



**OFFICIAL REPORT**  
AITHISG OIFIGEIL

# Environment, Climate Change and Land Reform Committee

**Tuesday 27 March 2018**

**Session 5**



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**Tuesday 27 March 2018**

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**ENVIRONMENT, CLIMATE CHANGE AND LAND REFORM COMMITTEE**  
**11<sup>th</sup> Meeting 2018, Session 5**

**CONVENER**

\*Graeme Dey (Angus South) (SNP)

**DEPUTY CONVENER**

\*John Scott (Ayr) (Con)

**COMMITTEE MEMBERS**

\*Claudia Beamish (South Scotland) (Lab)  
\*Donald Cameron (Highlands and Islands) (Con)  
\*Finlay Carson (Galloway and West Dumfries) (Con)  
\*Kate Forbes (Skye, Lochaber and Badenoch) (SNP)  
\*Richard Lyle (Uddingston and Bellshill) (SNP)  
\*Angus MacDonald (Falkirk East) (SNP)  
\*Alex Rowley (Mid Scotland and Fife) (Lab)  
\*Mark Ruskell (Mid Scotland and Fife) (Green)  
\*Stewart Stevenson (Banffshire and Buchan Coast) (SNP)

\*attended

**THE FOLLOWING ALSO PARTICIPATED:**

Adrian Gault (Committee on Climate Change)  
Patricia Hawthorn (Scottish Renewables)  
David Sandison (Scottish Salmon Producers Organisation)  
Mark Simmonds (British Ports Association)  
Dr Alan Wells (Fisheries Management Scotland)

**CLERK TO THE COMMITTEE**

Lynn Tullis

**LOCATION**

The Robert Burns Room (CR1)



**Scottish Parliament**  
**Environment, Climate Change  
 and Land Reform Committee**

*Tuesday 27 March 2018*

*[The Convener opened the meeting at 09:46]*

**Decision on Taking Business in  
 Private**

**The Convener (Graeme Dey):** Good morning and welcome to the 11th meeting in 2018 of the Environment, Climate Change and Land Reform Committee. I remind everyone present to switch off their mobile phones and other electronic devices, as they may affect the broadcasting system.

The first item on the agenda is a decision on whether to take items 5 and 6 in private. Do we agree to do so?

**Members** *indicated agreement.*

**Committee on Climate Change  
 (Annual Progress Report)**

09:46

**The Convener:** Agenda item 2 is evidence from the Committee on Climate Change on its annual progress report. I welcome the acting chief executive of the Committee on Climate Change, Adrian Gault. Good morning, Mr Gault.

**Adrian Gault (Committee on Climate Change):** Good morning.

**The Convener:** We will move straight to questions.

Over the past few years, we have seen a number of revisits to the baseline because of changes in the calculations, methodologies and assumptions. What impact have those changes had?

**Adrian Gault:** As you say, there have been a number of changes to the inventory. Some of those changes have led to increases in emissions estimates and some have led to reductions in emissions estimates. They have had a significant impact on whether annual emission reduction targets have been met. In looking at the targets, it is important to try to take account of those inventory changes to see what impact they are having. In a sense, the changes are a good thing because they improve—I hope—the evidence base and the way in which the measurements take place. It is important to make those changes according to international standards and keep them up.

**The Convener:** There have been times when the changes have made it easier to hit the targets and times when they have made it more difficult. Will you summarise for us what the overall change has been?

**Adrian Gault:** Overall, the changes have meant that a couple of the targets have probably not been met. More recently, the last two annual targets that have been met would probably have been met even without the inventory changes. The changes made it easier, but the targets would still have been met. That reflects policy measures that have been taken. At least, that has been our assessment.

**The Convener:** Are we at the endgame in that process, or will changes still be made?

**Adrian Gault:** We will almost certainly still make changes in line with improvements in the methodology. It is difficult to say exactly what that will mean. In future, upland peat will be included, and that could make a significant difference to the amount of emissions that are included in the

inventory for Scotland. We do not yet know the exact nature of that difference, but that upward change will happen in the next few years. It is important to bear that in mind when we think about the targets now.

**The Convener:** To what extent has the unanticipated, such as power station closures and fluctuations in the weather—bad winters and good winters—got us to the position that we are in now?

**Adrian Gault:** We have tried to take account of those inventory changes and changes in temperature in our assessments. In the past couple of years, we think that the targets that have been met would have been met even when fluctuations in the weather and the inventory changes are taken into account. That is the good news, as policy seems to be delivering emissions reductions.

A lot of the progress is down to improvements in the power sector. There have been very substantial reductions in emissions and we can expect that there will be more to come in future years. The closure of Longannet power station will lead to a big reduction in emissions, so there are one-off changes.

**Stewart Stevenson (Banffshire and Buchan Coast) (SNP):** Are there areas in Scottish policy, and indeed in United Kingdom policy, in which the policy is ahead of the ability to measure what is going on? For example, in the Climate Change (Scotland) Act 2009, for which I was responsible as the minister, we attempted to account for what was happening in other countries when we displaced production to them. Are we yet in the right position in which to understand the effect of that and to incorporate it in our assessments? Are there other areas in which we are yet to have sufficiently robust information to act on?

**Adrian Gault:** In that particular example, which is about consumption emissions rather than production emissions, there has been an improved evidence base over the past few years. That has improved our understanding, but there are still substantial uncertainties in those calculations. We might have a reasonable understanding of production emissions in the UK, but the evidence on what is going on worldwide, country by country or in groups of countries, is not as strong. Various averages need to be applied to work through those things.

From our evidence, we probably have a pretty good feel for the broad trends and the difference between production and consumption. However, there is still substantial uncertainty about the individual year figures, and some fluctuation has been observed in those estimates in the past.

It is very difficult to estimate emissions in agriculture, for example, but work is being done in

Scotland and the rest of the UK on a smart inventory and improving the methodologies; that will improve the basis for our understanding of the sector and the estimation of abatement potential.

**Finlay Carson (Galloway and West Dumfries) (Con):** On the balance of effort in the climate change plan, are the expected emissions reductions proportionate with actual sectoral emissions, and are they balanced and achievable?

**Adrian Gault:** We feel that the balance of effort across the sectors in the plan is more in line with the reductions that we had in our own scenarios. There has been a shift to less effort in the decarbonisation of heat for buildings and more effort on the transport side. We can talk about where the exact numbers will end up, but that shift has moved the balance of effort more in line with the Committee on Climate Change's view on the cost-effective trajectories. There is less effort in agriculture than we have in our ambitious scenarios, so there is a question mark about the potential for further abatement in that sector.

**Finlay Carson:** If a sector falls short on performance expectations, will that allow slack in other sectors? For example, in agriculture there is a voluntary approach. Do you have a contingency plan for balancing things out, with one sector taking up the slack of another?

**Adrian Gault:** There is not much contingency in any of the plans. We are looking at a high ambition trajectory to achieve a 66 per cent reduction in emissions by 2030 to 2032, and there is not much slack in any sector. We need to see a high level of achievement across the board. There is a question mark over agriculture, which might be able to go a bit further, but there is also an issue about upland peat emissions data, which is yet to come in. When that comes in, there will be a need to look at the abatement potential. That could make things harder going forward.

**The Convener:** However, the projected spend on peatland in the current year's budget raises a question mark over the extent to which peatland will contribute—

**Adrian Gault:** I am sorry—peatland will do what?

**The Convener:** The target for peatland delivery has gone up, but the money that is being directed to it has gone down, so there is a question about the extent to which peatland will contribute. The question is not what it could contribute, but what it will contribute.

**Adrian Gault:** Yes. That will need to be continually reassessed, as will other parts of the plan, in terms of what is achievable. However, my understanding is that, within the climate change plan, abatement from peatland has been included

in the estimates, although upland peat emissions are not yet in the inventory.

**John Scott (Ayr) (Con):** Good morning. I declare an interest as a farmer—indeed, an upland farmer. Where is the crossover between farming and peatland management? Where is the responsibility for peatland management in terms of carbon reduction and absorption and the credit to the farming community for that?

**Adrian Gault:** I am not sure that I can answer the question about where responsibility lies.

**John Scott:** There is talk about absorption by peatlands. Is that a credit to farming, or is it just a credit to peatlands?

**Adrian Gault:** It is a credit to land use and land use change. For part of the inventory, there is a question about how the policy can be incentivised and who gets that return, or who has the responsibility. I do not think that it would appear within the agriculture part of the inventory at the moment.

**John Scott:** Is the management of soils similar? Which part of the inventory is soil management in?

**Adrian Gault:** In terms of the carbon that is sequestered, that would be within land use and land use change. However, the responsibility for that will be with farmers and with the policy for managing that.

**Claudia Beamish (South Scotland) (Lab):** Good morning, Mr Gault. I will take the questions that Finlay Carson asked a little further. You used the term “cost-effective”. From the perspective of the Committee on Climate Change, is there any balance among the sectors in relation to cost effectiveness and equity? A 9 per cent fall in emissions has been highlighted for agriculture; the figures for other sectors are much higher. It is not necessarily any easier to achieve a reduction in transport than it is in agriculture. I would value a comment on that.

**Adrian Gault:** We would not expect every sector to make the same percentage reduction. In part, we would approach that by looking at where it is most cost effective to make reductions. That approach suggests that reductions will occur faster in the power sector, for example, than in agriculture.

There is still a question about what it is cost effective to do in agricultural abatement. The level of abatement for agriculture in the climate change plan is rather less than we have in our high-ambition scenarios, which try to take on board overall cost effectiveness for the path toward 80 per cent reductions by 2050.

**Claudia Beamish:** So your committee has more of a cost-effectiveness position. However, for any

of the Governments to which you give independent advice, the decisions on equity could be more political.

**Adrian Gault:** In the end, those decisions have to be made by the UK Government, not by the committee. We just provide advice. Cost effectiveness is a key part of our advice, but there are a number of other criteria in the legislation that we look to, such as energy security and competitiveness implications. We would have a mind to some of the equity issues within that, but in the end, the Government has to make those decisions.

**Claudia Beamish:** I have a couple of other fairly brief questions—well, they are brief questions, although I am not sure about the answers; it is of course for you to answer.

You will recall that 6 million tonnes of carbon dioxide equivalent from the LULUCF—land use, land use change and forestry—sector has been treated as a windfall to allow for reduced ambition in other sectors. At least, that is some people’s view in Scotland. Is it the Committee on Climate Change’s view that that should have been banked, given what is known about potential fluctuations in future emissions inventories?

