

Business, Energy and Industrial Strategy Committee

Oral evidence: Clean Growth Strategy, HC 596

Wednesday 7 February 2018

Ordered by the House of Commons to be published on 7 February 2018.

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Members present: Rachel Reeves (Chair); Vernon Coaker; Drew Hendry; Stephen Kerr; Mr Ian Liddell-Grainger; Rachel Maclean; Mark Pawsey.

Questions 143 - 194

Witnesses

I: The Rt Hon. Lord Deben, Chairman, Committee on Climate Change; Adrian Gault, Chief Executive, Committee on Climate Change.

Examination of Witnesses

Witnesses: The Rt Hon. Lord Deben and Adrian Gault.

Chair: Thank you very much, Lord Deben and Adrian Gault, for coming to give evidence to our Select Committee this morning on your report and the Committee on Climate Change's assessment of the Clean Growth Strategy. We appreciate your time and we are looking forward to hearing your thoughts on that. We are going to start this morning with Stephen Kerr.

Q143 **Stephen Kerr:** Good morning. If I could, I will begin by asking a general question. Why have the Government produced a strategy that openly fails to meet their own carbon targets?

Lord Deben: There is nothing like an easy question to start. First of all, we have to recognise that there is a fundamental change in the way the Government have been looking at this, and we should be respectful of that. The change is that the Clean Growth Strategy has been presented as part of the industrial strategy and as a central part of how Government operate. That is different. It is a change, and it is a very valuable change. At the beginning of our report, if you notice, we made it absolutely clear that we saw that as a change of a kind that we had not seen before. It really made a difference and it was a proper response to the effects of Paris as well as to the growth.

The fact is there are some things you can understand. I am not excusing things here; I am not there to do that, but rather the opposite. If you are in the middle of Brexit negotiations, there are certain things you do not know and you cannot tell. Of course we should not be in those negotiations, but there we are: we are. There are certain things we cannot tell. There is a small area around energy efficiency in present buildings where the Government feel confined, because of the Grenfell inquiry, and I do not disagree with that. I can understand that you do not want to play into that anything.

Outside of that, it seems to me that this is the first stage of establishing right across Government that this is a central Government policy and of reaching out beyond the two Ministries with whom we have had the sort of relationship that you want with Ministries up to now. It is true that the Committee on Climate Change has largely been dealing with BEIS, and its predecessor, and DEFRA. That is partly because they are the sponsor Ministries and that is where the money comes from, but it is also because that is our entrée into Government. Although we have sought, and have had, relationships with other Ministries, quite clearly what has to happen now is the Department for Transport, the Ministry of Housing, Communities and Local Government, the Department of Health all have to recognise that at the centre of what they are doing should be this battle against climate change, because we will not win it otherwise.



It seems to me that this is stage one of bringing everybody on board. Therefore, some of the vaguenesses in it are because we have not yet got a proper answer. Now, the Department for Transport will say that it cannot have a proper answer about aviation until it produces its aviation policy. That is my view on that. What we have tried in this report is to say, "We actually have to move on significantly before it is critical". We have reminded them that they now have a legal obligation for this. This is what the carbon budgets mean. When Parliament has passed them, they cannot be changed without the Committee on Climate Change giving them permission for them to be changed. I have to say that I cannot see any particular reason why we would do that. Therefore, the Government are bound by them, and we thought it was right to remind them.

Q144 Stephen Kerr: In terms of the fourth and fifth carbon budgets, they have said they are going to deliver 94% and 93% respectively. What is the Committee's view on that? What is the gap according to you?

Lord Deben: You can count it in various different ways, but we do not count it in the same way as the Government do. What we have done is to take the real promises that can be properly measured, and then we have taken the aspirations that are strong enough to be able to try to put some sort of measurement on. We have then said, "There is quite a lot of uncertainty there, but you are still significantly behind that aim".

You should in fact be ahead of it because, even if you take the Government's figure, it is based on everything going right. I run businesses. I have done it ever since I was a Minister; I did it before I was a Minister. I have to say that I would not allow my finance director to come forward and say, "We are going to hit this budget absolutely on the dot". I would say, "I want to have a bit of elbow room here. Will everything start on time? Will everything be done on time?" I do not want to put a figure on it, but it is certainly, it seems to me, a significant gap. That gap must be filled, and I want to see something that shows that it can be filled, even in circumstances where some of the propositions take longer to come in.

Q145 Stephen Kerr: When Claire Perry appeared before us, she said she was 100% certain that the Government would hit their targets.

Lord Deben: I am an enthusiast for Claire Perry—you can hardly not be an enthusiast—and she really is trying very hard to deliver this. If I were her, I would also be enthusiastic to say, "I am going to deliver". My job is to say, "I would just like a few figures around that". I cannot believe that Claire Perry is going to be here at the end of the fifth carbon budget.

Stephen Kerr: It might not be in her portfolio, but hopefully she is still with us.

Lord Deben: I hope the good Lord keeps her for that long, but the point I am trying to make is that I am also trying to do this for whoever is in government and whoever is the Minister. We have had some Ministers who would have found it difficult to find their way out of a paper sack.



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You just have to realise that is one of the problems I have. That is a non-party-political thing. I could list Ministers on both sides.

Q146 **Stephen Kerr:** Is it reasonable for the Minister to have said, as she did say to us, that she felt the gaps in the plan would be filled by advances in technology?

Lord Deben: I am ambivalent about advances in technology. On the one hand, it is a remarkable fact that advances in technology have delivered very much more than we ever expected them to. Offshore wind, for example, is a remarkable achievement. When I gave up being the chairman of an offshore wind company in order to become chairman of the Committee on Climate Change, we were really fighting to keep the price at 150 and we are down at 53 seven years later. It is a staggering achievement.

What we have to remember is the other half of it: it is an achievement that you really do have to put down to Government action. It was George Osborne allowing £7.6 billion to be used in order to create a market. From that market, the wind industry managed—by new technology, by new mechanisms and by thinking in a different way—to deliver what we have now. It was a very definite connection.

I do have a worry here. We have to do much more on carbon capture and storage, for example. If you do not do more to establish markets so that enterprise can be released, then you will not get those new technologies. If you are not careful, you get yourself into the George W. Bush position of saying, "Something will turn up". You cannot run the future on, "Something will turn up". I am a great enthusiast for new technologies. You have to hope that, yes, some of that will make it easier, but you also have to recognise that some other things may run in the opposite direction.

Stephen Kerr: I am sure we are going to come back to onshore wind and CCS.

Adrian Gault: Can I add to that? I would just say that the start of the fourth carbon budget is only five years away. The start of the fifth carbon budget is only 10 years away. To think new technology is going to make a substantial difference to that would be stretching it. Yes, it can make a difference to meeting our 2050 targets at lower cost, but the emphasis for the fourth and fifth carbon budgets has to be on deployment of what we know now, and learning by deploying what we know now.

Q147 **Mark Pawsey:** Lord Deben, you gave us a canter around the very large number of Government Departments who will be responsible for implementing policy. Where are the areas where we have policy gaps? Have we taken all of the low-hanging fruit? Have we gone for the easy stuff already? Where are the gaps and where are the challenges over the next few years?



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Lord Deben: We have obviously done the things that had to be done first. You cannot do anything successfully unless you decarbonise the power supply. That was the first thing we did, and that is crucially important.

