OFFICIAL REPORT
AITHISG OIFIGEIL

Net Zero, Energy and Transport Committee

Tuesday 6 January 2026

Session 6

The Scottish Parliament
Pàrlamaid na h-Alba

© Parliamentary copyright. Scottish Parliamentary Corporate Body

Information on the Scottish Parliament's copyright policy can be found on the website - www.parliament.scot or by contacting Public Information on 0131 348 5000

Tuesday 6 January 2026

CONTENTS

NET ZERO, ENERGY AND TRANSPORT COMMITTEE
1st Meeting 2026, Session 6

CONVENER

*Edward Mountain (Highlands and Islands) (Con)

DEPUTY CONVENER

*Michael Matheson (Falkirk West) (SNP)

COMMITTEE MEMBERS

*Bob Doris (Glasgow Maryhill and Springburn) (SNP)
*Monica Lennon (Central Scotland) (Lab)
*Douglas Lumsden (North East Scotland) (Con)
*Mark Ruskell (Mid Scotland and Fife) (Green)
*Kevin Stewart (Aberdeen Central) (SNP)

*attended

THE FOLLOWING ALSO PARTICIPATED:

Professor Rachel Aldred (University of Westminster)
Sara Collier (Confederation of Passenger Transport)
Professor Adrian Davis (Edinburgh Napier University)
Iain Gulland
Kim Pratt (Friends of the Earth Scotland)
Duncan Simpson (Resource Management Association Scotland)
Lamech Solomon (Logistics UK)
Gary Walker (Scottish Environment Protection Agency)
Dr Lucy Wishart (University of Edinburgh)

CLERK TO THE COMMITTEE

Peter McGrath

LOCATION

The Mary Fairfax Somerville Room (CR2)

Scottish Parliament

Net Zero, Energy and Transport Committee

Tuesday 6 January 2026

[The Convener opened the meeting at 08:35]

Decisions on Taking Business in Private

The Convener (Edward Mountain): Good morning, and welcome to the first meeting of the Net Zero, Energy and Transport Committee in 2026. Our first item of business is a decision on taking items 2 and 4 in private. Item 2 is consideration of a draft report on the legislative consent memorandum for the Biodiversity Beyond National Jurisdictions Bill. Item 4 is consideration of the evidence on the draft climate change plan that we will hear today, as well as the evidence that we heard at our previous meeting, when we ran out of time. Do members agree to take those items in private?

Members *indicated agreement.*

The Convener: It looks like our only items of business next week will be consideration of two draft reports. For the convenience of the official report and the broadcasting unit, I ask now whether we agree to take those items in private next week and, if necessary, in future meetings, every time they come up. One of those items is the Ecocide (Scotland) Bill. Monica Lennon is the member in charge of that bill, and on a precautionary reading of the standing orders, I ask Monica to recuse herself from the decision on that.

Do members agree to take the draft report on the Sustainable Aviation Fuel Bill LCM and any supplementary LCMs in private?

Members *indicated agreement.*

The Convener: Do members agree to consider a draft stage 1 report on the Ecocide (Scotland) Bill in private? Monica Lennon is recusing herself from the decision.

Members *indicated agreement.*

The Convener: We are happy. We will move into private until around 9 am.

08:36

Meeting continued in private.

09:05

Meeting continued in public.

Draft Climate Change Plan

The Convener: Welcome back. We are now in public for our third item of business, which is an evidence session on the Scottish Government's draft climate change plan. The plan sets out how the Government intends to meet its carbon emissions reduction targets. The committee is leading a cross-committee effort to scrutinise the draft plan. The Scottish Government has said that it will lay the final plan before the Parliament is dissolved at the end of March. Everyone giving evidence today will be contributing to a report that we will publish in late February. A debate in the chamber will follow.

I welcome to the meeting Professor Adrian Davis, transport research institute, Edinburgh Napier University; Professor Rachel Aldred, University of Westminster; Lamech Solomon, head of decarbonisation policy, Logistics UK; and Sara Collier, senior public affairs manager for the Confederation of Passenger Transport. Thank you all for attending this morning.

This evidence session will cover all the main aspects of the transport sector. I note that we discussed electric vehicles and charging points at the meeting on 16 December, so I feel that that part has probably largely been covered, although we may come back to it.

In the normal way in this committee, I get to ask the introductory questions, which are meant to be a gentle warmer into the bank to give you each a chance to say what you think. Are the policies that are set out in the draft climate change plan sufficient to deliver the Scottish Government's overarching goals for car use reduction and modal shift, including in the freight sector?

The answer could just be yes or no, but I suspect that you will want to say a bit more than that. I remind you that there are four of you, so if somebody wants to say something that somebody else has already said, it would be better just to say, "I agree with so-and-so," rather than repeating it all, because time is of the essence.

Professor Davis, do you want to start?

Professor Adrian Davis (Edinburgh Napier University): Good morning, everyone, and thank you for inviting me. I will give a short response to that question, because I know that you have been given evidence on this by many others. The answer is no, because there is no real substance to this plan on transport—it is very weak.

In the whole of the 160 pages in annex 2, the word "encouragement" appears 50 times. It

appears most times in the transport section, and within that section it appears most times to do with road transport rather than shipping or aviation. The emphasis is on encouragement, but we know from the best robust science that encouragement alone is not enough.

I will briefly say that electric vehicles on their own have been overemphasised to the detriment of behaviour change. Behaviour change requires strong action from the Government, through local authorities, to put in measures that make it safer for people to actively choose public transport, walking and cycling. It also needs the disincentivisation of the use of private motor cars where there are alternatives. The emphasis, as has been stated in previous plans, which I agree with, is on the action that lies in urban areas, where the opportunity is greatest.

Sara Collier (Confederation of Passenger Transport): I know that the convener said not to mention things outwith the two outcomes that he referred to, but I will just mention the transport outcome on zero emissions road vehicles by 2040, because you did not talk about coaches and buses at the previous evidence session. We are quite happy with that outcome and the policies under it.

I will be a bit more positive than Professor Davis. I certainly agree with him that the car use reduction outcome and the policies and proposals under that do not seem sufficient and lack a lot of detail.

I was a bit more encouraged by what I read on modal shift, however. Again, a lot of the detail was buried right at the end of annex 3, and it took me more than one read to realise what was a policy, a proposal, an enabling policy, an enabling proposal and so on.

I was fairly encouraged by what I read. It echoes a lot of what we have been saying as an organisation in the workshops that the Government and Transport Scotland have held as part of this plan, which is that it is a package. It is not only about free bus travel or bus infrastructure, although that is the big one for us. The proposals and policies under the modal shift outcome reflect what we have been saying on the matter, so I am a bit more encouraged by that and tentatively happy with what is under that outcome.

I agree that it is a plan. However, it needs to move towards a delivery proposal, so it needs a lot more detail.

The Convener: I call Lamech Solomon. Can you hear me, Lamech?

Lamech Solomon (Logistics UK): Yes, I can hear you.

I echo what everyone has said so far on the detail. From what we have heard from our members, the support for modal shift does not reflect the operational reality. Recent funding decisions need to align with policy and the emphasis on rail and water freight must be matched by long-term funding.

Support for modal shift schemes has recently been reduced—indeed, the mode shift revenue support scheme, which provided support up to £700,000, was removed from the Scottish budget two budgets ago, and subsidies for timber transportation by water have also reduced. A lot of ambition is being portrayed in the climate plan, but the parallel, or adjacent, funding to support it is not there. We need to ensure that the funding aligns with the policy ambitions in what we are asking for.

The Convener: Thank you for that. Sorry, I was looking up something in my papers to make sure that I had the right bit. I come to Rachel Aldred.

Professor Rachel Aldred (University of Westminster): Thank you for inviting me here. I will not repeat what other people have said but, like Adrian Davis, I was disappointed by the underwhelming nature of the transport aspects of the document. The plan is very focused around electrification, which is obviously important, but the substantial potential role for demand reduction seems to be sidelined. There is not really a sense of the transformational nature of change that will be necessary in order to reap the benefits of demand reduction and modal shift.

We know what to do. We know that we need push and pull policies and substantial investment in public and active travel, and that we need to use pricing and to reduce the road space that is available for private motor vehicles. There are really good examples from across Europe and North America, including in rural and hilly areas and areas that have particularly bad weather and so on. There is a lot of scope for change, but I do not really see that in the document.

Very often, targets are set that are then missed, or targets are not monitored. We need targets on car use reduction and on modal shift that can be monitored at a local level. What Transport for London does with the London boroughs is a good example: targets are monitored at borough level every couple of years, and it is therefore possible to have an overview of which are going in the right or wrong direction, and action can be taken. That is what we need with regard to targets.

The Convener: I want to drill down a bit into the draft climate change plan. Annex 2 addresses sectoral changes. When it comes to transport, on page 51, it says:

"In order to achieve our Net Zero targets in relation to the transport sector, action will be required to be taken by all members of society, from the general public, businesses,

public sector organisations as well as all levels of government",

which seems to be a call to arms. Then, on page 28 of annex 3, the total gross cost for achieving net zero in the transport sector is shown as about £12.7 billion and the net cost as £6.9 billion.

Can someone help me understand who is paying the £12.7 billion? Where is it coming from and where is it going? On the basis that you have all read the paper, Adrian Davis, do you want to have a go at answering?

09:15

Professor Davis: Not really, no. The responsibility is everyone's, but it is the responsibility of Government to set the framework, and that means that it needs to understand the cost benefits and the losses that will occur if we continue in the way that we are.

I will try to answer the question in a meaningful way by giving an example. There was a target to increase funding for active travel to at least 10 per cent of the overall transport budget by 2024-25. That failed. Less than 50 per cent of that target has been achieved, and the amount has declined in the last year. It could be argued that the result of that is that in the long term fewer people have the opportunity to reduce their carbon emissions because there is not the infrastructure there for them or their children to cycle or walk to school. They do not feel safe, so they drive their children to school. Such actions have huge knock-on effects down the line for the Scottish Government and for Governments in general in terms of the work that needs to be done to ameliorate the impacts of climate change.

Whichever way you want to stack it up, the Government has to be able to invest money along with others, including businesses, but it has to take the lead. That is a round-about way to say that we have to do things now and accept the up-front costs—whoever is paying for it—because, as Kevin Anderson made very clear on 16 December, we are in for a catastrophic future if we do not take action fast.

The Convener: I am not disputing your thought process; I am trying to work out where the £12.7 billion that is needed will come from, and the net costs, because a saving of £6 billion, £6.7 billion or £6.9 billion—whatever it is—is not going to be achieved by active travel.

Professor Davis: This might jump into the whole issue of co-benefits, which I know is on the agenda for today's meeting. One of the points about active travel—and I say that in the same breath as public transport, particularly bus use—and the amount of walking that needs to be involved is that we know from the science that if we can increase the amount of active travel that people do, we will reduce the disease burden on the national health service and on society generally and improve levels of overall wellbeing. That will have a pretty substantial cost saving down the line.

It has been said that active travel is the greatest opportunity in the current century to improve public health. There is an irony that climate change has forced us to decarbonise, which means that we transfer from using fossil fuel energy to more calorific energy. We get the health benefits, and there are very substantial benefits and savings to health services from those.

The Convener: Those savings would have to be £6.9 billion.

Professor Davis: Yes, they would, but there are ways to do that.

The Convener: Well, that is the assessment. I am trying to work out where the figures come from, as somebody who is interested in figures and how they come about. How much of the £12.9 billion that is needed is the industry going to come up with?

Lamech Solomon, I cannot hear you.

Lamech Solomon: Apologies, I was not able to unmute.

The Convener: I am checking this with broadcasting colleagues, but my understanding is that broadcasting will unmute you.

Lamech Solomon: Because I joined the meeting via a browser, I think I need to unmute myself.

The Convener: Ah, okay. I understand that. Normally, broadcasting unmutes witnesses, but because you are coming in in a different way, you need to unmute yourself. I apologise. We can now hear you. Go for it.

Lamech Solomon: Brilliant. I know that you had a discussion on electrification earlier. I want to reiterate that our members, who are making the initial investment on the vehicles, say that a lot of the funding should come from Government. Our research has found that electric heavy goods vehicles in particular are double the price of their diesel counterparts, and hydrogen HGVs are three times the price of electric HGVs—so, six times the price of diesel HGVs. Our members are making a lot of up-front investment.

Price parity in energy costs in comparison with diesel is very substantive. However, the electrification ambitions really outpace the infrastructure readiness. The plan places very strong emphasis on electrification, but freight-specific infrastructure such as high-capacity grid connections, depot charging and HGV-suitable

public charging are not yet in place at the scale or speed that is required. Without addressing those constraints, many of those emission targets will be difficult to deliver, and there has not been the investment to match the pace of the timeline that is set out in the plan.

As I mentioned earlier, there is a lot of emphasis on modal shift, but a lot of the funding for that has been reduced or removed. There seems to be a lot of lip service and policy intent, but not the adjacent or parallel funding to support that movement for industry. Our members are making a lot of investment at their end, and they want the Government to meet them halfway.

The Convener: Rachel, do you want to add anything on where all the money is coming from and where the savings are being made?

Professor Aldred: Sure. Obviously, this is not a plan that any of us produced but, on costs and benefits, as Adrian Davis said, the benefits of a substantial increase in active travel and public transport use would be really great. Health benefits, when quantified, are very large. Personally, I would say that people living longer, healthier lives and having fewer road injuries and pollution or inactivity-related illnesses is a good thing, regardless of exactly how that is monetised. However, when cost benefit analyses have been done—I have been involved in looking at the impacts of active travel schemes, for instance—the health benefits are always very large, and that is due to the monetisation of additional healthy life years.

The Convener: I understand that you did not write the plan, but you come to this meeting with a huge amount of knowledge. We are expecting everyone to read, understand and sign up to the plan, and not understanding or identifying the costs makes it more difficult for people. Do you want to have a go at that question, Sara?

Sara Collier: The Scottish Parliament information centre's assessment made the same points, so I imagine that your committee report will go back to them. One of the areas where it has been able to map out some of the costs is the spend on concessionary bus travel. That is a weighty sum of more than £400 million a year and potentially more in future years, which will add up to quite a lot of that £12.7 billion, will it not? It has been explained that it is not only a transport spend but is also about the cost of living—if you give people free transport, they will spend that money on something else. That is one area where a cost has been mapped out, but it is a crossover area.

The Convener: The next questions will come from Mark Ruskell.

Mark Ruskell (Mid Scotland and Fife) (Green): One of the challenges that we have, particularly in this committee, is that we are trying to scrutinise this plan for the very short period of time of the 120 days that is in front of Parliament. I am interested in what is missing from the plan, because the Government could go back to it after 120 days and say, "You know what, we've had evidence to show that this or that intervention or policy would make sense and would help to deliver the targets in a more effective way."

Particularly in relation to questions such as what local authorities and national Government can do with regard to budgets and changes in legislation, how we create the environment for that modal shift, particularly in urban areas where we have that massive population and we can get those health benefits—not to exclude rural areas—do you think that specific things are missing from the plan in its draft stage? I invite you to come back in and perhaps identify a couple of things that you think are clearly missing, particularly in relation to the modal shift—unless you think that it is all here, but it is about emphasis.

Sara Collier: As I said, I was encouraged by the list of policies and proposals. The new policy to develop and deliver bus priority measures on the trunk road network definitely jumped out for me, but it seems that it will be done over a long period of time and it has been assigned to carbon budget 4. I wondered why it would take so long for that to make a difference and I feel that there could have been a bit more on that. There is an existing policy on bus infrastructure, because there is an existing bus infrastructure fund, but there is a new enabling proposal for multiyear funding for bus priority measures and active and sustainable travel. I want to understand in a bit more detail whether that will be separate and whether we will do it differently.

I think that the plan is missing the sticks—how we will disincentivise behaviour. There is a crossover between car use reduction and modal shift, but it is not explicitly referred to in the section on modal shift, which is all about doing good things, not bad things.

Lamech Solomon: We hear a lot from our members that they really appreciated the modal shift revenue support scheme, which was a Westminster Government scheme that was administered by the Department for Transport United Kingdom-wide. The scheme exists in England, but it was removed only in Scotland two budgets ago. It was worth £700,000 and was designed to support the transfer of freight from road to rail and water, helping recipients to recover the operational costs of modal shift services to make them a bit more commercially viable. There was no consultation when the scheme was removed and there were no discussions with the industry. A scheme such as that would be much appreciated by the sector.

On the positive side, the Scottish Government is using the freight facilities grant, which is a £3 million capital investment programme, to help to pay for infrastructure and equipment to enable the freight shift. It offers only a one-year funding settlement, which is a short duration. Without further funding commitments, the overall impact of the grant may be constrained.

Professor Aldred: I have a few things to add. To pick up on Lamech Solomon's point on funding settlements, I have found in my research that it is really important to have long-term substantial guaranteed funding settlements for active travel, so that local authorities have certainty that they will have the funding that they need and that it will not end at the end of a year.

