



OFFICIAL REPORT
AITHISG OIFIGEIL

Environment, Climate Change and Land Reform Committee

Tuesday 20 September 2016

Session 5



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ENVIRONMENT, CLIMATE CHANGE AND LAND REFORM COMMITTEE
5th Meeting 2016, 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)
Richard Dixon (Friends of the Earth Scotland)
Andy Kerr (Edinburgh Centre for Carbon Innovation)
David Mallon (Scottish Government)
Robin Matthews (James Hutton Institute)
Robin Parker (WWF Scotland)
Sue Roaf (Heriot Watt University)
Tom Rye (Edinburgh Napier University)

CLERK TO THE COMMITTEE

Lynn Tullis

LOCATION

The Robert Burns Room (CR1)

Scottish Parliament

Environment, Climate Change and Land Reform Committee

Tuesday 20 September 2016

[The Convener opened the meeting at 10:00]

Decision on Taking Business in Private

The Convener (Graeme Dey): Good morning and welcome to the fifth meeting of the Environment, Climate Change and Land Reform Committee. Our colleague, Finlay Carson, sends his apologies.

The first item of business is to consider whether to take items 7, 8, 9 and 10 in private. Do we agree to take those items in private?

Members *indicated agreement.*

Greenhouse Gas Emissions Targets

10:00

The Convener: Agenda item 2 is evidence on Scotland's greenhouse gas emissions targets. We are joined by a panel of stakeholders and academics. I welcome Andy Kerr, executive director of the Edinburgh centre for carbon innovation at the University of Edinburgh; Robin Parker, public affairs manager of WWF Scotland; Susan Roaf, a professor at the school of the built environment at Heriot-Watt University; Richard Dixon, director of Friends of the Earth Scotland; Robin Matthews, natural assets theme leader and climate change co-ordinator at the James Hutton Institute; and Tom Rye, professor of transport policy at and director of the transport research institute at Edinburgh Napier University.

I encourage short, sharp questions, and say to the panel that you do not have to answer every question or provide a response if you do not feel that you have something to contribute. That way, we should make considerable progress on a very important subject. Kate Forbes will kick off the questioning.

Kate Forbes (Skye, Lochaber and Badenoch) (SNP): Good morning and thanks for being here. First, I have a general question that I direct to each of you. Last week, the committee heard evidence from Lord Deben, chair of the Committee on Climate Change, who said that "Scotland is doing better" than the rest of the United Kingdom. What are your views on the role that domestic policies specifically have played in reducing Scotland's emissions compared with other factors such as warmer winters or a reduced share of European Union emissions trading scheme emissions?

Robin Matthews (James Hutton Institute): The news that we are meeting our targets—at least, we met them in 2014—is good, but there are a few caveats to that. I will talk mostly about the agricultural and land use sector, as that is where my immediate experience comes from. There is a question as to whether the policies have really had an effect. I think that there has been a small effect, but the contribution to the reduction from agriculture and land use is due largely to factors that were happening anyway: the reduction in livestock numbers over the past couple of decades or so, and the reduction in fertiliser applications. Those things were happening anyway, so one could argue that the policies have not had too much of an effect in that respect. However, it is certainly good news, and we can focus on those two things in the future and try to use them to

carry on reducing greenhouse gas emissions from the land use sector.

Richard Dixon (Friends of the Earth Scotland): Lord Deben acknowledged last week in the report from the UKCCC that there had been some impact from domestic action. That is certainly true. The big drop that happened from 2013 to 2014 was clearly mostly to do with the EU ETS, which is how we account for the energy sector—it was not really to do with our energy sector but with what is happening in Europe and in that trading scheme. Some quite artificial things are happening. The drop was also because of some warmer winters, which mean that people burn less fuel to keep their homes warm.

The ETS has some variable things going on at the moment. Some permits have been held back, which means that our figures look better. Those permits may be released in future years so, in the 2015 numbers, we might see an increase in Scotland's emissions because of things that are happening in the EU ETS and which are not really anything to do with anything that we have done. That is why most people are supportive of the idea that in the proposed climate change bill we will have a new accounting system that gives us full credit for the very good things we have done in our energy sector. That sector is successful in terms of the move towards low carbon, the growth of renewables and good progress on increasing energy efficiency.

Of course, we have closed both of our coal-fired power stations. Closing Longannet will give us a reduction in real terms of about 10 million tonnes of carbon dioxide a year. However, we will not see that in the figures under the current accounting system, even though Scotland has taken that very big step. In the new system—if that is where we go—that reduction will come through properly.

The energy and waste sectors are praised by the UKCCC as areas where Scotland really is doing useful things, but it points at agriculture, buildings and transport as areas where we need to do much more, particularly to meet future targets.

Finally, on the effort that I see in Scotland—and I have been tracking climate targets in Scotland for more than 20 years, since the Labour-Liberal Democrat Government first said that we might have a climate target right through to the current detailed process in the Climate Change (Scotland) Act 2009—there is probably not another country in Europe where so many civil servants get together and clutch their heads about how to reduce carbon, where there is such engagement of stakeholders as there has been here, at least in previous years, and where there is something as comprehensive as the reports on proposals and policies. We are not delivering enough but we have a good process, which potentially leads to

good delivery, so there is cause for optimism that the third RPP, which will be called “the climate change plan”, will be a credible plan to deliver on targets.

Sue Roaf (Heriot Watt University): Thank you for inviting me. The domestic sector is responsible for about 30 per cent of all emissions from Scotland. Of those emissions, about 66 per cent goes in space heating, 16 per cent in water, 3 per cent in cooking and 15 per cent in lighting and appliances. Homes are incredibly important to Scotland because citizens are important to their legislators. An average of about 30 per cent of households across Scotland are in fuel poverty, and in some deprived areas—in Dundee and rural Lochaber, for instance—the percentages are higher, so homes really matter.

The move to 30 per cent more renewables over the past five or six years has masked a significant problem in the domestic sector. We are controlled by legislation via Europe to manage the domestic sector. The European energy performance of buildings directive is concentrated on certification to improve the stock incrementally, so every time a building is sold, you have to improve its performance and so on. The energy efficiency directive is a framework of measures promoting energy efficiency, with connotations of machine performance. The ecodesign directive mandates the performance of things such as heating, ventilation and air conditioning to try to get incremental improvements in efficiency. There is also the ozone depletion directive.

Unfortunately, year on year, our buildings and houses—even the modern ones—become more challenging. The traditional Scottish house was fairly robust. It might have been leaky and fairly solid with cold bridges and so on, but the roof did not blow off. Let me look at domestic development of efficiency in the past couple of decades. In the 1990s, we had the passive house, which was rather simplistic. You put insulation around a building, stopped the airflow through the windows and doors—so you stopped the draughts—got rid of cold bridging in the structure, put in double glazing or better windows and put a machine at the centre of it. It had a lot of stringent targets, too. In the noughties, we became more interested in sustainability and there was a move to better comfort, better indoor air quality and so on.

Now we are beginning to realise that, with the next generation of housing, we have created problems. For instance, in modern, light-weight, cheap-to-build, highly insulated timber housing with very little air movement, people are experiencing very bad indoor air-quality problems. Such houses often have big windows that do not have bits that it is possible to open. The solution is a small machine. We are getting chronic problems

of overheating in Scotland, which Tim Sharpe at Glasgow School of Art has done a lot of work on. That means that, eventually, more Scottish homes will be air conditioned, and that will cost. We already know that many people in Scotland cannot afford to heat their homes in winter, and they will not be able to afford to cool their homes in summer. Therefore, we have a real problem.

The Sullivan report mentioned the process of engaging with stakeholders. When we develop our action plans, we engage with stakeholders. Who do we engage with? We engage with Homes for Scotland, the Scottish Property Federation, Construction Scotland and, down the line, the Scottish Government's buildings standards division. We engage with people who make much higher profits by building lighter and cheaper housing for citizens. If we genuinely want the domestic sector to have a resilient and robust future that includes large emissions reductions, we will need to start ventilating houses naturally again, getting rid of the machines and running them on solar energy. Through the use of solar hot water and solar photovoltaic cells plus storage, we could reduce the 30 per cent of emissions that come from the domestic sector by 15 per cent tomorrow. We could make significant reductions, but we will not do that by tinkering about and getting improvements of 1 or 2 per cent in the heat pumps that we put in buildings, which is what will happen if the lobbyist-driven vested interests of Europe and elsewhere are allowed to prevail in the legislative process.

Robin Parker (WWF Scotland): There are two points that I want to make in answer to Kate Forbes's question. The first relates to what the CCC said about sectors, which is an important guide in answering the question. As Richard Dixon said, the sectors in which we have done well are electricity and waste. I am more familiar with the electricity sector. It is possible to trace directly the policies that have driven the excellent progress that Scotland has made in deploying renewable electricity. Obviously, decisions about the market and the support that is provided for the renewables industry are taken at the UK level, but although the UK Government has that role, everyone who is involved in the renewable electricity industry recognises that the leadership that the Scottish Government showed in setting the 100 per cent target set a long-term direction for the future of the industry after 2020, which drove a lot of progress. That is why Scotland has done more on renewable electricity than other parts of the UK have done.

On the flipside—the sectors in which the CCC made it clear that we have done less well—are transport, heat, homes and the land use sector. The most recent climate action plan contains no domestic policies in the transport sector, for

example. All the policies that are driving our transport emission changes are EU or UK-level policies; there are no Scotland-level policies on that. That goes some way to answering Kate Forbes's question.

My second point is about our most recent climate action plan, which is known formally as RPP2. It was strongly criticised for being insufficiently transparent and for providing insufficient information on what the monitoring and evaluation process was going to be. Without knowing a particular area extremely well, it is very hard to go back to that plan and work out whether the things that the Government said would reduce emissions happened and whether they delivered the envisaged reductions. That is a hugely important point to bear in mind as we look ahead to the new climate action plan. There are two clear areas in which the next RPP needs to be much better, the first of which is transparency and monitorability, if that is a word. Secondly, the CCC has given a clear steer that we need to step up our action in those sectors in which we have done less well.