There are two particular areas I would draw your attention to. One is new housing, which is a scandal. We are building houses that are not of the same quality as our major competitors, and we are building houses that actually ought to be retrofitted because they are to such a low level. The Government have to face the fact that we should have a standard not dissimilar—perhaps a little different—to the Passivhaus standard level 5, as it used to be called. You can do that by regulation. It would not increase the price of houses, because if every house had to be built that way, first of all, instead of it being a niche market where you have to buy niche products, it would be a mass market and you would have lower prices, and it would change the price of land.

The difficulty is that house builders have become land operators. Because they have land banks, of course they have paid that price for land and they know very well that this would impinge upon the profits. Their profitability is not unreasonable, and it seems to me that we should be saying this. That would begin to make a difference. Let us say the Government are right and they can build 300,000 houses a year. You really do make a difference to the emissions if you build those to a standard. Everybody in those houses pays so much less for their energy. That is one thing.

Q148 Mark Pawsey: To stick with housing, your contention is that we could produce houses with a better insulation value at no extra cost. The argument of the house builder is that it does put the price up. If you talk to the person buying the house, they are more interested in nice kitchen fittings and some extra facilities to the house rather than their future energy bills.

Lord Deben: Mr Pawsey, let us undo the house builder's argument. The first thing is this. The spending you have on a house is the mortgage or rent plus the heating. If you reduce the heating cost very significantly, your total outgoings every month will be reduced. If there is a slight increase in the cost of housing, all the evidence is that it would be very small if it is anything at all. I refer you to Hastoe Housing Association, which has built 100 Passivhauses. They are quite clear that if you did this, you would not find it to be very much more expensive, if at all.

The second thing is that house builders have to come clean about how they fix house prices. It is not done, as many other things are, by saying, "This is the cost of the land. This is the cost of building it. This is the profit". It is done the other way round. They say, "What can I get for the house? What is the price I can get for the house?" They work back from there.



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That is why Persimmon was able to offer £120 million as a sum to its chief executive. That is a very significant amount of money out of profit. I am merely saying that if you turn it round the other way and you start quoting the price of a house on a proper monthly basis, which is the mortgage plus the cost of energy, you will find that, far from it being more expensive, it is likely to be less expensive for the person who is actually spending the money.

Q149 Mark Pawsey: That may be the case, but the house builders will say that what the purchaser is interested in is the overall price of the house, and they would rather see their money going to other things. One house builder I spoke to said that customers would rather see an artificial chimney put on the top to make their house look traditional than investment in insulation measures.

Lord Deben: They may say that, but there are three things that are quite untrue about it. First of all, this is an industry that is constantly conservative in what it says. I was the Minister responsible for housing. I have dealt with these people. They have not changed; they are just as conservative. Secondly, why should we be building less good houses than the Germans or the Scandinavians? There, purchasers expect a better standard. Thirdly, if I may quote a famous lady, they would say that, wouldn't they? They have ceased to be house builders and have become much more interested in the interplay of the value of the house and the land you have. If you look at their profits, they are very significant. Their return on capital is remarkable. We have to say to them, "The community demands that you do not make the situation of climate change worse".

What is this industry? There are nine of them who control something like 80% of the industry. My complaint is not that the Government have not set this; it is that the industry has not recognised that it is its duty, together, to insist that they build houses at that level.

Q150 Mark Pawsey: Is there something Government should do to change that?

Lord Deben: There is. I believe in light regulation wherever it is possible. As you know, that is my political view, but there comes a moment at which the market has failed. The market has failed in these circumstances. There are a very small number of players who fix the terms of the market. The Government should intervene and say, "All houses have to be built to level 5". Let us just use that as an example.

Q151 Mark Pawsey: Would you say that is an area where we can make the biggest improvement? Are there other sectors you would particularly want to work on?

Lord Deben: That is the quickest or the first thing we should do. You asked me for first things. I would of course also point out that the enforcement in this area is very small. I do not know whether the houses that are being built at the moment are actually being built even to the



standards we set, because the way it works—I will not bother to go into it—makes it very possible that what you actually build does not meet the standards of the original house, which you have had tested.

The second thing we need to do is think about how we encourage people to improve the insulation in their own homes.

Q152 Mark Pawsey: This is retrofitting the existing stock.

Lord Deben: Yes, it is retrofitting. It is not for the Committee on Climate Change to tell the Government how to do it, but we are supposed to make suggestions. One of the suggestions I have is that when people sell a house, it is not unreasonable to say that the house should have moved one notch up on the measurement. There is a very sensible European Union rule, which is that we have to know what the energy efficiency of a house is. We know where they are. If they are at the bottom end, you should be lifting it one. The moment to do that, it seems to me, is when there is money involved in any case. You either do it while you are living in the house, to show you bought it at this level and you have moved it up one, or you provide the money for it to be done when the house changes hands.

I do not see why something along those lines could not be done, perhaps in conjunction with some reduction in stamp duty or some other mechanism. It seems to me the Government have to find some way to ensure that every year a significant number of houses in owner occupation are improved.

We then have to look very seriously at some of the extremely good systems that have been made to improve houses owned by the community. I point to Wales here. Of course, we advise the Welsh Government as well. They have done some remarkable work on improving very poor estates. I was very moved when I went to see one of them. The teacher who took us round from the local school said, "This has been a revolution for us, because the children now do not come to school wet". I would just make the point that this is a socially important thing as well, and the Government could do a great deal on that front.

The other thing is that we really have to speed up the coming of electric vehicles; that is not just cars but vans, because e-commerce means there are many more vans on the road. Our standards for vans have lagged behind, and we need to get those numbers of electric vehicles up faster.

Q153 Mark Pawsey: Are there any areas where we have done well but where we are perhaps in danger of falling back?

Lord Deben: We have done well overall in the sense that a 41% reduction in our emissions is a proud record of three different Governments. I can be genuinely congratulatory to all three. The problem is that the last bit of decarbonisation is always more difficult. You have a problem about how quickly new technology will come in.



There will be a mixture of smart meters and the smart grid, and there will be artificial intelligence enabling you to balance the grid very much more quickly. There is also a question around how far and how quickly storage will be able to be part of the system. All of that is really quite difficult to estimate. That is the area we must be very careful not to slow down.

Q154 Mark Pawsey: Can I ask you one specific question? We have done well on reducing the amounts of biodegradable waste that is going to landfill. That has gone from 31 million tonnes to 9 million tonnes between 2005 and 2015. I would suggest that one of the reasons we have been able to do that is because of the use of packaging in avoiding food waste. As we look to reduce the amount of plastic packaging we are using at the moment, is there a danger that the levels of food waste might increase?

Lord Deben: I declare a series of interests, which I have declared in any case, because we are moving away from the central climate change thing. I will just do that, because I have been working very hard in the packaging industry, trying to get this type of thing right, because of my chairmanship of Valpak.

“You do not get owt for nowt”. You have to be very careful about balancing these two things. It is important to remind people that packaging is a very important part of enabling people to have decent food in a decent condition in a way that they did not have before. I am old enough to remember my mother shopping in the village. Frankly, it is no wonder we grew it as much as possible, because the quality of the food you could buy was not very good. Now that is very different, so we must not underestimate the value of packaging. We just have to get smarter about how much we use and what we use. That seems to me to demand changes, which the industry has now committed itself to. If the Government accept this, it would make a big difference.