On electrification, there is a trend for cars to be getting larger and heavier, which will counteract the positive impacts of electrification. I would like to see policies that disincentivise cars, including electric vehicles and vehicles in general, from doing that. I would like to see more on e-bikes, which could be important in a Scottish context. In Switzerland, Lausanne had a policy of giving free e-cargo bikes to any residents who wanted them. I would like to see that level of ambition. Similarly, I would like there to be more about last-mile freight cargo bikes in cities, which could be important for deliveries in cities, although not in rural areas in the same way.

I would also like there to be a strong steer on road space reallocation. If road space is removed from private motor vehicles and reallocated to walking, cycling and public transport, it combines push-and-pull policies and creates a disincentive to drive alongside an incentive to use other modes of transport. We know that that is difficult to do and that it needs a strong steer and support. I will give you one example from some of my recent research. People may be aware that, over 25 years, bike trips in London have increased by a factor of four, but in Paris, where road space reallocation has been much more substantial, they have increased by a factor of 40. That illustrates the scope of the change. There are also examples of that in more rural areas and in other European countries.

Professor Davis: Following what Rachel Aldred has said, the best example of an experimental trial of sustainable transport interventions across the whole of the UK was the sustainable travel towns project involving Worcester and Darlington from 2004 to 2009, which was funded by the Department for Transport. That was at least a five-year programme—Rachel has touched on the problems with one-year funding—which brought about a 2 per cent overall reduction in car use and a 7 to 10 per cent reduction in the number of car trips per resident. The fact that it relied on a multipronged approach is a key point. There needs to be a set of multiple interventions, not just one. Ideally, there should probably be at least three or four interventions, such as bus gates, segregated cycle facilities or more facilities for pedestrians—continuous footways are an example. Substantive interventions can be implemented. A number of such interventions were trialled across five years.

09:30

The target of a 20 per cent reduction in car use has been dropped by the Scottish Government and replaced in the draft plan by a reduction of 4 per cent a year, but that will not be sufficient, according to the evidence from the sustainable travel towns. That is the best available evidence that we have in the UK from the point of view of what we in academia call external validity. Can such a target be transferred to another place? Yes, such a target can probably be transferred from England to Scotland, but that will not be enough.

The available evidence shows that the best measures, which Mark Ruskell asked about, are congestion charging, parking and traffic controls, and traffic zones—Rachel Aldred talked about the very good example of road space reallocation in Paris. Those are the interventions that give the best bang for your buck in reducing car use. If that is what we are seeking to do, those are the best sort of measures.

As was referred to at the beginning of this session, we do not suffer from a lack of good-quality evidence. What we lack is the implementation of those good examples.

Mark Ruskell: What role has travel planning had in those case studies? I am thinking, in particular, of large institutions and employers. Should national and/or local government co-ordinate, require or mandate travel planning? Would that be an effective route for delivering a multipronged approach to achieving modal shift in urban areas?

Professor Davis: I think that you were looking at me. I would say that that is the case, although I confess to having been an author of studies for the Department for Transport in London on large organisations' travel plans and school travel plans.

Travel plans can be very effective in reducing car use. One of the key examples of its age was at Addenbrooke's hospital in Cambridge, where 110 car parking spaces were removed and a bus station was put in place. That increased bus use to the hospital site enormously. Off the top of my head, I cannot remember the figures—it was quite a while ago—but that bus station is still there and in use. That was accompanied by many other

measures, including free bike availability and many incentives for staff.

However, I come back to the key point that one item on its own, such as an organisation having a travel plan, is not enough. There needs to be a whole set of interventions across the local authority area and by the national Government. It needs to be shown clearly that we are heading in a certain direction, and these things are synergetic. Travel plans are very good—we have good evidence of that from lots of different organisations, both small and large scale—but they need to be set within the context of a national policy that makes it very clear why we are doing what we are doing and the speed at which we need to do it.

The Convener: In relation to the evidence that we have heard so far, I want to drag us back to the Highlands and Islands, which is the area that I live in. We do not have such transport routes. Yesterday, there were no trains and no buses. If I had jumped on a bicycle to get here, I would probably have got only as far as Aviemore by now. How do we sell this policy to the people who are not the low-hanging fruit, who might be penalised by some of the things that have been suggested?

Sara, do you want to have a go at answering that?

Sara Collier: Are you asking how we should tackle the issue in rural areas?

The Convener: Yes. How should we deal with it? It appears that private car use will be hit first by the climate change plan—it is at the pinnacle or the sharp pointy end—and the private car is used in rural areas more than anything else, because there ain't anything else.

Sara Collier: That is why the car use reduction policy is being reconsidered, and it will be dealt with at regional transport partnership or local authority level. As previous witnesses have said, it is urban areas that we need to focus on in terms of modal shift, whereas we might need to focus on different things in rural areas. In the Highlands and Islands, you will benefit from a £2 fare cap in the coming year. There are buses in the Highlands and Islands. Otherwise, why would we have a fare cap? It is about doing different things in different areas. It is not about having one policy that is the same for a very remote rural area as it is for Edinburgh.

The Convener: Phasing out private cars appears to be the direction of the plan, but, for a lot of rural people, private cars form the basis of just getting to a hospital appointment.

Sara Collier: Everybody recognises that. Unfortunately, the issue is sometimes presented as a binary—"We're going to take your cars off you," or, "You can drive all you want." The answer sits in the middle. It is more about whether there are some journeys that you can make by bus instead of car; that is more likely to be the case in urban areas, although there will be journeys that you can make by bus in rural areas. I was at a National Trust property at the weekend. It was in a rural area, and it was offering a discounted ticket if you arrived by bus, and there was a bus to get there. It is not all about taking cars away from everyone. It is sometimes presented that way in the media and, potentially, in the Parliament, but we need to think about the middle rather than this or that extreme.

The Convener: I understand that, but I also understand that the low-hanging fruit are urban centres where buses, bicycling and changing the use of streets make more sense. In rural areas, they do not make a lot of sense.

I want to go back to a point that I made earlier. I am completely confused, because I went through the costs and benefits, which none of the witnesses have challenged me on, and I am sure you would have looked at them. I gave you a non-cumulative benefit figure that was identified by the Government in annex 3. If you add those figures together, it comes to a total financial benefit figure of £26 billion, with a cost estimate of £12.7 billion. I am interested that you did not challenge me on the figures that I gave you, because I tripped myself up to find out whether that was an area that you had looked at, but you have not really looked at the costs of this and were not able to challenge me on it. You just accepted the figures that I gave you, even though they were incorrect. Why would that give me confidence that what you are suggesting will be correct?

Adrian Davis, as you answered, I will come to you first.

Professor Davis: I do not have anything more to say in response than what I said earlier about the costs and benefits and about us having to get on with this. I have not looked at those figures in that much detail. I will give an excuse that I have not had that much time to do that, because of the pace of the preparation for this, but that is probably not a good enough excuse. I come back to the fact that what we need to do is what we need to do.

As Rachel Aldred and I will know from when we have done studies on transport interventions, we get high benefit-to-cost ratios. Returns on investment are generally very high, not least because of the health benefits that accrue when you get people to change their travel behaviour, which is largely what we need to do in urban areas. I am sorry that I am not giving you the direct answer that you wished for.

The Convener: I am just saying that I have struggled, like most people who have picked up the massive climate change plan. It is massive, and it formed a good part of my Christmas reading—that is probably a sorry state of affairs to be in. I have looked at the figures, and I cannot make them work. Having quoted the figures at you, I am interested to see that you do not seem to be able to make them work either. Maybe the Government will understand them.

Michael Matheson (Falkirk West) (SNP): I suspect that the whole issue around preventative spend goes back to the Christie commission and trying to make that long-term investment in order to get wider societal benefits. The problem is that, very often, the political cycle does not lend itself to that type of investment. I was struck by Rachel Aldred's point about the need for long-term investment, which a couple of you have also made. The challenge that the Scottish Government will have is that it does not know what its budget will be next year, because it is, by default, set from the UK Government's budget. That political process issue compromises some of those other issues.

That brings me to the question that I would like to ask Adrian Davis and Rachel Aldred. You do not feel that the transport provisions in the draft climate change plan are sufficient to achieve the reductions in transport emissions that are needed to tackle climate change. Adrian, you rattled off four examples of areas of transport in which we get good bang for our buck in relation to impact. You mentioned congestion charging, road reallocation and the enforcement of parking restrictions—I am sorry, but I missed the fourth example that you gave. If you feel that the transport provisions in the existing plan are insufficient and that there are clear policies that would, if implemented, have a marked impact, why do you think that those policies are not in the plan and the Government is not pursuing them?

Professor Davis: Unfortunately, I think that the answer is quite straightforward, but let me provide a bit of background. In previous evidence sessions, the committee has been told that one of the problems for us all is that there is a lot of vagueness and not a lot of detail in the plan. We do not know who the authors of the report consulted, and we do not know some of the thinking behind why some things were included and others were not. From research, we know what the best interventions are. There are transport officers up and down the land who know what the best interventions are, and some of them work inside the Scottish Government.

I fear that the issue is the forthcoming election. There is a reluctance among politicians to put their cards on the table and say that we might need to introduce restrictive policies, because the history of modern road transport in recent decades, particularly in the past decade, shows that there has been a fear of a backlash, particularly through social media and the right-wing press, with such policies seen as restrictive and damaging, so parties will lose votes.

Unfortunately, from my reading of the document, it almost seems as though the stuff that needed to be in it has been taken out, with the emphasis put on words such as "encouragement", which appears 50 times in the document, whereas the words "restrict" and "restrain", as well as other similar words, do not appear, as people would see if they did an audit of the words used in the document.

That is my answer. The issue is that we are in the run-up to an election. If this was not the year of the election, the document would be different.

Michael Matheson: Rachel Aldred, you also mentioned a range of evidence-based policy options that could be pursued. If we were the health committee, we would expect our health service to follow an evidence-based approach when taking actions to address a particular issue or particular conditions. In your view, why do you think that the transport side of the climate change plan does not necessarily include the evidence-based actions that are needed to reduce transport emissions?

Professor Aldred: I am a little nervous about second-guessing motivations and processes, but one well-known factor is the appeal of the technical fix. For instance, there is the idea that electrification will solve all the problems and make things easy. The evidence suggests that that is not true, but that appears to be easier than doing controversial things such as reallocating road space, expecting people to change their behaviour and communicating the trade-offs—saying that some things will be harder but that there will be substantial benefits, too. That is one issue.

For many of us, there is also a failure to grasp the scale of the change that is needed. For instance, when free buses were mentioned, I thought, "Oh, there are going to be free buses," but then I thought, "Oh, it is just the existing limited concessionary schemes." As Adrian Davis said, the evidence suggests that we need to do so many different things at once.

It is easy to focus on just one of those things, and often that is the one that is not that difficult, such as encouragement or technical changes, but actually we need to do a lot of things at once. Understanding, communicating and accepting that, and then funding it, is a challenge. One would hope that plans such as this would be led from the top and that leadership would say, "Look, a lot of

change is going to be required and we will support that change."

Michael Matheson: Thanks.

09:45

The Convener: Thanks, Michael. Monica, I think that you have some questions now. Sorry—I have so many papers to do with the plan in front of me that I am not quite sure which one I am looking at currently. However, Monica is definitely next.

Monica Lennon (Central Scotland) (Lab): Thanks, convener, and good morning. I have a couple of questions, which—I will give you advance warning—are mostly bus related. I will start with Rachel Aldred.

What policies and practical actions have been proven to get people to use the bus rather than to drive their cars? How could those approaches be supported through the climate change plan, particularly the approaches that would work best in a Scottish context?

Professor Aldred: My expertise is primarily in walking, wheeling and cycling rather than in modal shift to public transport, but I can say a little bit on that. As with the shift to active modes, it is really a case of providing a service that competes well with the car, and that involves push-and-pull policies. The shifts to active modes and public transport often happen together as well, particularly in congested urban areas. If we are going to create priority routes for buses—doing that is very important—the space for that will have to come from somewhere, but it should not come from space for pedestrians or cyclists; it needs to come from reallocating space away from private motor vehicles.

I mentioned free bus travel earlier. The evidence suggests that that does not produce a massive shift to bus use, but I think that it is important for reasons that are related to the just transition, because it is important to signal what the priority is. I would not necessarily say that making bus travel free will produce a massive shift to bus use, but I think that that helps and signals the importance of buses.

Producing the shift is really a question of making buses a lot better, a lot more reliable and a lot more affordable, and of making sure that they compete well with the car. If we look at the example of London's modal shift towards the bus, we can see a virtuous circle. When the congestion charge was implemented, a lot of the funding went towards improving buses, diversifying their customer base and making them more affordable. That helped to produce a substantial shift away from the car and towards bus use.

Monica Lennon: As your expertise is largely on the active travel side, is there anything that you want to add about adopting a more holistic approach? I often hear from people that one of the barriers to using public transport, walking or using active travel more is how they feel about their personal safety. That can be their safety in the community at various times, particularly in the hours of darkness. What policies could improve the public's confidence about using buses? That is not just about being on a bus, because people must walk to and from bus stops. Can you add anything on that issue from your work or research?

Professor Aldred: Yes. There needs to be the freedom to travel safe from the risk of harassment or crime and free from fear. It is important that consideration of social fears is mainstreamed as part of the process. A good example is the approach to cycling in London, where cycling route assessments incorporate not just traffic safety but personal safety and factors that make people feel more safe travelling at night. For instance, a route could be sited through a park or a housing estate, but that will not be perceived as safe to use by many people, especially after dark, particularly by women and people from minority groups. Mainstreaming that factor into planning is really important.

I am less up on the research in relation to specific measures for buses, but safety certainly should be considered as a factor in planning and given equal importance to other things.

Monica Lennon: Thank you, Rachel. I will turn to Adrian now, and ask him to comment on the policies and practical measures that can help people shift from using the car or driving to using the bus.

Professor Davis: I would like to defer to Sara Collier on that, but I will say that there are examples—such as the controversial bus gates in Aberdeen, which increased public transport use considerably after they were put in place—of the challenges in realising the benefits. You often have to go through a period of social media backlash when trying to put in measures that we know, based on the evidence, are likely to be beneficial.

I come back to the overall emphasis on having a system-level approach. A city or town needs integrated bus routes, integrated with the rail network where there is a railway line, and supported by clear priority measures, so that car drivers who are sitting in queues can see buses being given priority. People will not start to switch immediately—other things might need to happen, including the setting of price caps—but we need to be able to show clearly that the buses work.

There are lots of measures, and the measures from the sustainable travel towns are a case in point. They ensured that they had proper integrated networks, with priority throughout the system, including through urban traffic control, which is the online network that gives signal prioritisation to buses, and they extended those to make them more efficient for bus use across the city. It was a moot point because, after that trial, no city has tried to do that level of implementation across bus use and other sustainable transport measures, largely because the funding is not there or because the funding that is made available is for one year. That is a problem that we eternally come back to—the very short timescales mean that officers at local authorities, and probably in the regional transport partnerships, too, are unable to plan for the longer term. Such measures need to be planned over long periods, but we just do not have that ability in the transport field.

Monica Lennon: Thank you. Sara Collier, I am keen to hear your recommendations.

Sara Collier: I agree with a lot of what Adrian Davis said. To build on that last point, previously we had the bus partnership fund, which was paused, then went away but came back in the form of the bus infrastructure fund. I very much hope that there will be another year's funding for that in the budget later this month. I also hope that we can build on that to get back to the multiyear arrangement that councils and bus operators want. That funding would allow bus operators to match that in kind, because if they know that they have a multiyear commitment, they can be more ambitious.

There is nothing wrong with the bus infrastructure fund, but councils are having to get the money out the door. It becomes a question of, "What can we spend it on this year? That bus stop needs fixing". However, if they had the guarantee of three or four years of funding, they could be more ambitious.

I agree with Rachel Aldred that free bus travel can increase the number of bus trips, but that does not seem to reduce the number of car trips. For example, the year 1 evaluation of the young persons free bus travel scheme showed that some young people were taking fewer car trips but that the number of car trips overall has not gone down. Are their parents still taking the car but the young people are just not in it, because they are getting the bus to the football or whatever? We need careful evaluation of such schemes to see whether they are really linked to modal shift or whether they are more about the cost of living side of things. The same is true of other measures, such as scrapping peak rail fares.

You have probably heard us say it a thousand times, but we think that multiyear funding for bus priority is really important.

Monica Lennon: That is definitely on the record again today.

Adrian Davis might also have a view on this, but, Sara, the issue of school transport has been quite contentious in my region—I cover North and South Lanarkshire. Many councils have already changed their policy to stick to the statutory minimum. The two Lanarkshire councils held out for a bit longer until they felt that they could no longer afford to do so. A lot of families and young people have been affected by a reduction in free bus travel to school, which has been a little bit confusing at a time when we have the extended concessionary travel scheme for under-22s.

