OFFICIAL REPORT
AITHISG OIFIGEIL

DRAFT

Rural Affairs and Islands Committee

Wednesday 14 January 2026

Session 6

The Scottish Parliament
Pàrlamaid na h-Alba

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RURAL AFFAIRS AND ISLANDS COMMITTEE
2nd Meeting 2026, Session 6

CONVENER

*Finlay Carson (Galloway and West Dumfries) (Con)

DEPUTY CONVENER

*Beatrice Wishart (Shetland Islands) (LD)

COMMITTEE MEMBERS

*Alasdair Allan (Na h-Eileanan an Iar) (SNP)
*Ariane Burgess (Highlands and Islands) (Green)
*Tim Eagle (Highlands and Islands) (Con)
*Rhoda Grant (Highlands and Islands) (Lab)
*Emma Harper (South Scotland) (SNP)
*Emma Roddick (Highlands and Islands) (SNP)
*Evelyn Tweed (Stirling) (SNP)

*attended

THE FOLLOWING ALSO PARTICIPATED:

Jackie Baillie (Dumbarton) (Lab)
Claire Daly (WWF Scotland)
Dr Vera Eory (Scotland's Rural College)
Nim Kibbler (Scottish Agroecology Partnership)
Edward Mountain (Highlands and Islands) (Con)
Emma Patterson Taylor (Scottish Agricultural Organisation Society)
David McKay (Scottish Environment LINK)
Professor Dave Reay (University of Edinburgh)
Lorna Scott (NFU Scotland)
Donna Smith (Scottish Crofting Federation)

CLERK TO THE COMMITTEE

Emma Johnston

LOCATION

The Mary Fairfax Somerville Room (CR2)

Scottish Parliament

Rural Affairs and Islands Committee

Wednesday 14 January 2026

[The Convener opened the meeting at 09:05]

Draft Climate Change Plan

The Convener (Finlay Carson): Good morning, and welcome to the second meeting of the Rural Affairs and Islands Committee in 2026. Before we begin, I remind everyone to turn their electronic devices to silent. I put on the record that Emma Harper joins us remotely today.

The first item on the agenda is an evidence session on the Scottish Government's draft climate change plan. This week, we will focus on the agricultural chapter of the draft plan by taking evidence from two panels of witnesses.

First, we will hear from a panel of stakeholders from the agriculture sector. I welcome to the meeting Emma Patterson Taylor, project manager, Scottish Agricultural Organisation Society; Donna Smith, chief executive, Scottish Crofting Federation; Lorna Scott, senior policy manager for climate, land and business, NFU Scotland; and Nim Kibbler, Scotland manager for the Nature Friendly Farming Network, representing the Scottish Agroecology Partnership.

Edward Mountain MSP will join us later in the meeting, and he will have the opportunity to ask questions at the end of our questions.

As always—sadly—on this committee, we are limited in time. I therefore ask members and participants to be succinct with their questions and answers. I remind witnesses that they will not need to operate their microphones, as a gentleman will do that for them.

I will kick off with a fairly broad question. Emissions from the agricultural sector have broadly remained stable since 2020, despite earlier predictions of decline. What is the main reason for the gap between policy expectations and on-farm outcomes?

Donna Smith (Scottish Crofting Federation): Broadly speaking, it is probably that, although there are high-level policy intentions, we have not seen that follow through into what has been delivered in relation to agricultural support and where things might change to encourage folk to change their working practices. We seem to be stuck largely on an as-you-were basis, which I suspect is driving that lack of change.

Emma Patterson Taylor (Scottish Agricultural Organisation Society): I echo that point. There are policy expectations and then there is industry doing what it does. If policy wants industry to change, it has to implement policy that will engender change in the industry. Simply having a general expectation and hoping that the industry will follow does not work. Farming, in particular, looks for very clear signals about what it is expected to do in the long term, and I would argue that those signals have not been given in any significant way.

Lorna Scott (NFU Scotland): It is important to recognise that agriculture, by its very nature, will always produce some form of emissions. It is therefore important to emphasise that we should be seeking to reach net zero, rather than absolute zero, for the sector.

Significant efforts can be made in terms of efficiencies in the sector. However, it would be helpful to also take into account the sequestration that already happens on farm through soils, peatlands, on-farm woodlands, hedgerows, grasslands and so on but that is not accounted for at the moment, as the two are separated.

The Convener: The committee has previously discussed this issue. It is not clear what the agricultural reform route map is delivering or what the pathway is. We have heard about falling off a cliff; the road has certainly come to an end, because there has been no clear indication about the pathway.

This meeting comes in good time, given the budget statement yesterday. The NFUS said that the budget "falls short" of what is required to deliver food, climate and nature outcomes and that it

"essentially flatlines vital direct support".

Is that one of the factors behind why the emissions decline has not continued and has flatlined? Are emission levels flatlining because the funding is not there to back up the decline, or is it more to do with policy confidence?

Lorna Scott: It is a combination of the two. We got the budget only yesterday, so we are still going through it and will need a bit more time to properly process it. However, we need to be aware of how many different things we are now trying to deliver through agriculture. We need to make sure that we are onshoring emissions from food production and not offshoring them through imports, which would have a significant negative environmental impact—we need to recognise that—and also a wider socioeconomic impact.

More widely, agriculture has a fundamental role in rural Scotland. This is a difficult question. We need more information on policy, and financial

support is crucial for incentivising further action. The sector is increasingly expected to deliver huge outcomes, which is a challenge.

The Convener: In recent weeks, we heard about the resignation of members of the Royal Society for the Protection of Birds and Scottish Environmental LINK from the Agriculture Reform Implementation Oversight Board, which was the go-to body for helping to inform future policy. How confident are you that the Government has the right people in place to deliver at pace? Ultimately, the longer it takes to put policies in place, the further and harder the policies will hit. Has inaction over the past five years led to the decline in the reduction of emissions?

Nim Kibbler (Scottish Agroecology Partnership): Fundamentally, yes. It is an issue of ambition versus the reality gap of implementation. As outlined, the climate change plan relies heavily on an agricultural reform programme and tools such as whole farm planning to deliver that ambition. However, the way in which the delivery routes and tools have been implemented has been too slow. The route map has lost the confidence of the industry. It is too fragmented, and you cannot underpin long-term business planning if you do not know where things will go after 2030.

Documents such as the climate change plan have unrealistic uptake assumptions for the agriculture sector. The plan's analytical annex assumes a 45 per cent uptake of mitigation measures. That is not achievable for farms with regard to the way in which the industry is currently responding to the challenges that it faces. Without a credible road map or stronger incentives, the plan will always be an assumption rather than an actual plan.

The Convener: This is my final question before we move on. Following the budget announcement yesterday, organisations such as Scottish Land & Estates have said that rural businesses, which are being asked to deliver climate and community outcomes, have been given "little confidence" by the flat line in the budget. Will the gap between policy expectations and on-farm outcomes narrow or increase as a result of the climate change plan and the effects of the budget? Will it get bigger or smaller?

Lorna Scott: That is difficult to say. As I said, we need to go through the budget a bit more clearly, because we first saw it yesterday.

The Convener: Your organisation said that the budget "falls short".

Lorna Scott: Yes, I know. Again, it is about the multiple outcomes that we are expected to deliver. Climate mitigation is one aspect, but adaptation is becoming increasingly vital for business resilience. The investment that will be needed for adaptation over the long term is only going to increase. The important question is where we are putting investment in place for businesses to remain sustainable and profitable. However, the pressures are significant.

09:15

Donna Smith: Again, we have not had time to look at the budget properly, but we have repeatedly pointed to the shortcomings of the agricultural reform programme. The core issue is that, despite all the rhetoric about sustainable and regenerative agriculture, there is still not a plan for how people can achieve that. Therefore, it is hard to say, from looking at the budget, whether the gap between expectations and outcomes will narrow.

For instance, we are still maintaining the same level of basic payments, but we are not diverting more money to things such as agri-environment schemes. Until we see such a shift, there will not be a broader shift across agriculture, because, as everyone has said, no one knows where they need to focus their energies.

The whole farm plan, which was touted as a measure that would reduce emissions, was brought in, but it is not working. In the first year, certainly in a crofting context, we have seen that many of the whole farm plan elements do not help people to achieve any improvements. In fact, all that the whole farm plan has done in the first year is fill the pockets of a lot of agricultural consultants who have been paid to do plans for people that tell them that they cannot improve anything. All the right information needs to be processed to give people the right advice to make changes, but we would argue that that is not happening with things such as the carbon audits.

There has been a lot of talk. For me, the budget is neither here nor there. We need to look at the budget to ensure that the money is pointing in the right direction. At the minute, it is, in effect, all pointing to the status quo, so how will that result in any change?

The Convener: I put the same question to Emma Patterson Taylor. Do you have any confidence that the gap between policy ambitions and on-farm outcomes when it comes to climate change will narrow?

Emma Patterson Taylor: No, I do not. I echo what Donna Smith has just said. I cannot really comment on the budget, but I do not think that it is the critical thing. The critical thing is what is in the climate change legislation and what people are compelled to do. Unless a meaningful shift is driven in that regard, it simply will not happen. I do not think that we are seeing any evidence that

there are strong enough drivers to bring about a meaningful shift at the industry level.

Nim Kibbler: We, too, have real issues. If we take a high-level look at the budget and then look at what we need to do as an industry, those two things do not seem to be in agreement.

There needs to be an understanding of what efficiency will look like in a farming context and how that will lead to climate change mitigation. We need to ensure that businesses in the sector continue to be profitable. A lot of people are already doing a lot of things, but the policy does not reflect that. I mentioned the ambition. Given what they are doing, many farmers would already have quite high baselines on carbon sequestration, animal welfare and meeting some of our climate challenge changes, but that ambition in the industry is not reflected in the policy.

The Convener: Thank you. We will move on to look at some of the policies in more detail, on which Emma Roddick has a question.

Emma Roddick (Highlands and Islands) (SNP): Emma, you touched on what is missing when it comes to driving change in a policy sense. Are there any policies that you think are missing from the climate change plan?

Emma Patterson Taylor: What is missing is a list of the mitigation measures. I cannot remember how many there are, but there is a whole host of them. Pulling those in has been delayed, so that whole process has been pushed down the road. None of those measures is there. There is no sense of, "There you go, farmers. Select from this menu, start implementing and start measuring." That can has been kicked down the road. That is my issue. That delay means that the industry will lose time.

In addition, as Nim Kibbler has just said, there are lots of things that farmers are doing at the moment, which could start to be reflected now, but that is not happening.

Emma Roddick: Is there perhaps a resource missing that would link the plan with the end user by telling them how they could reach a certain target by a date that seems really far away?

Emma Patterson Taylor: I know that you cannot go back in time, so it is not helpful to talk too much about that, but I suppose that I would say that there is a missed opportunity with that delay. To me, that is the biggest issue. If you are trying to resolve that in some way, you could talk about trying to bring in those measures, and start discussing them, sooner.

The Government has made it quite clear that that there will not be any kind of penalty for lost time. It is not as if the Government is saying to farmers, "Don't do this, and then suddenly do it in 2030." Let us start talking about it now, in that case, and get a head start. I worry about the 2030 Neverland approach of saying, "Oh, and then suddenly," because that is what climate change has felt like for the past 10 years or so. It has been about saying, "Oh—suddenly we will arrive, and these things will happen." That is simply not the case in any sector and possibly it does not work like that in agriculture in particular.

Nim Kibbler: That is a key point. The change is already happening at the farm level—climate change is happening, and it is changing how we farm, including how crops respond and whether certain inputs to the farm do or do not work.

There are also significant changes in markets that we are simply not responding to at the policy level in order to ensure that our farm businesses are environmentally resilient and thus economically resilient for the future.

The Convener: Would anyone else like to come in?

Lorna Scott: I suppose that it would really help—to go back to what we have already touched on—to recognise the work that is already being done within the audits and assessments. I can speak about the carbon audit on my farm. We have peatland and woodland on the farm; we put the woodland in specifically to provide livestock shelter and better water management and so on, aside from the carbon storage benefits. However, those benefits are not accounted for anywhere in my farm assessment.

Mitigation, in particular, is not within the carbon audit at all. I think that it would help to promote confidence in the industry if people feel that they are being recognised and rewarded for what they are already achieving. That would definitely help.

Alasdair Allan (Na h-Eileanan an Iar) (SNP): You have all mentioned that the national vision around reducing carbon emissions from agriculture involves reform—that is, change—on the part of farmers and crofters. You have kind of answered this already, but perhaps you can say a wee bit more about it. To what extent do you feel that that aim is realistic? Can you give some practical examples of what the sector is doing by way of reforming its practices that might help it to get there?

Nim Kibbler: That is a question of resource efficiency. What concerned me when I was reading the climate change plan was whether we are just talking about technological solutions to a high-input, business-as-usual model of farming, crofting and growing in Scotland. That is not necessarily

favourable for the Scottish environment, nor for the food and feed industries for which we produce.

We need to redefine this efficiency as resource efficiency, not just maximum output per unit. If we continue down the route of getting as much as we can grub out of the land, we will find ourselves in real danger in the next four years. We are not going to account for carbon sequestration, soil regeneration, healthy livestock that will produce lower emissions or local food that is not trucked around the country to be processed at one end before going back to feed someone somewhere else. Alternatively, we are going to go to smart sheds and offshore all of our emissions somewhere else, which is completely morally reprehensible.

Donna Smith: I would back that up. As we keep saying, there is currently no firm plan to make any significant changes to agricultural support until 2030, so we are, therefore, not sure how the 2030 milestone in any route map will deliver any meaningful change.

We are also concerned that agricultural reform may not currently be looking at the full holistic picture. We were just talking about all the good things that are happening that are not currently taken into account in the information that people have been asked to provide. In addition, we are not really talking about multifunctional land use for food production, carbon storage, nature restoration, water management and all those things.

As Nim Kibbler touched on, there seems to be a focus on efficiency by means of higher throughput and technical fixes. However, technical fixes are not going to work for everybody—for example, in the crofting context. In general, crofters are not using machinery and stuff like that. They are already operating in a high-nature-value extensive system, and that needs to be recognised and encouraged, so that we can perhaps see more of it across the country without having to employ technology to achieve great strides forward.

There is muddled messaging, and—as we are all going to keep saying, I think—there is not currently, as we sit here, a clear path for how people are going to move towards the things that we want to achieve.

Alasdair Allan: You mentioned some of the things that the sector is doing off its own bat, if you like, to reach these aims. I appreciate the separate point that you make about Government support and so on, but it would be interesting for the committee to hear a wee bit about the things that the sector is doing to reform itself.

Nim Kibbler: Our thing is the holistic context. It is sometimes difficult to talk about this, because there are many different growing and farming contexts in Scotland. I am thinking, "Do I talk about dairy?" But then, that can be quite a high-tech sector—

Alasdair Allan: I am just looking for a few examples.

Nim Kibbler: I guess we focus on the soil and work up from there, as healthy soil supports the rest of the system, and we work on an agro-ecological basis. In a farming context, I do not think that there is disagreement that soil health is the driving factor on our farm—we are unanimous on that.

It is about thinking of the farm as a whole. The whole farm plan was supposed to be the tool that got us as an industry, collectively and nationally, looking at that context. However, the way in which it has been delivered has, unfortunately, pushed people away from that. It is creating concern.

Emma Patterson Taylor: I almost want to answer the question by slightly repeating myself. Until there is a really clear steer from Government, you will see quite a strong degree of hesitancy across the board in farming. That does not mean that there are not individual farms doing a lot of things—there absolutely are—but you will definitely continue to see that hesitancy until they get a clear steer.

With regard to the measures, I would say—to echo Lorna Scott's point—that there are two sides to the coin. On one side, there is all the sequestration stuff. Farmers are frustrated about that because it is not accounted for and is not acknowledged, and I would argue that it needs to be dealt with in some way.

On the other side, there are the mitigation measures that are coming but are not here yet. There is a real issue with the mitigation measures; they could achieve emissions reductions that would be represented in the inventory, but they are not tested yet, so they are still a little arbitrary. There is a list of the measures that, it is academically agreed, all hold value. However, because we are not yet doing those things, we do not really know to what degree, in Scotland, they are going to give good wins.