We could also move towards being much tougher about organic material going to landfill. I invented the landfill tax; it seems to me relatively successful. I do not see why we are putting food waste into landfill. Every local authority should be collecting food waste. If you do that, then you can have compostable packaging, which you cannot really have unless you have a food waste collection, because you have to divide compostable from non-compostable or recyclable packaging.

There is a series of things down there that can be done, which is one of the reasons I mentioned that DCLG is so important in this whole area, whatever it is now called.

Q155 Chair: I just want to follow up on a couple of Mr Pawsey’s questions. I thought this issue of housing and passive homes you mentioned was quite interesting. I wondered whether you could tell us what the impact would be, in terms of the fourth and fifth carbon budgets, if the Government legislated for new homes to be built to new standards. I am happy to be guided by you, Lord Deben, as to what they should be—passive homes or zero-carbon homes. What impact would it have on the



fourth or fifth carbon budgets? What specifically should they do?

Lord Deben: We would have to do a bit of work to tell you exactly the amounts. I do not want to overstate it. It would make a real impact, because we are supposed to be building 300,000 houses a year. If you multiply that, it is five years to the first one, and there will be five years of that, so it is 15 years. Fifteen times 300,000 is quite a lot of homes, actually. That would be quite a lot of emissions. It would also have the impact of saying to the world, "We are really acting, whenever we can in new circumstances, wholly in conformity with what we have signed up to both in the Climate Change Act and the Paris Agreement".

Of course, the largest number of houses that will be there in 2050, when we have to reduce our emissions by 80%, will be houses that are already built, which is why I see the two things together. They ought to be moving together, so that we are constantly improving houses. We are then supposed to be doing exactly the same with commercial development. Again, we ought to be setting the highest standards for commercial development. We will then start to get a chance of meeting our targets.

Adrian Gault: The point is that we think action on the new builds is a relatively easy win. It will not make a huge difference to the carbon numbers for the fourth or fifth carbon budgets, but it builds over time so that by 2050 it is quite significant, because then we are looking at something like 15% or 20% of housing stock would be new-build. It is going to be relatively small in the short term, but the point is that it is relatively easy. To retrofit the existing building stock, improve energy efficiency and move towards low-carbon heating for existing buildings is much more difficult. That is potentially much bigger in terms of the emissions that are at stake.

Q156 **Chair:** What is the relative cost of putting in what is needed when you build a home compared with retrofitting?

Adrian Gault: I have a figure at the top of my head of £5,000 or £10,000. It is something in that order of difference, but that may be something we can come back to you on.

Q157 **Chair:** Maybe you could come back on both those things: the impact of these new homes—if it was 300,000 a year for 15 years, what impact that would have on the fourth and fifth carbon budgets—and also the relative cost of retrofitting, rather than doing it upfront. If you could get back to us on those, it would be helpful.

Lord Deben: We could do that, Madam Chairman. One thing about it is that, of course, when you talk about retrofitting, it really does depend so much more on the home and whether you are moving, let us say, from level G to F or whether you are moving from level C to B. We are not proposing that you should be lifting right up to the top, because it is quite difficult to deliver that.



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The other thing about it that we ought to remember is that if you have a properly constructed house or a retrofitted house, you can then do much more about how you do the heating. You can move the heating itself into the use, for example, of air-source pumps and the like, which you cannot do if the house is not properly insulated. It has a lot of knock-on effects, which we will adumbrate.

Q158 Mr Liddell-Grainger: Can I come back to something? I want to continue on this. When you retrofit a house—you absolutely hit the nail on the head—it depends on the type of house. Are you including heat pumps and heat recovery? What do you talk about when you talk about retrofitting?

Lord Deben: In the specific area we have been talking about, I have been talking about insulating the house and raising its energy efficiency. That is the only way you can do that. I am merely saying that once you have done that, you have open to you things that you do not have open to you if the house is at the bottom end of the insulation level.

Q159 Mr Liddell-Grainger: The other point is that most house builders make their money on increasing land prices; you know the game. Maybe one of the areas—I am enticing you to have an opinion on it—is that we actually take action on the land itself. The land banks in these nine large builders are huge. One of the ways we can actually do something is to look at the land trading itself. Would that be an area to look at?

Lord Deben: Again, it is not for the Committee on Climate Change to do other than offer advice, but that may be one of the ways in which you deal with this. It is notoriously difficult, as you well know, to do this in a way that actually works. I did notice that in the debate on housing in the House of Lords, there was a universality of approach from the far left to the far right. At the heart of this problem was dealing with the way in which house builders now operate. We are in a position where we have to look at this very carefully.

Q160 Mr Liddell-Grainger: As a final point, Hastoe actually built some modular buildings.

Lord Deben: They built about 100.

Q161 Mr Liddell-Grainger: Yes, they did some in West Somerset. Embarrassingly, the building regulation officer would not sign them off because of concerns over their meeting the heat standards et cetera. Since then, we have had one fire and serious electrical problems, which they still have not got to the bottom of. One of the points you make—I am arguing in your favour—is that the regulation needs to be much tighter when we are doing these things. That was just one experience. It slightly put us off Hastoe, for obvious reasons; having said that, I think they are a very good company. When you are doing these, it is the regulation that matters, as well as the building inspectors. One of the problems we had was that building inspectors were not really sure what they were looking at.



Lord Deben: I am sure you are right. The thing I would say is that we have a problem at the moment, which is that if a housing association builds to this standard it is more expensive at the moment because of the fact it is a niche building. There are only 600 in Britain to this standard, of which 100 have been built by Hastoe, which is quite interesting. They have been built very successfully elsewhere, as a matter of fact.

They are not allowed to share in the savings as far as the energy is concerned. In other words, they cannot have a different rent level that takes into account what the person is paying—instead of £30 a month for heating, £5 a month, which is the sort of different you can have. You would have thought they have paid £5 a month extra rent, which would have paid for the initial cost, but the law stops them doing that. This is one of the things that might be changed. Again, this is our advice; we cannot tell the Government what to do. It seems to me that if you build a better house and the person's outgoings are smaller, you could charge a slightly higher rent because that person would actually be, in total, spending less. The differences are enormous, and that would be a very good way of helping the housing associations to build better houses.

Mr Liddell-Grainger: Are you gently arguing for peer-to-peer financing? A lot of academics are now talking about this. You would have somebody who has, say, photovoltaic cells on their roof. What they are arguing is that they could now trade with their neighbours. This is starting to be something where you could trade in housing in a small grid system. It is done in Germany and America. I am sorry: we are going completely away from the topic, but this is quite interesting. That would enormously change the situation. UCL and King's College London are now looking at this.

Lord Deben: What you are pointing to is something that worries us a lot, which is the lack of innovation in the structure of this. In Germany, for example, local authorities produce the infrastructure and very often the base. You go and choose your house individually. It arrives, and it is built very rapidly with huge quality—really good quality. In Britain, the system is locked up by the operators, and the relationship between them and the land they have means that they do not want to have any of these things, which are not new. In Germany, one in three new houses are built in a modular way. We really are behind the curve in this. It is innovation we need to have.

