



OFFICIAL REPORT
AITHISG OIFIGEIL

Environment, Climate Change and Land Reform Committee

Tuesday 21 February 2017

Session 5



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ENVIRONMENT, CLIMATE CHANGE AND LAND REFORM COMMITTEE
6th Meeting 2017, Session 5

CONVENER

*Graeme Dey (Angus South) (SNP)

DEPUTY CONVENER

*Maurice Golden (West Scotland) (Con)

COMMITTEE MEMBERS

*Claudia Beamish (South Scotland) (Lab)
*Alexander Burnett (Aberdeenshire West) (Con)
*Finlay Carson (Galloway and West Dumfries) (Con)
*Kate Forbes (Skye, Lochaber and Badenoch) (SNP)
*Jenny Gilruth (Mid Fife and Glenrothes) (SNP)
*Emma Harper (South Scotland) (SNP)
*Angus MacDonald (Falkirk East) (SNP)
*Mark Ruskell (Mid Scotland and Fife) (Green)
*David Stewart (Highlands and Islands) (Lab)

*attended

THE FOLLOWING ALSO PARTICIPATED:

Roseanna Cunningham (Cabinet Secretary for Environment, Climate Change and Land Reform)
John Ireland (Scottish Government)
Colin MacBean (Scottish Government)
Neil Ritchie (Scottish Government)

CLERK TO THE COMMITTEE

Lynn Tullis

LOCATION

The Robert Burns Room (CR1)

Scottish Parliament

Environment, Climate Change and Land Reform Committee

Tuesday 21 February 2017

[The Convener opened the meeting at 10:03]

Draft Climate Change Plan (RPP3)

The Convener (Graeme Dey): Good morning and welcome to the sixth meeting in 2017 of the Environment, Climate Change and Land Reform Committee. I remind everyone present to ensure that their mobile phones are on silent for the duration of the meeting.

At agenda item 1, the committee will conclude its evidence sessions on the Scottish Government's "Draft Climate Change Plan: The draft third report on policies and proposals 2017-2032", or RPP3. We are joined by the Cabinet Secretary for Environment, Climate Change and Land Reform, Roseanna Cunningham, and by John Ireland, Colin MacBean, Neil Ritchie and Morag Williamson, who are the Scottish Government officials leading on the development of that document. I wish the cabinet secretary and her team good morning.

We move straight to questions, the first of which is a scene setter. How did the Scottish Government arrive at its decisions on the relative sizes of the emission envelopes for each sector and the scale of reductions? Perhaps you could offer us examples of discussions that the Cabinet had on the trade-offs that are associated with pursuing particular sector emission envelopes.

Roseanna Cunningham (Cabinet Secretary for Environment, Climate Change and Land Reform): We have selected the emissions reduction pathway that is set out in the draft plan as the most beneficial to the people of Scotland. It is based on TIMES modelling and analysis, of which the committee is already aware. The TIMES model is internationally known—it is not peculiar to Scotland, so it needs to be adapted for our use. It provides an analysis of emerging technologies, and covers all sorts of practical considerations that have to do with delivery costs and disruption.

We have taken economic considerations into account. It is important that we do not take actions that result in what is known as carbon leakage, which is in effect offshoring carbon. That might help Scotland's figures, but it does not help globally. We have to ensure that we optimise economic opportunities, and that the transport

system provides the necessary connectivity to support and facilitate economic growth. We looked at all those factors when we considered our decisions on the emission envelopes for each sector.

We did not want to ignore social justice issues and other co-benefits. For example, in taking the decision to decarbonise heat in the residential sector, we have tried to avoid unintentionally increasing fuel poverty. That sort of balance must be taken into consideration. We did not want to create an adverse effect with regard to fuel poverty, given its impact on some of the most vulnerable people in Scotland, so improving energy efficiency is important.

The share of effort is different from that which the UK Committee on Climate Change originally suggested, but that was not unexpected in some areas. We started with a least-cost pathway. The ECCLR committee has been given a lot of detail on how the possible scenarios were run through the model to consider what the effect might be. There were a lot of stages, some of which included stakeholder input. I could say a great deal about the TIMES model.

The Convener: We will come to some of the detail on the TIMES modelling process in due course.

What are the implications for the other sectors of one sector over-performing on emissions reduction expectations? In the foreword to the plan, you appear to indicate that, if one sector did particularly well, another sector might—if you will forgive the expression—be let off the hook a bit.

Roseanna Cunningham: I do not think that I would have used that expression; it is not language that I would want to adopt.

The Convener: Such an interpretation could have been made.

Roseanna Cunningham: The targets that we present are pretty stretching across all sectors. We need to keep progress under review and take action to ensure that the policies deliver the changes that are needed to enable us to hit our targets.

As I said in an earlier answer, we wanted to balance a number of things, and we continue to look, through the monitoring process, at whether the balance is correct.

If we thought that a particular sector was underperforming—or rather, overperforming—it is not likely that we would say that someone else was off the hook. We have looked across the board at what we are expecting. Overperformance could be a bonus, rather than being used as an offset, which I guess is what you are talking about—

The Convener: That is what we want clarity on.

Roseanna Cunningham: I guess that there will be times when we discover that some areas are not performing as we had anticipated, but that is where the monitoring comes in to ensure that performance is brought up, rather than offset. That is how we would prefer to do it.

The Convener: Have the weaker ambitions on reductions in some sectors put particularly ambitious or potentially unreasonable expectations on others?

Roseanna Cunningham: I am not sure that I would use the word “weaker” in that context; that is not how we see things. We have tried to ensure that there is effort across the board. For example, agriculture’s effort was made more demanding during the process, and the sector’s effort looks more challenging than it did at the start of the process.

As I said in my first answer, we are trying to work out an appropriate balance across a number of different areas. We have to take account of the impact of all this and ensure that there are not consequences that none of us would wish to see. I used the example of how we have to take care to ensure that the decarbonisation of heat does not trigger further fuel poverty.

The Convener: Okay. We will move on.

Emma Harper (South Scotland) (SNP): I understand that emissions reductions have been achieved in the agriculture sector in previous years, but it has been suggested that transport and agriculture have got off a bit more lightly—you alluded to that—than other sectors. On the planned emissions reductions to 2032, how can we achieve bigger gains if some sectors have lower percentage goals?

Why were different approaches used to inform the agriculture and transport sector emissions reduction pathways? Has using those as a constraint in the TIMES model resulted in the model offering more ambitious reductions in other sectors?

Roseanna Cunningham: As I think that I said earlier, we have not simply followed the line of the Committee on Climate Change. Our approach to agriculture was developed in two ways and, as I said, that resulted in the sector’s emissions reduction being increased. I think that you know what I mean: over time, agriculture came out with a tougher challenge than was originally envisaged.

Forgive me, because this is quite technical—I had to ask about it myself. An assessment was made on the marginal abatement cost curve, which is about the extent to which, as one attempts to abate, the gains reduce until they are really very small. We had to look at that aspect.

The approach was not planned to be used as a model for calculating emissions, because it describes measures at farm level, which cannot be delivered through policy—agriculture is a particular area—and because some measures would be undesirable for reasons to do with health and safety and other aspects of farming.

10:15

It brings us back to the need to make sure that we have the proper balance and that what we are doing is proportionate. What we are talking about was still part of the process, but we had to revise it for the TIMES model. We could not have simply gone with the straightforward approach, because it would not have given us the result that we wanted.

Analysis by agriculture officials concluded that we could get fairly reasonable emissions reductions through policy interventions—again, this is also about policy interventions. We had to analyse trends in agriculture since 1990, which in any case projected a reduction every year in addition to our policy efforts. All of that is being fed in as part of the process. That is why our approach has not simply been lifted from the Committee on Climate Change, and why there has been an actual process to look at some of that stuff. As I have said, the TIMES model is international, and we cannot just lift something from somewhere else without looking at the conditions in Scotland.

What we and Transport Scotland have used to look at transport is research from Element Energy, which was published just after the publication of the draft climate change plan and is available for people to look at. It provided more detail than TIMES, and because the projections for emissions reductions were broadly consistent with the output from TIMES, that research is what has been adopted.

That is quite a long-winded explanation of the two areas in which the approach was not simply lifted and dropped into the TIMES model. We think that, in both cases, it was the right way for us to go, because otherwise the results would have been distorted.

Mark Ruskell (Mid Scotland and Fife) (Green): I have to say honestly that I am really struggling to understand the impact of each individual policy and proposal on carbon abatement. I have no reference point, so I have no idea whether the policies that you are putting forward are the most or least effective. That is partly because we do not have the figures that are associated with each policy and proposal. In your response to a written question that I lodged, which asked you to provide those figures, you said:

“the verification of the projected emissions of a particular policy or proposal will be provided by the delivery of the

policy outcomes—real life changes on the ground, such as penetration of low emission vehicles.”—[*Written Answers*, 15 February 2017; S5W-06879.]

Does that mean that you will not know the impact of the policies until you have delivered them?

Roseanna Cunningham: Most of what the plan talks about is policy outcomes. The TIMES model is about outcomes, which we are trying to measure. The specific things that the Government does or might choose to do have to be directed at those policy outcomes. As I understand it—I was not heavily involved in RPP1 and RPP2—things have been developed in RPP3 in quite a different way from how they were developed in the previous plans, and the specific policies will have to deliver on our overall policy outcomes.

That brings us back to the monitoring process, which will allow us to discover whether the policy outcomes are being achieved by the specific policies that we are putting in place. Some of the policies that we choose to put in place might not be in the climate change plan; we might do other things as we go along.

The whole purpose is to achieve a policy outcome. We have indicated what some of the policies and the longer-term proposals will be, but the monitoring process will keep us on track in respect of success. We did not have that process with RPP1 and RPP2.

Mark Ruskell: I think that you are describing outputs, so in your written answer—

Roseanna Cunningham: I am talking about not outputs but outcomes. They are different things.

Mark Ruskell: You described an increase in low-emission vehicles, which is an output. What will be the carbon reduction outcome of that policy?

Roseanna Cunningham: That is what the TIMES modelling is about—it measures the expected uptake of low-emission vehicles.

Mark Ruskell: What is the outcome of that?