10:00

**Adrian Gault:** We think that it is appropriate to take on board that latest evidence and to think about the implications for abatement in other sectors, so we would not necessarily regard it as a windfall. However, there are then questions about whether there is still potential to go further in some of the other sectors, which would mean that we would not entirely bank that. Given the high ambition that the Scottish Government has and the intention to move towards even tighter targets for 2050 and beyond, there are questions about whether it is possible to go further in agriculture, buildings or transport, for example.

**Claudia Beamish:** To push further on that, your progress report states that the climate change plan needs to provide “firm new policies” to ensure that the reductions in Scottish emissions in recent years will continue into the 2020s. It continues:

“The Plan as it stands lacks credibility in meeting the emissions targets to 2032 and fails to prepare properly for deeper decarbonisation in the longer term.”

What concerns has your committee highlighted?

**Adrian Gault:** That comment related to the draft plan and not the final plan, of course.

**Claudia Beamish:** Yes—that is a fair point.

**Adrian Gault:** The committee has not looked at the final plan in detail and assessed it. However, it is clear from looking at the plan that there are still

areas where there is high ambition but still a lot more to do to bring forward details of the policies and instruments that will be used to deliver on that ambition. For example, there is a high level of ambition on the energy efficiency of buildings, but the route map that will be produced for the Scottish energy efficiency programme later this year needs to provide more detail on how that ambition will be achieved. In a number of areas, a lot more policy development work still needs to happen to deliver the ambition.

**The Convener:** To be clear, are you saying that the UKCCC has not taken a view on the final plan? Has the Scottish Government asked you to do any work in that regard?

**Adrian Gault:** We expect to do more work on it as part of our future work plans for the annual progress report. We expect to cover it in the UK progress report, which is due at the end of June and in a Scottish progress report in the autumn. We expect to say something further about it on that timeline.

**The Convener:** Do you anticipate that anything that you say will be taken on board?

**Adrian Gault:** We hope that what we say will be taken on board. In the past, there have been some adjustments to the plans partially in line with the advice that we have provided. I expect what we say to be treated seriously.

**The Convener:** I am just a little surprised that, in the period between the draft being published and the final plan being produced—during which time four committees of the Parliament, along with stakeholders, commented on the draft—the UKCCC had no role in developing any change that might have been made.

**Adrian Gault:** We did not have a role in developing it, other than the fact that we provided advice in our assessment of the draft plan in the progress report.

**Claudia Beamish:** Finally from me, how does the climate change plan compare with and/or build on the UK's clean growth strategy? Are there synergies or stark differences?

**Adrian Gault:** In a sense, they are the same issues, which are about the fact that a lot of the progress that has been observed across the UK and in Scotland in recent years has been in the power sector. We can expect that to continue. However, the issue of moving it out to other sectors of the economy is the same. The level of seriousness and ambition in Scotland is very high and is to be commended. In recent years, there has been more commitment to higher targets, but many of the issues remain. The policies to deliver the ambition have to be developed further.

Scotland has made a good start in doing so, but there is a lot more to do.

**The Convener:** Taking the theme of development further, Kate Forbes has a question.

**Kate Forbes (Skye, Lochaber and Badenoch) (SNP):** I would like to move on to monitoring and governance. What input has the CCC had into the development of the Scottish Government's monitoring framework, and to what extent does it correspond with the CCC's own framework?

**Adrian Gault:** There are a number of similarities in the indicators that are being developed for monitoring in the future. The CCC has such a framework that dates back to 2009, when we started developing a framework of indicators that we would monitor over time. There have been discussions with the Scottish Government on its framework and the indicators that we track and that the Scottish Government might track. However, those discussions have not gone beyond that issue in advising what the framework would be.

**Kate Forbes:** Is the CCC satisfied that the Scottish Government's framework is clear and follows specific, measurable, achievable, relevant and timely—SMART—policies?

**Adrian Gault:** Not as yet. The plan contains an indication of some of the indicators in the Government's framework. However, there is a commitment to producing more on that framework in the autumn, regarding what it will look like and greater detail about what will be tracked and monitored. We expect that we will come back and look at those things in more detail when it has been produced.

**Kate Forbes:** Has the CCC had input into setting up the governance body? Does it have any views on the appropriate structure and functions of that body?

**Adrian Gault:** I do not believe that we have fed into the process on development. If I am wrong about that, I will return to the committee with further advice.

**Kate Forbes:** My last point is about the inclusion of external drivers such as Brexit or unseasonal temperatures as indicators. In developing monitoring frameworks, is there a risk that such drivers will take the blame for failure to meet targets?

**Adrian Gault:** There could always be a risk of that, but that does not mean that it is not appropriate to take account of the impact that significant external drivers have. In the CCC framework, we have included such indicators in our tracking because it is important to take account of them. We would not want to make excuses of them, as you have said, but it is



important to have an indication of the effect that they are having and to consider what that means for the rest of the delivery process.

**Kate Forbes:** So it is fair to include them.

**Adrian Gault:** I think so.

**Kate Forbes:** Thank you.

**Angus MacDonald (Falkirk East) (SNP):** Good morning, Mr Gault. It is fair to say that we are all of the view that behavioural change and public participation are fundamental to delivering emissions reductions. However, as with the first and second reports on proposals and policies, in the sectoral chapters of the climate change plan there is very little mention of communities and citizens. As you know, the individual, social and material—or ISM—approach has been used for the past 10 years to inform policy design in Scotland. However, there is concern that that approach has not moved on significantly since the last plan. There is also very little in the plan about how citizens were engaged in developing the policies that were mentioned in it. In your view, why has the ISM approach not evolved over the past 10 years? Would you say that it is still fit for purpose?

**Adrian Gault:** I do not know enough about the ISM approach to say whether it will be fit for purpose as we move forward. The importance of understanding behavioural influences and how to affect behaviour increases as we move beyond emission reductions in the power sector into a host of individual decisions about how to heat our homes, what car or van to buy and how much to travel. Understanding individual motivations and how to influence them becomes increasingly important, so there needs to be more focus on how that can be achieved.

**Angus MacDonald:** In a blog from the University of Strathclyde's centre for energy policy, Ragne Low highlights the need for behaviour change in transport and notes that the plan's

"emphasis is very much on technology and infrastructure—and the assumed 27 per cent growth in car kilometres between 2015 and 2035".

Have you had further discussions with the Scottish Government on behaviour change?

**Adrian Gault:** I am not aware of recent substantial discussions specifically on behaviour change. There have been discussions on behaviour change and the ISM framework in the past.

We have done a lot of work on some of these issues, and past CCC reports have looked at some of the behaviour change issues in the switch to electric vehicles. Our report on decarbonising heat, which was published towards the end of

2016, contained a lot of work on motivations and how to influence both individuals and business in the decisions that they need to make. Those were UK-wide reports, but they would have been applicable to Scotland.

**Donald Cameron (Highlands and Islands) (Con):** I refer to my interest in renewable energy in my entry in the register of members' interests.

I want to explore progress on cutting emissions in the energy sector. In the context of both the 2020 and the 2030 targets, how might further emission reductions in the energy sector be realised?

**Adrian Gault:** There is still substantial scope for emission reductions from moving further into renewables—in particular, offshore wind—through the contract for difference process and the money that has been set aside for that up to 2025. Substantial progress is still possible in that area with more renewable generation.

There is also potential for nuclear energy. One plant has had the go-ahead and there is the potential for more on a longer time scale, although there are questions about cost effectiveness.

Currently, there is no mechanism to bring onshore wind proposals forward, and that is an issue. We see onshore wind as potentially playing a cost-effective role where local communities want it and are happy to have it. That looks, to the CCC, to be a low-cost route to further decarbonisation.

**Donald Cameron:** What impact does gas-powered generation have on the carbon intensity of the grid?

**Adrian Gault:** That depends to some extent on how much the gas plant is running. There may be a case for some gas capacity, but by 2030 we would not expect that to be running substantially. It could be there for back-up purposes. It would not be consistent to have substantial gas plant running without carbon capture and storage, given the emission targets.

**Donald Cameron:** Exploring that, the climate change plan factors in a role for gas-powered generation in 2050. It says that it is

"a natural complement to a high renewables future".

The Scottish Government continues to assume a certain amount of generation. In your view, what should the proportion of gas-powered generation be? Should it just be an add-on, or should it be a higher proportion of generation?

10:15

**Adrian Gault:** We would expect it to be a very low proportion of generation, to be consistent with meeting the targets for 2030 and beyond. There

may be some capacity there, but you would not expect it to be running frequently, in order to be consistent with meeting the targets. In the longer term, for 2050, there will be less of a role. If we need to get to net zero emissions in the second half of the century, we need to be moving towards even lower levels of generation from fossil fuels, potentially with capture and storage, where it is still there.

**The Convener:** I want to explore the potential for the progress that Scotland aims to make in this area to be undermined by circumstances outwith its control. I am thinking, for example, about four major offshore wind farms having been the subject of on-going legal challenge over an extended period, which has delayed them. There is also the CFD issue with those offshore wind farms. At one point, a couple of years ago, there was a big push for solar power, but that has been undermined by decisions taken outwith the Scottish Government's control. To what extent is progress in that regard volatile, given that the Scottish Government does not control everything that it would want to in order to make that progress?

**Adrian Gault:** There may be some volatility from year to year, and it would be reasonable for those assessing that progress to have regard to that volatility in thinking about how it affects performance against annual targets. If annual targets are in place, that kind of volatility could make a difference. Over time, you would expect those things to even out, so that the overall trend would look more reasonable, but for individual years there could definitely be an impact.

**John Scott:** There is always the potential for other sectors, such as tidal or wave energy—or hydrogen, which was much discussed yesterday. From your vantage point, how optimistic are you that some of those technologies will be game changers? I expect that they will be, but I would be interested to hear your view, as you know a great deal more about it than I do.

**Adrian Gault:** It is important to know about the research that is going on in those areas and to support developments in those new technologies, but we would not bank on their succeeding when making our plans. That points towards the need for a degree of flexibility in plans going forward, in the make-up of generation by different technologies, but at the moment I would not be in the business of incorporating success in those technologies into future plans. If they are successful, that is all well and good. I presume that they would have to be generating at a lower cost than the alternatives in order to be successful, so they are worth some investment, but I would not go so far as to bank on their producing success. They do look very difficult to achieve—particularly wave energy. Those

technologies work in difficult conditions, so there are questions about how far we can go with them and how far we should bank on them while we have alternatives such as onshore and offshore wind, which is coming down in cost very substantially and still offers plenty of further potential to exploit.

**Claudia Beamish:** Let me take you back to your brief remark about the place of nuclear power in the mix and how it relates to other technologies. You will be aware that the Scottish Government's position is not to go forward with nuclear generation at the moment, and it is not part of our energy strategy. Can you comment on the cost-effectiveness of nuclear generation when the waste streams are taken into account? Have those been factored in?

