HOUSE OF COMMONS
SELECT COMMITTEES

Energy and Climate Change Committee

Oral evidence: The work of the Committee on Climate Change, HC 698
Wednesday 9 October 2013

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

Questions 1-54

Witnesses:
Rt Hon John Gummer, Lord Deben, Chairman, Committee on Climate Change and **Dr David Kennedy**, Chief Executive, Committee on Climate Change, gave evidence.

Q1 Chair: Welcome to the Committee. I suppose it is a measure of the importance of the subject that this is the second Select Committee you have appeared before in this morning's business.

Before we start, I should remind everyone of my entries in the Register of Members' Interests to do with the oil and gas industry and, in particular, a shareholding in Shell.

You are obviously going to follow up on the IPCC's report. Do you have any initial thoughts on the headlines that can come out of that?

Lord Deben: It is obvious, Mr Chairman, that the programme we are embarked upon is to give our response to the position of the fourth carbon budget in November and December of this year, therefore we will have to present that against the background of the science. That is bound to be so. That is the timing as we see it. The initial response is that there is no change in the basic assertions of the science. The degree of certainty has increased, but in general there is nothing in this that would suggest that there is a fundamental change in the science.

Dr Kennedy: In particular, there is nothing in there that leads you to believe there should be a different climate objective to the one that we have used before when advising on carbon targets and budgets. There is nothing in there that leads you to believe the emissions reductions to achieve that objective are any different from to the ones that we have previously assumed.

Q2 Chair: Do you think they have addressed adequately the warming pause observed in sea temperatures?

Lord Deben: The answer is yes, but I do not want that to be seen as being a dismissive one. I think we have to look at every piece of science and every piece of information with a critical and sceptical eye. My own view is that they have, but I approached it in that form. We are bound to have uncertainties in science. We are bound to have circumstances where we do not have a full explanation. What I think they have done is to give us the best explanation that the science provides us with, therefore that is the right way to approach it.

Q3 Mr Lilley: What empirical evidence would it take to convince you that the world's temperature sensitivity to increases in carbon dioxide is at the bottom of the level in the IPCC report and, therefore, not as serious a problem as we previously supposed?

Lord Deben: First of all, I would be delighted if I could have it. I do not want to believe—

Mr Lilley: No. What evidence would do?

Lord Deben: With respect, I want to put it in the context of where one stands. The first thing is that I am not not seeking the empirical evidence. I would be delighted if I thought that there was evidence to show that climate change was not as damaging as the evidence shows it. If you can produce the empirical evidence that we can assume that the lowest level of sensitivity is the highest level that we need to worry about, then you would have my support. That evidence is not there, but I would certainly accept it were it to be there. You and I have known that we have taken a different view on this since we both sat in John Major's Cabinet. We have had that difference. The fact is, I have always wanted not to believe in climate change, but I think it is so considerable a weight that we have to face and deal with it. Therefore, if you produce the empirical evidence I will be the first to accept it. I am the first person to say that if we have been wrong, if the world has been wrong and the scientists have been wrong, then we should admit it. Unfortunately, I am afraid they are right.

Q4 Mr Lilley: That was a very nice answer, but not to my question. My question is, what evidence would it take to convince you; what empirical evidence? Would it be a long period of no increase in temperature? A period of declining temperatures? The failure to find the fingerprint in the troposphere? What would it be?

When Einstein came up with the theory of relativity he also proposed the test that would say whether it was right or not: was light bent by the sun? What is your test as to whether the theory is wrong?

Lord Deben: I am not Einstein, and I am not in the position to make the test. If the evidence showed that what we have been saying is wrong—

Q5 Mr Lilley: What evidence? That is my question.

Lord Deben: I realise it is your question, and I know that you asked that question, but the evidence is actually for you. In other words, if the scientists produced evidence that showed that the lower level of sensitivity is the highest level——let us take that as the simplest concept—then I would be the first to accept it. I am not in a position, nor are you in a position, if I may say so, Mr Lilley, to lay down what that evidence would be, because that evidence is not there. Evidence could be any of those things that you have said, or a collection of them, or something that we do not know about now. I am a true sceptic. I do not know what that evidence would be, but were it to come I will take it seriously and I will listen to the scientists. I give you my undertaking on that. The fact of the matter is that the scientists who have looked at the evidence as it is have said that there is no evidence for that. When they say something different—or if they say something different—it will be our duty to accept that. I cannot prejudge hypothetically what evidence might arise that might have that effect. That is one of my problems with those I disagree, with because they tend to do precisely that.

Dr Kennedy: Just to add to that, the scientists have been very clear. On the specific issue of climate sensitivity, there is a range. They have not said, "Let's focus on the lower end of the range". They have not said, "Let's focus on the high end of the range". Our approach as a committee is that we look across the range in its entirety. That is the first thing. In order to believe that the lower end of the range is what we should focus on, that we should rule out the rest of that range, you would have to believe that the positive feedbacks that come from water vapour, for example, and through the melting of ice and reduced reflection of the sun back out of the atmosphere, were offset with very strong negative feedbacks due to cloud. That is not evidenced at all at the moment. So that is one thing that we look at.

Even if you believe the low end of the range, that does not take you to saying, "Let's do nothing. We can relax. We can sit back". It takes you to saying, "Great, it gives us a better chance of achieving the climate objective", which is a better balance of probabilities of achieving a temperature rise in 2100 that is around 2° C and not higher.

Q6 Mr Lilley: If the low end of the range is a 1.5° C rise for doubling and we have already had 1° C, that would be another half degree. Is that frightening?

Dr Kennedy: That is rather simplistic maths, with respect. If you can wait until our report in November we will show you what is the appropriate response across the whole range of climate sensitivity.

Again, the modelling says that even if you believe, for example, that climate sensitivity is 2, it does not mean you sit back and relax and do nothing. We do not believe it is 2. But if you did, that would not be the implication.

Mr Lilley: I still have not received an answer to what evidence would be necessary to convince you that alarm is excessive; that the sensitivity is less. I am not asking whether it is, but what evidence would be needed? Before you give us the same answer again, John—it was very long and it helps talk it out—I have asked this same question of sceptics. I say to them, "What would convince you that the Government is right? That the IPCC is right?" and they do give me an answer. Why can you not give me an answer?

Lord Deben: Simply because you are asking a question the answer to which could be any of the things that you say. What you need, if I may say so—

Q7 Mr Lilley: So a long period of no rise could be evidence that it is—

Lord Deben: It could be. But you would have to look at what other evidence came at the same time. That is the whole issue. You have all the time to be looking at the evidence. If I may say so, that is the problem of my many years of arguing with you on these issues. I think that you have to take the science at the present point, wherever that point is, and make a proper assessment of what that science is telling you. You do not say, "Well if it told you something different, or if this came along, I would have a different view," because that is not a sensible way to proceed. You have to—

Mr Lilley: It is the normal scientific method, I have to tell you. I am a scientist, you are not.

Lord Deben: With great respect, you are not a scientist in this particular area. You are a statistician, if I understand it.

Mr Lilley: A physicist.

Lord Deben: A physicist.

Mr Lilley: Is physics not involved?

Lord Deben: Of course it is a science. But the fact of the matter is you are not asking me a scientific question, if I may say so.

Mr Lilley: I am asking you a scientific question.