Roseanna Cunningham: The modelling also measures the longer-term impact of that uptake on emissions reductions. I will probably get shouted at by Colin MacBean for saying this, but I think of the TIMES model as being a bit like a sausage machine, where you put stuff in and—

Mark Ruskell: Do you understand the distinction that I am making?

Roseanna Cunningham: You are using the word “outputs”.

Mark Ruskell: Policies are put in place, which have a carbon reduction outcome. What is the expected outcome of each of the policies and proposals in the plan?

Roseanna Cunningham: We have not done the plan in that way.

John Ireland (Scottish Government): The issue that is being discussed is the distinction between the two different ways of doing the work. In the world in which RPP2 operated, we could say, “We need to achieve X reduction in emissions, and if we have a policy to encourage people to use electric vehicles, that will have Y impact on emissions.” The problem was that that approach did not take account of the impact of emissions in the round.

We have talked before about where the electricity comes from that is used to power low-emission vehicles. The source of that electricity can have an emissions impact, too. We have moved to a different approach—the TIMES model. That model clearly says that having a penetration of electric vehicles along a certain path will mean that we hit our emissions targets. It operates in that way because of the complex cross-sectoral nature of emissions. The numbers in RPP2 are of limited value, because they do not take into account the broad story.

That is a very different way of thinking; it is not that we are dodging the issue. If we have a set of policies that produce the outcome of a certain level of penetration of electric vehicles, that will contribute to emissions reductions. The TIMES model is the validating mechanism for making sure that all those things add up.

Our approach to doing things and to thinking about the issue is different, which is why we have been at pains to explain the TIMES model in so much detail and why we have given you so much additional information. Furthermore, the monitoring framework that will be developed alongside the plan will contain a lot of information about the policy outcomes that we will need to hit the targets. In essence, a different way of thinking is involved.

Mark Ruskell: With electric vehicles, surely it would not be hard to say that the measure will depend on decarbonisation of the electricity supply, so it will depend on a number of other areas in the plan. You could put a number on that and specify what you would achieve if we did—or did not—decarbonise the electricity supply.

John Ireland: That is exactly what the TIMES model does.

Roseanna Cunningham: That is exactly what TIMES does—different pathways are run through the model. It takes all those issues into account; it works across all those matters on a cross-sectoral basis.

The Convener: Will you clarify a matter for me? A number of stakeholders have been looking for

the Scottish Government to publish the data on the required annual emissions impact of each policy in the plan. Will that happen, and if so, when?

Roseanna Cunningham: No.

John Ireland: No. When TIMES is being used, that data does not exist. In the supplementary models—such as that for transport, which contains some information along the lines that have been mentioned—the data is only partial. It is incomplete and does not allow people to understand the impact of the policies.

Roseanna Cunningham: This is a completely new way of doing things.

The Convener: It is clear that it is confusing a lot of people who have an interest.

Roseanna Cunningham: I guess that that is because everyone is looking at how we would tackle the issue in the standard way, which would involve adding this to that and all the rest of it. That is not how the TIMES model works. I appreciate that that is difficult. People are looking for answers to questions that they think that RPP1 and RPP2 might have answered—although not particularly well—but that is not how we are modelling any more.

Claudia Beamish (South Scotland) (Lab): I am trying to understand where we are. My confusion arises from the fact that, if I look at the additional information—in the main, it is useful and the committee appreciates it—on the TIMES model that came in on Friday, we are drawn back to sectoral comments, which seem to stand alone. I will read out just one from the October 2016 run.

Roseanna Cunningham: I think that the model runs started in January 2016.

Claudia Beamish: As you will know, the committee got the progressions for the model, which involved putting in various assumptions and progressing the trajectories. The document says:

“A revised trajectory for agriculture was incorporated following extensive review by sector experts to better reflect achievable abatement within the sector.”

That is very sectoral and I do not see how it fits with what you said about how everything meshes together.

Roseanna Cunningham: That goes back to the technical information that is behind the marginal abatement curve. The TIMES model is like everything else in that the idea of garbage in, garbage out applies. We have to make sure that what goes in is accurate. If we put in information that does not accord with reality, we will not get an accurate outcome from the TIMES model. Making sure that we get an accurate outcome means looking at specific information in some of the

sectors in which the outcome is liable to be distorted if we do not make sure that good information goes into the model in the first place. That might be an untechnical way of describing the process.

Colin MacBean (Scottish Government): The cabinet secretary’s sausage analogy was a good one. At each stage and for each sector, we provide the model with the ingredients and tell the model what we think the world looks like. The model then blends the whole set together and gives an overall output. For example, in agriculture, when we tell the model about the advice that we are getting from the sectoral experts, the model looks at what it has to do elsewhere, given what it now knows about agriculture. It does that simultaneously across all the sectors.

The Convener: To pick up on the agricultural sector, the United Kingdom Committee on Climate Change asked in its evidence how, if there is to be a more softly-softly approach that involves sharing best practice in agriculture, we can be confident that the sector will make the overall contribution that it needs to make. How is that factored in?

Roseanna Cunningham: I have already indicated that, as the process was followed, the challenge for agriculture became tougher, not easier. The information that went into the initial run-through did not give helpful outcomes. As we refined the process, the agriculture challenge became greater rather than lesser. I am not quite sure how that is seen to be a softly-softly approach.

Because of the nature of agriculture, there is also an issue about the extent to which some changes can be mandated. That has to be taken into account.

The Convener: You are saying that TIMES tells us that taking this approach will produce the result that we are looking for.

Roseanna Cunningham: Yes. From the best evidence that goes in, TIMES tells us that everything is achievable for agriculture, transport and all the other sectors. That does not remove the importance of continued monitoring to make sure that things do not happen that would begin to reduce what is achievable. If we see that things are not working out in any one sector, we can have another look at it. That is what the process is about.

I do not think that RPP1 or RPP2 had that process built in. As I said, I was not doing my current job when RPP1 and RPP2 were produced, but I understand that that kind of continual assessment or monitoring did not take place. John Ireland is indicating that it did not.

10:30

We have added an element into the process, which is—unless I am wrong—that there will be annual reporting on the effectiveness of what we have put before the committee. I appreciate that that means more work for the committee, but it means that there will be a more constant process than we had before.

The whole thing has changed considerably—the model is completely different and the way in which it is described is really different—but the continual monitoring is also new. All of that together will provide a far better way forward than we have had before.

The Convener: Let us compare and contrast RPP1 and RPP2.

Kate Forbes (Skye, Lochaber and Badenoch) (SNP): We have touched on some of the potential challenges that are associated with moving away from the bottom-up approach in RPP1 and RPP2 to a more top-down approach. Are there any other potential challenges? How do you respond to the suggestion that the CCC made on the benefits of combining a top-down approach and a bottom-up approach to capture all the nuances?

Roseanna Cunningham: Let me be clear on where I am. We have said quite a lot about TIMES, and we should remember that it is about strategy. It is a tool for allowing choices to be made on the distribution of emissions reductions. It is a road map of policy outcomes; it does not prescribe policies, as dealing with that remains a bottom-up process and remains a decision that we and society have to make, which will feed into the policy outcomes that TIMES is modelling.

As we have discussed, the data is supplemented by some of the sector modelling and research. I referred to a large piece of work that was done on transport as well as agriculture. In a sense, that is another example of the top and the bottom coming together. The monitoring framework will also allow us to continue to assess how the top-down policy outcomes and the bottom-up policies combine to deliver the outcomes.

The idea that, somehow, the whole thing has flipped from a bottom-up approach to a top-down one is a misreading and a misunderstanding of what is happening. We are bringing the two together in a way that has not been done before.

Alexander Burnett (Aberdeenshire West) (Con): I refer to my registered interests in renewable energy.

We are on the road to understanding how the TIMES model works in terms of policy output and outcomes. You talked about how the model is the product of the ingredients that go into it. I would

like us to talk about what happens if one of those ingredients is unrealistic, referring specifically to the very high ramp-up targets. I have two examples. The first is the amount of low-carbon heat that is supplied to buildings; the plan says that in just eight years' time, in 2025, that will jump from 18 to 80 per cent. Similarly, in transport, there is an overnight ramp-up from 27 to 40 per cent in 2032. Those are the model's key ingredients, but we have heard from a lot of other evidence that they are unrealistic. Could you talk about that and tell us how you can provide more detail about that in the final report? If you are in agreement with the consensus of the evidence that we have heard, which is that those ingredients are unrealistic, will you rerun the model based on a more realistic trajectory?

Roseanna Cunningham: I have indicated that the monitoring process will be on-going, and I hope that the committee will be actively involved in that, as well, so that if anomalies begin to creep in in any particular area, we will have a management tool to look at that and consider whether there is a way to redress it, what would need to be done to manage it or, in the unlikely event that it was driven by a more uncontrolled event, what that would mean for the rest of our plan. That would be where the TIMES modelling would come in.

On the more general issue of what Alexander Burnett referred to as the ramp-ups, I think, or the high targets—

Alexander Burnett: I am sorry, but I was referring to very specific overnight step changes, not high targets.

Roseanna Cunningham: Okay, I understand; I am sorry—I picked up what you said wrongly.

I need to say something about tipping-point technology, because that is one of the key ramp-ups—although I would probably not have referred to ramp-ups.

Alexander Burnett: They are step changes.

Roseanna Cunningham: Yes. We are talking about a point at which something flips over. We are all very familiar with tipping-point technology. Tipping points can occur when the costs of technologies fall rapidly as a result of key developments. Usually, we talk about that in the context of phone technology, because we are all involved in that. When something new appears, it is very expensive because demand for it does not necessarily exist. Only a small number of people adopt it because it is very expensive. The general term for those people is “early adopters”. The technology will then begin to spread out a bit further as more people buy it, and there will be a point at which its price will fall so markedly that its uptake will go up quite significantly. That can

happen quite quickly; it will not necessarily be spread out over a very long time.

I have used the example of phone technology simply because that is the technology that is most familiar to us, but that has happened more recently with solar photovoltaics. The reduction in the cost of solar photovoltaics has led to substantially greater uptake than was originally envisaged. That is the kind of thing that happens. People try to work out where the tipping point is likely to happen in the process and what the level of uptake is likely to be thereafter. It is really about the very best guess about when that will happen. If we try to push policy before that point, that will not work, because the cost will be too high. It is a matter of trying to work out the tipping point.