The sector will continue to be efficient and drive its inefficiencies in its own ways. Some of those will achieve climate change aims, but until there is a stronger, clear steer, they will hold a financial focus as much as anything else, because the businesses have to survive.

The Convener: There is a supplementary from Ariane Burgess.

Ariane Burgess (Highlands and Islands) (Green): Nim, you talked about soil being a driving

factor in the overall—you used the word "holistic"—practice that you and other farmers in the Nature Friendly Farming Network use. In the whole farm plan, there is a soil test that farmers can opt into voluntarily. However, it is surprising to me is that farmers do not test their soil, if soil is a driving factor. That testing is currently optional. What more do we need in place?

There is a spectrum of people, ranging from those who have never tested their soil all the way to Mr Griffin down in the Borders—I cannot remember his first name—who tests his soil to an incredible level. What more would we need, by way of support, training and so on, to help farmers to move to an understanding that soil really is a direct, driving factor?

09:30

Nim Kibbler: That is there, and it is coming through the industry. I do not think that we need to worry too much. There will always be a recalcitrant bunch in any industry who do not want to change—and that is fine; we should let them do what they want to do. You cannot bring everyone with you.

The main thing to consider is the uptake of soil testing, climate change mitigation and sequestration. That depends on ARP development, and on co-operation and collaboration at the farm level. Part of what the Scottish Government needs to do with the tier 4 stuff that is developing is reassess the farming advisory and support landscape to ensure that we are all learning from each other. Rather than allowing us to polarise and fight over the budget—like how we all went off and did our assessments yesterday—we should get in a room together and work out what is practical. We are all practical folk after all.

The Convener: I have a feeling that there is a lack of enthusiasm here. This discussion is really flat, which makes me think that everybody is sort of shrugging their shoulders. The draft climate change plan that we are scrutinising is an incredibly important document, because it could affect the pressures that will be on agriculture over the next 10 or 15 years. We have to report on the plan as a matter of urgency.

Alasdair Allan's question is really important: it will be important to your members, because the Government sees agricultural reform as the most important driver for emissions reduction. I am getting a sense of "I really don't know" from you guys. We have had 10 years at this.

I will ask you this question, Lorna. Do you and your members believe that the current programme before us is capable of delivering the scale of change that we need, and which the climate change plan sets out? We need to know more. The committee will have to pull together a report and, ultimately, in a few weeks' time, we will have to vote on whether the climate change plan is fit for purpose. We have a climate crisis. We need to get a little bit more here. I am not being disrespectful, but you are shrugging your shoulders and saying, "Well, we are where we are. We are doing a bit of this and a bit of that." This is a critical matter, however. We need to find out whether you believe that your members think that what we have in place here in the draft plan is capable of delivering what the Government expects of the industry.

Lorna Scott: It is going to be a challenge. We need to keep at the forefront the point that businesses need to be profitable in order to survive and then to deliver on the outcomes that we are talking about. That is important, first and foremost.

Coming back to the soils point, that is a good example of a win-win for business and the environment. We are seeing a big uptake, in our membership and across the industry, of folk on the farm and on the ground ensuring that they are spreading the right fertiliser or minerals that are needed in their soils, because that improves the fertility and it is good across the board. We are seeing a good uptake in that. There are more things where that approach is possible, with multiple benefits from a business perspective and an environmental one. That is where we will see more uptake and better results.

Yes, that is a challenge. Viewing it more holistically will be beneficial, as we have all spoken about. Sequestration is really important, as are investment and doing things in an integrated manner—and I am sure that we will come on to on-farm woodlands and so on. Getting multiple benefits for business resilience and the environment will be important, but it is a challenge.

I would echo what we have spoken about in terms of the technology stuff. At the moment it is not really economically viable, and it is developing, so it is difficult to get a measure of how effective it will be.

The Convener: Emma Harper has a question that follows on from my questions.

Emma Harper (South Scotland) (SNP): I am interested in finding out what we need in the rural support plan that supports actions that the Government wants to take in the climate change plan. What specific information in the rural support plan would make you confident that agricultural policy will provide agriculture with a clear direction of travel and support a just transition to low-carbon farming?

A lot of farms out there are achieving a lot. There are anaerobic digestion plants on dairy farms in the south-west of Scotland that are using their own

digestate, creating biogas and using it as part of achieving their net zero goals. I am interested in hearing specifically what we need to see in the rural support plan.

The Convener: Nim, do you want to kick off?

Nim Kibbler: What do we need to see in the rural support plan? I guess that all our members in SAP would say that, essentially, agriculture in this context is an issue of rural and just transition, so it is an issue of rural justice. At the moment, we are seeing too many urban copy-and-paste solutions for the rural environment. The technology is not developing at the rate that it needs to, and what is being developed by the agritech industry will not necessarily work in all Scottish contexts, because it is driven towards high-input intensification machinery that will be unaffordable unless the Government steps in and either supports research and development or supports things like machinery rings so that agriculture can move towards net zero.

The other issue that we have is that SAP represents a lot of smaller farmers, growers and family farms, and a lot of them will continue to work on their own interpretations of what climate change and climate-mitigating farms will do, but they will opt out of subsidies and the tools that Government uses to drive that change because they are disillusioned with it, which is why we are all a bit "Meh."

Emma Patterson Taylor: I go back to the convener's point that we are sitting here shrugging shoulders and that you are picking up on some flatness. Forgive me, but I am going to be quite direct. I also ask Lorna Scott to forgive me on this.

We have quite a little industry that has a strong lobbying organisation that is very close to its minister. It is very important to the minister and very important to the industry that the relationship works. It is pretty tight. It has always been tricky for the Scottish Government and ministers to deviate too far from the voice of the industry in that function, so it tends not to do it. That is tricky, because—I do not want to go all Mary Poppins on you—it is like taking your medicine. Mary Poppins needs enough distance from the children to make sure that what needs to happen happens. If you stay too close and too tight, you end up with only what the industry is able to publicly say that it is willing to do, and the level of that is always going to be less ambitious than it needs to be.

We know that, across sectors, but particularly in this one, that leap cannot happen if we just have what can say publicly that they are willing to do. There are big membership groups—we all have membership bodies. We all have interests that we need to take care of and be mindful of. That is why we have a climate change plan that is not ambitious enough and is delayed to 2030, which is way too far out.

Emma Harper asked what needs to be in the plan. The measures that I hope are coming in 2030 need to be in the plan. That is tricky, and not everyone is going to agree with it and say, "Yes, please, bring this in and bring it sooner", but that is the problem that you are seeing across sectors, and you are also seeing it here.

The Convener: I am going to come to other members, but Emma Roddick has a supplementary question.

Emma Roddick: I do. I want to pick up on that and go off on a slight tangent. Are there issues with that voice that you are talking about and different areas of Scotland not getting their say or not being factored in to policies? Is that a concern that you have?

Emma Patterson Taylor: Not particularly, but I am not saying that I am the authoritative voice on whether that is happening or not. The issue that I have felt more keenly about, over the past 16 years working in agriculture, relates to the observation that it is tricky when the Government—I work for the Scottish Government as well—and ministers are close to an industry, so what do you do about that? I do not feel that it is misrepresentation or that people are being missed out; it is more that sometimes you have to lead, which means stepping out and beyond and doing things that are, frankly, unpopular—you cannot always be liked, sadly. That has consequences, and we all have elections, so I know that the dilemma is real.

The Convener: Does that shine a spotlight on the failure of the likes of ARIOB? Does that show that co-development is actually just smoke and mirrors, because there is a necessity for the industry to work or to be seen to be working closely with Government?

Emma Patterson Taylor: It does not have to be, and it is okay to work closely. It is great to have that relationship. It is really positive, but you still need to be able to hold a line. The line cannot blur. It is a dilemma.

Donna Smith: That goes back to the point that I made earlier about the agriculture budget. We are still sitting X number of years down the line, with the vast majority of payments going to people just because they have land, rather than it being aimed more at how those people are going to change their practices.

We need to make agri-environment climate schemes more of a focus and make them more accessible to smaller units. At the minute, it is difficult for small units and crofts to get on to the scheme. They do not get enough points because

they are not doing things at scale, but they might be able to achieve good things with that support.

There has been no shift at all, and that is the frustration. The rural support plan was published before Christmas, but all it does is say exactly what we are already doing and what we have been doing for the past few years. There is no shift there, and we are now talking about there being no shift until 2030.

People want to do stuff, and people are doing great stuff, but they are not acknowledged and rewarded for that. They keep getting told that, when the new support systems change, they will be rewarded for the good stuff they are doing, but there is no change. That is where the frustration comes from. You are right that we are all a bit unsure, but it is because there are no clear indicators yet of where people need to head. The people who are doing the good stuff feel more and more frustrated that nobody is recognising the work that they are already doing. We seem to be stuck, and we need to get unstuck if any of this is going to move on and achieve anything.

Lorna Scott: The delivery will be through the future support framework, as Donna Smith has just said. We need to see what the policies will look like and where the funding will be allocated to better understand how the climate change plan can be delivered and what farmers and crofters will be expected to do.

On Emma Patterson Taylor's point, it is important that industry and Government work together, and we will continue to be collaborative and constructive as much as possible. Our whole job is to represent our members' views, and we take that very seriously, so we will of course try to do that as much as possible.

Tim Eagle (Highlands and Islands) (Con): Did you see a copy of the rural support plan. It has not been published, so have you seen a copy in the background?

Donna Smith: I have seen a draft copy.

Tim Eagle: Oh right. Have we seen a draft copy? I do not think that we have seen a draft copy. If anybody wants to send that on, please feel free, because I would love to see a draft copy of the rural support plan.

I should probably declare an interest. I am an active farmer. I say that I am an active farmer, but I have barely anything left. I feel that I have done, and my neighbours have done, everything that we have been asked to do for the past 20 years. We were members of the countryside premium scheme, the environmental stewardship scheme and the AECS, and we have been in tiers 1 and 2 constantly.

I guess that some are saying that ministers are not making the tough decisions that they need to make, but, equally—you are obviously still going through the budget, but I had a quick look at it yesterday and the big numbers do not lie—there has been no change in the budget. When we come to the just transition question that our discussion has hinged on, we see that there is no money there, either. You cannot have a cliff edge—I think that that is the point that the NFUS has always made, is not it? If you have a cliff edge, you get the devastation of crofters and farmers across Scotland, because loads of people just fall off. What would that look like? I guess that, to get what you all seem to be driving at, you think that there needs to be an extra bit of just transition funding in place.

09:45

Donna Smith: There just has to be some movement, because there has been none. I do not think that any of us are saying that we should suddenly jump to a cliff edge, but there has been a period of years when there could have been a gradual shift from land-based funding to something else, yet there has been no shift. Let us start to see a gradual shift.

This year, we have had the future farming investment scheme, which was a great opportunity for folk. However—let's face it—I think that we all now accept that it was rushed, and it was perhaps not well designed. Looking at the figures, it seems as though a lot of the awards went to fund intensive precision farming that is reliant on technology and stuff like that instead of there being a focus on more sustainable regenerative things.

There seem to be mixed messages, and there has been no shift. We are stuck paying the vast majority of people for just having the land in tier 1, and we are not seeing any of that money start to shift to support change, so let us see it shift.

Emma Patterson Taylor: There is no need for a cliff edge; that is exactly the point. There is a sense of fear around a cliff edge and the thought of, "Oh, goodness. People have been lost, industries are crashing and people are moving out of rural communities that we want them to be in." It feels as though that has caused a sort of paralysing fear, which then means an approach whereby we must not have a cliff edge so we continue to defer. That is a climate change dilemma across the board, but it is really important in this context, and leadership is required. I think that Donna is right: there has not really been change.

Please forgive this addition. Tim Eagle was saying that he has done everything—I do not mean that in a personal sense—but perhaps what we are

trying to say is that what has been there has not been enough.

Nim Kibbler: I want to talk about the cliff edge thing. It is difficult for us in the industry at the moment because there is a sense of intense fear and worry coming from our members, and I think that that is being used to avoid change. Environmental change is happening, and there is change in markets and in the environment that all our farmers are operating in. I find it slightly funny that we are talking about not carbon capture but policy capture and whether that is a factor in this, too.

Tim, I would love to come to your farm and see what holistic approach we could have a look at.

Tim Eagle: I want to ask one more question. We have had the minister at the committee a couple of times. I do not want to get too political, but he will often say, "Oh, if you could see what's happening down in England—it's all a disaster." However, England has made a very big change, as has Wales, for that matter. Constitutional question aside, and whether or not you agree with everything that they are doing, do you see the fact that they have made a big change as positive? Has Scotland held itself back by not being prepared to make a big change?

I am not saying that I agree with that, by the way. I am just curious to hear your thoughts.

Emma Patterson Taylor: Yes, we have held ourselves back by not being willing to make a change. My comment is not to say that we should do what England did or anything like that. We obviously want the change to be right, but, if there is no change, we are in stasis. I think that that is why you are getting the kind of energy that you are getting.

Tim Eagle: The energy is picking up, I think.

Emma Patterson Taylor: Well, great—wonderful. However, that needs to go somewhere.

The Convener: My feeling is that we have an agriculture bill that was passed last year and it is yet to be really implemented.

The Scottish Government's flagship policy in that was to retain basic payments at 70 per cent. This year, however, that has been cut in real terms, so there is no additional support whatsoever for climate change or a just transition. The figure of 70 per cent of the total agriculture budget has dropped, and the support is not targeted. It would appear that, going forward, there will be a lot more stick than there will be carrot to encourage farmers to do the right things, which is concerning. The rural support plan will have to pull the rabbit out of the bag to allow the industry to deliver what the Government thinks is the primary driver for achieving our climate targets.

Nim Kibbler: That is a good point. We have talked a bit about the budget yesterday and the public purse strings in relation to the stick and the carrot. There is less stick and less carrot than there used to be. We need to talk a little about how we can balance the reduction of public support to drive the change that we need with the issues of subsidy and business security for our members. We also need to think about how the Government and we, as a nation, look after our members as private finance comes in to fill that void. I do not think that we are having enough of that discussion at the moment.

The Convener: Thank you. I will move on to a question from Ariane Burgess.

Ariane Burgess: It has been an interesting conversation so far. I can predict the answer to this question. The plan assumes that around 45 per cent of farmers will take up low-carbon measures, with most of that happening after 2030. As 2030 is the year before the next election, I think that the Government assumes that a lot of work will be done from 2026 to 2030, in terms of that rabbit that will come out of the bag.

From where you sit, does it feel realistic that we will get to 2030 and we will suddenly have that uptake? What would need to change on the ground for the uptake to scale now and into session 7? We have talked a lot about policy, but what other things do we need to help farmers to move in the holistic direction that we are talking about? [*Interruption*.]

The Convener: Unfortunately, Donna, if you nod or puff your cheeks, you are going to be the go-to person.

Donna Smith: As Nim Kibbler mentioned, the 45 per cent figure feels like a very big jump to make in a relatively short time, given that some things cannot necessarily be changed overnight. You need time, planning, working in a cycle and all the rest of it, so I do not think that that is achievable. There needs to be more holistic thinking. It is not necessarily just about what people are doing on their land; there is also the infrastructure around that. If we are to move to more low-carbon and local food production, other things need to happen. We are all aware that there is a lot of talk about abattoir provision, which is currently concentrated in a few places and people cannot access it locally, so that increases food miles and all the rest of it.

We still have not cracked the nut of looking at the whole picture properly. We have a lot of policies that talk about carbon reduction, food production and everything else, but they are not necessarily fully joined up yet, and there are

sometimes unintended consequences. For example, with the beef calf scheme, the Government decided to introduce calving interval conditionality and set it at 410 days to make the process more efficient and reduce emissions, but that had unintended consequences for many crofters and smaller producers. They disengaged from the system and sold their herds, because there was too much uncertainty over what was going to happen. We then lost the good stuff that they were doing on sensitive grazing and so on.

We need to be careful that decisions that are made along the way to try to suddenly hit the 45 per cent mark do not have knock-on unintended consequences. That means doing a bit more joined-up thinking now and allowing people time to start making changes as they go.