It is not just about the distance that children and young people have to travel but about the fact that they often have to travel in bad weather, perhaps with equipment such as musical instruments. We are hearing that that is becoming a real concern for families. We have a financial envelope to work within, but, in thinking about behavioural change and normalising the use of buses, could anything more be done? If we were making it easier for children and young people to get to school on the bus, would that help to normalise the use of public transport in that way?

Professor Davis: I will come to your question from a health psychology perspective. Habit is important—we are creatures of habit. Whether we are talking about physical activity or routine behaviours, if we start positive habits early on in life, they are likely to carry through. That is called tracking in behavioural science. Normalising bus use as an everyday activity for young people is really important for their use of buses in the longer term.

I will take an example from physical activity research. We know that children who are physically active when they are young are more likely to be physically active when they are adults. It gets into your DNA and stays with you across the life course. The same can be true of habits of using buses that we learn early on in life. It is not an unusual thing to do; it is socially normative. We have started using the term "social normativity". That is what we must do to make not using the car socially normative, rather than people seeing their neighbour get in their car every morning and letting that influence their thinking. We need to see people going out and using buses as socially normative in that way.

That said, we can say that as much as we like, but there must be buses going frequently to the right places at the right time. It is a combination of the structural stuff as well as the habits.

The habit is important. It is critical that we get children travelling by public transport, as well as walking and cycling, which is part of it. There is more opportunity to do that in urban areas as a result of, for example, school street closures, which, in essence, means closing roads for a limited period before the start of the day. That makes it safer for everyone to travel around. Residents and people with blue badges and so on are still free to drive their cars in and out. There are a number of ways to do things, but getting into the habit of using buses from early life is important.

Monica Lennon: Would you recommend that the climate change plan needs to include more about incentivising the use of buses for that early years school demographic? Could that be added to the draft plan?

Professor Davis: It will be. The convener will come back to me and talk about costs, because doing that does not come cheaply. However, as Sara Collier touched on, we know from a first-year review of free buses for five to 21-year-olds that the most positive effect—the biggest change—has been a reduction in parents driving their able-bodied children to school, because they are now able to travel on the buses. There are some downsides—there has also been a small reduction in children walking, because, if they see a bus coming, they will get on it. Nonetheless, that is a good intervention, although it costs a lot of money. Sometimes we need to be brave to put in those levels of funding, because we need to look at the issue over the long term. We do not have a long-term picture at the moment.

We can look abroad to other countries where they have done that and see that usage has increased over the years. That affords me the opportunity to say that behaviour change is hard. Human beings do not like changing their behaviour; we are creatures of habit. When you put in new infrastructure, whether it is for bus use or for walking or cycling, particularly in the context of today's discussion, the research says that it can take up to two years for people to change their behaviour—they think about it and think about it before doing it. For example, if it involves buying a bicycle, that is an extra set of things to think about how to get to work or whatever it is.

The change does not happen immediately—it takes time. Human behaviour is subtle and nuanced, so if you are trying to instil new behaviours, you have to think about things over a long period. The difficulty is that we are talking about a topic in which time is short. Nonetheless, there is still time to ingrain habits from the earliest age to get children to travel healthily—but that needs support from Government, including local government.

Monica Lennon: Time is always short on committees, so I will move on to my next question. I will come straight to Sara Collier on this one. The committee previously heard that traffic congestion, and its impact on bus service reliability and knock-on costs, is the key challenge that the bus industry faces. Does the draft climate change plan include policies or proposals that will tackle that issue? If it does not, what would you like to see included in the plan?

Sara Collier: You have heard us speak about the issue before. I do not know whether you saw, just before Christmas, the really good BBC piece that profiled a bus route in Edinburgh and showed the impact of congestion on passengers. That really brought the issue to life.

There are policies and proposals in the plan, but they need a bit more detail. As I said, in reading the plan, I was not clear whether the intent is to introduce a new bus infrastructure scheme or to keep going with the current bus infrastructure fund with some tweaks. I think that the way in which the funding is allocated at local authority level will probably change. We would like a bit more detail, but I am encouraged to see the issue in there, and I would love it to be moved from proposal to policy to make it a bit more concrete.

10:00

The CPT has a lot of evidence on the impact of congestion. We have modelled the issue a lot and we published another report on it last year, which showed that modest increases in speed of just a few miles an hour could generate millions more journeys, if we can get buses moving that bit faster. As Adrian Davis said, if motorists are paying a charge, whether that is in terms of time or costs, it is helpful if they can see, appreciate and understand where that is going. For example, they might be able to see that money is not just going into an anonymous Government or council pot. It is a communication thing that is about saying to people, "This is what you are spending, and this is what you are getting as a result. You might want to consider using the bus, because it will be faster."

Monica Lennon: Thank you. Unless anyone has any further comments, I will hand back to you, convener.

The Convener: The deputy convener wants to follow up on that subject area.

Michael Matheson: I have a question on the concessionary travel schemes, which is probably for Sara Collier, given that her members benefit the most from those as bus operators. In this financial year, the Scottish Government will spend £414.5 million on its two concessionary travel schemes. In the draft climate change plan, in the part about transport outcomes and seeking to

reduce car usage, one of the key policy areas to help to achieve car usage reductions is said to be the concessionary fare schemes for older persons and the under-22s. Is there any evidence that the £414.5 million that is being spent in this financial year has any impact whatever on reducing car emissions?

Sara Collier: I touched on that earlier when I talked about the fact that there has been one full-year evaluation of the scheme for the under-22s, and I think that one is being done at the moment for the older and disabled persons scheme. The policy does not seem to have reduced car usage, but it is one policy as part of a suite of policies. As we have talked about, it is important not to say, for example, that giving people free bus travel will sort everything out and that they will all take the bus instead of using the car. It needs to be part of a package of measures that include bus priority and, potentially, disincentives to using the car.

What you are spending on concessionary travel is not making people use their car less but, as the Government says, that is also a cost of living measure and is not just transport spend.

Michael Matheson: I recognise that there are wider societal benefits from having something for free, but I am asking specifically about the draft climate change plan. As a policy on its own, you are saying that there is no evidence that it reduces car usage. Is that correct?

Sara Collier: Not that I can see. We have had the scheme for under-22s since the start of 2022 and, as far as I am aware, car use in Scotland has not reduced since the start of 2022. If you are drawing a link between the two, yes, that is correct.

Michael Matheson: Let me turn to Adrian Davis on the important element of behaviour change in trying to create modal shift. Concessionary travel can play a part in helping to support modal shift, but, if we do not have a wider range of policies that act more like a stick to get people to make use of it, it becomes quite a blunt instrument with quite a high price tag attached and without any real benefits being gained from it, from a climate change perspective. In the draft plan, is there a sufficient suite of other interventions wrapped around the concessionary travel scheme elements to create the type of behaviour change that is necessary?

Professor Davis: I will repeat some of the things that I have said previously. Concessionary travel is important, but it is certainly not enough on its own. It is very unlikely that a single policy measure will show you a reduction in car use unless it is something like congestion charging. Some stuff is lighter and some is more heavyweight. Congestion charging is more extreme. It is in the plan—it is discussed very briefly four times, three of which are in the context of legislative measures.

Sustainable travel towns clearly demonstrated that you need to have a package of measures that are synergetic and that support each other—I have said so several times in that context. Some measures will be fiscal, but there will also be some on carriageways, such as protection of bus priority measures, as well as various ones for walking and cycling. It is about the synergy of having all those measures together—one on its own will not do.

The problem with the draft plan is that it focuses on encouragement. I am repeating myself, but it is really important to understand that, although encouragement might be a good thing, it ain't enough on its own. It simply is not enough. You have to do the things that are potentially politically unpalatable, and there's the rub. We need to put restrictions on car use, and not in rural areas, where people do not really have alternatives, but in urban areas, where a large mass of Scottish people live who have alternative choices. That is where the opportunity lies.

I do not like using the word "stick" because of the sense that it gives you, but you need to have carrot and stick policies. As well as encouragement, you need demand management—you cannot have one without the other. A concessionary fare scheme will not be able to secure a reduction in car use—it is simply not a strong enough measure on its own.

There are psychosocial aspects to the issue. What I mean by that is that people use and own cars because there are psychosocial attachments to them, which means that the value of a car is more than the sum of its utilitarian properties. People value cars because they give them status, because everyone else around them has one. We are birds of a feather who like to do things that others do. It is socially normative.

Cars are about more than the sum of the use that we get out of them—the motor industry would not pour millions of pounds every year into advertising if they were—so we need really strong measures to push people away from car use. We are not trying to punish people; we are trying to make a world in which we can survive and in which temperatures do not skyrocket in the way that Kevin Anderson has talked about. We need to have measures that push people—which is the phrase that Rachel Aldred used—towards public transport that is available, effective and efficient.

The same goes for walking and cycling. Between walking and cycling, a lot of money and attention gets pushed to cycling, and it is important, because lots of cardiovascular and other benefits come from it—it is the co-benefit

stuff that we talk about. However, on a population level—I am a public health doctor, so I talk about population health—walking is absolutely critical. It is the thing that virtually all of us can do. We can get out and walk to the bus stop, if there is a bus stop, and all the rest of it. We can do that, so we need to put a lot more effort into making the environments conducive and supportive for walking. Where it has been implemented, there is no denying that the pavement parking ban has been important—it has been a game changer in Edinburgh, certainly in my experience. Walking is really important in all of this.

The Convener: Before I go to Mark Ruskell for a supplementary question, I want to put some figures to the witnesses. I am looking back at the information that we have. When I started in this Parliament, 10 years ago, the cost of concessionary travel was, I think, about £193 million a year. We have now heard that it has gone up to £414 million a year. In that time, the number of kilometres that cars travel has gone up considerably—it is very difficult to put an exact figure to it, but it is perhaps up to a billion kilometres, according to Transport Scotland. Meanwhile, trips by buses have dropped by 150 million kilometres. Concessionary travel is a very expensive way—the cost having risen by £200 million—to get more car kilometres travelled and fewer bus trips taken. Would you say, therefore, that it is a poorly targeted intervention?

Sara Collier: As I have said a few times now, concessionary travel is about more than just modal shift. It is, as I think the Government would present it, a cost of living measure.

The Convener: That is if you can access a modal shift to buses in your area. Adrian Davis suggested that that might not be the case in rural areas.

Mark Ruskell has a supplementary question.

Mark Ruskell: I think that the context of Covid is important, too, convener. Oh, good—I see that everyone is nodding.

The Convener: I think that it makes things look even worse if you add Covid in.

Mark Ruskell: I want to go back to the issue of stand-alone transport policy interventions. Concessionary travel has been a hugely successful policy for young people—it has really opened up opportunities and created a lot of socioeconomic benefit—but I am struck by the point that individual transport policy interventions on their own are less successful and need to be blended and integrated together.

I am interested in finding out how that works financially, because, when it comes to the climate change plan, there are questions about how much all of this will cost and how we can raise the revenue to effectively invest in supporting particular policy interventions such as concessionary travel. What is the evidence that demand management, congestion charging and other such policy interventions have resulted in investment in other positive interventions? In other words, people get something free but, in effect, it is not free, because the investment in it is being raised through congestion charging or demand management measures.

I guess the challenge is in ensuring that policy interventions that are positive and that result in people getting reductions in the cost of—or, indeed, free—travel are rolled out in advance of any demand management measures being put in place. That would mean that there would be a choice from day 1 to give people free and accessible travel instead of their having to wait five or 10 years for funds to be built up to enable an extra tram line to be built, say, or for another policy intervention to be implemented that levels the playing field.

Does that make sense? If so, I invite you to comment on that. I ask Rachel Aldred to answer first, and then the witnesses in the room.

Professor Aldred: Thinking of examples that are relatively close to home, I would say that London provides a very good example. When the congestion charge was introduced, that money, as I have said, went towards improving bus services to make them more affordable, better and more reliable. Pedestrianisation schemes were the other big beneficiary of the congestion charge funding.

Given that we, and others previously, have been talking about how urgent the situation is and how substantial the need for change is, I would be wary of waiting until new tram lines get built before instituting demand management policies. Many things could be done at the start, as happened in London. For example, things such as changes to bus pricing could be put in place sooner than some other bus priority measures that might involve large changes to the road environment.

What I often see with active travel policy and interventions is that people say, “We can’t do X before Y, and we can’t do Y before Z,” which means that nothing gets done because nothing gets started. I agree that there has to be a commitment to doing all of the things, but they are not all going to be done at the same time, on day 1. There will always have to be mitigations; all of these policies will have potentially undesirable impacts in various ways—I am thinking of social equity, for instance—so those things will have to be thought about, too. However, even if everything cannot be in place on day 1, there will be an understood and communicated commitment to doing something about them—to build that tram

line, say, even if it is not going to be in place on day 1.

Professor Davis: One subject area that we have not discussed, but which is mentioned at least twice in the plan, is what is called workplace parking licensing—not workplace parking charging. Again, I think that the word "charging" must have caused offence to the authors, so they kicked it out. There is only one example of workplace charging in the UK; it is in Nottingham, and it has proved successful, according to different commentators and all the evidence. The scheme places a charge on a business if it has 11 or more parking spaces in the central area, and the money from that central levy goes towards increasing and improving public transport.

That money has been put towards enhancements to Nottingham's main railway station and to bus services across Nottingham city, as well as towards the construction of tram lines—although, to pick up on Rachel Aldred's point about needing to do immediate things, I note that tram lines are a longer-term project. We have not had any movement in that regard in Scotland, despite the fact that background work has been done to make the power to put in place workplace parking levies available to local authorities. It is not a cure-all, but it would be useful as a measure.

10:15

On my point about sustainable travel towns, I will steer you to a 2015 Transport Research Laboratory report by Sally Cairns and Marcus Jones, which was produced five years after a sustainable travel town intervention. It is unusual that we get reports that are able to look at a relatively long-term intervention and see what happened after the money dried up. The researchers found that there was a halo effect, by which I mean that, even though the funding returned to the level that it was at before the Government funding arrived, people maintained the travel behaviour that they had adopted during the trial period: they stayed with buses, and more people stayed with walking and cycling. The situation has not been monitored since 2015, and it would be interesting to see what has happened in the past 10 years. However, to go back to the point that we discussed earlier, the report shows that we can get habits to stick.

There are some valuable lessons to learn about multi-pronged interventions from the evidence that is out there. They have a value, not least in that there can be a halo effect, and money can be allocated across a number of different measures, as per Nottingham.

Sara Collier: I am just sketching this out, but I suppose that there could be a role for the national Government in kick-starting the process by providing the initial funding for bus infrastructure and sustainable transport, with an expectation that the council, as part of its plan for car use reduction, will set out how it will raise the money in the future to keep the process going and how it will further disincentivise car use and reinvest money in order to keep the circle going.

Mark Ruskell: What do you anticipate the benefits will be from the bus fare cap scheme that is being rolled out in the Highlands and Islands?

Sara Collier: We are in the very early days of the process—the places where the scheme would apply were announced just a couple of days before Christmas. We had a quick call with the Highlands and Islands Transport Partnership at that time, and Shetland Transport Partnership will also be involved in the process.

We are very light on information about what will be in scope, which services will be involved and whether travel that crosses the council's borders—on a service from Glasgow to Inverness, for example—will be included. There will need to be a careful evaluation of the scheme, with regard to who is using it, what journeys it is being used for, whether people are using it for long journeys or local journeys and so on. That sort of information, about whether people are taking a coach from Glasgow to Inverness to do some shopping or are taking more individual journeys, will let us know whether the scheme could be a base for doing something in the future. If we find that people are taking lots of short individual journeys, a £2 fare cap might not be the best thing, because day tickets or an integrated ticketing system would be a better option for multiple journeys. However, it is certainly an opportunity to see what the impact of such a scheme is in a massive part of the country.

England has had a £2 fare cap for a number of years now, but it has not done a huge amount of evaluation of it. If you look at the annual statistics, you can see that the number of bus journeys has not gone up considerably as a result of that, but the position in England is different, as it does not have the same concessionary schemes as we do. The initial finding was that younger people were perhaps benefiting most from the £2 and £3 fare cap. Overall, it was more of a cost of living measure that was introduced by the previous Government than one that was introduced in the hope that it would bring about a modal shift.

The Convener: Bob Doris will ask the next questions.

Bob Doris (Glasgow Maryhill and Springburn) (SNP): I will stay on the subject of concessionary travel and other investment in bus services, although we have discussed that at length. Some facts and figures about investment

have been put on the record. I note that, as was mentioned, the main way that money is leveraged into the sector is through the concessionary fare scheme, which amounts to £414 million. The bus infrastructure fund is more modest at £20 million, but it is established, and we want to see multiyear funding and a long-term commitment to the network support grant.

In relation to the £414 million of funding for concessionary travel, which the convener mentioned, there was a 67 per cent real-terms increase in funding for concessionary travel between 2006-07 and 2023-24, but there has been only a 13.5 per cent increase in the number of concessionary travel trips taken, so there seems to be a sizeable disconnect between the investment and the number of trips that are taken, even though what we are talking about is all desirable. If we add all the money together, is it working in the most effective way that it can? Are there other ways to spend the money? How could it be better used or deployed?