In fact, we have been more conservative in some of our estimates of what might happen post a tipping point. We thought that the CCC slightly overestimated the extent of uptake in some cases—in respect of the penetration of electric vehicles, for example—but we still see that there is a point at which the uptake is quite significant. We have to consider that in any model both for the effort that we apply before that point and for the expectation of the outcome after it.

Alexander Burnett: I certainly agree about being conservative about transport, for example. I know that we will speak later about the target for the uptake of electric vehicles here being less than in the rest of the UK and in some other places in Europe. I understand what you say about tipping points. In digital technology and telephone technology, it is very easy to see how change can happen quickly and, as you mentioned, a quick improvement in the manufacturing process for solar PV allowed a different panel to be made that is much more efficient.

When it comes to low-carbon heating, we are talking about very large infrastructure in people's houses. That is not something that can be changed overnight. Do you still think that switching to 80 per cent low-carbon heat in eight years is a realistic target?

Roseanna Cunningham: I do not for a single minute doubt that it is challenging. We could have run models that would have been even more challenging, based on an expectation of low-carbon heat beginning to happen a lot faster, but that would have been a completely unrealistic approach for lots of reasons, not least of which is whether we have the capacity in the economy to do it—whether we have enough plumbers and so on. We have drawn on advice from the Committee on Climate Change on that one.

We also have to take into account some continuing uncertainties, because there are outstanding issues around the electricity and gas

networks, which are not for us to resolve. A lot of work has to be done with partners on that. We have taken advice from the Committee on Climate Change on heat policy and have also taken into account some of the uncertainties to try to work out what will be achievable. There will be continual monitoring to assess, as we go through, whether the target will be as achievable as we and, for example, the Committee on Climate Change think that it is.

At the moment, I am tempted to say that what we are doing is a best guess—although I will probably get shot down in flames for saying that—as to what is achievable on what timescale. As I said, based on one model we could have set a much more challenging target for much earlier, but that would have been an unrealistic expectation and we would rightly have been challenged on that. We hope that the decision about the network that will be made in 2021 will give us the way forward.

If anyone is wondering about the gas network and whether we are, for example, going to move away from gas, which is what everybody expects us to want to do, I point out that we do not want a whole load of people to move away from gas and then discover that the gas network will be used to pump hydrogen instead of gas, so the folk who have spent money moving away from gas and taking out the infrastructure for it are stranded in a way that they did not have to be. Part of this is about making assumptions about what might happen in 2021 to the various networks and working through how effective the changes would be in helping us to make the switchover on the timescale that we have indicated.

The further out you go, the more arguable uncertainties creep in. That is a fair point to make, but it is not one that we can fix, because the further out you go, the less certain we are about a lot of things. Solar PV is interesting, because it almost came out of left field. Nobody saw it coming so it was not factored into anything and it has opened up a whole area that had not hitherto been seen as one that was likely to lead to the take-up that we now see. There is always some possibility that, in some areas, technology and innovation will deliver faster than we expected.

10:45

The Convener: David Stewart has some questions on the subject of assumptions and uncertainties.

David Stewart (Highlands and Islands) (Lab): Good morning, cabinet secretary. I want to ask a few questions about assumptions that are made in the plan. You mentioned the problem of garbage in, garbage out. In a general sense, any plan is as

good and as strong as the assumptions behind it. Have there been any discussions with UK or European Commission officials about the scenario in which Scotland and the UK are not part of the European Union emissions trading scheme?

Roseanna Cunningham: As one might expect, discussions are on-going about the future that Brexit might bring. At this stage, it is a little difficult to ascertain how things will work. I think that I indicated in my statement to Parliament that the climate change plan is drafted on the basis of our being in the scheme. I wanted to defend that position, because that is the position that we are in now, and I have no idea what the net result of the negotiations will be. I hope and expect that we will continue to be in the scheme but, as you will appreciate, I do not have control over that.

We have worked on the basis that we will continue to be in the scheme. I wrote to Nick Hurd, the minister of state at the Department for Business, Energy and Industrial Strategy, before December's environment council, at which it was intended that the ETS phase 4 reforms would be voted on. At the time, we supported the UK Government's position on that, but that vote was postponed. It will now take place at next Tuesday's environment council. I have asked that my officials be involved in Brexit scenario planning on the whole ETS process because, as we all know, the CCP is predicated on our being in the trading scheme. I cannot do anything else at the moment. I desire my officials to be involved in that work so that we can monitor the situation and find out quickly if it looks as if we will not be in the ETS in the future. At that point, we will have to reconsider some aspects of the plan.

Monthly telephone conferences take place between various officials. Those are mostly on the phase 4 negotiations, but they also cover high-level discussions on Brexit scenarios. It is not an ideal scenario, but we are continuing to press the UK Government to get some clarity on the situation. If we get any clearer indications of where we might be, that might lead us to consider how the plan would have to change to take account of whatever new scenario we find ourselves in. At this stage, I cannot guess what that might be. We have a bit of time before scrutiny of the draft plan closes and the final plan is published to obtain more detail from elsewhere about what the intention is with the trading scheme, but I am not privy to any thinking that might be being done about its future.

David Stewart: Thank you for that. Would it be competent to run the TIMES model on the scenario in which Scotland and the UK were not part of the ETS?

Colin MacBean: That could be done, but it would not be a trivial task. Even on a standard

model run, the runs are quite time consuming, and we would need to think about how we best represented those changes within the modelling framework. In principle, it is possible, but I would not like to give you the impression that we could do it quickly.

David Stewart: I totally understand the cabinet secretary's difficulty in this area, given the huge confusion about the future. For example, the very large industrial plant at Grangemouth is currently subject to emissions trading, and the question is what would happen to those emissions if we were not part of the scheme. There are a lot of question marks.

On another area of assumptions, you will have read previous witnesses describing the dependency on carbon capture and storage as "incredible" and "unlikely", and the cabinet secretary will be aware of the UK Government's withdrawal of the £1 billion funding for CCS. Can you say something about that?

Roseanna Cunningham: Yes, if you give me two seconds. [*Interruption.*] I am sorry—I have got things in different places.

As members will know, the Government has been very supportive of CCS, which we consider to be a credible policy and which the Committee on Climate Change, too, has proposed as an advanced way of reducing emissions. The technology is still developing, so some of the issues that I mentioned earlier apply to CCS, too, but we are seeing evidence of some commitment at UK Government level in the Department for Business, Energy and Industrial Strategy. There might be some movement in that respect and, obviously, we would very much encourage and be happy to work with the UK Government on any such movement.

We, along with the UK Government, have provided joint funding totalling £4.2 million for the Summit Power Group to undertake substantial industrial research and feasibility studies for its proposed CCS clean energy project at Grangemouth. Joint Scottish Government and UK Government money is therefore going into specific work on a specific project at Grangemouth—which is ironic, given the example that Mr Stewart has raised—and that work is due to conclude in August 2017.

We are therefore not talking about CCS on the back of absolutely nothing—we are continuing to push forward on it. We know that it is critical to cost-effective decarbonisation. If we could do it, we could have strategically located CCS decarbonisation systems across the country. Indeed, we know that it will be needed by the industrial sector in the 2030s, which is why it has been embedded into our manufacturing action

plan as well as our climate change plan. As I have indicated, joint working is already going on between the Scottish and UK Governments on this specific issue.

I am confident, therefore, that it is right to have CCS in the draft plan, and we intend to put all our efforts into achieving the outcomes that we want to see. It is not that nothing is happening. I know that the decision not to go ahead with the £1 billion funding, which was taken a year or 18 months ago or whenever it was, was a huge blow, but there are now indications of work being done at UK Government and, obviously, Scottish Government level. We think that that ball is rolling again, and we want to keep it in the plan.

David Stewart: Obviously, I welcome the initiatives that the Government has looked at in respect of Grangemouth, but the loss of the £1 billion funding must make you want to keep some of the assumptions in the plan under active consideration.

Roseanna Cunningham: We do not want to draft a plan that does not take CCS into account, because we think that it will be needed by industry by the 2030s. I suspect that it will be driven by that need more than anything else.

John Ireland: Colin MacBean can say a little about the assumptions in the plan, if that would be helpful.

Colin MacBean: As we have said previously, we looked at model runs without CCS. Exactly as the cabinet secretary said, it is possible to achieve the climate change targets without CCS, but it becomes significantly more expensive. Taking CCS capability away from the power sector, for example, was raising our system costs by around £6.5 billion. For that reason, we kept CCS in the mix; it is part of our low-cost solution.

At the same time, we carried out a validation exercise on the costs and assumptions around CCS that were used. The numbers are in line with the most recent thinking on the issue. Our work drew on the report of the parliamentary advisory group on CCS, "Lowest Cost Decarbonisation for the UK: The Critical Role of CCS".

David Stewart: Thank you.

My final question is about your assumptions on road traffic growth. In his evidence to us, Richard Dixon expressed great concern about the assumption of an increase of 23 per cent—nearly a quarter—in road traffic by 2035. He said—I paraphrase—that we need to be braver in future about getting people to think dramatically differently about their transport choices. I appreciate that the assumption is in another portfolio, but road traffic is a huge emitter and for it

to grow by nearly a quarter is concerning. What is your assessment of that, cabinet secretary?

Roseanna Cunningham: I am not the transport minister, so you will forgive me if I am not aware of every detail of this but, as I understand it, transport demand is pretty much shaped by the operation of the economy—it is about commerce rather than commuting. When we think about managing transport demand, we mostly think about commuters—folk jumping into their cars, or not—when by far the biggest part of transport demand is driven by the economy.

In predicting transport growth, we have tried to take a realistic view that reflects population and gross domestic product, but we are not simply providing for expected demand growth, because we know that travel demand has a role to play in reducing emissions. That is reflected in the plan. We have identified key actions, such as the establishment of low-emission zones, that will signal to individuals and businesses that behaviour change is needed, and we are actively supporting other measures, such as the greening of the bus fleet, to reduce the environmental impact.