10:15

Ending on a good-news note—this is particularly important for all the politicians round the table—we have a survey out today that shows that increased action on climate change is very popular with the public, and that only 10 per cent of the Scottish public say that we should not increase investment in tackling climate change. We should do more, but the good news is that that will be popular and will bring lots of benefits and improvements to the economy and to society.

Andy Kerr (Edinburgh Centre for Carbon Innovation): All sectors are affected by some level of EU, UK and Scotland competence, and it is often difficult to tease out the bits that relate only to Scotland, as some of that involves enabling legislation that supports other legislation that comes through at the UK or EU level.

Last week, the Committee on Climate Change made the point that, even with temporary adjustment and back loading, we would still have met our target. To echo the point that Robin Parker and Richard Dixon made, we ought to congratulate ourselves when we have met a target.

Our action has been focused on two sectors, and the challenge for this committee is how we start to focus on the other sectors—transport, agriculture, the domestic sector, which Sue Roaf mentioned, and energy efficiency more generally—in which more can be done locally. The committee needs to take a forward look at those issues and focus on them.

Tom Rye (Edinburgh Napier University): I will limit myself to transport. I concur with pretty much everything that has been said so far about transport; I do not think that Scotland is doing well on transport and climate change. I have two specific points. The Government's own carbon account shows that the large new transport infrastructure investment in which the Government—or Transport Scotland—is engaged has increased the amount of car travel and therefore increased travel distances and climate emissions.

I also point to land use planning. The bulk of our land use planning decisions lead to the creation of car-dependent communities that are relatively far from where people want to go. That increases travel distances and the use of cars, and makes it more difficult for us to hit our climate change targets. We can have more a detailed discussion about that if members have other questions, but those are my two main points.

The Convener: Okay, that is great—it has set the scene. We will move on to focus on specific areas, starting with the energy sector.

Claudia Beamish (South Scotland) (Lab): There has already been some focus this morning on Scotland's progress to date in cutting emissions in the energy sector. Any further comments on that from any of the panel members would be welcome, as would suggestions for areas or policies that could be prioritised to build on the progress in that sector.

Robin Parker: I am happy to come in on that. First, we have made a lot of progress only in the electricity sector, and electricity accounts for only about a quarter of our energy usage. Heat is half of our energy use, and transport is a quarter, so even in the energy sector we have made good progress only on a very small part of our emissions.

To echo my earlier points, we can learn a lot from what we did on electricity. We can transfer the leadership and direction in those sectors into the other sectors. Setting a target is important, as that has driven a lot of the progress and benefits that we have seen in the electricity sector.

WWF is very keen on the idea that the Scottish Government, in the forthcoming energy strategy that it is producing alongside the climate action plan, sets a target for our renewables usage in 2030. For the target to be consistent with the Climate Change (Scotland) Act 2009, we need half of all our energy usage across all three of those areas—electricity, heat and transport—to come from renewables.

Claudia Beamish: If it is not putting people on overload, I will ask a couple of supplementary questions. You might feel that it is appropriate to

answer them at this stage, or we could come back to them because they fit into the whole energy picture.

I am thinking in particular about the practicality of achieving the significant increase in the installation rate of renewable energy schemes that is required to meet the 2020 renewables targets.

I also seek your views on how progress can be made on district heating and renewable heat. Last week, Lord Deben said that, as we all know, progress in that regard has been slow, and that it was not necessarily part of the Scottish culture to be collective—he did not put it quite like that, but there is perhaps an issue in that respect. If you feel able to address those issues in your remarks, that would be helpful.

The Convener: Robin Parker wants to come in first, and then Andy Kerr can answer.

Robin Parker: I have one point on Claudia Beamish's question about district heating and renewable heat. The Scottish Government set up an expert group to advise it on the role of regulation in district heating and it has produced a report. WWF thinks that the next step to take that forward is through the warm homes bill that is proposed in the programme for government. We would like that bill to deliver the regulatory framework that is very much needed to deliver the required scale-up in district heating schemes and renewable heat in Scotland. We think that we need to get to about 40 per cent renewable heat by 2030 to meet our climate change targets, so there is a really long way to go.

The Convener: Before I let in Andy Kerr, Jenny Gilruth has a question.

Jenny Gilruth (Mid Fife and Glenrothes) (SNP): It is a supplementary to Claudia Beamish's question. There is obviously a debate as to how best to achieve the increased delivery of renewable heat. As Claudia said, the Committee on Climate Change report notes that the uptake has been slow, and we are looking at how stronger implementation can be developed. Does the panel have a view on how we increase renewable heat? Should that come from central Government, local authorities or private industry? Is there a collective view on how best to achieve that? In my constituency, for example, we have the RWE biomass plant in Markinch. That was supported by £8 million of Scottish Government funding, but the council and a private company are also involved.

Andy Kerr: I will start with Claudia Beamish's question. Over the past 18 months or so since the renewable electricity subsidies went offline, there has been a genuine attempt to move away from just installing turbines across the landscape to consider how we deliver affordable clean energy

at local scale in Scotland. We are already moving away from the old style of electricity system with big power stations and so on. There has been a lot of stakeholder engagement and exploring. One challenge is that we have seen radical changes in technology costs and in energy markets and governance, and there have been big changes in the understanding of how people use energy in their homes and businesses. It is a challenging space to operate in.

Obviously, a Government does not want to be in the position of trying to choose winners. We are therefore seeing an awful lot of demonstration projects at local community level through things such as the local energy challenge fund, the energy efficiency programme pathfinder funds and some of the community and renewable energy scheme—CARES—funding. Those are about trying things out and exploring what works and does not work. A lot of the knowledge behind that will start to come out in the consultation on the climate change plan or RPP3. That is a really good way for Scotland to go, because it sets us up to focus far more on people's needs rather than on simply how many turbines we have. It will allow us to focus on whether we are delivering affordable clean energy across the piece.

That approach also provides an enormous export opportunity, because lots of countries are grappling with the same problem and we have the skill set in the private, public and academic sectors to help to deliver on that. There is a real opportunity there.

Specifically on heat, the committee has already heard about the proposed warm homes bill. Another really important element is the Government commitment to consult on the minimum energy performance standards for private sector housing.

More widely, having energy efficiency as a national infrastructure priority is absolutely key, because we ought to be committing public money to that. However, to come back to Jenny Gilruth's question, that ought to be as a means to leverage private money. The public sector and Government cannot pay for what will be a huge programme of investment across the piece in every building in the country—it cannot be done by the public sector alone. We have to consider smart ways of leveraging private money. That might be by helping to underwrite risks, by offering interest-free loans or by essentially crowd funding private sector funds. The Scottish Futures Trust and others have been developing really interesting business models to bring private money into those spaces. That is where the focus of attention needs to be.

Richard Dixon: On Claudia Beamish's two questions, I think that, as Andy Kerr has

mentioned, it is great news that insulation is now a national infrastructure priority, because it will focus minds on long-term and bigger-scale investment. My view is that we know what to do—indeed, we have been doing it for some years now—but, although we have some very good examples of schemes that really work and which do the right kinds of measures at the right kind of scale in communities, we need to roll that out on a much bigger scale across Scotland. We know what to do but we need, as Andy Kerr suggested, to find ways of getting in private money to allow us to do it at the right scale.

As for district heating, some really interesting conversations are going on. I was part of a conversation about district heating networks in central Glasgow in which universities were talking to the council, health providers and so on about the heat that they produce and how they might be able to join all that up. However, when you question those people in detail, their answer is always, "Well, we might build something with lots of heat, but we can't guarantee that the custom will still be there at some point in the future." The problem is that there is no regulation of the heat market as there is of electricity, and the urgent priority is to create a regulatory framework to ensure that a supplier of heat is able to guarantee that it will sell it somehow without having to rely on the company next door not going bust next week. That is really important; indeed, it is so important that we should perhaps think about putting it in the forthcoming climate change bill, given that it will be one of the first opportunities for us to put in place a system that will make such an approach work. That would really open the doors to delivering on all those interesting conversations.

Finally, on Jenny Gilruth's question about renewable heating, the Committee on Climate Change is very keen on air-source heat pumps for people's domestic properties. There are a number of ways in which that might be encouraged. For example, we could simply rewrite planning and building regulations to ensure that in almost all cases new-build properties had to go in that direction. In the past, we have had boiler scrappage schemes, in which people with very old boilers were able to get a bit of a grant to replace them with something much more efficient. That was for gas boilers, but we could do the same here by encouraging, with a bit of money, those with a gas boiler to replace it with something that uses renewable heat. There are therefore regulatory and incentive routes for encouraging and accelerating a transition from gas boilers to renewable heat.

Of course, as renewables build up and the carbon content of electricity gets lower and lower, electric heating makes more and more sense. All

of those options need to be put together in the right kind of bundle to take us in that direction.

Mark Ruskell (Mid Scotland and Fife) (Green): On the back of that, I was interested in Tom Rye's comments on the planning system and ensuring that we design low-carbon places. Does that feed into the discussions about district heating, particularly if we are looking at providing certainty for the private and public sectors in meeting opportunities? How would you envisage that working in, say, a warm homes bill or whatever?

Richard Dixon: I will start off, and then Robin Parker might come in.

I get depressed when I see big developments being built on empty sites that, although they have boilers to make heat—and even combined heat and power systems to make some of their electricity—are not connected to anything. The building of a new housing estate on an empty site is the cheap time to link things up, put in pipes for district heating and so on. If you have to retrofit those kinds of systems, you will cause major disturbance in people's lives, you will have to dig up carefully laid roads and so on, so it is much harder and much more expensive. It is almost a crime that we continue to build housing estates that do not have district heating built in from the start, because that is the cheap and easy time to do it. The planning system and building regulations are absolutely key to our doing much more sensible things like that.