Q162 **Mr Liddell-Grainger:** Can I just come back to where I was meant to be? This is about interpretation. You interpreted the Clean Growth Strategy, and you were very generous about it, to be honest. You based it on the upper range of plausible emission reductions and policy proposals. If I am paraphrasing you wrongly, I am sorry, but I think that was what it was. Is it not better to try to show the whole range, instead of trying to get to the top? I know you are trying to force people up, but is it better to take a slightly broader range, so that we can get a better idea not only of reality but also of the reality of where we could be? This is not quite



the Claire Perry approach but something similar.

Lord Deben: You can do it in different ways. The Committee on Climate Change has established a reputation for never moving from what the science or the facts are. I want to stick to that, because that is what has kept us clean for 10 years. It is our 10th anniversary this year, and it is true that we have managed to do that, which is a very important part.

When we deal with the Government, it seems to me that what you have to do is to make clear the terms on which you have done the calculations. Others can then say what is perfectly reasonable, which is that, even on the best calculation, the Government are not going to reach their targets, and those targets are statutorily necessary. If you take a less optimistic calculation—that is what I have suggested you might have to do, because this is based on everything going right—there is a bigger gap. That is clear. If you do a range, I am not sure it is any clearer. I merely say that is the best you can do. There is a gap, but it might be much worse.

Adrian Gault: If I can add to that, if we start from a position where we take, say, the fourth carbon budget in 2025, then before the Clean Growth Strategy there is a gap, in our estimation, of around 31 million tonnes of CO₂ that needs to be filled.

Vernon Coaker: That is the fourth one.

Adrian Gault: That is the fourth carbon budget. We can give you some of the figures for the fifth. If you then take what the Government have said in terms of aspirations, and we are generous in our assessment of that, that would provide around 18 million tonnes of CO₂ savings in 2025. That would be nearly 60% of the gap filled on that generous interpretation, but that still leaves 40% of the pre-CGS gap that needs to be filled by measures that have not been outlined in any sense at this point.

Q163 **Mr Liddell-Grainger:** There is a very good chart on page 59. I suppose what I am getting to say is that if you have a range that is too big it allows us policymakers, of any party, to then have a wider range of policies. Are you not inadvertently widening the policy? What this chart shows is that there are a lot of imponderables.

Adrian Gault: What we are saying is that all the aspiration measures the Government have said they want to take forward need to be taken forward in a very robust and strong way, which is the way we have assessed them. Even if that happens and we lay out what we think needs to happen to do that, there will be a gap that means other measures have to come forward. All of those have to deliver.

Lord Deben: I am finding, Mr Liddell-Grainger, a difficulty in seeing what difference it would make. In the end, you have all that information in front of you. The fact is that there is a 40% gap if they do what they say they are going to do. Even if you take the best outcome, there is a 40% gap. It may be much worse than that. Policymakers working on the



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40% will have quite a lot of work to do, if you see what I mean. I am not sure I would make a difference there, that is all.

Q164 **Stephen Kerr:** Can I ask you about flexibilities? You disagree with the suggestion that the Government should carry forward the progress that has been made in the first phase of these plans. Why?

Lord Deben: First of all, we have not disagreed; we have said it is unacceptable. They have to ask our advice, and I make it absolutely clear: it is unacceptable. The reason it is unacceptable is that the budgets are set on the basis that you do not do it. They would be different budgets. First of all, the Government have said that they did not carry them forward on the first carbon budget. What is more, they said that they were not going to carry them forward. Our fourth and fifth carbon budgets are written on the basis that you do not carry it forward.

If they are going to carry it forward, then the budgets have to be different. When I say that we disagree, we are doing something much stronger than that. We are saying, "You are not going to meet the budgets as they are statutorily enforced if you do this". There is no question, in my view, that it can be done.

Q165 **Stephen Kerr:** Why did you not revise the budgets when it was obvious, 10 years ago, that things other than policy were going to give an over-performance in the first couple of budgets?

Lord Deben: It was quite clear that the Government understood that you did not do this. We made it clear that we would not give that advice. That is what the Act shows. I am not in favour of revising budgets if you can avoid it. It is difficult enough for people to follow budgets, let alone if you are constantly changing them, particularly if you are trying to explain the complication of that change. You could say, "It might be that the Government might do this", but it is much better to say, "We are not going to advise the Government to do it. We think it is contrary to at least the spirit of the Act and maybe something more than that, so let us get it right in the first place". As successive Governments have accepted that that is the case, I am not prepared to accept that some Governments should now start changing it.

Q166 **Stephen Kerr:** What happens to the cost of meeting future budgets if they were to use flexibility as against your strictures?

Lord Deben: There is a difficulty with using the flexibility. I do not like the word "flexibility", but if you bank it and use it in that way, you do not do as much in the fourth and fifth carbon budget. If you do not do as much in those circumstances, when you come to do it, it is more expensive. What is more, you do not do your bit as early as against stopping further climate change. It is just a nonsensical way of looking at it, particularly as some of the advantages we have had were accidental advantages. They were not things planned by the Government. It was not as though the Government tried to do better. I am talking about



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three Governments here. It was not that they tried to do better; it was that certain things turned out that meant they did do better.

Stephen Kerr: Mild winters, for example.

Lord Deben: Yes, certainly. I am sorry. It is not a sensible thing to say that because we have had a few mild winters we are not going to do so much. Climate change does not wait for Governments. Therefore, we ought to remind them: "It does not wait; get on with it".

Q167 **Stephen Kerr:** How confident are you they are not going to use flexibilities to hit their targets?

Lord Deben: I am pretty confident that the Government will recognise that it would be a very major political mistake to try to do that.

Q168 **Rachel Maclean:** I have a question on Brexit. I just wanted to ask you something for the benefit of the Committee. You made a comment earlier about Brexit. Could you just tell us whether you are a supporter of Brexit or not?

Lord Deben: I am entirely opposed to Brexit. It is absolutely on record. That is not just because of the Committee on Climate Change, but it does seem to me that there are some real issues we have to face. For example, if you look at the monthly bills that people have for their energy, they are about £9 more than they would have been because of the green measures that we are taking. This is, on average, for 85% of people who are on dual tariffs. They are £20 less than they would have been because of the energy efficiency of boilers, toasters and all of this kind of equipment; that, of course, is a level that is set by the European Union. Were we to leave the European Union, one of the things we would be very tough on is that we would have to go on reducing the energy use of equipment. No one is going to make it for our market, so we are going to have to do it in line with the European Union. If you do that and you have removed yourself from the European Union, you have no say in it. That seems to me to be barmy, as a matter of fact; it is just barmy.

There is a whole range of things like that. There is the fact of our power system, not only for the United Kingdom as a whole but in terms of the relationship between Northern Ireland and the Republic of Ireland. You have to continue that. We are already passing an Act to try to say we have left Euratom, although if you look at it very carefully it appears that we are saying that we are doing all the things we would have done as a member of Euratom but we reduce the amount of influence we have.

If I may say so—this is not as Chairman of the Committee on Climate Change but as me—it is morally wrong to remove yourself from the opportunity of doing good. We are on this earth to do good and to contribute. One of the ways we have contributed remarkably is in the European Union on environmental things. We have moved from being the dirty man of Europe to being in many ways the clean man of Europe.



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We have done all of these things as far as climate change is concerned. We have really made a difference, because we were there at the table. We are now saying, "We are not going to be at the table. We are far superior to you lot. You get on with it". Yet we are going to have to do, in many ways, whatever we do, very much better. That view is wrong. It is not just silly, which it is, but wrong.

