Select Committee on the European Union

Energy and Environment Sub-Committee

Corrected oral evidence: Brexit: Environment and Climate Change

Wednesday 23 November 2016

11 am

Watch the meeting

Members present: Lord Teverson (The Chairman); Lord Cunningham of Felling; Viscount Hanworth; Duke of Montrose; Lord Rooker; Lord Selkirk of Douglas; Baroness Sheehan; Lord Trees; Viscount Ullswater; Baroness Wilcox.

Evidence Session No. 5 Heard in Public Questions 75 - 84

Witness

I: Matthew Bell, CEO, Committee on Climate Change.

Examination of witness

Matthew Bell.

Q75 **The Chairman:** Welcome. Can we start our last evidence session on our report on Brexit and the environment and climate change? Can I remind members to declare their interests, if they have any, in this regard? Probably we will not get on to marine matters but, just in case, I declare I am a board member of the Marine Management Organisation. Could I remind Mr Bell and Committee Members that this is, obviously, an open and public session of the Committee and it will be webcast? We will also take a transcript and if, when we forward it to you, you find there is an error, please come back to us and that will be changed. Mr Bell, we are going to concentrate on climate change in this session. Perhaps I could ask you to briefly introduce yourself and then we will start the session asking formal questions.

Matthew Bell: I am Matthew Bell. I am the chief executive of the Committee on Climate Change.

The Chairman: Good. That was very succinct. Hopefully we can continue in that informative manner. We are very aware that the climate change committee, which is central to climate change policy in many ways in the United Kingdom, recently published a report *Meeting Carbon Budgets—Implications of Brexit for UK Climate Policy*. Perhaps I could ask you to summarise the conclusions or the main points that came out of that report for the information of this Committee, our report and the conclusions we will make. Over to you, Mr Bell.

Matthew Bell: With pleasure. As many of you know, the role of the Committee on Climate Change is to provide independent advice to Parliament on all issues relating to climate change. We are an independent body; we sit outside of Government. In that regard, after the Brexit vote, we thought it would be useful to table something that discusses climate change and Brexit generally. It probably goes without saying that the general advice about it being too early to tell applies to all of this conversation, and in many respects it is too early to tell. The note we put out was intended very much as a checklist rather than coming to any conclusions at this stage, but very much a checklist of the types of issues in relation to climate change that everybody should have on their minds as we go through the Brexit negotiations.

In that respect, there are probably three high-level points. The first of those is that there are some things that have not changed as a consequence of Brexit. Given that most of our conversation will be about things that have changed, it is worth being clear about what has not changed. The first of those is the scientific evidence around climate change. The second of those is the international transition to a lower-carbon world, part of which is embodied in the Paris Agreement that the Government have just ratified. The third of those is the UK Climate Change Act itself, which was an Act enacted by the UK Parliament off the back of, partly, the UK’s contribution to that international effort and, partly, preparing the UK to be well positioned in a low-carbon world. Those are probably the things that have not changed as a consequence of Brexit.

The second point and conclusion that we would make is that if you look at the requirements under that UK Climate Change Act—and the recently enacted so-called fifth carbon budget requires the UK to reduce its greenhouse gas emissions by 57% by 2030 compared to 1990 levels—there is currently a gap between where we would be were we to do nothing and where we need to be by 2030. In our annual report to Parliament we set out the details of that gap, but, roughly speaking, if we were to do nothing, we would only get about half way to where we need to be in 2030. There is a gap of about half of that ambition. That will require action. That requires action, again with or without Brexit, to close that gap.

That brings me to the third point, which is that before Brexit some of the mechanisms that we were anticipating would close that gap would have been mechanisms that the UK would have negotiated at EU level and some of them would have been things we decided to do ourselves. We divided those things into four different categories. The first of those that relate to EU-level measures is product and efficiency standards, probably the quintessential example being fuel efficiency standards on new vehicles, but there is a range of other sorts of product and efficiency standards—whether it is on electrical goods, such as fridges and freezers, or indeed on things such as F-gases, which are powerful greenhouse gases—that the UK had previously negotiated at EU level that will be up for discussion during the course of Brexit.