That is a very open question. I think that it makes sense to go to Sara Collier first.

Sara Collier: That question is possibly more for the Government and Transport Scotland than it is for me. It is very difficult to take away an entitlement once it has been conferred. Yes, the total amount of money could probably be spent differently, but I am not suggesting taking away concessionary travel.

Bob Doris: Could we drive a much better deal with bus companies? Are bus companies getting quite a significant amount of public cash without having to do very much in return?

Sara Collier: The concessionary travel scheme operates on the principle that bus companies will be no better or worse off, as you will probably know from sitting through the debates on the order every year when we work out the rates.

Bob Doris: I certainly know that that is the theory behind it.

Sara Collier: You mentioned the bus infrastructure fund and the network support grant. We have already drawn to your attention the fact that the network support grant rate has not increased in more than 10 years. It is not just large bus companies that we are talking about; hundreds of smaller bus companies and community bus operators can claim the network support grant, too. The fact that the grant has not been uprated in many years is a big issue, so we would probably want more money to go towards that.

Bob Doris: I am focusing my questions on you because I think that the wider issue has been well explored with the other witnesses. If the grant were to be uprated, should the Government, local authorities and strategic transport authorities get something back for the uprating, or should we just uprate it without any conditions being attached?

Sara Collier: It should be uprated to match the current costs relating to fuel, energy, labour and drivers, because all those costs have gone up over the years. Local authorities are getting something back in relation to the journeys that bus companies are carrying. A lot of the routes are subsidised by local authorities, so an essential service is being provided.

Ms Lennon talked earlier about school transport. In some areas, the provision of journeys to school is being transferred to more commercial services, rather than statutory services being provided under the Education (Scotland) Act 1980. That is something to keep an eye on. Transport Scotland has reissued guidance on school transport to ensure that local authorities do not do too much of that. It is a case of people saying, “You have a bus pass, so you can get on that bus to school instead of the actual service that is contracted to take people.”

Bob Doris: I have more questions to ask later, but do any of the other witnesses have any comments about the quantum of public cash that is going into bus services, mainly, but not exclusively, through concessionary travel funding? How could that funding best be used, or tweaked, to get better or more desirable outcomes?

If no one wants to put anything on the record, that is fine—if you do, though, now would be a good time to do it. Are you all comfortable with that investment? Are things all going as intended? I am not trying to create an issue if there is not one—I am just looking for clarity. Are there no concerns about a 67 per cent real-terms increase in funding for the concessionary travel scheme, given that there has been only a 13.5 per cent increase in the number of trips taken through it?

Professor Davis: I will repeat what has been said: we have to think about the wider societal impacts rather than just about the travel in itself. Transport is a derived demand. Transport services are provided to enable people to do other things. If we do not provide concessionary fares, more people will miss hospital appointments, for a start, and so on. There is also the issue of false car ownership—that is, someone decides that they need to buy a car but they cannot really afford to run it, so they cut back on other things in their household budget.

The issue is complex. I will leave it at that.

Bob Doris: I do not want the witnesses to misinterpret my questions as meaning that I am not supportive of all this. My job is to interrogate whether we are getting the spend right.

Sara Collier, I know that it was not you who said this, but there is a perception, which I will challenge slightly, that the easiest way to get the biggest reduction in car usage is in large urban areas, where the services currently exist. That might be true, but that is where the most substantial investment might also be required. As a non-driver with a family, and as a regular bus user in Maryhill and across the north of Glasgow, I know well the congestion on the routes on Maryhill Road, Great Western Road and Dumbarton Road. We all play the game of looking at the interactive timetable to see when the bus is likely to appear—first, it is five minutes, then eight, then seven and so on as the bus gets clogged up at Cowcaddens or on Byres Road or Queen Margaret Drive. I also know that the buses are bursting at the seams when they arrive.

The first thing that should probably happen in large urban areas is that the quality of services are improved for those who already use them. I suspect that if there were modal change, and people got out of cars to use those bus services, they would do so for only a short period of time and then not use them again.

This might take us back to the infrastructure fund, but do you have any comments about how we first get services running well in large urban areas, before we talk about those services being the game changer in getting people out of cars? Is the picture that I have painted of some people's experience of using buses in large urban areas a reasonable one?

Sara Collier: Yes. It echoes my experience as a non-car driver in Edinburgh; indeed, I was held up by some road works this morning. It is not just other cars that are an issue—road works are a big issue, too.

You have talked about people doing something, but only for a while and then not continuing the pattern. Is your concern that the investment goes into something, but it does not result in behaviour change?

Bob Doris: My concern is that the first tranche of investment should be used to improve services for those who already use buses. Tonight, I will probably have to stand on a bus to get back to my home from Glasgow city centre, because of capacity issues. I do not blame the bus companies—I know that finances are tight and it is not easy to magic up a new bus service. It is not just one bus, either; it takes four buses to complete the route, which means additional drivers and significant costs. Is the first step to get it right for existing users before we can realistically talk about getting people to switch from cars to buses?

Sara Collier: I suppose that that is a good point. We should make the bus user the advocate to sell bus use to other people.

You mentioned talking to children about their school travel choices, but perhaps we also need to talk to their parents and teachers or other adults about their journeys and how they are making them. Is there something that is making them not keen to use the bus? Is it the journey planning? Are they just a bit unsure? Those adults can be the greatest advocates for the next generation.

Bob Doris: I will move on. I have put on public record what I think is important in urban areas and for my constituents.

How can the Scottish Government rethink its development of a new car use reduction target and policy? The previous target was abolished, because achieving it was not seen as realistic. There is an interim 4 per cent car mileage reduction target out there, but I understand that the Scottish Government is developing a new, more substantive policy.

Professor Davis, you have already put on record all the push factors involved in achieving modal shift from car to other forms of transport, including active travel. I will not ask you about that, but what would a realistic target look like? If there is any push factor that you have not yet put on the record, now is your opportunity to do so.

Professor Davis: If we look at other research from recent years, we see that a 30 to 50 per cent reduction in car mileage has been cited many times by CREDS—or the Centre for Research into Energy Demand Solutions, which is a consortium of universities; by Element Energy for the Scottish Government, which is where the original target for Scotland came from; and by others whom I have on a bit of paper in front of me. All of them come up with roughly the same range—there is a kind of triangulation—and suggest that that is the level of change that we need, not 4 per cent per year.

There is something awry with these calculations, which leads me to ask where that figure comes from. Where do what is written and that proposed change come from? Why has the Government decided on 4 per cent? As I, and others, have alluded to, what has been written about that is really vague. We do not have any evidence. We know that AECOM conducted a study of demand management for the Scottish Government, which looked at road pricing in detail. That is not really mentioned at all, except in one footnote in the document.

A lot of information is out there and I would like, before the end of this session, at least to put on record that there are a lot of people with expertise inside and outside the Scottish Government who would be able and willing to help it draft the final

plan, albeit that the time in which to do so is very tight. My point is that the Scottish Government has not taken on board the expertise that is available to it.

10:30

Bob Doris: You have just got your point on the record, so job done.

I should say that I am neither supporting nor denouncing the 4 per cent policy, but a reduction of 30 to 50 per cent seems at odds with the Climate Change Committee and its recommendation of a 6 per cent reduction. What do you think is a realistic reduction? I am not asking for the reduction that you would wish for but the reduction that you think would be realistic, practical and deliverable. That is at the heart of the issue.

Professor Davis: The Climate Change Committee was focusing more on the latter as being realistic rather than on what Kevin Anderson might say is what we need. It is perhaps a sad point for the planet.

I am not quite sure how much more there is to say other than to note that we need to revisit the target in the draft plan. There is at least time to reconsider that before the final document is published. Also, there must be more detail for readers to understand why that figure has been decided on, as it is just not clear to us why that is the case and what the background to it is.

Bob Doris: That was helpful, and it was important to put that on the record. However, I do not want to misinterpret your comments, Professor Davis. Are you suggesting that, although you would like the target to go much further, you think that 6 per cent is a reasonable and achievable reduction?

Professor Davis: I think that we need to do more. There is a difference between what we might have to accept and what the science tells us we need to do. I feel very uncomfortable saying that 6 per cent is enough. It is better than 4 per cent, but we are still off target and, in years to come, our children and grandchildren, if we ever get to that stage, will lament the fact that our generation did not take this action when the science was very clear.

Bob Doris: Okay. I think that you are answering a different question from the one that I asked, but you have put that on the record.

My final question is for all of the witnesses. Is there a contradiction in trying to incentivise the use of electric vehicles while looking to reduce car usage? On the one hand, we are trying to promote the use of low-carbon vehicles, but, on the other, we are trying to get more people to drive certain types of cars. Is there anything that the Government has been mindful of in its strategy in relation to that?

Professor Davis: Is that question for me?

Bob Doris: I am looking at the witnesses on the monitors, too. Does anyone want to come in? Perhaps someone who has not had the opportunity to contribute might wish to.

The Convener: I am not sure whether Rachel Aldred is trying to come in, but you are being given the opportunity to contribute before Kevin Stewart comes in with the next question. Does anyone want to respond?

Professor Aldred: Yes, I do. We cannot unmute ourselves, so it just takes a minute before those of us online can speak.

At the start, I referred to the need for policies to restrict the growing size and weight of cars. It is a problem if, as in a document such as the draft climate change plan in which the focus is very much on electrification, there are unintended consequences with that approach. That has been found to be the case in Scandinavian countries, which are ahead of us in incentivising the use of electric vehicles. The risk is that people will simply drive more and shift from public transport to car use if you make it easier for them to drive electric cars and do not make it harder to drive more generally and sufficiently improve alternative modes of transport. My answer, then, is yes, that is a potential contradiction.

This also links to the point about car use. I very much agree that a 4 to 6 per cent reduction is not enough, but it will still be very hard to achieve that. You will need a clear plan that lays out where the change will come from, and you will need to monitor different parts of the country and regularly check what is happening and whether things are going in the right direction. Even achieving that will be very difficult, which is why we need clear targets, monitoring and regular action. We must ensure that we know where the reductions are coming from or, if they are not happening, what more we need to do.

Even a relatively small reduction in car use will require substantial change, which is why the point about there being a contradiction is worrying. I agree with you on that.

Bob Doris: Thank you. I have no further questions, but if any witnesses want to add to what has been said, that would be grand. Otherwise, I have finished.

The Convener: I call Kevin Stewart, who has been waiting patiently to come in.

Kevin Stewart (Aberdeen Central) (SNP): My question is on a different point. A number of

comments have been made about habit. During the course of our scrutiny of the draft climate change plan, I have said a number of times that it is all a question of delivery. In order to deliver, we will need to change habits. As some folk have stated, human beings do not like change, but sometimes we can sow change if we get things right.

I want to ask about some aspects of delivery. The issue of bus gates in Aberdeen was touched on. There was a social media backlash and many folk were unhappy, but the reality is that some folk were unhappy because they felt that they had not been listened to on what was required. Is it possible that we could put too much into the plan without allowing the flexibilities that would make habit change easier? Perhaps we could hear first from Professor Davis, because he had the most to say about habit.

Professor Davis: As I mentioned earlier, habit is really important. Where habit is stronger than intention, change is not achieved. We often have intentions to change our behaviour, such as new year's resolutions, but they often fail. We must not belittle or misunderstand the importance of habit in human behaviour, but there are nudges that we can make. Many of us will have heard of nudges—the number 10 policy unit used to talk about nudges. We can use nudges to help people to make small changes.

For example, if we could persuade people not to use their car for one day of the week and to use the bus instead, that would represent a 20 per cent reduction in car use. If we did that across the travelling population, that would achieve the 20 per cent reduction that is being sought. Such things are important. Small changes, when they are made at a population level, can add up to big changes.

In responding to the question, I restate that we should take account of the evidence from social psychology about the importance of things such as habit. There are other aspects such as anchoring, which I will not go into, but habit is really important when it comes to travel behaviour. There is a lot of literature about how habits can be changed by making some changes that release people from previous habits. For example, quite a few studies have found that some people move house so that they can change their travel behaviour, which is interesting in itself. They might want to travel more sustainably. Moving house is a big thing to do simply because you want to change your travel behaviour, so most people will not do that.

However, we know that there are ways to ameliorate some of the effects of habit when intention on its own is not strong enough. That could be done through nudges by the state at one level or another. Those changes could be fiscal or they might take the form of changes to bus routes, bus frequency and so on. Marketing, which we have not talked about, could also be used. Social marketing can be used to market for social good. It could be used to give people more incentives to change some of their behaviours. At a population level, that could lead to significant changes in the travel behaviour of the overall population.

Kevin Stewart: You missed out one part of the question, which was about listening to people. We have all agreed that it is difficult to get folk to change, but it is easier to get people to change if they feel that they have been listened to. How do we do that better in order to ensure that we deliver?

Professor Davis: I touched on that when I used the words "social marketing", which is about communication and explaining why you are doing things, the background to it all, and that it is not just for the fun of it but is really important. We have seen the failure to do that at national levels across Governments elsewhere in the UK. I will cite Wales's implementation of the 20 miles-per-hour limit, which was done in one day, on 17 September 2023. Despite being given a social marketing strategy involving a national conversation with the population of Wales, the Government chose not to use that approach. We need to have conversations, which means a two-way street and listening to the public.

I absolutely agree with your points. We need to listen to the population, because we need to alter some of the things that we previously might have done, and then develop a good strategy that includes a lot of good comms work to get messages out there across society to explain the rationale for why we are doing those things. That will not stop all of the social media backlash that we inevitably get these days, but it is important.

Professor Aldred: I will add something on the importance of engagement, because it has also been affected by the limitations of funding and by short-term funding. As I found in the studies in England, there is often not the staff to meaningfully engage with residents. Staff are taken on for a short period for a project, and the on-going participatory involvement that is needed does not happen. That is a problem.

I have seen examples of where such engagement is done well, for instance, around traffic reduction in neighbourhoods. Research suggests that you do not "need" greening in order to get traffic reduction, but that people want greening and that various things that people want can make traffic reduction measures easier to implement and to get acceptance for. I have also seen good examples where local authorities have adapted schemes once they are in place in

response to potential concerns and requests for improvement.

There are good examples, but resourcing is needed. When there were cuts and austerity in local government, it was very easy to think, “Well, we won’t get rid of the engineers. We’ll get rid of the consultation and engagement people.” That was a big mistake. There are ways to do this better and good examples, but resourcing is needed.

Kevin Stewart: Again, the strong message from today is that the Treasury needs to get this right and come up with multiyear funding instead of the current single-year funding that most of us, including the Scottish Parliament and the Scottish Government, get. Is that your view, Professor Aldred?

Professor Aldred: Yes. In the long term, we need a lot more funding, certainly for active and sustainable travel, and that funding needs to be sustained and multiyear in order to provide the best chance to make the transformative change that we need.

Kevin Stewart: Ms Collier, do you want to come in?

Sara Collier: I agree with a lot of what has been said. You made the point about flexibility, Mr Stewart. Buses are a very flexible form of public transport. Bus priority does not need to be about digging up and making bus lanes; it can be as simple as using technology such as artificial intelligence and traffic signalling and giving such technologies a go to see whether they work. If they do not work, you can try something different. It is a flexible form of transport, and bus priority can be a flexible solution.

Kevin Stewart: I have a question for Ms Collier about bus companies. Should they listen to passengers about the formulation of routes? Would that make a real difference in terms of patronage? I think that it would.

Sara Collier: Yes, absolutely, and I think that many bus companies do that. Guidelines for community engagement were developed as part of the bus task force a couple of years ago. We could give companies more of a reminder that they exist. There are plenty of online forums where people make suggestions about how routes could be altered and about changes that could be made to them. I think that bus companies genuinely listen to those suggestions, and if something is not working, they make changes.

Kevin Stewart: I am not so sure about that, Ms Collier, but maybe you can help us by trying to get more companies, including First in Aberdeen, to listen to their customers and not always dictate that they are right—they often cut off their nose to spite their face in terms of the amount of folk they get on buses. I have a question for Mr Solomon, because he seems to have been left out of the equation.

The Convener: I am afraid that it will be your last question.

10:45

Kevin Stewart: Indeed.

How do we get to a point with logistics where we match up the opportunities of rail, sea, water and road freight transportation? Do you think that the UK and Scottish Governments have done enough in that area to see how we can do better?

Lamech Solomon: To give a bit of context, support for modal shift must reflect the operational reality. Logistics UK supports modal shift to rail and water where it is viable, but those are appropriate only for certain flows and commodities. Many freight journeys, particularly the first and last mile movement, will continue to rely on road transport. Modal shift should be seen as a complementary tool, not a substitute, for decarbonising road freight. You will start to get the benefits when you look at it as a holistic solution, rather than a substitution.