Sue Roaf: The theory and the practice in this respect sort of diverge. For someone building a big new housing scheme out in the Borders or somewhere—and we are talking about remote transport communities here, not somewhere where 800 houses are being put in because developers know that they will make shedloads of money out of them—it cannot be guaranteed that once they have built the first 100, the second and the third hundred will come. Do developers therefore front load the cost of those schemes on the first 100 houses? No, because they would not be able to sell them. It is a nice idea in theory, but who is going to pay for it and how are they going to do that? I do not necessarily think that putting the cost of the systems on the Scottish voter is a very good use of Scottish money.

10:30

There is another thing about technology tie-ins. Air-source heat pumps technically work well with a coefficient of performance of 1.3 or 1.4, but in practice they can be terrible. There are many failed heat-pump systems, so to mandate that everybody must have an air-source heat pump would possibly not do many people a great favour.

People—myself included—can build or design houses that do not need much heat any more. That is the solution. One way of doing that is to incorporate thermal storage in the buildings, as we always used to in cavity walls, for example. An inner lining of concrete-block walls absorbs heat during the day so that it can be reused. With lightweight, highly insulated buildings, as soon as the door is open and the sun has gone down, no renewable heat is left in the system, yet 87 to 88 per cent of the buildings are lightweight, timber-framed buildings with no thermal storage. We would probably do the citizens of Scotland more of a favour if we mandated for thermal storage to provide resilient heat over time than if we tried to force them to put in extremely expensive and often inefficient and expensive-to-run heat-pump systems.

My final point is that, across the board, there is only one way of taking individuals out of fuel poverty: put solar panels on their roofs. The best thing you can do is continue the huge surge in the installation of solar energy—it was going to be done on 10,000 units on Glasgow housing sites. At the same time as you invest in distributed energy capacity, you take every individual home out of fuel poverty for ever. If we can do both those things, we will meet two targets that are difficult to achieve anyway.

The Convener: Do we need cultural change in the housing sector for the developers, who will always find a reason not to do things? That is the mindset, is it not? We need to get to the point at which they understand their responsibilities and contribute to what we are all trying to achieve.

Sue Roaf: We need little nudge regulations, so that, for example, all houses must have adequate natural ventilation opportunities because the lights will increasingly go out—we know that we live with an unstable energy system. Houses must have enough thermal mass capacity to stabilise internal temperatures, and they should avoid overheating simply because of their orientation. If your house faces west you may have been severely uncomfortable in your home in the past two weeks. It is simply a matter of correct orientation. We need simple planning laws that optimise the solar benefits and negate the solar disbenefits of construction. It does not cost anything to change the orientation of a house.

The Convener: That is interesting.

Andy Kerr: I want to go back and mark what might be put in a warm homes bill. One of the key things to remember is that heat is, of course, inherently local, so what will work off the gas grid in the rural environment for 15 per cent of homes and businesses across the country that will often use either oil or electricity for heating will be a very different solution from that for a suburban

settlement or the tenements in the centre of our cities. One or two of them might suit district heating, but suburban settlements do not because the sheer capital costs of putting in the pipes are not paid back any time soon.

It is about making sure that there is very clear zoning—that goes back to the planning system—on what is appropriate. The heat regulations that Richard Dixon mentioned might say, for example, that if someone was in a certain type of space, it would be appropriate to do X, but it is important to be aware that one size does not fit all.

It is also worth flagging up that the big challenge for heat is that there is around four times as much heat energy demand in December as there is in June. Heat demand is much more variable, seasonally and daily, than electricity is. The issue is always that if we are going to meet the maximum heat demand there will be a lot of redundancy in the system, because it is not on for a lot of the year.

Therefore, in terms of affordability for businesses and homes, the issue is not just whether we can generate more but whether we can make the system more efficient so that we do not have the peaks in demand. That can be done through business models—National Grid does it—there are lots of ways to manage peaks in demand, but that is the big challenge that we face in heat.

At the UK level, for many years there was a narrative that said that all we needed to do was electrify the whole system. Fortunately, we have moved away from that and the next big idea is to stick hydrogen in the gas pipes. That might work because we already have the pipes in the ground and we would not need to build a huge amount of infrastructure for houses, but we do not really know what the costs of that would be. Nevertheless, you will hear more and more people pushing that as a silver bullet and you need to be aware that, although that is one option, you must be careful to understand the wider costs and benefits.

The Convener: A lot of members and witnesses want to speak. I remind everyone that we have a lot of ground to cover, so people should keep their contributions short and sharp.

Claudia Beamish: Does the panel believe that there is a role for fracking to provide a bridging fuel? How compatible is fracking with Scotland's greenhouse gas emissions targets? Do panel members have any wider comments to make on the challenges of the energy shift from fossil fuels?

The Convener: I also raise the issue of carbon capture and storage. Last week, Lord Deben made the point that the UKCCC had told the UK Parliament that CCS must be addressed urgently.

I would welcome the witnesses' views on how pivotal CCS is.

Richard Dixon: The UKCCC published a report on the UK picture of the compatibility of fracking with climate change targets. The industry says that fracking is okay as long as it is regulated nicely; the UK committee says that there are tough regulatory tests to meet, after which it might be okay. There are different views on the same report.

The UKCCC is also compiling a report on what fracking would mean for Scotland's meeting our climate change targets, which are much tighter. If that committee says cautiously that fracking might perhaps be okay for the UK, it is hard to see how it could say that fracking would be at all okay for Scotland, because every climate change emission that was produced from fracked gas would have to be compensated for somewhere else in the Scottish economy, and that would be pretty hard to do.

It is not clear that there will ever be a viable fracking industry, despite the claims of Ineos, which is terribly bullish. Cuadrilla, which has been in the business for a lot longer and is accessing a much bigger potential resource in the north of England, has said that it would take it five years and 40 boreholes just to work out whether there is a viable industry that is economically worth tapping into. If there is any, there might not be much and it might be quite a long way away.

In Scotland, we are rapidly becoming more energy efficient and moving towards renewables. We have closed our coal-fired power stations—the only fossil-fuel power station that is left is Peterhead gas station, which is running at reduced capacity—and we are doing well at moving away from fossil fuels in the electricity sector. We should continue that trend rather than go backwards and introduce fracked gas, which we would have to build a new power station to burn.

A few years ago, CCS looked like an attractive option but, these days, why would we want it in Scotland? We would need it only if we were building new fossil-fuel power stations instead of continuing on the renewables track. It might be an important technology in other places, but even places where it used to be important, such as China—which still burns a lot of coal—are seeking to reduce its use. Coal-fired power stations around Beijing are being pulled down, and China is now the biggest installer of solar and wind generation in the world. It is moving away from the need for CCS.

Therefore, although Scotland has lots of engineering expertise and access to the North Sea, which would be useful if CCS was worth doing, it does not seem that it is worth doing. If we

are going to spend research money on something in Scotland, we should be making wave power and floating offshore wind power work; we should not be spending the money on CCS.

Robin Parker: I have two quick points to make. First, on fracking, the global message is clearly that we need to start leaving fossil fuels in the ground if we are to tackle climate change. Scotland has always played a leadership role and, to build on all the points that Richard Dixon made, here is a way to play it.

WWF has always supported CCS and there is no harm in researching it. Scotland's current electricity generation policy statement assumes that we will have a new gas power plant that is fitted with CCS, but that no longer reflects commercial realities and does not reflect the unfortunate decision to remove the financial support for the research element. Our concern is that, when that may or may not go through to commercialisation, why are we planning that it will be here?

WWF commissioned a piece of research a while ago called "Pathways to Power" that looked at what kind of electricity system we could have in Scotland in 2030. The good news is that it showed that we could have an almost entirely renewable electricity system that would provide us with safe and secure electricity. That system would also maintain our exporting position so that we would continue to export to England and other parts of the Great Britain grid.

Andy Kerr: I always find Richard Dixon's and Robin Parker's answers on fracking slightly disingenuous. Eighty per cent of our homes use gas for heating and will do so for the next 10 to 25 years. The first big tanker-load of fracked gas for Ineos will arrive in Scotland this week and we are using fracked gas already. The question is not whether we should use fracked gas or frack it ourselves but whether it will allow us to continue to meet our climate targets. Climate targets are fuel neutral—it does not matter what is done as long as the carbon targets are met.

I am ambivalent about fracking as long as it is done in an environmentally sensitive way—it is not clear that it can be done in such a way but, if it can, that is fine. The issue is more about ensuring that we improve the quality of housing stock and reduce the demand from housing so that gas is irrelevant—whether it is fracked or not—in 25 years' time. That is at the heart of what we are doing on climate targets.

It is always slightly odd to debate whether we should frack in relation to climate change. We already use gas, and either it is from Russia or it is fracked gas from the US. Does it matter whether we fracked it ourselves? Not really.

Robin Parker: The point is about where we can have a technological advantage. A company near Glasgow produces heat pumps and there is a place in Norway that has a heat pump running a district heating scheme.

Andy Kerr: I agree with the approach as an industrial strategy, because our gas is far more expensive than that in the US. However, to stop businesses trying fracking seems slightly odd. If they want to put money into it, that is fine, as long as they are clear that they will not be using gas in homes in 20 or 25 years' time.

I agree that CCS is irrelevant in Scotland for the power sector, but it is not irrelevant for industry. For Grangemouth or other big industrial sites, having a small amount of CCS is potentially sensible. CCS should not be shut down—it is not the same big deal as it is in the UK, but it is not irrelevant in Scotland.

Sue Roaf: Energy raises two problems. First, is there enough to meet our needs? Secondly, what is the personality—for example, the peakiness—of the relationship between the supply of and demand for energy?

I do not know how many members have looked out of their windows and seen what I call the great eye of Sauron—the huge gas flame on the horizon—over the past week. For 10 days, millions and millions of tonnes of gas have been flared off. It looks like Mordor over there.

That raises the issue of storage, which is pertinent to the whole debate. With judicious management, we can use less energy each year. Why would we want to introduce new, potentially environmentally expensive technologies if we do not need them? We can meet energy needs with our growing renewable capacity. Storage is critical. Off-river double-pumped systems, hydro storage, battery storage and so on must be introduced into the debate.

