



The Scottish Parliament
Pàrlamaid na h-Alba

Official Report

TRANSPORT, INFRASTRUCTURE AND CLIMATE CHANGE COMMITTEE

Tuesday 30 November 2010

© Parliamentary copyright. Scottish Parliamentary Corporate Body 2011

Applications for reproduction should be made in writing to the Information Policy Team, Office of the Queen's Printer for Scotland, Admail ADM4058, Edinburgh, EH1 1NG, or by email to:
licensing@ogps.gov.uk.

OQPS administers the copyright on behalf of the Scottish Parliamentary Corporate Body.

Printed and published in Scotland on behalf of the Scottish Parliamentary Corporate Body by
RR Donnelley.

Tuesday 30 November 2010

CONTENTS

	Col.
DECISION ON TAKING BUSINESS IN PRIVATE	3417
DRAFT BUDGET SCRUTINY 2011-12	3418
“LOW CARBON SCOTLAND”	3453

TRANSPORT, INFRASTRUCTURE AND CLIMATE CHANGE COMMITTEE

24th Meeting 2010, Session 3

CONVENER

*Patrick Harvie (Glasgow) (Green)

DEPUTY CONVENER

Cathy Peattie (Falkirk East) (Lab)

COMMITTEE MEMBERS

Jackson Carlaw (West of Scotland) (Con)
*Rob Gibson (Highlands and Islands) (SNP)
Marlyn Glen (North East Scotland) (Lab)
*Charlie Gordon (Glasgow Cathcart) (Lab)
*Alison McInnes (North East Scotland) (LD)
Shirley-Anne Somerville (Lothians) (SNP)

COMMITTEE SUBSTITUTES

*Alasdair Allan (Western Isles) (SNP)
Murdo Fraser (Mid Scotland and Fife) (Con)
David Stewart (Highlands and Islands) (Lab)
Jim Tolson (Dunfermline West) (LD)

*attended

THE FOLLOWING GAVE EVIDENCE:

Dr Dan Barlow (WWF Scotland)
Professor Iain Docherty (University of Glasgow)
Anil Gupta (Convention of Scottish Local Authorities)
Dr Andy Kerr (University of Edinburgh)
Professor Tom Rye (Edinburgh Napier University)
George Tarvit (Sustainable Scotland Network)

CLERK TO THE COMMITTEE

Steve Farrell

LOCATION

Committee Room 2

Scottish Parliament

Transport, Infrastructure and Climate Change Committee

Tuesday 30 November 2010

[The Convener opened the meeting at 14:00]

Decision on Taking Business in Private

The Convener (Patrick Harvie): Good afternoon and welcome to the 24th meeting this year of the Transport, Infrastructure and Climate Change Committee. Mobile devices should be switched off. In saying that, I am—unusually—doing that myself; I normally do that before the meeting.

We have received apologies from Marlyn Glen, Cathy Peattie and Jackson Carlaw. Alison McInnes has indicated that she is likely to be at the meeting but will be slightly late. I also welcome Alasdair Allan as a substitute for Shirley-Anne Somerville, and Ian Thomson, the committee's budget adviser.

The first of our five agenda items is a proposal to take in private items 4 and 5, in which we will consider the evidence that we will receive on the budget and "Low Carbon Scotland: The draft report on proposals and policies". Do members agree to take those items in private?

Members indicated agreement.

Draft Budget Scrutiny 2011-12

14:02

The Convener: The first substantive item on the agenda is our first evidence session on the Scottish Government's 2011-12 draft budget, which was published on 17 November and sets out the Government's spending strategy for the next financial year, including the allocations to transport, infrastructure and climate change projects. The budget was also accompanied by a carbon assessment.

Today, we will hear from academics and experts in the fields of transport and climate change about the draft budget's impact on transport measures and the Government's climate change activity. Witnesses should note that they are not necessarily expected to respond to every question that is asked; questions will—if we can get the procedure right—be directed to each witness's specific area of expertise. It is also likely that there will be some crossover between this item and the next, on the RPP. Obviously, we do not want to discourage responses that consider the congruity or coherence between the two documents, but it is perhaps best to leave any point that relates to the substance of the RPP to the next item.

Professor David Gray from the centre for transport policy at Robert Gordon University was due to appear on both panels, but because of the adverse weather he is unable to join us. Instead, he will provide written evidence. With that, I welcome to the meeting our first panel as it stands: Professor Iain Docherty, professor of public policy and governance at the University of Glasgow; Dr Andy Kerr, director of the Scottish alliance for geoscience, environment and society at the University of Edinburgh; Professor Tom Rye, from the school of engineering and the built environment at Edinburgh Napier University; and Dr Dan Barlow, head of policy for WWF Scotland. Thank you for making it to the meeting—I hope that you had a better journey than some of us had—and for submitting written evidence in advance.

Do any of you wish to make some brief opening remarks before we move to questions?

Dr Dan Barlow (WWF Scotland): We need to view the budget in the context of the need to invest in Scotland's future. Establishing the right kind of budget—of which public spend is a part—will help us not only to tackle carbon emissions but to deal with issues around health and jobs. The budget very much represents an opportunity to support a low-carbon future for Scotland and to deliver not just environmental benefits but health benefits, benefits associated with further active

travel measures, benefits from tackling fuel poverty and so on. If we get it right, the budget will be a real investment in our country's future.

The Convener: Can you comment on the process by which we have reached this position? Unlike the budget in most years, this budget has been preceded by the independent budget review, which set out a number of observations, comments and suggestions about transport and climate change. Have any positive proposals in the IBR report been included in the budget? Are you concerned about any recommendations that might have been dropped? What is the relationship between the two documents?

If no one wishes to kick off on that, I will ask Iain Docherty to respond.

Professor Iain Docherty (University of Glasgow): Thanks, convener. I will be brief.

It is not much of a secret that we are in the run-up to an election. As a result, the Government and perhaps all the political parties are taking more of a partisan stance to their presentation of and opposition to the budget than might have been the case in previous years. That said, it is perhaps not surprising that there has not been as much of a direct read-across from the IBR to the budget as many people in July had either hoped or wished for.

However, the IBR report contains some interesting observations. Perhaps the most interesting from the transport perspective was the floating of road user charging as a potential mechanism to ensure that, in what will be a very difficult public spending environment for a long time, investment in transport continues at the level that we have enjoyed over the past few years. That proposal seems to have slipped in under the radar without the usual howls of protest. Although we would not have expected any Government six months before an election to announce the introduction of additional transport charges or taxes—which we might consider such a proposal to be—we should welcome the more balanced and less hysterical manner in which some of the proposals have entered into the public debate.

The Convener: Although it was in the IBR report, the road user charging proposal does not feature in the draft budget. However, what about other aspects of the concessionary fares scheme? What is the relationship between the two documents? What has been included and what has been dropped?

Dr Andy Kerr (University of Edinburgh): The IBR came out at the same time that a series of stakeholder workshops for the RPP were being held and I found it interesting that proposals that two or three years ago would have seemed politically impossible, or at least very difficult, were

actually being introduced. We would not necessarily expect a direct read-across from the IBR to the current budget in that respect, but the fact that the proposals have now found a space out there is probably a good thing. The question is how we build on that not just over six or 12 months, but beyond that.

The Convener: Do you have a sense of how the issue will be taken forward?

Dr Kerr: Given the political cycle, it is difficult to see it being taken forward in the next few months. The key thing for the IBR recommendations and how they have been framed in the budget will be what happens immediately after the election.

Dr Barlow: I welcome the priority that the Government has attached to tackling climate change in the budget. Indeed, it is clearly identified as one of the issues that the budget needs to support. The IBR gave inadequate attention to measures supporting the development of a low-carbon economy, and I welcome the Government's identification of the budget's key role in that respect. However, it is disappointing that the budget still falls short with regard to many measures that we would like, and that the Government did not follow the IBR's recommendation to take a more serious look at road user charging. We would have liked a clearer commitment from the Government on looking at implementing such a system.

Professor Tom Rye (Edinburgh Napier University): My point on road user charging relates to the independent budget review and may cross over to the committee's discussion with the second panel. Much of the review work that the University of Aberdeen and Atkins did on developing measures to mitigate the impact of climate change included road user charging. Indeed, many other measures in the report, which work through in some respects to the RPP, count on road user charging or something like it being in place to lock in the benefits of some of the softer measures in the RPP. If road user charging does not go ahead, we can expect some of the softer measures to perform less effectively than they would if road user charging or some other fiscal-type measure were in place.

Professor Docherty: I will pick up on the point about concessionary fares. In previous evidence sessions, I and absent colleagues raised the issue of looking again at the concessionary fares budget, including whether it is targeted at the right users. It is understandable that the Government chose not to do that. At the time of the introduction of the concessionary fares initiative and other universal benefits—not only in Scotland but in the other devolved territories—lots of commentators said that, once the benefits were in place, it would be hard for any Administration to take them away.

That opinion was correct. That is why we are where we are today. I have no doubt that that will continue to be the case for any devolved Administration, none of which has the substantial tax-varying powers that allow proper and full debate on the benefits of universalism—that cannot happen when spending but not tax-raising powers are devolved. For what it is worth, today's announcement elsewhere is unlikely to change that substantially for the Scottish Government, and the situation is unlikely to change in the other devolved territories where, of course, free concessionary fares for the over-60s were implemented before they were implemented in Scotland.

There seems to be a variety of opinion on whether road user charging would be environmentally beneficial. Clearly, it would depend on the kind of scheme that was implemented. From 2007 or 2008, the Department for Transport worked up some models for a United Kingdom national scheme. The indication is that we would generate more traffic through diverted trips than we would save through congestion relief and that there may even be a negative carbon impact, depending on the exact definition of the scheme. We should be careful not to assume automatically that road user charging is environmentally beneficial. The devil is in the detail.

The Convener: The IBR said on road user charging that it could be a source of revenue for on-going maintenance. The IBR also posed a question on the balance between capital spending on new infrastructure and the on-going maintenance of existing infrastructure. Do panel members have any comment on that?

Professor Docherty: As Professor David Gray has said previously at committee, the past 10 years or so have been something of a golden age for transport investment in Scotland. Since at least the 1950s, we have consistently underspent in Scotland and the UK as a whole. Over the past 10 years, all that we have managed to do is to stop the gap in infrastructure investment between ourselves and our European competitors getting any bigger. There will be a variety of opinions on whether we have spent the infrastructure money on the best projects—for example, on the best roads—but I subscribe to the view that our infrastructure is still weak in comparison with our continental friends, neighbours and competitors. There is something of an economic cost in that, although we are not entirely sure how big it is.

I am also of the view that we probably spend too little on capital and too much on revenue in the transport sector across the UK. That is why, once every 30 or 40 years, we have a crisis in infrastructure maintenance. We have just gone

through one on the railways. If we do not keep up maintenance expenditure, we may go through one on the roads network. I guess that that is a rather unsophisticated call for a bit more of everything, but it reflects the fact that, for a long time, we have not prioritised the transport sector in the way that we might have done.

My worry about the pseudo-ring fencing of income from initiatives such as road user charging is twofold. First, the UK Treasury will never allow any Administration to ring fence anything, which means that the money would disappear into a black hole. Secondly, if the public are promised real and immediate infrastructure benefits or improved services on the back of an additional charge and the bargain is broken, it becomes much harder to do the same kind of thing in future.

The Convener: You said that we need more new infrastructure and more maintenance of existing infrastructure. Moving on from the IBR to the budget, what is your comment on the budget as proposed?

14:15

Professor Docherty: The budget as proposed looks reasonably sensible. The road maintenance budget, which is always an easy target for Administrations or Oppositions, has taken something of a hit. During this session, the Opposition has also sought to cut the road maintenance budget to try to fund other budget headings. It is an easy target for all sides. As I say, the budget looks reasonably sensible on paper, but the question is whether it is reasonably sensible come February or March at the end of another hard winter. Let us revise matters once we have seen what has happened.

Professor Rye: I find it rather curious that the trunk road maintenance budget has apparently been cut in order to finance the pre-works on the replacement Forth crossing. Purely from an equity point of view, it seems strange to move finance for maintenance throughout the country—which as Iain Docherty said is important—to a specific scheme in a specific part of the country. I am sure that we will discuss the pros and cons of that investment later, but robbing from the maintenance budget in order to pay for preparatory work on the Forth crossing seems to be rather curious.

The Convener: Is there a need to address how specific the Scottish Government is being with local authorities about their road maintenance duties? Away from the trunk road network, many people will rely daily on many of the more local roads if there is another harsh winter.

Professor Rye: The average length of a car trip on the Scottish road network is nine miles. That

implies that a large proportion of the mileage that we—certainly private car users—drive is local mileage rather than trunk road network mileage. I have always thought that there might be a need to revisit the balance between trunk road maintenance and local road maintenance expenditure. This is an anecdotal impression, but the trunk road contractors appear to have money to spend on schemes that are perhaps not totally necessary while local authority road maintenance departments are strapped for cash. That said, the Government is, of course, in a difficult situation in terms of its ability to tell local authorities what to do with the money that it gives them. Perhaps that is another issue that we will come across when we discuss the RPP. Basically, there is a real-terms reduction in the cash that is going to local authorities for their transport capital and revenue expenditure. Within that, it is difficult for the Government to say, “We’d like you to spend more on maintenance.”

Dr Barlow: It clearly makes sense to look after our existing assets, and it is right that we should spend money on maintaining our existing infrastructure, which includes roads and rail. However, we need to recognise that our infrastructure locks us into certain development pathways. The infrastructure that we build now will lock us into certain trajectories for decades, so we need to ensure that decisions that are taken now and the commitments that are made in the budget are compatible with our long-term climate change commitments. Compared with the previous year’s allocations, the budget increases the money allocated to motorways and trunk roads and reduces the money allocated to railways. In that sense, it is at odds with the general thrust if we are to deliver our climate targets.

Given that we are in a time of very tight finances, it makes sense to invest in many of the softer behaviour change measures, as they can deliver substantial returns in helping to cut emissions. Many of the measures that are proposed in the RPP can help us to cut emissions from transport significantly, but they are softer behaviour change measures. We believe that by investing more heavily in them and less in infrastructure, we would achieve benefits in carbon emissions and health benefits, through, for example, greater support for active travel.

Professor Rye: I agree with Dan Barlow.

On the second Forth crossing, if we compare how its carbon impacts are presented in the carbon account for transport with the way in which the Edinburgh trams carbon impacts are presented in it, we find that the Edinburgh trams appear to increase the amount of carbon that is produced. The reason for that is the much more sophisticated land use and transport interaction

model that is used, which models the secondary land use impacts of the trams. I am not sure whether that has been done for the new Forth road bridge and the other trunk road investments that are under consideration or are being funded. I think that that work needs to be revisited to assess the secondary land use and emissions impacts of those major trunk road investments that will, as Dan Barlow said, shape the way that we travel for many years to come.

The Convener: So we could apply the same methodology to, for example, the Aberdeen western peripheral route and the ribbon development along it.

Professor Rye: Yes. The questions are what would the long-term land use impacts of that be, what would happen to people’s travel patterns and what would that do to emissions?

Dr Barlow: On the big capital infrastructure projects, it is important to remember that the draft budget’s £200 million funding commitment to support the works for the new Forth road bridge is of course only for the first stage of developing that major project. In future years, a greater proportion of the budget’s transport expenditure will be committed to delivering the new Forth road bridge. Given that we are likely to face financial constraints for some years to come, I have major concerns about the implications of that Forth road bridge commitment for the transport budget elsewhere. Will it squeeze investment in public transport and in walking and cycling for years to come? We will have to find significant funds for the Forth road bridge project every year until it is completed.