Logistics is not a cash-rich sector; most operators have a profit margin of 1 to 3 per cent. Modal shift is not always commercially viable for all operators, especially the 99.7 per cent of the sector that are small and medium enterprises. If you want to incentivise modal shift, you would need to ensure that support schemes are available for infrastructure to facilitate the transition and to provide revenue support. As I have mentioned, much of the revenue support has been pulled back. It is all well and good to have ambition, but if you do not have funding mechanisms to support it, you will not achieve it, because it is not commercially viable for many businesses.

The Convener: That is a neat move to the deputy convener with his questions on the subject.

Michael Matheson: I want to turn to the pathway to achieving the decarbonisation of freight. In relation to that transition, the climate change plan places a large amount of focus on the decarbonisation of HGVs and vans. From personal experience, I think that steady progress is being made in the van market, but there has not been so much progress in the HGV sector. Mr Solomon, how many of the HGVs that are operating in Scotland or across the UK are electric? What does the operational pathway to the electrification of the HGV sector look like over the next 10 to 20 years?

Lamech Solomon: I do not have the exact number for Scotland, but there are 600 working electric HGVs across the UK. Our members’

concern is the fact that the maturity of the technology is not aligned with where the regulation or legislation is expected to be. It is all well and good having electric HGVs, but there is an issue if there is no parallel infrastructure to charge them. The situation is particularly difficult in Scotland, where there is not much charging infrastructure for HGVs, and there is an issue with power capacity.

There is also concern about payload—electric HGVs are heavier and attract a payload penalty, which means that operators are carrying less load and are therefore making less money. They already operate on tight margins—they pay double the price for electric HGVs and are paying more for electricity—and, on top of that, they are making less money because they can carry less. There is a misalignment between the regulation and what operators are expected to do while remaining commercially viable.

We in Logistics UK talk a lot about looking at alternative pathways. We talk about low-carbon fuels, which should play a more important role in reducing emissions, particularly in the near and medium term. They can act as a viable solution until there is the technology maturity for electrification. However, there is not a lot of talk about that in the plan. Low-carbon fuels allow or facilitate a pragmatic pathway for freight decarbonisation alongside electrification. Those fuels are not in opposition; they act as a pragmatic solution whereby you can still use the existing diesel vehicles, but with drop-in fuels, which provide up to an 80 per cent reduction in emissions. Those fuels can act as a good support in the meantime until the technology maturity catches up.

Michael Matheson: You talked about 600 vehicles. That must be a very small percentage of the overall fleet in the UK. I would have thought that the percentage would be in single digits. Is that correct?

Lamech Solomon: Yes.

Michael Matheson: I take it from what you are saying that, largely, the HGV sector does not feel that the existing technology for electric HGVs is mature enough to be an attractive investment and to meet operational demands. Is that correct?

Lamech Solomon: Yes. It is important to note that logistics operations vary. If you are doing regional deliveries or parcels, perhaps some routes can be electrified. Regional deliveries or back-to-base operations can be electrified. However, a blanket approach is taken to the sector when there are very different operational realities. With long haul, a trip from Edinburgh to the East Midlands Gateway logistics park, for example, would be very difficult to electrify, because there would not be the appropriate infrastructure to charge along that route. If electrification is to be pushed, we should look at certain segments and at where the low-hanging fruit is, rather than trying to approach electrification for the whole sector. The sector is very diverse, and the movement and flow of goods differ depending on what you are moving.

Michael Matheson: You say that a more pragmatic and realistic route for the decarbonisation of HGVs involves using alternative low-carbon fuels, such as drop-in fuels, which you mentioned. Are you talking about things such as hydrotreated vegetable oil being used as an alternative? Is that the type of thing that you are referring to?

Lamech Solomon: Yes—HVO, biomethane, bioethanol and other alternative low-carbon fuels.

Michael Matheson: I might be wrong, but my recollection is that all HVO in the UK is imported from overseas and none of it is manufactured in the UK. Do you know why that is the case?

Lamech Solomon: It is because there has not been a lot of support for domestic use. We lobby for that, and we have produced a paper on it. Again, there is competition, and we are being outcompeted internationally for domestic supply. There is not the support here that there is internationally from other Governments for the production of HVO.

Michael Matheson: Given that the objective of the draft climate change plan is to reduce emissions from things such as HGVs, you are saying that it would be more pragmatic to look at drop-in fuels rather than electrification, which feels like a bit of a pipe dream at present. The problem is that using things such as HVO is effectively offshoring by importing fuel, as opposed to making stuff domestically in Scotland or the rest of the UK that could be used as a drop-in fuel. However, there is insufficient Government support for that. Is that correct?

Lamech Solomon: Yes. There are domestic suppliers of bioethanol, and biomethane is produced domestically, too. There is a domestic supply of low-carbon fuels that can be used—it is not just internationally imported HVO that can be used.

Michael Matheson: In that case, would you like to see in the climate change plan some indication from the Scottish Government of how it will support the use of alternative fuel types such as drop-in fuels as part of the HGV decarbonisation plan?

Lamech Solomon: Most definitely, because I think that that will facilitate that transition. A lot of operators are doing nothing, because there is not the technology at the moment. Instead of just

waiting for the technology to catch up, they could be making up to 80 per cent emissions reductions now, simply by using some alternative fuels.

There is an obsession with the "zero" part of "net zero", when what we should be looking at, particularly in freight, is having that wider decarbonisation and that downward trajectory. The European Union is taking such an approach at the moment—it is focusing on not just zero-emission vehicles but a downward trajectory in emissions.

Michael Matheson: Okay. That was helpful.

My final question is on moving freight from road to rail. I know that grants were available to encourage freight operators to make the shift to rail. I am conscious that there are limitations on the types of goods that can be put on to rail freight, but do you know exactly how many rail freight pathways on the UK rail network are not being utilised because of a lack of demand from industry to switch to using rail freight?

Lamech Solomon: No, I do not have an exact number for that.

Michael Matheson: Is that information available?

Lamech Solomon: I can check that and follow up with you, but it is not something that I have seen in my role.

Michael Matheson: I would have thought that, given your expertise in logistics, and given that we are trying to encourage people to put freight on to rail, it would be helpful to know what capacity is available but is not being utilised, and what we can do to try to incentivise its greater use. I know that there are limitations on the number of freight pathways on the rail network, but, if we have not quantified that and do not understand exactly how much capacity is available, it will be difficult to understand how much we might be able to incentivise people to make use of it.

Lamech Solomon: Most definitely. I am happy to follow that up after the evidence session. We also have a modal shift lead on the team who might be able to provide support and information on that.

Michael Matheson: That would be very helpful. Thank you.

The Convener: I want to ask another question before we leave this issue. Obviously, it is good to get more freight on to rail. As I understand it, you can have heavier containers on railway lines than you can on lorries, and I believe that there was a move in some parts of your industry to take what was called a 48-tonnes-for-48-miles approach, which would allow a container to be offloaded and then taken to a depot to be broken up for normal use. However, that would require co-ordination, because such a weight would exceed the UK road limit—and, indeed, desperately compromise that limit if we are talking about electric vehicles.

Does more thought need to be given to that whole process and, as a result, to encouraging freight companies to make more use of the railways, because they provide a means of moving bigger parcels that can then be broken down for onward distribution once they get to a hub such as Inverness or Glasgow? Do you have any comments on that?

Lamech Solomon: Most definitely. That brings me back to my primary point that this should be looked at not as a substitute but as a holistic complementary tool. Such a shift happens when people, operators, companies and businesses look at something and ask, "How can this complement rather than replace my operations?" At that point, people start to look at the sorts of solutions that you have mentioned, such as having sections or fragments of routes and then thinking about what the end route will look like.

It comes back, as I have said, to my primary point. We support modal shift, but we need to consider the operational realities and the fact that a majority—or a lot—of freight will still be moved by road, because of the last mile or the first mile.

The Convener: I am sorry—I have one further question. I was interested in your comment that electric HGVs cost double the price of normal ones. We are talking about a cost of in excess of £300,000, compared with perhaps £150,000. Once you get your electric HGV, every time you finish using it, you will have a huge amount of downtime while it is charged back up. Are electric HGVs a pipe dream at the moment, and is the use of drop-in fuels a better approach, as the deputy convener suggested?

11:00

Lamech Solomon: Yes. It is not only the vehicle that you are paying for; you also have to pay for the charging infrastructure, the connections upgrade and the electricity. The TCOs do not line up at the moment—sorry, for those who do not know, the total costs of ownership are how much you pay for the vehicle during the period that you have it. The costs for electric vehicles do not align with those for diesel vehicles at the moment.

We need to look for pragmatic solutions. What things can we do now, while still decarbonising, that are realistic, deliverable for businesses and commercially viable? Low-carbon fuels are a great option, because they allow us to decarbonise but are still commercially viable for businesses.

The Convener: I think that Douglas Lumsden has some questions.

Douglas Lumsden (North East Scotland) (Con): My questions were on rail freight, but we have covered that already.

The Convener: Mark Ruskell wants to come in briefly.

Mark Ruskell: I want to go back to a previous point, and my question is for Sara Collier. It has been mentioned that bus patronage is struggling to get back to pre-Covid levels, and we are struggling to make the required significant modal shift. One of the issues for bus companies is the amount of road congestion, ostensibly caused by private cars, in urban areas. Is that a reason why some services are being reduced?

Sara Collier: New services are being introduced, so the trends are not all downwards. There are new intercity routes and so on, so it is not right to say that everything is being cut. New services are coming in and being refined.

When we model congestion, we find that we could run a service three times an hour, for example, if there was less congestion, but it is currently running only two times an hour. You have probably heard us say that it is not only about competition from cars. Road works have been a massive issue, as our operator members have pointed out. Action and co-ordination in that regard need to be an important part of local authorities' car use reduction plans. The enforcement of parking rules is another issue that is raised.

Mark Ruskell: Is it right that increased car use affects public transport and reduces the amount of public transport services that are run in urban areas?

Sara Collier: Yes, or it reduces the possibility for more services to be run. It is not that the number of services is going down, but there would be more potential for an extra service per hour if the road was clearer to allow the bus to get through. As I said, we are talking about incremental changes. If we could get buses to run that bit faster and cover a couple of extra miles an hour, that could result in millions of extra journeys.

Professor Davis: I will pick up on the point that Sara Collier made about road works. We are likely to see increasing levels of road works because of road wear and tear due to heavier vehicles being on the road. I am referring to the switch to EVs, which often means that people move from a vehicle that weighs roughly 1 tonne to one that weighs 2-plus tonnes. That means that there will be 16 times more road wear per mile because of the weight and the impact on the road. That is not often understood. When people talk about road works in the future, they will need to understand that some of the work will be needed because we will be driving much heavier vehicles that will be tearing up the carriageway. That needs to be factored in, because there will be long-term costs in relation to asset management for local highway authorities, which will need to repair roads—and to do so far more frequently—when that money could be going elsewhere.

Professor Aldred: There is an important linking point in relation to the first mile and the last mile of freight deliveries. I mentioned it earlier, but we have not talked much about the potential to shift some of those last miles and first miles to e-cargo bikes, which are obviously a lot lighter and provide a range of co-benefits. In European cities, there is much more use of e-cargo bikes for the first mile and the last mile of deliveries.

We have started to see a shift in that regard in London. Transport for London has an action plan, and I recently received a report that set out that an undercroft under Waterloo station is starting to be used as a hub for last-mile deliveries by e-cargo bikes. That is becoming increasingly desirable and efficient because, when streets are designed for sustainable transport, the use of e-cargo bikes has more of a competitive advantage. However, that will not just happen. Support needs to be provided to repurpose such places to allow e-cargo bike deliveries to be made. That is really important, so that should also be part of the plan.

The Convener: I am afraid that our time for this evidence session has run out. I thank all the witnesses for attending and giving their evidence. I will suspend the meeting before we take evidence on the Government's draft climate change plan from the second panel of witnesses.

11:05

Meeting suspended.

11:13

On resuming—

The Convener: Welcome back. We will continue with our next panel of witnesses on the draft climate change plan. This panel will focus on those policies and proposals in the draft plan that deal with the waste sector.

I welcome Gary Walker, head of specialist regulations at the Scottish Environment Protection Agency; Duncan Simpson, a member of the management committee of the Resource Management Association Scotland; Kim Pratt, senior circular economy campaigner for Friends of the Earth Scotland; and Iain Gulland, who was, until very recently—I think that I have that right—the chief executive of Zero Waste Scotland. I do

not know what happened after recently, but he can no doubt tell us afterwards. Dr Lucy Wishart, a lecturer in the circular economy and sustainable transformations at the University of Edinburgh, joins us online. Thank you all for attending today. As is normally the way, I get to ask the simple questions at the beginning to put you all at ease.

The figures show that emissions from the waste sector fell sharply until about 2013 but that that fall then effectively stalled. I cannot understand the barriers or the reasons why. Gary, can you explain the barriers that make further reductions impossible and can you tell me why those reductions stalled? Is that quite a hard question to answer?

11:15

Gary Walker (Scottish Environment Protection Agency): No, not really. The figures that I have show that emissions in 2023 were 73 per cent lower than they were back in the 1990s. That is an indication that there has been significant progress. The landfill figures show that we are landfilling 19 per cent of our waste, compared with more than 90 per cent of our waste back in the 1990s.

There is evidence of progress, but we all recognise that our endeavours to reduce waste, prevent waste, reuse and recycle have plateaued. The recycling figures have plateaued recently. We welcome the fact that the climate change plan, aligned with the route map and the circular economy strategy, focuses on the top of the waste hierarchy and on unlocking further progress in terms of reduction, waste reuse and prevention.

As the figures show, recycling figures have plateaued, which is slightly frustrating, but there is progress on emissions reductions and further progress is certainly achievable in the shift away from landfill.

The Convener: Duncan Simpson, do you want to comment on the stalling? Is it down to people to do more, or is it down to Governments to do more? What do we need to do?

Duncan Simpson (Resource Management Association Scotland): Thank you very much for the invitation to be here. I agree with much of what Gary Walker says, but the important point to emphasise again is that we have picked off some of the low-hanging fruit. It is also correct to say that solely focusing on recycling is not the right thing to do, and I know that you all know that. We need to persuade consumers—as we have heard, because we sat through the transport section of the meeting—to change their consumption habits and rethink some of the purchases that they make, and we need the supply chain that delivers those goods to those consumers to change their behaviour, which is a long-term activity.

A lot of work and investment has been done in that area, and some of the good points in the plan relate to the work around procurement. Procurement can be used as a lever to say that there is a good standard for recycled content aggregate, which many of my members make available to the industry. However, a buyer is probably taking more risk on a recycled aggregate, in their mind, than on taking a clean stone out of a quarry.

There may be more policy thoughts around how to incentivise people and reward them for making those consumption and production changes. If it is more expensive to buy the more environmentally sound product, why would you do it?

We are also taking a lot more time to try to construct more complex legislation, such as the extended producer responsibility legislation. However, when you start to encapsulate that cost within the cost of a packed product, it is a longer-term communication with that company to say, “If you designed the product differently, it may cost you less; it may be easier for the consumer to make it last longer, and easier to deconstruct, repair, refurbish and put on the market.”

We have made a lot of progress in a short space of time. We have had a stall, and more has been happening in the background, but we need to try to invest more in those areas to get that change to happen at scale.

The Convener: Kim Pratt, could you comment on whether you think the waste emission pathway in the plan will deliver, and whether the Government has set the right ambitions in the plan?

Kim Pratt (Friends of the Earth Scotland): Thank you very much for inviting me to speak to the committee. I have been working on waste policy in Scotland for the past 15 years, and I most recently spoke to the committee about the Circular Economy (Scotland) Bill.

Your first question was about progress. What we are seeing in the waste sector is, in fact, not as big a reduction as the figures seem to show. What has happened is that emissions have been transferred from the waste chapter to the energy chapter of the plan, and that is because the biggest change that we have seen in waste management in Scotland over the past few decades has been the move from landfilling our waste to incinerating it instead, which is covered in a different chapter of the circular economy plan. Therefore, less progress is being made than what it looks like in that chapter.

It all comes down to poor carbon accounting and one of the main points that I want to get across to the committee is that poor carbon accounting has led to poor policy making for the waste sector in Scotland. In Scotland, we account for emissions on a territorial basis—in other words, those that are generated in Scotland—and what we really need alongside that is more of a consumption-based approach to considering our emissions, which will involve thinking about the emissions from all materials, no matter where they come from. That will be particularly important with regard to waste and materials, given that 50 per cent of the materials that we use in Scotland are imported, and we use about 100 million tonnes of materials every year.

It is very important that policy makers can see the whole picture of what they need to reduce. If they focus only on waste, it means that they are looking at about 10 per cent of our material use by weight. As a result, a whole 90 per cent of materials are just a black box for them, and it is impossible for them to make the right changes and to drive the changes that we need to see in Scotland.

That is partly why we have also seen emissions reductions stalling—it is down to a failure to deliver the right policies. There have been failures in reducing food waste—indeed, the amount of food waste in Scotland has actually increased—and there has also been an increase in incineration, because of poor carbon accounting. Therefore, we really need the committee to consider how we can bring in consumption emissions reporting to help policy makers make the right changes and drive change up the waste hierarchy.