The second category of things is the collective of funding and delivery mechanisms used to reduce greenhouse gases or that have, as an incidental consequence, the reduction of greenhouse gases. The prime example of that is the EU Emissions Trading Scheme, which allows both the power sector and heavy industry to trade emissions permits around the EU and reduce the costs of reducing emissions. Another example would be the Common Agricultural Policy, which is not primarily about greenhouse gases but lots of the measures in there have an effect one way or another on levels of greenhouse gases emitted; afforestation and tree planting have an impact for sucking greenhouse gases out of the atmosphere.

The third category that relates to the EU is what we would call sectoral targets. These are things where we have agreed targets at an EU level but the precise way in which we deliver those is left up to individual Member States. That includes things like reduction of waste going to landfill, where there is an agreement at an EU level but the mechanisms—landfill tax and other things; recycling programmes—are very much things that have been developed in the UK. Other examples are biofuels, where again there is an EU-wide agreement on the target but the mechanisms are developed at a national level.

Those are the three main categories of things that are currently negotiated at an EU level, and have an impact on greenhouse gas reduction and closing the gap that I mentioned, that will be up for discussion over the course of the next couple of years.

There is a fourth category of things that we call enablers, which are agreements that have been reached at EU level that are about a range of other things but have an impact on greenhouse gas reduction. Perhaps the prime example of that is interconnection in electricity networks, and so how the agreements for how electricity networks across the EU are integrated. Clearly, that is about energy security and trading electricity but also has an impact on greenhouse gas reductions. Other examples might be innovation and funding around research and development, collaboration between universities, and so forth, where, again, that is about a wide range of issues, only one of which is about R&D and innovation in the low-carbon space. There is a series of enablers that were put in place specifically for greenhouse gases but have some impact on how we move forward.

The Chairman: Thank you very much for a very comprehensive summary indeed. One of the other areas we have looked at to some degree has been standards on things such as energy efficiency and all those sorts of areas as well, which I think were mentioned in your report, whether it is vehicle emissions or electrical efficiency, all of which may be good ideas for consumers but are also good in terms of the greenhouse gas emissions. Is there a concern in that area that those standards might diverge, or do you feel that because of the single market or trade pressures they will stay the same?

Matthew Bell: In this report we have certainly flagged up that area as a very important consideration through the discussions, in our role, trying to understand whether the outcome of the discussions is to increase or reduce emissions based on what happens to those standards. You are right to say that on the vehicle side, fuel efficiency standards for vehicles—which have been negotiated and agreed at an EU level and currently extend to 2020 but the negotiations are currently under way for the extension out to 2030—have been a very important driver of new vehicle efficiency standards. Whatever the next step is that would have been negotiated at an EU level, we need to think about how we either replicate that or develop a new version for the UK—similarly for electrical goods. One of the things in the evidence we hear is that in many of these cases there is an economic market, which might be an EU-wide market and creating a level playing field for competition to take place to facilitate UK industry and competitiveness, quite apart from the impacts on greenhouse gas reductions. I am sure that will be one of the considerations that gets taken into account in deciding how to move forward with some of those.

It is worth adding that it is not just about the standard itself, it is also about how that standard is applied. Transport and vehicles is important in that respect. The UK could decide, for example, to comply with whatever the EU standard for new vehicle efficiency is to 2030, but if sales of new vehicles in the UK are not counted towards the calculation of that EU average that creates different incentives for which cars are sold in the UK, and that could have an impact on meeting carbon budgets.

The Chairman: Thank you; that is very useful.