Professor Docherty: I support a lot of what colleagues have said, but I want to inject a note of caution about the sheer level of uncertainty about the future and how our response to climate change will play out. The major infrastructure projects to which Dan Barlow referred have a project life of 30 or 60 years, depending on which appraisal frameworks you favour. We have absolutely no idea what our response to climate change will be in anything like that timescale, so while it is true that every infrastructure investment locks us in more strongly to a particular set of behaviours, other events and changes might disrupt those patterns even more.

I also make a plea—which I think amplifies something that Tom Rye just said—about the importance of understanding land use and transport interactions better than we currently do. On the face of it, a lot of our railway investment seems to be very good, and I am certainly not about to argue that we should have less of it. However, as we make it easier for people to commute further and further, particularly to Edinburgh and Glasgow, by train from various

places in the central belt, and even the Scottish Borders in the future, we actually encourage those people to live a more dispersed lifestyle and, for every other trip, to use their cars. So while on the face of it railway investment may be justified by its being very environmentally friendly, we might find that, in responding to the choices that are opened up to them, people's transport behaviours make problems worse rather than better.

Rob Gibson (Highlands and Islands) (SNP): Talking about cuts, and following on from the discussion that we have just had, those of us who are optimists might find today some means to deal with the borrowing requirements to even out the costs of the replacement Forth crossing and actually free up money. We do not want to prejudge what will be said, but that is possible. The Scottish Government has lobbied London on that, because of the huge impact on the overall transport budget.

Do you not think that it would be utterly irresponsible of a Government with a failing bridge to have an all-Scotland policy that fails to maintain the route to the north and, indeed, fails to take in more than just the thinking that leaves many academics looking at routes between Glasgow and Edinburgh, when Scotland has been denied expenditure in the past for routes to the north and the south-west? In fact, we can deal with this catch-up situation while applying at the same time many other aspects to the low-carbon elements and so on. It is easy to say that we should cut the Forth bridge, but no responsible Government of any major stamp in this country will do that.

Dr Barlow: I agree with the importance of maintaining and developing connections to the north of Scotland, and we support and fully recognise the need for a means to travel by road over the Forth. Our concern with the Forth road bridge is that the current decision is premature. Studies are under way at the moment to look at what can be achieved through the current dehumidification work, and there are also studies that suggest that even if that work were to fail—although I understand that the initial indications are positive—it would not be impossible to replace the cables without weekday restrictions on the bridge. At this stage, it is not certain that the current bridge cannot be repaired, so making a commitment to an additional bridge is premature. We could wait until the results of the studies, which I believe are due next year, are clear and conclusive before making the commitment.

I will make one extra point. Many investments on the public transport routes to the north could be made with relatively small sums of money. Significant investments could be made to reduce the journey times, perhaps by 45 minutes, between Edinburgh, Glasgow, Inverness and

Aberdeen. We are talking about sums of money of between £40 million and £50 million. A study produced several years ago highlighted how we could substantially cut journey times through the investment of small amounts of money on train travel between the central belt and north of Scotland. We think that those are sensible priorities that it would be right to proceed with at this stage.

Rob Gibson: You will be aware that there is in hand a move to cut the journey times in the next year and a half by 20 to 25 minutes through retimetabling. Some of that work has been taken into account.

Dr Barlow: Yes.

Rob Gibson: Let us address the constitutional question that comes up in the budget all the time. If we were allowed to borrow money, we could spread the cost of the large projects more evenly and have money for other projects as well.

Dr Barlow: Without getting into any political stance, I would say that, regardless of the decisions that we take, the money has eventually to come from the public purse, unless, for example, we implement a system of road user charging for road projects. It therefore makes sense for all the projects to be compatible with our commitments under the Climate Change (Scotland) Act 2009. As long as the projects factor in what they mean for our delivering on those commitments, we can of course pay back for the infrastructure projects. We will have to find ways to secure major investment on a wide range of infrastructure over the next few decades. Some activities will be more compatible with cutting our emissions than will others, and those should be the priority for us.

Professor Rye: Is it permissible for witnesses to ask members a question?

Rob Gibson: No.

Professor Rye: Okay.

The Convener: You are perfectly entitled to raise a question. If members choose to comment on it, that is their choice.

Professor Rye: I will ask a slightly rhetorical question that I ask my students when we look at the economic development impacts of transport investment: what would happen to the economy of Scotland if the Forth road bridge fell down? It would not mean that the north of Scotland was cut off from the central belt. I am not saying that we should let the bridge fall down, but there is an awful lot of academic evidence to suggest that we can overexaggerate the economic development impacts and importance of transport infrastructure. We should not assume that if the link were not

there, the north of Scotland would become an economic wasteland.

The Convener: For clarity, I have never read anything to suggest that the bridge is about to fall down. It might be closed to certain types of vehicles.

Professor Rye: Exactly.

Dr Kerr: I am not sure that I agree completely with Professor Rye. Do we need a transport link across the Forth? Yes, I think that we do.

In the past few months, in a Royal Society of Edinburgh inquiry that looked at how we face up to climate change, we covered the question of how we best meet the modal needs of transport between Lothian and Fife either with the current infrastructure and bridge, repaired or not, or by building a new one. One issue was not so much the building of a new bridge as how it would be used and how the old bridge would be used in the meantime. In other words, how would we maximise the volume of people who move across the bridge, combined with car parking, transport by train across the train bridge and so on?

The issues were not so much about the bridge itself as about how we make most effective use of the existing transport framework across the Forth. We were worried that the framework as it is currently constituted does not seem to make a huge amount of sense. Obviously, there are a lot of different ideas, but the point is that we need to optimise the framework and use it much more effectively than at the moment, so that we both allow for the transport of people to meet their needs and meet a lot of the modal shift requirements to meet the carbon targets.

14:30

Professor Docherty: I will respond directly to the challenge of giving the view of a central belt academic. Of course it would be irresponsible for any Government to let an essential link perish, and nobody suggests that that should happen, but we need to make absolutely sure, before the Government finally commits on paper to spending around £2 billion of public money, that that is the correct course of action. I and other witnesses on panels over the past few years have said that repeatedly, and Government ministers have said it repeatedly, which is why the contract preparations have been structured in such a way as to ensure that that is the process. It would be equally irresponsible for any Government to ignore the opportunity cost of spending around £2 billion of money on the wrong project. That amplifies my point that we need to be absolutely certain that committing to the construction of the replacement bridge is the correct course of action.

Part of the reason why the infrastructure in the north of Scotland is not as many of us would wish it to be is because of the geography of that part of the world and the fact that we spend lots of money on revenue support for transport services that could otherwise go into infrastructure. We spend that through support for the ScotRail franchise, local bus services, CalMac Ferries and NorthLink Ferries and a variety of other transport subsidies. If you look back at the Scottish Government accounts and, pre-devolution, at the Scottish Office accounts for many years, you will find that, historically, our revenue spend on transport in Scotland has been much higher than it is in most other territories in the UK, precisely for that reason. I am afraid that part of the price that we pay for having about 10 per cent of the UK's population and a third of its landmass is that our jam is spread thinly. As long as we continue to support through revenue subsidy a variety of lifeline services—rightly, I think—that will inevitably mean that less money is left for infrastructure.

In general, if we look at the data, we find that the implicit accusation that the north and the south-west and other areas of Scotland are underfunded is not true. To be scurrilous for a moment, I could point out that the £18-something cost of my train ticket to come here today is not the market value, as a large proportion of it goes to support services in the north of Scotland that are less economically viable. Another interesting rhetorical question is of course about how much extra economic growth we could generate in the central belt if we reduced rail fares to the market rate.

Rob Gibson: The point is that we are talking about the cuts in the current budget. I posed the question in the context of the wider one. There are answers to that. There is an economy to be generated in various parts of Scotland, including the north and the north-east, that can lower our carbon content hugely. We might want to take that into account in the equation.

I have a couple of points about trunk road maintenance and the long-term future of the network. Transport projects, by their nature, are long term, as the Forth bridge project shows. The more dual carriageway trunk roads we have, the more maintenance is involved. Also, the harder the winters, the more maintenance is involved. Can you honestly say that, if we reduce funding in one year, it will be possible to increase it in future if it is shown to be needed? How badly were we found out on trunk road maintenance by last year's winter? How did we get so hugely far behind? I travelled on quite a lot of roads to see what state they were in and, actually, outwith the towns, they were in not too bad condition.

Professor Docherty: I have two points on that. First, as colleagues have said, partly because the trunk road network is under direct Government control, it has probably been privileged in the past through the expenditure regime. There is a question about whether the local roads, which in some cases carry more traffic than trunk roads, are being adequately sustained.

Secondly, trunk road maintenance is scrutinised carefully every year by Audit Scotland as part of its review of Government accounts. There are good accounting reasons for that, to do with the management of Government assets. If we got to a situation in which core maintenance was not being undertaken to the extent that it should be, Audit Scotland would quickly tell us that.

The third of my two points relates to the motorways and trunk roads table, which is table 7.11 in the budget document. In relation to minor roads, the A9 and elsewhere, one thing that the Scottish Government and Transport Scotland have been very good at in recent years is that, rather than just carrying out routine maintenance, they have bundled up the maintenance into modest but useful improvement projects. If we consider the budget headings, there seems to have been some kind of reallocation between maintenance and improvements, and the two are treated differently in the budget. It is impossible for me and, I guess, for my colleagues here to tell you the extent to which that is happening, because of the broad-brush nature of the level 3 figures in the budget. You may want to ask people who have greater technical command of the niceties of maintenance versus improvement about exactly how much value for money can be extracted through careful management of those two headings.

Dr Barlow: I want to pick up on a point that Mr Gibson made earlier about maintenance and wear and tear on the current road network. On the Forth road bridge, a not insignificant amount of the wear and tear is caused by heavy goods vehicles. A major concern in the draft budget proposals is the removal of the freight facilities grant. To date, the grant has been very successful in supporting the transfer of HGV movements from road to rail. I believe that 33 million lorry miles have been taken off Scottish roads since the introduction of the grant. Despite that, the draft budget proposes to take away that money. That will aggravate the pressure on roads, including the Forth road bridge, and will therefore increase wear and tear and increase maintenance costs. In addition, there will be a detrimental impact from climate change emissions.

Rob Gibson: Should there be moves to encourage—or more than encourage—freight operators who use the roads to move to rail? Instead of giving them incentives, should we not

have a targeted programme that tells road users that they must move part of their operations on to the railways? Should such a programme replace the current grant-based mechanism? Do we have things the wrong way round?

Dr Barlow: That is a very sensible suggestion; we should probably consider both mechanisms. Any mechanism that encourages freight to be moved by rail rather than road has to be positive.

Rob Gibson: Nobody has suggested one.

The Convener: Are there any other comments on freight or any of the other issues that Rob Gibson has raised?

Professor Docherty: I have two brief points. If Mr Gibson is arguing for more regulation of certain sectors of the economy that make heavy use of freight—the supermarkets come to mind—I offer no dissent. Indeed, one could argue that they could be better regulated on a number of fronts, given that they generate lots of traffic and clog up the road network with what some would argue are environmentally unsound trips.

My second point relates to the uncertainty that can arise over the lifetime of long projects. There is an argument that shifting freight on to rail may be only a short-term or medium-term solution, depending on how efficient HGVs become in future. We may need the rail network for even more passenger movement in future, if that becomes the more environmentally sustainable thing to do. I would therefore not be quite so negative about the withdrawal of freight grants. Withdrawal may seem negative on the surface, but as yet there is not a huge amount of evidence to back that up.

The Convener: I want to pick up on your comments on the regulatory approach. Are you satisfied that the Scottish Government has the power to impose such an approach? Has it shown the political will to do so?

Professor Docherty: I think that my understanding of this is just on the right side of speculation. It would be a regulation of trade, and regulating the operation of companies such as supermarkets would be wholly reserved to the UK Government.

The Convener: That being the case, would you still argue that the withdrawal of the freight facilities grant should not be seen as a problem?

Professor Docherty: It might not be a problem. The best target for investment will depend on our assumptions of variations in the future environmental performance of road and rail.

Professor Rye: Again, there is a crossover between this point and points that have been made during discussions on the RPP. In surface

transport, one of the fastest-growing contributors to CO₂ is the freight and light goods vehicle sector. It is therefore extremely worrying that the freight facilities grant has been withdrawn, even although there may be cases in which the grant compromises our ability to increase passenger capacity. The grant was the only financial measure in Scotland that gave an incentive to freight operators to shift from road to other modes of transport. All the other measures in the RPP are either voluntary measures or measures that simply offer encouragement. There is not a lot of evidence to suggest that the freight industry is all that interested in taking them up. Their likely impact is at least questionable.

The Convener: The written evidence that we have received from Transform Scotland about withdrawal of the freight facilities grant suggests that the vast majority of the modal switch from road to rail in the non-coal market in Scotland in recent decades has been achieved with the assistance of the freight facilities grant. It argues that the budget that was allocated

“seems trifling in comparison with the benefits”.

Is that view supported by the panel?

Professor Rye: Yes.

Professor Docherty: That may well have been true in the past, but of course trying to prove the counterargument that the developments would not have happened—at least to some extent—without the grants is not entirely possible.

Dr Kerr: One of the issues that has arisen with regard to the differences between the national scale and the local scale is that the national railway's scale is designed to minimise point-to-point travel times for passengers. If you also want to create a framework that shifts freight on journeys that are not point-to-point journeys between cities or encourages commuters around particular cities, the infrastructure inevitably gets tied up. The evidence from Fife, Dundee and so on shows that it is impossible to have things both ways. You cannot minimise the travel times between Glasgow and Dundee and Edinburgh and Dundee and also ensure that you have effective transport networks around central Fife, because the elements get in each other's way. There is an issue about the infrastructure that is required to deliver all the aspects on a network that is, essentially, a couple of rail lines.

The Convener: For the record, I should confirm that I was quoting a submission from Transform Scotland. I am told that it might have sounded like Transport Scotland, which would have been wrong and improbable.

Alasdair Allan (Western Isles) (SNP): There has not been much of a change in the budget with

regard to air services. I would like to ask about a subject that is close to my heart: the air discount scheme. I declare an interest in the scheme, as I use it myself. Could you comment on its economic importance or relevance to the budget?

Professor Rye: I am afraid not.

Alasdair Allan: I promise you that it appears in the draft budget. As there are no responses, I suppose that I will have to fill in by telling some jokes or something.

There has been some debate about the relative merits of the air discount scheme versus other means of achieving the same or similar economic ends, for example through public service obligations. Could you comment on that, or is that also too detailed a line of questioning for a discussion about the budget?

Professor Docherty: I will give a response that will underline my personal ignorance of the issue.

I have not seen any detailed research that would answer your question, although that does not mean that none exists. However, with regard to such subsidy schemes, we must be careful about ensuring that we are not simply subsidising the transfer of economic activity from one place to somewhere else.

One potential problem with the air discount scheme—although, as I said, I have not seen any detailed research on it—is that, although there are economic benefits to enabling people to travel more, there can also be economic disbenefits, as what tends to happen in such cases is that the discretionary spending of disposable income is centralised in a few places. For example, the retail sector in remote communities can suffer because more discretionary spending ends up happening in Inverness, Glasgow or Edinburgh.

I believe that the absence of detailed research on the matter is what underlies the silence of the panel.