The Convener: I understand your aspirations in that respect, but we are looking at a plan that has been put to us by the Government to see whether it meets Scotland's aspiration to reach net zero by 2045. However, we will certainly bear in mind what you have said.

Iain, do you want to answer the question? Given that we have plateaued and are not going any further, do you think that the pathway in the climate change plan is sufficient?

Iain Gulland: Thank you for the opportunity to give evidence. I will start with a caveat. As you said, convener, I moved out of Zero Waste Scotland only very recently—on 31 December—so you will forgive me; I feel that I am still a little bit in transition. Obviously, I am not here to speak on behalf of Zero Waste Scotland.

The Convener: We understand that, but you have a huge knowledge of the sector. We know that you have taken a step back, as it were, but we are very grateful that you are here, because you bring with you the knowledge gained from years of involvement in the sector. We understand that you are not speaking on behalf of Zero Waste Scotland.

Iain Gulland: You will forgive me, though, if I slip in the "we" word or something like that.

The Convener: We will not quote you, of course.

Iain Gulland: Please scratch it from the record.

I agree with what all the participants have said, but I think that we are in a particular moment of time with regard to this policy area. Having been involved with Zero Waste Scotland, I know that we have been, to some extent, staring at this issue for the past couple of years now; indeed, I have been in this very room, talking about it, acknowledging that recycling rates and so on have plateaued and discussing our ambitions to think differently about not just carbon, the climate and all that but, more broadly, the circular economy and what it means for our economy in terms of building more resilient supply chains of materials and reducing our overall consumption of resources both here in Scotland and, as Kim Pratt has said, from a global perspective.

Therefore, I think that we are in a different place. There are plans; we have a circular economy route map that is in play as we speak; we have circular economy legislation that was passed unanimously by the Parliament; and there is a circular economy strategy that is out for consultation at the moment. All the ambitions that I think that Kim Pratt has mentioned are very much in play in Government policy making, and our future direction of travel will involve a recognition of the need to look at this through not just a carbon lens but, perhaps more important, an economic lens—hence the focus on the circular economy.

We are in a much better place than we have been, because we now understand the complexity of all this. I echo what others have said: that perhaps we have picked some of the easy fruit and that a lot of the areas that we need to get into now will be more complex. However, we need to embrace that complexity—that is the real challenge. Instead of just talking about this being complex, we need to embrace it and understand that it is complex, and we need to start seeing it through a systems lens. We need to involve not just the waste management part; we need to think about the design of products and their utilisation, deployment and procurement. We need to think about how we as consumers and businesses use products and materials throughout their life cycle and take more of a product stewardship approach, which is very much a focal point of the proposed circular economy strategy, so that we are not

thinking about the issue from just a waste management point of view.

Ultimately, because of the way that the climate change plan is set out, it is about waste management. It is about what happens at the end of the pipe, particularly on landfill, and how we reduce that. There is acknowledgement of other issues throughout the plan—the circular economy is mentioned, and there is stuff about consumption, production and the responsibility that we all have in that space. I am sure that I have been in this room over the years asking for those things to be acknowledged. However, we need to have a different approach rather than just think about the end of the pipe. Those things are in there, but we need to do more.

Ultimately, we have shifted a lot of material out of landfill into another disposal option—energy from waste. The plan acknowledges that, and it also acknowledges that the carbon emissions from energy from waste will increase, because we are moving more to energy from waste, and there is even more stuff in the pipeline—I am sure that we will get on to the landfill ban implications. We will see increased carbon emissions in that space, but the plan does not really talk about what we are going to do about it. It says that we are going to deliver the range of policy on reducing waste, but without really thinking it through and recognising that, ultimately, we need to reduce what we are disposing of and tackle the carbon-intensive materials in our waste stream in a different way, rather than simply thinking about the issue from a collection point of view.

The Convener: Lucy, do you want to come in on that?

Dr Lucy Wishart (University of Edinburgh): Sure. I will probably just reiterate a lot of what has been said. However, one thing that has not been said is that it is not only Scotland that is facing this sort of levelling out of big ambitions, or big shifts, if you like, in how our waste is managed. There are a lot of conversations on the circular economy about how we have reached the low-hanging fruit of the things that can be achieved through technical changes, but it is the social changes and the transformational aspect that will deliver the additional figures.

To follow on from what Iain Gulland said—I think everybody said this—it is now about looking upstream, not just at waste management, and thinking about transformational changes in how we interact with our resources. Often that is about moving beyond thinking of people as consumers or producers, to thinking about them as users of resources. It is about trying to use different language so that we see our resources as a collective responsibility, rather than as individual things that we deal with as and when we need, as businesses or as individual households. That shift is the only way that we will achieve the carbon reduction targets that we are looking for in Scotland.

The Convener: I will go on to my pet subject, which you will not be surprised to hear is figures. Page 45 in annex 3 gives the figures for the cost of the climate change plan. It appears that, in every year, the benefits outweigh the costs of doing things, which is interesting. In the first period, from 2026 to 2030, the net costs are £89.9 million, and that includes the costs of a deposit return scheme, although we know that those figures are perhaps not quite in line with what the industry thinks are the costs.

Are you happy that the net costs in the climate change plan for waste management are reasonable, or are they lower because there are hidden costs of the burning of waste?

Iain Gulland, I do not have any confidence in the figures, but you will have looked at them and will have huge confidence in them, surely. Do you want to start us off?

11:30

Iain Gulland: I get the detailed question. I will put my hands up and say that I am not absolutely clear about the modelling that has been used. I was going to start on the point about the basis of the costs relating to taking biodegradable material and so on out of landfill, but do the costs include the stuff that goes into energy from waste and the impact of that? I do not know—I do not have a quick answer to that, because the two things are in two different chapters. My reading of the plan is that that figure relates to the chapter on waste. I am not sure that we—when I say “we”, I mean Zero Waste Scotland—have modelled those specific costs, but we have modelled specific policy instruments that are in play or are being delivered through impact assessments.

It is a truism that, although there is a cost to implementing a policy, the benefits quite often outweigh that cost over a long period. Obviously, that is a challenge, because we still need to invest in infrastructure, new technology and behavioural change campaigns to get people to shift their behaviour or adopt new systems, whether in the public sector, the private sector or households.

Ultimately, waste is a cost. It costs everyone money, whether through taxation or through costs on private industry, and the costs will increase. If we consider what is ahead of us in relation to legislation and policy—not just at the Scottish level but at the UK level—and the global challenges relating to material extraction and accessibility, particularly for critical raw materials, we can see that prices will increase. We are trying to reduce

the impact of those costs over the long term. Although it is probably not part of this discussion, which is all about carbon, that is the reality. We sometimes ignore the fact that, for good reason, the costs will increase, because we now think about the environmental and social harm of some of the practices in the wasteful and throwaway society in which we live. We now have to correct that, but that will cost money.

We need to do something, and investing in the transition now is the thing to do, as opposed to bearing the brunt of the costs in the future, given the impact that that will have not just on individuals and local authorities—I am sure that we will come on to that issue—but on our wider economy. If we continue what we are doing and think that we can just take stuff, use it and then dispose of it, that will cost us a hell of a lot of money.

The Convener: In the earlier session, we heard about changing attitudes and getting people to buy into the plan and understand the costs and the benefits. That is what I am trying to drill down into, because I am struggling to understand them.

Kim Pratt, you are probably happy that the costs in annex 3, on page 45, are exactly right. Are you happy?

Kim Pratt: Actually, I agree with Iain Gulland that there is a lack of detail. Clearly, some assumptions are being made, but they are not very clear, so, no, I am not happy with the costs as they are laid out.

I also agree with Iain Gulland that there is a cost to inaction, which is not measured in the climate change plan. If we do not act, climate change will worsen and there will be increases in pollution.

I would like to pick up on one particular area. Plastics are not mentioned at all in the circular economy strategy for Scotland, and they are hardly mentioned in the climate change plan. There is a huge health impact related to plastics. A report last year showed that, on a global scale, the health damage that is being done due to plastics is already costing $1.5 trillion per year. We can scale down that figure to get the cost of that to Scotland. There are huge costs relating to plastics.

The health impacts relate to two main things. First, all plastics eventually break down into microplastics, which become so small that they can enter our bodies. Also—

The Convener: I understand your enthusiasm for the subject, but let me ask you a question about plastics, because you are saying that there is a huge cost. If plastics have been considered, would you expect to see the benefit side of the equation reducing or increasing as a result of not having them? Are you confident that the £1.3 billion of benefits in the first period includes the cost of not having so much plastic in the economy, or do you think that that has just been ignored?

Kim Pratt: I do not see that it has been included. The lack of consideration of plastics in general makes me doubt that it is in there.

The Convener: Okay. We are short of time—I am sorry, because I understand that plastics are really important. Iain Gulland and Zero Waste Scotland have told us that, and we were given quite a good insight into how important they are when we considered the Circular Economy (Scotland) Bill. However, I am going to cut you off there because I want to bring in the other witnesses on this subject before I move to other questions from members.

Duncan, are you happy with the facts and figures on the costs and benefits?

Duncan Simpson: The problem with some of the calculations is knowing where to draw the boundary in order to make those calculations in the first place. There is an assumption that a lot of very good things happen at the back end. For example, I know that we have heard comments about moving from landfill to another form of disposal, but that is moving one step up the waste hierarchy. If we do not have landfill in Scotland, that waste has to go somewhere but, with the best will in the world, the tonnage that we produce as waste, recycling or reuse is not going to go down to zero in two or three years.

We will need a transitional plan to get there, and energy from waste is quite an elegant solution if it is well managed, run and maintained. I would add that it must be well networked into the system in order to provide electricity and free heat and power to local communities, which will lead to a reduction in its own right. That does not take away from the fact that, in the future, those facilities will have to cope with the UK emissions trading scheme, the reporting for which kicks in next year. Those plants will receive a penalty cost for all high-carbon materials that go into them, including plastics, textiles and anything that has a carbon-14 number on it.

What we need to do just now is all the work that we should have done on DRS and other policies. We are quite good at designing the push-out of material. I will put my cards on the table and say that I do not necessarily agree 100 per cent with DRS, because we are already collecting three and a half out of every four bottles that we consume, and it would have been an expensive way of collecting the next half bottle. However, the prize from DRS would have been the polyethylene terephthalate plant to recover and recycle the polymer that would go back into the bottles, which in turn would go back into manufacturers' recycled content in Scotland. We would also have had jobs,

technology and innovation here. I would love to see that, as would RMAS members.

The Convener: You are drifting away from my original question. Are you happy with the figures in the draft plan?

Duncan Simpson: There is an overall benefit to moving up the chain, but the cost will be paid by us.

The Convener: I will put the same question to you, Gary.

Gary Walker: Thank you, convener.

The Convener: I am not sure that you mean that.

Gary Walker: I do. Like Iain Gulland and his former colleagues in Zero Waste Scotland, we are not party to the modelling that sits behind those figures and have not gone into them in any detail. It is a truism that we are not actually paying the real cost of waste management at the moment. There is a cost associated with shifting further up the waste hierarchy and realising the true embedded value in the goods and products that we consume. There is a cost associated with that true value and with the shift.

I cannot challenge the figures, but I think that the benefits—not only in carbon terms but in material value and in the wider benefits to society—will be realised in the long term.

One example that might help to illustrate that would be the recent changes to the packaging producer responsibility regime in 2025—so only last year; in fact, only last week. As a result of the reforms to that scheme at the tail end of last year, Scottish local authorities received £160 million of payments that they had not previously received. That scheme will continue, so we will start to see some of the benefits being delivered back into the system and to the service providers.

The Convener: It will be interesting to see where they spend it.

Dr Wishart, would you like to add anything on that question?

Dr Wishart: About the reliability of the figures? I have been in this area for long enough—like Kim Pratt, for 15 years—to be pretty sceptical of any figures that are given for costs and benefits from waste management, because the sector has struggled with getting data. That is not to say that the waste management sector itself has not made great bounds in getting that data, but it also requires data from other sources, which is not readily available.

I would pick up on the issue of specificity. The figures do not tell us where those costs and benefits lie, and we have seen with the deposit return scheme thus far that certain groups in society feel that they are overburdened with costs and are not supported with bearing those costs. It is important that we have more details in line with the aspiration for a just transition about where those costs are going to lie and where the benefits will go. We therefore need a more detailed breakdown of those figures, along with the methodology behind them.

The Convener: I think that the climate change plan suggests a figure of £89.9 million in the first period of four years. However, that is based on the deposit return scheme at 2023 prices, which seems wildly out of date, but there we go.

We will leave the deposit return scheme and move straight to Mark Ruskell with the next questions.

Mark Ruskell: I am interested in the witnesses' views on the circular economy strategy and how that links with the climate change plan. Is there consistency there, or are there things that do not quite read across between the two?

I am also interested in hearing your brief comments about the circular economy strategy. I know that there is a focus in the strategy on sector-specific road maps—do you welcome that? Do you feel that some things are ambitious, too ambitious or unambitious? I would like to hear a couple of points from each of you.

Kim Pratt: I am concerned about the link between the two documents. The circular economy strategy is not a quantified document, so we do not know how much impact or benefit there will be from each of the policies in it. The climate change plan is very reliant on the circular economy strategy and the waste route map. There is a lack of accountability between the two documents.

On top of that, there is a huge gap between the level of ambition in the circular economy strategy—that level of ambition is good, as we want a circular economy in Scotland—and the policies that are being presented to achieve that ambition. It is not clear how the policies will meet the ambition. In addition, a lot of those are existing policies: things that we have seen before. Over decades, we have seen those policies not working as well as expected, so how can the Scottish Government expect the same policies that it has presented previously to meet the new level of ambition without giving details of what changes it will make?

Mark Ruskell: Is there a point at which, with the sector-specific road maps, there would be clarity as to what the carbon reduction is? You say that it is currently difficult to say what will happen and that, with the broad suite of policies, we might get somewhere towards achieving the envelope for

waste in the climate change plan. However, is there a point in the next year or two at which you expect more detail on exactly what will be achieved?

11:45

Kim Pratt: We very much hope to see that. One of the problems with taking a territorial approach is that the impact of many of the policies that we are talking about will be broader than that. Without a plan to introduce a level of thinking on consumption emissions reporting, it will be difficult to show the benefits of those policies.

Mark Ruskell: Okay. There is a blind spot on the consumption side.

Duncan Simpson: The easiest answer to give in the first instance is that the devil will be in the detail of what comes out.

If you asked me to pick EPR, product stewardship or materials, I would pick textiles and clothing, in which I would include mattresses and carpets. If you asked me to identify a specific material, I would say plastics. We need to have a strategy for managing plastics. We already have an EPR scheme for waste electrical and electronic equipment, but people need to know more about that, and we could potentially introduce a reuse element.

All those things are pointed at as ways forward, but a lot of negotiation with industry is often required and they often take a long time to put in place. The benefit is that we get greater granularity and accuracy of data. Because of packaging EPR, we have much more reliable data on packaging than we do, for example, on mattresses or other types of material. Such measures give us levers to move.

With some of the policies that are being talked about, one of which is similar to the policy in France under which people are not allowed to destroy returned goods, we can immediately see a carbon benefit. If we decide to reuse all the stuff that comes back from online buying and put it on the market again, rather than destroying it, that will obviously have an increased carbon benefit. When will we know how much of a benefit it will have? We will know that only once the policy is in place.

In my view, the plan represents a move in the right general direction. I can understand why there is sensitivity—as is the case in relation to transport, as we heard earlier—about not giving firm commitments to push forward at greater speed. I would have loved the plan to push things forward at greater speed. The key to this, and what our RMAS members would like to see, is a much faster and more planned way of moving from policy to operationalisation of the policy at ground level.

Mark Ruskell: Is it possible to articulate that in the climate change plan?

Duncan Simpson: It is very difficult to do that, because we are dependent on so many other stakeholders and actors moving forward with the policy and agreeing with the way in which it is set out.

Overall, the direction is correct. Could the plan be a bit more ambitious? It probably could be. Has consideration been given to all the outcomes of Covid, war in Ukraine, inflation and so on? In my view, the balance is there. The key to delivering it is to take a more efficient approach to delivery in future.

Mark Ruskell: Lucy, do you want to come in?

Dr Wishart: I am sorry—I was overenthusiastic and tried to unmute myself, not realising that it had to be done for me.

To come back to the original question about the connection between the climate change plan and the circular economy strategy, there are obviously connections between them and overriding points of crossover. The way that waste management is depicted in the climate change plan reinforces the need for some of the direction that is provided in the circular economy strategy, especially the emphasis on data and on skills and education, although, as others have said, those aspects could definitely be fleshed out in the strategy. At the moment, they are quite broad brush.

It is important that there is more concrete articulation of the measures that are really broad, because there is a lack of transparency about what the policy will actually do. We might identify things such as producer responsibility and deposit return schemes, but there are multiple ways in which those things can come to the fore, and people are not being given certainty or a direction of travel with regard to what will happen.