Q76 **Duke of Montrose:** First of all, can I declare my interests in that I have been in receipt of Common Agricultural Policy subsidies for a number of years and am a major shareholder in a small farm hydro-electric scheme? Are there any elements of EU climate policy and mechanisms that the UK should particularly maintain, amend or repeal, and on what grounds? It seems to me that we have prided ourselves in leading the way on a lot of climate change initiatives and if we could link ourselves to some of the more emerging economies and get them to take them up, could we not be seen as still leading the way on these issues? The final point is: what is the contribution of current EU-level policies towards the UK's 2030 emission reduction target?

Matthew Bell: Let me take those questions in turn. On the first question, there are two ways in which the UK aims to help meet the global challenge around greenhouse gas reductions. One of those is through its domestic efforts. The second of those is through how it contributes to supporting other lower-income countries elsewhere in the world. Our primary duty is around the domestic efforts the UK makes—that 57% reduction to 2030 and the 80% reduction to 2050—but equally the Government have funding and programmes in place to link to and support other countries. The previous Prime Minister announced, in the context of Paris, £5.8 billon that is currently being spent to support greenhouse gas reduction in other countries with likely ancillary benefits to the UK, as you indicate, in trade and opening up markets. That is a package of international support that currently sits largely with the Department for International Development and the new Department for Business, Energy and Industrial Strategy that we do not have a direct role in understanding.

On the domestic effort, you are very right to point out that in some areas the UK could gain competitive advantage by being at the forefront of some of the international shifts to lower-carbon economy. Examples often mentioned are things such as low-emission vehicles and manufacturing of electric and other low-emission vehicles in the UK, but a wide range of products and services that the UK could develop and be part of future economic growth.

On the second question about what EU policies would have contributed to the 2030 target, in some senses it is difficult to say. There is a range of uncertainty around the answer to that question because lots of those EU policies are currently being negotiated among the Member States. Part of the analysis in the report we have published is to try to extrapolate forwards as much as possible. Going back to our example on new vehicles, we know what the fuel efficiency standards will be for 2020, there are discussions under way about what will happen between now and 2030, and we have some understanding of those discussions. Extrapolating forwards, our sense was that about half, 55% or so, of the emissions reduction that the UK would have made to 2030 would have come from policies that would have been negotiated at an EU level and, correspondingly, about 45% or so of the emissions reduction to 2030 would have come from policies the UK itself would have enacted.

The Chairman: Do you want to follow anything up on that?

Duke of Montrose: No, thank you.

Q77 **Baroness Sheehan:** Can we move on to adaptation programmes? I wonder if you could answer the question in two parts. First, what effects might the UK's withdrawal from the EU have on UK adaptation programmes and then, vice versa, what effect would it have on the EU?

Matthew Bell: The adaptation work is based on the understanding that there are certain risks from climate change that are already in the system because of historic and ongoing emissions, and the sets of risks include things such as increased risks from flooding, risks to biodiversity as species shift their locations, risks on water scarcity through a combination of climate change and other things. The thing about those risks is they are often a combination of several things; they are a combination of the increased risk from climate change as well as population growth, as well as urbanisation, as well as economic growth. The combination of all of those risks materialises in, for example, threats to water supply or to biodiversity. There are a number of Directives and agreements that have been negotiated at EU level that try to tackle that combination of risks and try to make sure that we adapt in a sensible way. The Common Agricultural Policy is clearly one of them, as mentioned before, so how we husband the soils and how we manage forests. All of those inclusions in the Common Agricultural Policy are partly about adaptation to the risks from climate change as well as others.

The Water Framework Directive is another example of an EU agreement to improve the quality of water supply, which is partly affected by climate change but clearly affected by other things as well. The Nature Directive and the Common Fisheries Policy are, again, examples of EU agreements where they are partly about adaptation to the risks from climate change, but partly about wider risks that exist. It is often the combination of risks that creates pressure, whether it is on water, fisheries or on agriculture. It is those types of things and how those types of things are translated into UK law that will have an impact on adaptation and how we adapt to the risks from climate change. I think it is much harder to go the other way—and it is not our job so we have not looked at it in as much detail—and what the impact of UK withdrawal from the EU negotiations will be on the EU agreements that are realised. We have not looked at that in much detail.