Alasdair Allan: The budget document addresses the air discount scheme as it applies to business, rather than to passengers. However, if no one wants to add anything, that is fair enough.

14:45

The Convener: Tom Rye was about to say something, but—

Professor Rye: I want to say only that I do not feel capable of answering the question. I am afraid that I am not qualified to answer it. I concur with Iain Docherty: there is a real need for research to demonstrate that the scheme meets its objectives and to show that the two-way-street effect to which he referred is not happening.

Professor Docherty: The more general point—it also amplifies the issue—is that there is relatively little research on business travel. My hunch—that is a technical term—is that the two-way street applies less to business travel than to other activities. As far as I am aware, there is insufficient research on the subject at UK—never mind Scotland—level. That is an important gap in our understanding.

Dr Barlow: In the past, we were critical of the route development fund as a way of subsidising aviation, given the significant role of aviation in climate change, which is a major concern. However, we absolutely understand that, in remote parts of Scotland, aviation is an appropriate means of transport—it offers lifeline routes. We do not oppose it per se.

In subsidising such schemes, we have to be careful to understand the impacts and to ensure that we support and invest in alternatives so that we have, for example, the best possible videoconferencing and teleconferencing facilities, which can cut unnecessary journeys.

Alasdair Allan: I am sure that I can recommend that in the Scottish Parliament. Instead of coming here from the Western Isles every week—

Charlie Gordon (Glasgow Cathcart) (Lab): Just your hologram would do.

Alasdair Allan: A hologram may be the best way forward.

Charlie Gordon: Gentlemen, I have a question on buses. The draft budget maintains the level of the bus service operators grant—indeed, to be fair, it was recently the subject of something like a 10 per cent increase. Of course, there is also the capped provision of £180 million per annum for the free bus travel scheme. Is the bus being treated equitably vis-à-vis other travel modes?

Professor Rye: As part of my preparation, I looked at spending at national level and compared it with the number of trips that Scottish residents make on different modes of transport. By my very rough calculation, we are looking at a spend of about 15 pence a trip on trunk roads, £7 a trip on rail and 57 pence a trip on the bus. Buses seem to be doing well in comparison with road, but very badly in comparison with rail.

I have a point on the concessionary fare scheme as a form of subsidy—

Charlie Gordon: I did not say “subsidy”.

Professor Rye: I know. Strictly speaking, the scheme is intended to be a form of subsidy not to bus operators but to individual passengers. However, there is a lot of evidence to suggest that the scheme is working out as a subsidy to bus

operators. Certainly, that is the case on certain routes and in certain areas.

Work that colleagues at the University of Southampton have done demonstrates that the most effective way to maximise welfare benefits from our subsidy to the bus industry is by means of franchising or regulated systems such as that in London. That is better than directing subsidy to the passenger through a concessionary fares scheme. I say that without any expectation that there will be much change in Scotland in the near future. I simply make the point that those other means are more effective ways of directing subsidy than is the current scheme. We should not forget that a significant amount of money goes into the concessionary fares scheme.

Charlie Gordon: That was an interesting aside, Professor Rye, but I would like the panel to stick to the question: are buses being treated equitably vis-à-vis other transport modes? To be fair to Professor Rye, there was a point about rail at the start of his response.

Dr Barlow: On balance, in terms of our transport policy, buses still do not receive the level of funding that they deserve. In social justice terms, we have to remember that a third of Scottish households do not have access to a car. For many people, the bus is the preferred and default option, but the bus is still the poor cousin—in spending terms—to road building and rail. At the moment, spending on buses is still lower than it should be. We must be serious about investing in public transport; some of the social justice issues are around access to a car.

Professor Docherty: There are a number of possible answers to the question. The big-picture answer is that we should do the academic thing of taking a step back and asking how we want the world to be. If we want to maximise social welfare and social inclusion, we should then ask whether we are spending the right proportion of our money on each mode.

As colleagues have pointed out, the evidence might suggest that we should spend more on bus transport because that would achieve substantial benefits for relatively little money. I do not think that that is a controversial point of view in the academic literature. In the real world, however, if we ask whether the bus industry does okay in the budget, the answer is that it probably does. After all, compared with other UK territories, our concessionary fares scheme continues to be relatively generously funded on a per-trip basis. I do not know the figures, but I imagine that for some bus companies the majority of their income probably comes from public subsidy or publicly funded or supported services. Are those market companies—which after all are out to make a profit—generously funded under the paradigm of

the current deregulated environment? They probably are. Is the bus sector funded in the way that we would wish for wider societal benefits? It is probably not.

Charlie Gordon: The figures in the draft budget are being presented at a time when some local commercial bus services are being withdrawn as a result—the bus operators have suggested or implied—of the level of bus service operators grant or the capped level of compensation for the free travel scheme. The implication is that hard-pressed local authorities might come under additional pressure to step in and salvage—or retender or reprocure—socially necessary local services. Do you have a view on that?

Professor Docherty: First, we should not blame the bus companies which are, after all, profit-making enterprises in what is currently an unregulated, or deregulated, environment. They will respond as rational economic actors to the situation as they find it. If that response is not what we would wish it to be for a variety of other reasons, the Government or the state should step in and regulate.

Dr Barlow: Local authorities will face considerable challenges in the coming years. Like the rest of the public sector, they have a duty to contribute to the delivery of the targets that were established in the Climate Change (Scotland) Act 2009. Under the single outcome agreement process, there will be clear commitments to actions that are required to meet that objective, and we urge local authorities to ensure that they allocate funds in ways that are compatible with meeting their share of the commitment to deliver Scotland's overarching climate change emissions targets as well as, of course, supporting transport systems to that end.

Professor Rye: That is absolutely right. Local authorities will come under extreme pressure to fund services that commercial operators have pulled out of. In tendering for services, however, they face the very significant problem of not having that many operators to choose from and, as a result, will not be operating in a competitive market. It is, if you like, a double bind.

The Convener: That perhaps raises longer-term questions about the regulatory regime, as opposed to this year's budget.

Professor Rye: Yes.

Charlie Gordon: I was too modest to mention that last point.

The Convener: Heaven forbid.

Rob Gibson: I have what I hope are three short and quite focused questions on ferry services in Scotland—of which you might or might not have experience. First, why does support for such

services continue to increase at a level well above any measure of inflation? I do not ask questions that I do not already know the answer to, but I want to see whether you know the answer.

Professor Docherty: I will be the first to say that I do not know. My best guess is that a substantial enough proportion of the overall cost is wages and that, in common with many other publicly supported services, there will be wage inflation even at today's very modest level and so the level is driven by staffing costs.

Professor Rye: I, too, am unable to answer the question, but I could refer you to my Napier colleague Professor Alf Baird, who has extensively researched and written on the subject and would probably respond by pointing to the lack of competitiveness in the industry and the way in which services have been tendered.

Rob Gibson: The answer is that the increase is due to the price of diesel, which links to my next question. Given that the increase is above inflation, is sufficient capital being made available to ensure the upkeep of the fleet and the onshore infrastructure? The short answer is no.

Dr Kerr: The issue of fuel costs is a good one. There are on-going efforts to seek out alternative fuels and to improve engine efficiencies in the ferry fleet. It is clear that funding for that work must continue at a higher rate, because in the long run it will deliver efficiencies that will benefit everyone. I am not sure what stage those trials are at.

The Convener: Is that investment being taken forward with state support or by the companies themselves?

Dr Kerr: My understanding is that it is a bit of both.

Rob Gibson: CalMac is run by the state anyway.

The Convener: It is a question of whether the work is funded directly or through the company.

Rob Gibson: We had better find that out.

The wider economy might be able to deal with the problems with regard to the replacement of ferries and so on. We still have the skills, and if there were more places to build ships here it would be entirely possible to do so. The amount of investment that is needed has crept up on us, and somewhere in the region of 90 vessels will be required in the next four or five years if we want to ensure that vessels in the different island groups are at the optimum age.

Dr Kerr: That raises several issues. The first is whether funding during the past few years has been appropriate to deliver an effective replacement cycle. We can leave that to one side, because it is done and dusted. The second issue

is whether we are expecting higher and more volatile diesel prices—which we are. Even if we do not do anything else, we expect that to be the case. Thirdly, there is an issue for the maritime organisations—if the International Maritime Organization does not get its act together—with regard to shipping coming under the European emission trading scheme from 2013. There is a series of converging issues around the quality and efficiency of maritime engines and the use of fuel.

That suggests that a lot of work is needed—not just in Scotland, but at a broader European Union level—to find effective solutions. We need to tap into some of those networks effectively, because it is not a Scotland-only problem and we should not treat it as such. It goes much wider than that. The pressure on costs will increase, and we need to manage that. One way that we can do so is to engage with a lot of the other companies and organisations around Europe that are also considering the issue.

Professor Docherty: You learn something new every day, so I thank Rob Gibson for the information about diesel. If that is true—and assuming that we can get the data from someone—it would be interesting to compare the price that the ferry operators pay for diesel with the price that is paid by private bus companies, which engage in sophisticated hedging and other tactics to reduce their exposure to fuel price rises. I guess that data might be quite hard to get for commercial confidentiality reasons, but if it is at all possible to get the information it might be illuminating.

Dr Kerr: Shipping companies buy the cheapest pile of rubbish that comes out of the bottom of the tank. They still need hedging operations, but there is a quality issue with the fuel, as marine engines will run on anything.

Professor Docherty: You could argue that it is a brave assumption that a public monopoly would buy the cheapest of anything. It should do, but it might be useful to check whether that is actually true in this case.

Rob Gibson: I know that other members have been waiting patiently to ask questions, but do you have any views on the continued support for the road equivalent tariff pilot? It is the equivalent on the sea of a public service obligation, in that it allows for inward as well as outward mobility of goods and services.

Professor Rye: I will only echo the comments that were made about the air discount scheme. To what extent is the road equivalent tariff meeting its objectives? Is it providing value for money in doing so? If it is, that is okay, and we should perhaps carry on with it, but there is a big danger of a two-

way-street effect happening with it, which is not an objective that we are seeking to achieve.

Dr Kerr: I echo that point, but I also ask whether the tariff is being aligned with broader economic development in the north and west of Scotland. We have a huge opportunity with renewables, but are we aligning the different subsidy rates in a way that supports what we are trying to achieve with our energy infrastructure? I do not know the answer, but the question needs to be asked.

15:00

Alasdair Allan: I want to return to the point that was made about the replacement of the ferry fleet. Do you have any thoughts on the shape of the commitment that will have to be made in future years? The ferry fleet is now dramatically older than it was 10 years ago, and it is continuing to age—

Charlie Gordon: It is 10 years older.

Alasdair Allan: By definition, we are all older than we were 10 years ago, but as a group we are not necessarily older, except in parts of the Highlands and Islands.

My question is whether the panel has a view on the shape of commitment that the Government will have to give to vessel replacement over the coming years.

Dr Kerr: Again, I think that the Government will have to come back to asking what is fit for purpose for the ferry routes that are necessary to deliver social services to the islands that require them and for the economic benefits that can be derived. That will determine the scale and size of each ship and the replacement of the fleet. In other words, is the fleet as it was designed 20 years ago appropriate for the next 10 to 20 years, given the change in economic development that we are seeing in different parts of Scotland? I am not sure that we can answer your question directly, but the key question that needs to be asked is, are we aligning a future major capital cost with our future economic development plans?

Alison McInnes (North East Scotland) (LD): My questions relate to the budget heading “Other Transport Policy, Projects and Agency Administration”, which is broken down in table 7.12. There is no great change in the budget heading; the significant change is a 16.2 per cent real-terms increase in the support for sustainable and active travel budget line. The commentary that supports that budget shift seems to suggest that it will go into the development of infrastructure to support the roll-out of electric cars. What are the panel’s views on the appropriateness of that shift?

Dr Barlow: As you say, the budget shows an increase in that line and acknowledges that a

significant amount of the increase relates to investment in low-carbon vehicles. We fully support the development of low-carbon vehicles. We think that they have a role and that we should be exploring how significant it can be.

Our concern is that the active travel budget remains far too small overall. If we discount the low-carbon vehicle component, we are left with £22 million. As a proportion of the total transport budget, which is somewhere in the region of £1.5 billion or £1.6 billion, the budget line is tiny. We have long argued that spending in the region of 10 per cent of the transport budget on active travel will start to deliver the step change in walking and cycling that we want to see in Scotland, which can help us to cut emissions and become fitter and healthier. Overall, it is still a major concern that the active travel budget is far too small.

There is another concern. There used to be a ring-fenced pot of money to support local authorities through what was called a cycling, walking and safer routes budget. It is not clear, but that does not seem to be in the draft budget. Previously, it was around £9 million. If that is not anywhere in this budget, we will have gone backwards in the total spending that is available to support active travel, walking and cycling. To that extent, we are concerned that we have not got the balance right.

The RPP notes many proposals for changing behaviour, and it lists proposals on walking and cycling that require to be funded in order to deliver emissions cuts from transport. By my reading, they do not seem to be included in the budget. There seems to be a mismatch between the commitments that are required to deliver the RPP on transport and the financial commitments in the draft budget. That is a major concern.

Alison McInnes: Dr Barlow has anticipated my two follow-up questions, so it is fine if the other panel members want to deal with the three issues together.

Dr Kerr: It is clear that delivering the radical change from internal combustion engines to electric vehicles will require public sector support of some sort. However, as with many of the big investments that are required in the built environment in Scotland that are of the order of tens of billions of pounds, the public sector cannot pay for it itself, so it needs to use its money as seeding for private investment. It is all about how we use public investment to mobilise private investment. In other words, rather than making a series of small grants, we need to leverage much bigger private investment from, for example, the electricity companies and the supermarkets, which may see a profit margin in having a charging station and building that kind of infrastructure.

We should not assume that the public purse has to deliver it all; it is very much about using public money to leverage other funds. The recognition that budget money cannot deliver the change on its own needs to permeate the budget. However, it is not clear from the budget lines exactly how the change will be delivered through engagement with the private sector to ensure that it brings the money in. What is needed is a combination of seed funding from the public sector and the frameworks around that. However, it is very difficult to pull out information on that sort of package of measures from some of the individual budget lines.

Professor Rye: I concur with Dan Barlow on the lack of clarity about how much of the sustainable travel budget will go to walking and cycling and how much will go to cleaner vehicles and electric technology. We need to have more confidence about how many electric vehicles will be purchased and used and how popular they will be with the public in the timescale that we need if we really are to convert a large number of people to using alternatively fuelled vehicles, particularly electric vehicles. That is a bit of a gamble, in a way. Andy Kerr may be able to comment on that, but I do not want to put him on the spot.

Dr Kerr: Say it again.

Professor Rye: What evidence is there of a likely public take-up of electric vehicles? I hope that I am permitted to ask a question.

Dr Kerr: The studies that have been done show that, if we have a turnover of seven years for the car fleet, and if take-up by 2020 is, say, one in seven or one in six, then by 2023 or 2024 every single car in showrooms will need to be fully electric if we are to have a largely electric transport system by 2030. It will take 20 years from when the electric vehicles roll off the production line in 2013 or 2014.

Dr Barlow: Just to add some analysis, WWF is looking at the role of electric vehicles. We have identified that, to make a significant contribution to meeting the cuts in the transport sector that are necessary to deliver the Climate Change (Scotland) Act 2009 commitments, we would need to see in the region of 300,000 electric vehicles on Scotland's roads by 2020.