Lord Deben: With great respect, you are not. You are asking me to propose to you the situation that might arise in which I might have to answer a question. I think that is a series of hypotheses that do not get you anywhere. I am saying to you, if there were evidence in any of the range that you are talking about and beyond, not contradicted by any other evidence, then I am happy to accept it. When that comes—if that comes—I will accept it and show that I will do what I say I will do. I only wish I believed that that were true of some of those who disagree with me.

Dr Kennedy: The Chairman asked, "What does the latest evidence say?" and that is what we consider, the latest evidence.

Mr Lilley: That was not my question.

Dr Kennedy: But this was the question from the Chairman.

Mr Lilley: I am sorry, you are answering my questions now.

Dr Kennedy: Right. We have a statutory duty to consider the science.

Q8 Mr Lilley: We have established that you cannot envisage any evidence, or will not tell us in advance what evidence would falsify—

Dr Kennedy: I gave you a specific example.

Mr Lilley: I want to move on to another—

Lord Deben: If I may say so, we did not establish that I could not envisage that. We established that I could envisage the evidence. What I could not do was to tell you in advance what that evidence might be. I could say that there are a range of things that could turn out to be true that would change my view. But it is incorrect to say that I suggested that I could not envisage such a circumstance, because of course I can and anybody who said that they could not is not treating science seriously

Dr Kennedy: It is important to say, as well, that we continuously monitor the science. That is a statutory duty. We will continue to do that. We will come up with an assessment of the latest science in November. That will not be the last word. We will continue to look at it.

Q9 Mr Lilley: Let us move on. In round numbers, between the industrial revolution and about 1997—these are very round numbers—if I have my units right, mankind emitted approximately 800 gigatonnes of CO_2. This coincided with an increase of about 1° C in temperature. The IPCC, having looked at that and lots of other stuff, said they are fairly confident that CO_2 was the main determinant of that rise in temperature. Since 1998 we have added half as much again—another 400 gigatonnes of CO_2—but the temperature has not risen. Most people would say that perhaps indicates that there are other factors, in addition to CO_2, that can be of the same order of magnitude of importance in affecting the world's temperature. Would you agree?

Lord Deben: The first thing I would say is that all that has been looked at by the IPCC and they have come to very clear views. So I would at least treat carefully the judgment of the world's key scientists in this area. That is the first thing I would say. Secondly, I would say that this is a very short period of time in looking at the world, therefore I would be very careful not to produce my views on that short period of time. Thirdly, I would say that we are dealing with a very complex world, and of course it is true that there may well be countervailing issues, not least when you talk about, for example, the influence of ozone-depleting chemicals and the rest. There is a whole range of things that can be dealt with. That is why the IPCC looked at it so carefully and came to that conclusion.

My problem with your question, Mr Lilley, is very simple. This is not a new question. It is a question that has been considered in great detail by scientists. You are careful to point out that I am not a scientist. May I point out that you are not a climatologist? Those who have looked at it have come to the conclusion that this does not alter their view of where we are. That is why I take that view.

Q10 Mr Lilley: Right, so you are taking the IPCC as doctrine, so in looking into the IPCC you will not be capable of reaching a different view from the IPCC.

Lord Deben: I'm sorry?

Mr Lilley: You are saying you cannot answer—the IPCC has given your answer, they are very authoritative, therefore you take their view as a given. So when you have promised to somebody or other that you will be looking into the IPCC report and reaching a judgment on it, you have already reached that judgment, "It is authoritative. We will accept it".

Lord Deben: Certainly not. I am reaching the judgment at this moment. I have not done the review. We are doing the review. If I may say so, I really do find it difficult when you are trying to impute to me things—that is the second time—that I have not said. I have said "at this moment". We started off by saying we are looking at this very carefully. At this moment I am taking the view of the IPCC, because we have not done the work. If in doing that work I come to the conclusion that the opinions that you have held for all these years turn out to be true, then I at least will admit it and say it. But I am not saying it in advance, because we have not done the work.

Dr Kennedy: It is not the only source of evidence that we use, either. For example, on the climate science we had a call for evidence; we have had workshops; we have had a whole range of people involved in climate science coming to talk to us. So we will consider all the different views, including, for example, views published by the Global Warming Policy Foundation on climate science.

Q11 Albert Owen: I am not a climate scientist, nor an ex-member of the Major Cabinet, although it was fascinating to have an insight into what was going on. I will wait for the diaries from both of you and read them differently.

A serious point, though. I am more of your views than I am of Peter Lilley's. I always have been. As the Chairman reported, the pause was one of the headlines that came out of the science, and there had been a pause. So I am confused, let us just say. Yes, you are going to reflect on the report and the evidence that you receive, but will you be able to look at some predictions for the future? If there was another 15-year pause on top of the 15 years that we have had, would people then be arriving at different conclusions, or would they be moving to other judgments and evidence?

Lord Deben: It is not surprising that you highlighted the headline. A large number of organisations spent a great deal of time making sure that that was the headline.

Albert Owen: With respect, I am coming from the view that my constituents are raising this issue, and so are the people of Britain—

Lord Deben: Yes exactly, of course.

Albert Owen: —and we are asking you to answer some questions.

Lord Deben: My job is to look at the evidence. Obviously it would be foolish to ignore the IPCC's evidence. They have produced a particular answer. We will go through all the things that we have talked about and come to an answer. You are absolutely right, if we were to find some evidence that suggested that we should take a different view, we would say that. In our report in November and December—there are two parts of it, and it will be in the November part—we will seek to say whether we think that the prognostication is different. I do not know, because we have not done the work yet, but it would be possible to say that we would look carefully for evidence of this kind and that kind, which would move a little bit towards where Mr Lilley was. In other words, it would be possible to say, "We are looking at the evidence. We will be looking carefully for this or that, which might give an indication of a different sort". That seems to me to be the right way to approach it, and that is what we will do.

Albert Owen: I look forward to that report.

Dr Kennedy: The pause is there in the report. The long-term outlook does not change in the report, either, so those two things fit together in the views of the climate scientists in the IPCC.

Q12 Dan Byles: I would just like to talk a little bit about the tension between the UK's competitiveness and our emission reduction targets. It has been said that the UK's approach is world-leading. I think I am right in saying—Dr Kennedy will correct me if I am wrong—that there is no other country on the planet that has a tougher 2050 strategy target than the UK. Is that still the case? None spring to mind, certainly.

Lord Deben: Well, no, without comparing ourselves with South Korea, which has a carbon-neutral target, but you do not quite know how that is going to be measured. There are a number of countries that have very similar determinations, but targets are one thing and what you will do to get to them is another matter.

Q13 Dan Byles: Absolutely. The point is we have a world-leading approach through the Climate Change Act, the 2050 target and the use of interim budgets, but is there a risk that we are world-leading without necessarily having followers? I say that because the Committee on Climate Change themselves have said that the competitiveness risks are manageable, provided other countries commit to deliver the emissions cuts required as well and that, if other countries were to deviate from theirs, there is a risk that UK competitiveness could fail. I want to explore that tension a little bit. For example, we know that there are some EU energy companies that are pushing the EU to water down their renewables targets. Do you see a potential danger to UK competitiveness if that were to happen?

Lord Deben: As you know, we wrote a letter that we hoped would be helpful to the Secretary of State for Energy and Climate Change in assessing the present situation as far as Europe was concerned, because that is the first step. Our assessment was that, in the European context, at this moment there is nothing to suggest that Britain should alter its targets because of other people not acting or the European Union not acting.