Baroness Sheehan: One quick follow-up question: adaptation, to a fairly large extent, is about water management, either too much rain or too little rain, often. We have seen quite a lot of rain in the UK at the moment. What EU programmes are there that feed into our management of too much rain and flooding?

Matthew Bell: I would have to come back to the Committee with a detailed list of any programmes. Most of the work, to my understanding, that we do on flood management is work that is developed at a UK level. Programmes around flood defence and programmes about how we manage the natural environment to reduce the risk from flooding are programmes we have developed here. There are clearly overarching EU and broader international frameworks that have an impact, so again things like the Common Agricultural Policy and the nature directive, which affect how the natural environment can be changed or adapted or adjusted to help manage against flood risk—how catchments are managed. There will be components of those Directives that affect what we do domestically and what can be done with the natural environment to manage flood risk, but they are indirect associations, in that sense. I can certainly come back with a more detailed, clause-by-clause sort of discussion if that is useful to the Committee.

The Chairman: That would be very useful. Thank you, Mr Bell.

Q78 **Lord Trees:** Good morning, Mr Bell. We have been provided in the Committee with a very useful briefing document from our policy analyst about EU funding for environment and climate change, which goes some way to addressing the question I have to ask you. Can you give us your assessment of the impact that the UK's withdrawal will have on our ability to fund climate change adaptations and so on? Perhaps you could also suggest how you think the funding shortfall, which will be considerable, either in direct budgets or in loans from the European Investment Bank, might be made good post-Brexit.

Matthew Bell: The job of the Committee on Climate Change is very much to hold the Government, and indeed Parliament in general, to account for meeting those greenhouse gas emission reduction targets and for making sure we address the risks from climate change through adaptation. It is then the role of Parliament to decide how to allocate whatever funds are available and what the priorities are while meeting the reductions in emissions and the adaptation objectives. We rarely comment on precisely how money should be allocated.

There are some general points worth making. The first of those is that infrastructure investment is clearly a very important component of shifting to a lower-carbon economy. There is a range of infrastructure investments—whether that be investment in electricity networks, investment in heat networks, investment in carbon capture and storage or investment in electric vehicle charging infrastructure—of which flood defence is one as well, that is funded from different sources, sometimes completely privately funded, sometimes through UK Government and sometimes with loans from the European Investment Bank and others. It will be important going forward that that type of infrastructure investment can continue. It will be our job to assess, as we come out of the Brexit negotiations, whether the amount of funding going into those things is sufficient to meet the carbon budgets. Where I sit now, I do not know how those cards will fall.

Similarly, as I mentioned in the introductory remarks, there is a range of funding that goes for innovation and research and development into new and emerging technologies, and some of that is coming through EU funds to which the UK contributes but all the other Member States contribute, and they provide very important sources of funding for new thinking and new research and for early stage development, which will be important in a lot of areas, not least agriculture and forestry areas. How is that redistributed and how do we make sure that there is sufficient money going into research and development such that the UK can be at the forefront of shifting towards the low-carbon economy? There is an important question about how that will be distributed coming out of Brexit that we will assess, but I do not have a thought ahead of time.

Lord Trees: Would you make recommendations to the Government on what funding is required and how it might be derived?

Matthew Bell: On an annual basis we provide a report to Parliament that sets out both whether we are on track and what needs to be done to put us back on track. The last report was back in June and there will be another one this coming June. That sets out recommendations. For example, we make recommendations around the amount of money that needs to go through what is called the levy control framework, which is the envelope of money for the power sector to transition to low-carbon emissions. That is currently scheduled to be at about £7.6 billion by 2020 and there is a very important discussion then about what happens to that levy control framework through the 2020s, which we have made several recommendations about to Parliament, about both the size of it and how it should work. Similarly, in other areas we might make recommendations, yes.