The Convener: I accept that there is ambiguity about whether the take-up of electric vehicles will be as rapid as it needs to be and that there is a need to lever in private sector investment and so on. Just coming back to the active travel component of the budget line, the committee agreed in its report on active travel that the increases for which the Government cycling action plan and other policy documents aim will not be achieved without substantial increased

investment. If the witnesses are saying that there is ambiguity about how much of the Scottish Government's sustainable and active travel budget will be spent on active travel, as well as ambiguity about how much local authorities will spend if the cycling, walking and sustainable streets budget is not ring fenced, is it safe to assume that we are just not going to achieve those levels of increase?

Dr Barlow: I would certainly agree with that at the moment. Certainly, we are not putting in place the levels of investment that would lead to Scotland realising the benefits from the levels of walking and cycling that many European cities already have. For example, the commitment in the draft RPP suggests that cycling and walking infrastructure investment of £207 million is required in 2011. That does not read across to the budget.

The Convener: We would need a different budget if that was to be credible.

Dr Barlow: That is correct.

Professor Docherty: Just to support that point, given what we know about the health benefits of active travel, there is a strong case for some of the investment to come out of the health budget. The committee has made that point in previous budget rounds.

Professor Rye: I have a brief point on the certainty of the benefit that we would realise from an investment in walking and cycling and road safety measures. Such small-scale local measures pay for themselves quickly because they have a relatively small cost and a relatively high benefit in comparison to major road and rail infrastructure investment schemes, which we evaluate over a 60-year period. As we know, if, five years ago, we had tried to look 60 years into the future, we would probably have predicted a very different future from the one that we would predict now.

The Convener: Is the Scottish Government getting the best value that it could from its investment in ScotRail and the rail network?

Professor Rye: Currently, Network Rail is being investigated by the Office of Rail Regulation in relation to its cost effectiveness. The rail regulator's initial report has found that Network Rail is 35 to 40 per cent less efficient than comparator organisations that run rail infrastructure in some continental European countries. There are significant question marks over whether Network Rail is delivering value for money to Transport Scotland and the Scottish Government. That is not to say that Network Rail is not delivering—far from it. It is encouraging that schemes such as the Airdrie to Bathgate railway have opened on time and to budget. The question is whether that budget is reasonable if we

compare it to similar schemes in parts of continental Europe.

To give another price comparator—because I enjoy giving them—members may have seen in the press recently that the Swiss have been boring and have finally finished their Gotthard base tunnel. The project, which involves twin tunnels running 35 miles underneath the Alps, will cost about £6,500 million. If I may compare that to the replacement Forth crossing, the Swiss seem to be getting an awful lot of tunnel for maybe three times the cost of our bridge. Perhaps some of the apparent cost ineffectiveness in Network Rail extends to other parts of the civil engineering industry in Scotland. I must say that that is speculation, but I have done some work on the issue over time, as Iain Docherty may know. There is quite a lot of broadly anecdotal evidence that we pay more here for similar schemes than our comparators in continental Europe do.

Professor Docherty: The railways are roughly 40 to 50 per cent more efficient than they were before privatisation in terms of the numbers of passengers and the amount of freight that they carry, but they cost us roughly four times as much as they did—that does not meet any definition of productivity that I have ever read. The big issue about the paradigm that we work in is that our railways are far too expensive for what they deliver. The 40 per cent inefficiency figure is the one that seems to have gained traction—to use a bad pun—recently. It first appeared in a DFT report about two years ago, after the construction of high speed 1, that looked to moving forward with more rail infrastructure construction at UK level. That 40 per cent figure keeps cropping up in all the work that is done. Even that is probably only the level of efficiency that could be created inside the current rail industry model.

You ask whether I believe that spending roughly £900 million per year is value for money. That is a significant proportion of Scottish public spending and the figure should be a lot less than that, given what we know from our European competitors. What is less clear is how the current system can achieve that.

Charlie Gordon: On that point, Professor Docherty, you will be aware that the UK Government has asked a man called McNulty—not Des McNulty—to consider some of those issues. The scoping report is a pretty good analysis of the byzantine complexity of the UK railway industry, and it touches on some of the issues that you and Professor Rye have just referred to. I have a fear that the study could make things worse in terms of what the UK Government might ultimately do in making changes to the UK railway system. Is that conceivable?

15:15

Professor Docherty: I would never underestimate the potential for Governments of all colours to make things worse. Yes, of course it is conceivable.

We in the UK are very bad at admitting that we were wrong and turning the clock back. Our usual solution to a very complex problem that we cannot manage is to make it more complex and worse. For us, that seems to be a normal, systemic response.

I cannot remember if it was at this committee or elsewhere, but I have said before that, if devolution had occurred after the 1992 UK election and not the 1997 one, the Scottish Government would have inherited a single, vertically integrated ScotRail with responsibility for everything except cross-border freight and passenger services. There is no reason why we cannot recreate that model if we choose to do so. It is one of a number of competing visions for the future of the rail industry, and we should take the opportunity of the next franchise renewal to consider it.

Charlie Gordon: Could the McNulty inquiry conceivably mean an earlier window of opportunity?

Professor Docherty: It could, but the focus of the activity of the rail industry at a Great Britain level, which is how it is organised, is on what happens in London and the south-east, and journeys into London on the intercity network, so it would be unusual if the report did not accept that, at least implicitly. Although what you suggest might be true, I am not sure that that window of opportunity will be as great as we would like it to be. Perhaps it is for the committee, the Government or the Parliament to grasp the opportunity to do some thinking and feed the idea into the process.

The Convener: Coming back to the shorter term for the moment, I note that the UK Government is talking about increasing the proportion of rail costs that the passenger pays through fares and intends to allow an increase of up to 3 per cent. The Scottish Government is talking about maintaining a cap on increases in regulated fares of 1 per cent and keeping the ratio between the public purse and the fare payers about the same. Do the witnesses have any comments about that general approach, whether it stacks up, whether it is the right way to go for the moment, or whether something else is possible?

Professor Docherty: It is a reasonable holding position. Again, data on these issues seem to appear in dribs and drabs and I am not privy to much of it. Passenger demand in Scotland seems to be holding up reasonably well, and the railway

accounts will not have been exposed to the complete collapse in demand and fare revenue that has happened in many areas of London and the south-east, which are particularly exposed to the collapse of first-class ticket and regular commuter income that has hit a lot of the accounts of the south-eastern train operating companies very hard. Given that our picture looks more stable than many others elsewhere in GB, that seems to be a reasonable position to adopt for the short term.

The Convener: When you call it a reasonable holding position for the short term, do you mean that it cannot be sustained for longer than that, or does it simply fail to address the wider point that you made?

Professor Docherty: Both, in a sense. It does not address the wider point of the overall financial stability and sustainability of the rail industry. Given what we know will happen to public expenditure in the next few years, that £900 million number needs to get a lot smaller.

The Convener: As there are no further comments on the question of fares versus public funding, we will move on to talk about the wider climate change aspects of the budget. Obviously, the transport questions include a climate change element and climate change, as a topic, will include some transport aspects. In general, though, are there particular positives or negatives in the budget in relation to climate change? Are there climate change impacts that could be felt in the short, medium or long term as a result of the spending decisions that are outlined in next year's budget?

Dr Barlow: As I set out in my submission, the budget has a number of welcome commitments such as continued support for important public transport investments. Although it does not allocate the money, there is also the reiteration of the commitment to the Borders railway. I have a couple of concerns on the balance of transport spend. In my view, it is still too skewed in favour of road building, with £200 million being allocated to the new Forth crossing and a much smaller investment than is needed in active travel.

I have also looked in detail at what we need to spend to make our homes more energy efficient, so that we can cut fuel bills and emissions and eradicate fuel poverty. That area is one of the main contributors to our climate emissions in Scotland, yet the investment in energy efficiency improvements in our homes is still modest. From the way in which the budget is set out, it is hard to be certain what the implications are for the energy assistance package and home insulation scheme. There is a commitment to maintain current levels of investment, although the overall budget line—I

think that it is referred to as sustainable homes—is reduced significantly.

If we cross-reference the figures to those in the RPP for the number of homes that will have measures installed to improve their energy efficiency, then, based on our cost per property analysis, we may be seeing a decrease in the funding that is made available this year to support home insulation schemes and the energy assistance package. At this stage, it is not clear but it looks likely that the investment in home insulation will be less than it was last year. This is a major concern. The recent figures for fuel poverty in Scotland show that 700,000 households live in fuel poverty. We know that investment in energy efficiency is a cost effective way of cutting emissions. We also know that, for every pound that we spend on tackling fuel poverty, we save the national health service 42p.

At this stage, I remain concerned that we have not seen the step change in improving the level of investment that is required to make our homes more energy efficient. I am aware that we need to see the next tier of detail before we will be clear on the sums that are being allocated to the home insulation scheme and the energy assistance package. Last year, a commitment of £10 million was made to support a universal home insulation scheme. The draft budget does not allocate any funds to support a similar scheme.

The Convener: Besides the home insulation scheme and energy efficiency, do panel members wish to pick out other areas as positive or negative?

Dr Barlow: There is a positive commitment to support the renewables infrastructure plan. There is £17 million for the facilities that will enable us to reap the benefits from the renewables revolution and the job opportunities that will arise. That is to be welcomed, albeit that it is still a relatively modest sum. We are supportive of that. For us, the key areas are those that I have set out where I have identified welcome opportunities and things that we need to strengthen.

It is worth saying that strengthening the budget to make it much more carbon and climate friendly requires only quite modest investment. In a total budget that is in the region of £28 billion, WWF believes that an increase of only tens of millions in the sums that are invested in energy efficiency in our homes and in active travel could achieve and deliver substantial cuts in climate emissions and produce health benefits, including through greater active travel. I press the committee on that. We are looking at quite modest sums that will make a very big difference.

Dr Kerr: I would counter that by reiterating that, although this looks like a pretty good holding

budget for a while, what we need to hit the climate change targets more generally is a complete industrial revolution in energy terms. That will not be funded from the public purse alone; money will have to come from other people, too. We have some but not a lot of enabling funds.

My concern about the budget is more that everything is being pushed down to local authorities, which have restricted budgets and an increasing number of targets. They will struggle to hit many of the targets and they are already starting to say that they cannot deliver on all the targets. I am sure that, if we pushed them, some targets could be met, but the danger is that the problem is simply being shovelled down to somebody else rather than solved.

Overall, I disagree with Dan Barlow, because I do not think that having little bits of money for different grant schemes is the solution. We are talking about a much bigger transformation of the energy sector, which requires private finance, whether that is from individuals who do up their homes or from big pension funds that invest in the Scottish environment. That is the key. Can we use public money as enabling funds to leverage more and bigger funds from elsewhere?

Dr Barlow: Of course, I agree completely with Andy Kerr that leveraging in private capital will be critical to delivering the long-term transformation that we need. There is no disagreement about that.

Of course, members will be familiar with the discussions that are under way about the implications and opportunities of a UK green infrastructure bank and about what might arise from a green deal to support improvements in our housing stock, but those developments are still a couple of years away, which is why we are concerned. We cannot simply wait until those mechanisms are established, because that time is too far away. We need investment now.

Andy Kerr is right—we need to ensure that investment now catalyses and stimulates investment from home owners in improving energy efficiency and from the private sector. However, that is no excuse for the Government to get its allocation wrong. I count money that is allocated to the new Forth road bridge as allocated incorrectly—it could be much better spent. Even if we just allocated that £200 million next year to supporting active travel and improving energy efficiency, we would make the budget much more climate friendly.

The Convener: Do the witnesses have anything to add about the climate impacts of measures in the budget or about missed opportunities to make the speeches about the low-carbon economy into a reality?

Professor Docherty: I will focus on the afterthought that is planning policy. I quote:

“Scottish Planning Policy influences the location, density and form of development to make access by public transport and active travel easier and reduce travel demand.”

I have no doubt that that is true rhetorically, but we do not have to go far outside in the real world to see that our development patterns are still fundamentally unsustainable. It would be good to start by stopping making things worse. Why are we still building out-of-town retail parks? Why are we still building car-dependent housing? Why are we still locating major public investments—which are nonetheless laudable—in the wrong places, as with our major hospitals? I echo the comment that, if we are serious about the issue, we must do something completely different that is at a level of regulatory and policy skill that has not been achieved at the UK or Scottish level.

Planning policy is a slow-burner. Changing people's travel habits takes a long time. We replace only about 1 per cent of the built environment every year. We know all that but, equally, we could have the same conversation in 20 years' time, when we might not have replaced 20 per cent of the built environment because we did not start to do so now.

The Convener: I presume that, if reductions in expenditure on planning nationally or in councils came to pass, that would make inculcating a new approach to planning harder.

Professor Docherty: My initial response is that I am not convinced. We have known for long enough what the problem is and that we are not very good at applying the planning policies that we have. Perhaps we should start doing something about that.

We used to have the idea that the polluter pays. We have talked about carbon taxes for a long time. I understand and acknowledge that such measures are beyond the Scottish Government's competence and are for the UK level but, if we are serious about changing the locations of developments and how people access them, we need to start thinking about such interventions, as well as spending relatively small—or even relatively large—amounts of money on initiatives such as active travel. Even if we spent on that, that would address only part of the problem.

Professor Rye: We know that various trajectories to reach our emissions targets exist—we could start with a steep downward reduction, with a shallow reduction or possibly even with an increase. My feeling is that, under the budget, we will start with a possible slight increase, if anything, which is not a great way to head downwards to our final target.

15:30

Rob Gibson: We have looked at some issues that affect the transport, infrastructure and climate change budget and others. Rather than repeat what has been said, I would like to look at the distribution of budget changes. Do you have any specific recommendations—other than those that you have already made—in relation to issues with which the committee deals, such as transport and rural land use? The committee also has responsibility for the climate change aspects of waste. There has been quite a lot of discussion of the issue of homes and communities, which includes planning, but we have not really discussed rural land use and waste. I suspect that we will return to those issues when we look at the RPP. We will get to that before nightfall, if you wish to hold your fire.

The Convener: The witnesses have no comments to make on those issues at the moment.

Alison McInnes: How appropriate do you consider the carbon assessment of the draft budget to be? I know that we are breaking new ground, so we should not be too harsh, but there are a number of competing carbon assessment methodologies. It is important that the methodology that the Scottish Government has chosen is fit for purpose and measures the right sort of things. How relevant is the carbon assessment report to budget scrutiny? How clear and credible is it?

Dr Barlow: I agree that we must recognise that the carbon assessment of the budget, which is a welcome initiative, is a relatively new development, which means that a learning process is involved. The report gives us a top-level assessment of the impact on different areas of spending, so it enables us to identify which portfolios are responsible for the significant components of our climate emissions, under a limited, consumption-type model. However, it is still quite simplistic, because it attributes emission figures to broad portfolios. On transport, for example, it says that the average impact of transport per amount spent is X, so the emissions from the transport budget are Y.

In the long term, the carbon assessment must be used to inform decision making, but it is not being used for that at the moment. My understanding is that, at the very end of the process of developing the draft budget, an assessment is made of what the spending figures mean for carbon emissions. I would like carbon assessment to be used to allow us to include different options early on, so that we can consider spending more money on health and less on something else because health spending would deliver multiple benefits, or cutting part of the

health budget because we have spent more on active travel, which will enable us to meet some health targets. The carbon assessment should inform how moneys are allocated, but it does not do that yet.

The second issue is integration with the other mechanisms that are now available. Work is under way to ensure that we understand the carbon impact of big infrastructure projects, but I understand that such individual-level assessments are based on a slightly different methodology. The RPP is based on understanding the policies and proposals that are needed to deliver our commitments under the Climate Change (Scotland) Act 2009, which are based on production emissions.

