presents us with a huge opportunity economically and environmentally. That goes back to Terry A'Hearn's point about systems thinking. People tend to look at only one aspect of a system, but we need to think about the whole steel system in Scotland and think about how we can create a more circular economy here in terms of the flows of material into and out of our infrastructure. We just need a number of parties to come together and make that connection. There will be demand for steel for the infrastructure that we require in order to meet our net zero targets between now and 2045, so why are we not making use of the materials that we already have in our society? Steel is a great example of how the circular economy could transform material management for our economic, social and climate goals.

Collette Stevenson: It is interesting to hear you talk about the manufacture and recycling of our steel. I am keen to know more about that and am happy—I am sure that we all are—to have a conversation outside the committee on that issue. It would be good to know whether there is a case study on that issue and whether the committee can play a role in promoting it.

Iain Gulland: I am happy to share more information with you directly, or with the committee, about some of the work that we have seen on steel. I know that other parties in Scotland have been considering the issue, too.

Liam Kerr: I have two brief supplementary questions that arise from that line of questioning.

Where are you with the development of plans to ensure that plastics from the deposit return scheme are ultimately recycled in Scotland rather than being shipped abroad?

Iain Gulland: Now that the legislation has been passed, that is under the control of producers. The scheme administrator, Circularity Scotland, is putting the implementation plan together. We are supporting it, and it is keen to do exactly what you suggest and have plastics that are collected through the scheme reprocessed and repurposed in Scotland so that they can go back into the supply chain in order to create climate and economic opportunities. Along with other parties in the Government landscape, we are working with it to support the potential for reprocessing capacity to be built here in Scotland. Obviously, the scheme is not up and running yet, so we have some time to land that project.

Liam Kerr: My second question concerns the cut in the Scottish Government's budget allocation to Zero Waste Scotland of £4 million between 2019-20 and 2020-21. When I had a look at your latest accounts, I saw that the Scottish Government grant was down by £1.5 million in 2020-21. One would have thought that that would have had quite a significant impact on your ability to deliver the outcomes that you are trying to deliver. What impact has it had?

Iain Gulland: The funding cuts are related to the ERDF. There will be an impact on certain programmes in terms of match funding as we come towards the end of that funding. The bulk of the money from the ERDF was used to support individual circular economy businesses at an early stage of development—we have supported more than 240 individual companies over the past couple of years. You could say that, without that money, we will have to reduce the number of businesses that we support. However, other parts of Government have access to funding—the green jobs fund, for example—so the issue is about working in partnership with other parts of Government to see whether we can provide a better interface for some of those businesses and introduce them to other support that is available.

As I said, I think that we have a healthy pipeline of businesses. The circular economy is now a central part of Scotland's ambitions around climate change, a new minister has been appointed to lead on the circular economy, and there is definitely an opportunity to scale up businesses and circular economy strategies at a local authority level. Obviously, we will have to keep an eye on funding, but we recognise the bigger picture in terms of funding that is available to public sector agencies such as ourselves.

Obviously, our funding levers in private sector investment. I do not have the figures in front of me

but they basically say that, for every £1 that we invest, another £3 or £4 comes in from the private sector. There is a growing appetite from the private sector to support circular economy businesses, and one of the aims of the fund was to demonstrate the art of the possible in terms of the circular economy, so that private sector investment, whether that came from banks, angel investors or venture funds, would take the circular economy more seriously. That is beginning to happen, and my team is having conversations with private sector investors to understand what a follow-on programme might look like. There is a lot of interest in this space and, I hope, a role that we can play to provide an interface and support businesses into that pipeline.

Monica Lennon: I have questions for Zero Waste Scotland and for SEPA. I will start with Zero Waste Scotland.

According to the latest SEPA data, progress on recycling has slowed and reversed. Less than 45 per cent of household waste in Scotland was recycled in 2019, and there are huge variations across the country. In East Renfrewshire, which is at the top of the league table, almost 60 per cent of household waste was recycled; in South Lanarkshire, where I live, the figure was 46 per cent; in Glasgow, which is hosting COP26, it was 25 per cent; and, in Shetland, it was only 17 per cent. Why are we not making more progress on recycling rates in Scotland? What needs to be done to rapidly improve the situation?