That does not mean to say that that will necessarily be true. It was an attempt to say, "This is not the moment in which you can tell that, because the European Union is at the moment discussing exactly what its longer-term plans will be". The first part of the answer is, no, it is not at the moment, as far as Europe is concerned.

As far as the rest of the world is concerned, we think you have to look at competitiveness in different ways. For example, you have to look carefully at energy-intensive industry and particularly those using a lot of electricity, particularly in the context of the electricity market reform. We produced a very detailed report that shows that, given the Government's decisions and what it has put aside to help the electricity-intensive industries particularly, we see no evidence that our plans and our programme make us uncompetitive. That is where we are and where we will be in the foreseeable future. Just as I tried to say—probably unsuccessfully—to Mr Lilley, I have an absolutely open mind about these things. Particularly coming from my political and business background, I am very keen on making sure we do not lose competitiveness. We are looking at it all the time and it could change all the time.

But you must look at it against a background in which other people are moving, many of them, it appears, faster than we are. If you look at the changes that China has been doing and the speeding up that is happening—I hope that Mr Lilley has read the details of this—what they are doing is very significant. If you look at countries as different as Korea and

Mexico, the fact is the world is moving very clearly in this direction and making the changes, and we are seeing that very widely. So, although I am not prognosticating, I do not think you can put this against a background in which we have gone out in front and no one else is doing things. A lot of people are doing things. You then have to assert what they are doing and assess whether what they are doing is actual or merely window dressing. That is the nature of it. So we do that and we will keep that up-to-date all the time. All I can assure you at the moment is that the evidence shows that we are not in a non-competitive position, it is not making people offshore and, in the European context, we are not out there in front. If the European Union were to make certain changes then we might be, and in that situation then we would have to reconsider that and the Committee would consider it necessary to do so.

Dr Kennedy: Just to come back on that quote, our conclusion is that competitiveness is obviously very important. We take it very seriously. We have to. It is a statutory duty for us. We concluded that the competitiveness risks are particularly pronounced for electricity-intensive industries. Under current policies those risks are manageable and/or being managed, out to 2020. The fourth budget is what people will be discussing over the next month. The incremental competitiveness risks associated with a small budget are very small in magnitude. So again, they are manageable. We were very clear in our letter that there is no reason to change the fourth budget on account of competitiveness risks. The EU was the context for that letter. We will go beyond the EU and look at the broader international context in our November report.

Q14 Dan Byles: Moving on from business competitiveness to consumers, the cost to consumers and the impact on public opinion, why do you think there is such a wide range of estimates? The CCC has estimated the cost in energy bills from low-carbon policies to 2020 to be £5. The TaxPayers Alliance has calculated it to be £240.

Dr Kennedy: £100 was our estimate.

Q15 Dan Byles: £100? I apologise, my note is incorrect. But the TaxPayers Alliance has said £240. Obviously there are lots of ways of estimating this, but such a wide range makes the public look at this and think, “Hang on. We are being taken for a ride. Nobody knows what is going on. Who knows what they are talking about?” Do you think there is a danger, particularly in public opinion terms, when it looks like this is a wet finger in the air rather than a properly calculated figure?

Lord Deben: Some of the figures that are put forward—and wild horses would not drag them out—are clearly like that, and that is an issue. Look, we have no interest in that sense in doing other than trying to get the figures right. We are there to do that job, so if the figures were £240, or whatever it is, we would have said so. We have done the work and our calculations are clear and public, so you know what they are. Other people have done different calculations and some people appear to have done no calculations but suggested that a particular figure might be. We have had thousands. We—

Q16 Dan Byles: Do you look at other people’s figures and make an analysis as to how they got to them?

Lord Deben: Very, very carefully. Indeed, we have had to say to some political people, “Look, your figure is not right, because you have done this, that and the other and it does not add up”. Sometimes you have to say to people, “Your figure is right, but it refers to something quite different,” because one of the other things to ask is, “What is this that you are talking about?” We do it all the time. I am very conscious of that, but I know that there are some people who do not believe us. I know they do not because they believe that we are in a kind of campaigning group. If I wanted to be that I would, but that is not what I am. I am here to provide the facts. Therefore, we have done this work very carefully. If anyone has other figures, we hope they show them to us. If it is in public, we find it and we look at it extremely carefully.

Q17 Dan Byles: Do you publish your views on it?

Dr Kennedy: Yes, we do.

Lord Deben: Yes, we do.

Dr Kennedy: I will just come back on that. On the TaxPayers Alliance, for example, you would not say that is a fact-based exposition of energy bill impacts. What you do if you go to that website, you put your consumption in, you press the button and a big number comes out. It is not clear where that comes from. There is more serious analysis out there. For example, RWE did their energy bill impacts recently. DECC does a very detailed analysis. If you look on our website you will see a comparison of our analysis with all of the different estimates out there that we have done over the last few months. We take it very seriously.

In terms of what is the right number, it is pretty easy to calculate. We know that the levy control framework is agreed at a number, which is £7.6 billion in 2020. We know how much the residential sector consumes relative to the other sectors. You can just allocate that amount across the households. That is where the £100 comes from. It is pretty uncontroversial, although there are people who for whatever reason put a much bigger number out there.

Q18 Dan Byles: Do you think the Government is effective at communicating this in a clear way? I sometimes worry that Government is not always honest enough between when they are making a comparison with the counterfactual versus a comparison with the actual.

Dr Kennedy: Yes. We have discussed this before. The DECC methodology says, "Imagine a world if we did not ever do anything, and we had not ever done anything about low-carbon policies, what would that world look like?"

Then let us look at the full set of our policies, both those that push bills up, so support for low-carbon, and those that reduce bills, the energy efficiency. We think there is analytical merit in that approach but it is confusing for people. Our approach is: we know where we are now. What is the change from now to 2020 and then to 2030 through investment in low-carbon technologies? How much does that push the bill up? We are very clear we think that is £100. We do not then roll in and say, "That £100 will automatically be offset through energy efficiency improvement". We say, "It is £100, so debate and discuss that. Is that something we can afford?" Energy efficiency improvement is part of the story. We put a number on that and then we raise questions around the major challenges that there are in delivering energy efficiency improvement in practice.

Q19 Dan Byles: Can I quote you saying the way DECC do it is confusing?

Lord Deben: Mr Byles, the important thing is that that is the way we do it. It does not mean to say that we do not look at the ways other people do it, because there are other issues you might want to raise. On our website we have tried very hard—and tell us if you feel that we have not succeeded—to show the differences and show why they come to different points of view. I rather wish that other people with websites would do the same thing, so that they would in fact show what their position is based on. Of course, some people do not produce any explanation of how they get to that figure. They merely present it to you. That is much more difficult.

Dr Kennedy: I should say this is a communication thing as regards us and DECC. If you dig into the DECC numbers, the £100 from now to 2020 is totally consistent with the DECC analysis. They have different headline numbers but, again, the £100 in our analysis is in their analysis as well. That is on a website for anybody who wants to follow up and see why that is the case.

Q20 Dr Lee: I guess there is a broader point about not just competitiveness between countries but also carbon budgets and global negotiations. Are you persuaded that consumption-based measures of CO_2 are the right way forward, or territorial-based measures of CO_2 emissions? For example, I look at current Government plans on transportation. They are building a train that is going to be electrified between London and Birmingham. Arguably, you could say that we should be building fibre-optic cabling so that you are discouraging people from travelling, which would be a better way of reducing our carbon footprint as a country, instead of putting in a massive railway line with all the expense of that. Yet, because we do not tend to negotiate in territorial-based CO_2 emissions, it is not such a—do you understand what I am trying to say?