Andy Kerr raised the quality of energy, which is the third element of the plan. There are low-exergy energy systems. For some functions, strong high-quality energy is needed. For example, the industrial sector uses gas or coal-fired turbines. A low-exergy energy system would provide the different energy qualities that are needed. In a big industrial complex, such as Grangemouth, coal-fired capacity might be needed for the next 10 to 20 years to get the quality of energy that the industry needs, in which case CCS is a no-brainer.

10:45

David Stewart (Highlands and Islands) (Lab): The panellists will know that 28 per cent of our emissions come from transport. Tom Rye highlighted transport issues earlier. How satisfied

is the panel with Scotland's attempts to reduce emissions from transport?

Tom Rye: I alluded to my view that, at the Scottish level, the policies that are—or perhaps are not—being implemented are leading to increases in climate change emissions from transport, not the reverse. I am concerned about the investments in new infrastructure, because they reduce the time cost of travel by car and make such travel cheaper. When something is made cheaper, people consume more of it, so they will travel longer distances, which will generate more emissions.

The question is about what Scotland can do, because many aspects of transport policy that relate to climate change are devolved. An issue that comes up frequently is the need to invest more in, and bring about a modal shift to, the use of public transport. I am absolutely not averse to that, but I am cautious about the amount of change that such investment can bring about, especially in the short to medium term.

About 15 million trips a day are made by everyone who lives in Scotland—that is about three trips a day per person—of which nine to 10 million trips are by car and 1.5 million are by public transport. Doubling the number of trips that are made by public transport would make only a relatively modest dent in the amount of travel by car. Furthermore, how would a doubling of the number of people who use public transport be brought about, particularly if we wanted that increase all to come from those who previously used cars? That would need immense investment. As we know from looking at the schemes that are under way, that does not happen quickly or cheaply—although I have done a lot of research that suggests that schemes can be delivered more cheaply in other European countries. That area, along with district heating costs, could be looked at.

That aside, it should not be expected that investing in public transport will automatically mean that all the new users of public transport shift from cars. To bring about a mode shift from the car, improvements are needed to the alternatives to the car, as are disincentives to the use of the car. Disincentives could include road pricing, which I know is not very acceptable politically, and parking charging. The cities that have brought about a mode shift from the car to public transport have implemented such measures.

We must not forget the contribution of vans and heavy goods vehicles to climate change emissions. Scotland could take steps to change the characteristics of the technologies that are used for vans and HGVs. Should I continue?

The Convener: You have not touched on the issue of the wrong type of vehicles on the roads; electric vehicles, for example, have a contribution to make. An interesting statistic that is out today is that only 1 per cent of the vehicles that were purchased in Scotland in, I think, the past month were electric vehicles, in comparison with 33 per cent in Norway. We could have better vehicles on the road, but we seem to be reluctant to buy them.

Tom Rye: If, in the short to medium term, a high percentage of trips continued to be made by road vehicles, we would need to address the engine technology of those vehicles. How can we do that? I understand that Norway has reached the situation of having the highest share of electric vehicles of any country in the world through having charging points, including fast charging points, and—more important—dealing with the price of those vehicles. It has incentives and disincentives to encourage people to buy electric vehicles; it makes electric vehicles cheaper and, through taxation, it makes highly polluting vehicles much more expensive.

Evidence that was presented in a CCC report showed that the structure of vehicle excise duty in the Netherlands has led to a much faster adoption of lower-emitting vehicles than in the UK. Of course, vehicle excise duty is currently a reserved matter.

I draw the committee's attention to another thing that could be done to encourage the uptake of low-emission vehicles, which is within local authorities' power under the Transport (Scotland) Act 2001. If we look at where low-emission vehicles are being bought in Britain and if we control for socioeconomic factors such as income—if we leave them out of the equation—we find that people who live in a London borough are something like eight times more likely to own a low-emission vehicle than people elsewhere in Britain are. We can only conclude that a main factor is the fact that they live close to a road user charging scheme in central London for which they get a discount or free entry.

David Stewart: You have predicted my next question. You appear to say that modal shift is a combination of the carrot and the stick with a bit of psychology. Last week, I told the chair of the Committee on Climate Change that I stayed in a very urban area in London when the congestion charge came in. Overnight I saw a difference in traffic flow, because people were penalised for taking their car into the zone, and there was as a result of hypothecation huge investment in new buses and tube trains, which was the other side of the coin. The public had greater capacity and ability to travel by public transport. Is your point that we need to look at not only the carrot and the stick but the psychology of making that jump?

Tom Rye: Absolutely. In the case of the London congestion charging scheme, it is interesting that people in outer London boroughs have also acquired low-emission vehicles at a faster rate than the population of Britain as a whole. One would expect that they do not drive into central London very often, but the scheme has still had an impact on their purchase choice.

We need a combination of carrot and stick, but we must bear it in mind that, when the London scheme was implemented, there was not great investment in new rail or new underground facilities. That was just on-going, which reflects the length of delivery time. However, the bus service was improved.

The Convener: Before Dave Thompson continues—[*Interruption.*] I am sorry; I meant Dave Stewart. The mention of electric vehicles made me hark back to the previous parliamentary session.

I ask panel members to think of another angle when answering questions. The UKCCC has identified that reducing the upper speed limit from 70mph to 60mph could lead to an 8 per cent drop in emissions. That would be quite a substantial contribution, but I wonder how popular that measure would be with the public. Can we explore that option, alongside what Dave Stewart is developing?

David Stewart: I want to talk about the other side of the coin. The panel will be aware that there is a Government trial to increase HGV speeds from 40mph to 50mph on the A9 in the Highlands and Islands. I made a small contribution to that. It may seem to be counterintuitive to increase speed, but the Road Haulage Association tells me that a vehicle going at 50mph in top gear emits less than a vehicle going at 40mph in a lower gear. You will know that England and Wales have already introduced a 50mph speed limit for single carriageways. The irony is that an HGV going from England to Scotland on a single carriageway has to drop speed from 50mph to 40mph. I would welcome the panel's views on dropping speed limits for general transport and increasing the limit for HGVs in Scotland from 40mph to 50mph.

Robin Parker: I want to make a few points. The first is in answer to Dave Stewart's first question, which was about our overall progress on transport so far. The statistics speak for themselves: we have barely shifted from our 1990 levels on climate change emissions in the transport sector. It is an area where we need to find solutions and—as I mentioned—there are no solutions in the existing climate plan. I hope that the Government is listening to this conversation, because one thing that is apparent from it is that there are any number of solutions available; we just need to go out there and decide which is the right solution to implement in Scotland.

You can draw examples from elsewhere in the world. In Norway, the Government has—in addition to what Tom Rye mentioned—done plenty in terms of priority measures for electric vehicles. London was mentioned; I grew up in London and when I go back there I see that the scale of cycling is much bigger. The infrastructure has been a big part of driving that change.

My other point is on behaviour changes. They do not happen in a vacuum, but happen in response to all the different carrots and sticks—the nudges and various things that governments can do at all levels. That is what drives behaviour changes.

A huge number of benefits can come from changes that we can make in the transport sector—changes to do with air quality, health and the liveability and desirability of our cities. Nottingham is another example that we can look to. It has put in place a work-based parking levy, which has, among other changes, made the city a much better place for businesses to do business. It has brought in new companies because there is a really good public transport system, which makes it a much more liveable city.

Powers are coming to this Parliament on speed limits, so we should look at how we can use those powers in future legislation. To set 20mph as the standard speed limit in cities really changes their liveability. It would make implementation much easier for local authorities because if 20mph were the standard, authorities could then decide where they need higher speed limits, rather than the other way round, which would reduce signage costs and so on.

Richard Dixon: There is some optimism about the next climate change plan and the amount of action that it might propose on transport. The plan will be different from the previous two plans in that it will be based on the output of a big computer model of the Scottish economy—the TIMES model—which I am sure you will be hearing a lot about in the future. There are good and bad things about using that model. A good thing is that it looks across all sectors and says how much each sector should do. It will produce a number for transport and say that transport needs to do a lot because it has done very little so far, as Robin Parker was saying. Therefore there will be much more of a numerical challenge to the people involved in transport and to the transport minister to come up with policies that do more. That approach will be much stronger than the previous two exercises, so that is very helpful.

A concern about the TIMES model is that although it is a sensible thing to apply, it looks at very direct costs and carbon savings; we know from previous work in transport that if we look, for instance, at investment in cycling infrastructure, it

looks expensive for the amount of carbon that we save. We can, however, look more widely at the fact that more people will cycle, which means that they will be healthier and have fewer days off sick from work. Therefore, the economy will be better and there will be fewer bills for the national health service because people will be less sick because they will be fitter. Even just in economic terms, that carbon saving looks much better. We need to understand whether TIMES also takes into account those very important secondary benefits, which are good for the economy and for the people of Scotland.

On speed limits, on the long roads where we have average speed cameras, the fact that people are now obeying the speed limit is saving us some carbon, because people are driving at the speed limit instead of five or 10 miles over it. That has been very helpful and there is an important lesson to learn from it. When average speed cameras first started to appear, there was a lot of negative reaction and negative publicity. Now, they are normal on some of our major roads, and there are average speed cameras on many road works. People understand the cameras, they know how to operate with them, and they understand that the cameras are about preventing accidents and saving lives. The cameras are also about saving carbon.

There is a big lesson to be learned about assuming that doing something challenging in transport will mean a huge negative reaction and will be politically far too dangerous. The lesson to learn from the average speed cameras and the 20mph zones in Edinburgh is that although there was a lot of nervousness about introducing them, the public like them and understand the rationale. It is about saving lives, saving money and saving carbon—people are mature enough to get that. A small bit of the roads lobby will go off at the deep end about it, but the public will see that it is a good idea. We should certainly consider the proposal to have a 60mph top speed limit, for instance.