Iain Gulland: Without getting into what individual councils are doing, I can say that one of the other questions that we might want to ask ourselves is whether we are measuring the right thing. Obviously, those measurements relate to tonnes of material, which is how we have historically measured recycling rates. There have been incremental increases in household recycling, but the actual carbon intensity of what is being recycled has increased intensively—I think that it has risen by about 17 per cent in the past few years—because we have been able to use a world-renowned carbon metric that allows us to consider recycling opportunities for different materials and target the ones that are much more carbon intensive.

Over the past few years, most councils have proactively engaged on food and plastics recycling. Plastics are not very heavy, but the density of plastic recycling has improved. There has been a great shift in recycling performance when we measure carbon but perhaps not when we measure tonnes of materials.

12:15

There are differences across different authorities. The work that we are involved in, particularly on the route map, is about not only assessing how we will hit the 2025 targets but, more importantly, examining best practice or good practice across authorities. We are trying to understand why some authorities perform better than others. Is it because of housing type, approach or communications?

The £70 million recycling improvement fund that I mentioned provides an opportunity for councils to further advance some of the recycling schemes that they already have. Our evidence continually shows that something in the region of 60 per cent of what is in the residual bin could still be recycled through our current infrastructure. That is not about introducing new infrastructure—going out and getting more bins and boxes—but about examining the system that we already have in place in Scotland.

Capturing food waste is a good example of that. More than 80 per cent of Scotland now has a food waste collection service, but the participation rates are low and patchy.

There are quick wins that we could all make locally and nationally to get behind recycling. From continual engagement with householders, we know that they see recycling as part of fighting climate change. They want to do something. We need to get the messages out and re-engage with parts of Scotland that do not have the same recycling levels as others.

Monica Lennon: I hear what you say about other metrics, other measurements and different ways to benchmark. However, a national target was set to increase household recycling to 60 per cent by 2020. We are way off the mark. The figures are worrying and, in part, embarrassing. Are we measuring the wrong thing entirely? If so, why do we have those targets in the first place?

Iain Gulland: I cannot remember when the targets were set—five, six or seven years ago. You are right: we are making progress but not at the rate that we would like to. The route map work that we are undertaking on behalf of the Scottish Government is setting out the path to hitting the 2025 recycling rate target, which is the next one, and to go beyond that. We are assessing the ambitions and whether we have the right strategies and policy instruments in play or whether we need to think differently about strategies and policies. A lot of intensive work is being done on the route map to understand exactly how we get back on track.

The tonnage question comes up a lot. Should our focus be on the macro level of waste prevention—such as preventing waste in building

materials or slightly inert materials—or on some of the more carbon-intensive products and materials? We are much more aware of that now. I am not going to single out any moment in time but, as a nation, we are now much more carbon focused and much more carbon literate. We have much more access to information and detail, even in real time, when making decisions. Climate change is the focus. We are definitely looking at the right thing to do for the climate.

Monica Lennon: On the wider policy landscape, we expect the Scottish Government to announce a review of the role of large-scale incinerators in Scotland's waste hierarchy soon. Should we slam the brakes on new large-scale incinerators being built? Should we have a national moratorium? What would you like to see in the policy review that will be announced shortly?

Iain Gulland: Obviously, we will be supporting the Government in that policy review. Indeed, we have already provided some information on the climate impacts of incineration as opposed to landfill. We are aware that we need to come up with clarity on this, but disposing of waste whether through incineration or landfill is, as we keep saying, part of the old linear economy system. We need to decouple ourselves from that and think more aggressively about different strategies to reduce, reuse, repair and remanufacture materials at a much faster rate and in a more strategic way. Instead of just handing this to the 32 local authorities, we need a much more collaborative approach as a nation. Our waste system has, to some extent, fragmented, with 32 authorities that take a variety of approaches and a number of waste management companies in the middle. As a small country, if we really want to realise some of our ambitions with regard to our resources, we need a much more collaborative and joined-up approach to harnessing those resources for economic as well as climate gains.

I certainly look forward to supporting the review and getting some clarity as quickly as possible.

Monica Lennon: I think that we all want clarity.

On the issue of new large-scale incinerators, would it be a sign of failure if, from this point onward, we were to see such incinerators getting consent and being constructed, given what we know about the climate emergency?