The Chairman: Following on from that, you mentioned particularly the research side, for which, certainly—again, work from our policy analyst has shown—Britain gets more out of it than it puts in. Academics are very concerned about Brexit and their relationships with Horizon 2020 programmes. Do you think that is a key area where we need to make sure we have continuity over the Brexit period? Is research and development in the climate change area, technologies and all that side, at risk? Is this something that Government needs to give attention to, or is it not really any more important than anything else?

Matthew Bell: One of the most often repeated points to us is that we will only succeed in tackling these risks from climate change if it is a global effort, a multi-country effort, and that includes EU-wide as well as around the world. Ensuring that that international collaboration is possible will be crucial to tackling climate change. In that respect, I think it is very important. At this stage, precisely what the impact of Brexit will be on that is not an area of expertise for my committee, but we have flagged up the importance of making sure that research and academic collaboration in these low-carbon areas can continue going forward.

The Chairman: I hear what you say about not getting particularly involved in this area, but if there were any areas around, say, particularly the Horizon 2020 area that you felt were important to continue, we would be very interested to hear that evidence. Let us move on to the EU Emissions Trading Scheme and Lord Cunningham.

Q79 **Lord Cunningham of Felling:** What will be the consequences of Britain withdrawing from the European Union Emissions Trading Scheme?

Matthew Bell: That seems to presuppose that we will withdraw from the EU Emissions Trading Scheme, which we do not know at this stage. There are countries that are not part of the EU but that are part of the Emissions Trading Scheme, and so we will see how that evolves. Were we to withdraw there are two points worth making. The first of those is that, in principle, the EU Emissions Trading Scheme, like many other trading schemes, has been set up to reduce the costs of decarbonising both the power sector and heavy industry. It is supposed to allow us, across the whole of the EU, to search out the least-cost way of reducing emissions from power and heavy industry. In that respect, withdrawing from the EU Emissions Trading Scheme could, subject to future analysis—because it will be subject to what is put in place, and we do not know that—increase the costs of reducing emissions. In that respect it is particularly important to highlight industry whereby there are obviously lots of ongoing discussions about how heavy industry is going to make its contribution and transition to lower-emission output, and the EU Emissions Trading Scheme is probably an important way of trying to find least-cost ways for industry to reduce its emissions. To the extent that those types of trading schemes facilitate lower-cost carbon reduction, that could have an impact.

It is important to say that the EU Emissions Trading Scheme is not functioning as well as was envisioned when it was set up. Some people would say it was always envisioned as something that would get progressively better over time and we would learn, and certainly we are learning and it is getting progressively better, but it has a long way to go to be a scheme that properly delivers the levels of reduction that are compatible not just with the UK's commitments but with the EU commitments as well to the Paris Agreement and to international efforts. While, in theory, it is a very good thing and it could develop into a very cost-effective way, to date it has not performed very well. That would affect what you thought about withdrawing from it.

There is a completely separate point that is worth making, although it is quite a technical point, which is that the way in which the accounting system around the UK carbon budgets works is in part linked to the Emissions Trading Scheme. The carbon budgets are divided into two buckets, if you will: the so-called traded and the non-traded. In the traded bucket, which is the power sector and heavy industry, the way we count emissions reductions is very closely related to the allocation the UK gets from the EU Emissions Trading Scheme. Were we to withdraw we would have to change the accounting system. It is important to distinguish between that accounting framework and the real reductions, in a sense, that are taking place in the power and heavy industry sectors.

The Chairman: Would that be a benefit of Brexit? Would we get real about what our emissions are?

Matthew Bell: It might simplify certainly the explanation of the accounting system. As I was saying before, despite the fact that it adds some complexity there are pros and cons to being part of it as well, and I think those would have to be carefully thought through. There is no question that you could come up with an alternative accounting system. The main issue would be what are the advantages or disadvantages for the power sector and for heavy industry of either being part of it or not.