Andy Kerr: I have two quick points to add to what Tom Rye talked about. One is that we are in the midst of an emerging revolution in transport services, with data analytics and connectivity. We might call it the Uber effect, in that a lot of transport providers of goods and services and moving people around are being radically disrupted by incoming technologies. With all disruptive technologies, we are never quite sure which way they are going to go and whether they support what we are doing. However, there are ways in which Parliament can shift things to ensure that as that revolution takes place in Scotland, we start to see real benefits. When companies come in with such individual mobility services, we need to ensure that they do it in a low-carbon way—for example, by providing fleets

of electric vehicles. We are seeing lots of things that you will pick up over the next year or two and which are worth being aware of.

11:00

We did a review of speed limits, although it was of a change from 30mph to 20mph. It found that although it had loads of liveability benefits—as Robin Parker said—the carbon benefit is very marginal because it depends on the amount of start-stop traffic and so on. However, overall, for all towns and cities it is a benefit to bring down the limit from 30mph to 20mph. The heavy goods vehicle folk are right; on a carbon basis, it is not unreasonable to set stable speeds at 50mph rather than to slow down traffic.

The Convener: A lot of people want to come in on the issue, but we need to wrap up the discussion.

Tom Rye: I concur very much with what has been said about the politics of implementing what might be perceived to be unpopular measures in transport.

Moving on, but on the linked issue of how we might introduce reduced speed limits on higher-speed roads, we might start by ensuring that the existing speed limit is enforced rather than trying to reduce it. An assessment of that was carried out in RPP1—“Low Carbon Scotland: Meeting the Emissions Reduction Targets 2010-2022: The Report on Proposals and Policies”—which predicted that keeping vehicle’s motorway speeds to 70mph and their not travelling above that would save around 25 kilotonnes of carbon a year in Scotland.

How might we sell a reduction from the current speed limit to a lower speed limit? Obviously, there are the accident-reduction benefits such as those that we have seen on the A9, but there are also congestion-reduction benefits. When there is heavy traffic on congested motorways, such as on the M8 between Edinburgh and Glasgow at peak time, running at lower speeds can increase the capacity of the motorway and therefore the reliability of the journey time, which is an extremely important benefit to users.

It is very important to do all the modal shift stuff, including the cycling and walking investment, for all the health and liveability reasons that we have heard. However, we must not forget that the bulk of our CO₂ emissions from cars come from medium-distance journeys, by which I mean journeys of between 20 and 50 miles. As travellers, we make a lot of very short journeys, but they do not produce much carbon. The data demonstrate that the carbon comes from our less frequent medium-distance journeys. We have to

think about how we address those trips, which produce so much of our carbon.

The measures to shift people to cycling, walking and bus-based public transport, which tend to be used for shorter trips, will not necessarily have a huge benefit in carbon terms, although they will have massive benefits in terms of health, liveability, road safety and local air quality. On what to do about that, I return to the point that I made right at the beginning about land use and ensuring that we locate new developments in areas that are easy to walk, cycle and take public transport to and from, rather than sticking them in some sprawl on the edge of town or in completely isolated new settlements a long way from where people live so that the only viable choice is the car.

Sue Roaf: Norway produces 140 per cent of its electricity from clean renewable hydro power, so use of electric cars there is a no-brainer. Singapore recently irked Elon Musk by refusing to allow Tesla cars into its market. It has done that because it does not have any renewable energy and the Tesla is a really big car that uses a lot of energy to get from A to B, irrespective of its being electric. Therefore, the simple message about the size of vehicles is critical.

We must also ensure that electric vehicles are run on renewable energy, which means having pricing tariffs for electricity. I have an electric bike, a photovoltaic roof and a battery, and I can see exactly when I am charging. Given that most electric-vehicle charging seems to happen at night, considerable effort will need to be put into the relationship between energy supply, charging and making the vehicles work for us in a larger system if we want to grow those kinds of fleets.

Mark Ruskell: We have heard some really interesting comments about the wider secondary benefits of some of this action and about how we create genuinely sustainable communities that have a strong sense of wellbeing. I know that we will be talking about this later, but how do we capture that in the RPP? Introducing default 20mph zones in Scotland's residential areas, for example, will clearly have health and public safety benefits, but how will that then read across into the Cabinet Secretary for Health and Sport's remit as well as into planning? After all, it is important to capture such sustainability benefits.

Before we leave transport, I also have a question about air passenger duty. Last week, Lord Deben asked about policy trade-offs. Clearly the Government has an economic policy to reduce air passenger duty, but are there any alternatives to that that would both meet the Government's overall economic objectives and reflect the true environmental cost of frequent flights?

Robin Parker: As far as air passenger duty is concerned, it should be a point of principle that any new powers that come to the Parliament should be used in a way that is consistent with the Climate Change (Scotland) Act 2009. First and foremost, the Scottish Government should be finding some way of using those powers to reduce our climate change emissions, so it is frustrating that although the Government has analysed what cutting air passenger duty in half would do to our climate change emissions, it does not seem to have looked at other models or at what they would do with regard to our climate change emissions.

As for the economic benefits, reducing air passenger duty will not actually be very good at achieving what I understand the Government is trying to achieve. It says that it wants to increase Scotland's direct connections, but its own modelling points to half the passenger increase coming from UK domestic flights. Given that APD is not charged on flights to the islands and so on, we are basically talking about flights from the central belt to London. It is not a good policy for the Government to achieve what it is trying to achieve, so we should definitely look again at this area and do something different.

The Convener: You talked about consistency of approach. You guys are members of Stop Climate Chaos Scotland; one of your member organisations has taken legal action to block offshore renewables production, which completely undermines that particular direction of travel. Is there not a lack of consistency in that approach, too?

Robin Parker: I cannot speak for other organisations that are not represented on this panel, but WWF Scotland has always been supportive of renewables being in the right places as well as very supportive of Scotland's huge opportunity with regard to all forms of offshore renewables. Given that a quarter of Europe's offshore renewables potential lies in Scotland, Scotland should be at the heart of the industry. There has been a huge amount of really positive change as well as progress in marine renewables developments in Orkney and Shetland. Scotland has a good story to tell about marine renewables, and we can lead the way on it.

Tom Rye: I, too, am curious as to how air passenger duty is intended to benefit the Scottish economy. As a whole, UK passenger statistics for airports suggest that only around 20 per cent of passengers come in from other countries, which means that 80 per cent of passengers are British. That implies that those passengers are going elsewhere—and taking their money elsewhere, too. The mean household income of leisure travellers from UK airports is around £53,000, and that would suggest that the reduction of air

passenger duty is regressive and is just a subsidy for wealthier people. On those two counts, I find the policy slightly problematic.

In addition, we have to look at the immense impact of international air travel. It is calculated that approximately 32 million tonnes of carbon are produced by UK residents travelling internationally by air, in comparison with around 100 million tonnes from surface transport. That is a very significant proportion. What could we do about it?

The bulk of air travel is undertaken by people—such as me, I have to say—who travel frequently by air. I would not mind paying more for additional journeys, although a duty of that nature might be difficult to implement and enforce. If we can get over those barriers, it would have an impact on air travel.

The Convener: Andy Kerr might be able to answer this question. Is it the case that the projected increase in emissions from APD being halved is equivalent to only 0.01 per cent of Scotland's overall emissions?

Andy Kerr: You are putting me on the spot, convener.

The Convener: I am sorry.

Andy Kerr: I would need to go and check that, but the figure is not huge. There are two points to make in that respect. First, airline emissions are capped, within the European system, so we need to keep in mind the fact that they will not grow exponentially as they have done in the past.

I come back to the point that Richard Dixon made about the TIMES modelling. The Scottish Government has tried to create an analytical framework that allows awkward questions to be asked of ministers. That should include asking ministers what they will do to compensate, if they are prepared to cut APD and there will be a rise in emissions.

As long as the total territorial emissions are within the carbon target, it does not really matter; it is simply a trade-off between economic policy and other areas. We need to be clear about the questions for the minister. We must say, "Okay—you want to do that, but how are you going to compensate for those extra emissions? What additional thing will you implement over and above what we already have?" That requires looking at the system in the round, which is important.

Mark Ruskell: There might also be a better way to do it, through an alternative to APD that reflects costs.

Andy Kerr: Absolutely—there are different ways. It is interesting to see that a number of European countries have taken the duty away and sought to put in different systems. One could ask

why we do not look closely at systems that have worked to deliver the economic benefits—which Tom Rye flagged up—as well as the environmental benefits. I do not know the answer to that.

The Convener: If you have access to that information, it would be useful if you could share it with the committee. Perhaps you could write to us so that we could have a look at it.

Emma Harper (South Scotland) (SNP): I have a couple of quick points. I was at a bike shop on Friday where the electric bikes are going out the door really fast. I assume that that is a good thing, because we want people to make the short journeys of 5 to 10 miles on their electric bikes.

As Sue Roaf said, charging bikes overnight will not help us to overcome the issues. We need people to be riding their electric bikes rather than using their cars.

Sue Roaf: A complete mind shift has to happen. Is there any reason, when someone goes to work in a hospital, school or elsewhere, that the workplace should not have solar panels all over the roof so that the bike or car can be charged there?

There is also the point about tariffs. There might be a tariff that reflects excess wind on a particular night. The electric bike charging tariff can reflect where we can harvest free energy out of the system. It is a huge growth area—it is a surprising development. However, that must be given a bit of thought now.

David Stewart: I have a quick final question, as time is against us. I want to ask the panel about best practice. In the previous parliamentary session, I went to Holland where I was shown round a consolidation centre. As panel members know, that is where HGVs arrive with massive loads of stock, and smaller electric vehicles take goods from the centres into the city so that the HGVs do not pollute the city zones. That has been looked at in Stirling by our transport companies. What is the panel's view on ideas for best practice?

Tom Rye: There is value in understanding what certain cities in Europe have achieved through changes in their transport system. I am thinking in particular of those cities that have brought about a modal shift away from cars and truck-based freight through consolidation centres, for example.

