



Energy and Climate Change Committee

Oral evidence: [Carbon Capture and Storage](#), HC 742

Tuesday 4 February 2014

Ordered by the House of Commons to be published on 4 February 2014

Written evidence from witnesses:

- [Department of Energy and Climate Change](#)

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Members present: Mr Tim Yeo (Chair); Dan Byles; Ian Lavery; Dr Phillip Lee; Mr Peter Lilley; Albert Owen; Christopher Pincher; John Robertson; Sir Robert Smith

Questions 103–172

Witnesses: **Michael Fallon**, Minister of State for Energy, DECC and **Jonathan Holyoak**, Deputy Director, Office of CCS, DECC gave evidence.

Q103 Chair: Good morning and welcome. We are so keen to get on with this that we have raced through our private business in order to get to it three minutes ahead of time. Thank you for arriving early. As you know, we have been working on this subject for the last three or four months, and it is one of enormous importance and one that I know the Prime Minister places a lot of faith in.

Could we start by talking about the Don Valley project? Why was Don Valley excluded from the competition?

Michael Fallon: I am not sure I can help you there. I think that was before my time as a Minister. I do not know if Jonathan Holyoak can say—

Jonathan Holyoak: It was part of the competition. It was assessed alongside a number of other projects against the published criteria, and it scored less well than the projects that we took forward.

Q104 Chair: Just remind us which of the criteria it failed to match up to.

Jonathan Holyoak: It was a broad assessment across a whole range of criteria. I cannot remember all of them at the moment, but basically it was about the contribution to

the outcome we were seeking to achieve, which was cost-competitive CCS in the 2020s. Other projects, overall, across the whole assessment, scored higher than that project did.

Q105 Chair: There are not any specific aspects you can remind us about?

Jonathan Holyoak: There is no fatal flaw that I can identify as the one weakness compared to other projects. It was a broad assessment and, across the full range of criteria, it just did not score as well as others.

Q106 Chair: The effect of that was that the developers, 2Co Energy, said it had been on track to be operational in 2016. Now they are going to be making a final investment decision at the end of 2015, so is it not the case that the exclusion of Don Valley has effectively delayed the development of CCS in the UK?

Michael Fallon: No, I really do not accept that, Chairman. This was a competitive process. There are always people in all the competitions we run who say they will be ready to go, they are going to be delayed or whatever. We have to have regard to the criteria set out in the competition and we have to always seek value for money. The competition, of course, is only the start, and it is only those who wanted to have a share of the capital expenditure we were putting on the table. What is really exciting about CCS is that we want to ensure it plays a part in our more general electricity market reform programme, and that CCS projects are eligible for Contracts for Difference.

Q107 Chair: The competition is staggering forward rather slowly. When do you expect this competition to be concluded?

Michael Fallon: I absolutely refute that. The competition had selected its two winners when I arrived at the Department, and we have been driving those two projects forward towards signature of the front-end engineering and design contracts. I signed the contract with Drax on 20 December. We are nearing completion of the second negotiations, and I hope we can sign the contract with Shell and the consortium at Peterhead very shortly. We are pressing ahead with CCS as fast as we can.

Q108 Chair: One of our earlier witnesses said that he thought it could be 2016 before final investment decisions are taken for either of those competition projects. Do you think that is a fair assessment of the timetable?

Michael Fallon: I am not sure when we are likely to get a final investment decision. It looks unlikely within a year or so, so it could possibly slip to 2016. These are huge projects. There is a huge amount of public money involved—£1 billion of public money—and it is very, very important to get these projects right. I just want to knock on the head any idea there has been any kind of delay. On the contrary, we have been pushing to get these contracts signed all through last year. We now have Drax signed, and we are looking forward to signing on Peterhead very shortly.

Q109 Chair: Given the potential importance of this technology in that it would completely—or potentially—transform the use of fossil fuels, do you think, looking at the last three or four years, that we have given this the urgency and dealt with it with the urgency that it really needs?

Michael Fallon: Yes. We have been working extremely hard to get it right. There has been a huge commitment of public money. We are the only country in the world now likely to be offering operational expenditure support through Contracts for Difference, and we could well be the first country in the world to take forward commercial-scale gas CCS. It is always possible for people to say we could have gone faster a few years ago, but I do want to reassure the Committee we are cracking ahead with this.

Q110 Chair: Turning to the commercialisation programme, the announcement on 9 December awarded funding to the White Rose Project. Does that mean it is going to be the only project that will be supported in the commercialisation programme?

Michael Fallon: No. We signed the FEED contract—I think the announcement was slightly earlier, but I signed the contract on 20 December. All these projects, the two winning projects in the competition and the two reserve projects, all involve slightly different technologies. It is not possible yet to see which of these technologies is going to be commercial at scale. That is what we all want to see. I think, of the first two that we have selected, we have very good prospects, particularly on the commercialisation of gas.

Q111 Mr Lilley: I am not normally in favour of industrial strategies, as they are called, but when £1 billion of public money is involved, there is something to be said for using it in a way that will help develop industrial capacity in this country with export job growth potential. To what extent has that been a criterion in your selection of candidates, and are the consortia British or international?

Michael Fallon: The consortia are led by British companies. Drax is an independent British company, but there are other companies involved there. Shell has been leading the consortium at Peterhead. I think you would regard Shell as at least part-British. There are British companies in the lead, which is good news. What I hope will follow is the early application of these technologies for industry, and we have taken great care in the Drax project, for example, to ensure that the infrastructure involved in the Drax project is future-proof, that there is sufficient pipeline capacity for it to play a significant role for industry on the Humber. You will recall, Mr Chairman, that as part of the Tees Valley City Deal, we are funding some pilot studies as to the application of CCS across the existing pipeline networks for the chemical industry on Teesside. There is a real opportunity here for the industrial application of these technologies once we get them properly tested.

Q112 Mr Lilley: The commercial application is a different thing from the commercial development and export of the technology, and it is that that interests me. At the end of the day, companies will apply whichever technology is available and whichever companies they think are best, whether they are British or not. It would be nice to have helped ensure that the British companies are the best and the most advanced and the most commercial and the most accessible to foreign markets.

Michael Fallon: Yes, I accept that, and we are looking very hard now at the supply chain potential of CCS. I will be hosting a supply chain conference, the first of its kind, in London, I think on 12 May, and we are also funding a number of techno-economic studies of industrial CCS. We do not yet have enough evidence as to how industrial CCS can best be deployed, and there is more work to be done with academia and with industry to provide the data that we need, but we are now funding research in that particular area.

Q113 Dr Lee: Just to follow on from that, is there any assessment of how far ahead or far behind other countries are in terms of their CCS technology? If we, like Peter, are investing public money in this way, it is more acceptable to me if I feel like we are cornering a niche market, where we can export technology to other countries that need CCS if they are going to have any chance of hitting their carbon targets. Do we have any feel as to how far China is in this area before we start throwing public money at it?