Lord Deben: Yes.

Dr Lee: Do you have an opinion on this? In terms of competitiveness, when we were in China it was quite interesting that the Chinese were worried about going down the territorial-based route. They were also worried about the consumption-based route, because it would discourage us from buying their manufactured products. They did not know which way to jump. I personally think it should be territorial, because that is the honest assessment of the impact of this country's CO_2 emissions.

Lord Deben: As you know, we did do a report looking at precisely this issue. It is important to be aware—and I do not mean that in a vague way but seriously aware—of our impact in an extraterritorial way. In other words, I think that the idea of the consumption measurement is a valuable idea because if you do not have it, then you do not get the context right. As you well know, the problem with it is that it measures things over which you have very much less control, whereas the mechanisms that we use today are at least dealing with things that to some real extent we have control over. I am always worried about having things over which you do not have a huge amount of control. I want to do both. I want to have that as part of the contextual situation, but we have come to your conclusion that that is the right way to do it.

I think the question you talk about, HS2 and fibre-optics—again, I very much do not believe in emission creep, so I am not going to give any view about HS2—is partially affected by that, but it is also a much more complex issue. It is a very important issue about how Government make decisions, which goes beyond that.

Q21 Dr Lee: I guess my point is that one of the supposed selling points of HS2 is that it is green. I remember the video with wind farms next to the railway line. I am thinking, "Well, hang on a minute, it would be greener to discourage people from travelling, full stop, by giving them the facility to be able to do commerce via a fast broadband". I think this is the problem I have generally with the way in which protecting the environment is used as a reason for doing something. It depends how you measure the impact of that.

Lord Deben: Absolutely, and one should be cynical about it, certainly sceptical about it. I agree with that. The other thing I want to do—I have still not managed to do it, but I promised to, and when I find the right person I will do—is add to our team of behavioural scientists. One of the difficulties of putting those two issues beside each other is that, despite all the efforts of BT and others, so far people have been peculiarly resistant to not going to see people and dealing with things on the internet and suchlike. I would add into that a third issue, and that is that it is only green if people do it. If it means that you give all the fibre-optics but instead of using them they get on a less green train or they drive to do it, irrespective of what you have done, then you have another problem. So I just want to put that into it.

Q22 Dr Lee: I guess my point is that Peter's scepticism is, I think, driven by what this is going to cost the British economy, essentially. Therefore, if we were to change our economy that we were less dependent on energy full stop, then how it was generated would become less important.

Lord Deben: I agree with that, and I think that is one of my problems with those who do have this view about the British economy. My own view is that there are timing problems and the rest, but in economic terms we are doing something that we are going to have to do in a world of 9 billion people anyway, and that to become less dependent upon finite resources becomes absolutely crucial. In a sense, the bigger issue has to be taken into account in that sense. We are also involved in the immediate issue, and in that sense you are right. The more that we can lessen our dependence on energy without making our lives less exciting and full of choice and the rest—because I am not a puritan, I want people to live in an exciting, choice-full way—the better we can do that. One of the sadnesses of the world is that we waste a tremendous amount of energy unnecessarily.

Q23 Albert Owen: I am going on to electricity market reform. I am conscious of the time, so I will try to be as concise in the questioning as I can. You have given evidence to the Government that focusing investment on shale gas in particular, but gas in general, in the 2020s and then moving back to low-carbon in the 2030s could drive up costs. The figure I have here is £100 billion in some scenarios. Why might prioritising investment in gas in the 2020s be so expensive?

Lord Deben: It is a question of the timing, Mr Owen, and I will ask David to go through the details that we have put forward in that sense. The background thing is that it is not because we are opposed to gas. There are two issues with the gas. One is that we have to be careful about birds in the bush, in terms of how much and what the cost is and the rest. The second is that you have to be careful about building an infrastructure that is for a temporary period of time and inhibiting another infrastructure, which is the one that you want in the long term. It is trying to bring those two together that we are most concerned about. You also have to be careful about the assumption that that which you know about, in the sense that you experience fossil fuel production, for instance, is inevitably a better way forward than the one that you are beginning to learn about, which is low-carbon.

Q24 Albert Owen: But in the context of decarbonising, at the moment we have predominantly coal. We do not have carbon capture as yet. Surely gas is less of an evil when it comes to carbon in some people's minds, so that would be an improvement. Exploiting shale locally rather than importing foreign gas may be an advantage.

Lord Deben: First of all, as long as that is interim, yes. If you continue—

Albert Owen: I did give some dates. I am talking decades here.

Lord Deben: Yes, but it has still to be interim in the sense that you are reaching over time—

Albert Owen: We are nearly in the 2020s now.

Lord Deben: Exactly, but it still has to be interim. The second thing is that you have to be reasonably certain about it being provided for, and thirdly, you have to make sure that in providing for it in the interim you do not exclude what you need to do for the longer term. That is all that one needs to do. It is a perfectly reasonable thing to say that you will have some use of shale gas, but our own belief is that it should not interfere with the decarbonisation of electricity. That does have to be on a cost-effective—

Q25 Albert Owen: You do accept that there is less carbon in gas than there is in coal, so there would be a net gain?

Lord Deben: As long as it is produced in particular ways, as long as it is measured properly, yes, but very often no, because people have not taken the carbon impact of producing it into account.

Dr Kennedy: I will just give you a sense of where that £100 billion comes from, and that is an upper band. It is a range of £50 billion to £100 billion. The Government is committed to spending a lot of money on investing in a portfolio of low-carbon technologies out to 2020. That is the levy control framework. Beyond that, you have a choice. You can either stop investing in that portfolio and instead focus on gas-fired generation, use that as the bedrock of the system, then get into the 2030s and very quickly have to scrap that gas-based system and build a low-carbon system over a short period of time with technologies that you have not developed properly. That is a very expensive thing to do. The alternative is to carry on with the portfolio investment and carry on with the technology commercialisation, drive those costs down, and then roll out the technologies that at the moment are less mature, and roll those out in the 2030s and 2040s at a much lower cost. That is how you get the £50 billion to £100 billion number. The £50 billion figure is an assumption about gas prices at current levels.

Q26 Albert Owen: Does it have to be either/or? Why do we have to stop the development of renewables and carry on with gas? We are still going to need gas. Most people, domestic and businesses, have gas heating. If we are going to have to electrify that, that is a big challenge in the future.

Dr Kennedy: Of course we will carry on. There is a debate about what you do with the power system. The carbon budgets and all of our analysis say we will continue to use gas for heating our homes, our offices and our industries, not just in the 2020s but in the 2030s and 2040s. The demand from those sectors is likely to be much more than any shale gas that will come to the market in this country. There is a use for the shale gas. As long as we bring it from the ground in a responsible way, there is a use for it within a carbon-constrained world. It does not change the power sector story, which is about portfolio investment, investing in order to save money in the future.

Q27 Albert Owen: Can I move forward slightly on that, then? You have also said that you think it will create uncertainties for investment in the future. Is that the—

Lord Deben: No, I do not think that we have done that. First of all, you are right to say it is not either/or, but it is both/and. There are those, of course, who are presenting it as if it is either/or, so that we do the gas and we do not do the other thing at all. That is one of the ways in which some have been speaking. The issue that we have about investment is that, from all the work that we have done with industry, it is clear that if you have a system where you spend the money—the Government has been very good at producing the money that we asked for in order to do the work on the portfolio between now and 2020—but you do not have certainty thereafter, or at least a degree of certainty, so that you have a figure at 2020 and then you go to a figure at 2050, industry finds it very hard to plan for that.