11:15

However, I would urge caution on one point. I work a lot on European projects that share best practice. Understanding the processes and the underlying legislative and regulatory frameworks that support and enable best practice is

fundamental, because, unfortunately, it is often the case that something can seem like an amazingly good example of best practice but the regulatory, financial and organisational framework in one's own country is so different that it is not possible to implement it there. I lived and worked in Sweden, where I directed a public transport research centre. A great deal has been achieved in public transport in Sweden on, for example, alternatively fuelled buses. However, it would be extremely difficult to replicate that easily here because the regulatory framework is so different.

That is my caution about best practice. It is great to learn from it, but it is necessary to understand how it was done and what regulatory and organisational framework enabled it, and to determine whether that framework exists in one's own country.

Robin Parker: I have a brief point on Emma Harper's question, to reinforce what Sue Roaf said. Our energy system is fundamentally changing. We are going from an electricity system that was based on having a big thing somewhere and burning more stuff in it when we needed more energy. Similarly, much of our transport is based on burning stuff to drive around. On that topic, there is a really nice advertisement for Nissan Leaf cars, which imagines a world in which everything—from your radio through your kettle to your hairdryer—is run by burning stuff.

Our energy system is fundamentally changing and one of the really good things that the Government is doing is looking at an energy strategy that brings together transport, electricity and heat because there are neat interplays between them. Electrifying vehicles, whether it is bicycles or cars, can play a neat balancing role in smoothing out demand during the day if people charge up during the night. Those approaches can work nicely together.

Emma Harper: Robin Matthews said that the agricultural industry has reduced emissions from fertilisers and animals. One thing I learned at last week's Quality Meat Scotland dinner was that if the beasts were healthy, emissions would be reduced; however, they were referring to eradication of bovine viral diarrhoea. We need to establish baselines of how to measure emissions from agriculture. Do you have any further thoughts or information on that?

Robin Matthews: The question of baselines is very important in agriculture. There is tremendous variation in the estimates of emissions, not so much with livestock as with other land uses such as peatland restoration. There needs to be a focus on improving the methodology of baselines.

On livestock, there is a major focus in the industry on trying to improve efficiency, and part of

that is improving the health of animals. The logic is that if the health of animals can be maintained, productivity per unit—and greenhouse gas emitted—is improved. Efficiency is one thing, but we are trying to reduce the total emissions figure. If the net effect of action to increase efficiency is an increase in the total amount of emissions—through perhaps an increase in numbers—even though efficiency has improved, the overall emission figures are not helped. Care is needed to distinguish between the efficiency drive and the total of the emissions that we are trying to reduce.

Emma Harper: We had a conversation with Andy Kerr about the proper use of fertilisers rather than nitrogen everywhere. Does he have any further thoughts on that issue?

Andy Kerr: There are two things to say about that. If we look around Scotland and elsewhere, there are three obvious areas in which interventions can change things: one is soil, and ensuring the maintenance of organic soils, peatlands and so on; another concerns nitrogen, and ensuring that we have precision agriculture that ensures that only the amount of nitrogen that is sufficient to deliver the needs of the soil is used, because there is huge wastage in some farming systems; and another concerns reducing food waste throughout the cycle, which is an issue not only for farms but for the whole food industry.

Last week, we held a workshop on those issues. We have not got the results back yet, but those are the things that will feed into the consultation with the Government. The Government has been looking hard at precision farming and farming issues with stakeholders in the farming community and has been asking about the appropriate methods that can be used.

One challenge that we flagged earlier concerns the issue of integrating the outstandingly good practice of leader farms across the industry. All industries face a similar challenge, but it is a particular issue for farming.

Other than that, I echo Robin Matthews's point, which was made by Lord Deben last week, about the need for better baselines so that we can understand what the interventions mean and what happens.

The Convener: On baselines, are we not completely missing a trick on peatlands? We talk about how important peatlands are, but we do not seem to measure upland peatlands or the impact of rewetting peatlands.

Andy Kerr: The James Hutton Institute is leading a huge amount of work on developing a better understanding of the carbon flow through peatlands and trying to put it into measurement frameworks that are acceptable at a national level.

I will let Robin Matthews comment on the extent to which those frameworks are robust.

Robin Matthews: Peatland restoration has huge potential—I think that RPP2 estimates that it could contribute a reduction in Scotland's total emissions of around 8 per cent, which is a significant amount. However, there are a couple of problems, one of which concerns the huge spatial variability across the country—it is not like the situation with an agricultural field, where doing something to one part of it will have a similar effect elsewhere. In estimating the benefits of peatland restoration, it is difficult to extrapolate findings from small plot areas to large areas such as the flow country in the north.

The other problem concerns the effect of rewetting on methane emissions. By rewetting, you are introducing anaerobic conditions, which means that, although you are not producing CO₂, you are producing methane, which is a more powerful greenhouse gas. There is a balance to be struck in terms of the impact that restoration will have. The current thinking on that is that there is simply a methane pulse that lasts for a few years, which means that, in the long term, restoring peatland is a benefit. As Andy Kerr mentioned, some of my colleagues have done calculations on that, some of which are in the RPP2 and will, I hope, be in the RPP3. Those calculations show that, as I said before, if you restore a modest area of 21,000 hectares a year, you can contribute a reduction in Scotland's total emissions of around 8 per cent.

I agree that we are missing a trick. The problem at the moment is that peatland restoration is not incorporated into or accounted for in the national inventories. There are on-going discussions to bring that about, but a large part of the problem relating to incorporation concerns the uncertainty about the baselines and the carbon sequestration rates that are associated with peatland restoration.

Kate Forbes: Why are we not planting enough trees, and how can we sort that?

Robin Matthews: I will have a go at answering that, but Andy Kerr might want to answer it, too.

We have fallen short in that regard. The target is 10,000 hectares a year and, if I remember correctly, we are planting something like 7,000 hectares or 8,000 hectares a year at the moment. I guess that part of the problem is the resistance of a lot of farmers and land managers to planting trees. That is partly to do with the identity of a farmer as a farmer and of he or she essentially being there to produce food; they see themselves as food producers and tenders of the land, and trees do not figure in that so much. There is a natural inborn resistance to planting trees,

because those people would rather that productive land was used for producing.

Of course, in a number of European countries, the situation is different. Again, a culture change probably needs to take place. That could happen through education or some kind of persuasion such as economic or financial inducement, but we need to find a way of changing the culture to ensure that land managers see more value in planting trees.

Alexander Burnett (Aberdeenshire West) (Con): First, I refer to my agricultural holdings in my entry in the register of members' interests.

I am glad that Andy Kerr mentioned food waste, because with food never as cheap and production probably never as undervalued, do you think that Brexit offers some opportunities for changes to be made to the subsidy system that will actually have a positive impact on food waste?

Andy Kerr: The blunt answer is that I genuinely do not know. I am not familiar enough with the workings of the whole food system to be able to offer any thoughts on that. I know that it was one of the big discussion points at our meeting 10 days ago, and I am very happy to feed back some of the conversations that came out of that and which will be available in the next week or so. However, I am uncomfortably outside my territory on that matter.

The Convener: We will move on. We have covered the housing sector quite extensively, but I think that Mark Ruskell has a couple of small questions.

Mark Ruskell: I have one follow-up question, convener. We have talked a bit about the energy efficiency national infrastructure priority and, of course, the existing homes alliance Scotland is pushing for every existing home in Scotland to be category C. That is a big job and, beyond the issue of budget, I wonder what else needs to be in place for that to happen. Do we actually know how to do that? Have enough people been trained up? Do we need more college places? What do we need to bring that to fruition, or is it just a matter of setting a target, giving it a budget and letting it happen?

Sue Roaf: The big answer to your questions is no. Addressing the energy efficiency of every house in Scotland will not be made to happen within the next decade. Whether it needs to, though, is another question. People with a vested interest in making a profit from a massive roll-out of fiscal incentives are probably asking different questions from, say, MSPs, who will be asking, "How do I improve the quality of life for people in houses in my constituency?"

Another idea that I would promote is one that I have been working on with the New Zealand Government. Basically, it is about trying to keep people safe in their homes. In New Zealand, the population is rapidly ageing and, because they live in large, poorly designed and constructed houses, many elderly people are ending up in hospital with pneumonia. We have therefore started a buy your gran a cosy corner for Christmas programme. The idea is that with the increase in extreme weather events, no matter whether we are talking about overheating or extreme cold, those people will have one room that acts as a safe haven and energy efficient sanctuary—a cosy corner for the winter—that they can go to when, as is increasingly happening, the lights go out. In Adelaide in South Australia, I am working on a buy your gran a cool corner for Christmas. As I have said, they are safe havens.

We need to take a new approach and say to designers, “When you design a new building, you need to put in a safe climate room for extreme cold, heatwaves and so on.” We can start incrementally by putting insulation into the roof of that particular room, installing double glazing to get rid of draughts and putting in a nice warm carpet. Making every building energy efficient will just not happen. Do we want to ensure that every one of our citizens is climate safe in their own homes? Yes; so we must think about it differently.

Mark Ruskell: That is an interesting idea, but of course families being crammed into one room could be a bit problematic. Does Robin Parker have anything to add?

11:30

Robin Parker: First, the health element to tackling energy efficiency is incredibly important. There is UK guidance. A health advising non-departmental public body—I have forgotten its name—has recommended that we get housing to, at the minimum, energy performance level C. At that level, the very real health risks and the winter increase in mortality rates that happens in part because of poor energy efficiency in housing stock start to reduce

In climate terms, energy efficiency is a no-brainer. It speaks to so many different Government priorities: health, fuel poverty and the social justice agenda. That is one reason for different organisations having so much support for the vision set out by the existing homes alliance. The designation of energy efficiency in the national infrastructure project is really important because it changes the mindset and says, “This is a long-term thing that we’re going to do as a country. What steps do we need to put in place to get to that point?” A relevant metaphor is building a new railway line or something like that. After

saying that we will do it, we then decide what steps to put in place, what work to do with the business supply chain, what training is needed, and what to do on placing requirements and the skills side of things—apprenticeships or things like that. Setting out the long-term agenda and saying, “For 10 years, we will put money into energy efficiency, both public and private” transforms business confidence and the business perspective.