Michael Fallon: We are already committing public money to it. I hope you would not regard it as throwing public money at it. That is why we had the competitive process that we were discussing earlier, so that we do have an eye on value for money, and you will be aware of some of the criticisms of the Norwegian project, about the lack of financial controls there and so on, some of the questions that have been asked. Internationally, I think we are up there with the front countries.

Q114 Dr Lee: The evidence for that is what?

Michael Fallon: The evidence for that is that nobody yet really has large-scale CCS projects off the ground. These are being pursued in different ways. I think your own Committee visited the Boundary Dam Project in Canada, which has the advantage of oil recovery near at hand. We do not have that here. We have it offshore, so it is slightly more difficult for us. We are aware of what has been going on in Norway and the United States, and indeed in China. I think we are up front. I do not think we are being left behind on this. We are working hard to get it right. We are the only country offering operational support for CCS through the Contracts for Difference under the Energy Act, and it could well be that we become the first country in the world to take forward commercial-scale gas CCS. That could well be the result.

Q115 Albert Owen: Just to follow on, as you indicated, Minister, we visited Canada, and we saw a number of projects there. One was a co-production that could be coming online in this year. You have a bilateral agreement with Canada. You are looking at that closely, and I welcome that. Is there a potential then for a renaissance of the coal industry in this country in the future? You talked about gas, and I fully support the Government on shale and exploring, therefore, energy security, but do you see coal playing a major part in the near and mid future?

Michael Fallon: First, on the collaboration, yes, we are collaborating with Canada. We have some joint research work in hand with SaskPower on the Boundary Dam Project that you saw, and we have that co-operation agreement in place. If there are lessons there to be learnt, we will certainly learn them. They do have the advantage of having the oil right alongside. We are likely to have the largest oxy-fuel CCS project in the world at

Drax, and we will have the first ever CCS project on a gas power station at Peterhead, so we are not doing badly in terms of the technologies.

On coal, I am not so sure. I don't know if Mr Holyoak would like to add anything on that on the possibilities of how far away an application in coal is likely to be.

Jonathan Holyoak: Two points. The Drax project is a coal oxy-fuel project, so there is a long-term future for coal through that technology, potentially, and we have been talking to the coal industry about CCS offering a long-term, low-carbon future for them in the future. We have met the UK Coal Forum last week and described what we are doing on CCS and how it could potentially be useful for them in the future.

Q116 Albert Owen: Sorry, Minister, can I just push you on that? Again, we are talking about reducing carbon emissions, but also on energy security. Yes, we could potentially be sitting on shale gas, but we know we are sitting on coal. What I am saying is, as a Government and as a Minister and as a forward plan, do you see that as part of your plan for the future?

Michael Fallon: Potentially, yes, but we have to see whether the application to coal is commercially scalable, and that is the purpose of the competition and the purpose of the contracts that we are now considering, and we are open to proposals from all these different technologies as to where it is likely to move next. We have to try to be—the competition was designed this way, and I think it is right for governments to do this—technology-neutral to start with. We cannot be sure which of these particular applications is likely to take off first and to be commercially scalable, but I certainly do not rule out its application to coal.

Q117 Albert Owen: That is the reason I mentioned it. You mentioned gas. I did not think you were very neutral, and I just wanted to balance it with coal.

Michael Fallon: Sure.

Q118 Mr Lilley: I believe we are subsidising a project in China where they are developing CCS. How does that fit into us developing our technology here?

Michael Fallon: I am sorry; I may need a little notice. We have signed a co-operation agreement with the Governor of Guangdong Province, and we have a memorandum of understanding between two of our research institutes. I am not sure it has led to co-operation or subsidy in exactly the form that you are proposing, but certainly there is a co-operation agreement and there is going to be some joint collaborative research between ourselves and the Chinese.

Q119 Sir Robert Smith: I should remind the Committee of my entries in the Register of Members' Interests, in particular to do with the oil and gas industry and a shareholding in Shell. I just wanted to pursue what the strategy was, because these two projects are coming down the track, but what is going to be the strategy to make sure there is something to follow on if they are successful? One of the concerns expressed to us by Professor Haszeldine of

Scottish Carbon Capture and Storage was that those that have fallen, failed in the project, have now been abandoned and cast adrift and “left to wither”, as he said. Do you think this is a fair criticism?

Michael Fallon: No, I do not. The competition is very much the first phase of the drive towards commercialisation of CCS. We are working with industry, beyond the two preferred bidders, to ensure that we have further projects coming towards us, and they can come forward in parallel with the commercialisation programme. As the two FEED studies are being carried out, we will continue to look at other projects both from the unsuccessful bidders and indeed others that are now coming forward, not least because they are interested in securing a place under the Contracts for Difference. This second phase that we are now entering is designed to ensure that we are completely open to other projects outside the original competition.

Q120 Sir Robert Smith: What specific support for those projects? Is it an engagement in discussion of how the market will work, or is there a greater understanding of some of the challenges they are facing to take their projects forward?

Michael Fallon: There is support on the research side. We are funding a whole range of projects now through our various research funding streams. They, too, will learn the lessons from the two FEED studies towards commercialisation, we will work with other projects to strengthen the business case for CCS, and finally we will work to see whether some of these projects can be supported through recurrent expenditure, as I explained, through Contracts for Difference, ones that may not need the capital expenditure that we have put on the table for Peterhead and for Drax, but may be able to come forward under our electricity market reforms.

Q121 Sir Robert Smith: Mr Warren suggested that developers need to know how they can access those contracts, and at the moment the allocation methodology for CCS projects has not been developed, and it is very important that DECC delivers that. Is that something you would accept?

Michael Fallon: I agree with that, and we are going to deliver it. We are consulting at the moment on some of the allocation processes under the electricity market reform. As you will recall, the Act has just received Royal Assent. We are now working through the secondary legislation to ensure that those Contracts for Difference are available towards the end of the year. We are consulting industry on how the allocations will work.

Q122 Sir Robert Smith: So, by the end of the year, there should be a greater clarity for CCS projects?

Michael Fallon: Before that, Sir Robert, we will make it very clear. The secondary legislation we hope to bring before this House before the summer recess, so we are all the time increasing certainty for investors as to how Contracts for Difference will be allocated and to ensure that they have more clarity on contract length and all the various commercial things that they need to know, and we are working very hard at that at the moment in consultation with industry.

Q123 Ian Lavery: Talking about the DECC policy levers, you have already said, Minister, that you do accept that that seems to be a lack of pace and a lack of scale in the process of the CCS project. 2Co Energy have stated quite clearly that they seem to believe that there really is a lack of scale and a lack of pace. You have said that you do not think that is the case, and you have said that you do not think that it is fair to say that. Can you say why?