Between 2015 and 2035, growth of 27 per cent in car kilometres is forecast. That comes from the Element Energy paper for Transport Scotland—I do not know whether members have seen that paper, which I have here, but it would probably be useful for folk to have a look at it. We have cross-checked the assumption with the transport model that went into TIMES, and we think that it is robust—

David Stewart: Is there any reason why you cannot bring in low-emission zones more quickly than you are currently planning to do? You will know that Glasgow has breached the EU environmental regulations, and that there is a strong association between emissions and dementia—

11:00

Roseanna Cunningham: I am aware of that. Low-emission zones are something that local authorities decide on, so we would need local authorities to look at them. For the Scottish Government to bring them in would mean us imposing on others where they might be. That would involve a whole set of different discussions.

I am conscious that, in some parts of the country, a discussion about low-emission zones has already begun. Glasgow is one of those places, precisely because of the statistics that came out before Christmas.

I expect that there will be applications from local authorities to proceed with low-emission zones,

and we would be glad to have discussions with any local authority. At the moment, no local authority has come forward with anything approaching a proposal. I hope that changes, because our expectation and our hope is that we will have the first zone in place before the end of 2018. However, that depends on the 32 local authorities, and I cannot speak for them.

The Convener: We have two brief supplementaries, from Claudia Beamish and Mark Ruskell, on that theme.

Claudia Beamish: I have a supplementary on both issues. First, on CCS, Colin MacBean remarked that £6.5 billion would be the cost to the energy sector without CCS. Has there been an estimate of the cost with CCS? There have been a lot of comments about the assumptions, and Andy Kerr of the Edinburgh carbon innovation centre and the UKCCC itself have said that it is unlikely that CCS could proceed. That is my first supplementary.

Roseanna Cunningham: I am not sure what the question is. We have costed—

Claudia Beamish: My understanding was that Colin MacBean said that the cost would be £6.5 billion.

Roseanna Cunningham: If we do not have CCS.

Claudia Beamish: What would CCS cost Scotland?

Colin MacBean: Perhaps I was not being particularly clear.

Claudia Beamish: Maybe I misunderstood.

Colin MacBean: No, I think it was probably me.

The £6.5 billion does not refer to the energy sector. It refers to the costs that are imposed on the overall system by taking the option of CCS and energy off the table.

What we have done in the plan is to allow CCS to come forward, which leads to the figure of the net present cost being about 2 per cent of GDP over the period. There is a system-wide impact—it has ripples.

Claudia Beamish: So that goes back to the TIMES model.

Roseanna Cunningham: It is also about what drives industry demand by the 2030s. The cost will be colossal if we do not get there. It is a technology that has to happen.

Claudia Beamish: Thank you for that clarification.

Secondly, on transport, in your answer to the first question, cabinet secretary, you said that the

emissions reduction pathway was the one that would be most beneficial to the people of Scotland. Was any assumption made about the cost of infrastructure for more safe cycling and walking, rather than the assumption being that domestically the answer is electric vehicles? I understand what you were saying about a lot of the demand coming from industry and deliveries; it does not just come from domestic needs.

Roseanna Cunningham: I think that my point was that the increase in transport demand is driven by the economy, not by commuters. As a result, the balance is much more in the direction of commercial transport than the kind of personal transport that people automatically think about in relation to managing transport demand. We are all guilty of that—indeed, it is the first thing that I think of; we tend not to think about the commercial drivers.

I might be wrong about this, but a model that put more into what you might call active travel might not result in as much of an emissions reduction as you might assume, because the bigger part of the balance with regard to transport demand is actually commercial rather than commuter. That is not to say that active travel is not a good thing to do—after all, all sorts of co-benefits come with it—but it might not give as big a hit as far as emissions reductions are concerned as you might imagine. Again, people's assumption is always that managing transport demand is about commuter demand, when in fact demand is mostly driven by commercial and economic drivers.

John Ireland: Active travel is one of the things that have been evaluated by the Element Energy work. That research has been carried out.

The Convener: Mark Ruskell has a brief question.

Mark Ruskell: On the point about emissions from vehicles being driven primarily by the economy rather than by commuters, the UKCCC has said that you have effectively overestimated the increase in passenger vehicle emissions and placed not enough emphasis on vans and commercial deliveries.

Roseanna Cunningham: Not placed enough emphasis on what?

Mark Ruskell: On commercial deliveries made by vans. The UKCCC has said that you have overestimated the predicted increase in passenger vehicle numbers, which seems to be the opposite of what you are saying, cabinet secretary.

Roseanna Cunningham: We have done as much work as we think is reasonable on what the actual future holds. Transport and agriculture were the two areas where we did not simply take what the CCC said, because we needed something that

was a little bit more focused on what we thought the reality was. [*Interruption.*] Yes, I have seen what you are pointing out, thank you. That is basically what I have just said.

John Ireland: Sorry.

Roseanna Cunningham: The growth forecast is a baseline forecast that assumes no further changes to policy, and it will adjust as policies to reduce emissions are implemented over the period of the plan. Again, we are back to the process of monitoring how this plan works through as we go along.

Mark Ruskell: Yes, but what you are suggesting is similar to what the UKCCC has suggested in its modelling, and that does not seem to have been reflected in the baseline chosen to be fed into the TIMES model.

Roseanna Cunningham: That is because we are using the work that has been done by Element Energy to ensure that the best possible information goes into the model for Scotland.

Mark Ruskell: Okay. I think that it would be useful to get clarification on why the modelling that you have put forward for the TIMES model, from the Element Energy report, differs from that produced by the UKCCC. It seems that you are on the same page with regard to not wanting to overestimate passenger vehicle numbers but, on the face of it, you have overestimated those numbers—unless, of course, there is a very good reason for that in the modelling that is not transparent to the committee.

Roseanna Cunningham: A lot of work has been done on this. Some aspects of it will not necessarily be terribly different but others will. We were looking at the whole transport envelope.

I guess that it is because we have been conscious of the fact that, 20 or 30 years ago, most households would have had only one car where they now have two or three. We are trying to make sure that we build realistic numbers into the assumptions, as well as the extent to which car ownership will move to electric vehicles as and when it is appropriate.

Two things are going on: there is the change in the technology that we expect to see in the future; and there is the desire to get people to switch away from using cars. One could argue that that means switching away from using any cars, even electric vehicles. Is that where we want to be? In the short to medium term, those two actions will help to reduce transport emissions but, in the longer term, are we realistically going to get people to not have even electric vehicles? I do not know if the committee would look at that as being realistic.

Mark Ruskell: Would you not want to feed several options into the TIMES model and present those publicly?

Roseanna Cunningham: We could have presented a climate change plan with all the different options run through the model, but you would still need to know which one we were going to choose. What is in front of members is how the Government has decided to take the plan forward.

Yes, we could do a run that removes carbon capture and storage completely from the equation, or we could do one that does something else elsewhere. We could do a run that does two or three of those things at the same time. I am not sure, however, that that would get us very much further forward. All it would do is present the committee with an even bigger headache because it would have to work out which of the plans was most realistic. In a sense, we have done that. The RPP is the most realistic plan. We can try to pick out individual things within that plan, and that would be understandable, but if we are to keep rerunning TIMES and reproducing a hypothetical scenario for everything, we will paralyse our attempt to tackle climate change, because we will spend so much time doing that that we will not get on with it.

Mark Ruskell: There might be some key areas in which options and choices are available to the Government and the thinking needs to be scrutinised across Parliament. If you put different options on the table, that might challenge assumptions in other areas. I am not suggesting that there should be 500 different TIMES runs, but maybe there should be five runs that look at the key assumptions around carbon capture and storage, modal shift and the other key areas that the committee has been discussing for the past few weeks.

Roseanna Cunningham: That would mean that we did not have a plan. It would be a series of hypothetical scenarios, none of which makes an actual plan. This is very process-y and I—

The Convener: Let us move on to look at the monitoring and evaluation process, which will be key to all this. All morning we have been hearing that the climate change plan is essentially a moveable feast, and that is perfectly understandable. However, a number of stakeholders have raised concerns about how progress can be monitored, the consistency of the details that are presented in each sector, and how specific, measurable, achievable, realistic, and time-bound the policy outcomes are. How do we get sufficient detail that will allow for the creation of an appropriate and robust monitoring framework?

11:15

Roseanna Cunningham: Monitoring is key. It will still include TIMES, so some of the things that you have mentioned will have to be done if it looks as though a sector is underperforming. We hope that the whole monitoring framework will enable clear tracking of the plan. That tool will allow us—and you—to understand the effectiveness of the policies.

We are committed to further development of the framework to ensure that it is embedded in the plan and allows Parliament to scrutinise delivery of the plan. We would expect work in Government to continue to create a suite of indicators for the entire plan, and we will work with the Committee on Climate Change and this committee to see how we can make the framework as robust, transparent and useful as possible. I am happy to meet you, convener, if you want to be part of the process of developing that robustness. We are also committed to publishing an annual monitoring summary from 2018 onwards. Again, I am happy to talk to you, convener, about that.

There will be a governance body for the monitoring. We are trying to make the monitoring as robust as we possibly can. If the committee has views on how it could be made even more robust, we would be happy to hear them.

The Convener: We do have views and we will make them clear. However, I am really asking about what we will be monitoring. What detail will be in front of stakeholders, this committee, the monitoring group and whomever else to allow them to be confident that the monitoring is determining whether the targets have or have not been hit, where we are slipping up and where we are doing well? People are looking for that level of detail. They want to have confidence that they will have something in front of them that they will be able to scrutinise to some purpose.

Roseanna Cunningham: The expectation is that we will look at the policies that are supposed to be bringing changes on the ground. For example, we will look in particular at whether the peatland grant scheme is realising the level of restoration that we have built into the plan and whether our support for electric vehicles is leading to sufficient purchases in order for the plan to be on track. The monitoring will look at those policies to ensure that they are doing what they were designed to do. You will see in the report our assessment of whether the policies are on track. If we discover things that are not on track, we will have to look as a Government at how we can either get them back on track or deal with the consequences of their not being on track.

The Convener: Will we see that in all sectors?

Roseanna Cunningham: All sectors will have to be looked at. I suppose that there will be more focus on those areas that are not doing as well as one might have started out expecting them to do. However, in order to discover those, you have to look across the board.

The Convener: Clearly, it is for Parliament to decide how it scrutinises the work, but do you envisage that multiple committees might look at the particular sectors in the same way as multiple committees are scrutinising the draft plan?