**Adrian Gault:** The costs of the waste streams were factored into the cost calculations. Plants following on after Hinckley would have to come in at a cost that was substantially lower for them to look cost effective against the alternatives. The recent auctions produced a cost for offshore wind that was substantially lower than anyone would have been expecting a few years ago, and wind generation has been a huge success. However, if you are seeking a cost effectiveness comparison with nuclear, I think that nuclear would have to be generating at much lower costs than the plant that has been committed to.

The question, then, is how that would be achieved. I know that EDF and others have plans in that respect and think that some of that cost reduction is possible. However, unless you are convinced by that view, it is difficult to argue that nuclear generation would be cost effective.

**Claudia Beamish:** Thank you.

**Stewart Stevenson:** With regard to annual targets, which you have commented on, we should recognise that, although we commonly talk in percentage terms, those targets are actually based on tonnes of CO<sub>2</sub>. Is there any role for an algorithm that would smooth things out and thereby take account of the one-off or occasional event? Given that your targets are in tonnes of CO<sub>2</sub>, this will always be a long-run thing instead of simply a matter of playing around with percentages, but is there any scope for doing things slightly differently?

**Adrian Gault:** How you want to do this will, in the end, be a political decision. UK carbon budgets are based on five-year periods, which allow for the sort of smoothing that you have referred to; indeed, it is one of the attractions of that approach.

The attractiveness of an annual target is that there will be a policy focus on achieving that target every year. Nevertheless, it is important that, in

looking at that achievement, we take account of some of the factors that can produce variations from year to year, and it will be important politically to have regard to those factors in assessing what is being achieved in policy terms. However, that is a decision not for my committee but for you and other politicians to make.

**Alex Rowley (Mid Scotland and Fife) (Lab):** With regard to new technologies such as tidal energy, is the UK Government making enough of a commitment not only to investing in research and development but to seeing some of those projects through? After all, the Government has pulled the funding for some projects—for example, carbon capture. Is there capacity not in the Scottish Government alone—I know that it is not there—but at the UK level to make the investment that is needed, or is more joined-up working required in that respect? Moreover, will Brexit have an impact on that?

**Adrian Gault:** The clean growth strategy now puts a strong emphasis on innovation and research as well as on higher spending on energy research. I am not in a position to tell you whether that spending is at the right level or enough for particular technologies, but it plays an important part in the strategy's narrative.

That said, it is important not to rely on that as a means of meeting the future legislated targets. Given that we have successful technologies such as offshore wind, we need to focus on their further deployment. We can see that they are generating at a relatively low cost, which points to the importance of deploying some of the newer technologies instead of focusing on early-stage R and D.

The same deployment issue applies to carbon capture and storage. To some extent, the Government needs to invest more in deploying that technology and learn from that approach instead of thinking that early-stage R and D is the answer. We have seen with offshore wind that deployment has brought costs down substantially; the question is whether the same is possible for, say, carbon capture and storage.

**The Convener:** Mr Rowley has rightly raised the issue of Brexit and its implications, one of which is, of course, the question mark over the UK's participation in the emissions trading scheme. Have any of the Governments of these islands asked you to provide advice on the consequences of having some sort of associate membership of the emissions trading system, of remaining in the ETS—if that were possible, it would be quite clear cut—or of the UK setting up its own scheme? Have you been asked to model the options?

**Adrian Gault:** No, we have not been asked by any of the Governments to look at those implications.

**Mark Ruskell (Mid Scotland and Fife) (Green):** I want to ask about reduction of carbon emissions from buildings. In the final plan, we see that plans for emissions reductions in residential sector and service sector buildings have been brought together. Do you welcome that and does it help with the scrutiny of those two sectors?

**Adrian Gault:** That is not something that the committee has discussed, so I will give my personal view, which is that I would rather that they were kept separate. If the sectors are not separated, I would hope that we could keep the components clear. Some of the potential may be different—we may be able to go faster on the commercial side.

**Mark Ruskell:** Why do you think that?

**Adrian Gault:** There might be scope for some larger scale applications of heat pumps or district heating linked to substantial base loads. There may be more potential to go further, faster in that sector than there is in the residential sector, where there might be a host of individual decisions to be made.

**Mark Ruskell:** We have seen quite dramatic change in that area between the draft plan and the final climate plan. The target for the reduction in emissions from homes was 75 per cent, which is now down to 23 per cent, and in the related area of homes with low-carbon heating the target has gone from 80 per cent down to 35 per cent. What is your view on that reduction? Does it reflect the practicality and credibility of steep carbon reduction over a short period or has it gone too far in the other direction?

**Adrian Gault:** The energy efficiency ambition looks very good. There are still questions about the policy to deliver that target, but the ambition is set high. When we commented on the draft plan we said that the targets for decarbonisation of heat were too stretching and unlikely to be achievable by 2032. When we look at the plan's figures on future emissions for heat from buildings, they do not look too different from our stretching scenario. I do not quite understand that and there is further work to be done there.

The ambition on the proportion of heat that would come from low-carbon heat sources looks lower than our suggestion. We thought that the original target for low carbon heat was too high, so we suggested a stretching target of 50 per cent, but the final plan appears to have a lower figure. At this stage, I do not understand why that is the case.

**Mark Ruskell:** When we had a briefing from the Scottish Government, it was indicated that it had brought embedded low-carbon heat, including biomass, into the new target. I do not know whether that may have had some bearing on the target.

**Adrian Gault:** I do not know. We would want to explore that further to consider the difference in definitions and what is being suggested in the plan compared to the scenario that we proposed. At the moment, I cannot quite explain it.

**Mark Ruskell:** We have just had a discussion about electricity, innovation and developing a situation in which we could meet a more stringent target. Where do you see heat supply, particularly for the domestic market, going? The initial plan was very ambitious to 2030, with steep decarbonisation from 2025, which we assumed was to do with putting hydrogen into the gas grid or making a major innovative change to the way in which we supply heat to homes. Is there not a danger that by chopping and changing the target we are sending out mixed messages to industry? How do we plan for a big step change in carbon reduction and the way in which we heat our buildings, if that is not to be through the grid?

10:30

**Adrian Gault:** First, we have to get on with the things that look like being cost-effective solutions over the next few years. Hydrogen or something else might be the long-term option, but there are things that we can do now that are worth doing, regardless of what the final solution might be. Those things include tightening the building standards for new build; improving energy efficiency and insulation levels in the existing stock; implementing district heating schemes from low-carbon sources, where that is cost effective; and starting to develop the heat pumps market and supply chain through investment in heat pumps, probably off the gas grid, initially. There is more emphasis on building supply chains and so on in the climate change plan than there is in the draft.

Following that, work needs to be done on what the longer-term solutions might be. For example, with regard to hydrogen, we need to consider the public acceptability issues, the likely costs and so on. Work needs to be done to pilot the approaches so that, in the early part of the 2020s, Governments can make decisions about what they think that the long-term solution might be and whether it will involve hydrogen at all or will involve, for instance, electrification through heat pumps, as well as the extent to which the solution involves district heating. We are not ready to make such decisions now, but that does not mean that there are not things to do in the meantime that will

make sense regardless of what the long-term solution is.

**Mark Ruskell:** When do you expect there to be clarity about what that step change will be and how we can deliver it? I hear what you are saying about the fact that there is more clarity now around the low-hanging fruit and the immediate measures that can be taken in the next five to 10 years. However, major gas suppliers and so on will want to know when the trigger point is for more substantial change in the way that we heat our homes.

**Adrian Gault:** The committee has said that we need that steer in the first half of the 2020s—by 2025, and the earlier the better. However, that decision cannot be made now. There has to be a learning phase where things are demonstrated in a way that enables us to understand them better and understand more about their costs. Further, if hydrogen is part of the route forward, that will have to go along with carbon capture and storage, because reformulation of natural gas would be the route to the production of hydrogen. If that process is to be a low-carbon process, it will need to involve carbon capture and storage. That needs to come back on the table and be developed as an option if hydrogen is to be part of the long-term solution.

**Mark Ruskell:** So you do not see the route to hydrogen production involving renewable energy.

**Adrian Gault:** It is possible that some hydrogen could be produced through that route. However, because of the scale that we are talking about and the level of cost, the committee's view so far has been that production is likely to involve the reformulation of natural gas. We are doing more work on hydrogen, and we will produce a report on the hydrogen option this autumn. That will provide more details about the options and potential costs and where the hydrogen can be used.

**Stewart Stevenson:** Carbon capture involves at least five different technologies. For clarity, are you talking purely about pre-combustion carbon capture rather than post-combustion carbon capture?

**Adrian Gault:** In this case, I think that that is right. I will get back to you if I am wrong.

**Richard Lyle (Uddingston and Bellshill) (SNP):** I will turn to the issue of emissions from transport. The climate change plan undertakes to phase out the need to buy petrol and diesel cars or vans by 2032. That is only 14 years from now. You say that, by 2030, 60 per cent of the sales of cars and vans could involve ultra-low emissions vehicles, and, by 2035, that figure could be close to 100 per cent.

Is it the case that if we are to convert our transportation to ultra-low emissions vehicles, we will need more electric cars on the road, which means that we need to vastly increase the number of charging points on the roads and ask builders to install more charging points when they build houses?

**Adrian Gault:** Yes. To achieve that level of ambition, there will be a continuing need to invest in the charging network. That investment is happening: in recent years, there have been significant increases in the number of fast and other chargers that have been available in Scotland. If there are opportunities through planning mechanisms to build charging points into new-build estates, that makes sense and is worth doing now.

**Richard Lyle:** Builders install telephone, satellite and wi-fi points. Should we not be telling them to install charging points for electric vehicles? Should that not be a condition?

**Adrian Gault:** I do not think that the Committee on Climate Change has come to that view and said that yet. It seems to me—

**Richard Lyle:** It is something to think about.

**Adrian Gault:** —to be a very sensible thing that should be required.

**Richard Lyle:** I will move on. I have a diesel motor car. Should a Government—or anyone else—provide an interest-free loan to encourage me to change my car? How will we convince people to change? Is our 2032 target feasible?

**Adrian Gault:** The Scottish Government's 2032 target goes beyond the ambition set out by the Committee on Climate Change, which is more stretching than the UK Government's target. Is the target feasible? Yes, it is feasible to achieve the target to that timetable with policy effort to back it up. That will happen through not just the availability of the charging network, but communication to people about the network that covers what it involves and what is required. We need to reassure people about its capability.