Q169 **Rachel Maclean:** Thank you for sharing that with us. It is obviously a political view. You have made your views clear.

Lord Deben: I do not think it is political. I honestly do not think it is political. I think it is logical and moral. I do not accept that there is a political argument that has so far been adumbrated to explain what the advantages of leaving the European Union are, except a number of slogans, most of which have turned out not to be true, like the £350 million. I find it impossible to take seriously people who will not accept the realities of the world in which we live.

Q170 **Rachel Maclean:** Lord Deben, you do not need to tell me that. I appreciate that; I am merely making the point that that is a view that not everybody in the country shares, for the record. That was all I was seeking to say.

Lord Deben: I agree they do not share it.

Q171 **Rachel Maclean:** I wanted to ask you that question, because obviously Brexit is an emotive issue. I just wanted to ask you, with regard to what we need to secure in negotiations to ensure we are going to meet our emissions target, what the Government need to look at specifically in the Brexit negotiations, which as we all know are a priority for the Government.

Lord Deben: Of course, one is able to draw a distinction between one's views on Brexit and things that are directly a result of one's responsibility on the Committee on Climate Change. The whole issue of our relations with the rest of Europe on energy is very important, because the figures have to add up. I am particularly concerned about Northern Ireland and Ireland. It is a very important part of that. As you know, they have a joint operation, and it is really very important.

Q172 **Rachel Maclean:** What specifically should the Government seek to do on that issue?

Lord Deben: They must seek to maintain the present circumstances and the present system. We do need an energy system throughout Europe that is operated as a single system. They must seek to do that, as they have had to seek over Euratom. It is a thing you have to do together because you cannot do it on your own.

Secondly, they need to think very seriously about how we deal with environmental standards that impinge significantly on our emissions. It is not just domestic things but, for example, motor car standards and van



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standards. We need to ensure that we are at least doing as well as our neighbours.

These are also fundamentally international businesses. I cannot see the British motor industry and other motor industries meeting special standards for the United Kingdom. Therefore, we will need to keep those in line and we need to have some sort of an arrangement that makes it possible for us to do that. You can go through a whole series of things of that kind where the market demands that, if you are going to raise the environmental standards so as to reduce your emissions, you have to do that in a common way. Therefore, in your negotiations you have to deliver that.

Q173 Rachel Maclean: The next question I am going to ask is about industrial strategy. Obviously, the Government have presented the Clean Growth Strategy as an integral part of the development of our industrial strategy. Are the proposals in the industrial strategy and the Clean Growth Strategy enough to capitalise on the opportunities, or is there more the Government need to do? I am talking about the development of new technologies and those things where we have a competitive edge as the UK.

Lord Deben: My concern is that we are repeating the mistake Britain has made as long as I can remember, which is to be thinking about the need to improve our research and to do more research without thinking about the bit that is really difficult, which is moving from the invention to the commercialisation. We have a history of being at the forefront of invention and breakthroughs, but we also have a history of them all going off somewhere else to be developed as a commercialisation. The present mix has not got that right. There is a great need to try to make this country more able to commercialise its inventions and developments.

Q174 Rachel Maclean: What specifically would the Government need to do to enable that to happen?

Lord Deben: There are various models. Again, it would not be for me to say which one to take, but there are various models. Other countries have been more successful—the Germans have been more successful and the Americans are clearly more successful—at using Government funds to help with that. Their banking institutions have also been more successful. It is notable that the private enterprise has been more successful. We ought to concentrate on it. If we did, we would get better. We can learn from them; I like learning from other people.

Q175 Mark Pawsey: You were speaking about the commercialisation of the great ideas that come out of our universities. Are the Government's catapult centres going to have the impact there in achieving that objective?

Lord Deben: I would hope so. I would like to see more emphasis on it. I would like to see the Government show that they really understand that that is a very important bit of the problem.



To finish answering your earlier question, it is also true that the Department for Education is going to have to play a very important part in all this. I am worried about the connections between universities and further education. Take agriculture, because one of the big areas we are going to have to come into is agriculture and its impact on emissions. The lack of connection between the land-based colleges, the agriculture research in universities and the farmers is a very notable thing. That is another area where I would like to have seen more in the industrial strategy.

Q176 **Rachel Maclean:** You talked about how we need to capitalise better on and commercialise research. Can you identify specific technologies where we could have a better competitive edge?

Lord Deben: I will take the one we mentioned very centrally, which is carbon capture and storage. In our view, we cannot meet our endpoint in a cost-effective way without carbon capture and storage. The rest of the world is also going to find it very difficult, so this is something that we ought to be developing. The Government did have a situation in which it had put aside £1 billion to do this. It cancelled that. It then had nothing; now it has £100 million. Again, it is all concentrated on the start and beginnings of research and encouraging in that sort of way. Actually, we are the perfect place to have carbon capture and storage because we have the places to store it.

What I would like to see would be the Government saying, "We are going to be the leaders in carbon capture and storage," as we did say with offshore wind—not early enough but we did that. "We are going to be the leaders in carbon capture and storage, and we are going to do two things. First, we are going to invest in that in a serious way. The second thing is that we are going to make the fossil fuel industry"—we have some big players in that—"understand that their future depends on this". We are not going to be able to use gas after the middle of the 2030s for a generation, for example. If you want to have a future for gas, it has to be with carbon capture and storage. This Government ought to be saying to the leaders of the fossil fuel industry, "This is the future. This is a partnership. You have to put your part up and we will put our part up". I would like to see that.

Adrian Gault: I can add a few further examples just very quickly.

Chair: Drew has a number of questions about carbon capture and storage.

Adrian Gault: I will identify some areas other than CCS. We did some work early last year where we looked at the opportunities for the UK from global decarbonisation. We identified areas that are picked up in the industrial strategy around potential UK advantages: electric vehicles, offshore wind, smart energy systems and low-carbon finance and insurance. There are some areas within the industrial strategy that we would agree are areas of potential UK strength.



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Q177 **Drew Hendry:** You have answered my question about how important carbon capture would be in order to meet our climate change targets, so I will ask you a few questions about how we do this, and you have alluded to the difficulty in taking that forward. Earlier, you mentioned £7.6 billion being invested in wind energy to get that energy stimulated to the point where it can make a difference. How do you feel about £100 million for carbon capture and storage? Is it anywhere near enough?

Lord Deben: Not all of the £7.6 billion was spent on wind; it was spent on a whole range of other things as well.

Q178 **Drew Hendry:** In that case, I will give you the original £1 billion that was originally scheduled for Peterhead.

Lord Deben: Yes, exactly. No, I am not going to dodge your question. Clearly, we have said in our report that this is not the sort of sum that is going to deliver what we need. More importantly, in a sense, it is that sum because it concentrates on research and on that end of the thing. It does not set out a vision for Britain taking this to its real end and being able to use it. It does not talk about it in that way. It talks about it in a different manner. That is not the way in which the independent report, which the Government commissioned, suggests it should be done. I am merely saying that all the evidence is that we should do this in a much more wholehearted manner than what £100 million means, but thank goodness we have £100 million. We have the beginnings of something. People have begun to once again admit that climate change demands carbon capture and storage, so we ought to thank our lucky stars for that.