Roseanna Cunningham: That is a matter for Parliament and its committees.

The Convener: I am asking about how we would assist you in your role as the environment secretary.

Roseanna Cunningham: Yes, I suppose that that approach makes sense, because it would put a lot on this committee if it were, in effect, making assessments across all policy areas. However, that is not within my decision-making powers.

The Convener: No. I just asked for your views.

What about the proposed governance body? What are your thoughts on its make-up and the form that it would take?

Roseanna Cunningham: We are trying to draw on the experience of the climate change delivery board and the internal Government directors group that supported the draft plan all the way through its development. We need to think through how that body engages with external stakeholders. I am pretty confident that we will get input from the Committee on Climate Change and I would expect input from this committee that will mean that we can develop a monitoring framework that is fit for purpose.

The governance body that we are looking at will be built on a group that already exists, which will morph into something that will not come into being just for the development of a plan; it will work all the way through.

The Convener: Do you envisage stakeholders being involved in that group?

Roseanna Cunningham: I am not sure that we have thought about that. There will certainly be a lot of engagement with stakeholders. We have boards that involve external stakeholders, so I suppose that that is not automatically precluded. The danger is that the expectation would be that somebody from just about every sector would be involved in the group, which would not be particularly helpful. Governance is more about ensuring that the process works properly, so questions would need to be asked about how effective that approach would be.

The Convener: How do you see that body interacting with the Cabinet sub-committee on climate change? Would they have two specific roles?

Roseanna Cunningham: They would be quite different. In effect, the governance body would work to ministers; it would not interact directly with the Cabinet sub-committee on climate change.

The Convener: Okay. I have a final question on that theme. It has been suggested that your indicators to track implementation progress are somewhat different from those of the UKCCC. Is that a cause for concern? Does that create unnecessary difficulty?

Roseanna Cunningham: As you know, we regularly engage with the Committee on Climate Change. We have had recent discussions with it on how we can ensure that the plan's monitoring framework has read-across with its monitoring approach, and we are currently having a conversation to try to even out some of that. I think that the Committee on Climate Change is open to new ways of doing that. If our monitoring framework works really well, it is not beyond the bounds of possibility that it will use that as an example for others to follow. We are talking to the Committee on Climate Change about how we can ensure that that read-across works. Let us put it this way: it would not be helpful for us if it did not.

The Convener: Absolutely.

We have covered a lot of ground and we still have a lot of ground to cover. I suspend the meeting for five minutes for a comfort break.

11:22

Meeting suspended.

11:31

On resuming—

The Convener: Welcome back to the meeting. We will now explore the issue of behavioural change. I call Kate Forbes.

Kate Forbes: Officials have previously stated that behaviour change has been very important in thinking through the plan. Can you sketch out how you have used the individual, social and material tool and how it has been used to inform the selection of different policies, proposals and delivery routes in each sector described in the plan?

Roseanna Cunningham: The ISM tool allows us to break down the factors that influence people's behaviours, and we are using it across a range of policy areas, including the two key areas of housing and energy. Obviously, influencing

behaviour is key to achieving many of the policies in the plan and over the past year we have supported a lot of workshops on issues such as the demand for energy efficiency measures by landlords, the uptake of energy efficiency loans, domestic heat supply, uptake of tree planting and travel choices for the school run. Those are the quite specific issues that we have looked at. ISM workshops were led by individual policy areas, by the public sector and by other organisations, and they have also taken place to support policies on influencing behaviours.

That is how we have been using the tool. In effect, we have been going out to speak directly to people in order to try to get the kind of information that is needed in different policy areas.

I do not know whether you want me to start going through some of those policy areas or whether there are any policy areas that you are particularly interested in.

Kate Forbes: Perhaps I can start with transport.

Roseanna Cunningham: Okay.

Kate Forbes: As far as transport is concerned, there has been some suggestion that not enough behaviour change ideas have been used, that there has been too much of a focus on technical solutions and that, across the different sectors, there has been too much of a focus on individuals making deliberate choices rather than on how social and material factors shape and produce behaviour over time.

Roseanna Cunningham: On transport, as I mentioned earlier, the backdrop is one whereby most of the emissions are driven by commercial and economic drivers; I am sorry—that was not meant to be a pun. In the longer term, we are trying to encourage a shift to sustainable transport. That is being supported by the smarter choices, smarter places programme, as part of which we have undertaken a range of personal travel planning campaigns and public awareness events, as well as mapping active and public transport options. We have also supported the completion by more than 6,000 drivers of driver training on fuel efficiency that encourages not only fuel-efficient but safe driving.

As well as doing things at that level, across the board technological change will deliver quite a significant step change, if we consider that part of the plan to be robust, which we do at the moment. As long as nothing changes in that respect, technology will make an enormous difference; I see little point in pretending that it will not when it will. Reducing emissions from transport is a long-term project, which must be underpinned by innovation and behaviour change. However, although behaviour change is important, the truth is that it will not offer anywhere near the same

amount of abatement as advances in vehicle technology can. That is just a fact. Therefore, in our view the emphasis on technology is correct. That does not mean to say that we are not looking at behaviour change with regard to commuter travel, but we must go back to where the big demand comes from, which is where the big changes can be made.

Kate Forbes: Before the plan is finalised, will any further consideration be given to behaviour change, particularly in supporting the plan's implementation?

Roseanna Cunningham: We will look at the potential for behaviour change all the way through the process. If we can map behaviour change—it has been possible to do that in some areas; there has been quite a big change in behaviour on energy use, for example—that is fine, but if it is shown that behaviour change is not taking place in the way that we would want, we would have to go back and look at that.

I keep coming back to the fact that, when it comes to transport emissions, commercial and economic factors are far more of a driver than the behaviour of commuters. Although it is true that we want commuters to make different choices about how they travel, it would not have been appropriate or effective to have loaded all the emissions reduction efforts on to the shoulders of individual commuters.

Finlay Carson (Galloway and West Dumfries) (Con): I have a question on the same subject. We have had evidence to suggest that the key low-carbon behaviours that are identified in the plan

“are not reflected—or are only very poorly reflected—in the policies and proposals”.—[*Official Report, Environment, Climate Change and Land Reform Committee*, 31 January 2017; c 20.]

On transport, you mentioned the need to strike the right balance between behavioural change and technological solutions. Surely the technological solutions will be the same across the UK and Europe, so why does the plan envisage a 40 per cent increase in sales of electric cars when the UK Committee on Climate Change recommended that we should be aiming for a 65 per cent increase? Other countries in Europe are aiming much higher. We are also assuming that there will be a 30 per cent growth in road traffic. Is that because too much emphasis is placed on technological solutions and there is a lack of confidence in the ability of your policies to drive the behaviour changes that we can see elsewhere?

Roseanna Cunningham: The thrust of your question is that we are not being as ambitious in respect of the technology change as the Committee on Climate Change would have anticipated.

Finlay Carson: It is the absolute reverse. I assume that technological solutions would be the same, whether they are for Scotland or the UK or the rest of Europe. We are looking at the uptake in electric cars being 40 per cent as opposed to the 65 per cent recommended by the UKCCC, which is also less than in other European countries.

Is that because we are not going to get the behavioural change right, so we are not going to get people to adopt those new technologies?

Roseanna Cunningham: People do have to be able to adopt new technologies. They have to decide when to replace their cars and they need to be able to afford to replace them. We have been a bit more conservative in our estimate as to how fast that will happen in Scotland. If we are wrong, and uptake of electric vehicles is much greater than we expect, that is fine. If we are right, however, some of the other countries may have got it wrong. Only time will tell.

Our feeling was that the expectation of a 65 per cent increase in electric car sales was a bit too high, considering the length of time for which people will usually run their cars and the point at which they will decide to change them, with all the things that go into that decision. The cost of the car may affect that decision, too.

We have made our best estimate. It departs from what the CCC has said, but I would rather that, and overshoot the 40 per cent increase in sales, than run a plan on the basis of a 65 per cent sales increase that does not turn out to be the case. We will find out.

Finlay Carson: Our evidence was that the outcomes are not ambitious enough and are weak, and that the low-carbon behaviours identified are not reflected well in the policies.

Roseanna Cunningham: I would say that the outcomes are realistic for what we know about that market in Scotland. We have to think about what is realistic for what people will do here in Scotland and over what time period. If we are wrong, it is because we have underestimated the speed at which it will happen. It is not about a level of ambition. The projection about uptake is a best-guess scenario, whether you are talking about 40 or 65 per cent. If we are wrong, and 40 per cent is not as high as the figure turns out to be, that is all to the good. If we are right, plans elsewhere will be in difficulty. We have made an assumption about what can realistically be expected in Scotland.

The Convener: Let us move on to look at the public sector.

Claudia Beamish: What are the Scottish Government's expectations on the public-sector maximising opportunities to reduce climate change emissions as part of the procurement approach?

I note that Jamie Pitcairn of Ricardo Energy & Environment said in evidence to the committee:

“That is a big opportunity that has not been harnessed to date and that could drive change across the Scottish economy.”—[*Official Report, Environment, Climate Change and Land Reform Committee*, 5 February 2017; c 40.]

What are your comments on opportunities in procurement?

Roseanna Cunningham: I agree that public procurement both can and is already making a contribution towards the transition to a low-carbon economy.

All public bodies are subject to a sustainable procurement duty. They are required to act in a way that will improve social and environmental wellbeing. Through that reporting duty, we have seen 150 named major players report on their compliance with their climate change duties, including a section on procurement policies and activity.

For example, our electricity contract is used by public sector sites all over Scotland and allows public bodies to access energy that is 100 per cent attributable to renewable sources. Considerable advances are being made.

11:45

I am not quite sure what evidence you got from the individual. I suppose that people will always want to do more, particularly in the sector that is of interest to them. We want to ensure that we get public sector bodies to do the right thing. In most cases, that is also the economic thing to do, because achieving value for money is important. It is for public sector organisations to decide on the best approach for them in their own projects.