Lord Cunningham of Felling: As you say, there are non-EU countries in the European Economic Area who are part of the EU Emissions Trading Scheme. In the circumstances you have been describing, would it be worthwhile Britain trying to remain in the EU Emissions Trading Scheme even though we are going to leave the European Union?

Matthew Bell: If we look at how the world as a whole is tackling climate change, one of the main mechanisms for doing that is trading schemes, and we are seeing them emerge. There is not just the EU Emissions Trading Scheme, there is a North American one that encompasses a number of the US states as well as some of the Canadian provinces that are now joining. China is setting up its trading scheme and Australia is considering what it wants to do in trading. I think it would be unusual for the UK not to be part of a trading scheme as part of a cost-effective way of reducing emissions. There is potentially a choice about whether that is the EU trading scheme or a different trading scheme but, as a way of trying to find what is the least-cost way of doing this, trading schemes have a lot to offer.

As I said, were the EU Emissions Trading Scheme operating as well as was envisioned when it was set up, then this would be a very easy question to answer. The difficult part is that it is not operating terribly effectively. The UK has been a big part, at an EU level, of trying to get it to function better, and so to the extent that we are confident it can move in the right direction there is a strong argument in its favour.

Lord Cunningham of Felling: If we were to leave the EU Emissions Trading Scheme, how long do you think the process would take in disentangling our existing commitments, obligations and allowances from the scheme?

Matthew Bell: The short answer is I do not know.

Lord Cunningham of Felling: You are a member of a big club.

Matthew Bell: It would be a process. Clearly, UK-based companies have acquired allowances through the EU Emissions Trading Scheme that have some value, and there would have to be, as part of the negotiations and discussions, a discussion about what happens to those existing allowances that they already own, quite apart from whether there would be any right to purchase or trade other types of allowances going forward.

The Chairman: We will come on to a lot of those questions.

Q80 **Lord Trees:** Were we to leave the EU but remain in the ETS—you have outlined there are still substantial deficiencies in it—would we still have an equal weight of influence in making progressive change in the European Emissions Trading Scheme?

The Chairman: I think Viscount Hanworth is about to ask almost that very question.

Lord Trees: I am sorry.

Viscount Hanworth: I need not ask it again, but the supplementary one is to observe that we have been a leading proponent of the ETS, as you have implied, and to ask: is there much impetus from the remainder of the European Union to improve the efficacy of the ETS? There is a question that has been asked on my behalf by Lord Trees, and there is that supplementary one about, if we were to leave, what the impetus is from the rest of the EU.

Matthew Bell: We are not privy to the detailed discussions at a European level about how it is hammered out. I think it is fair to say that the countries that are part of the European Economic Area but not part of the EU currently have less say in how the EU ETS and other things are developed, but probably not zero say. The issue of how the EU ETS would evolve were the UK to be out of it is interesting because the European Union has a very clearly stated—both 2030 and 2050—ambition on climate change. The EU has said, under the Paris process, that it will reduce its emissions by at least 40% by 2030 and has an ambition that has slightly less legal standing to reduce emissions by 80% to 95% by 2050, similar to the UK's 80% reduction by 2050. We have seen over the last few months individual EU countries come up with their own ambitions to 2050, so Germany, France and others have set out their ambitions to 2050 as part of the UN process.

If the EU collectively and each of those individual countries are going to live up to those ambitions then it will require a more effective EU Emissions Trading Scheme. The corollary of having that level of ambition is that the EU needs to develop a more effective EU ETS, whether the UK is part of it or not. That, as we know, will involve discussions across a lot of countries. To the extent that the UK, with France, Germany and a number of other countries, is at the more ambitious end of pushing the EU then the UK being part of that discussion, I would have thought, would be helpful rather than harmful.