The grants that are available for the new purchase of electric cars and vans will need to continue while those vehicles are more expensive than the conventional alternative. By the early 2020s, electric vans and cars in particular will be cost competitive with the conventional alternatives, taking account of the life-cycle cost. We are not in that position now, and as long as they continue to be more expensive, we need to continue with the grants, or a similar mechanism, to encourage purchases.

**Richard Lyle:** I know that you do not have a crystal ball, but do you agree that we would have to ensure—either through Governments or

charging mechanisms—that the cost of charging an electric vehicle is substantially lower than the cost of putting fuel into a vehicle?

**Adrian Gault:** We need to maintain a position whereby costs are lower for electric vehicles. The up-front cost of electric vehicles is higher than the conventional alternative. To make them cost-effective, there needs to be a lower fuel cost over time.

**Alex Rowley (Mid Scotland and Fife) (Lab):** I will follow up on that. To what extent is this issue about what other policies we are able to come up with? To what extent is it the carrot-and-stick approach? When the Cabinet Secretary for Environment, Climate Change and Land Reform gave evidence to this committee, she said that increases in transport demand are “driven by the economy”. I can see where that is true—for example, shopping patterns have changed and we now shop much more online. If transport demand relates to commercial rather than personal transport, is there a way in which the Government can start to put pressure on companies to make the shift towards the use of electric vehicles?

Another issue that is talked about is low-emission zones in cities. What is your experience of the London congestion charge? Has it worked? Has it reduced emissions? Does it have a role to play?

**Adrian Gault:** Transport demand is very important and needs to be considered further. Despite the fact that the Scottish Government's climate change plan is now based on moving to 100 per cent electric sales by 2032, which is faster than our trajectory, the projected level of transport emissions in 2032 is above the level in our scenario. I do not understand at the moment why that is the case. I would have expected the transport emissions level in the Scottish Government's plan to be a bit lower than that in our scenario, but it could be a reflection of a higher level of transport demand than that in our scenario. We will have to look at that further.

Transport demand is dependent, to an extent, on income growth—there is a long-established relationship in that regard. However, we have a role in considering how we can reduce transport demand through work on individual travel planning and work with the business sector. Our scenarios have a relatively small amount of that modal shift. I am keen to look further at how much of that shift is included the Scottish climate change plan, because that could explain the higher level of emissions in it compared to the level in our scenario.

On the emission zones, I regret that I do not have the figures for London, but I think that the London scheme has been quite successful in

reducing the levels of traffic and emissions because of the incentives that the scheme has provided for using electric or low-emission vehicles. Other countries have achieved similar levels of success in that area. For example, Norway has the highest level of electric vehicles in its new car sales—it is substantially higher than the couple of per cent that the United Kingdom has reached—which is partly down to tax issues and partly down to the provision of bus lanes and local incentives such as lower-cost parking. Those kinds of mechanisms can be used to provide softer incentives to encourage the take-up of electric vehicles.

**Alex Rowley:** I have a couple of questions on cycling. The cycling action plans seeks to deliver an 8 per cent increase in everyday journeys on bikes by 2020. Is that ambitious enough? Indeed, I ask myself whether it is even realistic. What joined-up work from the Government is needed on that? How do we increase the level of cycling in, say, Edinburgh, the capital city of Scotland, given that driving along the roads there is like an assault course, never mind what it is like for those on a bike? Do we need more joined-up thinking around that? It goes back to Angus MacDonald's question about taking people with us. In the press in the past number of weeks in Scotland, cyclists have been talking more than anybody about the state of the roads, particularly those in the cities, and saying that it is not safe to go on a bike. Is the 2020 target in the cycling action plan realistic? Do we need more joined-up thinking? Do we need to start to engage more with people—in this instance, cyclists—to talk about what the issues are?

**Adrian Gault:** My understanding is that the proportion of trips currently undertaken by cycling is very low—perhaps a couple of per cent—and is nowhere near the ambition of the target. I cannot say whether the 8 per cent target is high enough, but I can say that we are nowhere near achieving it at this point. That suggests that there are a number of barriers to achieving the target going forward. There would therefore have to be discussion about how a host of issues could be joined up across sectors, including issues such as the state of the roads. However, substantial amounts have been achieved in different cities, so there should be lessons in that for Edinburgh and elsewhere.

10:45

**John Scott:** Will you briefly explore modal shift and the practicalities of getting people on to bikes from cars? The reality might well be that people will move to buses more readily, given the state of the roads and the ageing profile of our community—myself included. I am the recipient of a bus pass and have gone from being a point-to-

point person in a car to someone who totally enjoys travelling on buses as a new way of moving around. Bus use could be encouraged. Will you talk about that and the possibility that that might be the solution for low-emission zones in cities, particularly in Scotland?

**Adrian Gault:** Without in any sense downplaying the importance of trying to shift towards more cycling, the journeys that would potentially be shifted through that would probably be the shortest ones. They might be a significant proportion of journeys, but they probably account for a relatively small proportion of the overall carbon and transport carbon. There is the potential for a greater shift in carbon emissions to be made through modal shift towards buses. They can take a higher proportion of journeys, and a higher proportion of carbon could potentially be reduced through that mechanism.

**Mark Ruskell:** To finish our questions on the theme of walking and cycling, we have quite a clear route map to achieving very high cycling rates: we just need to look at what happens in the Netherlands, Denmark and major cities. Where is the gap? Do you see a blueprint there—particularly in cities across Europe—for how to develop very high walking and cycling rates? Is there a gap between what we have in Scotland and across the UK and what there is elsewhere? Is it best to build things up the way from city action plans, or is a national policy that works from the top down as well as from the bottom up required?

**Adrian Gault:** I suspect that local plans will be very important. That does not mean that there cannot be national ambition and guidance, but I suspect that a bottom-up approach at the local level will be very important, because the issues will be different in different localities. However, there is a lot to learn from areas, cities and countries in which there has been success in that area.

I go back to the point that I would not want to get too hung up on the carbon benefits of cycling because, in the end, a relatively small proportion of transport emissions can be shifted by cycling. There may be huge benefits from such a shift for other reasons—health benefits, for example—but I suspect that a relatively small proportion of carbon can be shifted by cycling.

**Mark Ruskell:** But is investment in cycling cost effective?

**Adrian Gault:** Yes, it probably is.

**Mark Ruskell:** Is it more cost effective than investment in electric vehicles?

**Adrian Gault:** Both should be invested in, to the extent that they are cost effective compared with our assessment of what is needed to meet the

future targets, but cycling cannot be relied on to achieve anywhere near the level of decarbonisation that the shift towards electric vehicles will achieve.

**Stewart Stevenson:** I draw attention to my entry in the register of members' interests, which shows that I have shares in a local wind farm. To give context, that gives me an income of £36 a year; nonetheless, it is appropriate to declare that, as I want to talk about the industry.

How does the proposed 21 per cent emissions reduction in the industrial sector to 2032 compare with the Committee on Climate Change's scenarios?

**Adrian Gault:** I think that that figure is a little but not hugely below our scenarios. It relies on a number of mechanisms, particularly the European Union ETS, which is not within the Scottish Government's control. There is some energy efficiency improvement in there, as well. Longer term, there is still an issue about the necessity for carbon capture and storage in order to meet the 2050 targets, because we will need that mechanism in order to decarbonise the industry.

**Stewart Stevenson:** Are you implying that carbon capture and storage should apply to industry beyond power generation? In previous contributions, you seem to have suggested that, in essence, combustion as part of power generation will be all but eliminated by 2050.

**Adrian Gault:** I certainly see carbon capture and storage as necessary for industry in the long term. In a sense, decarbonisation of the power sector could happen without much of a contribution from carbon capture and storage, but it will be required for the decarbonisation of the whole of industry or for the substantial decarbonisation that will be needed to meet the long-term targets. As the work of our committee and others such as the Energy Technologies Institute has made clear, the overall costs to the economy of meeting the 2050 target will be doubled if we do not have carbon capture and storage. However, that is largely an industry issue.

**Stewart Stevenson:** I referred earlier to the different technologies that exist. Recently, there has been a lot of focus on retrofitting power stations, but that, I think, has come off the agenda; building new power stations is a quite different activity, but we also have to think about the different technologies that apply to different industrial processes. Such technologies are still immature, so I understand the difficulties in doing this, but has your committee carried out any research on the matter and, indeed, the economics in that respect and do you have any conclusions that you can share with us?

**Adrian Gault:** We have done quite a lot of work on carbon capture and storage, and I will, if I may, send you a link to the relevant work. We have taken a substantial look at the issue and have made suggestions to the UK Government about how it might be taken forward that are largely consistent with Lord Oxburgh's review of the matter.

Clearly, carbon capture and storage comes with a cost, and that cannot be avoided. However, we have seen how the deployment of offshore wind, for example, has brought costs down substantially, and our view is that deploying carbon capture and storage is likely to result in the same kind of cost reduction.

**Stewart Stevenson:** One of my colleagues has already referred to the EU ETS, but moving on from his question, I note that there was international trading between Japan and Latvia in 2009, and there has also been trading between Japan and Ukraine as well as other international trades. Does that suggest that, post-Brexit, the UK would not really need to be forced to be a member of the EU ETS, although there might be some administrative advantages in being a member? Will it be able, if it so chooses, to buy and sell in the international markets that are beginning to develop?

**Adrian Gault:** There might be the potential to link to other schemes that are beginning to develop—China, for example, is developing schemes. In principle, however, we see advantages to the trading mechanism in the EU ETS.

**Stewart Stevenson:** Is that simply because it is probably the biggest scheme in the world at this time?

**Adrian Gault:** At this time, it is the biggest. Of course, the EU ETS could link to other schemes, too, so there are advantages to being part of a bigger market. If we are not part of the EU ETS, the Governments will have to decide what mechanisms should be used to maintain some kind of trading role.

However, our view has always been that, in the long term, emissions reductions ought to be achieved domestically instead of relying on trading. Trading may have a role in smoothing and reducing the costs of the transition but, in the end, everybody has to get their emissions down very substantially. We have a target of net zero in the second half of the century, and trading is likely to be a part of getting to net zero.

Some countries are likely to have greater potential advantage than others in removal technologies, so there may be a degree of trading there. However, for the long term, the UK focus should be on how we reduce our emissions

without thinking that we can buy our way out through trading. We expect such trading to be very expensive in the longer term, given the requirement for everybody to reduce their emissions.

**Stewart Stevenson:** Let me just post the point that I am encouraged by your attitude to trading.

To close off this line of questioning, are there any particular opportunities to reduce emissions in industry that Scotland is missing out on and which are within our competence? The answer might be no.