Claudia Beamish: We all know that there is a wide range of public sector bodies, which differ widely in scale. Some bodies have expressed significant concern about the achievability of a 96 per cent emissions reduction in the service sector in the period to 2032 and have asked how the 15-year plan relates to the current reality in the public sector. Are you confident that the aspiration—or target—is realistic? What are the implications in relation to the concerns that have been raised about bodies that are currently installing gas boilers with an expected lifespan well into the 2030s?

Roseanna Cunningham: There are a lot of uncertainties about heat decarbonisation. We talked about some of them earlier, not least the decision that has to be made about the networks in—I will say 2021, hoping that that is the right date.

We are prioritising action on energy efficiency during the first half of the plan, to 2025, as well as

continuing to support the deployment of changes that do not involve making the wrong decisions now. I think that I referred obliquely to such a change: if someone removes their gas central heating and puts in an entirely new system, only to find that three or four years later the gas network is being used to pump hydrogen rather than gas, they will have spent an awful lot of money doing something that they did not need to do. That is the kind of thing that not just the public sector but everybody is juggling with at the moment and must consider in the context of existing and future programmes.

That is a massive challenge, particularly given the delay between now and 2020 or 2021, while we wait for decisions on the potential for repurposing the grid, which would be a big delivery change. The overall targets are achievable, but assumptions are being made about decisions in three or four years' time on what will happen to networks. We are trying to strike a balance, so that people do not spend a huge amount of money that in three or four years' time will turn out not to have been well spent, given the potential that will come from the decisions that we expect to be made then. That is why we have done things in the way that we have done them: low, slow, and then a big change.

Angus MacDonald (Falkirk East) (SNP): To date, we have seen some excellent investment decisions in the public sector—not least from Scottish Water, which has successfully introduced wind turbines at a number of its water treatment facilities. Other examples that the committee is aware of include refurbishment and retrofitting of public buildings. Does the Scottish Government provide guidance on what would a reasonable length of time within which to achieve the potential efficiency savings associated with such investments?

Roseanna Cunningham: Yes. We make sure that there is advice through our non-domestic energy efficiency procurement framework and support unit, which are there to support the scale of the ambition required to achieve projects that are energy efficient. Again, the approach is about achieving value for money and integrating energy efficiency into the heart of refurbishment projects.

Scottish Water is a very good example of how that approach works. Although it is not particularly well known as a producer of renewable energy, it produces an enormous amount of renewable energy, which it uses in its own processes. Such potential exists, although it would not be open to all public sector bodies to do that. That is why I said that it is for public sector organisations to decide for themselves the best way to move forward. Scottish Water has been able to be incredibly ambitious because it has the capacity to

do that. It is perhaps more difficult to see how that would work for other public sector bodies. It is a more challenging ask for public sector bodies that are effectively about people sitting in rooms and having meetings around tables like this one.

We also have an advice and support programme called resource efficient Scotland, which works across all the sectors, so it can be accessed by the public sector too. It does precisely what it says it does—indeed, it gives one-to-one support. Whether an organisation is in the private sector or in the public sector, it can have one-to-one support on changing its carbon footprint. That approach works quite well. The programme has been doing that since April 2013.

There are therefore two resources in place: public sector energy efficiency support is available through the procurement framework; and there is also resource efficient Scotland, which provides advice and support across the board, including to public sector organisations. Some public sector organisations are relatively small, while others are absolutely massive, so there is not a one-size-fits-all approach or an easy read-across from one to the other. They all have to make their own decisions and make their own plans in their own way.

Angus MacDonald: It would be helpful if it were made easier for local authorities to invest in wind turbines. We had a crazy situation a few years ago, with a Dutch local authority investing in wind turbines in the east of Scotland whereas local authorities here did not have the opportunity to do so at the time.

You will be aware of the sustainable Scotland network's views on the need for investment in and prioritisation of climate change leadership in the public sector. In its evidence to the committee, the SSN stated that it would

"welcome action by the Scottish Government directly to ensure that the Climate Change Plan is made an effective driver of public sector leadership; addressing the individual, social and material barriers that hamper leadership currently".

Do you agree that those barriers must be addressed? If so, what is the best way to address them?

Roseanna Cunningham: I certainly think that the plan requires strong leadership from across the public sector. That will be our priority as we move into the delivery phase.

I am afraid that I am not able to comment on the specific local authority example that you gave. I do not know what the story was there, so I cannot say what the barrier was and whether it was specific to the area or whether it applied to all local authorities.

We have connections with 150 major players through public body reporting. We expect the bodies to lead by example in reducing emissions.

Through the monitoring framework, we will be able to see where more effort is needed to deliver our policies. We will work with key leaders across the sector to support and enable low-carbon transition. I have had a couple of meetings with the Convention of Scottish Local Authorities on the issue. The benefits for local authorities as public sector organisations are as immense as they are for many other bodies. However, the work has to be led. I hope that the publication of the climate change plan and continued engagement with COSLA, for example, and the relevant spokespeople will help to ensure that local authorities across the board are working on the issue.

The Convener: We will move on and look at the waste sector.

Maurice Golden (West Scotland) (Con): I refer members to my entry in the register of members' interests in relation to Zero Waste Scotland and the Chartered Institution of Wastes Management.

I will cover food waste and recycling more generally, before looking at regulatory tools. First of all, cabinet secretary, how confident are you of meeting the target to reduce food waste by 33 per cent by 2025?

Roseanna Cunningham: We would not have put the target in place if we were not confident of achieving it. I think that I am right in saying that Scotland is the only country in Europe that has set such a target. I remind committee members that the target is about preventing and reducing food waste rather than recycling it, so it does not take into account what happens once the waste is created.

I am certainly confident that we can reach the target. We have chosen a target that we believe to be achievable—I would not have announced it otherwise—and we will see how matters progress.

Food waste is another area where behaviour change is important. I hope that, by appealing to people's sense of economic wellbeing at the individual level, the reduction in food waste can be brought about. Of course, the weekly food bill is a good deal cheaper if people do not buy stuff to throw away, which most of us are probably guilty of doing at some point. Work will need to be done in that respect, although we are already taking action. Maurice Golden referred to his previous history with Zero Waste Scotland, so he will know that there are consumer programmes, such as love food, hate waste, that help a lot and will continue to do so.

Perhaps what will switch people most on to change is the money saving side of things. There is no doubt that by reducing food waste at the outset they will save money.

Maurice Golden: I will give the numbers on food waste reduction. In 2013—the baseline—there were 1.35 million tonnes of post-farm-gate food and drink waste in Scotland, of which 600,000 tonnes came from households and 740,000 tonnes came from commercial and industrial sectors. We learned on 7 February that there has been an 8 per cent reduction in household waste, which is to be welcomed. On the timeline to 2025, between 2013 and this year—a third of the way through the overall timeframe—we have perhaps made 4 per cent of the reductions. We might have expected the figure to be slightly higher. I recognise that work is on-going but, on that trajectory, I cannot see how the 33 per cent reduction will be achieved. Is the Scottish Government looking at additional measures—change beyond behaviour change at a household level, or technological change, as has been highlighted in other sectors—to achieve that 33 per cent reduction?

12:00

Roseanna Cunningham: On food waste prevention, we are trying to take a stakeholder-led approach to identify actions to deliver on the target. We have set a stretching target—we have said that from the outset. We are working across the sectors with stakeholders to deal with the issue across the supply chain.

Maurice Golden is right to say that we are talking about change not just in the household but in the food supply chain. Prevention of food waste is not just about what people might throw into their bins; we have to look at and think about various sectors in industry.

Cross-sectoral workshops are on-going. Once we have concluded those, the next step will be a formal consultation on a set of actions to meet the target. That will be done later this year and which could include legislative measures for inclusion in the good food nation bill. We are also committed to consulting on whether the target should be aspirational or statutory. It is fair to say that this is the year in which some of the things that the committee is looking for will be developed. Because we are in the early part of that process, I cannot say what some of the regulatory actions might be.

I remind members that we have excluded issues from behind the farm gate because we do not have a proper baseline for such a target. We are looking at what happens from the minute that the food leaves the farm gate all the way through to

what householders or organisations do with it—food waste is an issue for the Scottish Parliament as much as it is for us as individuals.

Maurice Golden: You have whetted my appetite for what might be coming up.

Roseanna Cunningham: I have just given your inner geek a wee prod.

Maurice Golden: Yes—thank you.

Are you confident that the work that is under way to prepare for a landfill ban in 2021 will avoid a sudden switch of biodegradable waste from landfill to energy-from-waste facilities?

Roseanna Cunningham: Yes. The Scottish Environment Protection Agency is already working on that—I know that the committee knows that because of the evidence that SEPA has given. Through SEPA and Zero Waste Scotland, we are making sure that businesses get support and advice on how they can comply with the regulations. Our absolute priority is to keep biodegradable waste out of landfill so that it does not produce harmful methane emissions.

The separate collection that the regulations stipulate for councils means that councils cannot incinerate food waste that has been collected separately. It is obviously for councils and businesses to ensure that they abide by their statutory duties, and I believe that we are on track to ensuring that there is no sudden switch. We would all be concerned if that happened.

Maurice Golden: We were informed last week that only 62 per cent of businesses that had been inspected by SEPA were fully compliant with the Waste (Scotland) Regulations 2012 with respect to food waste. What work is under way to maximise business compliance in that area?

Roseanna Cunningham: That is a job for SEPA now. If it identifies businesses that are not compliant, I expect that it would draw up a plan of action to ensure that those businesses become compliant. Businesses have to abide by the regulations; they are not optional, so it is just a question of enforcement. This is, to an extent, about businesses being aware of the regulations, and conscious that they are in force. I guess that some small businesses in particular do not realise that their practices are not compliant. That is SEPA's job; I confidently expect it to do the job for which it has been created, which is to monitor and enforce where necessary. If it has identified that that percentage of businesses are not compliant, it will return to the issue. I also expect that it would have conversations with Zero Waste Scotland about how best to tackle the matter.

Maurice Golden: The Scottish Government is reviewing the current rural exemption for separate food waste collections. What solutions is it

considering for rural and island areas and how will rural and island local authorities be ready for the 1 January 2021 landfill ban?

Roseanna Cunningham: That is a matter for those local authorities. We are examining the exemptions that we first granted because they captured quite large urban areas that happened to be in the wider rural area. Local authorities will need to think about what constitutes a reasonable solution for the areas within which they operate. I am not sure that it would be right for the Government to start mandating solutions. Perhaps Maurice Golden thinks that that is what we should do, but—as he knows perfectly well—there is a healthy discussion about the difference between the powers of the Government and those of local authorities.