Q28 Albert Owen: What should Government and Parliament be doing now to address that uncertainty?

Lord Deben: Our view is that there should be a carbon intensity target for 2030. That could be modulated in such a way as to take into account changes between now and then, which would leave you between 50 and 100. You can do it in that way. We believe that that is necessary. It is partly for a climate change reason but, frankly, it is also partly for a UK plc reason. If you want people to bring their supply chains here rather than elsewhere, or build them here rather than elsewhere, you have to give them the sort of parameters that enable them to do it. Otherwise, they will go to other countries.

Q29 Albert Owen: You do not think the current Energy Bill does that?

Lord Deben: We think that there needs to be some certainty for the 2020s. The carbon intensity target is the right way to do it for this reason: it is not prescriptive. It merely says, "That is where we are going to reach. You, whatever your technology and the rest of it, can bring towards that your best efforts". That is the right way. Industry has to compete. Industry has to accept that there will be ups and downs. Industry cannot be protected by Government, but it must at least have some view of what the Government certainty is, which is why we think that is reasonable.

Dr Kennedy: It is not just us. Again, you will have seen a very high-profile letter in the last couple of weeks—

Albert Owen: But you are before us today and I am asking you.

Dr Kennedy: Absolutely. Just a couple of other things. First, it should not be a blank cheque to the industry. We have been very clear about that. It should be a challenge to the industry and a commitment that if you can drive costs down, then there will be a market for your technologies, but if you cannot drive costs down there will not be.

One last thing. There is a figure that is being quoted around what the cost of a decarbonisation target is over and above the Government's current policies. We have been very clear on this. Again, we have a transparent analysis of this in our electricity market reform report. The incremental cost of that target, over and above current policies, we estimate to be £20 for the typical household in 2030. It is £20 on top of that £100 we have said is associated with policies to 2020.

Q30 Albert Owen: A final point on EMR, you recently wrote to the Secretary of State recommending they include, "A slower degression in strike prices for offshore wind" in line with evidence. What would be the anticipated impact of reducing Government support more slowly? What advantages would there be?

Lord Deben: The overall one is to encourage investment at the next stage and to move forward. That is the overall one.

Q31 Albert Owen: But does that not discourage investment in tidal and other renewables that we need to build up a bigger renewable portfolio?

Dr Kennedy: The point is at the prices proposed we think those are below the level of cost, so you have to ask, "If the prices proposed are below the level of cost who would want to invest?" The risk is that we get very limited offshore wind investment.

Q32 Albert Owen: Is that what industry is telling you? Is that what the offshore developers are telling you?

Dr Kennedy: It is not just the offshore wind developers. We had a very detailed study on all of the low-carbon technology costs. It was state-of-the-art. It looked at all of the evidence that has been published, and concluded, "This is what we think the costs are at each point in time". It certainly is what industry have said in response to our letter. We did not go and say to industry, "What do you think? We will do your bidding for you". We said, "This is our evidence. The prices are low, relative to cost". We have since had a lot of feedback. I think everybody in the industry, or almost everybody, is in agreement with our letter.

Q33 Albert Owen: You have not answered my final part. If we put all our renewable eggs in the offshore wind basket, then we are not going to encourage other big projects to come forward, like tidal.

Dr Kennedy: They are not all in that basket. If you look at the way the National Grid modelling says that £7.6 billion will be spent, some of it is on onshore wind; some of it is offshore; some of it is on biomass conversion; some of it is on marine technologies. There is a portfolio approach there that is both possible and planned within the £7.6 billion. I think doing less offshore wind would raise questions about whether we can commercialise that technology properly.

Lord Deben: Mr Owen's point is very important. I think what we are saying is that if you want one of the eggs in your basket to hatch, you do not have the figures quite right. We have produced those figures ourselves with the help of research, not with the industry. It is not our job to listen to what industry says. Our job is to look at the facts and try to produce the best figures we have, so that is true. I think that we have to be ever mindful of the fact that you do not want to get into too close a position so that you exclude others. As you well know, although I no longer have any interest in it, historically I had a real interest in the belief that tidal power in various places is a very valuable thing. We and the Government have to keep an eye on that and all sorts of other things at the same time.

Albert Owen: I would imagine you still have an interest, you just do not have a financial interest.

Lord Deben: I do not have an interest in the technical sense. I am interested in it.

Albert Owen: Not everything is financial. I have interest but I do not have a financial interest.

Lord Deben: Yes. I have a belief that we have all the time to say both/and rather than either/or, which is the point you made.

Albert Owen: Yes, absolutely. Thank you.

Q34 Dr Whitehead: When you produced your 2013 progress report, you essentially suggested that had it not been for the recession, we would not have met our first or second carbon budget. What are the elements of the savings that would have enabled us to have met our first and second carbon budget, and why were they not achieved?

Lord Deben: First of all, the overall reason for putting it in that way is that we were concerned lest people should think, "Oh, well, we have done rather better than we thought we were going to do. Therefore, we have that so we can splurge it on something". It was very important to point out that, if you looked at it very carefully, it was clear that a major element in it was the recession. There are ups and downs. We produced a document explaining some things in our annual report, showing how we had done rather better in certain areas and we had done rather less well in other areas. There is also the question as to whether what we have done has been the right thing. I think we have all the time to look at what we are doing and say, "Is that the right thing? For example, is seeking to insulate more and more solid walls the right way to spend our money?" That is the sort of question we ought to be asking all the time. I do not think it is a static answer to your question, but the static answer David will give you.

Dr Kennedy: The first carbon budget built in a relatively low level of ambition, recognising there is a limit to what you can do in terms of new policies and implementation. We are broadly on track with that low level of ambition. The point is we have outperformed the budget because of the recession, not because we have done a lot more than we thought in terms of policies.

If you look forward I think it is pretty clear that there is more needed to achieve the budgets further out in time and, in particular, the fourth carbon budget. The Government has been clear on that in giving evidence to the Environmental Audit Committee recently. As John says, there is an open question around what is the set of policies that will deliver the emissions reductions to which we have committed in the fourth carbon budget. We will be coming back on that in our report to Parliament in July, but there are big questions around all of the key policies, whether it is electricity market reform, the energy company obligation, the renewable heat incentive, the electric vehicle support schemes or the commercial sector energy efficiency improvement policies. All of those need further consideration and we will come back on that and I am sure others will as well.

Lord Deben: Mr Whitehead, can I make a point that I think is very important for the Committee perhaps to consider, and it is this. You set out a series of policies, the Government acts, and it continues. There is a tendency among campaigners to feel that if you change those policies, or you spend money on something else in order to achieve that end, you are going back on your commitment. One of the things that we have to get better at is being prepared to say, "We have tried that. It does not turn out to have quite the effect that we thought it would". I remember myself being very critical of the formation of the climate change levy when that was first introduced. I remember being attacked by supporters of it saying, "You cannot believe in climate change, then, if you are against the climate change levy". I had to say, "I do believe in climate change, but I do not think this levy is going to do what you say it is going to do".