**Adrian Gault:** I come back to the need to think further about carbon capture and storage and the potential in that respect at Grangemouth and other industry clusters. There is also offshore potential for storage. The Scottish Government is currently funding a pilot, but it is pretty small scale, and the UK Government plans are also pretty small scale, with substantial focus on usage at the moment. For the long term, we have to get carbon capture and storage to reduce industry emissions, so that area needs more focus.

**Stewart Stevenson:** The little work that is going on is in my constituency, so I am interested in it. We have a huge advantage, in that one of the depleted fields was a sour gas field, so the quality of the piping is already suitable for carbonic acid, unlike most piping.

**The Convener:** Looking briefly at opportunities, what potential does blue carbon have for Scotland in this regard?

**Adrian Gault:** I am sorry, but the committee has not looked at blue carbon in any substantial detail. I think that the issue was covered very briefly in our last risk assessment report, but we found that the evidence base was very thin. The evidence is developing, so I am sure that the committee will come back to the issue in future. At the moment, my understanding is that it is potentially of relatively high importance for Scotland compared to the rest of the UK, but I know little more than that. The committee will come back to that.

**The Convener:** I hope that it will, and my colleague Claudia Beamish certainly hopes so, as she has taken a particular interest in that.

We considered earlier the impact of revisions to the baselines that we work to. In the land use sector, how robust is the methodology for calculating emissions from forestry and peatlands? Should we anticipate revisions in those figures?

**Adrian Gault:** We should absolutely anticipate that there is the potential for such revisions, and we should think about how we plan for that and take it into account. However, it is difficult to anticipate what the size of those revisions might be. The Scottish Government asked us to advise

on how targets might be amended or reconsidered in the light of inventory changes that have occurred, and we wrote to the Scottish Government in, I think, December to set out the committee's views on that. We suggested that the important thing is to maintain policy effort, because it is important to have stability and understanding of what is required from those who are taking forward the mitigation.

Changes in the inventory could make meeting the existing target easier or make it more difficult at very late notice. However, the committee's view is that policy effort should not be increased or reduced because of that. Rather, it is better to assess progress against an adjusted emissions inventory that is consistent with the emissions inventory at the time when the target was set and then, after a five-year period, to reconsider the accumulation of the inventory changes over that entire period and think about whether the targets should be revised or amended. In the long run, the targets need to be consistent with the science. We should not expect year-to-year variations in policy effort as a result of variations in inventory, but we should have a mechanism that allows for the targets to be met in the longer term.

11:00

**The Convener:** If we look specifically at forestry, although Scotland presently has 70 per cent of the trees that have been planted in the UK over the period of RPP2, the average was still only 6,700 hectares per year. We now need to move to an average, between 2012 and 2022, of 10,000 hectares every year. How does the Committee on Climate Change view the measures that are in place to deliver on that, such as the forestry grant scheme? Is it viable to hit those targets?

**Adrian Gault:** I think that the target goes out beyond 10,000 hectares—it goes to 15,000 in the longer term, which is consistent with the committee's view about what is necessary. We think that it is viable to achieve that. I am sorry that I do not have an exact answer on whether the plans that have been set out will be sufficient to achieve that, but it will clearly need substantial policy effort and support for that afforestation. We think that it is an appropriate level of ambition.

**The Convener:** But you are not yet sure whether it is achievable.

**Adrian Gault:** We think that it is achievable.

**The Convener:** I should have said that you are not sure whether it will be achieved.

**Adrian Gault:** We have not yet done a full assessment of whether it will be achieved with the current policy.



**John Scott:** It is fair to say that there is a deal of antipathy in agricultural circles towards planting, and I am not certain whether the measures that are in place will sufficiently encourage what is planned. How do we balance the need for more forestry, more timber and the sequestration that that provides against the need for food production?

**Adrian Gault:** The Committee on Climate Change is currently doing a bit of further work on land use change and what might be required. That will include looking at how we can balance the need for afforestation against the need for food production, as well as the potential need for bio-energy crops. There are significant issues about that balance. We need to think about the cost-effective potential in different areas. Also, if we need to get to net zero emissions, which is a Committee on Climate Change target, we will need these kinds of negative-emission technologies, so there has to be a substantial role for appropriate afforestation and for using wood in construction. That may not entirely answer your question.

**John Scott:** It is probably one of those imponderables. Why do you think there has been so little progress in the agriculture sector to date? Do you think that it is to do with profitability, a lack of knowledge or other factors?

**Adrian Gault:** I suspect that it is connected with profitability and lack of knowledge, and it is also connected with the voluntary approach that means that it is those who have the greatest commitment who are likely to take up planting. However, we have not seen a reduction in agricultural emissions in Scotland for the past six or seven years, as I understand it. They are pretty flat, so it would appear that the voluntary approach is not working. The question for my committee is whether thought should be given to moving towards a more regulated approach that would still retain elements of information exchange and availability—it would have to—but which would not be voluntary and would be compulsory or incentivised in other ways.

**John Scott:** Do you accept—given the sophistication of current food production and its being quite a refined process—that in interfering with the food production system simply to maximise profitability, there is a huge difficulty in also moving towards carbon reduction? There is a need for much greater knowledge transfer. Witnesses at the Environment, Climate Change and Land Reform Committee have suggested that although the knowledge exists, the livestock, agricultural and cropping industries are not entirely aware of what is expected of them or of how to achieve it. Is that a fair comment?

**Adrian Gault:** That may well be a fair comment, but there are schemes to provide information, so there is a question about why they are not working. If they are widely not working, they need to be evaluated; if they are not producing results, we must consider the alternatives and how we can go beyond that provision. Information provision will still be part of the answer, but perhaps incentivisation through other routes is also needed.

We are talking about farmers maximising their profitability: if they do not take account of social costs in that profitability decision, they will not make decisions that are appropriate for society as a whole. We need to bring such decisions more into line, which suggests a move towards other mechanisms to incentivise use of abatement measures, rather than our just relying on the voluntary approach.

**John Scott:** I sense that I already know the answer to this question, given the tone of what you have just said. Is the Scottish Government wrong to reduce the targets for the agriculture sector from 12 per cent to 9 per cent?

**Adrian Gault:** That is an area in which the Government should be considering the potential to increase targets, rather than to reduce them. Incentive mechanisms might well be needed in order to produce the desired results. Agriculture emissions in Scotland make up 20 per cent of the overall total, or perhaps slightly more, so the potential for agriculture to contribute to long-term reductions really needs to be examined.

**John Scott:** I think that the figure is 17 per cent for agriculture.

**Adrian Gault:** The figure in my head was 20 per cent, but you might be right.

**John Scott:** Can you speculate on what alternatives the Government should consider to help to deliver the bigger reductions?

**Adrian Gault:** Previously, the Scottish Government said that it would introduce compulsory soil testing—pH testing and testing for nutrients. It has moved away from that position, but it could come back to it. Compulsory testing would provide more information that farmers could use for nutrient management.

It could be considered whether payments to farmers could be reformed to encourage uptake of mitigation measures. We have that opportunity through Brexit: there may be an opportunity to reform the payments system to encourage greater mitigation effort by farmers.

**John Scott:** Does anything in particular stand out as being worth doing?

**Adrian Gault:** It might be worth our while to consider the most effective and efficient use of fertilisers, which might also be good for farmers in the longer term. We should consider mechanisms to incentivise appropriate use of fertilisers. I do not have an exact policy recommendation, but there is potential for that to be reasonably good for farmers in the long term and good for reducing emissions.

**John Scott:** I would prefer the voluntary approach to continue, but I speak from a position of open self-interest. Do you agree that, in the longer term, a voluntary approach is better than a regulatory approach?

**Adrian Gault:** If the voluntary approach were to deliver the emissions savings, that would be excellent. It is important to evaluate the current voluntary approach. I am not aware that there has been a substantial evaluation, as yet. Work has been going on with the Scottish Government on what the approach has achieved, so the next step might be to have a serious look at what it has delivered. If we look simply at the level of agricultural emissions, it appears not to have delivered much, but there may be things that we can learn from the voluntary approach that we would want to retain.

**Mark Ruskell:** Have you had contact with the Scottish Government on a voluntary approach to soil testing, in particular? Has there been active discussion about policy on that?

**Adrian Gault:** I do not know what discussion there has been in the teams, but our past recommendations and advice to the Scottish Government, in our progress report and past UK progress reports, have included advice on the need to move beyond the voluntary approach.

**Mark Ruskell:** Were you given reasons for the statutory approach to soil testing having been rejected?

**Adrian Gault:** I am not aware that we were given reasons for its having been being rejected. However, we could look at the climate change plan to see what reasons have been given for the approach that has been taken.

**The Convener:** To wrap up, let us look to the future and the climate change bill that is coming down the track. Stewart Stevenson has a question on that.

**Stewart Stevenson:** During your earlier contributions, you identified a number of areas in which Scotland could perhaps do bigger things than the UK. The one that you mentioned most recently was the distant prospect of blue carbon. Are there other areas in which the 2050 targets that we expect to be incorporated in the proposed climate change bill could be more ambitious than those in the rest of the UK? If so, why?

**Adrian Gault:** Scotland can go further in terms of the contributions of afforestation and use of wood in construction. In the latter, it already has substantially higher levels than the rest of the UK. Scotland is also more ambitious in terms of the move towards electric vehicles. It could, however, look at going further than its current plan on decarbonisation of heat. Scotland also has a slightly higher proportion of buildings that are off the gas grid than the rest of the UK has. Those are areas in which it may be appropriate to go relatively early, and faster, on decarbonisation—for example, through moving towards use of heat pumps. There is also the potential to go further and faster on energy efficiency improvement, on which Scotland has ambitious plans.

**Stewart Stevenson:** I speak as someone who is off grid and whose spouse has researched heat pumps and has wanted to go down that route. However, having established that the nearest servicing engineer would be two and a half hours' drive away, we have decided not to proceed. The nearest oil heating engineer to me is six miles away and can be summoned very readily. Lack of support is one of the big issues in attracting off-grid people, so there are broader policy issues. However, that is just an observation and really should not inform our discussion.

I move on to net emissions accounting. How will that help us in the future, as regards dealing with inventory revisions?

**Adrian Gault:** Do you mean the move towards measuring just the gross emissions?

**Stewart Stevenson:** Yes.

**Adrian Gault:** Gross emissions accounting will help, in the sense that there will be clarity about what is being aimed at. It is very difficult to explain the concept of net emissions accounting. On clarity on targets, it helps to explain what the targets are and the measures that need to be in place to achieve them. That is consistent with the need to get domestic emissions down in the long term, rather than trading emissions. Some complexities might be introduced because in moving away from that approach, there might be more pressure on industry to reduce emissions rather than to trade them out at potentially lower costs. In moving towards gross emissions accounting, we need to be careful either that the measures that are expected of industry do not come at excessive cost, or that compensation mechanisms are available to deal with those industry costs. We do not want to impose higher costs than countries with which we trade.