Michael Fallon: Because, in terms of scale, we have committed £1 billion of public expenditure. I do not think anybody could accuse the Government of not putting some public money and heft behind this programme. We are doing that at considerable scale. In terms of pace, this has been a priority for me since I arrived in the Department. We have got one project signed, I hope the other one will be signed in the next few weeks, and we are driving forward, and I think we are at the front internationally in terms of making a reality of CCS. I do not accept a lack of pace. These two winning projects in the competition are huge projects; they are innovative projects, and they involve different technologies. As I said, they will be spending £1 billion of our constituents' money, and it has been very important to get the detail right, but I am pushing them as hard and as fast as I can.

Q124 Ian Lavery: Mr Warren, who is the Chief Executive Officer of the CCS Association, said that it was his view that there was an absence of hard numbers in the CCS Roadmap by which you can judge progress against, and he also said he suspected that this was intentional. Why are there not any hard numbers in the CCS Roadmap? Do you believe that he is right in what he says?

Michael Fallon: No, I do not. I am not sure hard numbers or hard targets are necessarily what are going to help here. We published the Roadmap, which sets out our vision for CCS deployment beyond the competition. There is a huge amount of work now being done as a result of the CCS Cost Reduction Task Force in terms of knowledge transfer, in terms of storage and in terms of commercial development. There is an awful lot of work going on there. I have explained what we are doing to make the EMR reforms tally with CCS, and we are relaunching the CCS Development Forum. I have appointed Michael Gibbons as co-chairman. The first meeting of that forum will be on the 26th of this month, which I shall be attending, and we are driving all this forward. I am not sure specific numbers and targets would be helpful.

Q125 Ian Lavery: With regard to the Contract for Difference for the CCS project, it has been suggested by a number of experts that perhaps it needs to be bespoke. At this moment in time, as a generic Contract for Difference framework, do you think, as the Minister, that there needs to be a bespoke Contract for Difference programme, or do you think it needs to be a tailored introduction for CCS projects?

Michael Fallon: I think the design of the Contract for Difference will inevitably be somewhat bespoke. We are discussing that with the industry at the moment. We are discussing it with the various developers as to what the terms of the Contract for Difference would be and what the allocation arrangements would be that would be sufficient to bring forward specific proposals for investments. To that extent, yes, this is a

new technology and we cannot consider it exactly in the same way as some of the more mature renewable technologies.

Q126 Ian Lavery: Just following on very briefly from what Mr Owen said before with regards to shale gas and coal, if the shale gas revolution does take place, where we have huge reserves that we can use, is it not essential that CCS is in place by then, because if we do not use CCS with shale gas then, we will not meet any of our submitted targets? Would that be right to say?

Michael Fallon: I am not sure about that. The carbon footprint of shale gas that could be produced in the UK I think is significantly less than coal and is certainly lower than imported LNG, so I am not sure about the actual net effect of emissions from UK shale on our greenhouse gas emissions total. I do not think we need to be too alarmed about that. CCS is an important technology. It is a clean technology, and it offers some real potential.

Q127 Albert Owen: Just a couple of points, Minister, with regards to the Contracts for Difference and CCS. I hear what you say that you cannot have fixed numbers or targets at this moment in time, but you said the EMR would “tally” with CCS. Could you just elaborate a little on that? When we had this debate, you will recall we did the pre-scrutiny of the Bill. We did an inquiry into EMR and various things, and it seemed to people like myself that you can apply it quite quickly to wind and you can apply it quite quickly to biomass and other things, but when it comes to CCS, I am not sure how it will work. Could you, for my benefit, explain how you see it working, and that this will not be pushed back, and that other technologies will take up all these Contracts for Difference?

Michael Fallon: That is an extremely important question, and “tally” was probably the wrong word. The point about Contracts for Difference is they are designed to incentivise all forms of low-carbon generation, and I recognised when I used the word “bespoke” that we may need to tailor them to suit the specific requirements of very individual technologies like CCS. Contract term is an obvious area where the length and conditions may be slightly different. We are discussing inside the competition and with others outside the competition exactly how much tailoring—perhaps that is the best analogy to use—is needed to bring CCS forward under electricity market reform, and we will be considering that in the next few weeks, but I want CCS to be there under electricity market reform—

Q128 Albert Owen: You do not think it will be crowded out by other—

Michael Fallon: Exactly. I do not want to see it crowded out by some of the more mature forms of low-carbon generation. We have time now, in getting the secondary legislation right, to discuss it with the developers and to see exactly what it is that would provide a sufficient incentive for them to come forward under EMR.

Albert Owen: Thank you. That is useful.

Q129 Sir Robert Smith: It is very important for the investors, because it is an upfront capital project, that its return is purely there when the country is committed to lowering its emissions, so presumably the contracts have to be quite long-term to send the signal that they are going to get a return on their capital.

Michael Fallon: Yes, but there is always a balance to be struck here in putting out Contracts for Difference for low-carbon generation and ensuring they are not caught, for example, by the state aid provisions under European law, that they are fully compatible with our obligations under the Treaty, that they help us move towards a low-carbon economy, but they do not otherwise distort competition. That is something we continue to discuss with the Commission in Brussels.

Q130 Sir Robert Smith: One of the other needs for bespoke nature of the CfDs is the fact that they are exposed to the carbon fuel price as well in terms of their electricity production, whereas wind and nuclear are all upfront costs with less market-variable running costs.

Michael Fallon: Yes. I suspect you are trying to tempt me into the area of the Carbon Price Floor and possible changes to that and its implications for the Levy Control Framework—

Sir Robert Smith: No, I think it was put to us by the industry.

Michael Fallon: —which is, I am afraid, slightly wider than my very narrow brief.

Q131 Sir Robert Smith: It was put to us by the industry. The need for a bespoke CfD is to recognise the operating risk of the fuel they are going to be using.

Michael Fallon: Yes. I accept that, and that is why a CfD in this area will have to be slightly different. We want to try to make it work. We are talking to the industry and the developers about it, and I hope we can come up with something that does work.

Q132 Chair: You mentioned the Carbon Price Floor, and it is an issue that does have a considerable bearing on a number of investment decisions that might be taken. One of the reasons why we have raised it with you and your ministerial colleagues at DECC on several occasions is because of the extreme reluctance of the Treasury to supply a ministerial witness before this Committee, despite several requests. If you are not terribly keen to go into detail on that issue yourself, we would much appreciate it if you would just give a little encouragement to the Treasury, when we make a further request for a ministerial witness, that they might decide on this occasion to accept.

Michael Fallon: Yes. I will certainly think about that request. I am not sure I am the best person to help with your witness arrangements, but Carbon Price Floor is a matter for the Treasury, and it is something we in DECC and, indeed, we in BIS are actively discussing with the Treasury, but I do not think I can say any more than that at the moment.