Q179 **Drew Hendry:** The Minister, Claire Perry, indicated to me during questioning in this Committee that she felt the £1 billion that she thought would be the figure that would be needed to get this stimulated would come from private enterprise. She was confident that was going to come in. That does not seem to be what you are suggesting, so I would like your thoughts on that. Perhaps you could just touch on the report that was commissioned by BEIS. It came back saying that it did not think there was a commercial model there that the private sector could take forward. Does the public sector need to be taking the lead here?

Lord Deben: I have some sympathy with the argument of Ministers that it is surprising that the fossil fuel industry—even those bits of it that recognise the reality of climate change and are beginning to say that their own place is very much threatened by that—do not appear to be recognising that carbon capture and storage is an important part to protect their shareholders' interests.

I have sympathy with the argument that this is not an industry that has bounced up to say, "If the Government do this, we will do that". I understand. Having been a Minister, I would have said that myself. I would have said, "This is really rather difficult". Is the industry sitting



about and waiting for us to do it because it does not want to spend the money?

I have some sympathy for that, but in the end we have to accept that we need a significant commitment by Government that, if the industry steps up to do these things, the Government will be backing it with money and with a continuous commitment to it. The industry is, of course, much more suspicious now the two programmes—the White Rose one and the Peterhead one—were summarily closed. It is difficult to get them started again, so the Government have to play a rather—

Drew Hendry: You have been refreshingly forthright up until this point. I hope I am not being disrespectful by saying you seem to be choosing your words very carefully around this subject. My question was: do you think the investment by the Government is sufficient? I will just add this: do you think it is likely to achieve the aim to provide a meaningful move forward on carbon capture and storage, which everybody, including the Minister, states is going to be required in order to get anywhere near meeting the targets?

Lord Deben: I hope I have not been choosing my words too carefully. It is not a reputation I have. I am genuinely saying that what the Government have put forward is a considerable relief, because they have committed themselves to this; they have no longer crossed it out. However, it is manifestly not enough money to deliver what we need. If it is the beginning of a mechanism whereby the private sector is brought into the tent and the Government can then feel themselves able to move further into this area, that will be jolly good. I hope it is, and I shall be pressing for it to be. If we do not deliver carbon capture and storage, the cost of meeting our obligations will be significantly higher, and therefore we ought to do it.

Q180 **Drew Hendry:** Given that we all agree that we need carbon capture and storage, I hope—"hope" is a word I have heard many times from Ministers—it will move forward at speed. Do you actually believe that the impetus provided by that investment—as you said, it is more on research and development—is going to be enough to give us the acceleration that is required in order to deliver that?

Lord Deben: We have said in our report that we believe much more has to be done. In that sense, that suggests that not enough is done now. That is where I want to stand. I will be pushing for more to be done. The way to do that is that we will produce our annual report. The first one that relates to this will be in June. We have to every June; it is part of the Act. We will be looking at that, and we will be saying, "Here we are in June. What has happened on this?" The fact is that we will take that opportunity to press the Government to extend their operations, particularly, as I say, out of the concept of research into the concept of commercialisation. By "commercialisation", you see what I mean: making the thing actually work and be there and be used.



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Drew Hendry: Okay. I think the answer is that not enough is being done and not enough money is being put forward for it. Thank you.

Q181 **Chair:** Just to build on Drew Hendry's questions, you said earlier, Lord Deben, that countries like Germany were well ahead of the UK in terms of house building and the standards there. You also spoke about offshore wind and how creating a market here has led to the sharp decline in the price of offshore wind energy. On carbon capture and storage, could we still be a world leader or has that moment passed? What are other countries doing on this? Does it matter if we are not a leader? If other countries are doing it, might we be able to adopt what they do and transfer those technologies once they have been brought forward?

Lord Deben: First of all, there are other countries that are doing a lot. Canada is doing a lot and there are various places where things are being done but nothing sufficient for one to be able to say, "There will be this in a time at which we can adopt it". That is the first thing.

Secondly, although I was rather tough about Brexit and explained where I stood on Brexit, we all have to live in the world in which we are. I thought that the people who were in favour of Brexit said, "Leaving the European Union releases us to do all kinds of things which we have not otherwise done". One of the things we have not otherwise done is actually recognise that we have to build on our expertise and strengths, and we have to be able to sell into this wider world. If we are going to say that on carbon capture and storage, where we are uniquely well placed as far as the storage bit is concerned and where, because of the Climate Change Act, we are ahead of other countries in sorting out the way you deal with climate change—and given that we have those two advantages and given that we have some of the finest universities and research in the world—it seems to me to be an odd view to say, "We will not try to develop this ourselves but we will hang about until somebody else does it", and then, at huge cost no doubt, we will buy it in. I just find that a very odd way of looking at it.

In many ways, the whole Brexit issue diverts us from the fundamental British economic issue, and the fundamental British economic issue that is not solved by Brexit—indeed some of us would say it was made worse by Brexit—is that we have been very poor at turning our strengths into real money. The vulgarity of the American technique is not something that we have caught nor have we established the very careful banking arrangements that the German have. I just think that we have to find a way of doing that, because otherwise I do not see how my children and grandchildren will have jobs, let alone anything else, and I rather care about that.

Chair: Thank you, Lord Deben. That is a very helpful answer.

Q182 **Mark Pawsey:** On the broader question of energy costs, the Government's policy is to have the lowest energy costs in Europe and, in fact, the Government are bringing forward a Bill to cap the price of



electricity in order to support consumers. Is that in conflict with the objective to reduce the amount of carbon we create in generating our electricity?

Lord Deben: It is not necessarily in conflict. Whether it is the right policy or not is not for me to judge. We have this rather odd situation in which we have high electricity prices and rather lower gas prices. It is quite difficult not to say that part of it is the way in which the industry operates. It is quite difficult not to say that it is about the wholesale prices and the distribution costs rather than the usual issue and the usual argument. It is certainly not about “green crap”. That is very clearly not true.

I wonder whether one could put it this way: if we get the breakthroughs that we clearly seem to be expecting, we are likely to have to deal with lower energy costs. That is what it means. The development of renewables and suchlike means we are likely to have lower energy costs and we are likely to have more efficient machinery and such. My own view is that we will have to handle the fact that, if you have lower energy costs, people will tend to use more of it, and that is a real issue. However, I do not think this will make much difference.

Q183 **Mark Pawsey:** You do not accept the assertion that using greater renewable sources of energy will put the costs up. At the moment, for example, energy suppliers are charging more for consumers on a green tariff. People are willing to pay more to know that their energy is being created in an environmentally friendly way. You are saying that that should not be the case.

Lord Deben: I am not saying that should not be the case; I am saying that, in the future, the fact is that it is likely—not certain but likely—that the basic costs of energy will be reduced if the present trajectories go on. Whether it is a suitable thing to have an energy cap and suchlike is really a matter for politicians and not for me. You asked whether I thought it would have a counterproductive effect. My own view is that it will not have much effect at all, and that is not one of the things that I am too worried about.

Q184 **Mark Pawsey:** You are clearly very supportive of moving to more renewable methods and you spoke about the lead that this country has had. We might be able to get a lead in tidal energy. A proposal was put forward for a pathfinder project in south Wales. Do you have any views about whether that should proceed?

Lord Deben: We have looked at it very carefully. I am a great believer, as is the committee, in the whole issue of energy diversity. You would be very foolish to rely on one sort of thing. I am instinctively for it. However, it is significantly more expensive and you have to think about whether it is the sort of technology that is likely to reduce significantly in cost if you create a market and scale it up. The problem with the whole argument is that much of the cost is in the construction business—the



pouring of concrete. It is difficult to see how, by building more and more of them, they are going to decline in cost significantly. It is difficult to see that.