One of the things we have to do all the time is to look at the policies that have evolved and say, "That is not doing as well as it was thought"—it may not be a policy we would suggest—"and perhaps it would be better to look at it in this way". What I hope we will be is mature enough not to have a whole lot of campaigners then saying, "This shows you do not believe in it" because these things are developing all the time. The mechanisms of measurement are developing all the time, particularly in the area of how you save energy in homes.

Q35 Dr Whitehead: I think that is absolutely right. Indeed, one of the purposes of the budget mechanism and the review mechanism is precisely that it is not necessarily exactly what you do, it is how you do it in a framework that, first, learns from what you were doing before; and secondly, may move about depending on how the budget might best be achieved in certain trajectories. But the point about the recession can be seen either as a silver lining for the achievement of targets, "Luckily we achieved the targets because there is a recession"—

Dr Kennedy: We would not see it as a silver lining.

Dr Whitehead: —or as a bankable challenge in order to say, "Let us loosen up targets for the future, because we did rather better than we thought we were going to do not because of our own efforts but because of something else that happened. Therefore, we can loosen arrangements for the future". Which way do you see that?

Lord Deben: We would say very clearly that it is a warning rather than a bankable thing. It is a warning that even in these terms, not in any other, even in the favourable circumstances, we found it pretty hard to do this. Therefore, do not think we are in splurge time, because we are not.

Dr Kennedy: We have to advise the Government can that be banked through to the next budget, and we will do that I think early next year. In banking through, all you do is store up costs and risks for the future. You say, "Okay, I can delay doing things that I should be doing to be on track to meeting the 2050 target".

Q36 Dr Whitehead: Yes, which indeed takes me to the third carbon budget and the advice that you have given that we are not on track to meet the third carbon budget. Indeed, banking and borrowing aside, what effect might not meeting the third carbon budget have on those 2050 targets in the long term in your view?

Lord Deben: The purpose of budgets is to try to keep us on course in the most cost-effective way to reach the end. If we do not keep to the course, it costs us more money. I am rather mean about these things. I would like it to cost us less money. The point that David has rightly pointed to is that you have to be careful about banking for another reason, which is that if it stops you doing it in time then you do not get it done. I think the fundamental thing is that any failure to meet budgets costs money. That is why we have done the budget. The budgets are done on the basis of ability to do them—of course, you do not do a budget that you cannot achieve—in order to make sure you do it in the most cost-effective way.

Dr Kennedy: We have not said we cannot meet these budgets, either. We have said we are not on track at the moment. The challenge is to put policies in place so that we are on track to deliver the cost-effective path to our longer-term objectives.

Q37 Dr Whitehead: I guess the central point that is being made is that keeping on track in the first place costs you rather less than scrambling to catch up in the second place.

Lord Deben: Absolutely.

Dr Kennedy: That is why we recommended the budgets in the way that we did. They were the cost-effective path and a departure from it—

Lord Deben: Any businessman would say that, and anyone in front of a business—that is exactly how we run businesses.

Q38 Dr Whitehead: In your process of reviewing the fourth carbon budget, indeed you have recently written to the Secretary of State, Lord Deben, indicating that the assumptions relating to the review of the fourth carbon budget should not be based on what may or may not happen as far as EU policy is concerned. That is rather a brief caricature of what is being said, but how do you see that in terms of your review that is under way at the moment?

Lord Deben: The Act provides for, and we specifically said that we would do, a review of the fourth carbon budget, and that is what is under way. The Government wanted it done in this time scale, and there was no reason not to accept that, so we are producing the evidence and the science and the rest of it in November and our conclusions in December. That is how it will be done. First of all, the review has to be done in a particular way because that is what the statute says. The statute says that we should review the basis upon which the budget was established and assess whether there were changes, whether scientific or political changes, which would lead to our recommending that the budget be tightened or loosened or whether the budget should stand.

One of the changes that have been widely mooted abroad is that the situation in the European Union is now different from the basis upon which we produce the budget. Because that was a widespread comment, what we did was to look at the circumstances and see whether that was true and whether that was established. What we have said is that at the present time it is not true. There is nothing in the present circumstance that would lead one to say that the budget should be changed. We also say that at the moment there is no likelihood of certainty that there might be a change, because there could be a change, of course, depending on what the European Union says. We considered what the Government's own view about what the level of ambition should be. We looked at all that and said that what we need to do is to recognise that there is no reason to change the budget in the present circumstances, but we will monitor that, because there might be a situation in the future in which the basis upon which the budget had been made is changed. That is not something that we are likely to know—indeed, it is probably impossible for us to know—between now and

December. Indeed, it may not be next year or the year afterwards, but that will be a future thing when we know where the European Union is.

Q39 Dr Whitehead: In its response to the Commission's 2030 framework for climate and energy policy, the UK Government suggested that the EU should adopt a unilateral greenhouse gas emissions reduction target of 40% for 2030, which is an increase in ambition on where things apparently presently stand, certainly as far as the Green Paper suggestions are concerned. Presumably that would cause a change in circumstances in terms of the fourth carbon budget in a revision downwards, would it not?

Dr Kennedy: No. What we show in the letter is that the fourth carbon budget is broadly consistent with that 40% target at the European level and the implication of that target for the UK. The UK Government is also arguing that, in the context of a global deal, we should have a 50% target, in which case you would tighten the budget. It is only if the UK is completely unsuccessful and we end up with business as usual, the current default policies, that you would look again at the budget. That certainly is not what we are hoping for, it is not what the Government is aiming for, but let us watch closely.

Q40 Dr Whitehead: If I can be clear, the position on matters as they appear to be moving is that the budget stays as it is.

Dr Kennedy: Broadly, yes. If you look at the—

Dr Whitehead: The higher rate of ambition might cause the budget to be reviewed downwards.

Dr Kennedy: Yes, annex 2 says, "The budget is 1,950 megatonnes". It might be 1,960 if the UK is successful with its unilateral target for the EU, and if we move to a 50% target, you would tie it to something like 1,850 megatonnes. So it is developed very much in the way that we had assumed when we designed the fourth carbon budget. That is why we say there has not been a change in circumstances that leads you to think we should now lower the ambition in the budget.

Lord Deben: The importance, Dr Whitehead, is simply this: that with all the issues that are discussed, it is important to ensure that you know which ones you can have a definitive answer to and which ones you cannot. Therefore, what we have done is to provide as early as possible an interim answer, which says, "In most of the likely scenarios, as far as this bit of the basis of the budget, it looks as if the budget is more or less in the right place". There are circumstances in which that would change, both at the bottom and the top, but those circumstances would not be shown until you reached that point. Looking at the speed with which the European Union moves and the rest of it, that is not going to happen between now and the end of the year, and it may not even happen next year. We thought it was right to at least clear that one out of the way while we were doing the work.

Q41 Dr Whitehead: Yes. Finally, how do you see your position as a committee based in the legislation, relative to such changes that might be made to the fourth carbon budget?

Lord Deben: The committee has a particular legal position, which is that we can review the budget, and we wanted to do that. If we propose that it should be tightened or loosened, then the Government can either agree or not agree it. If we propose that there is no need for this, then the budget continues. That is the Climate Change Act situation.

Therefore, it is very important that we do this work extremely carefully so that every detail is dealt with. That is what we are doing. That is why it is taking rather a long time, because we have to look at everything. But happily, the Climate Change Act makes it clear how you do it. In other words, you do not bring in exterior things. You look at exactly the basis. You establish the basis again on which you based the fourth carbon budget in this case, or any budget, and then you look in detail at each of those elements and see whether, first of all, individually and then cumulatively, they demand a change in the budget either upwards or downwards. That is what we are going to do.