We anticipate local authorities showing us that there are solutions that they can achieve. The household recycling charter will be part and parcel of what they have to do to transition to the new regime, which will bring them into compliance across the whole of Scotland. The charter is currently voluntary. Take-up has been good, but I am conscious that in specific areas there are specific problems that will need very specific solutions. It will be for local authorities to develop those.

Maurice Golden: Okay. More generally, how confident is the cabinet secretary that household recycling rates will rise in line with the 70 per cent goal by 2025, given that they have reached a plateau?

Roseanna Cunningham: The first thing that needs to be said is that the 70 per cent goal is for all waste—it is not only for household waste. It includes commercial and industrial waste and is for waste across all sectors.

On household waste, I have already referenced the household recycling charter and the single collecting system, which I think will set us on a good path towards improving further. The single system will make things a lot simpler and more straightforward for households, and it will cut out the confusion that arises when people move from one area to another and find that a completely different system is in place. Such differences will gradually be eased out of the process. In the past, we have had to work with 32 different systems; what we are doing opens up the opportunity to streamline the system and make it much easier for people to recycle.

On commercial waste, we have identified construction as a priority because it accounts for 50 per cent of all waste in Scotland. There is a lot of scope for greater recycling in that sector. I know that Zero Waste Scotland is working with the construction sector to identify opportunities that

might arise from that waste. Again, I suppose that it is a little bit like transport, in that we are all guilty of thinking about household waste and not realising the extent of the much bigger cross-sectoral picture, which presents a massive problem, as well.

Maurice Golden: Of course, the construction sector has done very well on the waste to landfill issue.

With regard to local authorities and their recycling rates, 24 of the 32 councils have signed the household waste recycling charter, but has any analysis been done of when those 24 will comply with it? Secondly—I appreciate that a direct answer will perhaps not be forthcoming on this question—are there any restrictions with regard to the local authorities that have not signed the charter? In other words, are they likely to sign it at any time soon?

Roseanna Cunningham: Our intention at the moment is to allow the charter to proceed on a voluntary basis. Maurice Golden is right to identify that there is a transition phase, which means that the local authorities that signed up first will probably get a bit further down the line. This was never going to be a case of waving a magic wand and achieving everything overnight.

I do not have to hand an analysis of where all the local authorities are, but I will see whether work is on-going. The problem is that the situation will change if new local authorities sign up to the charter, but there will be a point at which we would want to stop and take stock. At the moment, we have left the charter entirely voluntary, but there might come a point at which we will begin to focus support more on those that have signed than on those that have not, as a bit of an incentive to the latter. I am not conscious of specific issues that are causing particular local authorities not to sign, so it might just be that it takes a while for some local authorities to make such decisions and work things through. We are still very much in the voluntary phase.

Maurice Golden: It would be very useful for such analysis to look at areas where local authorities have made, or are about to make, contractual obligations that might put at risk future recycling targets. I am thinking, for example, of contractual targets for energy-from-waste facilities that some local authorities have signed up to for 10, 20 or more years, which is a major issue for the whole of Scotland.

Roseanna Cunningham: We are having such discussions with councils: you are right to identify that as a hazard.

Maurice Golden: Are there particular key materials that you are seeking to switch from landfill to recycling as part of the process?

Roseanna Cunningham: I am not conscious that we are looking at the issue in that way. Obviously we have talked about food waste, which is a big development, but the fact is that a lot of the materials that we automatically think of in terms of recycling are already not going to landfill. I can double check and come back to the committee if I have missed something in the specific breakdown.

Maurice Golden: I am thinking mainly of absorbent hygiene products, for example.

Finally, on 2 February, the Scottish Government stated that work is on-going on producer responsibility systems, and on 7 February, Government agencies told us that there had been discussions on that. What actions are under way to explore how the enhanced producer responsibility schemes that are referred to in the circular economy strategy can be implemented?

12:15

Roseanna Cunningham: In “Making Things Last”, we committed to doing two things on producer responsibility: first, to explore the scope for reform of the existing producer responsibility scheme and, secondly, to develop new schemes specifically for tyres, mattresses and furniture. Maurice Golden will be aware that producer responsibility is quite complex. It is a devolved matter, but we have worked with the UK Government to create a system that operates across the whole UK. The current schemes are for packaging, batteries, end-of-life vehicles and waste electrical goods, which are all done UK wide, for convenience.

We are exploring the scope for a reformed system that supports a more circular economy; that is where we need to direct some of our interest and attention. Members will be aware that there will, at some point in the session, be a circular economy bill. We want to drive consumer choice towards products that are already suitable for reuse and remanufacture and which are more generally built to last, so that we move away from the throwaway culture to which we have become accustomed. We also want the funds that circulate around the system to be directed towards better outcomes.

We are taking a collaborative stakeholder-led approach, and we are working very closely with Community Resources Network Scotland to identify social outcomes that a reformed producer responsibility system could support—for example, reuse of equipment by social enterprises that support vulnerable communities. We have already agreed to work with Wales and Northern Ireland on the project, and we are asking the UK Government to work with us on it.

The first stakeholder workshop on producer responsibility will be held in the last week of March. The discussion is very current, as is the set of changes that we are hoping to bring in.

The Convener: Thank you. Let us look at land use and peatlands.

Mark Ruskell: I will start with the question of compulsory soil testing. The committee received a letter from the Cabinet Secretary for Rural Economy and Connectivity, in which he states:

“We cannot significantly reduce emissions from agriculture without the goodwill of the custodians of the land.”

He goes on to say:

“There is a significant risk that moving immediately to a regulatory approach achieves the opposite intended effect of alienating farmers”.

Does that mean that the compulsory approach to soil testing is off the table for the time being?

Roseanna Cunningham: That is not how I see the matter. We are trying to work out how we can achieve what we want as effectively as possible. The letter that the committee received indicates the percentage of farmers who are already doing soil testing. We are setting a milestone on the way towards all improved land being tested. The best way to achieve that would be if farmers were to do it voluntarily.

A large proportion of improved land is routinely tested, but at the moment our data is not good enough for us to know exactly how much. A little bit of data analysis needs to be done so that we are building on a good foundation. Our current view is that it would be premature to go through the difficult process of legislating for and enforcing soil testing before we know whether we can get all farmers to test voluntarily.

Over the next few years, we will try to achieve that ambition. In that sense, this is a little like our conversations about other issues. The letter that the committee received from Fergus Ewing—I think that I have a copy here somewhere—sets out how that is to take place.

Mark Ruskell: On the effectiveness of the voluntary approach, in answer to a written parliamentary question that I lodged in October you said that only 4 per cent of farmers had taken up advice as part of the climate change programme. Did that fact feed into the TIMES model, so that account was taken of the effectiveness of voluntary approaches?

Colin MacBean: Our trajectory for agriculture comes from the modelling that the agriculture team did and fed in—this takes us back to our discussion about TIMES. The trajectory reflects the team’s understanding of the rate of uptake that

can be delivered. If that does not happen, that will be flagged up through the monitoring framework.

Mark Ruskell: We have talked about outputs and outcome. At the moment, the output is that fewer than one in 20 farmers are engaging with the climate programme.

Roseanna Cunningham: That is about more than just soil testing, though; it is not fair to load everything purely onto soil testing. I think that in his letter Fergus Ewing indicated that soil testing is being carried out on considerably more than 4 per cent of land. We should be careful that we are not talking about slightly different things.

I am sorry—I am trying to find my copy of the letter.

Mark Ruskell: May I move on to the land use strategy?

The Convener: Before you do that, I want to get something clear. The letter refers to a potential “timetable” for the introduction of regulations. For the record, is the Government saying that it will give farmers until 2023 to implement a voluntary approach, after which it will, if necessary, make regulations, or is it saying that the issue will be monitored over the next two or three years and a determination will be made in advance of 2023?

Roseanna Cunningham: You will need to ask Fergus Ewing how he intends to proceed. He flags up the potential for making regulations and he says that

“the timetable ... will guide our decisions”.

I think that you will have to explore with him the detail of that.

The Convener: We will do that. I apologise to Mr Ruskell for interrupting.

Mark Ruskell: That was a useful clarification.

How we use our land is critical and there is the potential for not just conflicts but synergies between different types of land use. Onshore wind, forestry and peatland restoration can all work together to deliver positive benefits, but there can also be conflicts. Given that, why does the land use strategy not feature more prominently in the climate change plan?

Roseanna Cunningham: The draft plan includes higher ambitions for forestry and peatland. We have looked at specific policy sectors rather than the land use issue across the board. As we go through the next phase of delivery on the climate change plan, we will work to ensure that the ambitions for forestry and peatland are delivered on the ground. That is how we have looked at the issue.

For the purposes of the climate change plan, the land use, land use change and forestry sector is

divided into six land use types. Some of the land use issues are in agriculture, some are in forestry and some are in peatland. I am not sure how we could have run the land use strategy as a whole through the TIMES modelling. In effect, we lifted specific policy sectors from the strategy; we did it that way.

Obviously, there is an increased ambition for forestry and peatland, and the plan includes policies and proposals for the agriculture sector. There are also issues in respect of the planning system. We took the view that, in the circumstances, the land use strategy as a whole and as a policy document was not really capable of being fed into the model in the way that we have been doing with other areas.

I am not sure whether Colin MacBean looked at trying to do that, rather than what we have done, which is almost a disaggregation.

Colin MacBean: There were constraints on our ability to do modelling, which is exactly what the cabinet secretary said. There was a limit because of the existing frameworks and our ability to adapt those in the time available.

Mark Ruskell: The ambitions for peatlands and forestry are welcome, but do you have figures for the carbon abatements that those targets will actually deliver? I presume that those are not so dependent on decarbonisation of the electricity supply, as we talked about earlier in relation to electric vehicles.

Roseanna Cunningham: Yes—the issues are not quite so interdependent.

Mark Ruskell: Perhaps that is an area where you can pluck out a figure and say that it will be delivered.