Alongside the programme for government, the Scottish Government said that it would put £20 million into energy efficiency measures as part of a stimulus package to reflect the economic uncertainty following the EU referendum. That was a good signal of intent that energy efficiency stacks up alongside any other kind of infrastructure project from an economic point of view.

Andy Kerr made a point earlier about things that go alongside energy efficiency, such as regulation. Regulation can act as a way of leveraging in private money, so I encourage the committee to focus on that strongly.

The Convener: I am conscious of time. We need to move on to deal with the waste sector, which Maurice Golden will lead on, then Claudia has a question on the public sector.

Maurice Golden (West Scotland) (Con): Obviously, we have made considerable progress on cutting emissions in the waste sector. What are your thoughts on where we go next in that sector?

Richard Dixon: There is huge potential. Zero Waste Scotland produced a report a couple of years ago about the potential for moving to a circular economy—using materials much more efficiently, thereby reducing the energy that goes into, and the carbon consequences of, producing raw materials. The report suggested that we could save 11 per cent of current emissions by 2030, which is as much of a saving as closing a whole coal-fired power station. That is a huge opportunity. The potential delay is because although the Scottish National Party has promised a circular economy and zero waste bill, there is no mention of it in the programme for government as being anything that is coming soon—it could be several years away. It could be worth putting one or two key measures in the proposed climate change bill to get the ball rolling on emissions savings. It would be disappointing to wait four years for a big bill to do much more on that.

The Convener: If nobody else wants to add to that, Claudia Beamish has a question.

Claudia Beamish: I do not know whether this will be that quick. What are the panel’s views on the public sector and the contribution it could

increasingly make to cutting our carbon emissions?

Andy Kerr: The public sector is facing an incredibly challenging time in terms of its budgets. There have been two challenges: losing the skill sets and knowledge in different parts of the public sector that would enable that type of change to take place, and not having the capital to spend in that space.

We need—and are starting to see—very different models. For example, Edinburgh and Glasgow are bringing forth a wholly owned energy company to act as a delivery mechanism for making major changes, including massive deep retrofitting of public buildings. Such things coming out of recurrent funding, given the skill sets in local authorities or in the NHS, is just not going to happen. There is a strong need to look at how we can use the different models by which we can deliver changes and how we can lever in other funding to make those things happen.

Richard Dixon: We are now moving to a phase in which public bodies will have to report on what they have done under the public sector duty. That will be helpful, because there have been some excellent examples since the 2009 act was passed. For example, NHS Scotland, a number of local authorities and the Scottish Environment Protection Agency have done really good work in taking that duty seriously. However, many others have done not very much. The fact that public bodies will now have to report will concentrate the minds of chief executives on the question, “What are we going to say we’ve done?”

The broader problem is that the public sector duty is a duty on every public sector body to make a fair contribution to delivering on Scotland’s climate targets, which is quite vague. If a body is enthusiastic, it can say, “We’ll do a lot because we are a local authority and we should do a lot.” If a body is not enthusiastic, it can say, “Our fair contribution isn’t really very much because it’s quite difficult for us.” A bit more direction from Government and Parliament on what is expected of local authorities and various sectors would be very helpful in getting the benefits that are there to be gained.

The Convener: That is a good point.

Robin Parker: I have two quick points to make. First, the public sector has a huge physical presence with all the buildings that it has, so improving energy efficiency is important. Some support has been provided by some of the bodies, but we are looking more at that area.

Secondly, I want to highlight a theme that has come out in the last few questions. I mentioned regulation and energy efficiency in the private sector, and Maurice Golden mentioned the waste

sector. All those things relate to powers in the 2009 act—the public reporting duty, the plastic bag tax and the powers to address regulation and energy efficiency in the private sector. Two of those actions have been taken forward and one has not. Similarly, those aspects were all mentioned in previous RPPs—again, some have been taken forward, but action on regulation and energy efficiency has not.

The committee could do a good job—essentially, a piece of desk work—by going back to previous RPPs and climate bills to identify what has been taken forward and what the Scottish Government said it would do that has not been taken forward. That would provide the committee with areas whose inclusion in the climate action plan it could push for.

The Convener: We have a question from Angus MacDonald about the implications of the Paris agreement on the targets.

Angus MacDonald (Falkirk East) (SNP): Given the time constraints, convener, I will skip my preamble.

What are your views on the compatibility of Scotland’s existing climate targets with the goals that are reflected in the Paris agreement? What implications does the agreement have for the development of the climate change plan?

Richard Dixon: The UK Committee on Climate Change said in its report to the Scottish Government in March, on the cumulative budget that it has to advise on, that pursuing efforts to limit warming to 1.5°C, which is the figure that is specified in the Paris agreement,

“would require a tighter cumulative emissions budget, and hence would imply a more ambitious 2050 target.”

The UK committee will produce advice for the UK Government next month, and advice more specifically for Scotland at a later date. It says in its report that we need more ambitious targets to show that Scotland is doing its bit to help to deliver the more ambitious end of the Paris agreement. The CCC’s advice to us on new targets for the forthcoming climate bill will no doubt refer to the target of 1.5°C that is in the Paris agreement, and will urge us to be more ambitious.

One of the difficulties is that the climate plan—the RPP—is being written right now under the existing bill with the existing targets, and with a bit of a nod to Paris and the 1.5°C target, but without really knowing how to put that into numbers. Although the civil servants think that the new climate plan will be very ambitious, it may be a little unambitious compared with what we need in order to do our bit under the Paris agreement. We will revisit that when we are sitting here in six months talking about the new climate bill and the

targets. We will look at how to tighten up the targets and, therefore, at what more action is needed and how we can tighten up the climate plan.

There is no perfect order to do things in, so we are doing them in the order that is set out in the current Climate Change (Scotland) Act 2009. However, as you discuss the current climate plan, it is worth remembering that we need to revisit that quite soon in order to up its ambition so that it delivers on the tougher targets that we will agree through the proposed climate change bill process.

The Convener: Just to be clear, you talk in your written evidence about hitting the 80 per cent target much sooner than 2050. In essence, are you saying that we need to set a target of 80 per cent by 2030?

Richard Dixon: No-one can really answer that question yet. The TIMES model, which will look at the energy sector and help to inform the climate change plan, will give us some information. The problem with any computer model is that although it might be quite good at telling you what you should do next year and in five years, and it might be okay for the next 10 years, for 34 years' time, when we get to 2050, it will have no clue. To illustrate that, let us think backwards 34 years.

If this were 1982 and I had permission to get off school early to talk to you, we would be thinking about renewables and the 10 per cent of energy that comes from hydro power. What about wind power? Well—there is some stuff happening in California, but it is not for us. We would not have been thinking of offshore wind. At that point, we would have thought that there would be lots more nuclear reactors in the UK because that was the Government's plan then. What about electric vehicles? Someone is doing something funny in California, but it is not for us, either. We would have had no idea, 34 years ago, about the solutions that we will put in today's climate change plan, so predicting exactly what we can achieve in 2050, which the TIMES model will try to do, is a bit fictional.

For the couple of decades that will come, the TIMES model is a good indicator of what we think we will do and, therefore, of the level of emissions reduction we can achieve. Further out, the model will be inaccurate. It is better for us to think about what climate science and the Paris agreement need us to do to get to the right emissions reductions, even though we cannot spell out the exact pathway. Who has any plan that will clearly exactly deliver in 34 years?

The Convener: Would not the fair-share approach require us to hit the 80 per cent reduction target by 2030?

Richard Dixon: There are very different numbers. If we are thinking about fair shares and historical responsibility, there are different dates that we can look at in terms of that responsibility. Does responsibility come from the beginning of the industrial revolution, from the 1830s, or only from 1990 when we started talking about the issue?

Analysis of countries' abilities to make changes is also required. A poorer country has less financial capacity to make changes that would reduce emissions, whereas we, as a richer country, can invest in things such as our housing stock in a bigger way in order to make more rapid reductions.

All that comes into it and I am sure that we will talk about it all as we deliver the climate change targets. On the question whether the 80 per cent emissions reduction target should be achieved by 2030, it is probably in that ball park—that is the kind of ambition that we should have.

Robin Parker: Two almost contradictory messages about action came out of Paris, where the international agreement was clearly an historic moment. One message was about the stories of different countries' actions that came to light as part of the build-up to the Paris agreement, including, for example, the huge levels of investment in renewables that China was making and the financial commitments that the US Government was putting in place. Equally, there was a message that existing government commitments for emissions reductions were insufficient even to keep us within the 3°C climate change range. Both those messages say that action can be increased and that we must step up action even to get us down to a 2°C limit and then to a 1.5°C limit.

What can Scotland's role be, and what can the climate action plan and the proposed climate change bill do? We need to be able to go back to climate talks with even more stories of how Scotland is leading. At the minute, we can go to those talks and say that we have done a lot on renewable electricity, that we have a 100 per cent target and that we passed a really good climate bill. I would love to be able to go back in a few years and say that we have an energy efficiency plan and that there is a national programme to insulate every house in Scotland up to a C rating. We can tell other countries about those things to demonstrate our leading role, which is really important in terms of historical responsibility.

11:45

The consultation on the first climate change bill started off with an historical perspective on Scotland's leading role in bringing about the industrial revolution. Our next responsibility is to

play a leading role in bringing about the zero-carbon revolution.

Another key message from Paris is about the importance of setting a zero-emissions target. The CCC has been on the receiving end of a lot of letters from the Scottish Government, but it could do with receiving another letter on what the right date would be for a zero-emissions target for Scotland.

Lastly, one important job for the UK Government is to ratify the Paris agreement—in particular, to reflect Brexit implications.

Andy Kerr: I would echo a lot of what we have just heard. It is worth saying that almost all the countries that signed up to and are ratifying the Paris agreement have absolutely no idea how they will actually meet the targets in 20 or 30 years. There is not some magical answer out there.