Nim Kibbler: I made a list of things that I would like to ask about in this regard. One is about the redistributive payment system. We talk about the 70 per cent to 30 per cent ratio but, if we were to go back and redo the maths, I think that we would find that it has slid a bit.

We need to cap payments but still make allowances for wages in the subsidy system. Inclusion for smaller growers needs to be in there, too.

We need to take into account the fact that we have very different farming systems. What will work on one farm will not work on the other. What will support an upland crofter with an incredibly sensitive, high-nature-value system is just as worth while in the climate, farming and food security context as what is needed to support someone on the east coast who has field upon field of tatties.

Ariane Burgess: Sorry—I did not catch that.

Nim Kibbler: Tatties.

Ariane Burgess: Ah, tatties—great.

Do you have a sense that enough farmers already know what they need to do? We have legislated for regenerative and sustainable farming under the Agriculture and Rural Communities (Scotland) Act 2024. Do enough farmers know what that is and what they need to do, or does there need to be more support? We have tier 4, which specifies continuous professional development, but does that get to the point of helping farmers to understand the new context that they need to be working in?

Nim Kibbler: I can only speak for the members who are represented in the SAP. A lot of them feel a collective “meh”, because they are trying. They are doing the work off their own back a lot of the time. They want support and recognition; they do not want to be the outliers pushing against the system. That is done through co-operation, collaboration and bold leadership. I am not talking about cliff edges; perhaps it is a hillock.

Emma Patterson Taylor: You could bring in the mitigation measures sooner and then bring in targeted training and CPD around those. Some farmers absolutely know what they need to do—they are very familiar with it and have completely got to grips with it—but does everyone know? I do not think that they do. When it comes to the various measures, I do not even think that we really know which ones will work best for which farms or in which way. There will be new stuff emerging that brings greater bang for its buck that is yet to be properly understood.

This might sound erroneous, but, on my point about bringing in something sooner, I was thinking of the earlier question around soil. Something that could be brought in now would concern soil testing and what happens to soil tests. We might wonder why people are not doing more soil testing. What is happening with soil testing? It is not just a matter of doing it, however; we want something to happen with it, and we need a whole journey to be taken by the farmer or crofter. At the minute, the whole soil-testing process is still manual and handwritten.

There is no soil carbon database. That data is not being properly collated. It is going into a sort of bin—forgive me for saying so, but it is. Scotland is doing soil testing, so, fine: we are paying some farmers to test some soil, and then what? There is no “and then”. That is a practical thing. We might want to ensure that testing is automated using an electronic form as of whenever—soon—and we can use that data to develop a better understanding of what is happening with soil carbon throughout Scotland and to help farmers to make better use of those results.

Ariane Burgess: We have talked about a cliff edge, and a hillock has now been introduced, but it seems that we are in a place where people who are working with the land—farmers—need to try things out. Nim Kibbler has talked quite a bit about how we have a nuanced, diverse landscape, with different land and soils. Do we need to do something more to recognise that and to encourage farmers to try things out, knowing that, if it fails, there is the just transition—or perhaps not the just transition but some kind of support—in place in case a farmer puts a field over to trying more integrated measures or whatever, or they try certain cover crops or something and it does not work and they do not get a yield? Do we need to recognise that there is time to try things out over the next five years, that some of that will fail and that farmers need to be supported in that work?

10:00

Emma Patterson Taylor: Yes, absolutely. Your earlier point about when the next election period will be is really good, because that will again create hesitancy and uncertainty. In an ideal world, you would bring forward the mitigation measures and the funding, allowing for a run-up period of at least two years. If the work starts in 2030, not much will happen for at least another two years. Let us use this period in a way that does not expose farmers to risks that their businesses cannot tolerate but allows them to begin the journey that we must undertake.

Donna Smith: Nim Kibbler mentioned front loading and capping payments. That must be part of this. Crofts and smaller family farms have a bigger hurdle to overcome; they do not have lots of capital or whatever behind them, so they face bigger barriers to making the transition happen.

We just have to try some different stuff. Let us start doing that and see what happens.

Lorna Scott: I agree with that. Last year, we set up a climate forum in the union for members to discuss all those things specifically. We had a meeting on the climate change plan in December 2025, in which we talked about carbon calculators and the assessments that our members are carrying out as part of the whole-farm plan. It emerged that understanding could be better—on both what the outcomes might mean and how they could be implemented—and also that some of the suggestions were not really suitable for their units. Consideration must be given to making them more appropriate for our diverse sector.

Ariane Burgess: Are those suggestions automated? Do they put in information and then get a whole host of suggestions to try?

Lorna Scott: Yes. Those are based purely on your own inputs. The best suggestion from my carbon audit was to install wind turbines, yet that would not cut my emissions and it would be at huge capital expense. The suggestion was entirely impractical.

Ariane Burgess: Do you have a sense, from your work on the farm, what would work?

Lorna Scott: That is difficult, because I have an extensive sheep farm on rough grazing ground and the input is as low as possible and it is as efficient as possible, so I knew that it would be challenging to find ways to further reduce emissions. That is an issue, particularly for crofters.

Donna Smith: I totally agree. I have spoken with many crofters who have tried the carbon audit. The recommendation for one lady—the only improvement that was offered—was that she should get rid of her cows.

The people who are interested in this stuff and understand it recognise that it is all input based and that it does not capture anything about sequestration or whatever else. That immediately leads people to wonder what the point of it is, because it does not consider the whole picture.

Ariane Burgess: Thanks. I will ask a question later about sequestration.

The Convener: Tim Eagle has a supplementary question.

Tim Eagle: We are talking about the climate change plan, but I am acutely conscious of greening. Quite a lot of money is involved in tier 2 direct support payments for greening.

What are your thoughts on that, including with regard to the whole-farm plan? I take on board what Ariane Burgess said about the usefulness of the documents that we are producing. How much of a living document are those really? They feed into the climate change plan and shape our environmental future.

We were talking about this sort of stuff with a bunch of young farmers that we had in yesterday. For example, greening is not ideal for all places, including an island such as Orkney. To what extent are the changes that are being made in that regard helping us to deliver this environmental future, or do you not think that they are as flexible as they should be, if that makes sense?

Lorna Scott: Greening certainly has a role to play. Again, our members feel that they are delivering on that. Any measures must be evidence based, proportionate and suitable for the units that are operating across the country.

Donna Smith: At the minute, we would say that the greening measures are not yet applicable in a crofting context. We are waiting for something that is workable in a crofting context, but, unfortunately, so far, nothing workable has been put forward.

Beatrice Wishart (Shetland Islands) (LD): There has been a lot of talk about reducing livestock numbers in order to reduce emissions. However, the Scottish Government has been clear that it will not introduce a policy to reduce livestock numbers; instead, there will be policies on efficiencies and welfare in livestock production. What are your views on the measures in the draft CCP? Are they sufficient to reduce livestock emissions?

Lorna Scott: It is a tricky one. As I said, there are emissions associated with that kind of production, but most of our country is suited only to livestock production, and it has a fundamental role in our culture and in rural Scotland more generally, so we support maintaining livestock numbers. Efficiencies can be made, and we will

continue to work constructively to ensure that that is done properly through animal welfare measures and efficiencies in the production system. However, we absolutely want livestock still to be produced in Scotland.

Nim Kibbler: I accept that we are really good at growing grass in Scotland, but we must not get trapped in the idea that that is all that we can do. A lot of our members are doing innovative things in mixed farming. We have lost a lot of mixed farming over the past century, even though it was one of the most efficient systems that we had.

It is about having the right livestock in the right place. We have some really fragile upland habitats and some good species-rich areas that rely on cattle grazing to maintain them, so it cannot be a binary question of yea cows, nay cows.

My concern is that, if we focus on that issue, we could go down an intensification route whereby we focus on the efficiency of the cow as a machine and, if we are not careful about managing that, it could potentially drive a drift towards high-input indoor systems. The Scottish Government should set a policy that prioritises public value—including biodiversity and soil health—over simply the number of cows per unit of land.

Beatrice Wishart: A few weeks ago, I had a meeting with Food Standards Scotland about children's diets and how the diets of teenagers—sorry, they are young people; we cannot call them teenagers now—could be improved by reducing the amount of red meat and dairy products in them. FSS's briefing says:

"Greenhouse gas emissions associated with diets of children … could be reduced by up to ~28% … by reducing"

meat and dairy, which is in line with the recommendations of the Climate Change Committee.

I am not for one minute saying that we should not do anything about children's diets. My point picks up on what Donna Smith said earlier about muddled messaging. Does anyone have anything that they want to say on that observation?

Donna Smith: We need to look at where meat comes from. There are a lot of things at play here. Our herd stocks are currently decreasing but we are importing more cheap meat from elsewhere. Why are we doing that? Why do we not reduce the cheap meat imports from elsewhere, introduce higher standards here and use what we have? That surely has to come into play instead of saying, "Oh well, we just need to cut our numbers to work around the issue."

We agree with the policy not to reduce livestock numbers but, as I said, let us look at our whole meat supply chain and where the meat comes from. If we got to the stage where we had to reduce livestock numbers, we would have to consider where we would do that. Let us try to protect the well-managed extensive grazing systems that sustain our habitats and rural economies, while looking at the intensive things.

There are perhaps targeted approaches that could be taken. One size does not fit all; with the beef calving scheme, for instance, we are trying to compare emissions from intensive livestock production, where stock is housed indoors and so on, with an extensive, well-managed, high nature value approach. Those are not the same things, and, when you start to mess with what people are trying to do there, the impacts will be completely different. We have to bear in mind that there are differences and that one size does not fit all, and we need to factor that into any approaches that we take.

That answer was a bit rambling, Beatrice, but you know what I am saying. There is a bigger holistic picture that we need to look at, and taking one figure in isolation does not really work. However, there are ways of achieving both things; there are ways in which we can, possibly, change the diet in schools, without having to reduce our own herd numbers drastically. If we stopped importing meat from elsewhere, we could, perhaps, achieve more.

Beatrice Wishart: I should make it clear that I was being pointed to research that had been conducted by others.

The Convener: You have touched on some interesting points. We need to recognise that meat production has a smaller environmental footprint, if you like, in Scotland than anywhere else, but I cannot get my head around people celebrating the fact that the Scottish Government is not bringing in policies to reduce cattle numbers. What I find disappointing is that the Government is not bringing in policies to maintain numbers, because, with the policies that we have at the moment, we are seeing reductions in livestock numbers. After all, we often hear about critical mass in this respect.

Someone on the next panel will almost definitely argue for a dramatic reduction in livestock numbers, but we are looking only at one side of the equation. We do not look at the hugely important socioeconomic benefit of cattle and sheep, particularly in the west and the north of Scotland, which cannot be underplayed, the sequestration elements or the fertiliser that livestock add. Should we not be looking at policies to maintain livestock numbers, given all the benefits that they bring not just for the climate and biodiversity, but socioeconomically? We should not really be celebrating the fact that the Government is not bringing in a policy to reduce cattle numbers.

Are we just playing the game that Emma Patterson Taylor talked about early on? We are trying not to create too much friction and look as though we are all getting on, but if we were being pragmatic, honest and transparent, we would be saying that we need policies that maintain livestock numbers.

Nim Kibbler: I think that we are looking at this the wrong way. We are looking at the cow when I think that we need to be looking at the herdsman, or herdsperson, and the system that these animals are being raised in. When we offer them public money for the production of cows or livestock—or meat, or fibre—what public goods are we getting back from that? If we look at this only through the lens of food, without even looking at the quality and nutritional value of that food, just its kiloage, we are going to come away with some very perverse results with regard to this argument about livestock and where it sits.

The Convener: You are arguing that we should be looking at the high production quality, the high animal welfare standards and the high food value of meat products produced in Scotland compared to those that might be produced in the countries that we will ultimately end up importing more from to meet demand. The fact is that demand for meat has not flatlined; it is declining, but not at the rate at which the CCC suggests that we should be reducing livestock production in Scotland.

Nim Kibbler: When it comes to food, the biggest climate change element—if we take carbon as the metric—is processing it and moving it around, and after that comes the food waste at the other end. We need to look at production on the farming side of things, but we cannot ignore the rest of the supply chain. With the landscape that we have in Scotland, we need to fully invest in that supply chain, working at all scales of agriculture in all the different ecosystems that we have.

The Convener: We will have a supplementary question from Ariane Burgess and then one from Emma Roddick.

10:15

Ariane Burgess: Donna Smith said that we need to look at where meat comes from and that we are importing cheap imports. It strikes me that we have a challenge there. In Scotland, we are trying to meet our 2045 net zero emissions target, yet we are beholden to the supermarkets where that meat comes from. We are trying to do things with farmers on the ground, but the supply chain and the way in which people can buy their food create a limiting factor.

I went to visit Jock Gibson, a farmer in Moray who does mob grazing, which is incredible. He can do that because he has the family butcher in Forres high street, so the animals that he raises on the farm end up in the local butcher and feed local people. That does not happen when we are beholden to a supermarket system, which is where the majority of people in Scotland shop.

The Government does not have the powers to deal with the fact that supermarkets are just going to keep on importing. We have trading arrangements with the likes of Australia, so we are bringing in sheep that have experienced poor animal welfare. There is a bigger challenge around stemming that flood and helping people in Scotland to start to eat locally produced food.

Nim Kibbler: We talk a lot about red meat and livestock. The Scottish Government needs to be aware that there are certain things that it can influence. We are not necessarily talking about influencing all the right things, but we can put a little hand in the market here and there, and those local supply chains are really crying out for investment at the moment.

Because of the way that we inherited farming subsidy and public funding from the European context, agricultural policy in Scotland does not really have any influence over hundreds of thousands of animals. We are talking about poultry people such as Colin at Ramstane farm, who has genius pasture-fed broiler and egg production but who does not receive any subsidy. The ARP is not really going to drive or reward someone for doing useful stuff like that and for moving towards money for public goods. We need an ARP that steps away from the European context and looks at what works in the Scottish context and what meat, animal welfare and the ecosystems that animals live in mean within that context.

The Convener: Emma Roddick and Emma Harper have supplementary questions that are tied in with that.

Emma Roddick: My question is very much tied in with that, because I want to pick up on the same comment from Donna Smith. Where I live, it is much faster for me to go out and buy frozen lamb from New Zealand than it is for me to buy Scottish lamb in the supermarkets. However, the Department for Environment, Food and Rural Affairs's statistics show that we produce more lamb than we eat in this country. Trade is reserved to the UK, but could the Scottish Government be doing more through the climate change plan or other policy areas to encourage people to eat what we produce? As you say, it does not really matter how that lamb was reared in New Zealand; it has travelled all the way across the globe, and that was not necessary.

Donna Smith: I agree, but I do not know what the answer is. Ariane Burgess is right about the supermarkets—people like cheap food because it

helps them to survive, and the cost of living is challenging. I really do not know what the answer is, but it feels as though, if we started to educate people and make some decisions that the Government could make—I do not understand the trade laws; forgive me for that—there must be something that could be done that would start to encourage people.

One place to start is our public procurement system. We are in control of that, and we could drive some activity that way with the good food nation initiative. That would be a start, would it not? Supermarkets are a whole different ballgame, but there are probably some actions that we could take as a nation to encourage people to use local food more, instead of going elsewhere for it.

Emma Patterson Taylor: That is exactly the point that I was going to make earlier about the schools question and what young people should be eating. The Scottish Government can have an effect on public procurement, and we do have control over contracts for, say, schools, Government buildings and so on. However, they are not always as rigorous as they should be, and they are often too geared on price. We could be saying, "Let's support our farming industry through those contracts" and ensuring that what is supplied is Scottish beef, Scottish lamb or whatever. I do agree that supermarkets are trickier, but there are bits that we can affect.

The Convener: I am going to bring in Emma Harper with a supplementary, and it will be the final question in this section.

Emma Harper: The evidence has been very interesting, but I want to pick up on what Beatrice Wishart was saying about Food Standards Scotland and its latest dietary intake in Scotland's children—or DISH—survey. When the Health, Sport and Social Care Committee scrutinised the climate change draft plan yesterday, we heard that, according to research, people in Scotland already eat less than 70g of red meat a day. The worry was that Food Standards Scotland's information was being misinterpreted and that, if people in Scotland were already eating less meat to that extent, they would be facing a micronutrient deficit. I would also note that we are trying to get more people to eat venison in Scotland, which is quite lean red meat.