Q185 **Mark Pawsey:** Would people not have said the same about wind turbines 10 years ago?

Lord Deben: People may have said that but that would not have been a parallel because, if you can, for example, change the whole system of gearing and if you can have much bigger sales on them, so to speak, if you can have floating ones and if you can take them out and plant them in the sea for 10 months of the year instead of five months of the year because they are bigger and you have bigger boats and things, then all of that could be worked out. It has just been very much faster. One has to look at the realities and we have so far not been convinced of that. I say that as somebody who is, in fact, biased; I have to aim against a bias. I do think tidal energy is an important thing. I hope I will not upset Mr Liddell-Grainger but I have always thought that trying to create some sort of Severn Barrage is a very sensible thing.

I would like people to look at the cost in a different way. I admit that I do not understand why we do not apply what I call proper fatherly economics. If you said to me, "Will you pay a bit more for your electricity so that, in 30 years' time, your grandchildren will have free electricity in very large amounts for 100 years without very much change in it?" I might say to myself, "That sounds rather like a good deal".

The Treasury does not have a model for that, which is rather difficult, but it does seem to me that we ought to look at it and be prepared to do it. As you know, I was a promoter, before I did this job, for the Severn Barrage, so I am not opposed to it. We have done some really hard work on it and I am open to being convinced. In the end, I think the Government are probably right in questioning whether this is where they want to put their money.

Q186 **Chair:** What role do you think that onshore wind and solar might play in meeting our fourth and fifth carbon budgets?

Lord Deben: May we, Madam Chairman, just divide the two? They are slightly different. First of all, onshore wind seems to me to be something that ought to be playing a wider role. It was a mistake to make it impossible, but then it was a mistake before to make it so easy that the industry itself became very arrogant about it because they would look at the local planning committee, which was busy voting against having it, and then say, "I am going to appeal", because the law was changed in such a way that it was really very difficult to lose the appeal. That caused real upset. I know personally, representing as I did in those days a rural constituency that, if you went out to dinner, the only subject that was shouted at you was onshore wind. I do not want us to kid ourselves. It was a very difficult situation. I put that to you as a fact.



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Both the Conservative Government and the previous Labour Government got it wrong in two different directions. However, there are parts of the United Kingdom—particularly Wales and Scotland as well as some parts of England—that would be prepared to have these. I have them just up the road from me where I live in Suffolk. On the edge of Eye, there are four what are now really rather beautiful things. People who were opposed to them before now see it as part of the scenery. You can win these battles.

I will tell you something, Madam Chairman, that I really feel strongly about. When the Government decided that they were not going to allow more onshore wind, they should have told the public the cost of that, because it does increase the cost of meeting our climate change targets. I suffer often by being attacked because I am promoting this wonderful effort that we are all doing. I want to do it in the most cost-effective way, and that is what the committee is supposed to do. If the Government refuse to accept part of the most cost-effective way, they should cost that and say to the public, "In order for you not to have onshore wind, it will cost you X amount more to deliver what we have agreed to". That is a proper behaviour and I do not think it was a proper behaviour not to do that. Otherwise, people think that they can make these choices with no cost to themselves. Yes, we should be having the opportunity for more onshore wind. It should be within the system just like everything else. That would be a very valuable thing.

Q187 Chair: Before we move on to solar, I am interested because you have had lots of conversations with Ministers in the Department about this. Do you think there is any appetite from the Government to look again at onshore? You have made a powerful case that the balance was wrong on both occasions. Do you think there is an appetite from the Government, or do you think that it is something that is closed?

Lord Deben: As you know, we advise separately the Scottish Government and the Welsh Government. Clearly, other parts of the United Kingdom really feel strongly about this and the Government are beginning to take that very strongly into account. I hope that it would not be geographical but democratic; in other words, it would be to say, "Where people want it, we will encourage it". That is what I would like to see.

There are two problems for solar. The first is the history. We did get the figures wrong and, again, that was both Governments, so it is a fair thing. We got the figures wrong. We actually made it too worthwhile to put solar in and then we had to change that. Of course, the industry then cried foul. Of course, that is one of the reasons why you ought to try to get your figures right in the first place. It is quite difficult to do it and I understand that and I do not blame people for it.

We have to make sure that the solar import does not distort the way in which the mix works. That is quite difficult because it is true that solar in Britain produces energy at the time in which we least want it. You need



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to get some sort of balance in this. With the price of solar falling, as it does, in such a remarkable way, we should try to get as much as we possibly can but we have to balance the grid; we have to think seriously about that. It is more complicated than the solar industry sometimes suggests.

In a perfect world, we would be producing vast quantities of energy from wind, because we have one of the best wind mixes in the world, and the Spanish should be producing vast quantities of solar, and we should be linked together by fast grids that make that possible. That is what we ought to be doing. That would be a sane way of operating. The fact that we have not been able to do that, even inside the European Union, if I may say so, is a great disappointment. I have heard figures—I do not know if they are right—that say that, if we got the European grid right, we could save 12% of our emissions. There are a lot of ways of doing that and solar is part of the picture, but it is a much bigger part of the picture more generally. If you come to hydrogen, using solar in order to make hydrogen becomes a very sensible thing.

Q188 Chair: We will move on to Vernon in a moment but one thing that we have not touched on, and which our Select Committee is just about to start an inquiry into, is electric vehicles. I wonder whether you think that we could speed up the introduction of electric vehicles in order for them to make a greater contribution towards achieving our fourth and fifth carbon budgets. What are your thoughts on that?

Lord Deben: We have said that the speed at which the Government are intending to do this is not sufficient and that we really have to speed it up. The market will produce the vehicles that people want to buy. There is a cost issue and we have said that we want the present support, at least, to continue, although we believe that we will come to the point at which that will not be necessary. It is at the moment.

The area that I would like us to concentrate on is the question of being able to charge an electric vehicle. There are two bits to it. One is the actuality of it. I want to challenge London boroughs, for example. There ought to be a connection with when you pay for being able to park your car in your street. Every time you pull the street up, you ought to be putting in plugs so that people can in fact do that. In London, we would have a change very quickly, because most people's journeys in London are limited so they are already within the range. That is one bit of it. I challenge local government and challenge the Government to help local government do that.

The other bit is that people need to be very much more aware of how much charging opportunity there is. When you go to buy a car, there are two things that you want to know. The first is: "What is its range? Will it do what I need it to do for my normal journeys?" The second thing you want to know is, "Can I charge it?" I do not know whether you have tried but to find out whether you can charge it or not is quite a complicated thing. We have to be much better at telling people where it is. For



example, could we not do a deal with the garage chains so that we could say that by such-and-such a date every BP garage and every Shell garage would have charging points? Could we think creatively here? That is a thing that the Government, particularly the local government Department, should be thinking about. Creativity is something I would like to see rather more of.

Q189 Stephen Kerr: Some of the things that you have just mentioned are in the Bill, which is now coming to the House of Lords. Similarly, the Smart Meters Bill has left the Commons and is coming to the Lords. You mentioned earlier the importance of smart meters, smart grids and artificial intelligence balancing the grid. I would love to hear some of your thoughts on the progress that we are making with the smart meter rollout. It is integral, is it not?