Q133 Chair: I am glad to hear that because it is a pretty flagrant device by the Treasury to raise revenue, and it is outrageous for them to try to dress this up as a green measure, since it has very malign consequences in terms of both the environment and, indeed, consumer prices.

You have just been talking about Contracts for Difference, and although this session is principally on CCS, I am sure, as one of the Ministers completely on top of his brief, there is no difficulty about straying into other areas. Do you have any concern that the very high effective subsidy for offshore wind may consume too much of the available resource, now we have this cap through the Levy Control Framework, quite properly, a cap on how much money can be used from consumers to support low-carbon technologies? Offshore wind does not look terribly good value for money, compared with some of the others. Is there a danger that we are going to tie up too much of that supporting offshore wind, and then find we have less available for what might prove to be better long-term bets?

Michael Fallon: For the intermediate regime, the FID enabling process that sits between the RO and the enduring regime, the new Contracts for Difference, we took great care to protect the place of different technologies so that one particular technology did not scoop the pool. You will see, in the provisional contracts that we have awarded, support there for biomass, for offshore, indeed for a large onshore wind farm in Scotland, and so on. Secondly, we have also sought to ensure that the FID enabling process itself does not eat too much into the overall Levy Control Framework in the early years. It is important to encourage those projects that were ready to go, that would otherwise have lost a year or so waiting for the secondary legislation to come through, to ensure there was a mechanism that they could get started. That is the purpose of FID enabling, and we hope to sign those binding contracts in March.

So far as the Levy Control Framework itself is concerned, there has to be a cap on the budget. I am sure the Committee understands that, that this money is not unlimited. We are moving towards a competitive allocation of the more mature technologies. That is sensible. That is certainly something that Brussels is encouraging us to do. Your point about the overall share of the budget that offshore wind could take is very well made. We are continuing to exert pressure through the Offshore Wind Industry Council, which I co-chair, to achieve cost reductions as the industry scales up, but they will argue, and may well have done to you, that they need the scale to get the cost reductions. This is very much a timing issue, but we do want to see the cost of offshore wind deployment continue to fall. We made a very small change in the final strike price for offshore wind, just for one year, but beyond that we do expect prices to fall.

Q134 Sir Robert Smith: How much of the overall Levy Control Framework will be used up by the FID enabling phase?

Michael Fallon: I will have to get back to you with the actual total, unless anybody has it to hand. I am sorry. I would be guessing if I threw a figure at you, but we will certainly get back to you on that.

Q135 Chair: You mentioned Brussels and state aid a few minutes ago, and we saw last week their reaction to the proposed support for Hinkley. Are you confident that we will be

able to satisfy their concerns? This Committee has been very supportive of Hinkley and believes that nuclear has an important role to play in Britain's energy mix. It would be very unfortunate if some intervention from the EU pushed back even further what has already been a rather delayed project.

Michael Fallon: I discussed this in Brussels last week—indeed, with Vice-President Almunia—and I hope the Committee is clear that the Commission is fully entitled to look at the detail behind the heads of terms and to set out all the various questions that need to be answered, and they have done that now publicly and they have listed all the various aspects that we need to satisfy them on. That is the strike price, the length of the contract term, the nature of the investment, the infrastructure guarantee and so on, and they are perfectly entitled to examine all these questions. That consultation has now opened. It runs for four weeks. It is open to anybody, including any colleague, to respond to that consultation. It is a perfectly normal process of examination under the state aid rules, and I am sure that when we have gone through that process and answered these various points, we will in the end obtain clearance. That is important not just for our project; it is important for the other 13 member states who have nuclear power and who may wish to renew that nuclear power, and it is also important for the Union as a whole that member states do retain the competence to determine their own energy mix as we all move towards a lower-carbon economy. I think it is important that member states retain sovereignty in that particular area. This is a very important case. We expect to answer all the Commission's quite legitimate questions about it, and I hope we will see the state aid issue resolved before this Commission's mandate expires.

Q136 Dan Byles: Michael, thanks. I just wanted to talk a bit more about transport and storage. It has been suggested that the UK potentially has very high levels of storage available offshore. We have seen figures of 35% of all potential CO₂ storage for Europe potentially in the UK. However, there has also been some criticism of how quickly we are exploring potential storage sites. Professor Haszeldine—I hope I pronounced that correctly—Director of Scottish Carbon Capture and Storage, has said that we are “investigating storage at a rate that is about 100 times too slow” and that we need to have a “two orders of magnitude scale-up of that investigation if we are to deliver CCS by the mid-2020s”. Do you agree with that?

Michael Fallon: Not totally. We are very fortunate here for CCS in that we have a huge amount of storage potentially under the North Sea and indeed under the Irish Sea, and it is one of the great advantages the UK has in terms of getting CCS scalable. It is, I think, rather difficult for Government to direct how investment in the infrastructure should be most cost-effective. I think that is better done by the companies themselves. We are working with the various companies. Our aim is to help facilitate investment in capacity, where that is justified. That is why we were particularly interested under the Drax project in making sure the pipelines involved had sufficient capacity to develop this project outwards to benefit a wider area of the Humber.

We are also, where we can, facilitating the use of the existing infrastructure. That has been important. Sir Ian Wood's review of the North Sea has also included a look at the existing infrastructure and the way in which it is being withdrawn, as certain fields are finished, and the possibilities for encouraging a more collaborative approach, which is

already there, but an even more collaborative approach to the use of the infrastructure, and so on.

The difficulty really is nobody can yet be absolutely certain as to how much CCS is going to be deployed and where the investment that makes it commercially scalable is likely to be located. Storage is something we are absolutely keeping an eye on, and where we can help as a Government, we will.

Q137 Dan Byles: Do you think that the current incentives are adequate to incentivise investment in common infrastructure? The Carbon Capture and Storage Association has suggested to us that one of the problems is that the common infrastructure that would be required in order to invest at scale is not really incentivised properly under the current Roadmap.

Michael Fallon: We are looking at that. The Storage Development Group was one of the three major work streams under the Cost Reduction Task Force, and we are going to continue to work with the Storage Development Group to see how best we can ensure that transport infrastructure and storage infrastructure is shared between the various developers, and what the actions are on the part of Government to achieve that.

Q138 Dan Byles: In terms of long-term ownership and long-term liabilities for stored CO₂, Scottish Carbon Capture and Storage have told us that they believe it is inevitable that the UK State must take long-term ownership of stored CO₂.

Michael Fallon: Yes. I think there have been some uncertainties in this area at the moment, because it is so new, as to exactly which European legal requirements apply in this area, but I think the developers will have to resolve that as they go, case by case, with the appropriate regulator.