I am interested in issues such as food miles, food production and all of the supply chain aspects, because I do not want a reduction in our animals in Scotland if they can allow us to meet our dietary targets with fewer food miles. Do we need to make people more aware of this? It is all about food supply and food production, and it kind of links with Ariane Burgess's question about supermarkets, too.

Lorna Scott: I am afraid that I am just going to repeat what we have already said, but this is all about having a healthy, balanced diet, too. That is what we were taught when we were at school, and I do not think that anything has changed in that respect.

We absolutely need to support such an approach. Again, we want a thriving livestock agricultural industry in which we produce at home to the highest possible standards and feed our schools and the general public with our homegrown food. That is important.

The demand is not going to go away, which means that, if we are not producing the meat at home, we will only have to import it, and in doing so we will just be offshoring those emissions. We do need a wider conversation about healthy diets, but, yes, we absolutely want to be producing at home.

The Convener: The next question comes from Tim Eagle.

Tim Eagle: My question is pretty similar to the one about livestock, only it is about fertilisers. The climate change draft plan talks about reducing emissions by reducing fertiliser usage, but does the plan contain enough information on how we can achieve that? Is there anything additional that you think should have been in there?

The Convener: Who would like to kick off on that? Lorna?

Lorna Scott: We kind of touched on the fertiliser issue when we talked about soils. Obviously, more information, and better understanding of the information that farmers get through their soil samples, will help to improve those efficiencies and ensure that we are putting the right stuff in the right place.

It is all about technological advancement. As a result, it is a bit of a tricky issue, because alternative and more efficient fertilisers are still being developed, and we do not really know what they are going to look like or how cost effective or economically viable they will be for businesses at the end of the day.

Donna Smith: In the crofting context, there is not a lot of fertiliser use going on, so I cannot really comment on the question in detail. However, there are other natural options. Seaweed, for example, is a very commonly used fertiliser in crofting and brings all sorts of goodness. Again, we need to be careful about going down too much of a technical route when there might already be some good management practices that can achieve some of what needs to be done without using a lot of artificial stuff.

The Convener: When you reduce fertiliser input, there is almost inevitably a reduction in output over the initial period. Over five or 10 years, in a lot of circumstances, the production will come back, due to improved soil health, but, in the short term, there will be a drop-off in output, which means a drop-off in income and profits. Given that we have a flat-line budget and that there has been a budget cut in real terms, is it achievable to expect farmers to reduce fertiliser without any support with the hit to their outputs in the short term?

Lorna Scott: It is challenging. Again, it is about business viability, so we are always thinking about what makes financial sense to ensure that these businesses survive and that we can continue to produce. If the soil testing is being done well, there should not be a huge drop-off in production, although I appreciate that there will probably be a slight drop-off. Again, this is where incentives work best. If we are looking at the wider framework for doing these actions around soil testing and carbon audits, it is about making sure that they more fully show the holistic view on the ground and what those impacts will be, in order to ensure that the work is viable while the businesses are still producing.

The Convener: We will have to write a report on the climate change plan as it is at the moment and, ultimately, vote on whether we adopt it. In the draft plan, is there any indication of whether support would be there for farmers to reduce their emissions from fertilisers? Is it realistic for that to be in there, or is it pie-in-the-sky, blue-sky thinking? That is the question—is it realistic to expect a reduction in fertiliser use? I will go back to Lorna Scott, because of what you said in your previous answer. Is it realistic? It is in the plan.

Lorna Scott: Is it realistic? As I have already said, fertilisers can be spread more precisely, but the plan talks about alternative and more efficient fertilisers. Again, that is about technology rather than reduction. It is challenging, and we need to base the work on productive and viable businesses. That is the main point.

Nim Kibbler: I sit here as part of the Nature Friendly Farming Network. A reduction in fertiliser use is entirely possible. It is not easy, but, culturally, at the moment, as an industry, we are not going to achieve the 45 per cent target. We need to come back to resource efficiency rather than just maximum output. We have done a lot of damage to some of our most productive farmlands in Scotland—during the second world war and through the common agricultural policy—over the past 100 years and going back to the Cheviot time. The Government will have to support people to undo that damage, but we are not talking about that or about putting things in place at the moment. We are just tweaking around the margins.

Emma Harper: I have a quick supplementary question. We are talking about fertiliser, and there is an opportunity for fertiliser that is natural digestate from anaerobic digestion processes. If a dairy farm, for instance, used its farm digestate, that would be a circular economy. Does that need to be pushed, researched or engaged with more?

Nim Kibbler: I think that we have answered that question, and I imagine that Lorna Scott has given a full response as part of the consultation. Yes, waste from anaerobic digestion processes needs to be incorporated, but our farmlands cannot be a dumping ground for waste, because ecosystems can absorb only so much before the waste either volatilises back into the atmosphere or runs off into our rivers. We need to be really careful about not thinking that AD or something else is a technological panacea for managing these things, because if we push something, it becomes a perverse incentive and then we get the wrong thing out of it. The R and D around this is developing well, but we cannot jump on it and say that it is going to solve things.

10:30

Emma Harper: I am not talking about food waste in anaerobic digestion; I mean the digestate from slurry, for instance—which is already going on the fields. That is another opportunity. I am not thinking about food waste on land.

Nim Kibbler: I classify all digestate in that way, because we apply it in a very similar way.

We just need to ensure that we do not perversely incentivise that. It is definitely good to think about circular systems, but if someone is not farming with resource efficiency in mind, they will produce too much waste, and there is only so much that they can then re-engage back into the land. This is the holistic viewpoint that SAP members are trying to get across: people have to look at the whole-farm context. If they have a surplus of waste, something somewhere is out of balance.

Ariane Burgess: I need a little bit more understanding for this conversation. This is not the question that I was going to ask, but I would like to get a sense of this from Nim Kibbler. You have talked a number of times about resource efficiency. At the very beginning of the evidence session, I noted down your mentioning healthy livestock and local food in that context. Could you unpack what you mean by “resource efficiency” a bit more, so that we can understand it?

You can perhaps also touch on the question that I was going to ask, which follows on from Emma Harper’s questions on opportunities with what could be used as fertiliser. That is also what Donna Smith talked about in discussing how crofters are

using seaweed. The seaweed sector in Scotland is growing; it seems to be moving. Does that present a possible opportunity for more natural fertilisers, or does it become too technical?

Anyway—what does "resource efficiency" mean?

Nim Kibbler: Thanks. As a dyslexic, I really enjoy these "can you define" questions.

If we define "resource efficiency" only as output per unit, we risk funding intensification, and that actually damages nature. I guess we are asking the committee to consider that the draft plan defines efficiency as resource efficiency—reducing inputs and building soil health—and that subsidies must support agri-ecological, rather than high-capital, techno fixes just to continue business as usual.

On resource efficiency, I know that you were considering the developing R and D and concepts such as maximum sustainable output systems and other nutrient-loading and balancing systems. It is hard for me not just to end up becoming a soil scientist at you again, so I am going to back off.

Ariane Burgess: Okay. I guess that I will just have to go and research it.

Nim Kibbler: I will send you a bit on that afterwards.

Ariane Burgess: That would be great.

Nim Kibbler: I will share that with the committee.

Ariane Burgess: That would be helpful. It seems to me that that is quite an important part of the conversation, which we need to unpack and understand more.

What about the seaweed? Do we think that it presents a possibility?

Donna Smith: We have to be careful about what can be scaled up appropriately for the whole country. Also, there are definitely other options. As Beatrice Wishart knows, there is a fish factory near my farm, and the waste from it is incredibly good for fertilising ground. We need investment in that kind of R and D stuff to see what will work. It needs to be scalable and appropriate.

Evelyn Tweed (Stirling) (SNP): Thanks to the witnesses for all your answers so far. It has been very instructive.

The draft climate change plan assumes that half of new agricultural machinery purchases could be alternatively fuelled by 2040. How realistic is that?

I can see people smiling, which is never a good sign. Donna, you smiled first.

Donna Smith: I am probably the wrong person to ask about this. As I said earlier, machinery is not generally a thing in the crofting context. A lot of crofters will just have an old Massey that has been kicking around for years and years. They are unlikely to invest in something brand new until they absolutely have to, because the financial side is just not at the same level. It probably makes more sense for them to keep fixing what they have than to replace it with something new. I am probably not best placed to comment on that.

The one thing that I would say about alternative fuels is that they must be able to work in all contexts. Taking something that is powered by battery over a common grazing, where there is no guarantee about what the surface is like, for example, might be a challenge. I know some crofters who have battery-powered quad bikes, and they have had issues, shall we say.

That is all that I will say. I will leave it to people who know far more about it than I do.

Lorna Scott: I would need to check, but the last time that I was speaking about this, I think that I said that electric tractors are two to three times more expensive, which is significant. Buying a tractor is already a massive capital investment and it would be doubled or tripled, which is really big. It needs to be viable and practical.

On what Donna Smith said about appropriateness, infrastructure and connectivity are huge issues for most of our rural members and producers in Scotland. They need to be up to standard to allow the technology to work properly. The new machinery options are also often much heavier, which has an impact on soil structure, and that goes back to things that might cause more damage than we intend.

Nim Kibbler: I was going to add the point about such agricultural machinery being two to three times more costly, but it is also two to three times heavier, and our soils do not have that in them.

The other thing is that agritech business is going to have to meet large arable and on-farm, housed livestock needs before it replaces the tractor with the e-Massey. That tech is not going to provide a solution in time, because we are talking about a climate emergency and a lot of infrastructure will need to be put in place.

The Convener: To go back to the climate change plan, we need to focus on deciding on whether it is fit for purpose. It says that, in 14 years, effectively 50 per cent of new purchases for agriculture will run on alternative fuels. Is that realistic when support for the rural sector is flatlining or declining? Should it be in the plan at all? It is an assumption, and it will be part of a whole heap of assumptions that will lead to us

becoming net zero. If it is unrealistic and you do not believe that it is going to happen, it should not be in there. Is that not right? Lorna Scott, if you do not believe that it will happen, should the committee not report that the idea that, in 14 years, half of all agricultural equipment will run on alternative fuels is unrealistic—it is not going to happen, it needs to be taken out of the plan and we will need to find our carbon reduction somewhere else?

Lorna Scott: It is challenging. We simply do not know, because we do not know how fast things will develop. We have seen a huge uptake of electric cars over a quite short period of time, for example. However, I do not know where the technology is and I do not how it will have developed in 14 years, so it is difficult for me to answer.

The Convener: Okay. I will move on to a question from Ariane Burgess.

Ariane Burgess: My question is about trees and peatland on farms and crofts. Sectoral annex 3 counts sequestration under that wonderful acronym LULUCF—land use, land use change and forestry—but not agriculture, despite delivery happening on farms. Is the practice of peatland restoration and tree planting on farms and crofts becoming mainstream, or is it still marginal? Are the current support and advice joined up enough? What barriers are still putting people off?

I am aware of a couple of examples. There is a person who is trying to put pigs into forests—I think that he is called the woolly pig farmer or something like that—and he has faced real challenges. I saw another example when I went to a tremendous monitoring farm near Grantown-on-Spey, where the farmer has been doing peatland restoration and also has a small forest where his cattle graze at times. He says, "I'm looking after the peat, but there's going to be no support for me." The indication is that people are doing it—I have seen it—but they struggle to get joined-up support and funding. Do you have any thoughts on that? It seems that that is what we need to scale up, because farmland is so much of our land. We need to develop the integrated and holistic approach that has been talked about.

Donna Smith: I completely agree that those activities need to be an integral part of agricultural reform and not viewed as being separate. To go back to the principles of sustainable and regenerative agriculture, it involves planting trees and restoring peatland. At the minute, it feels like those things are still thought about in silos rather than as part of joined-up thinking.

I am glad that you said LULUCF, because I wondered how to pronounce it. There is some talk about aligning with that sector, but, as we touched on earlier, whole-farm plans are perhaps not yet fit for that purpose. For example, the carbon audits do not currently account for peatland restoration and woodland creation, nor do they recognise that land has been managed sensibly for climate and nature in the past. We have to see more specific support for maintaining restored peatlands—the ones that are already working well—and other high nature value habitats that are in good condition.

Things are a little bit more complicated in a crofting context—I know that the Crofting and Scottish Land Court Bill was discussed in the Parliament yesterday. At the minute, crofters face barriers when it comes to some of the work on common grazings. Crofting law means that they have to get landlord consent, but they also face issues with access to finance and administration. Grazings committees are not supposed to sit and hold lots of money, and there are uncertainties around private green finance and everything else—there is all sorts of stuff in there to consider.

We need to look at that side, because common grazings land makes up 500,000 hectares of Scotland's land mass, which is a big chunk of land. However, without some incentives and joined-up thinking through agricultural support, uptake is likely to remain limited. As I said, there are issues, and I am happy to share with the committee some examples of crofters who are trying to do some of that stuff and the barriers that prevent them from taking the work forward.

Nim Kibbler: I can give you a nice practical example. We are talking about increasing the number of hedgerows and things like that. The way that the policy gets implemented means that it is not flexible enough to deliver at the farm level, so it takes really clever, persistent people to get some of those things through the grant schemes.

Cora Cooper, who is one of our farmers, runs an extensive sheep farm with a lot of peatland that she has restored on a former open-cast mine site. She had someone visit to look at putting hedgerows back in, but because gaps in the hedgerows were not permitted in the planting scheme, she could not go ahead with it. If she had put in a solid hedge, she would have had to top-dress her sheep more, because she would not have had wind going across the fields to deter the insects. She has had to choose not to put in hedgerows in order to maintain the IPM strategy that she is working towards.

Ariane Burgess: Does IPM stand for integrated pest management?

Nim Kibbler: Yes.

Ariane Burgess: Thank you. I am trying to bust the jargon, but that is fascinating. Somebody wanting to put in hedgerows but not being able to have gaps and so on goes back to what you talked

about, which is that we need to look at all the integrated practices holistically so that they work really well together and actually help us to meet our climate and emissions reduction targets. Thanks for that specific example.

What about agroforestry? Are there any good incentives to get farmers to pursue that yet?

Nim Kibbler: Right tree, right place, is it not? We keep coming back to this, but flexibility has to exist to work at each level, in each system, and to support that. Trees are a long-term investment.

Ariane Burgess: Is there enough funding and other support to allow you to think about where to put the trees and so on?

10:45

Nim Kibbler: Yes, but we also need to be really careful that we avoid, and do not manipulate, high nature value rough grazing in areas and cultural landscapes as well as productive inby land. We have to be careful that we co-design this sort of thing and ensure that there is flexibility, and we also have to ensure that any community benefit from peatland restoration, tree planting and so on is felt at the community level. We could put in, say, a no-harm-to-local-community test, or something like that, for some of the larger-scale restoration stuff that is going on. Generally, though, there just needs to be more flexibility.

Ariane Burgess: Thank you.

The Convener: That brings us to the crux of the matter and a question that I want just a yes or a no answer to. The plans suggest that we will see an increase of 19 per cent in hedgerows and 2,600 hectares of agroforestry annually until 2045. Is that realistic?

Lorna Scott: I am not going to give you a yes or no, but what I will say goes back to what we have just been talking about: any approach needs to be flexible. Farmers generally know their land very well, and they need to have input into how it is managed. They will deliver those results, but there needs to be incentives and investment. As was said right at the beginning of the evidence session, the carbon benefits from the peatland, the woodland and the hedgerows that we have just been talking about are not accounted for anywhere, and they would help to incentivise further action. As we have been saying, this is a long-term investment, and a holistic view needs to be taken on what will work best on a particular unit. That is really how we will achieve this.

The Convener: So, the policies to deliver these outcomes by 2045 are not currently in place and they need to be developed into some pragmatic approach.

Lorna Scott: Yes, and the incentives need to be there, too.

The Convener: But they are not there at the moment.

Lorna Scott: Well, we do not have enough information on what the future policy might be.

The Convener: We have to agree this plan a couple of weeks from today. Are the policies that are currently in place fit for purpose to grow hedgerows by 19 per cent or to see 2,600 hectares of agroforestry?