Iain Gulland: As we have said, incineration is not the answer. It is not a low-carbon solution, because it still produces CO₂ emissions. Our country is trying to reduce all such emissions, and our energy sector has had great success with renewables, so we should be thinking about how we get out of incineration, certainly by 2045. What will our exit strategy be? Obviously, there is still incinerator infrastructure in play, but what is the

plan in that respect? It is a bit like diesel engines on trains. We have a plan for electrifying the railways to wean ourselves off diesel—*[Inaudible.]*—if by 2045 we have realised all our carbon targets, waste in its current form will not exist.

Monica Lennon: That was very helpful—it was good to get that on the record. *[Interruption.]*

The Convener: I think that our panel is back.

Monica Lennon: There has been a slight technical hitch, but if Terry A'Hearn can hear me, I will continue.

SEPA has been having a hard time. For a start, it was the victim of a cyberattack on Christmas eve, and I want to thank Mr A'Hearn and his whole SEPA team for their hard work in recovering from that. As chief executive, you advised the SEPA board earlier this year that there might be a risk of not protecting the Scottish environment, especially from key threats. Can you update us on the impact of the cyberattack on SEPA's regulatory actions or the environmental outcomes that you were working towards?

Terry A'Hearn: In our standard board papers, we set out the risks of not doing what the paper in question is proposing. The cyberattack that we had was very significant. You cannot do everything, so, from the very early days, we made decisions about our high priorities. We focused on the risks of which might have happened if we had not made the right choices and if the staff had not risen to the challenges. What would have happened if, for example, we had not got flood warnings and alerts out? We have not failed to do those things, and the staff have done an amazing job, including on the day of the attack. That is a critical service for Scotland, and it has been maintained. We also got other things such as information on water scarcity and river levels up and running pretty quickly. As I have said, we focused on the highest priorities to avoid those sort of risks.

As for our regulation of businesses, the pandemic sort of helped, because it meant that we could not send people out into the field that much. We had to do two things. We had to work out which businesses and sectors the risk was in, and we have good knowledge from many years about the businesses and sectors that have a good track record—to be blunt, they are the ones that we can trust most. In the philosophy statement that we published, we made it clear to businesses that we wanted and expected them to do the right thing and that we would support them to do that, because they faced challenges from the pandemic, but that we would be there if people abused our trust.

When the cyberattack hit, we had a double whammy. We already had a list of sites that cause things such as odour and noise, which are terrible for local residents and were even worse when people were under lockdown conditions at home, so we focused our limited ability to get out in the field on dealing with such sites, as well as the high-hazard sites and the sectors in which people were probably taking advantage of the situation. In the waste sector, fly tipping increased, so we worked with councils and the police to put effort into dealing with that.

The important thing that we did, which we will report on later in the year, was to consider the risks and use our extensive knowledge of the industries that we regulate to prioritise the riskiest things. I cannot say that I have the data that shows that that worked as a nine out of 10, but I can say with fair confidence that we focused on the highest-risk areas and put things in place so that environmental harm was not prevalent when we were constrained by the pandemic and the cyberattack.

We need to take the lessons from the pandemic and the cyberattack—when we found new ways of ensuring that people complied and stuck with the law—and build them into our new model of working. We were going through change anyway, as we started an ambitious regulatory change agenda before the pandemic. If we can build the workarounds that we had to use because of the pandemic and the cyberattack into all the good things that we used to do, we will be able to tackle more strongly the risks that you referred to from my report to the SEPA board.

Monica Lennon: I will ask briefly—

The Convener: It must be brief, please.

Monica Lennon: Police Scotland has said:

“We know criminals will exploit any opportunity for their own gain and COP26 will be no different.”

Ahead of COP26, the Scottish Business Resilience Centre is advising businesses to take steps to protect themselves physically and online. As part of national discussions about resilience, is SEPA giving advice around the table, so that we can learn the lessons and apply them quickly, ahead of COP26?

Terry A’Hearn: Are you asking about cyber issues?

Monica Lennon: Yes—about cybersecurity.

Terry A’Hearn: I will quickly make two points. I commissioned independent reviews of various parts of the cyberattack. Some of that needs to be confidential, because it is about the criminal investigation, because we do not want to give away to cybercriminals information about

improvements that we are making to our cybersecurity and because we need to protect privacy. However, in the next month or two, we will publish a lot of material from those reviews that we do not need to keep confidential, although we have had to redact a fair bit, for the reasons that I outlined.