Q139 Dan Byles: Do you think that the current CCS Directive in the EU is fit for purpose? Again, it has been suggested to us that it imposes some unreasonable and unnecessary burdens.

Michael Fallon: I think the Commission has committed to reviewing the relevant European law during 2015, and liability is one of the areas they are going to be looking at, and we are going to engage with the Commission as part of the review. I would not like to be drawn now before that review starts as to saying whether or not the existing legislation is fit for purpose.

Q140 Dan Byles: You have referred already to maximising the use of existing assets. One of the striking points from our visit to Canada was that many of the Canadian operations are firmly of the view that a value for the CO₂ was going to be a key driver in pushing forward CCS, and advanced oil recovery is one of the things that they are doing in Canada. The Wood Review I believe is going to be looking at this, the CCS Cost Reduction Task Force is setting up this joint industry Government work programme. Can you just talk a little bit about that? Do you see enhanced oil recovery as being a major driver for developing CCS in the UK?

Michael Fallon: I think that is less likely than it was in Canada, simply because the oil is further away and I think that is going to be more difficult, although we look forward to your report and seeing what lessons you think we should draw from Canada. As I said, the Storage Development Group is a key work stream from the Cost Reduction Task Force. That work was put in hand at the beginning of last autumn, and we will continue to learn from that and see where Government support ought to be made available.

Q141 Dan Byles: Just finally, DECC's response to us indicated that the Wood Review might look at future tax policy around EOR. It said, "While the Review will not make recommendations on taxation, its conclusions may nevertheless be drawn upon in future tax policy considerations by HM Treasury". Is that a subtle hint that we might see tax breaks for companies pursuing advanced oil recovery in the future, or a not-so-subtle hint?

Michael Fallon: If it is a hint, it does not sound very subtle, but, no, I do not think it is. Sir Ian Wood's review and the final report is going to be published very shortly now. You may have seen the interim report. Sir Ian was not specifically tasked with looking at the various fiscal incentives and the case for increasing one allowance or another, but his report has to be read as a whole. There is huge incentive for the Treasury in getting these arrangements right for the final third of the North Sea story, but I do not think I can be any more specific on that on the fiscal side.

Dan Byles: Thank you.

Q142 Sir Robert Smith: Just on that Ian Wood Review and the North Sea, is there not a lesson of history here that, with the piecemeal infrastructure development in the North Sea in the early stages making life more of a challenge now, as there are attempts to share infrastructure, and that, as we are starting from scratch with CCS, like you are doing with the oversizing of the pipe from Drax, it is very important to try to ensure at the start that shared infrastructure is built into the understanding of the benefits of the industry?

Michael Fallon: I absolutely agree with that. The choices made right at the beginning of North Sea oil exploration were not as collaborative as the approach adopted, for example, by the Norwegian Government or the Danish Government. What Sir Ian is essentially recommending is a more dirigiste approach to exploration and the way in which licence block activity is managed. I think what is fascinating about his interim report is the extent to which industry seems prepared to accept that and to welcome it as a way forward. I think there is a lesson there, because the amount of pipeline, for example, involved in these projects at Drax and Peterhead is really quite significant. It is 100 miles of pipeline and so on, and I think it is very important when you have public funding supporting these, the capital expenditure supporting these, that we do get maximum bang for our buck and that we ensure, as you said, that the pipe capacity is oversized, that we do not inadvertently exclude other processes from joining the pipe network and so on. That is something we have looked at in the Humber context with Drax, but it is also important for the Tees Valley and it is also important for the other river basins like Forth.

Q143 Albert Owen: I just want to take up the point that Dan Byles made with regard to our visit to Canada and some of the by-products from CCS, and I know you said you will look at

that report in detail, but one of the interesting things was that some of those by-products were sulphur dioxide and various other things that came out and were used in the country there. Again, I do want to move on to shale gas, but we are not really, as a country and as a Government, I would say, selling this side to it. There is more to it than just pulling things out of the ground. There are by-products of shale gas in the chemical industry, and I think here CCS would not be just about producing low-carbon emissions, but it is about extracting by-products that could be used in industry as well. I just wondered if you could comment on that.

Michael Fallon: Yes. I am very envious of your visit to Canada. I will have to content myself with your report. Clearly, there are lessons to be learnt, and I am particularly interested in the development of shale gas with the industrial applications. It seems to me the potential of shale as a cheaper feedstock for industry, whether it is on Teesside or in the north-west, is something that really has not come to the fore yet. It may well be that we see parts of our chemical and petrochemical industry starting to use shale gas anyway, whether first by importing it from the States and then hopefully using it from production here in a few years' time. I think there is quite considerable potential for the use of shale in our industrial processes that we have underestimated. As I understand it, there are only four major cracking plants in Europe that can handle this kind of industrial process in terms of dealing with shale, and we have two of them, and we could well convert a third one on Teesside, so there is big potential there.

Q144 Albert Owen: Sure. Ahead of reading our report, I am sure your Department is looking very closely at some of the by-products of CCS.

Michael Fallon: Yes, indeed we are, but perhaps you would allow me to write to the Committee with some more detail on that.

Albert Owen: I would appreciate that. Thank you.

Q145 Dr Lee: Moving on to the discussion of public understanding and acceptability of CCS, as a GP, I have had plenty of experience of how a population that is fed incorrect information about immunisation programmes leads to perverse outcomes of children dying from measles. In the same way, there is a sense, particularly if you look at the experience in Holland and Germany, that public opposition to CCS has led to a failure of CCS projects, and invariably it is based upon a misunderstanding or an ignorance of reality. I wondered how concerned you are that public opposition could jeopardise UK CCS development in that context.

Michael Fallon: I think it is something we have to be careful to reassure the public about, that we do have arrangements in place for monitoring the safety of CCS through the Health and Safety Executive. So far as the permitting of CCS is concerned, that is a matter for the Environment Agency, that we do have a regime in place for the development of CCS, just as we have a robust regulatory regime in place for the exploration of shale. I think it is important we continue to reassure the public about that.

Q146 Dr Lee: Does the Department have a proactive engagement programme of telling people about it? What is involved? I look at the fracking debate that is ongoing, and a lot of

that is driven by that factually inaccurate movie *Gasland*. The concerns around fracking are that the water table is going to be polluted, even though when we went on our Select Committee visit we found no evidence of water table pollution in the US at any point. I just wondered whether the Department had a plan, a strategy, to engage with the public on this issue before we end up dealing with a public that has been fed incorrect information.

Michael Fallon: That is a very constructive suggestion. Certainly, with shale, we are working hard to try to separate the myths about shale, as you say. We are not aware of any example of hydraulic fracturing causing groundwater contamination in the United States. On separating the myths from some genuine concerns about lorry movements and disruption, as you get with any normal industrial activity, so far as CCS is concerned, broadly the risks that we have to monitor are pretty similar to chemical pipeline transport and other oil and gas processes, so I do not think there is any reason for the public to be alarmed about it, but that is an important suggestion and I would like to reflect on it further.