At the moment, a number of different mechanisms are used. Some are based on consumption, some are based on production and some account for induced impacts, which the carbon assessment of the budget does not do at the moment. It gives figures for the impact of what we spend on transport, for example, but it does not account for what that means—the cars that will go on to the roads that we may build as a result of those spending decisions, and their impact on Scotland's long-term carbon emissions.

We need a more coherent and joined-up approach that links together RPP work, individual-level assessment work and carbon budget assessment work, so that we understand consumption and production emissions. We also need a report that is used to inform decisions, not one that is produced just as an end-of-pipe assessment.

Alison McInnes: How difficult would that be to achieve? Is it your assertion that the Government is just paying lip service to this at the moment, or are there genuine barriers to delivering the sort of carbon assessment that you have been speaking about?

Dr Barlow: The Government has required to take a new approach in order to develop a methodology to apply the carbon assessment to the budget. I understand that there has been a process to engage with various stakeholders to identify what mechanisms and approaches might work. I know that the Government consulted on that. At this stage, I would not criticise the Government for its approach.

I am not an academic expert in this area, but my understanding from those who are—including from the Stockholm Environment Institute—is that it should be possible to come up with mechanisms that show both the production and consumption emissions that are associated with budget spend. My challenge to the Government is for it to keep strengthening and developing the current

methodology. The committee is of course welcome to continue to champion this important aspect of ensuring that we are on a low-carbon trajectory, such that our budget and the RPP can join up on a line.

Dr Kerr: There is no real agreement in the academic literature about the best method of achieving that, so it is indeed difficult to criticise the Government for its approach. I absolutely agree with Dan Barlow that carbon assessment is a consequence of what we are doing and comes at the back end, rather than an informal or decision-making tool, which is what we would like to see in the end. It is an emerging area, and there will be multiple methods by which a carbon assessment can be achieved. There is no agreed perfect way of doing it. We just need to accept that.

Professor Rye: I have worked on local transport policy and I draw a slight parallel between carbon assessment and something that I did in that area. It is possible to present where we want to get to by way of scenarios of how to get there. That could be a useful thing for a carbon assessment to do. If we establish where we want to get to, there will be various ways to go there and we can ascertain how much it will cost us. That helps to inform how we get to the route that we want to take to where we want to go.

Professor Docherty: One of the biggest problems with complex forecasting models is that real-life events will intervene and show just how big the implicit errors in the models have been. The classic example is the traffic model for London, for when Hammersmith bridge was forced to close because of the attempted bomb attack on it. According to the traffic model for London, all kinds of chaos would be let loose upon that city, but that did not happen because people were much more astute and clever at changing their behaviour than we thought they would be. That point is intended to reiterate the importance of having proper empirical research about how people actually change what they do after major interventions. On the transport front, the obvious ones involve the opening of new pieces of infrastructure. We need to understand what actually happens in Scotland and the choices that are made by Scottish people in ways that reflect our environment and our economy. If we can ascertain how they behave once we intervene, the forecast models might be more accurate over the medium term, and they might become more responsive to our particular situation.

The Convener: I was struck by John Swinney's introduction to the carbon assessment:

"This assessment provides, for the very first time, an assessment of the overall carbon impact of the Government's proposed expenditure."

It might as well be the very first such assessment, but carbon assessment has in fact been developing gradually. It is the first one on a statutory footing, but this is not the first time we have looked at a carbon assessment of the budget. This time last year, various people made the criticism that parts of the document did not make sense without individual-level assessments, which also had to be developed. Last year's assessment was said not to be useful for informing decisions, to give us only a snapshot of what was happening and not to discern between different forms of Government expenditure—referring to a pound spent on road building not being the same as a pound spent on insulation, and so on. Has any progress at all been made since last year? I seem to remember the cabinet secretary acknowledging that the carbon assessment tool had to evolve, and that the next one would not be just a repeat of the same process.

Dr Kerr: You are asking whether any improvement has been made. Yes, it has. Has enough been made? That is a difficult question to answer.

The Convener: Could you point out for me the areas where you think the approach has been improved—or changed—since last time?

Dr Kerr: With the approach that was taken last year, very sweeping assumptions had to be made about some of the metrics—if £X is spent, the CO₂ tonnage is a certain amount. Over the past 12 months, there has been an attempt to distinguish things much more clearly, and that has taken us a step forward. However, we do not have agreed, common metrics that different groups can accept, in the same way that there are now common metrics for the national emissions inventories, which we use for where coal or gas are burned. We do not have such agreed metrics for the supply chains or for the use of Government expenditure.

A lot of work is going on in the private sector and at the Intergovernmental Panel on Climate Change to consider more common metrics that could be used in Europe, or in different countries. Those are emerging efforts, emerging tools and emerging metrics, which can be applied in Scotland, but there has not been sufficient agreement over the past 12 months on exactly how those metrics can be applied. Things have moved forward, but they have a long, long way to go.

Dr Barlow: From my perspective, the approach that has been taken has changed relatively little since last year. I accept Andy Kerr's comments about some of the details, but some of the issues that were raised previously about how the assessment has been used have not been addressed.

I recognise that a huge amount of work has been undertaken over the past year on producing the RPP to ensure delivery of the Climate Change (Scotland) Act 2009. I understand that the RPP is a very important document for giving us confidence that we are on track to deliver the necessary cuts in emissions. That is not an excuse, however, for not ensuring that we also have a good and robust approach to informing the budget.

The challenge now is to ensure that the interplay between the RPP and the budget works. As we noted when we gave evidence some years ago, it is often through the budget that very significant early expenditure commitments are made, including those for major road or infrastructure projects. After those projects have been committed in a budget, the scope for changing them is often quite limited—it can come down to an environmental impact assessment approach, whereby the funding might be adjusted a little bit with regard to exactly where some spending goes—because the political commitment will have been made. It is important to ensure that decisions are influenced at a very early stage. The budget is a process that influences many decisions at a very early stage. That is why it is important for it to be informed by an understanding of the carbon impact of the commitments that have been made.

The Convener: There are no further questions for this panel of witnesses. There being no outstanding issues that the witnesses wish to raise about the 2011-12 budget, I thank you all very much for spending this time with us. Some of you are staying with us for the next item on the agenda.

15:43

Meeting suspended.

15:48

On resuming—

“Low Carbon Scotland”

The Convener: Agenda item 3 is continuation of our consideration of the “Low Carbon Scotland” draft report on proposals and policies. This is the second evidence session that we have had on the draft report, which was laid on 17 November. There is a 60-day period for parliamentary consideration, and the Scottish ministers must have regard to the views of Parliament or committees of the Parliament on the draft report. We will hear from witnesses and the minister in the coming weeks. We hope to agree a report on the RPP before the Christmas recess, which will also take into account comments that we receive from other committees.

We will now hear from climate change and transport academics and experts. For anyone who was with us for the earlier part of the meeting, some will be familiar faces. I welcome back Professor Iain Docherty, Dr Andy Kerr and Professor Tom Rye. I also welcome new witnesses Anil Gupta, team leader for environment and regeneration at the Convention of Scottish Local Authorities, and George Tarvit, development manager at the sustainable Scotland network.

I welcome you all to the committee and I thank those of you who have provided written evidence to us. Do any of you want to make any brief opening remarks before we begin the questions? No. Okay, we will press on then. To keep this item to a reasonable time, I ask members to keep questions succinct. If witnesses can be as direct as possible in their answers as well, we will be able to get through everything.

I have an opening question about the development of the RPP. Do the witnesses feel that the document delivers the kind of revolutionary thinking that has been called for to achieve a low-carbon Scotland? How does the document relate to the wider suite of documents that were produced and published around the same time, and others that are expected soon? Do we have clarity from all those documents, or clutter?

Dr Kerr: I was involved in the project team that drafted the climate change delivery plan 18 months ago. The RPP used that plan as a baseline and developed additional work round it. I think that one of the best things in the RPP is the recognition that there needs to be a much broader narrative around what vision we are trying to achieve for Scotland. I ran some stakeholder workshops for the climate change policy team in the summer, acting as an independent for them.

One piece of feedback from many different stakeholder groups around Scotland was that we need to understand what the vision is that we are trying to achieve; doing it through simply saying, “There is a target in 2020 or 2015,” will not allow that. I was therefore very pleased to see in the suite of documents—the economic strategy, the energy efficiency action plan and the RPP—the Government’s attempt to deliver a much broader narrative about the positive benefits of delivering the outcomes that we seek in a low-carbon economy and society. That was a very powerful statement of where we are trying to get to and the biggest difference that I saw—and I thought it was very helpful compared with what we did 18 months ago. I will probably leave the detailed stuff until we come on to more detailed questioning.

The Convener: But, in general, if we talk about the policies in the RPP rather than about the issues that are listed as proposals that have not yet been adopted, the document does not really take us very much further into new territory; it is a statement of where things stand at the moment. Is that a fair comment?

Dr Kerr: That is a bit unfair. The fact that some of the proposals in the RPP are described as options is a step forward from where we were, say, two years ago when we were talking about road charging and speed limits. There is a range of issues there that are quite politically contentious, which is understandable. The fact that we are starting to engage with and debate such issues is moving us forward. Is the RPP revolutionary? No, absolutely not. But, from talking to stakeholders around Scotland, it seems to me that the big issue is not the technical innovation that we know needs to happen but the mismatch between what people think and the debate that is going on in political circles. We have not yet matched that mismatch—and the RPP does not match it—but we are moving in the right direction.

Anil Gupta (Convention of Scottish Local Authorities): As a starting document, the RPP is very helpful. It provides, as has been intimated, a stocktake of policies, and I think it is the start of quite an important process. It also starts making it a bit easier to move away from documents such as that on the public bodies duty and allows us to focus on the sorts of work that will need to be undertaken in the long term. It shows the potential of existing policies and, as has been said, starts listing proposals that we will need to get our heads around to see how they will fit into the carbon reduction potential of various actions. The RPP is very helpful in that regard. One of the areas where we find it slightly more difficult at the moment is the lack of clarity about who is to do what and at what cost. Those sorts of things will be particularly important as we try to provide for, or require more

money to deliver, some of the changes that are required.

At this stage, revolutionary approaches are probably not the most helpful way of encouraging people to come on board. We need people to understand what they can do currently. The 42 per cent target for 2020 will be difficult to achieve, but it seems to be almost achievable, given what is put in the RPP at present. It is a good way of getting everybody started.

The Convener: Does your comment about a lack of clarity about who is to do what and at what cost relate only to the proposals or are you concerned about a lack of clarity about currently adopted policies?

Anil Gupta: My concern is primarily about the proposals.

George Tarvit (Sustainable Scotland Network): I concur with the views that have been expressed already. Both the RPP document and the exercise that was undertaken to get to this point have been hugely useful. I attended some of the workshops and raised a number of concerns about the earlier drafts in relation to taking account of the rebound effect, how we account for consumption emissions and some of the wider sustainable development costs and benefits that we need to scope into the analysis. Not all those concerns have been addressed.

I do not think that the RPP has achieved its potential yet, but it is an excellent step forward. It starts to provide some of the clarity that our members are looking for about what policies and proposals should be considered locally. A lot of detail is still to be added to it; the process will be critical in that respect. The balance between revolution and reality will play out all the way through this. The climate change targets are ambitious, but we have to be realistic about what we can put in place, what will be politically feasible and how we can put it into practice. There is a huge challenge in transposing the level of analysis in the current RPP into local and regional versions.

Professor Rye: I will limit my comments to the transport section of the RPP. I find it rather disappointing, primarily because it places a lot of emphasis on the proposals and seems to have a very small number of policies. Given that transport is the second-fastest growing contributor to climate emissions in Scotland, I am concerned that the RPP does not go far enough in setting us down the road, as it were, to reducing those emissions.

Professor Docherty: I, too, will limit my comments to the transport section of the document. I agree with what Tom Rye just said. The document is very much an indication of the political realities of how difficult it will be to do

something about transport emissions. The Stern review, which was done for the Treasury three or four years ago, noted the difficulty of achieving both the technological innovation required to electrify the vehicle fleet, for example, and the behavioural and cultural change that is assumed necessary to get to where the forecasts say we have to be in 2020 and 2050.

The document talks about a very ambitious implementation of its proposals—bringing about a 13 per cent reduction in transport emissions by 2020, based on the 1990 baseline. However, that is quite a modest achievement in overall reduction terms. That is certainly consistent with what Stern told us about the difficulty of achieving meaningful reductions in transport emissions in the short term. The Government should not be wholly blamed for that. One of the biggest problems that is alluded to—perhaps not as strongly as you might have expected, given the authorship of the report—is that many of the really big policy levers that would make a big difference to transport emissions quickly are not held at Scottish Government level. The document talks a lot about EU policies and factors them in as the baseline, particularly on emissions from the vehicle fleet, which is fair enough, but if we were to seek a more ambitious trajectory of quick, deep cuts in emissions, the taxation mechanisms that are held at Westminster level would achieve that. There is of course a separate question about whether we would want to use them if they were available in Scotland. Currently, we do not have the power to do that.

The Convener: Thank you very much. We will come on to some of those specific topics in a moment. I have one final general question and, unless any of the other witnesses are keen to come in, I will direct it to Andy Kerr—partly because he has commented on the issues already.

The Scottish Government has asserted that it can and will become the destination of choice for low-carbon investment—I think that that is the phrase that is used. Is that assertion realistic? Is the Government doing everything it can to achieve its ambition and turn it into a reality as opposed to a slogan?

Climate change is a global problem. As the targets of 42 per cent and 80 per cent are our contribution to solving that global problem, should the question on low-carbon investment really be, “Who gets to be the winner?”—should we consider the issue as a shared endeavour rather than merely consider how well Scotland can do out of it?

16:00

Dr Kerr: I will answer those questions in order.

Yes, Scotland can be the place for investment. In other parts of the world, people are genuinely aware that Scotland offers fantastic resources and a good location for investment.

Is the Scottish Government doing everything it possibly can? I cannot really answer that question. It is certainly doing a lot, and it is certainly making a big noise about the issue. However, I think that the Government needs to back that up with the frameworks that will encourage investment. I know that it is considering different ways of doing that. The investment community is looking for what it would call a de-risked environment: it is looking for a location where it can invest—whether in energy efficiency, asset classes, wind or whatever—and where there would be a secure return over a period of time. Of course there will be uncertainties about the future, but we have to ask whether we can create the longer-term frameworks that will attract money in. The Government has done a lot to encourage that endeavour.

The third question was whether it is a race. No, I do not think that it is. There is a danger of our going off and saying how wonderful we are, at the expense of somebody else who has not had the same opportunities—and we can turn the question round. Given where Scotland is—with our resources, our engineering and financial nous, and our political, business and community intent—if we cannot deliver a low-carbon society in the next 10, 20 or 30 years, I do not think that any other country in the world can. Rather than consider the situation as a race of which we are a winner because we get there, I would say, “If, given our current opportunities and the talent we have available, we cannot be an exemplar, we have a real problem around the world.”

Anil Gupta: It is important to recognise the role of local authorities. Through the community planning partnerships, all local authorities have produced single outcome agreements. Every one of those authorities acknowledges the potential of a low-carbon economy to its local economy. Some local authorities are working closely together to maximise benefits, and they would like to see further developments—I am thinking, for example, of the “Sustainable Glasgow Report 2010”—so that powers can be given to local authorities to allow them to provide an element of de-risking to the environment into which they want people to invest. Local authorities, as well as the Government, have a role.