Viscount Hanworth: Are you identifying France and Germany as being principal enthusiasts for the ETS? If not, can you clarify my mind on who are the strongest proponents and who are the laggards?

Matthew Bell: Certainly the large countries—France, Germany, the Netherlands and others—have been pushing forwards on the ETS. The intention of the ETS is to seek out those least-cost options. For example, Hungary and France were the two EU countries to ratify the Paris Agreement fastest; they were the first two countries to ratify Paris. Other countries have very clear ambition and it is in their interests as well to make sure that the ETS is functioning properly. As I say, we are not privy to the detailed discussions, so I do not know exactly which country adopts which position with regard to ETS reform.

Viscount Hanworth: We have a carbon floor price which is, I suppose, testimony to the weakness of the ETS. Do other countries have carbon floor prices?

The Chairman: I do not want to get too much into discussing general EU climate change policy.

Viscount Hanworth: Will you allow that one? It does feed in rather significantly.

The Chairman: Yes.

Matthew Bell: To my knowledge, other countries do not have an equivalent carbon floor price to the one that the UK has. Partly that is a consequence of the UK having a very clear statutory framework about how it is going to tackle climate change that is lacking elsewhere. Other countries have certainly proposed it or are thinking about it. Both France and Germany, since Paris, have been thinking about a carbon floor price, but other countries deliver the same outcome in different ways. As we know, you can also use regulatory levers and air quality levers.

The Chairman: We will come on to that in future questions on what the alternatives are. Can I ask one factual question, very briefly? At the moment the only members of the EU ETS are either Member States or members of the EEA, I think. There was some question some time ago of Australia, in a previous, previous administration linking up with it. What I am trying to get to is if the UK wants to remain a member of the EU ETS, is that going to be easily legally possible? Are there any examples of other non-EU or non-EEA Member States trying to connect up with the EU ETS?

Matthew Bell: I do not know how difficult it would be. Switzerland has been negotiating for a long time to join the EU ETS but has not yet formally joined. There are examples of people discussing it, as you say, but I do not know how easy or difficult it would be for the UK.

The Chairman: Just taking the Swiss case, we know there are issues over free movement so that has rather put on ice a lot of Swiss-EU things, but before that what was the difficulty of the Swiss agreement taking so long? Do we know?

Matthew Bell: My understanding, and again it is not something we have looked into in a great deal of detail, is that there was a period of technical negotiation to understand how allowances and everything else would be allocated, but other than being very technical there were no real issues until the issues over free movement of labour.

The Chairman: We have obviously already gone through those technical issues, because we are already a member of it.

Matthew Bell: That is right, yes.

The Chairman: That is very useful, thank you.

Q81 **Baroness Wilcox:** I am amazed you are answering these questions so well because half of it you do not even have an answer for, but you are doing your best to give us something. I am very grateful. If the UK were to establish a separate trading scheme, in what ways could the design differ from the EU ETS to make it more effective? If you cannot answer it, say you cannot; that is fair enough.

Matthew Bell: There are things we have learnt about the ETS over the years that would help to make it more effective. Clearly, it would not be just up to the UK in that discussion to create those new circumstances. One of the things we have learnt is that the initial allocation of allowances becomes very important, and the reason that the price in the ETS has been very low is because when the allowances were initially allocated it was based on a forecast of GDP and economic growth that we have not seen, partly because of the financial crisis. Thinking about how that allowance allocation can be adjusted for what happens in the real world would be an important part of thinking about how to reform the ETS—equally, properly benchmarking economic activity. Clearly, in the initial allocation of those allowances, there was a lot of discussion about who should get what allowance, and whether they should be auctioned or what should go for free and how many different companies should get. We have learnt a lot of lessons based on how that process worked originally. There are definitely things that could be improved, but it would have to be things that would have to be improved in negotiation with whoever else was part of the agreement going forward.

Baroness Wilcox: What would be the cost? I do not see how you can answer this, but what would be the cost implications of a separate scheme?