Q147 Dr Lee: Apparently, and this predates me, the Select Committee reports on proactive engagement, the recommendations thereof on CCS date back to 2005, almost a decade later. Do you think that is a lost decade in terms of engagement with the public on this technology?

Michael Fallon: We do survey public opinion on these various things, and CCS has not been flagged as a major concern. I know that at both Drax and Peterhead the developers are doing a lot of public engagement work locally to explain these processes and explain what they are up to, but I am certainly very happy to reflect on whether we could do something stronger at the national level.

Q148 Dr Lee: Are the private companies incentivised to engage with the local communities in terms of their education of the technology?

Michael Fallon: They are not financially incentivised, but I think they can see it in their interest, as all developers must do now, whether it is nuclear or shale or whatever, to explain locally what they are up to, what these processes involve and, indeed, what the potential is in terms of jobs and economic activity.

Q149 Dr Lee: Finally, 2Co Energy has told us that the case for CCS would be better understood and appreciated if there was a comprehensive analysis of the economic, fiscal and social benefits of CCS. Will you consider undertaking such an analysis?

Michael Fallon: I am happy to consider that. We have had a number of reports recently, and I think we had a further report this week from the TUC and the CCSA, so there have been a number of reports in this area. I am not sure we are at the stage yet where we can make that kind of assessment as to exactly what the economic value is likely to be. It may be a bit early for that, but again, I am happy to have a look at that.

Q150 Dr Lee: Just one final question, more of a broader question building on the Chairman's questions earlier about the subsidy for offshore wind. In terms of public

acceptability, do you think it would be easier to persuade the public of the need for CCS and in the other technology if there was a sense that there was an overall energy policy that was going in the direction of the best economic interests of the country? I am just quoting here from the chief economist at the IEA, and he was quoted, I think it was last week, as, “This year is critical. I do not see many junctures in the economic history of Europe in which energy could play such a critical role for the long-term prosperity of the European people”. There are various other quotes in this article from chief execs of energy companies, saying essentially that the European energy policy is pretty disastrous, particularly in the light of the decreasing costs of energy in America as a result of shale gas exploration. I wonder whether it would be more acceptable to the public if we adopted an energy policy that made more economic sense, and therefore they would be more accepting of the need for fracking, or accepting of the need for public subsidy of CCS, if it could be demonstrated that we had an energy policy that made sense in the light of economic circumstances as they currently are, and as they are developing with the flood of shale gas on to the market.

Michael Fallon: That is, if I may say so, a huge question.

Dr Lee: Yes, but the problem is, Minister, that we are making commitments to CCS, and this Government is proud of this commitment and says it is evidence of our commitment to low-carbon technology. We are making significant subsidies of offshore wind, which have increased recently in relation to other forms. We are dealing with big figures here, talking billions of pounds over many, many years, so yes, it is a big question, but in the light of the fact that we are increasingly uncompetitive with growing parts of the world as a result of these energy policies—which, to a certain extent, we have inherited, and I recognise that—I think it is a question that the Government should be asking itself.

Michael Fallon: I think you are right. When this Coalition Government started in 2010, we inherited a climate change policy without really an energy policy to go alongside it. We require new capacity. Again, there was a lack of investment in earlier years. We are losing a fifth of our power over the next 10 years, and we need to move to a lower-carbon economy, but we need to do both those things and ensure that our industry remains competitive and our constituents do not pay bills any higher than are necessary, so we are very conscious of the need, when we say we are moving towards a lower-carbon economy, to move to a competitive lower-carbon economy. That is why the support prices that you referred to for all these technologies are decreasing. They are degressive over the Levy Control Framework period. That is why the support prices are not intended to be anything other than temporary. They are there to get these technologies to the point at which they can compete on a level playing field against other forms of generation. That is why we have to be rigorously careful, where we do commit these huge sums of either research money or capital expenditure, to bringing on completely new technologies like CCS, and we have to ensure there is value for money there because all of this is paid through our constituents’ bills. That is why I make no apology for getting these two CCS projects absolutely right and ensuring they do deliver good value for money, because these are huge sums of public money.

You are absolutely right. In moving towards a lower-carbon economy, we have to ensure that all this is affordable and that it continues to make our economy competitive. I am very conscious of that. I am also conscious that there is a growing awareness now among other member states and, indeed, in Brussels that we have not paid enough

attention to the gap in competitiveness that is emerging between ourselves and the United States and, indeed, other parts of the world. I think the mood is changing, but your points are extremely well made.

Q151 John Robertson: Minister, I was going to ask you some more questions on public opinion, and I will do that, but something you said there put an alarm bell up with me when you said you inherited a climate change policy without an energy policy. That is a political statement. I would disagree with you, but I would, wouldn't I, seeing I was part of the previous Government that introduced climate change and the energy policy we had? You have put this element of politics into it, and my fear is—you can correct me if I am wrong; you will probably say I am wrong anyway—that the political climate in this country, no pun intended there, is based around a referendum in Scotland and also the possible referendum in Europe. Therefore, the political parties are trying to basically play politics with subjects that are much more important and need to be assessed on the needs of the nation, rather than the political parties. Do you think that is a fair comment?

Michael Fallon: I do not, I am afraid, Mr Robertson. It follows from the fact that if we are losing a fifth of our power within the next 10 years, previous Governments clearly did not do enough to invest in our power. It is a fact that the year that Hinkley is planned to come on stream in 2023, eight of our existing nine power stations will be offline. That seems to indicate to me very clearly a lack of forward investment and planning in previous years. Perhaps we need to go back over the—

Q152 John Robertson: Was that not also down to, shall we say, political pressures put on to parties at the time? It had nothing to do with the needs of the nation.

Michael Fallon: Whatever these pressures were, it is for Governments to deal with. I think we are now in a much better place. We have three major parties committed now to nuclear power, and if you have nuclear power, it seems to me fairly obvious that you have to keep renewing it. I think your question specifically was about Scotland and the danger of—

Q153 John Robertson: Referendum in general. There is a fear of what would happen in Scotland, and, being Scottish, I have to say that I associate myself with that fear, but there is also the fear of Europe and withdrawing from Europe—a referendum that may or may not take place. As much as a referendum in Scotland causes my party a problem, Europe causes more than a little problem for your party. Therefore, they become more of a priority than the needs in energy terms of the nation.