Also, we do not really have the data to be able to predict how such things might be taken forward, or to say what the most sensible solution or direction would be. As I and others have said, both the climate change plan and the circular economy strategy could benefit from a little more specificity on what they actually mean by those policy directions.

Gary Walker: The link between the climate change plan and the circular economy strategy is explicit, and we welcome that. With some exceptions—plastic is an example where we need a bit more detail—the circular economy strategy sets out the right set of actions. More detail is to come in terms of the choices that we make about materials and how we deliver the strategy but,

broadly speaking, it is the right set of actions. We are keen to transition from making plans and policies to getting on with the delivery. Kevin Stewart referred to that in the previous panel discussion in relation to transport. When it comes to waste management, we, too, are all keen to get on with the delivery.

Iain Gulland: I am hesitating, and I declare a conflict of interest in relation to the circular economy strategy because, in my previous role at Zero Waste Scotland, I oversaw work to support the strategy's development, which was one of our specific roles. It therefore feels awkward for me to talk about it other than to support it.

The strategy sets out exactly what I talked about at the beginning of the discussion on where we are as a country and our ambition. For me, it represents the fuller picture. It is about consumption emissions and addressing the wider climate impacts of our economy, both here in Scotland and abroad, whereas the climate plan, as we have talked about, is very much about our territorial emissions. The circular economy strategy covers the bigger picture and is about seeing what we are talking about—whether it is waste or resources—from an economic and social point of view and as part of a future economic story for Scotland. That is where we should be going.

I believe that the delivery of the circular economy strategy ambition for Scotland will deliver our climate ambitions in totality, including those that are not even being addressed at the moment in the climate plan. I absolutely believe that. The strategy is out for consultation, which provides a good opportunity for others to feed into it, as much as it is an opportunity for the Government and Zero Waste Scotland to set the agenda. We welcome that.

However, the strategy deals with a lot of the climate issues that we have been talking about and goes further than simply thinking about the waste management options that we face, which, to be fair, are what the climate plan is all about. For example, there is a challenge around landfill. We need to get out of using landfill because of methane and so on, and we need to get more material out of the residual waste so that it does not end up in the energy from waste process, because the carbon intensity of the materials used in that is causing further emissions. That is the reality. That is what the climate plan is about; the circular economy is not about that. The circular economy strategy is aligned with the climate plan, but they look at the issue from two different points of view.

Mark Ruskell: Are the co-benefits of a more resource-efficient society adequately reflected in the climate change plan? Alternatively, does the climate change plan just focus on potential policies to cut carbon without thinking about the wider picture?

Iain Gulland: They are reflected. As I said at the beginning, the plan, in its annexes, talks about consumption and acknowledges that, to an extent, it is about territorial emissions and not consumption. That is the legal framework that you all operate within, and I am not saying that it is wrong. You have been asked to look at a plan that will reduce carbon emissions at territorial level, and waste management incurs such emissions, so that is where we are.

The good news is that we have something called the circular economy ambition, as well as the circular economy strategy and the Circular Economy (Scotland) Act 2024, which acknowledge that. It is not just me saying that—you are now saying it. We have something else that will take us further and go beyond territorial emissions. It might feel like that is at the starting point, and that we do not have all the answers and detail laid out, but there is a strategy, an act and a lot of people at the table from different sectors—we have talked about the sector road maps. A broader church of stakeholders is involved in this approach, and there is momentum. That is not just in Scotland; there is global momentum behind the approach. That is the good news.

Mark Ruskell: Thanks.

Dr Wishart: I will come in briefly on that. We talk a lot about sector approaches and sector road maps in circular economy discourse and in relation to carbon reduction. In both policies, I observe a drive for materials sectors. However, if we want to achieve some of the transformational ambitions, we need to consider all the sectors that are central for delivery, which includes cross-cutting sectors such as finance.

As it is presented, the number of jobs in the climate change plan that relate to waste management stood out for me. The plan says that 12,000 people work in the waste management sector. However, we do not need to think about just those 12,000 people, or the 80,000 or so jobs in the circular economy; much more involvement is needed in Scotland to deliver the route map and to have this transformation. Those job numbers need to expand, not in terms of new jobs but in terms of the responsibilities of different jobs and sectors in delivering the things that are needed for the ambitions on the materials sectors.

The Convener: Thank you. The next question is from the deputy convener.

Michael Matheson: Good morning. I want to consider the issue of procurement policy. The circular economy strategy is an important part of being able to achieve the ambitions in the draft

climate change plan to reduce emissions from waste. I would be interested in getting your views on how we could adapt or change our public procurement policy in a way that would help to strengthen the circular economy in order to support its development. Are specific measures being taken in public procurement to support the circular economy?

For example, in its evidence to the committee Highland Council said that the Scottish Government should mandate minimum recycling content in public procurement. It would be transformational if we were to do that across the public sector. Building on the point that Iain Gulland made, if we do things the right way and target the right areas, that could also have an economic benefit. Is there a role for public procurement policy, and would you like there to be specific measures within it to support the circular economy and drive greater use of recycled goods?

Duncan Simpson: Yes, absolutely. I would love for there to be changes in public procurement. Several changes have been mooted and put into place, but getting those to happen in practice has been a bit harder. Your example is a good one. There are other measures that could be used, such as social value. For example, I have seen people measure the benefit of providing refurbished and repaired laptops to give people access to education and information who would not otherwise have access to that type of technology or to the internet. We already measure a part of that, but we do not measure the financial benefit.

That links back to your point about recycled content. There are a number of strands in that regard that it would be worthwhile for the committee to understand. The European Union will introduce mandatory recycled content targets for packaging materials. If we do not do that, we will collect the material and it will disappear to mainland Europe, because that is where the incentive is for those goods to go.

We have a plastic packaging tax, which requires people to put in a minimum level of recycled content or else pay a fee. However, I do not think that I am speaking out of turn when I say that the industry that manufactures the goods does not feel that that process is well regulated or that everyone is complying with that.

12:00

You are absolutely correct to say that, if there is policy that requires a minimum amount of recycled content to be used and a public procurement driver that creates demand, we will have many more market factors in the form of carrots that make it more likely that domestic reprocessing by the plastic industry in Scotland will improve. That goes for recycled content aggregate and a number of materials that could be generated by the industry as part of the circular economy.

However, there is another area to look at. I know that this is legally complex, but, if someone in Scotland created a high-quality recycled material that lasted longer than others and was an alternative to a virgin material, that would represent the equivalent of a carbon inset. If so, should not public bodies be able to claim it against their net zero target in Scotland, as opposed to—I am not suggesting that this is not a good thing to do—planting trees somewhere or funding a hydroelectric system in some other part of the world? Why could we not measure that more directly here? That takes us back to Kim Pratt's aspiration of joining up carbon measurement, so that we can say that this decision here benefited that carbon sink there, rather than having a negative impact in the country where the carbon came from.

Iain Gulland: Absolutely. I totally agree. Procurement gives us a massive opportunity to leverage more circularity—everybody recognises that. We need to help procurement colleagues at the national level, in local government and in the public sector, as well as in businesses, to understand that, by adapting different strategies in their procurement, they can create the market pool for circular business models, perhaps by using recycled materials or products relating to reuse and remanufacturing on an on-going basis, and changing the life-cycle assessment of those materials so that they are not buying cheap. We need to support the procurement world to do that.

Many years ago—I cannot remember exactly how many—I was involved in what, at the time, were called public social partnerships, which involved changing public procurement to deliver social outcomes. There are now lots of examples of social criteria being put into public sector contracts right across the public sector. That initiative—which was done through local government, with European Union funding—was driven by piloting examples that demonstrated how that approach could work. By creating that body of evidence we encouraged public procurement professionals to approach their procurement in a different way in order to deliver multiple outcomes for not just their immediate community but the country in general.

That is the type of thing that we should be thinking about in this space: how to create opportunities to demonstrate the value of changes in the way that we procure goods. It requires us to think about the whole system. As I have probably said before, in this very room, the national health service presents us with a massive opportunity,

because it has a huge demand for materials that are made from plastic and it disposes of huge amounts of end-of-life plastic. It could create a market for some of the opportunities relating to plastic that we have mentioned with regard to the circular economy. The NHS needs help to create a system that involves the remanufacturing and repurposing of products in Scotland at a level that can demonstrate value.

Somebody in the procurement chain might have to spend a little bit more than they are spending now, which is a barrier. Ultimately, though—and this brings me back to the question that was asked right at the beginning—the benefits will be felt through the supply chain. We could be talking about, say, a factory or reprocessing infrastructure—Duncan Simpson has already mentioned PET bottles—in a local economy in Scotland that creates 150 to 200 jobs, supply chains and so on.

That is where we need to get to; we need to start thinking about the whole supply chain and the economic benefit, yes, at a national level but at a local level, too. After all, some of these opportunities can be delivered at a local level—and I am thinking not just about the central belt. They could be delivered in Inverness, in the south of Scotland or wherever, at a scale that really matters to those supply chains. It needs creativity—for people to get around the table, to start thinking differently and to be given the support and, to some extent, the space to step out of the constrained rules of procurement, test and model those ideas, and then come back and say, "We have the evidence and we can make a difference here."

Michael Matheson: Would, as the Highland Council has suggested, a mandated minimum level of recycled content in public procurement give a green light to the sector by saying, "Look—we expect you to push into that area, and we want to see innovation and opportunities being created"?

Iain Gulland: Yes, it would be something like that. Obviously, it depends on the material. We would want to ensure that it is a material asset that is coming out of our economy, so it will be driven by us. We are not just going to—

Michael Matheson: We are not just going to import stuff for the purpose of doing it.

Iain Gulland: For example—and I am going back to the beginning of my career here—there was such a thing in building. There was a minimum recycled content requirement in construction waste—I think that it was about 10 per cent at the time—and people said, "We're never going to be able to achieve that." However, that is what drove a huge amount of the aggregate reprocessing when buildings were being deconstructed in the economy, because there was a market for it. Obviously, the cost associated with getting rid of that material helped, too. Again, we are talking about targeted and specific things.

Looking at this not just from a waste point of view but from an economic point of view, I think that the question that we should be asking is this: where are the materials that we really need? The plan talks about critical raw materials—lithium, copper and all those things—but how do we get them? How do we start to focus on the ones that we have in our waste stream and which we need in our economy? How do we bring all the people involved together?

You are right, though. Putting minimum levels in procurement rules—or whatever you want to call them—will absolutely help.

Michael Matheson: Moreover, if you target this in a particular way and, say, produce things that help to reduce our carbon footprint, it will have a wider environmental benefit.

Iain Gulland: Absolutely, but it is all about looking at the system.

I hope that you will indulge me again, but I remember that, way before the DRS was talked about, I was at a dinner with the cabinet secretary at the time, who was arguing for something very similar with regard to plastics and was talking about putting a minimum level of 50 per cent on PET. At the dinner, there was a table at which a number of brands were represented, and they said, "Yeah, we could do that, but we won't be using the plastic from Scotland. We'll get it from somewhere else and bring it in."

So, technically, that can be done, and we might well achieve something, but unless we think about the whole system, we will still have to dispose of our plastics, because the infrastructure for collecting, separating and processing it will not be available to us. The plastic will be taken offshore or somewhere else; somebody else will get the economic benefit; and it will just be shipped back to us.

That was probably 15 or 20 years ago, and I know that things have changed, but I just use that story to illustrate that we need to think about the system, what we want to do at both ends and how we align and incentivise it to ensure that we get all those benefits. Ultimately, all we are doing is setting an arbitrary target, and delivering it could have unintended consequences. I am not saying that others should not benefit, but in such circumstances, not only do we lose the benefit, but we are still left with a waste stream and we still have to dispose of the material.

Kim Pratt: Through public procurement, Scotland has a huge opportunity to play its role as a good global citizen. As we know, many of the supply chains for the materials that we use in Scotland have serious and extensive impacts, and those impacts are not just environmental but involve human rights abuses. Therefore, we have to think about how we reduce our demand for those materials, in particular, and public procurement can play a huge role in that.

We could see, for example, human rights and environmental due diligence standards set up for public procurement in Scotland, and that could mean Scotland leading the way in producing guidance for businesses around creating more sustainable and fairer supply chains for everybody. The 2024 act places a requirement on Scotland to think about the international impacts of its supply chains, and the UK and the EU are also moving to think about that, so taking such an approach would align with those plans.

Another benefit of taking that approach is that it would force us to think about exactly what materials we are using and how we can reduce the demand for materials such as the ones that Iain Gulland mentioned: lithium, nickel and cobalt. There is huge demand associated with those materials not just in Scotland but around the world, and there is very limited supply.

It is an unaccounted risk, not just in the circular economy section of the climate change plan but across the whole plan, that we do not consider the materials that are needed to build the infrastructure that we need. Transport, for example, relies heavily on increasing the amount of lithium to meet our needs, but there is no plan for how we are going to get those materials. Scotland needs a critical minerals strategy—the UK has one, but Scotland does not.

We need to think more about how we use those materials sensibly and more efficiently so that we do not create a risk for ourselves further down the line where we are not able to meet transport and energy goals because the materials are not there to build the infrastructure that we need.

The Convener: I always say that the enemy of a good committee meeting is not the convener—it is the clock. The committee should bear in mind that my clock is ticking, because we need to get a report out today, too, so short answers and short questions are always helpful. I apologise to anyone that I shut down—as I just shut you down, Iain, by not allowing you back in. Monica Lennon has the next question, and I am sure that she will let you in.

Monica Lennon: I have a few questions, and I want to hear from as many of the witnesses as possible, but you should not feel that you have to answer everything.

My first question is on reuse and repair. I will ask Lucy Wishart to start, and then I will go along the table. If anyone wants to pass on it, that is fine; after all, we are looking at the clock.

The reuse and repair economy has been mentioned a few times today. I am interested in hearing from you whether the policies in the draft plan are appropriate and clear enough with regard to developing infrastructure and building the public and business engagement that we need in the reuse and repair economy.

Dr Wishart: There is one thing that I think is missing, although it is quite hard to put in a plan. It partly goes back to my thoughts in response to the second question about the costs and benefits.

The costs of reuse and repair are often felt in terms of labour. There is a lot of labour involved in reuse and repair, and in Scotland we have not, as yet, found a way of supporting that labour that would make scaling it up economically viable. Excellent work on reuse and repair is happening in local communities, but it often relies on either low-paid or voluntary labour. The work is hugely skilled, and yet somehow we have not managed to address those issues, and we cannot scale it up without recognising the value of that labour within the economy. When we talk about changes in consumption patterns, we often see that labour being shifted to the home. There is then additional labour required in the home, which, again, is not costed. That can have other implications for inclusivity, because different people are taking on different aspects of that labour.

Therefore, something that I think would be helpful would be setting targets, having more data and understanding what happens in reuse and repair in Scotland. Other countries have targets for reuse and repair; I am thinking of Ireland, although it is perhaps not the best example, because there it is more of a starting point, rather than a full ambition. Other countries are trying to understand how reuse and repair work in different places and locations. We could do more of that in Scotland to allow us to support reuse and repair in a proactive way.

12:15

At the moment—this brings me back to the previous panel's discussion on transport—reuse and repair schemes often receive only year-on-year support. As a result, the financial support is unstable, and it has to rely on the good will and passion of individuals. Although that sort of thing is brilliant, I am not sure that it is sustainable in the long term for those individuals or for reuse and repair in Scotland. There needs to be more long-

term, stable support if we are to scale up the excellent reuse and repair work spotted around the country.

Returning to the procurement question, I would like reuse to be included as a target for procurement, along with the 20 per cent for recycling. Indeed, instead of focusing on recycling, we could think carefully about how reuse itself is encouraged within targets. We know that reuse tends to stay in Scotland—in other words, the materials tend to be in Scotland and the social value is increased from reuse.

I am sorry—I do not know whether that counts as a short answer. I will stop there.

Monica Lennon: That was really helpful, Lucy—thank you. Other witnesses might well agree on some of those barriers and on what we need to do to scale up, so I am interested to hear your thoughts on what the targets should be.

I will start with Iain Gulland and then move along the table.

Iain Gulland: I fully agree with everything that has been said. When we talk about reuse and repair, we tend to talk about community-level stuff. A lot of reuse, repair and refurbishment happens within industry, too—industry will work that through.

Thinking about the work that is being done on renewables and so on, I would say that a lot more is happening there. The new industries are still getting their heads round some of the stuff that they are doing, but a lot is being done. The National Manufacturing Institute Scotland, which is based in Glasgow, is very much helping individual businesses consider how they can put reuse and refurbishment into some significantly complex components in their industry. Stuff is happening, but support is needed, as well as the right conditions. I would just point out, though, that there are a number of drivers, including the accessibility of critical raw material, price and the greater emphasis on innovation and technology.