Rob Gibson: I have been thinking about the delivery of policies and proposals. In particular, will the voluntary approach be able to deliver enough, in enough sectors, to allow Scotland’s climate change targets to be attained? How much does the RPP rely on other partners? Anil Gupta has

just mentioned local government. Stop Climate Chaos Scotland has mentioned housing, waste and agri-environment as key sectors in which the voluntary approach may not be delivering well.

Professor Rye: Earlier in the meeting I mentioned the freight industry. The RPP has policies relating to the freight industry and its management of emissions by voluntary methods such as best practice and eco-driving by freight drivers. The Scottish Government put some money into training in those areas, but that was several years ago. I am not aware of any monitoring of how far the voluntary programmes have been taken up by the freight industry. Without monitoring to measure the impact of programmes that are already notionally in place, we can have only limited confidence that such programmes will have an effect in the future. I have given an example of a voluntary measure that may not be as effective as we hope.

Professor Docherty: I will offer a broader view. The answer to your question depends on one’s take on the role of the state and the extent to which it should intervene in the market. Economists would define much environmental damage—for example, greenhouse emissions—as a negative externality of economic activity. Everyone in a market economy seeks to maximise their surplus and to get someone else to pay for negative externalities; usually, people do not mop those up voluntarily. The role of Government is to intervene either by using the pricing mechanism to change the costs and benefits of particular actions or by regulating so that people produce fewer negative externalities.

Coming from my admittedly dirigiste view of the world, one can point to several areas in transport and the environment and across the gamut of public policy where for a long time we tried voluntary arrangements that could, perhaps unfairly, be characterised as asking people nicely to do different things. Eventually, when the problem became serious enough, we decided to act through pricing or regulatory change. For example, a big public policy success for which the Parliament has been responsible in recent years is the smoking ban. We intervened to change people’s behaviour directly because, collectively, we decided that the negative externalities of that behaviour—its terrible impacts on public health and individual lives—were no longer worth it. We made the transition from asking nicely to intervening and doing something about the issue. That is the direction in which we must move. My reading of the trajectory question that has been ably put by my colleagues is that if we ask nicely, through voluntary arrangements, for a long time, we will not start to get on to the trajectory that is needed.

Dr Kerr: At UK level, over the past 10 or 15 years, when we have identified a problem we have tended to apply an economic instrument—a stick—which has resulted in a price hike. We have found that that is a necessary condition—that we needed to do it—but that it is not sufficient, as it does not change radically what we need to change. As a result, we have added one instrument after another and ended up with a hugely complex policy framework.

Agriculture is one of the few areas in which we have not applied such sticks. Instead, everything is done through subsidies and grants—in other words, we have turned around the whole problem and given people money to be nice to the environment. I cannot speak about waste, but there is a challenge in how we address issues such as agriculture. That does not mean that we must apply taxes to agriculture, but we need to be aware that it is not clear that simply trying to increase voluntary uptake of existing grant schemes—which is at the heart of some policies—is sufficient if we are to hit some of the agricultural targets. The answer to your question is that there may need to be some mandatory frameworks to drive change in agriculture, in particular, and land use.

Rob Gibson: If we start to look at the support that we provide to agriculture, we open up a lot of questions about whether agriculture should be treated differently from other kinds of business. Under the common agricultural policy or some son of CAP, the position is likely to remain the same, but your point is taken.

Is academia in a state of readiness to meet the requirements that the Government and the private sector will expect to deliver a low-carbon Scotland? Are you academics geared up to provide the best and most practical advice?

Dr Kerr: Tomorrow I will take up my new post as director of the new Edinburgh centre on climate change, which is supposed to be an innovation centre explicitly aimed at delivering what the academic community has not delivered in the past. We cannot solve the problems by research alone or by Government action alone; we have to get the various groups—representatives of civil society, business, policy makers and the leading researchers—together to solve the problems.

We need to train people to develop the relevant professional skills effectively, and that is exactly what we have set up the centre on climate change to do. That presupposes the fact that the academic community has not delivered in the past. In short, we are getting better at it, but we have been very poor at it in the past.

Rob Gibson: Might you recommend that other parts of the country have similar centres, or is it too early to say?

Dr Kerr: The University of Strathclyde is setting up a technology innovation centre, and the research pools have been very useful in pooling talent across Scottish universities. We in Scotland have far more effective frameworks for delivering what is required than elsewhere in the UK—certainly compared with England and Wales. We need to build and deliver on that to achieve a real impact. That is what is emerging at the moment. That work has not delivered yet—but it will.

George Tarvit: For the SSN, this illustrates the importance of partnership and collaboration to getting us through whatever the RPP actually produces. Although the SSN is a network of local authority officers, we never work in isolation. We have gained a huge benefit from collaboration with academics. At your evidence session just a week ago, you heard about dialogue between our network and Scotland's 2020 climate group. There is an appetite for collaboration here—a sense of different sectors approaching the agenda and saying that we are in this together. That will buoy up the voluntary approach, and we have an opportunity to work on the voluntary effort through the RPP.

Monitoring is a critical issue. We can only let a voluntary approach run for so long, at which point the various stakeholders have to establish whether it is actually delivering. That is a critical aspect of the Climate Change (Scotland) Act 2009. The targets are there—they are in statute—so there is only so long that this stuff can be ducked.

We are in a lucky situation in Scotland at the moment, with the different sectors, including the private sector, the public sector and academia, rising to the challenge. The Government is starting to identify a route forward. More detail needs to be added, but we have the means to proceed. The critical thing is how long we let the voluntary approach run before we cast a sharp light on it and ask whether it is delivering what it should be delivering.

It is as much a matter of how the private sector rises to that challenge as it is a matter of how the public sector does so. Sustainable procurement, for instance, is an absolute headache for procurement officers in the public sector—certainly in local government. They have to specify what they are trying to procure, with the private sector responding appropriately in order to achieve common objectives.

Anil Gupta: The voluntary approach means different things in different contexts, but when it comes to local government it is important to emphasise that, with the 32 councils having

signed up to the Scottish climate change declaration process and to the reporting, we are considerably further ahead than England is with the Nottingham declaration. We are also much further ahead in comparison with the European Union's covenant of mayors, which covers fairly similar territory. There are virtues in the voluntary approach, but it depends on the particular part of the process and what is subsequently done when we feel that not enough progress is being made.

Rob Gibson: So it is possible for a unit the size of Scotland to have such partnerships and synergies.

Anil Gupta: One important thing for local authorities is whether we can frame the relationships with academia well enough to achieve the rapid progress that will be required if the various targets are to be met. We are in a very strange position, where we have duties to do things although we do not have a strong hinterland of past achievement to draw on—achievement that helps us to decide unambiguously what best practice is. We are getting closer to forming an idea of what some good practice is, but at this early stage we need to rely much more on advice from academia.

Charlie Gordon: Gentlemen, low-carbon technologies have to be funded. I think that Dr Kerr alluded to that in an earlier answer. Do the carbon forecasting and cost techniques in the RPP take account of risk and uncertainty in the field? Do they reflect best practice? How can such forecasting be made more robust to allow decision makers to make well-informed choices?

16:15

Dr Kerr: Let me start with the last question, which is about how we can better forecast carbon accounting, say. Over the past few years, one of the challenges that everyone has faced is how the emissions impact of doing something is determined. At the moment, this is the way in which we frame things: our economy has some emissions, which we set as a baseline; to that we add a series of policies; and then we add them all up—and that where we are going to get to.

Typically, certainly within Europe, Governments have tended to be a bit overoptimistic about the baseline, because it has gone up unexpectedly, and a bit overoptimistic about the ability to add up all the policies to get to something. In practice, they are not all additive, they do not all work and they never deliver everything that they are expected to deliver. Governments have said, "Oh, we think we can get down quite low," but in practice that is not where they have ended up. That is why we do not appear to have made radical emissions reductions over the past 15

years or so, despite having lots and lots of policies to do so.

Part of that is to do with the assumptions that are written into some of the models, and part is to do with the quality of the models. For example, we have only had for a year or two a Scottish building model that tells us useful information about the impact on energy use, and therefore the impact on emissions, of, say, insulating the Scottish built environment. We are refining a lot of those models, but they are still pretty ropey in parts, so uncertainty is an issue.

On specific technologies going forward, a lot will depend on what is commercially viable. It is all very well to say, for example, that we will put photovoltaic cells or panels everywhere, but if that still costs an absolute fortune, or if the planning regulations are not there—there is a range of different reasons—you will not get PV or solar thermal technologies in place across Scotland as anticipated. The only way that we can make progress is to start to knock down the costs, knock out the technology innovation and deal with a lot of the stuff around what might be called social or business innovation, which is all about ensuring that the planning system is aligned with what we are trying to achieve and that communities buy into the idea that they can save energy and money if they go down particular routes.

What we are not seeing necessarily in the RPP is a pulling together around packages, with people saying, "Actually, in this space it will all work only if we look at things in the round and if planning, building regulations and local authority works are all aligned." Only if that approach is taken will we start to see the delivery on the ground of the abatement potential that is set out in the RPP. Over the past 10 or 15 years, we have discovered that a lot of the abatement potential has not been delivered in reality because of all those other things—planning regulations, for example—that exist around the space. If we could align those things, I would have a lot more faith that the potential reductions will actually be delivered.

Professor Docherty: There is a supplementary point about the usefulness of scenarios as a thinking approach. The problem with forecasts is that they are precisely that: forecasts. People focus on one particular future view of the world that has all these uncertainties built into it and which almost gives us a kind of average of all the uncertainties. Scenarios are potentially much more useful because they open our minds to very different futures and how we have to react to them very differently and straightaway.

The one that always comes to mind is the price of oil. If I knew what the price of oil was going to be next year, let alone in five, 10, 20 or 30 years, I would not be sitting here today, because I would

be making money from that. That variable is utterly crucial and could blow apart all our cleverly calculated forecasts on so many fronts if the things that we think of today as unthinkable actually happen. Do we really know what oil at \$300 a barrel in 2020 would mean? That price is outside most people's cognitive zones today, but it could happen. The point has already been made about the second half of 2008 being something of a rupture in our nice, settled view of economic development. Equally, if the price of oil were to crash to \$5 or \$10 a barrel for a significant period during the lifetime of the forecasts, they would be wildly wrong for the opposite but equally important reason. The problem with a forecast is that it is precisely that—a single forecast.

Charlie Gordon: The draft budget covers one year. Could a one-year horizon have negative impacts on the medium to long-term planning that is outlined in the RPP?

Professor Rye: That goes back to the point about there being a disconnect between the budget and the RPP. Tables in the back of the RPP show that £207 million a year will be spent on walking and cycling over the next five or six years. That is totally at odds with what we see in the budget. If your question is about the budget and its links to the RPP, my answer is that there is a very difficult disconnect. We have a one-year time horizon for spending, but a much longer time horizon in the RPP. It is not clear whether many of the measures in the RPP have funds attached to them.

Dr Kerr: I am not sure that it is all that important. The RPP comes off the back of the Climate Change (Scotland) Bill, which was passed unanimously. It requires investment over a much longer timescale than the timescales that apply to any individual Government. We are talking about investments over 20 or 30 years. Each successive budget will need to frame what is going on over a longer period. I am not sure that just having a one-year budget is a problem, as long as it is followed up by another budget that follows the same trajectory. Any four or five-year budget—or any budget that looks ahead four or five years—still has to deal with changes that are going to take place over 10 or 20 years.

Anil Gupta: Our view is that it is not as important for this RPP as it will be for later RPPs, by which time we will have a much clearer focus of where we want to go and what resources will be required. As Dr Kerr said about the ability to draw in external moneys from the private sector, such things need to be painted into the tables so that we know what is going where. If, this time next year, there is a comprehensive spending review that seeks to take us ahead three or four years, it will be essential for the gaps to be filled in.

Alison McInnes: I will explore that point a bit further. Dr Kerr touched on the dangers of overoptimistic assumptions in the proposals. There is also a real danger around the need for investment to support the intentions that have been set out. I get the distinct sense from commentators on the subject that it is still business as usual, but that that is okay because we will get there eventually. We need to get started, basically.

Does the panel think that there are contradictions or misalignments between the RPP and the proposed funding in the draft budget? We have heard about some aspects from the previous panel, but it would be useful to hear from this one, too.

Professor Rye: The transport proposals in the RPP are of the order of a few tens of millions of pounds, over the period 2010 to 2022. In comparison with the sums of money for transport that are set out in the budget, those RPP costs are rather small. I find it disappointing that the RPP and the budget commit us to so little spending in this area to secure some of the policies in the RPP. More needs to be spent on the policies and the proposals in the document, but the budget does not provide for that. The amount of money that we need to fund the transport proposals in the RPP is not great in relation to the overall size of the transport budget. That is a major issue.

Anil Gupta: It is quite difficult for local government to know at this stage the likely cost implications. All we have is the independent budget review figures, which are also reflected in the RPP and which indicate that about £800 million needs to be spent in this area each year. We can assume that a third of that is ours, as local government spends roughly a third of the public budget in Scotland, but we do not know where that money is going to come from. That is a big deal for us. However, as I said, it is perhaps not so much an issue for this year, but it will become a much more pressing issue later on.

Professor Docherty: I will pick up on what Tom Rye said and make a more general point about the apportionment of our available moneys between different transport modes and solutions. On the assumptions of modal shift across the range of our public transport projects, around a doubling of the total capacity of the public transport network would be required to reduce road traffic by 10 per cent. Therefore, public transport investment will not solve the carbon problem. The only way in which we can deal with that is either to reduce the need to travel substantially or to electrify the vehicle fleet—the high-tech, attractive thing to do. We have already discussed how much of that worthwhile and useful money is perhaps being hidden under some other budget headings.

On reducing the need to travel, the document says that the Government will undertake further analysis of options for community hubs—and that is it. If we are serious about translating rhetoric into action, we need to do so much more than that. The document does not begin to outline the scale of the challenge. It is not just about money, because reducing the need to travel is about supporting particular choices and, I would argue, regulating out others.

Alison McInnes: That is very helpful and clearly relates to the earlier discussion about planning systems and long-term planning decisions, on which you think the RPP is silent.

Professor Docherty: Yes.

Anil Gupta: I will come in again, partly in response to the last point. Quite a few councils are considering reducing travel because it is clearly an issue that is significantly impacted on by the drive for efficiencies and cuts in local government budgets. If you can go through a building rationalisation programme, as in Fife, and reduce the amount of office space that you need, you start working in different ways. For example, people could probably hot-desk and use office accommodation three days a week, spending two days at home. That would help on a number of fronts—buildings emissions and the like. We could perhaps look at reductions as part of our mainstream business in certain areas that would not be approached in any other way.

Dr Kerr: Coming back to investment, I fully accept that in an ideal world the budget would have laid out exactly where it was going. However, given where we are, that is less of an issue for me than the concern about the RPP's reliance on the green investment bank and other things that will come in at some point some years ahead. This is where we are just starting to see a slippage in timescales. In practice we need to get people investing, looking to invest or creating frameworks to invest right now. My concern is that by relying on a UK-based green investment bank, the green deal and so on, we are talking about things that will come in in 2013 or 2014, and it will be 2015, which is halfway to 2020, by the time that they are up and running. We will have missed the opportunity that we are holding right now.

That is a real issue that is not addressed in the RPP or in the draft budget. Stuff will be coming along at some point in the future, but what are we going to do right now? Who is going to do what now to deliver the investment? I do not see that clearly laid out, and there is a gap. That relates back to our earlier discussion on the draft budget.