Michael Fallon: Tempting as this is, Mr Chairman, I was trying to keep my replies to the field of energy. So far as Scotland is concerned, it seems to me a real challenge for an independent Scotland would be to finance, for example, the scale of decommissioning, to have the decommissioning tax relief that the Chancellor has put out there, for years to come. I simply do not see how that could be financed, other than by the British Treasury and British taxpayers standing together. It seems to me that simply could not be done in the North Sea in the way that we are planning to support it. The development of Scottish renewables, we are paying well over a third of the cost. A third of all renewables support

is going to Scotland, with 9% of the population, so there are huge flows of support that would have to be replaced by a Scottish Government, either through additional taxation or through additional borrowing, because at the moment the sums simply do not add up.

Q154 John Robertson: Minister, I want to interrupt you because I know what you are saying here, and I would be interested if you can give me proper figures on that, but that is an aside and I do not want us to go into it. The reason I ask these questions is because it is linked with Phillip's questions and about how public opinion then is galvanised and changed, and therefore how the Government has to look on these things. We have seen the problems with fracking already, where members of the public get together and try to obstruct any fracking testing being done. At the end of the day, the Government's job is to make sure that we get the best for the country at the cheapest cost, and I appreciate that and will back the Government every time when it does that, but my fear is, as elections are coming along, that the opinion of the ordinary person who is doing this campaigning will have a bigger effect on Government than it should have.

Michael Fallon: I understand the point you are making, and it is a perfectly valid one. In a democracy, politicians inevitably have to focus on the election when it becomes nearer, but I hope we have demonstrated that we are prepared to take some of these longer-term decisions and we welcome the support of your party, for example, in progressing the renewal of our nuclear programme now. We welcome that support. I think it is very important that the major parties in this House stood behind the Energy Act when we had a vote on nuclear power and have given their support to the Hinkley project and the others that will follow, because we do need an energy investment and renewing of infrastructure. We do need to take a longer-term view.

Q155 John Robertson: I suppose I should declare an interest as chair of the Nuclear Energy All Party Group, but it is not a financial interest. It is purely that I act as chair. On CCS, one of the things we did find out—and I am not sure, and apologise for being late, Chair—is that when we went to look at it in Canada, the fact was that none of the technology was new. The only thing that was new about the technology was the fact that different parts of technology were now being put together, and that was the problem, just to make sure it worked. The SaskPower is supposed to be coming online, if I remember rightly, around about April. I do not know whether they are running late or not, but they said about April. If they can get that running and start to, in effect, cover their costs because that is the way it has been set up, surely we should get them over here to have a look at our stuff and give us a hand.

Michael Fallon: We are, Mr Robertson, collaborating with SaskPower. We have some joint research work between us, and there are certainly lessons—and I hope they will be in your report—as to how these projects can be developed and managed. They do have the advantage of the oil sitting very close to the project, which we do not have here, but we have other advantages.

Q156 John Robertson: They have some innovative ideas on what they do with the by-product of the process.

Michael Fallon: They do, and we discussed that a little earlier, and that is certainly something we want to learn from. Again, I hope it will be referred to in your report. We have other advantages, too. We have some cutting-edge research in our universities in this area. Mr Byles and I were discussing that we are very fortunate with the amount of storage we have offshore under the North Sea and the Irish Sea. We have a lot of experience in infrastructure from the North Sea. We have a lot going for us too, and I hope we can maintain our position at the very front of the development of this technology.

Q157 Albert Owen: I was listening when you first said about the previous Government not having an energy policy and having a climate act, but when you repeated it, the temptation was far too much. I know you are a fair man, and you will acknowledge—will you not?—that many of the low-carbon projects that are now coming on stream were consented long before this Government came into being. I can give you an example in my region, where I was campaigning for an offshore wind farm, when the now-Government Minister was vehemently opposed. When I was campaigning for nuclear in 2005, the Prime Minister thought it should be the last resort and was not very keen on moving forward with nuclear power. I think it is worth getting those facts on the record.

My main point is about consensus, and I agree with you. I agree with you; we need consensus. I do think that consensus with hold, and with CCS, the commitment, if the money is not spent, what will happen to that money in the future? Is it committed by Government beyond 2015 and the next statement by the Chancellor, comprehensive spending review?

Michael Fallon: On the first point, I think I, too, must resist the temptation to go back over the years.

Albert Owen: Well, you started it.

Michael Fallon: A lot of plant was consented. Plant being consented is—

Albert Owen: No, it was.

Michael Fallon: Plant being consented is not the same as plant being built and commissioned, and that is what is now—

Albert Owen: Without consent, it cannot be built.

Michael Fallon: That is what is now happening under this Government and I hope will happen on Anglesey with the development of the new Wylfa nuclear plant, which I hope this Government will be able to give the consent for in the fullness of time, and I continue to push that on with Hitachi Horizon, who have that particular project.

You asked me what is going to happen after 2015-16. The money flows through to the end of 2016. That £1 billion is still available, and that will be split across the spending review periods, the period up to 2015 and the period beyond that, 2015-16, which is already now being planned. We are not able to make spending commitments beyond that. Do you want to add to that at all?

Jonathan Holyoak: Just, for some time now, we have said that the £1 billion is spread over spending review periods, and projects will get it when they need it.

Michael Fallon: There is no risk to the £1 billion, if that is what you are worrying about.

Q158 Albert Owen: Government made the big statement in the Chamber of the House of Commons about future infrastructure projects, and you did go well beyond 2016 in principle. What I am saying is there is a commitment, as you have just indicated, to 2016, but that money, if it is not spent, would be in place in 2015-16, the first year of the next—

Michael Fallon: Yes. Yes. The answer to that is yes.

Q159 Mr Lilley: Do you intend to support industrial CCS in the same way you are supporting CCS in the power sector?

Michael Fallon: It will not be in exactly the same way, but we do want to encourage industrial CCS. As I have indicated, we are talking to a number of developers. We are already financing a pilot study as part of the Tees Valley City Deal, which could unlock quite a significant amount of private sector development. The Tees Valley United, which is the local enterprise partnership there, has estimated that an industrial CCS cluster on Teesside could result in the reduction of some 20 million tonnes of CO₂ over 10 years and could help safeguard around 500 jobs. They have prioritised industrial CCS because they have chemical and steel processes on Teesside that are likely to need this kind of technology to decarbonise their plants and to therefore become more economically viable, so we are encouraging them there through supporting a pilot study and to see whether a business model can be developed for industrial CCS on Teesside. We are aware of other proposals in some of the major industrial areas, another proposal I think on Humberside, across the Humber, and one coming forward for the Forth valley.

Q160 Mr Lilley: You say it will make them more competitive. It will stop them being less competitive, will it not?

Michael Fallon: That is probably a much better formulation.

Q161 Mr Lilley: Yes, and only if we subsidise the CCS.

Michael Fallon: We are supporting CCS development—it is a brand new technology—as we are supporting all these different technologies. The word “subsidy” has been thrown around this morning. These are support mechanisms that are designed to get these technologies to market, to a position where they will not need taxpayer support, and where they can compete with the other, more established technologies.