**Stewart Stevenson:** Nonetheless, given your previous remarks about the undesirability of depending to a significant degree on trading, it would be appropriate for industry to focus on its

emissions rather than on netting them off by other mechanisms.

**Adrian Gault:** Yes. We came to the conclusion that switching to gross emissions accounting is an appropriate and sensible way forward, but it does not rule out trading, as a mechanism. We need to be alive to competitiveness implications, but we think that there are ways to deal with them.

**Stewart Stevenson:** Have you talked with the Government about the interim targets for 2030 and 2040?

**Adrian Gault:** Yes—in so far as we have advised on the 66 per cent reduction target for 2030, and we have suggested an interim target for 2040 that would be consistent with a 90 per cent reduction target for 2050. A 90 per cent reduction target is at the limits of what we think can be achieved, in our current scenarios.

**The Convener:** That concludes our questioning. Thank you very much for your time, Mr Gault. It has been a useful session.

11:16

*Meeting suspended.*

11:20

*On resuming—*

## Scottish Crown Estate Bill: Stage 1

**The Convener:** The third agenda item is to take evidence on the Scottish Crown Estate Bill at stage 1. We will focus on stakeholders who are directly affected by the management of Crown Estate assets.

I welcome Patricia Hawthorn from Scottish Renewables, David Sandison from the Scottish Salmon Producers Organisation, Mark Simmonds from the British Ports Association and Dr Alan Wells of Fisheries Management Scotland. Good morning to you all. We move straight to questions.

**John Scott:** Good morning, and thank you for coming.

I note the diverse range of backgrounds from which you come. What are your experiences of the Crown Estate and Crown Estate Scotland (Interim Management)? In your view, what makes for good estate management? Discuss.

**Dr Alan Wells (Fisheries Management Scotland):** We have wide-ranging discussions with the Crown Estate. The Crown Estate owns about 140 salmon fisheries across Scotland. It sits on several of the boards of our member organisations, the district salmon fishery boards. We have a close relationship with it on the management of wild fisheries.

We also work with the Crown Estate on salmon farming, marine renewables and other developments in the marine environment. For example, we are working with the Crown Estate on identifying and assessing methods of monitoring potential impacts on wild fish with regard to Aquaculture Stewardship Council certification for fish farms and the environmental management plans that come through the planning process for salmon farming.

We work with the Crown Estate on marine renewable leases—we have done a lot of work on the potential impact of marine renewables and offshore wind farms on migratory salmon and sea trout.

**Patricia Hawthorn (Scottish Renewables):** Good morning. I am here in my capacity as a director of Scottish Renewables, but I am also a partner in the law firm Shepherd and Wedderburn, which acts for a number of offshore developers, both tidal and offshore wind. I am happy to answer questions from both perspectives, although I am primarily here to represent Scottish Renewables.

The engagement that we have with the Crown Estate is largely through its role as a landlord in the offshore sector in relation to offshore wind and marine wave and tidal projects. In anticipation of this committee session, I spoke to a number of our members. The description that the Crown Estate offered up for itself on its involvement with renewables as being a

“landlord, catalyst and supportive partner”

would broadly be echoed by the industry and most of our members.

The relationship is triggered by the lease process, but the Crown Estate has also been influential in bringing forward licensing rounds for the development of projects and in participating in the delivery of the projects. The supportive role has been important and has ranged from participating in consultations to helping to fund and manage enabling works in the early stages of projects.

Broadly, our engagement is through that landlord and tenant context, but the relationship is a bit wider than that.

**John Scott:** Do you expect that positive relationship that you have had to continue into the future?

**Patricia Hawthorn:** Yes. It has been broadly a positive relationship and an effective and efficient management process.

**David Sandison (Scottish Salmon Producers Organisation):** Likewise, our relationship with the Crown Estate is mainly based on its being a landlord. We have a significant number of sea bed leases around Scotland’s coastline. Our needs and the scale of the sites that we require for our industry to move forward have developed rapidly over many years, and the landlord-tenant relationship has been productive over that time. Indeed, it is the fundamental relationship, and we view the Crown Estate as a body that has supported our development plans over the years.

**Mark Simmonds (British Ports Association):** My association represents the overwhelming majority of ports in Scotland, and most of our members’ engagement with the Crown Estate comes about because the Crown Estate owns most of the sea bed and, in order to carry out and fulfil their statutory duties, our members have to work with it on leases and licences for, say, dredging and maintaining navigable channels. Not all our members have always found that process to be the easiest; it has sometimes been difficult or time consuming, and at times it has added to development costs or caused delays.

In answer to your question about what would be good as far as the management process is concerned, I would say responsiveness; working

with the users of the assets; and ensuring that the process remains affordable. Obviously our members cannot move elsewhere, and they will have to work with the manager of the asset.

**The Convener:** Are you reflecting the view across the UK of dealings with the Crown Estate, or are you talking specifically about the experience in Scotland? Is there a difference?

**Mark Simmonds:** We have found the experience across the UK to be quite similar, but I am speaking today on behalf of our Scottish members.

**The Convener:** I was just wondering, because I am interested in finding out, as we move to Crown Estate Scotland, whether you are identifying opportunities for things to be done better.

**Mark Simmonds:** There is definitely an opportunity for things to be done better, but it remains to be seen whether it will be taken.

**The Convener:** Have the delays that your members have been confronted with arisen as a result of environmental concerns, local concerns or other concerns, or have they been caused by the process itself?

**Mark Simmonds:** It is quite often just the process of, say, extending leases or getting licences for certain activities for which, as I said, our members are statutorily responsible.

**The Convener:** Thank you.

**Claudia Beamish:** I want to ask Alan Wells about his perception of the interface between him and the Crown Estate. Has the experience been positive in the past, and will it be positive going forward?

**Dr Wells:** In general, it has been positive, but because we are dealing with the Crown Estate on a range of issues, the experience with regard to each might well be different.

With salmon fishing, we have had a very positive relationship with the Crown Estate, which leases its fishings occasionally to private owners but very often to angling clubs. As I have said, it also participates on the district salmon fishery boards. We are in favour of the management of those fisheries being devolved further, because that will have lots of benefits not so much from an economic perspective but from a wider environmental and social perspective with regard to encouraging access to fishings and getting more people fishing, which is an issue for our sector.

As far as salmon farming is concerned, the Crown Estate takes more of the landlord-type approach that has been highlighted. It is one of a number of elements of the regulatory system, which the committee has previously looked at, and

I think that there is a lot of scope for bringing things together and having a much more coherent system of regulation. The Crown Estate has a role to play in that respect, but as far as our interactions are concerned, we have been involved in several projects with it and our experience has always been very positive.

With regard to marine renewables, we were involved in the MeyGen development on the north coast, and the Crown Estate provided some support in getting people around the table for that project. Again, the experience was positive, but one of the things that we would like to see in the bill is a greater emphasis on sustainable development instead of the economic development that has been emphasised in the past.

11:30

**Claudia Beamish:** I will turn to the issue of environmental protection—I assure everybody that there was no plan to have Alan Wells set up my question.

Our committee and our predecessor committee have taken a strong interest in mission statements relating environmental protection. Perhaps the bill gives us an opportunity to clarify some of the issues around that.

As you know, the bill says that managers of assets

“must maintain and seek to enhance ... the value of the assets, and ... the income arising from them”,

and that they “may”—I stress the word “may”—do so in a way that contributes to wider objectives, including “environmental wellbeing”.

In their submission, Professor Ross and Professor Reid suggest that the bill could be amended to “require” managers to take into account the considerations that are listed in section 7(2). They also point out that sustainable development

“encompasses environmental, social and economic wellbeing”.

Would it be valuable to change “may” to “is required to”? Do you have any other comments in relation to environmental protection?

**Mark Simmonds:** This might not be a popular view, but I am not entirely sure that that would be necessary, because you already need to prove that any activity or development that you undertake that has an impact on the environment takes those considerations into account. I am not sure whether the change that you suggest would add an awful lot—it would simply replicate what developers already do.

**Claudia Beamish:** In relation to the Crown Estate, the point concerns

“the value of the assets, and ... the income arising from them”,

and whether there should be an obligation to take sustainable development and other objectives into account in the business plan and so on. Your comment is fair enough in terms of applications, but there is a broader issue.

Are there any other comments?

**Dr Wells:** I think that it would be a useful addition. Professor Ross and Professor Reid mentioned that there was a similar duty in the Climate Change (Scotland) Act 2009. Also, the Marine (Scotland) Act 2010 says that

“In exercising any function that affects the Scottish marine area ... the Scottish Ministers ... and public authorities must act in the way best calculated to further the achievement of sustainable development”.

The proposal that you mention is consistent with other legislation, and it would be good to see it in the bill.

**Patricia Hawthorn:** We would not have any fundamental objection to sustainability being part of any decision-making process, certainly in the renewables context. Looking at the bill, I do not think that that is the purpose of the provision. I think that its purpose is about balance and people’s ability to move away from that value judgment. That is how I read it, in any case, in conjunction with section 11.

I agree with Mark Simmonds that there are other regulatory controls that are focused specifically on sustainability and environmental protection. We have to get all the forms of regulation to sit comfortably with and respect one another, and not all to be looking at the same thing. We would not be fundamentally opposed to the proposal, but I am not convinced that it is necessary.

**David Sandison:** We hold a similar view on whether the proposal is necessary. We would like as many opportunities as possible to be taken to ensure that there is good alignment with other regulatory regimes, of which there are many in the marine context. There must be alignment with national planning and marine planning, and regard must be given to the fact that there is already significant environmental protection regulation around our activities.

We would like a cohesive bringing together of the planning functions and the Crown Estate in order to make the system beneficial to all. From that point of view, we would not have any particularly strong views about whether the proposal is required.

**Claudia Beamish:** I do not think that I am making the question clear. The point is about the assets of the Crown Estate. Managers of those assets have a serious responsibility to maintain and seek to enhance

the value of the assets, and ... the income arising from them".

In the context of responsibilities in reserved areas that will no doubt transfer at the point of devolution, should there be an obligation on the Crown Estate to look at the provision in relation to decisions on assets, rather than regulation? I hope I am being clearer.

**The Convener:** You have thrown them.

**Dr Wells:** I will give an example that might help. I mentioned salmon fishings, which are largely in the central belt. They tend to be on rivers that are not necessarily of high value in comparison with other rivers in Scotland. Therefore, trying to get a huge amount of economic benefit from those fisheries might not be the best way to go.