Dr Kennedy: The Act is very clear. If there has not been a change in circumstances, then the budget cannot be changed. That is our focus. Has there been a change in circumstances? The Government cannot reinvent the basis upon which the budget was set. It was set on a particular basis. Have those circumstances changed? That is our focus.

Q42 Christopher Pincher: I have brief questions about the 2013 report to Parliament on progress. What do you think the impact is of a low level of public knowledge about low-carbon technologies, allied to a jaundiced scepticism because of the perceived increased cost on their pockets that those technologies have, combined with the failure thus far of the Government at the much higher level to agree a strike price with EDF for Hinkley C? What sort of impact do you think that has on the investor community and their confidence about investing in those technologies? Is it a significant impact or a negligible one?

Lord Deben: I am a businessman, so I start off with the understanding that the most important thing for business is certainty, so uncertainty always has a real effect, and the length of time to establish the nuclear part of this is certainly very serious, but we hope we will come to a conclusion. The Climate Change Committee's job is to say that it thinks that nuclear should play a part in this portfolio, and that is what we have said, therefore we have an interest in that sense to see that it is achieved.

On the first part of the question, when energy prices are rising, it is extremely difficult for one to make the point that the overwhelming majority of the increase has come from the fact that energy prices have risen and that the green increase is a very much smaller proportion of it. There are two reasons for that. One is that those who do not approve of the policy will emphasise and exaggerate that, the green bit. The other is, of course, that those who have an interest in blaming somebody else for their prices will also do that. So you will always get that, and it is difficult. If you ask the degree, I think it is serious. I think it is very important for people to be clear about it. That is why we have tried—as we said earlier on about our website and suchlike—to describe it so that people know. The Government has to be better and better at explaining it to people, but I am not kidding myself.

You cannot constantly tell people in popular newspapers that the reason for all this is the cost of the portfolio, without saying to them, "Although there is a cost and the cost is limited, and this is the limited cost, the reason for that portfolio change is a very fundamental one, which is not just climate change, it is about energy sovereignty and it is about having some security against rising prices of a particular energy source, particularly gas". So there is a real sense of investment and insurance that is involved in this.

Q43 Christopher Pincher: In terms of the investor community's confidence in Hinkley C, the strike price still to be agreed between EDF and the Government, the failure thus far and the lead times that may result in to build and to put online Hinkley C, what impact do you think those things will have on our carbons targets?

Lord Deben: I do not think I would want to try to do too much of an estimate, because I am always sceptical about the nuclear industry's ability to meet the targets of timing, even when you know what they are. You are asking me to make a judgment when we do not even have the strike price and we do not know what the timing is going to be. I used to have two nuclear power stations in my constituency. I watched one of them grow and be built, and I watched them miss every target that they promised as far as the timing was concerned, so I would prefer not to say that. There is a real issue about investment. We have only just begun to explore that. We are told there are many opportunities in the wings, and companies are less willing to come out of the wings until this is over. So I would have to say that I would wait until it is over, when we know what the timing is, then I would add a bit to it, if I may say so. Then our job would be to have a look to see whether that means that we have to do more elsewhere. That is the issue.

Dr Kennedy: We have identified an important role for nuclear potentially in meeting low-carbon targets. There is a very healthy nuclear project pipeline, with at least three investors looking to put significant amounts of money into this country. They will be watching closely what happens with EDF. As John says, let us wait and see.

Q44 Christopher Pincher: But if I ask the question in a slightly different way, Sam Laidlaw from Centrica says he believes that the time scale for the project has doubled from five years to 10 years. Do you believe that then has an impact on carbon budgets and targets, and do you think it has a significant impact on other investors' confidence and appetite for fulfilling that pipeline that you mentioned?

Dr Kennedy: We should wait and see what is agreed. We have assumed something that is quicker than 10 years in designing our different scenarios for investment in the power sector. If it was 10 years, I think it would probably raise questions about what is the contribution of nuclear to power sector decarbonisation over that time frame relative to the other technologies, but again, it is something we would not spend too much time speculating on now. Let us get some facts about that, and then let us understand the implications of it.

Lord Deben: I am always careful about particular people, so I am going to avoid the Sam Laidlaw question, because one of the issues is that you also have to work out why people say certain things, and sometimes we have a range of reasons for saying things. The real issue is, once you have a stake in the ground, we can make those prognostications. I know the Minister says we are just a few weeks away, but I have heard that before and I just want to wait.

Q45 Christopher Pincher: Can you make a prognostication about the Green Deal, which has had a great amount of interest but a dispiritingly low level of take-up? What do you think the level of take-up has to be to make it a significant contributor to achieving our carbon targets?

Lord Deben: Without being rude and saying, "More than it is at the moment", I do think we have to be sensible about these things and say, "If it does not appear to have hit the spot as we hoped it would, are there are other things that we should be doing to try to make it do it?" In other words, at the moment, it quite clearly is not achieving what the Government had hoped that it would achieve. I would like it to achieve that. I think there is a lot going for it and much in it. But clearly it is either a much slower-burning fuse than anybody thought it was going to be or there are some things that have to be changed. I do not think we should be ashamed of changing it. It is not for us to do, but I think nobody should be ashamed of changing things. It is funny, it is like a product—I have been involved in launching a product. You think you are going to do it absolutely right and it turns out something needs to be changed, and if you are a sensible business you change it as quickly as you can.

Dr Kennedy: The order of magnitude. If you look at the previous policy, that was delivering millions of measures each year. If you look at 2012, it was in the millions for loft and cavity wall insulation. You would have to look at achieving those levels in future to say it is a successful policy. It is not doing that at the moment. From the start we raised fundamental questions about the Green Deal. I think there are also fundamental questions about the energy company obligation, focusing on what looks to be very expensive solid wall insulation. I say those are questions; we do not have the answers for you now, but again, we will come back on this in our Parliament report. The Climate Change Act requires us to do a deep dive on all of the key policies. We will do that in July next year.

Q46 Christopher Pincher: I wonder if Lord Deben can give us a sneak preview of what he thinks should be in there. He says he would not be ashamed to make changes, so I wonder what levers he would pull or knobs he would twist to make changes to the Green Deal.

Lord Deben: Mr Pincher, you are so tempting, but I am not going to go down that path. I do not think I ought to, because everything I say needs to be based on the evidence that we have, and we are looking in great detail at the reasons and the issues involved. We did make a number of criticisms of the way that this worked in the past, so we have not been uncritical about it. But I do say again what I said to Alan Whitehead. The fact is that if your policies need to be changed, improved, altered, that is what you have to do. If we think that is the case, that is exactly what we will say, but I do not want to pre-empt it. We do spend a lot of time getting this right, and if I started pre-empting it, I know my team—which is a jolly good team—would soon say to me, "What the hell are you doing?"

Dr Kennedy: We do know the options that we will consider—can you do stuff with council tax? Can you do stuff with stamp duty? Can you increase flexibility in the energy company obligation, opening that up to different measures? Can you put a safety valve into the energy company obligation, a bit like the renewables buy-out mechanism? Is there a bigger role for local authorities? So there are a set of things that we will be looking at very closely.

Lord Deben: There is one other thing that I am prepared to be led down the garden path on, which is simply this. I think people should not underestimate the need to put things simply so that people understand things, and I am not sure that that is always true about our policies.