Lorna Scott: I think that we have just heard how difficult it would be to do that on each farm. It would be a challenge. However, support should be coming from our future support framework. That is where the policy would sit.

The Convener: Okay. Donna?

Donna Smith: I cannot give you a yes or no, either. I suspect not, because it just sounds like a lot.

I cannot really speak from a farm context, but I know that a lot of crofts are already doing mixed land management. That said, I am afraid to say that I do not have a feel for the scale of that.

The Convener: Emma?

Emma Patterson Taylor: I am going to say no. That is not evidence based—I am just going on a gut feel, given what we have seen to date.

Lorna Scott is completely right. This area of activity—it brings me back to the point about peatland, too—is just not recognised, so farmers do not know why they would prioritise it. They know it is good—a woolly, good and nice thing—but beyond that there is nothing. There might be a bit of funding, but it will be a hassle to access, it will be complicated to implement and there will be issues with it. You have to really want to do it, and it is the sort of thing that is just not recognised in a landscape where farmers are already feeling penalised. Resolving that issue, whether through carbon audits or something else, needs to be a priority.

The Convener: And Nim? Please be brief.

Nim Kibbler: My answer would be no, and my little back-of-an-envelope calculation suggests that there is probably not even enough money in tier 3 to deliver that sort of thing up to 2030. Therefore, I do not think that we even have the financial infrastructure in place, let alone the cultural will for uptake.

The Convener: Okay—thank you. I now invite Edward Mountain, who is here on behalf of the Net Zero, Energy and Transport Committee, to ask his questions.

Edward Mountain (Highlands and Islands) (Con): Thank you, convener. Just to avoid any dubiety, I remind witnesses and committee members that I farm 1,000 acres, 500 of which are tenanted; I have a 160-strong pedigree beef herd and I mix-farm using the principles of rotational farming promoted by Turnip Townshend—something that I am sure all the panellists will know about.

My first question is about my concern that farmers are being pushed every day—as are crofters—to get their carbon budgets sorted out and work out all the carbon that they are using, but the industry is claiming those savings for itself. Do you think that there is double counting in the plan? For example, the production of barley has to be zero carbon; the farmers produce it, and the industry says that it has decarbonised its whisky production to zero, but somebody else has done all the work. Do you think that that is accounted for in the plan?

Lorna Scott: I am not totally sure. I would need to look at that example and go through it properly. To go back to what we were talking about, for farmers and crofters, the plan wants a holistic view whereby the sequestration is accounted for, so that it is not based just on inputs, which is what carbon audits currently are.

Nim Kibbler: From life-cycle analysis, there probably is some crossover, but I agree with Lorna that there are nuances of regenerative farming that are not included at all in those life-cycle analyses.

Edward Mountain: If they have heard previous evidence sessions, the panel members will not be surprised that, for my second question, I am directing them to page 67 of annex 3, which talks of the agricultural pathway and tries to give some idea of what needs to be achieved. The problem is that it says that no benefits or costs have been worked out, because the ARP has not been developed and it is not possible to develop it at this stage, so the annual budget for farm subsidies will run forward to 2040, which, clearly, is not in the budget at the moment. Do you understand from this climate change plan—which, to be a plan, must be properly costed—what its proposals will cost farmers and crofters? It can be a yes or no answer if you want. I will go along the whole panel, starting with Lorna.

Lorna Scott: No, we do not, because, as we have talked about, the technologies are still in development and some of them are key policy drivers for emissions reduction. We do not know yet.

Donna Smith: I do not see how we possibly can. Also, we still do not have a clear route map for how agricultural support is going to change, so we do not know what might be covered in that and what might not be. I do not see how we could say at this stage that we do know.

Nim Kibbler: Between the blurry mess of regulation, subsidy grants, agricultural industry culture and tech horizon—no.

Edward Mountain: In summary, you are saying that we have a plan without a route map of how to get to where we must get to, and we have no idea of the cost. It sounds like a good plan to me.

The Convener: That brings us to the end of our questions. Thank you very much for joining us. Your contributions have been hugely helpful in informing our report, which will subsequently go to Edward Mountain's Net Zero, Energy and Transport Committee. I will now suspend the meeting to allow for a change of witnesses.

10:53

Meeting suspended.

11:04

On resuming—

The Convener: Welcome back. We will continue our scrutiny of the draft climate change plan by hearing from a panel of academics and representatives from non-governmental organisations. I welcome in person Dr Vera Eory, a climate change researcher from Scotland's Rural College, and Claire Daly, who is head of policy and advocacy at WWF. Joining us remotely are David McKay, who is the vice-convener of Scottish Environment LINK's food and farming group, and Professor Dave Reay, who is the chair of carbon management education at the University of Edinburgh.

Before we move to questions, I remind members and witnesses that we have until about 12:15 or 12:30, so try to keep questions and answers as succinct as possible. You will not have to operate your microphones—a sound engineer will do that for you.

I will kick off. With our earlier witnesses, we were trying to find out whether the proposed plan is credible and whether it could be delivered, so I will ask you the same sort of question. How credible is the Scottish Government's proposed emissions pathway for agriculture? Will it meet future carbon budgets? If you do not believe so, is anything missing from the plan that you would have expected to see in it?

Dr Vera Eory (Scotland's Rural College): Thank you for inviting me to this important meeting. I am very happy that I can share the views that I have formed on the basis of science over the past decades in Scotland and abroad. As I was introduced, I am with SRUC, but I am

representing my own scientific views at this meeting.

A short answer to your question—I am sure that we will go into the details later—is that I feel that the plan to deliver emissions reductions is not credible. It will not necessarily support or act in the right way across the industry, on land use or the food system. I will make a few points for now on why I feel that that is so. We can go into them later, and I am sure that others will also have views.

First, the emissions pathway in the draft climate change plan is a lot higher than that advised by the Committee on Climate Change in the seventh carbon budget for Scotland, earlier in 2025. The pathway is substantially higher for every five-year period, which means that agriculture is left with high emissions. One can say that that is better, because if we have a weaker agriculture policy plan, surely it cannot reduce emissions that much, but it really means that it is a huge delivery risk for the overall budget in Scotland to reach net zero emissions by 2045.

Emissions reduction is back-loaded in the current agricultural climate change plan: most of the mitigation is pushed back to the end of the period. It will depend on research and the acceptance of quite a few further mitigation measures and a lot of efficiency saving measures, although those can increase emissions, because they can increase production and consumption if livestock numbers, especially, and other production are not kept at bay.

The major problem in the plan is that the main policy instrument is based on voluntary uptake supported by subsidies. We know from economic and policy literature across sectors that subsidies are not sufficient. For subsidies to be sufficient, they would need to be extremely high, which means that they would be financially unsustainable. A policy of voluntary uptake based on subsidies is very weak and it jeopardises the climate change plan.

The Convener: I know that we are not here to talk about the budget, but we cannot ignore the fact that we heard yesterday that, in real terms, the rural support budget is falling and has been falling for a number of years. Does that make the draft plan even more unrealistic, given that there will be less money for the additional support that you have stated might be needed in the form of subsidies or encouragement? Is it even less credible because of yesterday's announcement in the budget?

Dr Eory: Yes, especially if we go ahead with subsidies only, because the rural support budget covers so many things across agriculture and rural areas: income support, biodiversity, water pollution, adaptation, flood reduction and so on. However, I also urge everyone, especially MSPs and NGOs, to consider moving away from a subsidy system to reduce greenhouse gases and towards a pricing system, which would also help to resolve, to some extent, the budgetary problem.

Professor Dave Reay (University of Edinburgh): Thanks for having me along to the committee. I echo Vera Eory, who covered the key elements. The pathway or plan is not credible at the moment, and we do not know the policies that it relies on. We do not know what the first rural support plan will look like, so it is really hard to say how the targeted emissions reductions will be achieved over the next five years.

As your panel before the break picked up, the assumption that 45 per cent of farmers will take up low-carbon measures in the period up to and including 2030 is incredible. Without a rural support plan, actual policies or a budget in place, it is really hard to see, despite our sector having limited emissions reductions compared to other sectors in the climate change plan, how that will be delivered. Therefore, no is my answer to your question, convener.

David McKay (Scottish Environment LINK): I agree with what has been said so far. From 1990 to 2023, there has been a 13 per cent reduction in agricultural emissions, which has been driven largely by reductions in livestock numbers. You could argue that that has happened despite Government policy rather than because of it. The draft pathway now has us going further up to 2040, which will mean a 23 per cent cut over a 17-year period. Therefore, there is a need to go much further and faster than we are going.

Scottish Environment LINK's primary concern is about the reliance on the agricultural reform programme. You talked about this in your earlier session, but we are concerned that the current pace and scale of change that is set out in the programme is not sufficient to meet the targets that have been set.

Convener, you mentioned the budget. Realistically, although we all want to see a larger agricultural budget, the reality is that public finances are under pressure, so we expect that any overall budget increase is unlikely. Therefore, we need to use the available money more effectively than we are using it currently. As you heard this morning, we are still largely tweaking legacy CAP schemes, and under the schemes that have been set out, it is difficult to see how those emissions reductions will be delivered.

As Dave Reay said, a lot now rides on the rural support plan, as well as on future policy development, getting us to where we want to be.

Claire Daly (WWF Scotland): Similar to what other speakers have mentioned, despite the draft

climate change plan identifying non-road machinery and fertiliser in key areas, it has very little detail on what the Scottish Government will do to deliver the emissions reductions. There is a lack of detail linked to specific targets. As Vera Eory said, the plan also fails to account for the largest sources of emissions from Scottish agriculture, which derive from livestock management and livestock numbers—I know that we will come on to that.

I have another thing to add to what the other speakers have said. Food production is mentioned in the plan, but the Government fails to consider how the plan could complement other policies and how those policies could be mainstreamed together in order to reduce emissions.

Finally, as we see it, the climate change plan has very little mention of the important role that an agricultural knowledge and information system could have for Scotland. In the earlier evidence session, sharing knowledge came up again and again.

11:15

The Convener: I will ask the last bit of the question. If you do not think that there is anything missing, do not volunteer to speak. We have seen the Climate Change Committee's recommendations and the draft climate change plan from the Scottish Government. Was there anything that you expected to see in that plan that is missing?

Claire Daly: We would have expected better alignment with what the Climate Change Committee recommended. For example, signposting to the Scottish dietary goals could have been a way forward. That would also generate public health benefits, which was referred to in the earlier evidence session. That is not in there.

Professor Reay: The Climate Change Committee was really clear in its advice to the Scottish Government. It feels like groundhog day, to be honest. It asked for clarity on the assumptions on how emissions reductions were estimated and the costings around that. Edward Mountain said in his committee that the Government should show its workings for other sectors. Richard Dixon, in giving evidence to the Net Zero, Energy and Transport Committee, summed that up well. The crucial facet is where the numbers come from, but there are sensitivities around those, so we need to know where the big emissions reductions are going to come from and, if they do not happen, what plan B is.

I must put on the record that there are good parts to the climate change plan, particularly around just transition, which I hope we will get into, but one of the key things that is missing across all the sectors is that granularity and being able to see what assumptions have been made at that sub-sectoral level and what the sensitivities and plan Bs are, if things are not realised.

We have even less clarity on the agriculture sector than we do on most others. We are in a position of poor progress historically, as David McKay said, and there is a real risk that we will be sat here in another 10 years' time saying, "We didn't realise those emissions reductions either." There is a risk that agriculture is standing out like a sore thumb compared with the other sectors and is more vulnerable as a result, in terms of climate action.

I am a bit frustrated. I was hoping to see the Government showing its workings, but that is lacking.

The Convener: Is one of the reasons why we have not seen the Government's workings the fact that it is reluctant at this stage to make unpopular decisions? Emma Patterson Taylor from SAOS, who was on the previous panel, picked that up. It would appear that there is a lack of pragmatism and honesty around this. We have seen recommendations about livestock reductions, and many people find that unpalatable. Do you think that the draft plan is not bold enough because the Government does not want to make what could be unpopular decisions at this stage in the electoral cycle?

Professor Reay: Only the Government can answer that truthfully, I guess. That is likely part of the context, because this is a difficult issue—our sector is hard to decarbonise. We need a big transformation in agriculture, like all the other sectors have to transform, and, politically, it is difficult. The Government hears from us all the time, shouting at it to go faster or go slower. As you picked up from the previous panel, we have in Scotland a good approach from the Government and the Parliament in terms of listening to the stakeholders, which are not just the industry but the wider rural community. However, when we have a climate and nature emergency, what we really need the Government to do is lead. It needs to listen and it needs to be well informed, but then it needs to make the hard choices and upset people. What we are seeing at the moment is something that speaks more to keeping people happy for now, instead of addressing a systemic challenge for the future.

The Convener: Would anybody else like to respond to that?

Dr Eory: I want to go back to your original question about what I see missing. The fact is that no sector can be considered in the climate change plan, or in any similar plans, on its own, because

net zero depends on every contribution. The previous plan left agriculture with higher residual emissions. If you look at the overall numbers between sectors in this plan and how they differ from the Climate Change Committee's recommendation, you will see that what the CCP is doing—or hoping to do—is to save, or generate, massive and probably very overoptimistic emissions savings in both engineered and land-based removals, and in the energy sector, too. Indeed, in the last five years of the plan—that is, from 2036 to 2040—it seeks to generate 12 gigatonnes of removals. However, the CCC's advice in May 2025 for the same sectors was for 4 megatonnes of emissions—I am sorry; the figures are all in megatonnes, not gigatonnes. Not only is the scale different, but the plan is hoping to achieve minus 12 megatonnes, even though the CCC has suggested that what is possible is plus 4 megatonnes. If that does not work, the residual emissions in agriculture, which are planned to be very high, will have to count even more and might jeopardise the plan itself.

This links with the lack of a contingency plan. The CCC pointed out in a letter to the Scottish Government the need for such a plan, and for milestones and flag points that would act as check points for it. That is missing. Indeed, it was missing from the previous CCP and, if we had had it, and if we had had a proper retrospective assessment, we would already be on the contingency route.

The Convener: Okay—thank you. I will bring in Dave McKay and then take a supplementary from Alasdair Allan.

David McKay: I think that our frustration stems from the fact that the Scottish Government declared a climate emergency in 2019. After that, we had numerous reports, including one from the farming for 1.5°C inquiry and one that WWF did in 2020, which set out pretty clearly the options for reducing emissions from agriculture, including reducing nitrogen fertiliser use; getting more legumes into grassland; and looking at animal health, animal feeds, feed additives, agroforestry and organic farming. We know that emissions reductions can be delivered by all those approaches, but the Scottish Government's policies are not incentivising or rewarding much of that effort.

For example, in February 2023, a list was published of measures that were under consideration for tier 2 of the new four-tier framework. That list covered lots of the types of measures that I have just flagged and would have allowed some of the things that previously would have come under competitive agri-environment schemes to be more mainstreamed into agricultural support. However, it has not been brought forward. There is clear low-hanging fruit that we could be getting, or that policy could be incentivising or encouraging, and it is not happening.

Going back to the nitrogen fertiliser example, I would point out that, if you look at the nitrogen use efficiency statistics that are published annually by the Scottish Government, you can see very clearly that, although we are making progress in the arable sector with about 65 per cent nitrogen use efficiency, the figure for livestock is 10 per cent. By the way, the lower the figure, the worse it is; it means that we are wasting lots of nitrogen on grass. That presents a big opportunity for us to try to make up some of those emissions reductions. Some people are doing that work, but we are not incentivising or rewarding it through policy as it stands. We are still essentially giving the same amounts of money to the same people to do broadly the same things each year.

The Convener: Alasdair, do you want to ask your supplementary and then move on to your substantive question?

Alasdair Allan: I will ask this question in a deliberately provocative manner—forgive me. A couple of you have mentioned your considered assessment that Scotland is not going far enough, and you seem to be talking about the Climate Change Committee's recommendations on livestock. You have suggested that such proposals would be difficult or unpopular—that may be the case; I do not know.

However, there is another question. If Scotland were to, uncritically, take the advice about livestock, what would places such as the area that I live in and represent do in agriculture? What would happen if livestock levels were to fall below a critical mass, to the point at which communities could not operate agriculturally?