Another route is to look at getting a great deal more social and environmental benefit from those fisheries by getting people to use them, getting people into the outdoors and putting less emphasis on getting an economic benefit from them.

**Claudia Beamish:** Are there any other comments?

**David Sandison:** I think that I get where you are going with that question. It is quite interesting—you might be pushing at a slightly open door. I tend to agree with Alan Wells that there is more than just economic value to be accrued from the Crown Estate and that we should be looking at the wider socioeconomics of that relationship. That might be an opening that would allow you to widen things out.

**The Convener:** The committee has previously expressed its view, in the context of its salmon inquiry, on the regulatory approach to aquaculture, and we will not revisit that today. However, how might the Crown Estate's role in the aquaculture consent process change? We have heard the SSPO's view. What advantages and disadvantages might such a change provide for the industry, for local communities and, perhaps most important, for the marine environment?

**David Sandison:** As I think that we have said, we can see an opportunity for better alignment in the process of getting a lease and the various permissions that people need to carry out their activity. There needs to be good alignment. I am not saying that there has not been good alignment, but when we bring things into a purely Scottish context and look at how they might be devolved further, there is an opportunity for it to be

even better. That would be a great benefit at a time when we are looking at the overall regulatory environment and finding that some regulation has to be reviewed, changed and made to fit better with what the modern industries that use Crown Estate assets would like to see.

**The Convener:** I get why that would be helpful for the industry and, one could argue, for local communities, but what about the marine environment? How would it benefit?

**David Sandison:** I think that, at a regional or community level, we definitely have to have a view about the benefits of environmental protection to the wider community across the wide range of uses of that environment. With respect to enhancing marine spatial planning and regional planning by bringing in the environmental scrutiny that is required for that process and aligning it to the Crown Estate leasing process, we can achieve that.

**Dr Wells:** I will again give a couple of specific examples. I preface them by saying that the issue probably should be looked at in the round, with the other elements.

The fish health framework, on which work is being carried out at the moment, will require the management areas in which salmon farming takes place to be looked at. Those areas could be changed if there was an advantage in having fire breaks—for want of a better way of putting it—between different areas, so there would not be a read-across. Leasings in those areas that were not leased could be used to create those fire breaks and keep them in place.

The second example is that, if it were found that a farm was not located in the right place, we could decide not to renew the lease in that area.

Obviously such situations need to be looked at within the context of the wider regulatory regime.

**Mark Ruskell:** On transferred or delegated management, it is interesting that, in the consultation, differing views were expressed on the ability of various sectors to be involved, either with communities or on their own, in managing or having transferred responsibilities. How will the environment be safeguarded in that situation? Mark Simmonds represents ports and harbours: there are perhaps issues to do with harbour authorities having both regulatory functions and commercial interests. In terms of governance, how do you square those responsibilities? If control of the sea bed was added to the functions of harbour authorities, how would those issues play out? How will the environment remain a key concern if functions are delegated or transferred?

**Mark Simmonds:** As I said in my previous answer, I imagine that all activities that impact on

the environment will still be licensable by Marine Scotland or whoever does that. Therefore, the transfer would not have a huge impact on how things are done. Not all harbours are seeking to, or will be able to, take on asset management, so it will not be a particular issue for them all. As I said, there is a separate and fairly comprehensive licensing process for activities that impact on the environment that will still exist.

**Mark Ruskell:** My understanding is that harbour authorities already have some responsibilities in relation to the environment, because they are responsible authorities for assessments under habitat regulations. How do harbour authorities deal with that in their governance?

**Mark Simmonds:** It depends. If, for example, a harbour authority has designations in its statutory harbour area, it will already deal with those in a set way. That will depend on the management measures that have been set out for it, which will depend on the designation. That situation will not fundamentally change.

**Mark Ruskell:** Are harbour authorities fit bodies to take on transferred or delegated management without any reform of the current governance arrangements?

**Mark Simmonds:** Yes, they are—absolutely. As I said, harbour authorities have statutory responsibilities for assets that they do not own, which sometimes makes it tricky to carry out those responsibilities efficiently. Harbour authorities are generally good stewards of the environment. Development is usually carried out sustainably, and as I said, it is all licensable. If asset management or ownership is devolved to an authority, that will not mean that development activity will go ahead without permissions from the various licensing bodies.

**Mark Ruskell:** What about other sectors? Does the aquaculture industry have an interest in owning the sea bed or having delegated management of it?

**David Sandison:** The simple answer is no. However, we do not see any difficulty in devolution of management arrangements. In fact, that will probably result in quite a lot of enhancement, from the point of view of cohesive community planning and our being part of the community planning and local planning processes. The Crown Estate, or whoever manages Crown Estate assets, should certainly have a role in that process, because that gets down to the wider relationships and needs of communities and how best to align with those. From an aquaculture point of view, that would be entirely appropriate.

**Richard Lyle:** What is your view on the cases for national management and local management? Who should manage the assets? Does the

geographical approach to asset management present any risks to strategic decision making across Scotland, or would it take greater account of more locally specific considerations?

**Patricia Hawthorn:** From an offshore renewables perspective, particularly with large commercial offshore wind farms, it is critical that management is done at national level.

An important function would be for one body to look at all the opportunities for development around our shores, and to try to work out where the best combination of developments may be. That process has to be done with an overview of Scotland and Scottish waters as a whole, of all the developers that have indicated interest in developing, and of all the opportunities for development that might exist.

11:45

Our experience so far is that a centralised process is best, so we are keen to make sure that that approach prevails. Another licensing round is imminent—we think that it will take place at the start of next year. In order to remain competitive in the offshore sector in the UK overall, it is important to have a centralised streamlined process that is able to look at all the opportunities, and then to select the best combination for optimising renewable energy and for Scotland.

**The Convener:** What about the interaction between the roles of the Crown Estate and of Marine Scotland for offshore renewables? Does that work effectively?

**Patricia Hawthorn:** That interaction does work effectively. Those bodies perform different roles. Marine Scotland is the chief consenting licensing authority and is very much involved in the marine planning process, while the Crown Estate operates primarily as the landlord and the lessor of the sea bed, but it engages closely with Marine Scotland in that process. It is critical that marine planning sits alongside the leasing process; it is an important dynamic that works well between Marine Scotland and the Crown Estate.

**Dr Wells:** On salmon fishing, some of our members have expressed interest in managing fisheries. Fisheries management works best when it is undertaken at catchment scale, and the district salmon fisheries boards and the fisheries trusts operate on that scale rather than on a smaller scale. That element is useful.

On management, since the coming into force of the Aquaculture and Fisheries (Scotland) Act 2013, district salmon fisheries boards have operated under a legal duty to comply with various good governance requirements, including holding public meetings and publishing annual accounts

and reports, so they are a good fit for the community organisation category. If they are not in that category, we have a question about whether section 6(1)(b) would allow Scottish ministers to designate the district salmon fisheries boards or the trusts as part of that process, because they are not a clear fit with any of the other categories.

**Mark Simmonds:** The BPA supports a mix of management options. We do not want to see bodies taking on management of assets within a statutory harbour area without ports being consulted. There are cases in which that could cause competition issues, because the body taking over management might also own other harbours that compete with the harbour in question.

As I said at the beginning, ports and harbours cannot move away; they have no choice but to deal with whomever they must deal. We have questions about the proposals, but our main view is that, whatever happens, we want to ensure that ports are consulted meaningfully.

**David Sandison:** There is definitely a case for strong national policy settings for what the Crown Estate does in Scotland. However, we do not have any fundamental objection to whatever level of devolution might be appropriate in terms of the different management arrangements. We would like to see consistency in implementation, with checks and balances being included. We certainly need to see that the national policy context is the umbrella that covers that aspect and checks it from time to time.

**Patricia Hawthorn:** One of the challenges that Scottish Renewables faces is that it represents a wide range of interests. Among our members, we have islands councils and wave and tidal developers. It is therefore probably right if I add to my previous comments that I see benefit in considering the almost unique opportunities that are offered in the islands for those types of development. I understand that a number of pilot projects are being considered. It seems sensible to approach the matter on that basis.

**Richard Lyle:** I welcome Patricia Hawthorn's seeming to have changed horses slightly in mid-stream.

Mark Simmonds must have been reading my second question as I wrote it down. With the UK Government and the Scottish Government, we have two Governments and 32 councils that do 32 different things in their areas. Should not we be able to diversify and do different things in different areas so that we can innovate and allow organisations such as Scottish Renewables to explore Scotland's potential?

**Patricia Hawthorn:** I added to my comments because we always have to remember that

Scottish Renewables has a range of interests within its membership. I can see clearly that there is a need and a wish in the islands councils' areas to get involved at the community level.

For the rest of the industry, we have large-scale infrastructure developments to deliver. That is a national priority. We have to find the very best developments around Scottish waters.

We are supportive of the position that things should be looked at case by case and that there should be a functional rather than a geographic basis. Large-scale offshore commercial wind farms are a game changer for Scotland, so we have to consider them at national level.

**Richard Lyle:** I am going to be really controversial; I am sure that people will come back at me when I say this. Should planning applications for the likes of you guys be decided by national Government rather than by local government?

**Patricia Hawthorn:** Our offshore developers value highly their relationships with local councils. All offshore developments come onshore somewhere: the communities that are most directly affected are those that are looking at the applications for substations, cables and other infrastructure that might be required.

The consents for the offshore part of the generating station and the cable are decided at national level, as is correct. One party has the overview of where we provide our major generation assets. However, there is always the local connection because the developments have to come onshore somewhere, so relationships around that are very important. Economic development is based around a substation and the cable.

**Richard Lyle:** Thank you. That was a question that I have always wanted to ask.

**The Convener:** That moves us on to a question that Angus MacDonald wants to ask, but before that, Stewart Stevenson has a brief question.

**Stewart Stevenson:** Given the powers that ministers have to exercise under sections 36 and 37 of the Electricity Act 1989, which relate to generation and transmission consents, there is a framework within which ministers are applying national policy and considering the overall picture rather than deciding on pretty small offshore wind sites. I doubt that an offshore wind farm would be less than 50MW.

**Angus MacDonald:** The written submission from Scottish Renewables suggests that the Crown Estate has specialist legal geographic information systems, and consenting and commercial expertise that are not thought to exist currently in local authorities. The Royal Yachting



Association's submission also warns of a potential dilution of expertise. In your respective areas, what expertise, skills and capacity are required by a manager in the Crown Estate?