Alison McInnes: That is helpful and has covered what I was after.

16:30

Alasdair Allan: Could any other things have been added to the RPP specifically to incentivise renewable and low-carbon thermal generation?

Dr Kerr: Do you mean thermal generation in the heat markets, or thermal electricity generation in power stations?

Alasdair Allan: Thermal electricity generation.

Dr Kerr: Given the current electricity market, the market drivers and the Cockenzie plans, for example, that we know about, it is not clear to me what could be further incentivised that would make any difference to Scotland's medium-term carbon accounts.

Professor Docherty: As I have no expertise in the specifics of the question, I will adopt the usual tactic and rephrase it as a question that I would have preferred to have been asked.

Alasdair Allan: That is a fair tactic.

The Convener: It is usually ministers who do that.

Professor Docherty: Perhaps I should not pursue that analogy.

One potentially really disadvantaging dilemma that we have is that our least sustainable buildings in Scotland are in our most sustainable locations—in small towns and city centres and the older parts of our built environment. For understandable policy reasons, we have focused on intervening in greening the newer building stock first, which, by definition, tends to be in less sustainable locations. That is going to be a difficult issue to crack if we are not going to generate a whole set of perverse incentives by locating new housing and new economic activities in precisely the places where we would not wish them to be, from the perspective of reducing the need to travel.

I am not sure that I know the answer to the question, partly because the cost of trying to intervene in our old buildings is often substantial as a result of their structure and nature. There are also cultural imperatives around, for example, not permitting the installation of photovoltaics in Edinburgh's new town on the basis that the environment could not possibly sustain such a level of visual change. However, I am sure that the number of parked cars in that environment was not envisaged in the original architectural plans 250 years ago. That is a slightly frivolous point, but I make it to illustrate the fact that the policy process puts assumptions in the way of doing things that we know need to be done, and they keep certain very difficult questions, such as what we should do with our historic building stock, in the too-difficult basket. Edinburgh is perhaps as good an example as anywhere of a place where that

happens. We need to do something radical with Edinburgh quickly.

Alasdair Allan: I was going to touch on older building stock as opposed to historic buildings. Can the RPP play any part in addressing the problems that you have just referred to? You say that we should do something quickly. What are the quick options for elderly building stock?

Dr Kerr: There are things that we need to address in Scotland in particular that relate to tenement buildings and solid wall insulation. The issues are big and tricky. The UK-based grant mechanisms tend to go for the easy hits and tend to be for semi-detached houses in Sheffield, for example, rather than houses in Scotland. We tend to get a lesser share of those funds.

There is no easy answer to the question. There are many good ideas floating around out there about how to make much more effective use of the way in which buildings are planned and regulated—so that, for example, people can make the most of shared ownership options relating to solar thermal or heat networks that would run through tenement buildings—and about trying to find much better technical fixes for solid wall insulation that do not destroy either the outer facade or the inside of the building. None of those is an easy option, but they require to be done in the very near term if we are going to deliver not only in Edinburgh, but in Scotland's other old cities. There is a lot of work to be done in that space.

A series of broad policies to do with specific technologies and grant mechanisms is set out in the RPP. It is less clear from the RPP how they will all be put together. How do we deliver that approach on the ground in Edinburgh, Glasgow or Dundee, where we are tackling some of those hard-to-heat homes? That is much less straightforward. There is a lot of work to be done, but the RPP does not contain a package that shows how it will all be delivered in the future.

Alasdair Allan: Is that possibly because some of the funding mechanisms are at the UK level, as you just said? Which funding mechanisms address Scottish housing less well?

Dr Kerr: The standard one is the carbon emissions reduction target supplier obligation. That is what we electricity and gas users pay through our bills, although we do not know it, to suppliers, which then have an obligation to deliver a certain number of energy-efficient homes around the country. That rightly focuses on the cheapest ways of insulating homes. Some are in Scotland but many of them are not, so the attention tends to be focused elsewhere. Measures are afoot to rectify those issues, with which the Scottish Government has been engaged.

However, it is a wider problem. We talk about what a win-win insulation is. In many parts of the country that is true, but there are some real challenges for Scottish cities, in particular, to deliver in a way that is cost effective and socially acceptable. Householders need to accept people coming into their homes to insulate them.

George Tarvit: The RPP is quite light on traditional building stock—it just mentions some research that Historic Scotland is doing. We have yet to see real solutions being proposed.

There is quite an emphasis in the document on technological fixes. It assumes that people who are living in old properties are somehow going to retrofit them to a standard where they can live a comfortable and warm lifestyle. I do not know if the RPP needs to focus more on behaviour change and lifestyle emissions. People who live in buildings that are hard to bring up to existing building standards might be able to do other things in the short term. Perhaps the RPP's emphasis on technofix and retrofit should be balanced with more emphasis on lifestyle changes.

The Convener: I will stay with the homes and communities section for a while. I will come on to energy-efficiency measures and Dr Kerr's comments about insulation schemes in a moment, but some comments were made earlier about the other measures that could be taken. Alasdair Allan talked about how we could decentralise a great deal of thermal electrical generation through combined heat and power systems that could save people money as well as reduce emissions. The RPP contains little about what needs to happen for those to be rolled out in the future.

There must be significant opportunities in relation to tenements. They were built to house communities but, because of the changes in the housing market, they have turned into buildings in which everyone has their own little box but no relationship with the rest of the people in the building. Tenements must give us opportunities to return some of those services to being on a collective and shared basis. Does the RPP sketch out how that transformation can happen in buildings that offer so much potential?

Dr Kerr: The RPP reflects the history of where we have got to. For years we have talked about grant schemes or economic instruments that apply to individuals, but, of course, we do not operate as purely independent individuals with no reference to the world around us; we operate within communities. Certainly at the UK level, there has been a gap in the policy framework around delivering change at the community level, particularly around things such as CHP and decentralised heating.

Tenements are a good example. A tenement with a good-scale ground source heat pump out the back could deliver baseload to a lot of tenements without raising the efficiency issues that are often thrown up by single houses. There are lots of opportunities in that area. However, our mindset is not focused on groups of individuals; instead, we focus economic instruments on an individual as if he or she has no reference point beyond themselves and makes decisions without reference to anything else. A huge amount could be done, but the RPP does not articulate that particularly well.

I know that the University of Strathclyde, the City of Edinburgh Council and the University of Edinburgh are doing various bits of work on how to engage groups in the different cities, but there is a lot to do in that regard.

The Convener: The climate challenge fund was intended to create community effort or enterprise and to support communities that are ready, geared up and keen for collective action. I do not want the fund to be closed down. However, rather than just reproduce it, can we build on it to enable it to engage or connect with communities that do not yet see themselves as being at a point of readiness?

George Tarvit: At issue is how the CCF will move forward. It is fantastic that in the current budget the CCF has been committed to and has received increased funding. The fund is also being reviewed at the moment. It will be important for the committee to look at some of the lessons that can be learned from the first round of the CCF. There has been a lot of pressure on the programme just to get money out to communities and to get things happening. The number of communities and individuals who have risen to the challenge is encouraging, so the opportunity is there.

We probably require a sense that the CCF is a pot of money for investment and sustainability in communities, rather than a traditional grant-making scheme that seeks a carbon impact from spending money in the course of a financial year. As some CCF groups mature, we will be able to pursue a dialogue with them that shifts the CCF from being a grant process into being a community development fund, with a view to scaling up developments.

The Convener: Those comments are helpful.

I return to the issue of insulation. There is widespread agreement that much more can be done and that some of the more basic measures are very cost effective. Would we not get much greater economies of scale if we ramped up that activity and aimed to complete the job over a much shorter period? Would we not achieve more for our money if we did the work more quickly and

allowed the industries that supply it—which include many small businesses—to benefit from economies of scale?

Dr Kerr: Yes, but the work also needs to be tied into much more effective area-based schemes. The committee will be aware that such schemes have been developed over the past year or two. Instead of doing an individual house and leaving, we should proceed street by street. The way ahead on efficiencies of scale must be to put up scaffolding down the whole street, do every house and move on. However, that cannot be delivered with public funds alone. It comes back to the point that, somehow, we must mobilise investment from elsewhere.

George Tarvit: Getting community buy-in is an issue. One problem with energy-efficiency schemes is that, if you improve the quality of the building stock, you get a rebound effect, as people simply turn up the heating and get used to a different lifestyle. The CCF process, which involves engaging the public in a long-term societal shift, is critical. People need to understand why changes are taking place and to be involved in the process of scaling up developments. The 2020 climate group may be contemplating work to turn the policies and proposals into key performance indicators—how many houses we need to do, over what period and who will respond. SSN and other organisations like it are looking for that kind of dialogue over the next year or so.

Alison McInnes: Understandably, the RPP relies a lot on the public sector leading the charge to drive down carbon emissions. Are changes to the structure, funding and leadership of the public sector required to deliver a low-carbon Scotland? You cannot duck that question.

Professor Rye: A large number of transport measures in the RPP will have to be delivered at local level. However, as Anil Gupta indicated, it is not clear that the local level has the money or the capacity to do that or that the activity ties in with local authorities' commitments under their single outcome agreements. That is a significant problem. There is a real disconnect between what the higher level of government wishes the lower level to do and what the lower level can or will do.

16:45

Alison McInnes: How would you fix that?

Professor Rye: As an academic who has examined different governance systems, I think that if the centre has the desire for all levels of government to achieve certain outcomes, a system of incentives and funding—and perhaps even a little command and control—must be put in place to make that effective.

A governance system that I have considered and which takes that approach is the one for London's transport. A fairly clear path of responsibility and funding goes from the mayor down through local transport implementation plans to the London boroughs. To an extent, the boroughs must do what the mayor wants them to do. The money that they receive relates to what they do and how much that achieves what the mayor wants them to do. I am not necessarily recommending such a system; I am merely saying that it tends to achieve what the centre wants to happen more effectively than does a more distributed system, such as that in Scotland.

The Convener: Pretty much everybody on the panel is indicating that they would like to speak. I ask people to keep their comments reasonably brief, so that we can try to get through everyone.

Professor Docherty: I should declare an interest, as I am part of a team of academics that one of the research councils has just funded to consider the changes that will be required in the public sector's structure, funding and leadership to implement low-carbon policies. I have the classic excuse of saying that it is too early to tell.

In six or so months' time, when the committee and others have the task in the post-election environment of discussing how we should reform the structure of the public sector in Scotland, that thorny old question that we always say is too difficult, too costly or too whatever will finally have to be grasped. We must remember that our current local authority structure was brought in by a UK Government that had competition between those authorities for investment, jobs and activities at the forefront of its mind.

Our voluntary structures for creating the collaboration and partnership that we would like between authorities for public policy reasons might well be reaching the limits of their endeavour. Given the urgency of the carbon issue and the varying incentives for different locations in different local authorities, particularly in the central belt, where the system is more fragmented, we need to ask the serious question whether our local government structure is fit to deliver low-carbon policies.

Dr Kerr: I return to the question whether local authorities have the skills sets. I do not think that they do. What the RPP does not say but associated documents do say is that one of the big gaps in the next 10 or 15 years will be in skills, whether in senior decision making or in installing renewables technology. That is a huge gap that can be addressed only if we create partnerships between the higher or further education sector and the relevant authorities to support and build short courses and executive courses to meet those needs.

George Tarvit: Our focus is not on structural change in local government, because there are bigger issues on which to focus. Local government is reasonably well structured to focus on some issues in the RPP. We have done a huge amount of work to support network members in getting their heads around the agenda. However, we could be criticised for the pace of change and the skills that are available locally—we need to skill up.

Political commitment and leadership will also be required, and we have been putting in a huge effort to shore that up. Local partnership working will also be critical. Much work has already been done at regional level. In the local footprint project, the SSN has increasingly been working with a sort of collective of local authorities. For example, in the Lothians, we are not working with East Lothian Council, West Lothian Council and Midlothian Council separately, we are working with them all together; and they are considering how they can collaborate with the likes of the regional transport partnership and the regional economic development partnership. Even at local level, people acknowledge that they will need to use leverage and consider regional approaches, perhaps considering the city region.

Within SSN, we are already discussing how resources can be allocated for central skills as part of that agenda. For example, rather than every single local authority having the capacity, there could be a centralised climate change unit that would service the needs of a city region. There are ways in which we can work without considering structural change in local government and the public sector.

Anil Gupta: I will not disagree with anything that George Tarvit has just said; and, naturally, there will be concerns about the time and resources that would be needed for any restructuring of local government.

I draw to members' attention the point that our number of municipalities, and the ratio of that number to the population, are extraordinarily different from those in the rest of the European Union, where the scale of local authorities may help to maintain a strategic and sustainable relationship with communities. If our municipalities became much larger, we would be completely off the scale when compared with others in the European Union. I would be worried about that.

The Convener: I would like to drag people away from the issue of restructuring, which has begun to dominate. The question concerned whether local authorities had the skills at the moment to deliver.

Anil Gupta: The solutions that George Tarvit was suggesting are entirely the kind of things that

we would be considering. We would be trying to share expertise, for which SSN is very useful. SSN provides a very helpful community-of-practice approach, which helps to share good practice. We would be keen for that to continue.

In the public sector, we would like there to be better alignment of the different advice-giving arrangements, so that, for example, there could be a single delivery plan for low-carbon advice in Scotland. I do not mean a collapsing of different bodies, but we could have a single delivery plan similar to the set-up for zero waste Scotland, which has now been under way for the best part of a year.

When we consider overall structures, we have to bear it in mind that, for example, putting green cycle tracks along the sides of roads is not the main issue for local government. We need well maintained roads, and there is a hell of a backlog in the maintenance work required on existing structures before we can start changing them drastically.

The Convener: I invite Charlie Gordon to ask a supplementary question on this issue before moving on to his own questions.

Charlie Gordon: Convener, I know that you would like us to move away from questions on governance, but in light of Professor Docherty's remarks, I feel duty bound to ask him for an assurance that he will not be back here soon recommending that the best way in which to implement our climate change objectives would be to elect a mayor in a monkey suit, or a robocop.

Professor Docherty: No, it is fair to say that that would not be the best way to do that.

My challenge to people who doubt the importance of structures would be to invite them to go to the boundaries of any one of our four largest cities, look around at the fringe developments in the adjoining local authorities and ask themselves, "Is this a carbon-efficient way of doing development in Scotland?" The answer is a resounding no. Every time I hear the producer-interest response that the last thing that we need is reorganisation, I want to point out that when the system is broke enough, and when enough people are telling you that it is broke, it is time to fix it.

Charlie Gordon: We had a city region once in Glasgow.

Rob Gibson: An overriding issue is involving people in the revolutionary changes in their behaviour that will have to take place. Notwithstanding the regional approaches that some of the witnesses have mentioned, does living in a society in which people elect their local government at a very local level make it easier for those people to take more responsibility for their

actions and not to say that everything is somebody else's responsibility? The European model has that local level, and probably has regional levels as well—the Länder in Germany, for example. That would be a better model for delivering the RPP than the model that we have.

Professor Docherty: The simple answer is yes. That also addresses Anil Gupta's point about the size of the top tier of local governance. If we move to a higher tier, there will be even more of a vacuum beneath that. We should consider very carefully how to re-energise the community level through more formalised, responsible structures.