In such situations, what would happen if the landscape were to change radically because it was not grazed and there was not habitat for bird species and so on? What would happen if we were to do all that at the same time as we kept eating meat, which we would buy from the other side of the world?

The Convener: I ask the witnesses to reserve their responses to those questions, because Beatrice Wishart has a substantive question about livestock that is pertinent to that argument. I ask Alasdair Allan to ask his substantive question, because I know that Beatrice Wishart has a question on this topic.

Alasdair Allan: In that case, I will ask my main question. The witnesses have covered some of the issues that it will raise.

What scale or type of policy would you like to see from agricultural reform programmes so as to

have confidence in the emissions trajectory? That is a more positive phrasing than the provocative approach that I took with my supplementary—I understand that we will come to that subject. What would you like to see in the way in which we change agriculture in order to get to the aims that you are talking about?

Dr Eory: Thank you for the question and for raising the next issue, which we will also discuss. Both questions are really important.

In terms of policy, from what I have seen, read and discussed with economists and other scientists who work in various sectors—in climate change and in the general environment—subsidy-based and voluntary-based policies work to some extent. Specifically, they are important at the beginning of a policy cycle, to increase acceptance, to kick off R and D and to support transition. However, what works in the long term, both financially and in terms of adjustability, is pricing policies. In particular, that means taxing or some form of emissions trading scheme.

Taxing will be introduced for agriculture in Denmark. There are various experiences of emissions trading schemes—we have had them in some sectors and they can be adjusted to agriculture. They need to be adjusted; it is not that straightforward to bring them in. Pricing policies bring in revenues that can be redistributed to further improve the transition and to help those who will need to go through the harder transitions.

Claire Daly: The change that I would like to see follows on from the point that David McKay made earlier. I will give a bit more detail and speak to his point about showing your working. Back in 2020, WWF published a report, written by Nic Lampkin, called “Delivering on Net Zero: Scottish Agriculture”. Although I will not repeat the measures that David McKay already talked through, what is good about the report is that it quantified the emissions reductions that all those measures would achieve, and they were costed. It is all there in spreadsheets and tables for you to look at. The report was published in 2020, so they are in 2020 prices. Many of those measures can be put in place and—this refers to the report that we wrote with the Soil Association, too—those that are in the table of measures that could be brought into the basic payment system have the potential to be transformational. That is one thing that we would like to see.

Recently—in November—WWF published a report on skills for farming. That issue came up consistently in the earlier evidence session with industry. A lot of the knowledge is there on how to make changes—it is just that it is not funded.

The report contains a number of international comparisons. You can hear my Irish accent, so I will be so bold as to make a comparison. It is interesting to see that, in Scotland, the AKIS and agricultural advice are funded to the tune of just under £6 million a year. In the Republic of Ireland, the funding is €150 million a year, which is about £130 million, based on the current exchange rate. Of course, the Irish industry is bigger and more intensive, but it is not 20 times the size of the Scottish industry—it is about two and a half times the size, but there is 20 times the advice.

11:30

Of course, there are many aspects of Irish agriculture that I will not hold up as a model of best environmental practice, but, having visited some of the farms through Pasture for Life and the Nature Friendly Farming Network, I know that there is loads of innovation happening. It is about giving farmers the mechanisms and the funding to share the knowledge.

Professor Reay: Claire Daly has summed up really well where the yawning gaps are. We know a lot of this stuff. I recommend the WWF report from 2020, if members have not already looked at it. It is a really nice piece of work that is still relevant today.

I am biased because I was part of it, but the farming for 1.5°C report gave a good view of what is practicable and what emissions reductions are possible. David McKay mentioned a list of available options that have been well researched and discussed with the stakeholders and the people who would implement them, but there is not the incentive to do them and there is not the context in which to see those options being rolled out.

I guess that my frustration arises because some of the component parts of making this happen are there. The committee talked about the whole farm plan with the previous witnesses. I love the concept of the whole farm plan, because it should mean that we can better understand the carbon content of soils on our farms, for example, and the biodiversity package. NatureScot has a really nice platform for anyone to use to better understand the species and habitats on their farm.

However, that is all just information—it does not lead to any action. Before this meeting was suspended, the point was made that, without the follow-up, it is just words and pretty pictures and it does not actually mean emissions reductions or nature protection. We are lacking implementation of what is now a decade of work on what solutions are practicable and should be applied to meet those emissions reductions and nature targets.

David McKay: I agree with everything that David Reay and Claire Daly just said, so I will not repeat it. For quite a long time, Scottish

Environment LINK has been making a case about the budget and moving the money through the tiers. That means more money coming out of tier 1 and going into tiers 2, 3 and 4, which includes the advice aspect that has just been discussed. The rationale for that is that, as I mentioned earlier, the budget is not getting any bigger, as much as we would like it to, and we need to be doing more with it. That does not necessarily mean that individual farms will receive less, but they will be asked to do more or other things in order to receive those payments.

When the Agriculture and Rural Communities (Scotland) Bill was introduced, an analysis of CAP payments was published, and it found that direct payments were ineffective for the delivery of environmental outcomes and that the agri-environment climate scheme was the only scheme that was found to have a positive impact on the climate and the environment. However, I note that, in 2015, the budget for AECS was £55 million, while, in this current year, it is £28 million. In other words, we are underfunding the bit of the current structure that is actually doing this stuff, and that is not even accounting for inflation over the past 10 years.

It is also worth pointing out that Scottish Environment LINK's position on this has been supported by the First Minister's environmental council; it brought out a publication just before Christmas in which it said that the distribution of funds needed to change and that more money needed to go into the higher tiers. Moreover, the Scottish Government academic advisory panel has agreed that there needs to be better targeting of agricultural support payments to achieve the environmental benefits. Therefore, it is not just LINK that is saying this—it is backed up by many others, too.

Tim Eagle: I have a quick supplementary question for David McKay. I have never really understood why this was the case, but my understanding is that there was a package of measures that would have helped—I am sure that I saw it on an Excel spreadsheet—but the measures were never implemented. In fact, greening has gone in a completely different direction.

Do you know why the measures were not implemented? Obviously, there was talk about the information technology system, but I do not know whether you know if that was the block. I am curious to know why what came out has never transpired as reality on the ground.

David McKay: We discussed the issue with the committee last year. You can still see the list of measures, which was published in February 2023; if you cannot see it, we can share it with you. We, in LINK, were very positive about it and thought that it was a really good step forward.

Our understanding of the reasons for the package not being brought forward is that that was partly due to IT challenges; the current infrastructure was not really set up to deliver anything other than getting money out the door for the basic payment scheme and for greening. There might also have been a desire not to upset some stakeholders—indeed, that was discussed earlier this morning—but I do not know. I think that you would have to ask ministers about that.

Tim Eagle: I see this as quite an important point. We might all say that we are happy to move in the right direction, but what if there is some confusion? What if this has happened because, as we heard from the first panel, the relationship between a couple of groups was too close? It is important to work out, politically, what the stumbling block is. Is it a matter of will, or is it our ability to actually do this through the IT system? Do you accept that that is quite an important distinction to work out, so that we can push in the right direction?

David McKay: Absolutely. As I have said, we were very supportive of that list of measures coming through into policy, and we still think that that should happen. If there are IT challenges, I see no reason why they cannot be overcome. If the political will is there, we should be able to do that.

The Convener: With apologies to Alasdair Allan, we will now move on to the substantive question about one of the most contentious issues: livestock reductions.

Beatrice Wishart: If the witnesses could respond to Alasdair Allan's pertinent question, too, that would be helpful.

My question is phrased in this way: what would happen if the Scottish Government did not introduce policies to reduce livestock numbers? What are the alternatives for closing the gap, and are they to be found within or outwith the agriculture sector?

The Convener: Who would like to kick off on that one?

Professor Reay: It is such a good question, as was Alasdair Allan's related question. Obviously, it was a political decision by the Scottish Government not to take the CCC's balanced pathway on livestock, and I get it. That is part of its job. However, one question that I had was this: what if livestock numbers go up? It brings me back to the point about contingencies. Beef prices are high at the moment; if they were to remain high, you might see growth happening.

We have a long-term vision for Scottish agriculture, and livestock has to be part of it. As

Alasdair Allan has said, a lot of our communities, including my own, rely heavily on livestock; indeed, it is core to what we do. However, herd numbers have been decreasing for a long time now. If those numbers continue to decrease, which is potentially the likely direction, we have to avoid a cliff edge or hillock—or whatever was talked about earlier—such that the numbers get so low in some areas that we might lose the infrastructure around the livestock sector.

I guess it comes back to the idea that we are storing up real risks for the sector in the future by not taking action now. It is pretty much business as usual in terms of the climate change plan and the agri part of it, but that means that our sector is the sore thumb when it comes to emissions. Livestock is a big part of our emissions—I completely understand that.

In the future, there will potentially be carbon border adjustment mechanisms and so on, and we could be put under real pressure in 10 years' time, if not sooner, because we have not had a planned and delivered reduction in emissions. That could happen in a livestock sector where we get improved health. The calving intervals are being addressed to a certain extent. On feed additives, methane has the potential to come in and do some heavy lifting. We must not kick the can down the road. We certainly cannot afford to do that for livestock, as it is so fundamental for our rural communities.

It is a case in point for this part of the climate change plan. For example, we lack the detail that we need in the rural support plan to reassure livestock farmers and the communities that rely on livestock about the direction of travel and about what is expected over time. The fear of a cliff edge and of what livestock policy might come in a different parliamentary session under a different Government is bad for everyone. That speaks to the key issue that I have with the current policies, which is that we do not have the detail—and that includes livestock.

David McKay: The question is a really good one. Environment LINK agrees that grazing ruminant livestock is vital for sustainable food production in many parts of the country. In fact, we have put forward proposals to the Government for a high nature value farming scheme. By our calculations, around 40 per cent of Scotland's agricultural area, primarily in the north and west but also in other upland areas, could be considered to fit into that high nature value, where grazing livestock are delivering biodiversity and ecosystem benefits.

We are a bit confused. We find some inconsistencies when reading through all the documents in the climate change plan. There is the high-level commitment that the Scottish Government will not introduce any policies to reduce livestock numbers. At the same time, however, annex 3 makes it clear that the baseline for emissions reduction projections assumes a continued downward trend in livestock numbers. On the one hand, the Government is saying that it will not have any proactive policies to reduce livestock; on the other hand, there seems to be an acceptance that the current and historic trends will continue in the future.

From our point of view, it is better to be up front about that and to start thinking about what the transition will look like, if there is going to be one, and about how we manage that. We are not seeing enough of the detail at the moment, as David Reay said.

Dr Eory: I will first answer the convener's question about what will happen if we do not do anything about livestock numbers. The historic trajectory is downwards, but there is no guarantee that the numbers will continue to go down, and that is for two reasons. One of those, which especially concerns the recent reduction in beef cow numbers, is the strengthening of the dairy beef coming into the food supply chain, which means that fewer beef cows are needed. That has now reached a limit, so almost all of the dairy farms are producing dairy beef from the surplus calves. That means that we are at the end point of that reduction.

Dairy yields will continue to increase, which will shrink the dairy herd slightly, but that might then have to be picked up by the suckler herd if it goes that way and remains uncontrolled. I cannot see it guaranteed that the total livestock herd—cattle and sheep—will continue to reduce. The total consumption levels of barley, grass and so on are not decreasing as much as the numbers suggest, because of efficiencies and increased productivity. There are fewer animals, but they still consume quite a lot, and lots of fertiliser still goes into the system.

11:45

As a result, we will not be able to reduce agricultural emissions very much. Technical options can help—most of the reduction would need to come from feed additives, although all those are still under debate. At a maximum, we can get perhaps a 20 to 25 percent reduction at the farm level with technologies, if we push them through or subsidise them, but the remaining emissions will be there.

In 2045 or before, someone somehow has to magically put millions or billions of pounds into carbon capture. Also, land-based carbon capture, or land-based sequestration, is temporary. We

tend to forget that it is not permanent like direct air capture. The land can be blown up, the forest can fall or climate change can be so severe that the forest dies out. Therefore, it is increasingly likely that we will miss the target. What happens then will be down to society and the Parliament to sort out, but I see a crash point coming if we do not do something in agriculture.

I cannot address Mr Allan's question in just a few sentences, but what is important is managing the transition over time, avoiding the cliff edge and pointing out alternatives. Not everyone will have an alternative, and not everyone will have to leave livestock production, which is still needed. It will still be part of agriculture, but perhaps on a smaller scale. However, alternatives will be needed for land use, because we will need to produce more biomass.

There is the circular economy plan. There is also biomass and biochar production, which fit into the CCP itself, so there are many other land-use demands that generate profit to some extent. How to balance that, and how to ensure that communities in areas of high nature value—large parts of Scotland, or places where rural communities really depend on such activities—are safeguarded, comes down to the details, which are currently missing.

The Convener: Thank you. Do you have any comments, Claire?

Claire Daly: A lot of my thoughts have been covered by the other speakers. To come back to the simple question of what would happen if we do not introduce measures to reduce livestock numbers, the answer is not simple. Looking at the current emissions profile, we see that livestock management and livestock numbers account for nearly half of agricultural emissions, while manure management contributes an additional 14 per cent. That means that, from a greenhouse gas emissions point of view, we will not achieve the targets.

However, it is important to say that we, at WWF, recognise that livestock can support nature recovery, including through rewilding approaches. There is a very strong role for the high-welfare, low-input livestock sector in the UK and in Scotland, which is renowned for producing some of the world's best reared meat and for operating as part of regenerative farming systems. To link to what Vera Eory discussed, we need to avoid the cliff edge and, as mentioned in the previous session, we cannot suddenly cut numbers but must phase changes in gradually.

The WWF report "Delivering on Net Zero: Scottish Agriculture" has many suggestions, proposals and policy solutions that could be implemented. It is very important to recognise the role that mixed arable and mixed livestock systems can play in delivering a whole range of benefits for nature and the climate.

The Convener: We have a few supplementary questions. I do not know who is best set to answer this, but if we do not have a reduction in the demand for meat products that aligns with a reduction in livestock numbers, are we not at risk of seeing a net increase in emissions? The supply chain uses cargo ships and air freight to bring meat products in from other parts of the world, with a far higher carbon footprint not just in shipping them but in their production, compared with what we have in Scotland. How do we address that?

Dr Eory: That is why it is extremely important to consider production and consumption together and develop policies for both of them together. We are lucky, because most of the health goals align very well with the greenhouse gas goals, but we need to start by progressively strengthening the policy mix on the consumption side as well. I will not go into the details, but there is good literature on how to get acceptance first and then modify purchase behaviours. We have examples of that in the UK and elsewhere, such as various health taxes on food products. That is really important. Another example of what is being done is the emissions trading system in Europe. It is not easy, but carbon border adjustments can be another way of reducing the leakage that is caused by decreasing production rather than demand at home.

The Convener: I will bring in Dave Reay briefly and then move to supplementary questions from Ariane Burgess and Emma Roddick.

Professor Reay: The carbon footprint or emissions issue is really important in relation to offshoring. Food miles are almost irrelevant when it comes to meat, unless your private jet is flying your steak in from the other side of the world. It is really the production that counts. Our production is low emission relative to most of the world. That is really important. If we are in a situation where we are importing more meat—and dairy to a certain extent—that is likely to increase emissions, in comparison with domestic production, but that is contingent on our production going down this pathway of increased efficiency and lower emissions, particularly in the world, as Dr Eory said, of emissions trading schemes and carbon border adjustments.

Ariane Burgess: I want to pick up on something that Claire Daly was kind of saying. In the previous panel, Nim Kibbler talked about how we need to move away from looking just at cow numbers. I think that she meant that, rather than looking at the cow, we should look at the practices of the herdsman or woman. It is not just about having a

cow, but about how you work with a cow. In that earlier evidence session, I mentioned that I had gone to see the work of Jock Gibson in Moray. My sense is that we could be looking at more farmers doing that kind of practice across the whole of Scotland. We could keep a certain number of cattle, and then there is the balancing act of the size of throughput that is required to keep the abattoirs running and all that kind of stuff. Could we be looking at smaller herds in more places? I also guess that she was getting at the holistic aspect of how the cattle or sheep are raised.