Q162 Mr Lilley: Surely, by definition, they are higher cost. Effectively, CCS will mean you use 25% more energy to achieve a given outcome because 25% of your energy is absorbed in extracting the CCS. Unless you have a subsidy to the tune of that 25%, it will add to your costs.

Michael Fallon: This is one of the things we need to be clearer about. It is one of the reasons we are funding these kinds of studies, to see exactly where the costs and the benefits lie. I make no apology for looking at the potential of CCS and not excluding it. I do not think it would be right to support all these other forms of technology and say we should not be supporting CCS. We have made that commitment.

Q163 Mr Lilley: No, I see the logic of it entirely, but let us be absolutely clear: it will always need a subsidy.

Michael Fallon: We do not know that yet. The aim is to get CCS to a point where it could be commercially scalable, where it could stand on its own two feet. We do not know whether we can get to that point, but that is the purpose of the original competition and the continuing support.

Q164 Mr Lilley: Minister, you are not being clear. It will only be competitive if there is a tax on non-use of CCS by emissions of CO₂ or a subsidy for extraction of CO₂, otherwise it is inconceivable, however efficient it becomes, that it will not add to costs.

Michael Fallon: I wish I was as certain of that proposition as you are. I would like to look at the evidence for that.

Mr Lilley: It is self-evident.

Michael Fallon: Is it?

Q165 Mr Lilley: Yes. Can you think of a way of extracting CO₂ that is not costly?

Michael Fallon: I think you are beginning to test my expertise in this particular area. Of course there are costs involved, but there will also be benefits involved in the reduction of CO₂ in some of these industrial processes, and part of the work that we are doing is to get a clearer understanding of where those costs and those benefits lie. If you are suggesting to me that CCS will never be commercially competitive, I am not so sure. You may have more evidence on that.

Q166 Mr Lilley: Competitive with what?

Michael Fallon: With other forms of low-carbon technology.

Q167 Mr Lilley: With other subsidised forms of energy?

Michael Fallon: Other technologies that have been supported by the taxpayer in the past and are driving us towards the commitments that we in this House have made.

Q168 Mr Lilley: It is very worrying that you, the clearest-minded member of the ministerial team, cannot see the difference between a subsidised technology and an unsubsidised technology, between a technology that only becomes competitive if its competitors bear a tax

and it does not, and one that is on a level playing field. I appreciate that you have to play as part of a team, but you are beginning to undermine your own credibility, which was very high beforehand.

Michael Fallon: I am sorry to hear that.

Q169 Chair: Is it possible that, where CCS is operating in connection with enhanced oil recovery, there will be financial benefits from the enhanced oil recovery that might match the costs of the CCS?

Michael Fallon: I think that is wholly possible, and I would not exclude—that is why, I am afraid, I am not instantly agreeing with Mr Lilley, as I almost always do. I would not exclude that possibility in other areas. I am just not quite as certain as he is that we could necessarily rule that out. I take the point about taxation. It is certainly possible with the enhanced oil recovery, yes.

Mr Lilley: I do not always agree with the Chairman, but he has found a possibility that would let you off the hook, but one that, quite clearly, is not going to arise.

Q170 Dan Byles: Minister, I am just replaying in my mind something you said earlier about Scotland. Can you just clarify whether I heard you correctly, that you said, “A future independent Scotland might need to find alternative finance in order to fund existing commitments made to assets currently in Scotland,” or were you referring to future commitments, or is the UK saying that if the UK Government has entered into a contractual obligation with a project currently in Scotland, that, should Scotland become independent, the UK Government would cease to feel that it was honour-bound to continue with that contract?

Michael Fallon: If Scotland became independent, the whole series of arrangements would no doubt unravel, not least our investment in some of the connecting infrastructure, for example, that is under way at the moment; the Western Link and the National Grid project. There are a whole series of projects that could well start to unravel that would have to be looked at again. The point I was making was the Chancellor’s commitment, the scale of the tax relief that he has put out there for decommissioning, I simply do not see how that could be financed by Scotland without the support of the British Treasury, and I think the same applies to a whole series of commitments on the energy front.

Q171 Dan Byles: You were referring more to future commitments, future projects, future spending. It is an interesting point, is it not, that if there is a current project in Scotland that, for example, gets a CfD with a commitment going forward, where would that commitment sit with regards to the UK Government or a future independent Scottish Government, should Scotland become independent? Could the Scottish Government say, “We didn’t sign that contract, but the UK Government is contractually obliged to honour it for the next 20 years.”?

Michael Fallon: I think I would need to take some legal advice on that and perhaps write to the Committee, but yes, this would clearly be a change in law. It would clearly be a material alteration to the contract, and that is one of these areas that would have to be looked at very urgently if Scotland became independent. I think it might be very difficult

to persuade taxpayers in England and in Wales and in Northern Ireland to go on subsidising, if that is the word the Committee likes, the deployment of renewables in Scotland at the scale that we have seen up until now. I am not sure I would be able to persuade my constituents to do that.

Dan Byles: Thank you.

Q172 Chair: On a more general aspect of CCS, given that it is a technology that clearly has a vast worldwide application and might enable the consumption of far greater quantities of fossil fuels to take place even within the context of reducing greenhouse gas emissions, that looks in normal circumstances like a glittering commercial prospect. One of the things that concerns me—it is not just a UK issue; this is an international issue—is that there are lots of other technologies that the private sector is willing to throw huge amounts of money at in order to try to develop, without the need for what Peter refers to, I think accurately, as a subsidy. These are companies that are willing to raise money from private investors to develop a range of technologies, including many low-carbon energy technologies. It concerns me that, with all the wealth at the disposal of the big energy companies, they are not keen to risk much of their own money at this stage in developing CCS, yet it has this enormous potential market. That suggests to me that their assessment of the likely viability of any remotely economic form of CCS being achieved in the next decade is very, very low. Is that your assessment?

Michael Fallon: That is certainly a possible reading of it. These are very expensive projects with very uncertain outcomes. They involve hundreds of millions of pounds. Against that you might argue these are risks that these companies take in other parts of the world in more established parts of their business. It may be that some of the larger energy companies have got too fond of some of the public funding streams that are available. Whatever. We took a conscious decision as a Government that this area was sufficiently promising to put an element of Government support—I think that is the word I like—behind it, and that is a decision we have taken. In the contracts that we are signing, there has to be a considerable commitment from the consortia involved as well. They are putting up a significant amount of money and investing a huge amount of time in these projects, so it is not just the taxpayer that is at risk.

Chair: Does any colleague have any further questions? Thank you very much for a very helpful session and some wide-ranging answers. We much appreciate your time.

Michael Fallon: Thank you.