We are being told that the independent reviews and our transparency with the public have probably been leading edge by global standards. Most organisations that have a cyberattack do not talk much about it. We will publish the reviews and we are working with the Scottish Government and the Scottish Business Resilience Centre to ensure that the lessons are learned. I have given briefings to a series of chief executives and information technology executives throughout the public sector. I do a standard one-hour talk that explains—to the extent that I can, given the constraints—what happened with our attack and sets out the lessons about what to do to protect ourselves further from an attack and about how to cope if, unfortunately, an attack gets through.

Mark Ruskell: I will ask all three witnesses about their organisations’ changing remits. Nick Halfhide talked about the need to scale up to tackle the nature emergency, and I think that he said that NatureScot is taking over from Marine Scotland the responsibility for marine protected area designation.

I am interested in understanding how the witnesses expect their bodies to develop. What changes do you hope to make to your remits? How will you develop more partnership working?

12:30

Nick Halfhide: Technically, our remit on marine protected areas has not changed. Just to be clear, it is a role that we have always played in terms of giving advice to Marine Scotland and to ministers. More generally, we see that we need to scale up the level of engagement. It is something that we have already been undertaking, but we have realised that it is simply not enough. We need to further the number of people we engage with, whether that is in businesses, communities or organisations, and to engage more deeply.

On the one hand, we need to ensure that our expertise and the massive amounts of data and evidence that we have are more available, but we will also have a leadership role in saying to people, “Let’s stop doing so much talking about this. What is the action that we need to take?” That is true whether we are talking to people in the uplands, the agricultural sector or the cities. How can we lead the change with the evidence and skills that we have in order to really make the difference? We know that the scale and pace of

our activities need to increase significantly, both to meet the nature crisis and to contribute to tackling the climate change crisis.

Mark Ruskell: [*Inaudible.*—does that look like? Is it increased regional land use partnerships? What actions will be needed on the ground to drive that?

Nick Halfhide: I missed the start of that question, but I assume that you were asking what we need to do more of on the land.

Mark Ruskell: Yes, particularly in terms of regional land use partnerships.

Nick Halfhide: I understand that regional land use partnerships will be led by local authorities, so part of our role is to help them to move into that field, because they are not so familiar with it. We need to make sure that we are at the table with our evidence and expertise, corralling all the other partners, if we need to, and leading on what regional land use partnerships might mean.

From a biodiversity perspective, it will require more clarity about what needs to happen in terms of identifying which species or habitats we might need to target within a particular land use partnership and what a local nature network can look like in that space. Then we will consider how we can bring in the other partners, and private finance where necessary, alongside public sector funding and any other money that is available to make it happen.

All the time, we will be making sure that the communities that will get both the benefit and the impact from the partnership are as engaged as possible. The partnerships need to meet the needs not only of nature but of the local communities—for example, by providing places where they can go out and enjoy nature for their mental and physical health. We also need to consider the effect on water supplies, for example, so that we integrate all the benefits that restoring nature at a local level can bring.

Mark Ruskell: I ask Terry A'Hearn about changing remits, as well. The committee heard evidence from the just transition commission several weeks ago and it is clear that high energy users will need to produce just transition plans. What will SEPA's remit be in relation to that? Are you already working on that in terms of your sustainable growth agreements?

Terry A'Hearn: If you look at the setting, the scientists say that we have to have made huge inroads into decarbonising and dematerialising our economies and societies around the world by 2030. SEPA will use largely the same sort of programmes and tools—we now have a broader set of those—and we will change the nature of

what we do in line with what Mark Ruskell just suggested.

If we have to make those huge inroads in changing Scottish society and its economy, my philosophy would be to have very low tolerance for people who cannot even meet minimum standards. That does not mean throwing the book at everyone—some people just need help and they can quickly get there—but if people are deliberately breaking the law, they need to find regulation painful, expensive and uncomfortable, and we need to get better and tougher at that. We have started that by setting up an enforcement team. That is a key plank. The vast majority of people do not need that, but there are some who do. Even really good performers need it some of the time—when they make a mistake, for example.

What we will try to do with our remit is to get into the boardrooms and executive rooms of businesses that we regulate and talk to the owners, because that is where the big decisions are made about what sort of products they produce and how they can fundamentally change what they are doing. That will sometimes be through a sustainable growth agreement. The Scotch Whisky Association, which I talk about a fair bit, has a sectoral plan. We will try to fit in with what it is trying to do, using our tools to help it to decarbonise and dematerialise, and similarly with NFU Scotland. The range of sustainable growth agreements that we have developed will be key to that, and we will develop more.