Claire Daly: Absolutely. What is really interesting about farms such as Jock Gibson's is that there is a whole range of practices. It is very interesting to see practices such as rotational grazing, which delivers for climate and for nature, but also, importantly, makes for a profitable business that is doing very well and that produces a very good quality product. All of those things are really important.

What is not there but could be is a mechanism for transferring best practice and sharing knowledge. A lot of evidence, research and information is available. When we worked on our report on skills with SAC Consulting, which is linked to the SCUR, what came across in the farmers focus groups was that although the knowledge, the information and the evidence are there, there is a missing link in relation to having a mechanism to share those.

As you will have heard in your previous evidence session with the industry representatives, it is not enough just to have an enthusiastic farmer talking about what the best practices are. People need to be paid for their time. Time spent showing a group of people around your farm is time that you are not spending farming. That approach is being taken elsewhere, and it can be taken here. I do not know the extent to which that is being done, but we would like AKIS to be better set up, so that it could facilitate these kinds of sharing of best practices.

The Convener: Emma Roddick will ask the next questions.

Emma Roddick: I want to ask about changing behaviours around consumption. One thing that constantly comes up in conversations with farmers is the need for people to eat seasonally. It does not feel like the message has got out to the wider public, but that could reduce our need to keep importing food that is out of season here. Do you have any ideas on how the Scottish Government could encourage that behaviour change or bring in policies that would force it?

Dr Eory: What is really important is what our goals are. Sticking to the climate question, and especially GHG emissions, we need to consider the extent to which transport emissions are a problem in that regard. As you have heard, those emissions are minuscule. That means that eating out-of-season, imported food is not really the problem. The emissions and the land use associated with livestock-based protein are roughly five to 10 times higher than those associated with plant-based protein, so that is where our big savings are. It can be important to eat seasonally for many other reasons, but, having studied the literature on GHG mitigation over the past 20 years, I can say that eating seasonally is not a solution to the GHG problems that we face, unfortunately. Because of that, I do not really have an opinion on the issue that you raise. Of course, markets, import prices, price ratios and trade agreements matter.

Emma Roddick: With the previous witnesses, we talked about shipping lamb across the world and overproducing what we need here. Is it more important for us to focus on behaviour change around the type of food that is being produced near us?

Dr Eory: On lamb specifically, what is happening is that most of the lamb that we produce gets shipped out and we buy in cheaper lamb. That is a question of how much money people have and how much they are willing to pay for lamb. It is a market question, to a great extent. Whether we change that situation is for the sector to decide. However, it will not solve our problem in relation to GHG.

Emma Roddick: What about deer? Is there more work to be done around managing deer numbers and using that venison?

Dr Eory: That is a marginal issue, too. Deer are also ruminants, so venison also comes with a lot of methane emissions. That is not a get-out-of-jail-free card, either—I am sorry to disappoint you.

Ariane Burgess: We have already touched on the food system and the need for it to be integrated. The draft plan focuses mainly on agricultural production; it says much less about the wider food system with regard to things such as consumption, waste and dietary changes. From your perspective, does the fact that we are not already talking about those issues as part of the climate change plan represent a gap? It has already been suggested that it does. If so, what kind of policies would help to close that gap?

The Convener: Vera, I think that you touched on that earlier.

12:00

Dr Eory: Yes. I can give you a quick recap of a few of the numbers. Through the technical changes alone, which are really important—AKIS and all that sort of good practice are really

important—we could get down to 5.5 megatonnes annually by 2050. If we did not change anything on the farms technically, but instead changed consumption and production patterns, with a shift to more plants and less—but not zero—livestock, that would bring us down to below 4.5 megatonnes. If we were to combine the two approaches, it would take us below 4 megatonnes. That is the sort of huge difference that we could achieve if we made a combined effort on consumption and production.

As in any sector, consumption—and, indeed, production—needs to be looked at through progressive policy making. After all, no policy is static. Changes or transitions in society need to start with softer policies, with lots of information and help for people so that they can make—and anticipate—such changes. There also needs to be a credible policy threat that 5, 10 or 15 years down the line, much stronger policies will need to come in if the voluntary policies do not help. In my opinion, that needs happen on the consumer side, too; I have not seen any past examples of consumer behaviour change happening just because consumers were asked to make such changes.

Ariane Burgess: I will pop back in with a supplementary on that specific point. I was surprised to learn from Henry Dimbleby's UK report on food and the book that came out of it, which was called "Ravenous: How to get ourselves and our planet into shape", that people would only need to reduce the meat that they ate as part of their normal diet for two days a week in order to reduce emissions. I thought that that was interesting, and I wonder whether you have any thoughts on it.

Dr Eory: As far as I remember, the balanced pathway in the CCC suggests roughly a one-third reduction in the ruminant and dairy elements and less of a reduction in white meat—that is, poultry and monogastrics. That does not tally exactly with the two-days-out-of-seven suggestion, but it is kind of similar.

The Convener: Claire Daly wants to come in.

Claire Daly: I think that it all depends on what you are looking at. What Ariane Burgess suggests might be the case if you were looking at the livestock sector purely from a greenhouse gas emissions perspective, and I think that Vera Eory has spoken to that very well. However, we, in WWF, take a very holistic approach to the issue and talk about the triple challenge of tackling the climate crisis, restoring nature and giving people and communities the food that they need—and supporting them in that. Looking at the issue in the round, I think that a lot can be done with links to the good food nation plan, for example; indeed, we would like to see better links between the climate change plan, the good food nation plan and the dietary goals.

That would be our main point: when we start to look at diet, we need to look at it in the round. However, as has been said elsewhere, if we cannot create locally grown food or produce livestock here, we will not have an industry. In that respect, WWF advocates eating less but better and more local. That is an important point to make when it comes to, for example, red meat.

The Convener: Okay. Ariane, do you want to move on to your next question?

Ariane Burgess: Yes, I will move on to the issue of peatland and trees. We have heard that farmers and crofters are central to delivering peatland restoration and tree planting. I am interested in hearing whether the evidence shows that current support and advice are strong enough or well enough integrated to make that happen at scale. If not, what is missing?

David McKay: The climate change plan contains the very good example of Cora and David Cooper, who are upland farmers who have been doing peatland restoration work while maintaining well-managed grazing systems. It is really good to such positive examples of that happening.

There is one additional thing that we would like to see. We have targets for peatland restoration and woodland creation but not for agroforestry or hedgerow creation. That was picked up by NatureScot in its response to the Net Zero, Energy and Transport Committee. It is also advocating for targets. That would set out a very clear intention from Government and would indicate that it wants to see that happen.

Schemes are already in place. In agroforestry, for example, there are grant options through the forestry grant scheme. We think that the schemes need to evolve, and there are some gaps around lower-density agroforestry systems. We have submitted detailed proposals on that, with payment options.

Similarly, we think that there is a big opportunity to restore many of the thousands of miles of hedgerows that have been lost over past decades. That would deliver not just mitigation but climate adaptation, which is going to become increasingly important—and we are already seeing the impacts of climate change. Farm businesses—particularly those that have livestock—really should be thinking about integrating trees into their systems for the health and welfare of their animals in future. They should be thinking more about shade and shelter from heat; indeed they should be thinking about heat possibly even more than about more inclement weather.

There is lots in the draft climate change plan saying that the Scottish Government wants to see those targets happen. It is good that the political argument for integrating trees has been widely accepted. What are missing, however, are specific targets that set out a clear intention for the industry in order to drive uptake.

Professor Reay: I agree with what David McKay has just said. On Ariane Burgess's question, I think that we have a potential mechanism to drive things forward on the ground through the whole-farm plan. As landowners or farmers, we might already know where the land has potential, but it is about AKIS or the Farm Advisory Service being tooled up to help us with where that could go, how we monitor it and what the funding support will be over time. It is a matter of unlocking things on the ground.

As I said earlier, I have a lot of time for the ethos behind the whole-farm plan, if it leads beyond a kind of baselining to well-informed advice on what people do on their farm or croft with tree planting, agroforestry and hedgerows. The potential is there, but it is not being realised.

Dr Eory: I would like to add three very quick points. One is about the reconciliation of all the demand and how we would like Scotland's land to be used for peatland, afforestation, biochar production, biomass production, livestock and flood protection. That reconciliation is really important, but it is missing from the draft CCP. The CCP mentions quite a few documents, which is great, but in considering all those things together and reflecting policies against each other, we need some idea of how, if we put a lot more land to sequestration, wetland creation or restoration, that will affect our grasslands or arable lands. The same goes for biomass production, which probably needs to happen in prime, good-capacity areas.

Secondly, on peatland and forestry, I have heard from colleagues that the targets are area based. That might mean missing the emissions targets that are linked to them, because it could be that the restoration does not happen, the dams fail or the forest falls because of natural or man-made reasons. That is also really important.

Finally, in relation to how economics works, peatland restoration in particular, and probably also afforestation, happen in areas and places where they are relatively cheap to do. The Scottish Government and Scotland need to anticipate that the unit cost will increase as we go into more difficult and less accessible areas. The maintenance of these things is not necessarily as well funded as the transition to rewetting or afforestation.

I totally agree with all the points that the others have just made.

Ariane Burgess: Twice in this meeting so far, we have talked about trees falling, which is a real thing—we see that from storms such as storm Arwen. Do we need to be thinking about taking a more joined-up approach, where we are not looking at the carbon sequestered in a forest, but at the timber that goes into housing, where it cannot fall down?

Dr Eory: That is also important. In that way, it can be locked up at least for a few decades, or even for 100 years. However, timber for housing is usually, unfortunately, a relatively small part of the total biomass produced, because a certain quality and size of wood is needed. If we are looking at adaptation, pests, diseases and, increasingly and unfortunately, fires will be important, but wetland restoration can help to reduce some of the impact of that.

The Convener: We will now move to a question from Evelyn Tweed.

Evelyn Tweed: Thank you, convener, and good afternoon—just—to the witnesses. Thank you for all your answers so far.

This is a huge question, and you have all touched on it already, but what do you think a good, final climate change plan for agriculture would look like? Could you all give even a short summary of the key things that you want to see in it?

Claire Daly: Again, we have touched on this already, but a good climate change plan would have more of the measures that we set out in our 2020 report on delivering net zero, including a range of measures that have already been touched on, such as growing legumes in grassland, integrating legumes with rotational grazing techniques and using additives to reduce methane, as well as pursuing agroforestry and having targets around organics and so on. A range of emission-reduction measures have been set out, and we need to see more detail on that.

Another thing that a good climate change plan would have is detail on what the measures will deliver and what they will cost. Yet another thing—it is starting to sound like I am going through a wish list—would be signposting to other policy areas and co-benefits that can be realised, because then we would be talking about bigger savings, wider societal savings and health savings for the national health service.

Last but not least, as mentioned earlier, I would like to see a fit-for-purpose, properly funded AKIS system that can share best practice and that rewards farmers for the knowledge that they share. That would be it. There is still time for those

elements to be included before the climate change plan moves from draft to final.

David McKay: I agree with all that Claire Daly has just outlined, so I will not repeat it. The thing to add from Scottish Environment LINK's perspective is that we would like to see a clear signal that, in the next parliamentary session—the period from 2026 to 2031—we will start to see a phased shift in how the budget is allocated across the tiers, with the intention that more of the funding will go towards incentivising and rewarding the types of practices that we have been talking about and that Claire has just helpfully listed, including the important aspect of advice.

We have just talked about targets for agroforestry and hedgerow creation, and they should also be in there.

We have not really touched on the point today that the plan says that there is abundant evidence that the twin crises of climate change and biodiversity loss are linked and mutually reinforcing. We agree with that, but when you look at the carbon budget in the later period, you see that we are looking to rely quite a lot on technological fixes, starting with feed additives, the commercialisation of smart sheds and alternative fuels and fertilisers.

12:15

Our concern about that is that it risks locking in a business-as-usual approach and further intensification of agriculture. For example, green sheds are a fantastic invention, but they require animals to be housed in order for emissions to be captured. Likewise, animals have to be in a shed in order to be fed some of the feed additives that are being talked about, and there is a challenge there, given how much of our agriculture is extensively grazed.

We think that the direction of travel and the reliance on more technical fixes risks creating tension with regard to the delivery of some of the other objectives of the Agriculture and Rural Communities (Scotland) Act 2024, such as, in particular, on-farm nature restoration, animal health and welfare, so we would just issue a caveat in that regard. The plan needs to reflect the fact that we are trying to achieve multiple things, and that, although we might achieve emissions reduction, there may be perverse outcomes, particularly for animal welfare and biodiversity.

Professor Reay: Briefly, to the good wish lists from Claire Daly and David McKay I would add robust monitoring, reporting and verification, as we need indicators of whether progress is or is not being achieved, and, as part of that, contingency plans if it is not being achieved.

I have not seen the draft rural support plan—it sounded like someone on the earlier panel had—but I have seen the example one from a couple of years back, and I note that it uses indicative indicators. You would want a good set of robust indicators, so that, if we are failing on them as a country, ministers could pick that up early and say what they are going to do to get us back on track in terms of the measures to deliver the outcomes, whether they involve emission reductions, the just transition or biodiversity goals.

The Convener: Dr Eory, briefly.

Dr Eory: As the last one to answer, I can be very brief. I fully agree with what you have just heard about supporting the transition. I go back to the point that we need a credible, strong policy goal at the end, and we need to stop backtracking and saying that something was in the climate change plan update in 2020, because not much of that has been delivered—it sends the message that we can just carry on with business as usual. We need much stronger policies, and, ideally, the CCP would set out how to discuss and agree with industry and NGOs, as Denmark has done, what our pathway is.

Evelyn Tweed: I want to ask Dr Eory and others whether we can import policies and good practice from other countries. I think that Claire touched on that as well. Are there any specific things that you think we should be looking at?

Dr Eory: We should not necessarily forget about regulatory approaches, which are not voluntary and can come with financial penalties, but mostly involve technical standards. Denmark, the Netherlands and the north of Germany have achieved substantial nitrogen water pollution reductions via those regulatory standards, which kicked off market action in their farming communities, and there have been technological solutions, especially on manure management. That has involved a progressive approach to strengthening regulatory policies. That is a really nice example, even if they are not doing so well right now.

Another nice example is what Denmark has done in relation to getting together all the interested parties over years in order to come to an agreement on the pathway. They have agreed to diverge from the European Union way and put in place stronger policies for agriculture, despite Denmark being a major livestock exporter. We should look at those examples a bit more thoroughly.

The Convener: Would anyone else like to comment?

Claire Daly: David McKay and I discussed the issue when we were catching up last week, and he

gave the example of the Republic of Ireland's goal of 10 per cent of land being farmed organically by 2030, with measures having been put in place that will lead to that target being met. I am sure that there are better international examples.

The Convener: I am conscious of the fact that we are rapidly running out of time and we still have a number of questions to ask, so I ask people to be succinct in their questions and answers.

Emma Harper has a supplementary.

Emma Harper: I will not take long. It has been interesting to hear about all the work that is being done and about what other countries are doing. Our draft climate change plan does not mention diet specifically. Does it need to, or is it enough for it to point to the population health framework and the good food nation plan?

The plan mentions healthier food, which I think links to the need to avoid ultra-processed food, which may or may not contribute to climate emissions, because of everything that it involves, from supply chains and the movement of products to wrapping and packaging and so on. Our food system is really complex.

We have 180,000 dairy cows in Scotland, but there are 300 million sacred cattle in India and an estimated 11 to 14 million dairy cows in China. Therefore, rather than reducing the size of our herd, we need to look at what is happening with regard to technology, genetics and so on.

It is hard to ask questions when you are participating in a meeting remotely, but I would be interested to hear whether you think that our climate change plan should contain diet-specific info or whether we should focus on the population health framework and the good food nation plan.

Dr Eory: I will give a very succinct answer. As has been discussed, if we do not tackle the livestock numbers and livestock emissions, we will run a really high risk of not reaching the net zero target, so my answer to your question is that we need to consider the issue of livestock.

However, we cannot look at production without looking at consumption, because, unfortunately, reductions that are achieved only via the technological changes that you and others have mentioned will not be sufficient to enable us to get to net zero. In looking at consumption, it is not enough to point to health plans, for two reasons. The first is that they do not contain strong policies, and the second is that they do not have to quantify the GHG effects; they need to consider only the health effects. Somewhere, the GHG effects need to be looked at and sorted out and the two goals reconciled. They are similar, but they are not completely the same.