Lord Deben: It is. I am not up to date in the sense of saying where we are today as against where we have been. It seems to me that it has encountered much more opposition than it should have done. We could have done things more smoothly. I am not at all sure that the industry has behaved as well as it might have behaved, but we have to keep the pressure up.

I am also concerned about the other bit of it. The smart meter and the smart grid really go hand in hand. We have had a presentation from DeepMind as to the work they are doing with the National Grid. I would like to see much more emphasis on the importance of that. Artificial intelligence is ideally suited to making those hundreds of thousands of decisions every millisecond that balance the grid. That is very important, because it really means that you reduce the need for backup power and you reduce the need for base power. That therefore plays into the kind of decisions that you want to make on nuclear, and that is a very important thing to do.

Q190 Vernon Coaker: It has been a fascinating, informative and interesting session. A lot of the questions have been around particular individual policy areas that are obviously crucial. I want to have a broader, visionary strategic look at where we are. With regards to the targets in the Clean Growth Strategy, even on the best assumptions and even if we are very generous to the Government, there is a gap. However, we have also signed the Paris Agreement, which is absolutely the right thing to do but which actually means that the targets will be even more stretching. In your view, as advisers and, frankly, challengers to the Government, and for all of us, how will we, first, fill the existing gap and then be credible with the public in terms of what we will do to actually then meet the Paris Agreement targets?

Lord Deben: That is a very important question, Mr Coaker.

Vernon Coaker: I am not trying to be negative.

Lord Deben: I know. The targets are not under discussion because we fixed those, Parliament has voted for them and they cannot be changed.



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We know what the targets are. The thing is, as you rightly say, how you reach those targets. The Government have produced a plan that will not reach those targets unless they, first of all, make sure that what they hope to do in the plan is clear and will be achieved, and then they have to do more. The reality, if you ask how we will do this, is that we have to have much more engagement by all the Ministries across the board. Have you noticed that, when the Government devolve to Manchester or Liverpool, they devolve powers and they tell them that they have to do housing and transport and health altogether? However, when they come back to Government, are they talking to each other? They claim to be but I must say that I do not often notice it. We have siloed our system. The biggest way to break through this is to begin to really get the departments on board that think that somebody else will do it.

Take DCMS, for example. It is responsible for the whole of the leisure industry. The leisure industry is a crucial part of improving our emissions because it employs large numbers of people and it uses a lot of energy. I have not seen very many relationships between the DCMS and the leisure industry talking about how they reduce their emissions. The first thing that I want to do—and this is my aim having been reappointed for five years—is to try to spread out to those other Departments so that they are beginning to press them. That is one thing that we can do. Secondly, we have to release local government. Local government has a really important role to play here. There is a very good scheme that has started in Leeds, which I hope that we will be able to roll out. I am not just saying Leeds, but it is.

Vernon Coaker: It is a good start, though.

Lord Deben: Leeds University, which is a big leader in this whole area, has teamed up with the Leeds City Council and got a cross-section of the Leeds community from the bishop to the trades council—all groups—and they have a climate commission, and they will try to operate with the city council as we operate with the Government, so really putting tough measures in so that the city council can do its bit. I am impressed with some of the things that Leeds City Council is doing. It is building—I never know quite what word to use—the sort of zero-carbon, passive housing. They are building some themselves.

Chair: There is a good example in my constituency called LILAC, which you would be welcome to visit any time.

Lord Deben: I would love to have the opportunity to do that. I want to try to spread that around the country because it seems to me that the mixture of the academic quality of the research and knowledge gives credibility to the standards and targets locally that there are. If we do that all around the country, there are all sorts of things that you can do to meet our targets more effectively.

Adrian Gault: That side of it is concentrated on putting in place the policies and measures to potentially overachieve the carbon budgets,



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which would put us on track to go further for Paris. The other side of it is developing the greenhouse gas removal strategy, which again the Government are committed to in the Clean Growth Strategy. Within that, it is essential that we are looking at reforestation and carbon capture and storage in particular, so we come back to CCS. It is crucial for the longer term.

Q191 Vernon Coaker: What is the actual mechanism? I absolutely agree with what you just said. Certainly when you were in the Cabinet and I was a Minister, you are always searching for what the mechanism is that will actually deliver that policy objective. It is not aspirational. That is the challenge.

Lord Deben: That is the challenge. Claire Perry would say that she will use the mechanisms of the green Ministers and that operation. I think I am sufficiently well known to be independent on this so I merely say that she is very good at it, in the sense that she goes there and she does not leave until she has got what she wants in terms of that. We will see a much better co-ordination. I still think there are places where it really seems not to have spread into their minds, not just in terms of Ministers but the whole structure. I do not get the feeling from the Ministry of Housing, Communities and Local Government that this is top—or anywhere, really—in the list of priorities.

Q192 Vernon Coaker: Could that Department or DCMS, for example, have a greater awareness?

Lord Deben: Almost every Department could have greater awareness but it does seem to me that there are very significant things that those Departments can do to make a difference. I want to try to encourage them to do it. I do not want to point the finger because this is the next stage. Now that it is the centrepiece of the Government's industrial strategy, everyone should be involved in it. That includes the Department of Health. The National Health Service is a huge procurer and a huge user of energy. It has huge opportunities. I want to see the NHS having this as an important part of what it does.

Q193 Vernon Coaker: Do you know if they are part of the existing ministerial co-ordinating group that Claire Perry chairs?

Lord Deben: The Department of Health certainly is. Indeed, the Health Minister in the House of Lords is extremely enthusiastic about this. There are some bright bits but, without pointing the finger too much, I can think of some pretty dark bits too, and we have to try to make them much more keen.

Q194 Vernon Coaker: I just have one last thing. Is there a need for the Government now to be setting out a strategy for how they will achieve the terms of the Paris Agreement?

Lord Deben: There are two bits to it. We have looked at whether we should alter the fourth and fifth carbon budgets in respect of what Paris



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has required. Our judgment was that the trajectory does not change for that period of time sufficiently; it is within the parameters. Again, it seemed to us therefore that it would be beyond that that she would want to change the trajectory and that therefore it was better not to change the budgets because it would not make a material difference. Also, changing budgets confuse people. I want to stick them to doing things that are quite difficult anyway, which is to reach those budgets.

Also the IPCC is producing a document in which it explores what this really means and what we really ought to be doing, and I did not think it was sensible to make any changes or recommendations until we get that. We are waiting for that. It is pretty soon to come. That is part of it.

The second bit of it is that, if we are going to get down to a rise in temperature of below two degrees, we will have to find ways in which we are actually taking carbon out of the atmosphere. That brings us to all sorts of things like forestry and land use. If you ask me what my biggest worry is, I would say that my biggest worry is how we are going to deal with land use. That will be one of our big issues. We are losing fertility very fast in our soil. We have to think in the context of, if we were to leave the European Union, rewriting our agricultural support system in some way or another, which will have to take all this into account. That might be an advantage of leaving the European Union. I seek them all the time to try to find something I can say. We may well need to do that. That will be different. That really will make a difference in what we do. That will be one of the big discussions over the next period because the sixth carbon budget will have to include that, and I will start on that this autumn.

Chair: Thank you very much, both of you, for coming to give evidence and for engaging with our questions and being so open. It is a good tutorial in how to be a witness to a Select Committee. Thank you very much.