In relation to people's ambitions—I use the Grangemouth example—we need to sit down with the players and ask them what their challenges are. If people want support from us as a regulator to decarbonise, we will also put on the table that they have two residual compliance issues and tell them to fix those quickly, get on with it and stop local pollution. We do not have time to do one and then the other; local people should not have to put up with local pollution because we are dealing with bigger issues. We have to do both at the same time.

That is why we need to be in at the top of organisations. That is the kind of change that you will see in our remit. Most of the history of environmental protection involves experts, who we still need and who will play a key role in the regulatory body working with environment managers or plant people. We still need them to do that; they are critical because they know the technical issues and have good ideas, but we must also talk to the people who run businesses, because they make the big decisions about what and how to produce.

Mark Ruskell: That is regulation, but it is not just transition, is it? Just transition is not only about the boardroom; it is about workers and

communities and planning that transition. Are you working in that space of just transition, or are you still applying the regulatory limits and enforcing them where appropriate?

Terry A'Hearn: I see what you mean about what I just described. As you will have seen in our Leven programme, the stable growth agreement has some businesses involved, but it also includes community groups, non-governmental organisations, the local college and the local authority. Fundamentally, it will involve a whole range of partners.

I tend to focus on the business community when I answer such questions, because that is our primary way into those sort of processes and it is what people demand of us. However, you are quite right. We have expanded significantly how we will work with all parts of the broad community, including the business community. The mechanism for us getting involved in those things tends to be our role as a regulator and through that we will play a broader role in the just transition, as you suggest.

Mark Ruskell: I ask Iain Gullane the same question on remit. You provide key advice for Government and local authorities. I welcome your work over a long period of time on incineration and getting to grips with the environmental impact of that. That remit will remain, but how will the work of Zero Waste Scotland develop over time, particularly in the context of the forthcoming circular economy bill?

Iain Gulland: I have alluded to that. We are changing as a business; we launched a new corporate plan in 2019, which recognised that demand for our services from businesses, communities and individual citizens was increasing. We became much more aware of the areas that we needed work in to have the highest impact, which were potentially not the areas that we were previously working in. We recognised that our business needed to evolve, and that evolution is still under way. Covid has had an impact on that.

We recognise that working in partnership with others is important; we are keen to build on our success with chambers of commerce in furthering circular economy strategies and business opportunities at a local level. We have been working with Highlands and Islands Enterprise on a similar approach and there is potential work in the offing with South of Scotland Enterprise. We know that there are more people at our door looking for support, so it is about how we empower and upskill other parts of the public landscape and trade associations to provide that level of support in relation to Scotland's opportunities in the area.

We need to get much more involved in working with communities and even with individual citizens directly, and we need to get universities and colleges to help us with the further research and analysis that we need. In some of the sectors that we are moving into, and particularly in renewables, circular economy opportunities are new ground. We need to harness the expertise in other parts of Scotland—that is partnership working.

Similar to what Terry A'Hearn said about SEPA, our work has shifted. A lot of the interface that we had with individual businesses was out the back door looking at bins and in environmental offices looking at changing light bulbs or whatever—low-level stuff—but now the circular economy is at boardroom level. We are having to have those types of conversations. Businesses that are looking at the resilience of their supply chains and at consumer pressures welcome some of that work; they want to focus much more on the circular economy, but others have not started the journey yet. There are individual businesses that still have work to do, but that needs to be done at boardroom level. Clear signals are coming down about future investors looking for visibility on the net zero approaches of businesses that are trying to secure investment. We are trying to get ahead of that.

I am not painting a bleak picture of the circular economy or climate change. There are massive opportunities for businesses in Scotland to be ahead of the game, not just in relation to the Scottish supply chain but for export. We have the third greenest grid in the world, so products and materials that are processed and refurbished here are attractive across the world. There are huge economic gains to be had as well as the clear climate gains that underpin all that.

The Convener: That brings us to the end of our allotted time and concludes the evidence session. I thank our panel members for joining us and providing evidence across a very wide range of issues. Enjoy the rest of your day.

12:41

Meeting continued in private until 12:55.

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