Scotland is one of the leader countries; we actually have the know-how in the private and public sectors and in civic society. We need to be bold and challenge people to show that we can do it. There are also economic benefits from selling that know-how abroad, around which many people are developing ideas. There is a real opportunity for Scotland to take a lead in this space.

Sue Roaf: We will never meet the targets if we continue with our business-as-usual stance. We have the promotion of regulations and the promotion of new products into the markets: the regulations are written by people who make money from putting products into buildings. Scotland should lead the world in seeking a new generation of approaches to find solutions that do not require more and more machines, more and more products and more and more energy use.

We should be looking at a future in which we start to legislate to facilitate a world that is run increasingly on house-by-house and building-by-building local energy—by simply opening the window for as long as possible to maintain comfort and by running local buildings on renewable energy. There is an argument that we would not make vast amounts of profit from larger-systems approaches, but we would instead make every individual building increasingly self-sufficient in energy while providing resilience at all levels throughout society and encouraging local business and economies. We have to radically rethink what we are putting in the regulations and our dependence on machines for solutions.

The Convener: Thank you. I have two final questions on RPP3. They may well invite simple one-word answers. I hope that they do, given the time constraints.

The CCC said that

“RPP3 should represent an improvement on RPP2 by including clear and measurable objectives”

and that it should

“focus on a core set of policies that will have the biggest impact and enable effective monitoring of progress.”

Do you agree with that?

Secondly, can RPP3, given the timing, realistically reflect the potential implications of leaving the European Union?

Robin Parker: I laid out some of my criticisms of the second RPP earlier. The new climate action plan, as Richard Dixon said earlier, is off to a really good start with the energy model, which should provide some of the basis to enable the Scottish Government to say, “The policy will deliver a reduction of so much emissions and we will get to that point by this time”—that sort of thing.

The RPP is a very big document; it is more or less a strategy that covers the entire Government. There is quite a limited window in which to review that document to work out whether it stacks up well enough or not. In order to prepare for that, the committee could work out a set of criteria or something similar, perhaps building on what the CCC has said. You will have criteria, so when you get the RPP in January you can ask whether it matches up—you could judge it against the criteria that you have set and that you have shared with the Scottish Government.

The Convener: That was not a one-word answer, but thank you.

Andy Kerr: The answer to the first question is yes. The answer to the second question is that nobody seems to know what Brexit is. Until we do, we cannot tell whether the climate change plan will reflect it.

Richard Dixon: I agree with Andy Kerr. The key thing about the RPP3 is that it must be measurable. Can we tell at budget time whether something is being funded? When you look at the financial budget for Scotland, can you tell whether we are on track to deliver on what is in the new climate plan? So far, it has been very difficult to do that every year. The better it links to the budget process so that you can say that we are on track or ask “No—what has happened to this policy?”, the better off we will be.

Robin Matthews: The only other point about RPP3 concerns the level at which displacement of emissions might occur abroad, particularly in the agricultural sector. We mentioned livestock—we have managed to reduce livestock emissions, but we have not reduced our consumption at all. Essentially, we are just exporting the emissions abroad. In terms of monitoring and counting, we need to find ways of taking that into account

somehow. Consumption accounting may be the way forward. We have made a good start and we need to build on it.

The Convener: Thank you for your time this morning. The session has been very useful for the committee.

11:51

Meeting suspended.

11:55

On resuming—

Subordinate Legislation

Public Appointments and Public Bodies etc (Scotland) Act 2003 (Treatment of Crown Estate Scotland (Interim Management) as Specified Authority) Order 2016 [Draft]

The Convener: Item 3 is evidence on a draft Scottish statutory instrument. I welcome the cabinet secretary, Roseanna Cunningham; David Mallon, head of the Crown Estate strategy unit; and Douglas Kerr, solicitor at the Scottish Government legal directorate. Would the minister like to speak to the instrument?

Roseanna Cunningham (Cabinet Secretary for Environment, Climate Change and Land Reform): Thanks, convener. The officials are here to answer the complicated questions about the technicalities.

The draft order has been laid to ensure that appointments to the interim body, Crown Estate Scotland (interim management), can be regulated by the Commissioner for Ethical Standards in Public Life in Scotland. I wrote to the committee on 30 June, setting out the actions that I was taking to prepare for Scotland taking early control of the management and revenue of the Crown Estate's assets. In that letter, I proposed that an interim public body be set up to undertake those functions and that the appointments to that body be regulated by the Commissioner for Ethical Standards in Public Life in Scotland.

It is my intention that the new interim body will be established and take up its full powers in April 2017, subject to the UK Government completing the transfer and our Parliament approving the order in council to set up the interim body. In order to have the chair in place six months prior to the body taking on its full functions and in line with the Audit Scotland recommendation on establishing and merging public bodies, I wish to appoint a chair as soon as possible. The chair will be in place to assist in the appointment process for the chief executive and board members prior to the body taking on its functions in April 2017. It is important that the appointment of the first chair and board, which will have full responsibility for setting the agenda for the new interim body, is fully transparent and subject to the high quality of external scrutiny that the commissioner can provide.

To explain what is going on, I will read out the technicalities. It will sound a little bit chicken and egg, but I am afraid that there is no way round

that. The addition of Crown Estate Scotland (interim management) to the relevant schedule to the Public Appointments and Public Bodies etc (Scotland) Act 2003 follows recent precedent when new public bodies are set up. To regulate the appointments officially under the 2003 act, the new interim body will be added to the list of regulated bodies by the order in council that will, subject to the will of Parliament, establish the new interim body when it comes into force. Until then, this order will enable a representative from the commissioner's office to provide assistance during recruitment of the chair by treating the new interim body as if it were listed in the relevant schedule to the 2003 act until such a time as the order in council is in force and the new interim body is fully regulated.

I hope that you all grasped that—I had to read it about three times. It is one of those slightly chicken-and-egg scenarios because of the 2003 act. That is where we are at the moment and why we are doing this in the way in which we are. The order will ensure that getting the people into place can be done under the auspices of what Parliament thinks is the most transparent way of making appointments.

The Convener: As members have no questions for the cabinet secretary, I want to ask—and perhaps I am getting ahead of myself—about the timeframe for the order that will set up the new body. I gather that there are some difficulties with the UK Government, so how is that progressing?

Roseanna Cunningham: Obviously, we have to negotiate with the UK Government. The devolution of the Crown Estate has not yet taken place. We anticipate that it will take place at some point before 1 April 2017, but we are entirely dependent on the UK Government to progress that. If that does not happen, I am not entirely sure how we will manage, but that is the plan. Currently, conversations are taking place about some of the financials, because that is part and parcel of the process.

I know that the Treasury's negotiations have not concluded. I ask David Mallon whether that is the only substantive hold-up at the moment.

12:00

David Mallon (Scottish Government): Yes, we are awaiting a further draft of the transfer scheme from the UK Government. We are told that it will arrive very soon.

The other aspect of the process is the order that is to be laid before the Scottish Parliament that will be the product of the consultation that was launched at the same time as the order that we are considering was laid, and which will provide the regulatory framework for the new interim body.

We hope to lay that order before the Scottish Parliament in October.

The Convener: We discussed the issue—last week, I think—and asked that the committee be kept updated on progress on the issue to do with the UK Government, because we take a considerable interest in the matter.

Roseanna Cunningham: We are happy to do that. When we know, you will know; currently there are still things that we do not know. We are operating on the basis that everything will go according to the intended timetables and that on 1 April we will have in place the landing pad for the transfer.

At the same time, my officials are getting ready to put out a consultation on longer-term plans for the Crown Estate. We have committed to looking at communities and further devolution, so, alongside the process that we are talking about, there will be a consultation on that, which will require primary legislation in this Parliament. Such primary legislation cannot be introduced until after devolution has taken place.

The Convener: If there are no further questions from members, we move to item 4 and consideration of the motion. I invite the cabinet secretary to move motion S5M-01328.

Motion moved,

That the Environment, Climate Change and Land Reform Committee recommends that the Public Appointments and Public Bodies etc (Scotland) Act 2003 (Treatment of Crown Estate Scotland (Interim Management) as Specified Authority) Order 2016 [draft] be approved.—[*Roseanna Cunningham*]

Motion agreed to.

The Convener: The committee's report will confirm the outcome of our consideration of the motion. Are members content to delegate to me the signing off of the report?

Members indicated agreement.

The Convener: I thank the cabinet secretary and her officials for their brief—and delayed—appearance before the committee.

Water Environment (Shellfish Water Protected Areas: Designation) (Scotland) Order 2016 (SSI 2016/251)

The Convener: Item 5 is consideration of a negative instrument. I refer members to paper ECCLR/S5/16/5/4 and invite comments.

Emma Harper: I welcome the order and the marine protected area in Loch Ryan, which is in the region that I look after. However, I will seek clarification from the Government on the potential impact of protected area designation on the

current harbour regeneration at Stranraer east pier.

The Convener: If there are no further comments, does the committee agree that it does not want to make any recommendation in relation to the order?

Members *indicated agreement.*

EU Reporter

12:04

The Convener: Item 6 is the appointment of an EU reporter. The reporter's role is set out in paragraph 4 of paper ECCLR/S5/16/5/5, and in paragraph 5 an expanded role is proposed, given the need to report to the committee on issues arising from the Brexit vote that are relevant to our remit. If there are no comments on the paper, I invite nominations.

Maurice Golden: I nominate David Stewart.

Kate Forbes: I second that.

The Convener: There are no other nominations. Does David Stewart accept the appointment?

David Stewart: Thank you, convener. Yes, I do, and I thank the committee for their faith. *[Laughter.]*

The Convener: Excellent. I am sure that you will do a very good job. We look forward to hearing from you on the subject.

At our next meeting, on 27 September, the committee will take evidence from the Committee on Climate Change's adaptation sub-committee. As we agreed, we now move into private session. I ask that the public gallery be cleared, as the public part of the meeting is over.

12:05

Meeting continued in private until 13:04.

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