George Tarvit: I agree with that. The case studies that we bring across to Scotland to put before people in Scottish local government tend to involve continental European municipalities, with a mayor and a deputy mayor. The municipality will have the power, vision and leadership to put stuff into practice locally. Some of that is just absent here. I do not know whether that is to do with structures, powers or the vision thing, but there are a number of factors that mean that things are not working as well in Scotland as they do overseas.

Charlie Gordon: To quote the RPP,

"the policies that will have the most significant impact on emissions reduction lie with the EU and the UK Government".

Furthermore, the RPP sets only two milestones for transport by 2020. Is the Scottish Government taking sufficient and appropriate responsibility in the transport sector?

Professor Rye: Many of the transport policies and proposals that are listed in the RPP are closely based on a piece of work that you might well be aware of, which was produced last year by the University of Aberdeen and Atkins, called "Mitigating Transport's Climate Change Impact in Scotland". Were all the policies that are contained in that document to be included in the RPP, Scotland could make a very significant contribution to emissions reduction in transport. The answer to your question is that, in the draft RPP, the Government is standing back somewhat from what it could do, hoping that the EU and UK policies—over which there are some question marks—will deliver. It is not committing to enough devolved measures in Scotland.

Professor Docherty: The levers that are likely to make the biggest difference are the price of fuel, as we know—there is a lot of empirical evidence for it—and the general tax treatment of transport charges, for example tax relief on various modes of commuting or, returning to our earlier discussion, paying people to make more sustainable choices or subsidising them in making

those choices. That requires control over some basic building blocks of the taxation system.

Unless our expectations have been completely confounded, I guess that what has been announced recently elsewhere will not devolve that level of fiscal responsibility to Scotland. Therefore, the Scottish Government has a difficult choice. One option is to argue for particular uses of fiscal powers that it does not have. However, it will perhaps have learned the lesson of arguing for a local income tax, which was a particular solution to a financial problem that immediately ran aground politically. Any Scottish Government is hardly likely to say, "If you give us control over tax X, we will raise it to level Y, because that will solve the problem," as that is politically untenable. That is why the budget says as little as it does. Another option is fiscal autonomy, and we have heard plenty of interesting evidence this afternoon about the need for that in lots of areas of taxation policy. My own view, for what it is worth, is that without that we will find it very difficult to do many of the things that the RPP document seeks to do. At the moment, most of the spending and most of the carrots are devolved, but significant parts of the sticks are not.

Charlie Gordon: I will move on now. There was a nice balance to those two answers.

We have heard that during the production of the RPP there were discussions about revenue-generating mechanisms such as workplace parking charges and road user charging. The latter was discussed during the earlier panel session on the draft budget. So, avoiding repetition but bearing it in mind that others have joined the panel, what is your view on those two measures?

17:00

Professor Rye: I believe that there was a version of the RPP that included reference to a workplace parking levy, parking management and so on. Those are important because the work that was done to develop the transport proposals in the RPP looked at those measures as a package of mutually reinforcing measures; therefore, if you take out one of them, you lose more than simply that single measure's contribution. I will give you a good example. If you want travel planning to work, it is important that it is coupled with parking management, otherwise its effectiveness will be only a third to a quarter of what it would be with parking management in place as well. Taking out the revenue-generating and demand-management measures on parking has a much reduced effect on emissions, I am afraid.

Charlie Gordon: I want to press Professor Rye briefly on the parking management issue. Is it not the case that there is a market for parking, which

to a degree regulates the choices that people make? I might very well want to drive into Glasgow city centre and park there all day, but somebody will charge me an arm and a leg to do so.

Professor Rye: Off street, someone might charge you an arm and leg, but we must remember that our local authorities control a lot of on-street parking, a lot of which is not currently charged for or even really controlled.

Charlie Gordon: I do not know whether the professor has parked on street in Glasgow recently, but Glasgow City Council charges an arm and a leg now, too.

Professor Rye: I absolutely accept that Glasgow City Council, along with five other councils in Scotland, has decriminalised parking enforcement and now charges on street in certain areas, but you know yourself that if you go to areas a little way outside the city centre and the west end, there are areas that still have high parking demand where there is no charge and you just have to fight to get a space. That kind of parking management is what was being considered in developing the RPP, and we know that it is not there. That is why I think, as I said before, that some of the voluntary measures in there will be less effective.

Charlie Gordon: Are there any more views on those two points, especially workplace parking?

Professor Docherty: In the earlier question-and-answer session, I remarked on the uncertainty about the environmental impact of road user charging and whether it would reduce traffic overall because of varying outputs from the models. I come back to my point about our governance structure being designed to be competitive. The big problem with workplace parking charges is that the parking market is subject to substantial failure because we do not charge people the full price of their actions, which relates back to what I said about negative externalities. For example, if any of our central local authorities had a workplace parking levy, because they thought it an appropriate solution to the problem, immediately the classic problem would arise of surrounding authorities, which are in competition with them and have a plentiful supply of cheap land and cheap development sites, making the offer, "Come to us and have free parking," and the additional vehicle miles that would be generated would not be absorbed at all in the market pricing.

Charlie Gordon: And that is the current scenario under the Transport (Scotland) Act 2001, is it not?

Professor Docherty: Yes, as far as I remember.

Charlie Gordon: I think that discretionary powers exist.

Professor Docherty: But we come back, again, to one of the undercurrents in this afternoon's discussion, which is the limits of voluntarism.

The Convener: So you are suggesting that only a coherent national approach would have a chance of achieving the desired effect.

Professor Docherty: I would imagine so, because the boundary effects would be so stark. We have already seen them in certain sectors. Retailing is the classic one, where there are so many developments just outside the zone of an authority that wants to implement charging of that description. We would see very negative outcomes if the charging was not controlled.

Professor Rye: On the 2001 act, the powers for a workplace parking levy were struck out of the bill.

Charlie Gordon: Yes. I think that I was conflating that power with a discretionary power to introduce local road user charging. I apologise for that.

Professor Rye: That is still there. Another point is about the planning system, which we have heard a lot about. Given what Iain Docherty just said about competition between local authorities, it is a great pity that we have just seen the abandonment of national maximum parking standards for new development in the planning system in the new Scottish planning policy.

Rob Gibson: I want to move on to land use strategy with regard to the RPP. There is a target for growing forests and increasing cover to 25 per cent by the middle of the next decade. We have the farming for a better climate scheme with its focus farms. There is potential for 80 per cent of electricity to come from renewables by 2020. There is also the challenge of food security, which farmers can meet in the system. A land use strategy is to be tied in with the RPP to provide a decision-making framework to allow conflict resolution between the competing priorities that are set out in the RPP. What action is needed to ensure that all landowners contribute to delivering emissions reductions in the land use sector?

Dr Kerr: Those are big questions. One issue with the land use strategy is the lack of interaction with the strategic planning framework and the need to tie the two in more effectively. Whether that happens this year or in a subsequent iteration is a moot point, but there is clearly an issue about having a planning framework that has already set its course and then inserting a land use framework part way through.

I was worried when I looked at a couple of the RPP proposals, particularly that of increasing

woodland creation to 15,000 hectares per year. Woodland planting in the past five or six years has been on a fairly standard downward trajectory. In other words, we have been talking for several years about the need to up our planting rates, but that has not achieved anything yet. We need to look very hard at the current support arrangements in the Scottish rural development programme for delivering that increase on the ground, because clearly they are not delivering it.

On the broader issues, such as the farming for a better climate programme, a lot of positive work has been going on, particularly on cross-compliance and getting people to work together more effectively. There is a lot of good stuff in there, but we still appear to have a disconnect between what we intend to do and what is actually happening on the ground.

Rob Gibson: The conflict between farming and forestry is undoubtedly unresolved, although there was a slight upturn in the planting figures during the summer. Given that two thirds of planting is done by private owners, is it not the case that investment has been reduced because of the crunch and the recession?

Dr Kerr: I could be wrong, but my understanding is that it is less to do with the recession and more to do with what we might call behavioural attitudes of farmers, who do not think of themselves as foresters. They have a different view of land use from the forestry approach. There is a broader issue about how to use land most effectively throughout Scotland. It is not yet clear to me that the land use strategy will deliver what we seek to deliver. In a series of workshops that we held in the summer, a big criticism was that we do not have a geographically located land use strategy across Scotland. The issue is not just about rural land use but, to plug into earlier comments, goes right across into urban areas. We need to consider how best to use our land.

There need not be a major conflict between forestry and farming for food, if we assume that food comes from the top two or three grades of agricultural land. The issue is the rough grazing, but that is less of an issue, so there does not need to be a major conflict. However, we need a much more coherent approach and it is not yet clear to me that the land use strategy or what is written into the RPP will deliver that.

Rob Gibson: I am conscious of the time, but thank you for the hints. It bothers me that there is still a big conflict between supporting less favoured areas—rightly, for various reasons, and some of them are quite productive—and putting the onus on farmers, which to me seems the wrong emphasis, as they are not the biggest owners of land.

Dr Kerr: That is a fair point.

Rob Gibson: On waste, which we touched on earlier, does the panel agree that the existing policies will be adequate to deliver the required emissions reductions in the sector? Should wider resource consumption be considered in the RPP? If so, what proposals would reflect such thinking? We have had debates about collection and about changing behaviour, but is consumption at the root of the problem? If so, does it have to be changed first?

Dr Kerr: The RPP is framed around a series of bottom-up policies, and what I think you are saying is, "Would it be better to look at the issue far more holistically and ask whether we can stop the behaviour that is causing the problem in the first place?" The answer is yes, but I am not sure how you would deliver on it.

Rob Gibson: Well, we are looking for the practical delivery of these things. There are too many ivory towers and we have to get something that people can do.

George Tarvit: What is in the RPP, because it is derived from the zero waste Scotland plan, is adequate, but you are right to ask how we take people up the waste hierarchy from recycling. That challenge is still ahead of us.

SSN has done work on ecological and carbon footprinting, which takes people straight into discussion about their own consumption behaviours and puts the right emphasis on how consumption drives economic growth and the sustainability of that and the global dimension of the issue, in the sense that recycling is only one small, end-of-pipe solution. Zero waste Scotland has the right strategic approach, but the issue is how quickly we can go up that ladder of prioritisation.

Anil Gupta: We would like to see further discussion of engagement, through voluntary or other means, in producer responsibility, particularly given the proposal in the new Scotland Bill for responsibility for landfill tax to come to the Scottish Parliament. There must be a reasonable case for having discussions with some packaging producers and others in Scotland to try to reduce the amount of waste. Another idea—I cannot remember which company suggested it—is having, instead of buy one get one free, buy one and get one later. That is an interesting suggestion, but it disappeared completely. Offers such as buy one get one free, which pressure people into more consumption, are profoundly unhelpful, but they could be balanced out and still give people an interest in returning to the shop.

The Convener: You will be glad to know that we are getting close to the end. Alasdair Allan has a couple of questions.

Alasdair Allan: What is the panel's view on the requirement for a new RPP by 31 October 2011? What does that do for stability or uncertainty for the system in future?

Dr Kerr: If it simply meant recycling a lot of the work that had been done and not adding to it, there would be a problem, but given where we are in the political cycle, having an RPP within a year is no bad thing. Going forward, there has to be a clear understanding of the trajectory and what the added value is. I appreciate the reporting requirements under the 2009 act, but it has to be clear what the RPP is adding in practical terms to the debate. I think that next year is crucial.

George Tarvit: As long as the RPP is an iteration of what we have and it is not a case of tossing it out and starting again, I think that it is the right basic principle. We would probably want to see an RPP every year to have the system feedback and management information to answer whether it is delivering what it is meant to deliver or needs tweaked or amended. As long as it is a developing picture rather than a complete reworking of the RPP, that is a positive way forward.

17:15

Anil Gupta: If savings of 12 to 15 per cent are required as we move forward, greater prominence will be given to the transformational changes that were mentioned and the need to embed those in the milestones. That will be quite an interesting debate. I hope that, once the draft RPP is finalised, discussion of the longer-term objectives will come into play.

Dr Kerr: On that point, it is necessary to be much more specific about who is doing what. If we are getting investment, who has done what to deliver and by when? In other words, rather than just stating policies and proposals, it will be necessary to state what has been achieved.

Alasdair Allan: Finally, does the panel have a view on the 2020 group key performance indicators, which the committee was told were

"offered in a spirit of dialogue but are meaningless unless directly linked to carbon targets",

and whether the RPP should include indicators along those lines?

George Tarvit: I have heard that the 2020 group is taking that idea forward, but I have yet to see the detail. I think that it makes some sense to add detail to what is in the RPP, but I would not hold back on the RPP just to develop the indicators. Cross-sector dialogue would be required on what the indicators look like and how you put them into operation.

Anil Gupta: An issue for some parts of the public sector will be the extent to which the data to feed into the KPIs are readily available and whether gathering a lot of data might create a further burden.

Alasdair Allan: Thank you, convener. I am going to have to make my apologies.

The Convener: Thank you. I thank all our witnesses, particularly those who were on both panels, for their time answering questions at what has been a long meeting. It is much appreciated. Would any of you like to make final comments on issues that have not arisen in the questions?

Anil Gupta: We provided you with a draft set of comments—I do not know whether you received those—but we might want to refine them quickly over the next week or two and come back to you, if that is of any use to you.

The Convener: That would be possible, but any further written submissions should be sent to us sooner rather than later if they are going to inform our report.

Thank you all very much for your time. We now move into private session for the remainder of the agenda.

17:17

Meeting continued in private until 17:26.

Members who would like a printed copy of the *Official Report* to be forwarded to them should give notice to SPICe.

Members who wish to suggest corrections for the revised e-format edition should mark them clearly in the report or send it to the Official Report, Scottish Parliament, Edinburgh EH99 1SP.

PRICES AND SUBSCRIPTION RATES

OFFICIAL REPORT daily editions

Single copies: £5.00

Meetings of the Parliament annual subscriptions: £350.00

WRITTEN ANSWERS TO PARLIAMENTARY QUESTIONS weekly compilation

Single copies: £3.75

Annual subscriptions: £150.00

Available in e-format only. Printed Scottish Parliament documentation is published in Edinburgh by RR Donnelley and is available from:

Scottish Parliament

All documents are available on the Scottish Parliament website at:

www.scottish.parliament.uk

For more information on the Parliament, or if you have an inquiry about information in languages other than English or in alternative formats (for example, Braille, large print or audio), please contact:

Public Information Service

The Scottish Parliament
Edinburgh EH99 1SP

Telephone: 0131 348 5000

Fòn: 0131 348 5395 (Gàidhlig)

Textphone users may contact us on **0800 092 7100**.

We also welcome calls using the Text Relay service.

Fax: 0131 348 5601

E-mail: sp.info@scottish.parliament.uk

We welcome written correspondence in any language.

Blackwell's Scottish Parliament Documentation

Helpline may be able to assist with additional information on publications of or about the Scottish Parliament, their availability and cost:

Telephone orders and inquiries

0131 622 8283 or

0131 622 8258

Fax orders

0131 557 8149

E-mail orders, subscriptions and standing orders

business.edinburgh@blackwell.co.uk

Blackwell's Bookshop

**53 South Bridge
Edinburgh EH1 1YS
0131 622 8222**

Blackwell's Bookshops:

243-244 High Holborn
London WC1 7DZ
Tel 020 7831 9501

All trade orders for Scottish Parliament documents should be placed through Blackwell's Edinburgh.

Accredited Agents

(see Yellow Pages)

and through other good booksellers

e-format first available
ISBN 978-0-85758-253-9

Revised e-format available
ISBN 978-0-85758-268-3

Revised e-format ISBN 978-0-85758-268-3