Q47 Christopher Pincher: On that note, I will ask one last question, if I may. It is very quick. The Government's policy is dual. It is essentially to reduce energy output and money outlaid by more efficiency, but also by being better insulated. When you model the amount of energy saved and also the cost to the consumer that is saved, do you build into your model the spending that might result as a result of that money saved—what the customer, the consumer, will spend their cash on—and does that have an impact on our carbon targets? If they then spend their cash on goods from China, Brazil, Malaysia and Indonesia, so they are walking around in Primark t-shirts with big carbon footprints on their backs, should we not be counting that too?

Lord Deben: You have to be very careful, first, to ensure that what you are trying to model is precisely able to be modelled; and secondly, that you say very clearly what you are modelling. The answer is no, we do not to the sort of extent you are talking about, but we do in other ways.

Dr Kennedy: We do in the sense that we model the rebound effect. We do not say, "The energy saved through insulating your loft is this and there is no consequence of saving money and spending that elsewhere in the economy". We model the rebound effect using the best evidence available. It erodes some of the energy saving, but not all of it.

Lord Deben: What I mean by making that first comment is that, no, I do not think that when we model the rebound effect in a general sense—which we hope takes that into account—it is very easy to move down to the next stage, which is to count the number of Primark shirts. There is something between those two, which is what we use.

The other thing we are very careful about is that it does depend on where you do the energy saving. If you do the energy saving among the poorest, who have been spending every penny that they can afford on their energy, the actual energy saving you have is much less, because what happens is that they then make their house warm enough. They use the same amount of money, and indeed may well spend the same amount of energy, because they were living in a cold house and now they live in a warm house. Part of that warmth is because of the insulation, but part of it is because they are using the same amount of energy, but it is more effective. So you have to aim off that in quite a big way.

Q48 Christopher Pincher: I accept that you have to have some form of gearing when you model, but I just make the point—and I think Philip Lee made the point—that if we are not measuring emissions by consumption and nobody else is measuring those emissions, then there is an emission measurement gap and that we might be paying for that.

Lord Deben: Indeed. We are trying hard to make sure that we do it in this circumstance by consumption, so at least your figures for saving are as good as they can be taking into account those two elements, the one that I mentioned and the one that you mentioned. So there is certainty, yes.

Q49 Mr Lilley: I have a note here urging me to be brief, so could I ask for brief answers as well? It is about the Climate Change Act and post-legislative scrutiny. I am going to take the huge risk of asking a question to which I do not know the answer, which one should never do on these occasions. One of the main features of the Act was that it was said to be the only legally binding framework in the world. What would be the implications for Government and Ministers if they choose to ignore surreptitiously the targets and budgets you set them? Would they go to jail; would they be fined; would they be judicially reviewed? What does "legally binding" mean?

Lord Deben: "Legally binding" means that there are processes laid down in the Act that Ministers and the Government are bound to follow. Were they not to follow them and not to repeal the Act, then they would obviously be open to judicial review. It would not be for us to do that, but that is the situation. If they suddenly said, "We are going to ignore the Act and do X" then somebody would take them to judicial review, because the Act says they have to do Y. That is the situation. We cannot impose budgets on people, but we propose a budget, Parliament accepts that budget or not, then that budget becomes the budget and the Government is required by law to achieve that budget, and we are required to say each year whether they do achieve that budget. What would happen if they refused to receive that budget, it having been parliamentarily laid down? I suppose—but it would not be for me to say this—they would be subject to some kind of judicial review, because that is what they have said. The sanction is judicial review.

Dr Kennedy: Say that the Government—

Q50 Mr Lilley: No, that is fine. You have answered the question. There is no need to answer it several times. Now we know. So the judges could come in and impose a policy in response to a judicial review that the Government had rejected. That is fair enough.

Lord Deben: May I say, it was worth making just those two distinctions. There are some things that arise from the nature of the Act, the other things that arise from Parliament having passed a budget. That is all.

Q51 Mr Lilley: The other aspect of the thing is that it is unilateral. Britain is bound by this Act. No other country is. To what extent can you take into account the growth of emissions elsewhere? When asked by Mr Byles for other countries that were as stringent as us, you puzzled me by quoting China, because this Committee produced a report that said—I had it in front of me just now, but it has wiped itself out—that half the growth in the world's carbon emissions between now and 2030 would come from China. How is that compatible with them having a more stringent policy than us?

Lord Deben: I do not think I used the word "stringent," but I will—

Mr Lilley: Mr Byles did.

Lord Deben: Yes. I will just say this: the Chinese Government has now produced its five-year plan. It has now tightened that five-year plan. Its policy is to reduce its emissions very significantly.

Mr Lilley: Not its emissions, no.

Lord Deben: Sorry, just a moment. It originally had a view that it would not be concerned to reduce its emissions. It is now talking about peaking its emissions very much earlier than it previously did. It is now talking about objectively reducing emissions after that peaking. You are perfectly right that previously it did not do that. It talked about measuring its emissions in a wholly different way. But it has changed. It now has some pretty—I will use the word now—stringent determination. The issue that you and I would have, and we would be on the same side of this, is whether it is going to do what it says it is going to do.

Q52 Mr Lilley: My recollection is that their targets—what you are saying means that this Committee was wrong in its report—were to reduce the emissions intensity of economic growth. Emissions would continue to rise but not quite as rapidly as they would have done if they had not reduced the emissions intensity for economic growth. So they would not peak, they would continue growing.

Lord Deben: That was the position. It has changed its position, so your Committee is not wrong. It has said that it is now looking to peak. There is an argument about when it is going to peak, but it is certainly doing that, and the implications of its present policy are that it would reduce its emissions. That is very recent. It has happened over the last three months and is subsequent to any of the evidence the Committee should have. So I am certainly not suggesting that the Committee was wrong. Indeed, I think it is much better to stick to that until we have seen the evidence. I am merely saying that this is what its policies are now, and I find that very encouraging. It shows that China is moving.

Q53 Mr Lilley: Perhaps you could look at it a little further and give us a written note on what has happened since April when we debated this report in Parliament.

Lord Deben: Of course.

Mr Lilley: Now that has changed the outlook so dramatically without us noticing. Thank you very much. You asked me to be brief. I have done my bit.

Q54 Chair: Finally, we would like to welcome the decision to remove yourself from Veolia's energy-related activities. Obviously it caused quite a lot of media interest. Do you think there are any lessons that could be learnt for DECC to try to improve their processes?

Lord Deben: I will not argue about how much media interest there was. If I may say so, it was largely in one place. Besides that, the fact of the matter is that if I had known that this subsidiary company had a very small interest in linking up electricity of all kinds, with no particular interest in renewable energy, I would have told the Committee. I am pretty sure that the Committee would have seen that that was so distant I never had anything to do with it, that I was not going to have anything to do with it and that it was not a conflict of interest. I have always said it was a pity that I had not been informed of that, but the situation had not arisen. It is very clear to me that this can happen to anybody in the circumstances.

One thing I think I have to say is that surely the Committee would have recognised that, with my past, if ever there had been any question of anything that might have been seen as a conflict of interest, I would have withdrawn myself. All I have done is to put that on the face of the Bill, so to speak, rather than not. Of course I would have much preferred the order of these things to have been the right one, which is that I would have known in the first place and told you in the first place, and you would have seen what the context is.

Chair: Thank you very much. I would like to thank you for your evidence. We will be writing and following up some of the issues further, and if there is anything you wanted to have said that has not come across, please write to me. Thank you.