Neil Ritchie (Scottish Government): On peatlands, we have information available from work that the James Hutton Institute has undertaken, which is just being peer reviewed. That gives us estimates of the carbon benefits of peatland restoration for a variety of types of peatland, and those were fed into the TIMES model. I am not an expert on forestry, but a similar approach was taken on that, using figures that were provided by the Forestry Commission’s forest research agency.

Mark Ruskell: So we have some figures, but we do not have figures for everything. Is that what you are saying?

Roseanna Cunningham: We could try and do that, although it would be complex and we could not do it for absolutely everything. We might be able to do it for forestry and peat. We will see whether that can be achieved before the end of the scrutiny period so that it is perhaps reflected in the final plan. Can we keep you advised of that?

Mark Ruskell: Yes—that would be good.

We have taken evidence on the impact of the use of peat in horticulture and the numerous concerns about that from a carbon perspective and a biodiversity perspective. Will the Government consider making an explicit commitment in the plan to eliminating the use of peat in horticulture?

Roseanna Cunningham: The plan focuses on restoration activity rather than protection and management, although those are really important. We have highlighted our support for eliminating the use of peat for horticultural purposes, and planning policy is clear on the importance of protecting our peatlands. We will consider that particular point as the plan is finalised. Leaving aside the fact that those peat products are created and sold on a UK-wide basis, there are one or two technical issues. A number of historical horticultural extraction consents are in existence. Although it would now probably be difficult to get new consents, the ones that already exist would probably have to be bought out if we were to move to the kind of approach that the member is talking about.

We can look at some of the practicalities and see whether we can do that. I am just a little wary, given that we are talking about a UK market and that people can buy whatever from wherever, so it is not so easy to clamp down on that. That is a very lively debate.

The Convener: Angus MacDonald has a question on that issue.

12:30

Angus MacDonald: Non-government organisations have suggested that there is an opportunity to tax or to levy the retail sale of horticultural peat. Is the Scottish Government prepared to consider that suggestion as part of the climate change bill or, indeed, earlier than that work?

Roseanna Cunningham: I do not think that we have the power to do that.

Angus MacDonald: Okay.

Claudia Beamish: I have two brief questions on this section. First, will Scottish Water take a proactive role in supporting peatland restoration in water catchments? Secondly, to return to the woodland planting goals, an issue that has come up a lot with the committee is deer management. Given the concerns about the effect that deer have on woodland, has their impact been factored into the climate change issues?

Roseanna Cunningham: In respect of Scottish Water—

Claudia Beamish: And peatland restoration, as the convener has reminded me.

Roseanna Cunningham: Sorry?

The Convener: The impact of deer management on peatland restoration.

Roseanna Cunningham: I will deal with the question about Scottish Water first. Scottish Water is an active partner in the national peatland group, and it has been involved in a number of restoration projects. Where opportunities are identified that are compatible with the regulatory framework for Scottish Water, I am certain that there will be willingness on its part to engage in further activity. I would certainly support such engagement, were Scottish Water to choose to do that.

You asked about the impact of deer on peatland.

Claudia Beamish: Yes. I also asked about woodland.

The Convener: As well as forestry replanting.

Claudia Beamish: I want to know how that impact relates to climate change issues.

Roseanna Cunningham: I will need to get back to the member on that, as I do not have an easy, ready answer.

Neil Ritchie: Do you want me to respond, cabinet secretary?

Roseanna Cunningham: It sounds as though one of my officials might have an easy and ready answer.

Neil Ritchie: I do not know about easy. It would be difficult to model the impact of deer on restoration, because any impact would be specific to individual sites, for example. However, as we deliver the peatland action scheme, we will put in place advice on and requirements for how that is done, to make sure that restoration is delivered and to minimise the impact of any factors, such as deer, that could impact on the quality of the restoration.

The Convener: Next year, £10 million of public money is earmarked for peatland restoration. We could face a double whammy of having spent the money to restore the peatland and then needing to fence in the restored peatland to protect it from the ravages of deer. That is the thrust of where we are coming from.

Neil Ritchie: I will progress that issue about the delivery of the scheme with Scottish Natural Heritage.

The Convener: Thank you. I think that we are in the home straight.

Claudia Beamish: I want to ask about blue carbon. There has been quite a lot of comment throughout our evidence sessions on the stark fact that blue carbon was in RPP2 as an aspirational way to cut emissions—rather in the same way that peatlands was in RPP1, although progress has been made on peatlands. We have had some assurances, but will you comment on whether blue carbon will appear in the final climate change plan?

Roseanna Cunningham: I appreciate that it is disappointing that the draft plan does not contain hard policies and proposals on blue carbon, but we have run into difficulty when trying to ensure that we have the right science.

Both the Government and SNH have been working to assess the extent and potential of blue carbon in Scotland and published a report just after I made my statement to Parliament. That work is on-going.

We recognise that a lot of marine habitats are natural carbon sinks and that it is therefore incredibly important to ensure that they are adequately protected. We think that further research is required to provide credible estimates of the amount of blue carbon that is sequestered, which is why at this point we have no detailed policies and proposals in the plan.

The recently published SNH report came through too late to be considered for the draft plan, but we are now considering the latest report and the further research and survey opportunities that can be pursued and we will include an update of that work in the final climate change plan.

The draft plan just reflects that a lot of the on-going work on blue carbon was a little too late to be included in the draft plan. We hope to be able to include references to blue carbon in the final plan.

Claudia Beamish: Cabinet Secretary, I note the number of people who have given evidence on this matter and that I, too, have taken a keen interest in the issue as a result of speaking to the minister, Paul Wheelhouse, in the previous session. If I may, I will reinforce the fact—or, I should say, my view—that if the need for research on blue carbon is not clarified or highlighted in the plan we will not get to the laudable position that we have been able to reach with peatlands.

Roseanna Cunningham: I think that there has been a timing issue with regard to the proactive work that is being done. I am quite sure, though, that if I had come here and said, “I’d like to delay the draft plan by another fortnight so that we can do this,” there would have been uproar. The timing was just unfortunate.

Claudia Beamish: I am not concerned about the draft. You have reassured me that—

Roseanna Cunningham: That it will be in the plan, yes. We will have references to blue carbon in the plan.

The Convener: I want to wind up this discussion by looking at the process from here to the plan’s conclusion. What work will go on over the next period to finalise the draft plan? What engagement, if any, will there be with stakeholders, key interest groups and the Committee on Climate Change?

Roseanna Cunningham: As you are already aware, a considerable amount of climate change activity is planned for the remainder of the year, including a consultation on the new climate change bill as well as more routine business arising from our obligations under the Climate Change (Scotland) Act 2009, including the publication of the 2015 greenhouse gas statistics in, I think, June; my annual progress report to Parliament; and an update of the carbon accounting regulations.

I need to think very carefully about the best time to finalise the climate change plan to ensure that we take on board views from the whole of the parliamentary scrutiny process, which obviously involves a number of committees, and from further and deeper engagement with key stakeholders. I have already referred to that happening in a number of different areas, and it will happen again as we move into the plan’s delivery phase. It is my intention to come back to Parliament before the summer recess with an update on the timing for the plan’s final version.

I recognise that the scrutiny period for the draft plan has been very tight and that there are questions about that particular bit of the process. We probably need to park that issue for the climate change bill itself, because we will have to look at whether this timetabling of the scrutiny process has been as effective as it might have been.

That is what I intend to do.

A lot of work is being done, as I have indicated, and it will feed in to the final plan. I will come back to Parliament and the committee on the timescale. I am also conscious that sitting alongside that is the consultation, the draft energy strategy and all the rest of it. We are trying to make the timing sensible.

The Convener: The committee will obviously take an interest in the final plan and I suspect that other committees might want to do likewise.

Roseanna Cunningham: Indeed.

The Convener: Claudia Beamish has one final supplementary.

Claudia Beamish: You have already highlighted it, but I seek clarification on the proposed climate change bill. If and when that becomes an act, will there be an opportunity to revisit the climate change plan if different targets or issues arise as a result of the new act?

Roseanna Cunningham: That would be mandated, absolutely. The current climate change plan comes out of the 2009 act, so the new legislation will drive its own set of forward plans. I have kind of said, albeit not formally because I do not want to be tied to it, that if my officials have not all resigned by that point, we will probably start to look at another plan in 2019.

The new bill will have to trigger its own plans. The new targets that will be set down in the new bill will be new drivers for how we make our decisions. That is why I said that the issues around scrutiny and the way in which we have had to do this plan, because of what was set down in the 2009 act, might mean that the new bill will have to reflect on whether that process is the best way. The committee might feel that there could be better timescales and ways of managing the production of the plan.

I am conscious that there has not been time to talk about alignment with the budget, which has its own issues with timescales and everything else. Do we want the scrutiny process to be constrained or should we open it out and make it longer, wider and more open? All those are reasonable and legitimate questions to be asked in the context of the new climate change bill because it will move us away from the constraints of the 2009 act.

Claudia Beamish: Will there be an opportunity to revise this climate change plan if the implications of the new climate change bill demand it, or will we have to wait for the next plan? That is what I am trying to tease out.

Roseanna Cunningham: I am trying to work out a timescale for the new climate change bill, which will in effect reset 2020 targets, so we will have to go back and look at this plan as well as work out what a new plan would look like. There is a danger of overloading everybody. We need to manage the whole process.

The Convener: Cabinet secretary, thank you for your time and that of your officials. The committee appreciates the responsiveness of your officials to our requests for further information.

Roseanna Cunningham: The daily requests.

The Convener: That is the role of parliamentary committees. We are working within a constrained 60-day period and your officials have been incredibly co-operative, in keeping with the spirit of

getting appropriate scrutiny within the constrained time frame. I just wanted to put that on the record.

Roseanna Cunningham: Thanks very much.

Farriers (Registration) Bill

12:43

The Convener: We move swiftly on to our second item, which is consideration of the legislative consent memorandum for the Farriers (Registration) Bill, which is UK Parliament legislation. I refer members to their papers.

As there are no comments from members, is the committee happy to delegate the signing off of the report to the convener?

Members *indicated agreement.*

The Convener: At its next meeting on 28 February, the committee will consider its draft report on the Scottish Government's draft climate change plan, RPP3. That meeting will be in private.

12:44

Meeting continued in private until 13:12.

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