**Patricia Hawthorn:** I am a great believer that skills can be acquired in any context when there is a function to carry out, so I say that skills can be amassed elsewhere. What is incredibly important for our offshore sector is the experience that has built up in Crown Estate Scotland and the Crown Estate's London office, both of which are still engaging a great deal and in detail about the licensing function for offshore wind. It is not necessarily about the skills—it is also about the knowledge, experience, expertise and ability to compare and contrast opportunities.

**Mark Simmonds:** I agree. It has been suggested that a national body could be retained to help local and regional bodies with such skills shortages, if they arise.

**Dr Wells:** There are, in the Crown Estate, skills in relation to salmon fishings, but many of the fishings are leased to angling clubs and so on, and there is a lot of expertise in our sector, too.

**David Sandison:** There is some acknowledgment that there are skills at national level that are very helpful. However, that is not really a problem for the SSPO. We effectively use leasing and landlord arrangements. As long as the body that carries that out is competent in those functions, it will be acceptable to us.

**Finlay Carson:** The Smith commission recommended further devolution to local authorities, and your comments on that have been helpful. If powers are devolved, how can we assess whether a manager has the necessary expertise and capacity to manage those assets to meet the Crown Estate objectives?

**David Sandison:** We would welcome a pilot scheme to test the water before we know the answer to that question. I do not think for one minute that there cannot be further devolution, but it is sensible to go forward on the basis of a pilot scheme. It is not entirely new territory, because the Crown Estate already has different arrangements with the agents that do its work in different parts of Scotland. We should not take too strong a view until we have carried out a pilot scheme.

**The Convener:** What would be the implications for the practice of cross-subsidies and financial support currently provided by Crown Estate Scotland for different assets if the management were to be decentralised? Offshore renewables are a considerable earner for the Crown Estate and will continue to be in the future, but agricultural tenancies, for example, benefit from the current approach. I recognise that it is

probably not an issue for many of you, but do you have a view on the pros and cons of the two approaches?

**Dr Wells:** That cross-subsidy is an important element and it would be useful to retain it.

**David Sandison:** Our sector is effectively a cash generator for the Crown and therefore we support several different aspects of Crown Estate business throughout the country. We have no strong view that such a balance should not continue. We see great value in having input at national level to projects that have national significance. However, whatever the new arrangement, as a sector, we would like to see a scheme in which the income from our activities goes back into supporting the sustainable development of our activities for the future and generating potential for growth.

**Donald Cameron:** I refer members to my entry in the register of interests, which shows that I am a landowner in the Highlands.

Section 10 would confer on ministers the power to restrict the disposal of certain assets, such as the sea bed. In the consultation, the question was asked:

"Should the existing policy—the general presumption against selling the seabed—be maintained?"

It is fair to say that a significant majority of the respondents asked for that to be case, albeit that some respondents did not. Should the sale of a portion of the sea bed be subject to ministerial consent as per section 10? Should the bill be amended to explicitly prevent the sale of the sea bed?

12:00

**Mark Simmonds:** I do not think that the bill should be amended to prevent the sale of portions of the sea bed. Obviously, I am referring only to ports and harbours. Our fairly straightforward view is that, if people have a statutory duty to maintain or work with assets, it is not unreasonable that they should be able to purchase or own them. One or two ports have been able to do that but, obviously, most of them have not. In our members' experience, that just adds to the cost and the time that it takes to do their jobs. Therefore, we do not agree with that suggestion.

**The Convener:** Can anybody point to what the advantage would be of selling bits of the sea bed?

**Mark Simmonds:** One advantage would be that of not having to deal with the Crown Estate for licensing or renewing leases, for example.

**The Convener:** What would the public benefit be?

**Mark Simmonds:** It would be a more efficient ports and harbours sector. Obviously, ports and harbours bring benefits to the coastal communities in which they are based. They provide direct jobs and support industries such as fishing and manufacturing. If development in ports and harbours is stunted, that will harm the communities in which they are based.

**Stewart Stevenson:** Leaving to one side the environmental consents that are required for dredging, which is a common activity in many ports, would it make it easier for ports if they owned the ground that they have to dredge and so did not have to interact with the Crown Estate? Are there other examples besides that that would help us to understand the sides of the argument?

**Mark Simmonds:** Yes—I absolutely agree with that. There are plenty of other things that ports do, such as fixing aids to navigation and other things to the sea bed. They interact with the sea bed in their harbour areas in quite a few ways. There is also the general development of harbours through adding new quays, pontoons and whatever else.

**Donald Cameron:** Does anyone else have any comments on owning the sea bed? I see that no one has. That is fine.

**Kate Forbes:** There are a number of Scottish Government strategies. We have the national and regional marine plans, local development plans, community planning processes, the Scottish energy strategy, the tourism strategy and the food and drink strategy. Obviously, each of your organisations will have members with an interest in those strategies. What do you consider to be the key opportunities for the public management of the coastal and marine assets to contribute to those strategies and other strategies? I realise that that is a huge question, but you should answer it in light of the interests of your members and speak about specific strategies.

**David Sandison:** That leads me nicely to a couple of points. I completely see the need for the arrangements that we have in Scotland to be well aligned with that range of strategies, which touch on different aspects of life. On the arrangements that might be most appropriate, the focus on community planning, what falls out of it and getting it to work well for everybody—whether that is individuals in the community, businesses or organisations—is appropriate. I would like to see as much alignment as possible between how those things are delivered and how the national policy context is taken into consideration when people go about their business. Throughout Scotland, we can certainly improve our lot by doing community planning well and better.

**Dr Wells:** We have a number of issues to do with migratory fish. The number of fish surviving at

sea has gone from about 20 per cent of fish returning to rivers to about 5 per cent, so something is going on at sea that we need to look at.

With regard to overall sustainability, there is an important role relating to what we do in the marine environment, how that is assessed and all the rest of it. However, from our members' perspective, an important element is having more resource to deal with issues such as huge offshore wind farms, aquaculture and harbour developments. On the wider social and environmental benefit, it would be helpful to have a bit more resource to ensure that decisions that are taken as part of the sustainability process are taken in the right places and for the right reasons. I do not know whether that specifically relates to Kate Forbes's question, but it is an important element of what we would like to see.

**The Convener:** That is an interesting point, because there was a theory two or three years ago—it might still be relevant—that one of the impacts on migratory fish is from the electromagnetic currents that are generated by cables for a variety of offshore activity. Marine Scotland did a piece of work on that that was inconclusive. There is therefore still a question mark about the issue. Given that two major contributors to the Crown Estate are coming together in that regard, should the Crown Estate take a role in exploring that area?

**Dr Wells:** To be fair, the Crown Estate has taken a role in that, although I do not know whether it put money into that Marine Scotland research, which took place in the laboratory in Aberdeen. The research looked at only one form of cabling—I cannot remember whether it was for alternating current or direct current—so there is still a question about that cabling. Along with other organisations, we have had success, in that licensing arrangements have required cables to be buried or to have rock shielding to deal with those issues. However, an awful lot of work is involved in that process. For example, the paperwork for an offshore wind farm is delivered in boxes. My members are relatively small organisations, but they still have to deal with such matters. Some more resource, whether it is top sliced or whatever, would be helpful in ensuring that good decisions come through the process.

**Kate Forbes:** My next question might require just a yes or no answer. Do the witnesses support extending the definition of community with regard to the management of the sea bed to cover communities of interest, so that it would include their respective interests?

**Dr Wells:** As I said, we seek clarity about the definition of community. I hope that a district salmon fishery board or, indeed, a fishery trust

would be included, but we are not 100 per cent clear about that at the moment.

**The Convener:** The other witnesses are nodding their heads at that. Does David Sandison want to come back on that?

**David Sandison:** Our industry has no desire to be recognised in that way in terms of the functional approach. There is no ambiguity about that.

**Patricia Hawthorn:** Trying to define “community” can be very complicated at times, so I am inclined to agree with David Sandison on that.

**The Convener:** We have covered all the topics for discussion with the witnesses today. I thank you very much for your time. I suspend the meeting for a couple of minutes before we move on to the next element of our work.

12:08

*Meeting suspended.*

12:11

*On resuming—*

## Petition

### Drinking Water Supplies (PE1646)

**The Convener:** Agenda item 4 is initial consideration of petition PE1646, by Caroline Hayes, on drinking water supplies in Scotland. The petition calls on the Scottish Parliament to urge the Scottish Government to review the role of the drinking water quality regulator and to commission independent research into the safety of the chloramination of drinking water.

The petition has been referred to the Environment, Climate Change and Land Reform Committee following scrutiny by the Public Petitions Committee, which took evidence on the petition from stakeholders. Paper 5 outlines the previous scrutiny by the Public Petitions Committee and suggests possible options that are available to this committee. Of course, members might wish to suggest alternative actions in relation to the petition. I invite comments.

**Kate Forbes:** As the MSP for the area, I have spoken to the petitioners and I confirm the strength of feeling locally. I strongly support considering the issue. There are outstanding questions about the long-standing process as well as the chloramination. Scottish Water changed the source of the water in 2012, and chloramination was a subsequent treatment because of the issues that had been raised about the water.

**Richard Lyle:** I agree with Kate Forbes. We should know what we are drinking in our water. People should be advised or consulted before stuff is put into the water that they might not want. I agree with the proposal.

**John Scott:** I agree with the proposal. Quite a few of my constituents have raised the chloramination process as well, and I am interested to hear the justification for it.

**Finlay Carson:** Concerns have been raised about what the difference is between chlorination and chloramination. Some scientific or chemical analysis needs to be understood, and I do not think that Scottish Water has answered the questions that have been raised over a number of years. I agree with the proposal.

**The Convener:** Thank you for teaching me how to pronounce “chloramination”.

**Angus MacDonald:** I serve on the Public Petitions Committee and I was present when the petitioners gave evidence a few months ago. They presented a very strong case, so I am keen to

raise the issue when we speak to Scottish Water after the recess.

**The Convener:** To be clear about what I have heard from colleagues, we agree to raise with Scottish Water the concerns that stem from the petition at our next meeting on Tuesday 17 April. Thereafter, we will formally consider the petition at the earliest available opportunity, subject to work programme considerations.

**Richard Lyle:** On a point of clarification, can we ensure that the representatives from Scottish Water know that we will ask them about the issue, so that they cannot say, "Oh, we do not know about that"?

**The Convener:** I give Richard Lyle the assurance that that matter will be dealt with.

Are we agreed to take the approach that I outlined?

**Members** *indicated agreement.*

**The Convener:** At its next meeting, on 17 April, the committee will take oral evidence from stakeholders on the Scottish Crown Estate Bill and, as we just discussed, from Scottish Water on its latest annual report and on petition PE1646.

12:15

*Meeting continued in private until 12:45.*

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

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