Therefore, I think that health and climate change plans need to acknowledge one another and that details of the policies that relate to each area need to be provided in both places.

David McKay: I will be brief. It has been touched on that the CCP is basically silent on diet. I think that diet needs to be mentioned in the plan. Under the Scottish Government's dietary goals for Scotland, it is recommended that we eat 70g of red meat a day, but more than a third of adult meat consumers are eating more than that. If we were eating in line with what we are being told to eat, that would make a difference.

In addition, as has been said before, there is a gap in the plan in that it does not make any substantive reference to the national good food nation plan. That feels like an omission. I think that the CCP should be strongly linked to that.

The Convener: Ariane, can I ask you to keep your question brief, please?

Ariane Burgess: This question is about uptake and behaviour change. Annex 3 assumes that there will be a 45 per cent uptake of low-carbon measures across the sector, but as implementation of many of those measures will start in 2030, that will leave few policy-driven reductions for carbon budget 1. I want to get a sense from you of the bottom line. Is that realistic? In practice, what tends to limit uptake at that scale in farming systems and what helps change to spread beyond the early adopters?

Dr Eory: Reaching the 45 per cent target within that timeframe could be realistic, but a subsidy-based policy will not deliver that unless a lot more money is put into it, because the barriers at a farm scale span finances, the time it takes to consider major changes in the whole farming business, technological knowledge and the availability of technical advice—it is a very complex system.

The Convener: Thank you. Tim Eagle's question will address what happens if the approach in the plan does not work.

Tim Eagle: I have two quick questions to finish. The first is around contingency. If we do not get the behavioural changes that the climate change plan sets out, do we need to build some contingencies into the plan, and if we do, what should they look like?

Dr Eory: It is a policy question, but a contingency can be something that we do in the sector—either chucking a lot more money at subsidies or drastically changing the policy mix without taking a progressive, gradual approach—or it could involve massively scaling up emission removal technologies, especially the permanent ones. However, those technologies are currently

very expensive, probably around £1,000 per tonne of CO_2 equivalent, so it would cost a lot of money.

Claire Daly: There need to be contingencies, but I caution against ones that push action further down the road and that are overly reliant on negative emissions technologies and other technical solutions. A lot of the tools are in place now. As was talked about earlier, rather than having to jump off a cliff in 10 or 15 years' time, we should move gradually and implement things now.

Professor Reay: I do not have much to add. We need contingencies across the climate change plan. It is hard to see them because we cannot see the workings, but if we are looking at contingencies to deliver net zero for Scotland, then, as Vera Eory said, if one sector fails to deliver, we will need to act much more strongly in that sector or allow another sector to shoulder the burden. As I said earlier, that is a real risk for agriculture: by 2040, attention will turn to us if other sectors are not delivering. We need to identify what those contingency plans might be so that we can assess the risks that they could create for livelihoods and to people who work in agriculture, compared with other sectors.

David McKay: I do not have too much to add to that. In preparation for this session, I read the Scottish Parliament information centre briefing, which made the very point that there is no discussion around contingency. That reliance on future technical solutions is a risk, particularly at the back end: for example, will decarbonised farm machinery be available and affordable at some point in the future?

You talked about that in your last session. I have seen presentations on methane-powered tractors, and lots of things are going on in the manufacturing industry, but it feels unlikely that there will be mass uptake or affordability of such technology in the next 10 or 15 years. Dave Reay just outlined what the contingency might look like, and the risk for agriculture is that as we get closer to the 2040 and 2045 deadlines, if we are still not achieving the emissions reduction targets, the policy options will start to become more severe, as Vera Eory said earlier.

Elsewhere in Europe, there are examples of things that are perhaps not part of the discussion here. For example, Denmark has a climate tax on agriculture that is coming in in the next couple of years, and other countries are doing things that might be considered more radical. Some of those measures might end up on the table for discussion in Scotland if progress on agricultural emissions continues to flatline.

The Convener: Tim Eagle has a question.

12:30

Tim Eagle: My question is probably aimed at Professor Reay, given some of the work that he has been involved in. It appears that there is no just transition indicator for the agriculture sector or, perhaps more widely, rural communities. Is that a glaring omission in the plan?

Professor Reay: A big glaring omission outside the plan is that we do not yet have a just transition plan for land use and agriculture. We were hoping to see that in this parliamentary session—it was expected last year and we only have a draft consultation document. It would have been great to have had that plan to refer to when considering the agriculture sections of the CCP.

In the draft rural support plan—I mean the example one from 2024—there is nothing about just transition in terms of tier 1. There is nothing in there that speaks to the fact that the plan needs to take account of the diversity of farmers and crofters in Scotland, or the risk that, if you apply the major transformations in policy and rural support that are needed to address the climate and nature crises, the burden will fall most heavily on the shoulders of those who are least able to bear it. I have a concern there.

I am reassured by things such as the implementation of calving intervals. That derogation speaks to the fact that the Scottish Government listens to us as a community—to small farmers, crofters and our representatives—in saying that it needs a more nuanced approach and that just transition is crucial for us. For the sector as a whole, our voice is probably less loud than that of the energy sector, because we are a much more diffuse community. However, the risks of unjust transition are just as acute, if not more so. It would have been great to have had that just transition plan for land use and agriculture finalised before the climate change plan was produced.

On the climate change plan, the key is to consider the indicators. We have just transition indicators in the climate change plan, which I think is a world first, and I really applaud the Scottish Government for including them in the draft. The sectors, particularly agriculture, need to speak loudly for our communities and stakeholders. At the moment, the indicators that are listed in the example rural support plan do not really talk about just transition. They talk about job creation but not about the quality of the jobs, and they do not deal with the fact that we are very much an ageing workforce or with the fact that, in many regions, including mine, we are seeing rapid depopulation. It would be great to see information on how rural support to address climate change will also address those key just transition challenges. I hope that, in the final version, we will see those

indicators speaking to agriculture through a just transition lens.

Claire Daly: I have a small point. I completely agree with David Reay. The main point is that, despite being framed as income support, the current system of payments does not support those who need the support the most; instead, distribution of funding is weighted towards those who make the highest claims. David has talked about the fact that we need farming systems that are valuable to nature but, at the moment, some funding supports create damage to nature. Getting that balance better and getting a better balance in the payments system will make a big difference, and we should have a direct reference to that in the climate change plan.

The Convener: We will move on to questions from Edward Mountain.

Edward Mountain: You will not be surprised to hear that I want to look at annex 3. On page 67, it clearly says that, because of the slow development of the ARP, it is impossible to

"fully assess the costs and benefits to industry".

It goes on to say:

"All figures"—

that is, on the carbon reductions and costs—

"should therefore be treated as provisional".

On page 72, the chart setting out what it is going to cost says that the benefits to the environment over the period are worth £9.6 billion and, over the same period, the net costs are £90 million. However, the problem is that the costs of the agricultural support scheme, if you tot them all up as it rolls forward, are £12.8 billion. So, none of the figures match up. Can those people who have considered the plan tell me how much it will cost farmers and the industry more widely? I cannot work it out.

Dave, you anticipated the question, because you smiled. I will come to you first, because you must know the answers.

Professor Reay: I wish that I did. I was looking to the climate change plan to give me those figures, but they are not there, so I have not got the answer, and clearly neither has the Government.

Edward Mountain: Does anyone have the answer?

Dr Eory: No, but I have a recommendation. We need to be clear on other things as well as the numbers—it is not even clear from whose perspective the costs and benefits are estimated. Is it a societal perspective, a farmer's perspective, an industry perspective, or a policy, budget and taxpayer money perspective? Those are really important distinctions, but it is not clear. It is not clear whether non-monetary benefits are included or whether the carbon savings are costed on the basis of price and included. It is not clear whether the compliance costs and the costs of running the scheme are included.

I am with you, and I am adding to your list of questions.

The Convener: Does anyone else want to comment on the costings?

Claire Daly: That was one of the things that struck us from an early look at the draft plan. There is a lack of detail on costings linked to the measures and on what greenhouse gas emissions reductions individual measures will deliver.

On costing and who is going to pay for this, I draw the committee's attention to a report that was published by WWF this time last year, along with NatWest, that looked at a road map for financing regenerative agriculture. That looked at public and private sector solutions. To summarise, it outlined that it should not be farmers who shoulder the bulk of the burden.

Edward Mountain: I will end there, but I just want to say that we have an uncosted plan with provisional figures and with no idea of who is going to pay for it, what the benefits are and who will benefit. It is an amazing plan to me.

The Convener: We have no further questions so, on that note, I thank our witnesses very much for their time. It has been of great value and will help to inform the report that we write for the Net Zero, Energy and Transport Committee and to inform the climate change plan as we go towards finally agreeing it.

I suspend the meeting for five minutes.

12:38

Meeting suspended.

12:42

On resuming—

Subordinate Legislation

Conservation of Salmon (Scotland) Amendment Regulations 2025 (SSI 2025/390)

The Convener: Our next item of business is consideration of a negative instrument. I welcome to the meeting Jackie Baillie, who is attending for this item.

Do any members have any comments on the regulations?

Jackie Baillie (Dumbarton) (Lab): Thank you, convener. I thank you and the members of the committee for your considerable forbearance and for giving me an opportunity to speak. I do so on behalf of my constituents in the Loch Lomond Angling Improvement Association. The consideration of the regulations has become an annual fixture in my calendar, and in this case we are talking about Scottish statutory instrument 2025/390. Members can also be forgiven for thinking that this is a bit like groundhog day, because I see many of the same faces around the table.

At the heart of the issue is a continuing problem with the reliability of the data that is used. I have been talking about salmon conservation and regeneration since 2017. Members will be pleased to hear that I will not be rehearsing everything that I have said since then, but it is remarkably consistent. Last year, I lodged a motion to annul the SSI. I have chosen not to do so this year but I assure the cabinet secretary, who I hope will read what has happened at committee, that I will do so in the future if things do not improve substantially.

Last year, officials and the cabinet secretary said that data about catches on the River Endrick was robust, which was clearly an aspirational declaration rather than a factual one and I will demonstrate why. Since last year, considerable engagement has taken place between the LLAIA and Marine Scotland, resulting in the identification of new fisheries that were not previously known about, the identification of two stretches of the Endrick totalling 1.3km for which no ownership details have been established, and much more besides.

That demonstrates what we have all been saying all along—the data is not good enough and it is certainly not robust. That is true for other waters. Although I am here representing Loch Lomond, others share concerns about data.

Not for the first time, the LLAIA has invested considerable time and effort in trying to ensure that Marine Scotland has an accurate and complete view of Endrick fisheries and owners. Why it has taken repeated efforts over many years to get to this position is, frankly, more than disappointing, and it is little wonder that confidence in the process and the accuracy of the data is less than fulsome.

I am sure that the committee will appreciate that having an accurate view of the fisheries and owners on the Endrick is one thing, but ensuring that owners return catch data is another thing entirely. There are concerns that there appears to be no real enforcement or follow-up by Marine Scotland of the catch data. We are therefore again faced with relying on incomplete data on fisheries and owners and incomplete data if returns are not made.

As I said, when I looked back to refresh my memory of our discussions, I was struck by how I am making exactly the same arguments year after year and the same arguments that the committee understands. I am, however, not one just to bring the committee a problem. I brought the committee a solution previously, which was a suggestion to use fish counters as a means of removing subjectivity and the need to estimate catches. It would bring real rigour to the process. My recollection is that the cabinet secretary thought that it was a good idea, as did members of the committee. Disappointingly, however, in the time that has elapsed, nothing appears to have been done. Here is a relatively easy way of using quantitative data rather than estimates and assumptions. Convener, I am nothing if not persistent, so I make the suggestion again in the same spirit that I did previously.

However, we cannot keep coming back, saying the same things and having the same conversations because the data has not improved and nothing has changed. Therefore, I respectfully suggest that, if Marine Scotland does not improve what it does, or at least trials the use of fish counters—I offer the Endrick as a suitable site for that—I will regretfully be back here next year with a motion to annul. At the end of the day, we are not doing anything to help salmon conservation or regeneration if we keep relying on poor or incomplete data.

Thank you, convener, for giving me the opportunity to speak.

The Convener: It also gives me the chance to comment. Anecdotally, there are more constituents like yours, who have concerns about data capture, but, given the difficulty in changing the mythology that the marine directorate uses to calculate the health or otherwise of our rivers, they no longer come forward to suggest that we annul the instrument. However, that does not mean that there is no desire to see methods changed.

The robustness of the data is incredibly important. As we know, the present system across Scotland is generally based on rod catches. More fish tend to be caught in rivers that are fished more regularly and heavily, so they are graded higher. A good example is the River Luce in Galloway, which supports a healthy salmon population, by modern standards, that is. Whether it has been healthy historically is not clear, but it is a category 3 river. That is mostly because of the light angling effort on the river and the fact that the owners of the fishing rights only allow fly fishing, so far more fish probably get away than are caught compared with other rivers.

With a falling angling effort because of less angling, and also because of climate change affecting weather conditions, including causing droughts, it means that river gradings will be less accurate.

The national electrofishing programme for Scotland—NEPS—was developed by the marine directorate and widely welcomed. It started in 2018 and ran again in 2019. The programme did not run in 2020, because of Covid, but it was run in 2021 and 2023. It has not been operated in 2024 or 2025, due to what I understand to be a lack of funding.

There was wide recognition that NEPS was a good project that involved many trusts and those with an interest in rivers working together with the marine directorate to get a more accurate picture. That was considered along with fish counters. We heard in previous evidence sessions that the marine directorate recognised how important fish counters are. I am concerned that there has not been a roll-out of fish counters to make the data more accurate. There are also concerns that the NEPS project has not been restarted and is not attracting funding. It could remove some of the reliance on rod catch data, which is not as good as it may have been in the past.

Ariane Burgess: I was interested in Jackie Baillie's solution involving fish counters. My understanding is that fish counters already feed into the annual assessment through the fish counter network, but I wonder whether there is a concern that the network is not comprehensive, that the counters are not in the right rivers or that the data is not being weighted properly.

The Convener: That is certainly a question that we can ask.

Ariane Burgess: We perhaps do not want to put that on to Jackie Baillie; we could ask the Government about it. There are fish counters in the Government's data-gathering mix, but how comprehensive is that?

The Convener: From my memory of it, there was an understanding that fish counters would be rolled out more generally, because they were seen as a very effective tool for accurate data collection.

Emma Roddick: When Jackie Baillie was speaking earlier, she mentioned that the problem existed in her patch. It will be replicated across the country—it certainly is in mine. Fisheries organisations around Inverness and in Inverness-shire are keen for fish counters to be introduced. I have been trying to get a meeting with Government agencies about it for quite some time. I understand that there are complications around who makes the decision and how many people are involved. At this stage, I am still trying to sort out a meeting with the marine directorate, NatureScot and the Scottish Government, but it seems that most people agree that fish counters are the way forward.

Rhoda Grant (Highlands and Islands) (Lab): We are obviously coming to the end of the parliamentary session, and this matter will be a problem for the committee in the new session. Like us, the new committee members might be totally unaware of the matter until it lands on their desks. It might be worth our putting it in our annual report and information for the next committee. At the beginning of the next session, it will have time to examine things in more depth. It could consider the matter in the first instance, rather than reacting to an SSI appearing, by which time it could be too late. We got information about the matter, but I am talking about the basis of the decision making rather than about what data is being collected at the moment.

The Convener: My suggestion is that we follow up this agenda item with a letter, asking specifically about the roll-out of fish counters and, potentially, the continuation of the NEPS scheme. As part of our legacy report, which we will be dealing with at the end of March, we should have a specific section referring to the on-going problems that have been raised with this committee. The future committee should consider that and potentially do a bit of work that we have been unable to do at this time. Is everybody happy with that?

Members *indicated agreement*.

Jackie Baillie: Thank you very much.

The Convener: Thank you, Ms Baillie.

That concludes our business in public.

12:54

Meeting continued in private until 13:35.

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Room T2.20
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EH99 1SP

Email: official.report@parliament.scot
Telephone: 0131 348 5447

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