I absolutely agree that a lot more is happening at the community level than we probably give credit for, and it is sometimes not obvious to people what services are available. More support is definitely needed, whether in procurement policy or otherwise, and a lot of that is to do with accessibility and organisations being more visible to us all. We live in a frictionless, convenience society: we want things at our fingertips, we want new stuff delivered to our door, and we want to able to send it back instantly if we do not like it. We need to take the same approach to reuse and repair.

It was interesting to listen to the previous panel's conversation on transport. What caught my attention was the professor from London talking about cargo bike hubs underneath Waterloo station and so on. That type of infrastructure should be supported, whether by local government, national Government or other bodies, to make reuse and repair available and accessible to multiple citizens at different levels. That is what we should be thinking about.

I would also mention the library, which is a hallmark of our high streets and has been since I was a lad—and, indeed, for centuries, to an extent. We need the same availability and infrastructure for reuse and repair. We can talk about money, value and the economic system that supports these things, but this is, by and large, about the availability of the infrastructure to support reuse and repair in the long term.

Monica Lennon: We can all think of community-level examples.

Iain Gulland: Absolutely.

Monica Lennon: There is, for example, R:evolve Recycle in Lanarkshire; my mum is a big fan of the sewing class and some of the craft-based activities there. That is volunteer led, and a lot of those skills are seen as something that people do in their spare time or when they retire.

I just wonder about the education aspect of this, particularly with regard to the manufacturing aspect that you mentioned. Does the plan need to do more if we are going to have that kind of hub in every community? Should the plan help drive that sort of thing?

Iain Gulland: I apologise for repeating myself, but the policy aspects that we are talking about sit in the circular economy strategy. A programme of activity sits behind that, including all the things that Lucy Wishart has talked about. That is the ambition in that strategy, and in the work of Zero Waste Scotland.

We could say that those aspects exist in the climate change plan, but they have not been made explicit. The plan recognises that we need to do more of that but, in order to achieve its targets, we just need to get biodegradable waste out of landfill and reduce the amount of plastic going to energy from waste.

Monica Lennon: We would all like to see to see that. I certainly would.

Iain Gulland: Absolutely—I totally agree. I should say that you will be looking at the circular economy strategy when it comes before you, and the delivery of that part of the strategy should be a focal point.

Monica Lennon: I am trying to hold back from asking more detailed questions, because I want to put my main question to everyone and get on

record your main recommendations with regard to infrastructure, the reuse and repair economy and how we expand public and business engagement. I will go to Kim Pratt next.

Kim Pratt: Reuse is an incredibly important part of delivering on the circular economy. Everybody in Scotland should have access to reuse and repair services; indeed, it should be as easy to repair and reuse something as it is to buy something new. In order to create that kind of environment, though, we need a huge amount of investment in reuse and repair, and it has to be sustained. One way of creating that long-term ambition is to have reuse targets.

As for investment, some of the extended producer responsibility money could be ring fenced for reuse. It is important to remember that there are different types of reuse, and we should be thinking in particular about how we support those small community groups in the third sector to flourish as much as possible. Those groups bring huge social benefits, especially for their local communities, and the question is how we maximise those opportunities.

This brings me back to the point that I have already made about consumption-based emissions. We will not see these benefits being recorded, given how emissions are treated in the climate change plan as it is at the moment, but we will be able to have this sort of thing as a driver if we have consumption-based emissions as a target.

Monica Lennon: Thank you. Duncan, do you have anything to add?

Duncan Simpson: Yes, but I will be slightly controversial. I do agree that Circular Communities Scotland and community groups provide incredible social value, but, because of their nature, such organisations struggle with financing. Moreover, they usually depend upon one or two key individuals, especially in the repair and reuse area, and if those people retire or leave, it leaves a gap in their skills.

Iain Gulland will correct me if I am wrong, but I think that there have been suggestions that the research happening under the circular economy strategy might look at hubs. I would suggest three regional hubs—one in the west, one in the east, and one somewhere on the way north. In the area of electronics, there are already companies out there that do this sort of thing at scale; CCL North, which is close to Monica Lennon's area and is well worth a visit, does an enormous amount of reuse and repair. Those companies do not talk about it a great deal, because they see it just as the job that they do, but they also create many apprenticeships and, as a result, put those training skills back into the community.

GAP Alba has recently opened in Glenfarg, near Perth, but its Tyneside plant has a sister business, GAP Renew, which uses artificial intelligence technology on returned goods. The supply is of high quality, but it is not looking for good pieces at household waste recycling centres; instead, it uses at-volume consumer returns. The company plugs the item into AI, which says, "This machine, or part, will cost this amount of time and labour to repair, therefore it is worth while doing", "This part is unavailable" or "This is going to take you many more hours to repair than the value of the inherent unit." The company creates an inventory of its stock, takes a 3D photograph that it puts online and sells the items straight back to the market. It is the most successful form of reuse that you can have, whether or not you know that it is a form of reuse. The company also supplies social enterprises in its area with all the kit for home starter packs.

Regional hubs with embedded skills for training apprentices who can then go into the community and make repairs will be important, and supply chains can be created through return systems for waste electrical electronics and building and construction materials. Indeed, companies such as Brewster Brothers, J&M Murdoch and others are already involved in that work.

There are other niche areas that Iain Gulland will be more aware of through Zero Waste Scotland's work. For example, there is a big industry growing off the back of offshore decommissioning in which technical kit from Aberdeen and offshore in the North Sea is refurbished and sent to oil works in Africa or south-east Asia. All those types of hubs are driving that economy of scale, and they are not mutually exclusive of the social enterprise sector.

Monica Lennon: Thank you for those examples and emphasising the huge opportunities. As a committee, we will have to think about the recommendations that we will make to the Government and the Parliament about where the plan can be clearer and stronger.

Last but not least, I come to Gary Walker. Do you want to say anything about that, Gary?

Gary Walker: I will try not to repeat what has already been said. Extending product lifetimes and keeping materials in circulation help tackle our territorial emissions as well as the emissions that arise from replacing products at the point of manufacturing, which is very important. Stronger right-to-repair rules, fiscal incentives for repair over replacement, and support for local repair and reuse infrastructure have all been mentioned and are important. We have also touched on producer responsibility, and it is also important to use producer responsibility schemes to favour products that are genuinely designed to last and

are capable of being repaired and having a longer life.

In addition, I want to sound a note of caution about targets. Unlike waste, where we have a fairly good dataset, most reuse tends to happen outside of the waste system, so the data is sparse and it is difficult to understand the amount of repair and reuse work that is being done. Quantifying that sort of thing can be technically challenging, and we would favour having a strong evidence base before we jumped to setting targets on repair and reuse, as that would allow us to understand what is going on in society and the true potential.

Monica Lennon: Thank you. That was helpful.

The Convener: Before you ask your other questions, Monica, I point out that we have exactly 12 minutes left before I will bring the session to an end, so I can give you two minutes, and I will give Bob Doris and Douglas Lumsden five minutes each for their questions, which I think is fair. You can use your two minutes as you see fit.

Monica Lennon: I want to ask about the forthcoming product stewardship plan. We know that it is expected to identify priority problem products and the policy levers that will be needed to tackle those. The plan suggests that the initial focus may be on textiles and mattresses. How can the Scottish Government most effectively roll out product stewardship during the period covered by the climate change plan? Where is UK-wide collaboration likely to be needed?

Duncan Simpson: A clothing route map has already been worked through with the Waste and Resources Action Programme at a UK level. The industry is saying, “We would like EPR,” which is a strange thing for the industry to say. However, rules make the industry do things together, rather than only front leaders taking action. Zero Waste Scotland and others have done a lot of work in that area and on mattresses. It would be relatively straightforward to introduce an EPR system for that; what takes the most time is negotiating with the industry what the solution should be.

A start has been made. If I was being horrible, I would say, “Let’s get on and do it.”

Monica Lennon: I will take brief answers from Gary Walker and Kim Pratt.

The Convener: No—you can take a brief answer from one of them.

Monica Lennon: I will take one from Gary.

12:30

Gary Walker: I will be quick. You referenced the UK policy environment, which is important, because the market operates on a UK-wide, if not an international, basis. We can set our own priorities, and we need to be clear in doing that, but partnership working at that level would be useful.

Monica Lennon: Is that me out of time?

The Convener: That is you out of time. I apologise to you and to Kim Pratt, but I must be fair to Bob Doris and Douglas Lumsden. Bob, you have five minutes.

Bob Doris: This question is directed at Iain Gulland plus one in the first instance. As I speak to Iain, witnesses can work out who else would be best placed to answer it.

I want to ask about the recycling improvement fund, from which Glasgow has benefited greatly—it has received £21 million from that fund. I will not give details of that, but I hope that it will make a step change in Glasgow’s recycling rates.

The fund is nearly spent. Has it been a success? What should the priority be for the remainder of that fund to change what local authorities are doing with regard to recycling and diverting waste from landfill to be processed in Scotland for gasification or other uses?

Iain Gulland: The quick answer is that all the money that has been allocated has now been spent or committed, so there is no additional money in the recycling improvement fund. That five-year programme is coming to an end.

Bob Doris: I did not realise that—my notes do not mention it—so that was helpful to hear. What should the next steps be? Let us play a game: if £20 million appeared, what should the priority be?

Iain Gulland: The recycling improvement fund demonstrated that there is certainly an appetite for local authorities to improve or expand their services, both in geographical reach and into new materials and different socioeconomic groups and housing types. There is definitely an appetite for that, so if there was more money, there would be more investment in infrastructure.

More could definitely be done on reuse and repair. Although it is called the recycling improvement fund, its scope covered reuse and repair opportunities, for which there were a few successful bids.

To go back to the previous point, some of that money could be used to support the type of infrastructure that has already been mentioned.

Bob Doris: I might squeeze out some of your colleagues by coming back in, and I will take Kim Pratt as the second person to volunteer. Earlier, you spoke about the need for capacity to process all that stuff, but is that separate from those issues?

Iain Gulland: Yes, that is the challenge. Again, that is the thing about the system. The recycling improvement fund was a fund to fund local authority collection and infrastructure, but it did not do that. As has been said, it pushed more materials out, but there was not a fund that addressed the issue of what we should do with those materials here in Scotland. Whether we should invest in PET recycling or whatever type of material comes out, we need a different approach.

We need to look at the whole system and say, "We're going to target that material." To go back to Kim's point, we need to target copper, lithium, batteries and small electronic equipment at the kerbside and get that stuff out, and we need to find money from another source to invest in the infrastructure that will support the reprocessing of that material here in Scotland and tie it into public procurement. We should look at different pots of money in a system-wide way. That would be my approach.

Yes, we can invest in more bins, boxes and trucks on the road to take stuff out, but we are not looking at the other end of the issue. With every respect, we are probably putting the material in a container and sending it off to another part of the world.

Bob Doris: Thank you. I agree with all that. I am sorry that we were not able to have a discussion; it was almost like a speed-dating session. Kim, do you have anything to add?

Kim Pratt: The real test of whether the fund has been a success is Scotland's recycling rates, which have not improved for more than a decade. One example of how the fund has been used is the soft plastics recycling plant in Fife that went into administration seven months after it opened. There is no clear explanation as to why that happened.

I would say that these funds are not being used very well at the moment. One of the huge risks around recycling in Scotland is the fact that there has been a big increase in incineration. If we are burning waste, that means that it is not there to be recycled, which will be a huge problem for Scotland if it wants to increase its recycling rates.

Bob Doris: I am sorry, Gary, but I must move on. You can bid for my final question, if the convener gives me time to ask it.

The Convener: You have 30 seconds.

Bob Doris: Well, I will ask the question, and people can roll their eyes. If they do not get the chance to come in, I apologise.

The key commitments on recycling include the new statutory code of practice that the Circular Economy (Scotland) Act 2024 provided for, which is expected to come in in 2026. What practical changes will need to be made to support the waste management sector to ensure that we have a more consistent regime across the 32 local authorities in Scotland? After all, that is what the code of practice is supposed to secure. No authority should be left behind, and there should be consistency in relation to recycling.

There is much more to the question than that, convener, but I do not have time to ask anything else. To be honest, I feel that this is all a bit rushed.

The Convener: Does somebody want to give an answer on that? Just one person, please.

Gary Walker: I am probably not best placed to answer that question. Zero Waste Scotland is working with local authorities on the co-design of the household waste recycling plan, so it is probably best placed to answer that question.

Bob Doris: Quite frankly, it is only half a question, given the time that we have left. Does anyone else wish to comment? I realise that this is far from satisfactory.

Duncan Simpson: If you were going to spend money on the code of practice, the best thing that you could spend it on would be clear communication to the householder. There has not been a great deal of time to communicate the new system, how to use it and get the most from it, and where the benefit from the materials will come from. With regard to the EPR system, a lot of money will be going into a national conversation on these matters, and I would just say that, at a Glasgow level, the more Glasgow knows about its waste and what people do with its system, the better the quality we will get at the back end.

Bob Doris: I am finished, convener. My apologies for the dreadfully rushed questioning.

The Convener: I must apologise to you, too, Douglas.

Douglas Lumsden: Thank you, convener. First, I have a question for Gary Walker. SEPA has said that it will not fully enforce the landfill ban on biodegradable waste until 2028, but the Government seems to have baked in the ban from the end of 2025. Given that, are the figures that it is presenting still credible?

Gary Walker: The figures are still credible, particularly when you consider that the delivery of the plan and the emissions reductions comes in four to five-year phases. We certainly remain focused on delivering the ban. The impact of not taking the regulatory position that we have taken would be carbon emissions in other territories—through landfilling in England, for example—and the additional transport carbon costs that would be associated with that.

Although the achievement of those targets is being pushed back by up to two years, it is still within the timeframe that is set out in the plan. Moreover, thinking of the Climate Change Committee's recommendations, I would say that we can still deliver those emissions reductions by 2028.

Douglas Lumsden: I am struggling to understand how those carbon savings can be made if biodegradable waste is still going to landfill.

Gary Walker: They will not be made. Opinions vary on the actual gap with regard to residual waste capacity, but we estimate it to be about 300,000 tonnes per annum. In other words, 300,000 tonnes per annum could continue to go to landfill over the next two years. There might be emissions associated with that, but they will close off in 2028.

Douglas Lumsden: Yes, but it will be two years before that happens.

You made the announcement before the Government released the plan. Did you have discussions with the Government before that? Was it aware that what it was putting in the plan would not be achievable, because you were not going to enforce the ban for two years?

Gary Walker: I am not sure of the timing of the drafting relative to the conversations that we had, but there were certainly conversations involving Zero Waste Scotland, the Scottish Government, the industry and ourselves. This was obvious to everybody, because of the conversations that took place in the six months leading up to the announcement by SEPA.

Douglas Lumsden: I would like to dig into that further, but there is no time for that.

My next question is about energy from waste. Are the assumptions that are made in the plan about energy from waste credible and achievable? I am thinking of, for example, carbon capture and storage, so perhaps I will direct the question to Duncan Simpson in the first instance. When it comes to carbon capture and storage, do you think that the assumptions that are made on energy from waste will be borne out?

Duncan Simpson: I think that the technology is emerging and that the capability exists, although it will be harder to achieve than many people think. I also think that the industry and the Government are working towards trying to reduce the emissions that arise from energy from waste, given the ETS and the other drivers that charge for high-carbon material going into energy from waste. It is important that we work with Government, industry and other bodies to ensure that alternatives are put in place in the interim.

The capacity for energy from waste is there or thereabouts in Scotland, but there will be a need for it. Because of the ETS, we should be focusing on getting those plants to work well and linking them into the grid, into heat networks and into carbon capture facilities. Ahead of that, we should also have plans for dealing with, and removing, plastic and other high-carbon materials before local authorities and others have to pick up any costs.

Douglas Lumsden: Is the technology for CCS there just now?

Duncan Simpson: I, personally, do not believe that it is.

Douglas Lumsden: Kim, I will come to you—

The Convener: No, you will not. I am really sorry, Douglas—I do apologise. If I were sitting around the table as a committee member or as someone giving evidence, I would be disappointed about the meeting being ended there. However, I have no option: we are on incredibly tight timescales to do all the things that the committee has to do. The climate change plan is perhaps the biggest example—we have only until the end of February to do the work on it, as well as all our other business.

I thank everyone who has given evidence this morning for their time and for the details that they have provided. As convener, I apologise to you for not having enough time to get all your answers, and I also apologise to committee members for cutting them short, but we have a report to get through straight after this evidence session.

I now move the meeting into private session.

12:41

Meeting continued in private until 12:53.

This is the final edition of the *Official Report* of this meeting. It is part of the Scottish Parliament *Official Report* archive and has been sent for legal deposit.

Published in Edinburgh by the Scottish Parliamentary Corporate Body, the Scottish Parliament, Edinburgh, EH99 1SP

All documents are available on
the Scottish Parliament website at:

www.parliament.scot

Information on non-endorsed print suppliers
is available here:

www.parliament.scot/documents

For information on the Scottish Parliament contact
Public Information on:

Telephone: 0131 348 5000
Textphone: 0800 092 7100
Email: sp.info@parliament.scot

The Scottish Parliament
Pàrlamaid na h-Alba