Matthew Bell: You are right, I do not have a figure for the cost implications. I would highlight something that I said before. The trading scheme currently covers the power sector and heavy industry, and it is worth thinking about those separately because heavy industries—steel, cement, chemicals and various manufacturing industries—are industries that are very energy-intensive and often compete internationally. For them to have access to some kind of trading scheme to minimise the cost of reducing their emissions can be very important, and potentially the costs of not having a well-functioning one could be higher, compared to, potentially, the power sector, where it is much less internationally traded. There are reasons why we think it is useful to have the power sector as part of the ETS but it is a very different type of industry. In the main, the electricity we use in the UK is produced in the UK and it is not something that is competed internationally in the same way as manufacturing and industrial markets.

Baroness Wilcox: Thank you. That is very helpful.

Q82 **Lord Selkirk of Douglas:** Are there post-Brexit alternatives to an emissions trading scheme that would be as or more effective for reducing UK emissions?

Matthew Bell: If we are not part of the EU Emissions Trading Scheme, and we have just discussed ways in which, maybe, we could be part of it, I think, the first question I would have would be, first of all: could we be part of a different trading scheme? As we mentioned, there are others being developed around the world and, in principle, there is no reason why you could not join. If you look at the North American scheme it is a scheme that exists between non-contiguous American states and Canadian provinces; they are not country-wide schemes. There are schemes around the world that I think we should look at and see whether we should be part of them.

If it were not possible to be part of any trading scheme then we would have to think about how to cost-effectively move forwards in both heavy industry and power, which are the two parts currently within the EU Emissions Trading Scheme, and what mechanism we can use to identify the least-cost options. At the end of the day, that is what the trading schemes are doing; so making sure that at least at a UK level, when we are reducing emissions from industry—you could set up a UK scheme, for example—we are doing the least-cost things first and we are doing the research, development and innovation to uncover lower-cost options in the future. You would want to make sure that, at least at a UK level, you were doing that as well.

Duke of Montrose: Could I ask you, on other emissions trading schemes, whether you have short-listed your favourite trading schemes that we could link up with, and whether any of them include the emerging economies?

Matthew Bell: I am afraid I do not right now, but after this session I will be looking into my shortlist of trading schemes.

The Chairman: Thank you, Duke of Montrose, that is a very interesting question.

Q83 **Viscount Ullswater:** Perhaps I should declare an interest. I am a life member of Supporters of Nuclear Energy and a trustee of an estate in Cumbria which derives a proportion of its income from wind turbines. What will be the status of the UK's current emissions targets under the UN framework after Brexit?

Matthew Bell: It is clearly a legal question so I would defer to legal experts. My understanding is that currently the UK pledge—while the UK has ratified the Paris Agreement as a country and signed it—is part of the EU pledge. One of the consequences of Brexit could be that the UK would have to provide its own pledge as part of the UN process. Fortunately, the fact that we have carbon budgets and we have a 2050 target under the Climate Change Act means that that could constitute the UK's pledge under the EU framework, and the carbon budgets that have been legislated and the 2050 target are sufficient, so they would meet the UK's duties under the Paris Agreement. At a simple level—and I have no doubt there are legal complexities—the UK could submit its fifth carbon budget as its 2030 pledge, the 57% reduction the UK has legislated as its 2030 pledge, and as its mid-century pledge its commitment to reduce emissions by at least 80%.

The UK would, in addition, have to submit, as every country around the world does, a plan for how it is going to meet those objectives. Again, under our existing framework, the Government has a requirement to come out with an emissions reduction plan to meet that 2030 target, and it has committed to doing that in the first quarter of next year. That plan, provided it is robust and does meet the 2030 target, which it will be the responsibility of my committee to assess, could be submitted to the UN. There is a series of legal issues but, in principle, I think that is how it would work under the UN process.

Viscount Ullswater: I think you have answered my supplementary question as to whether it is straightforward and that the UK's current obligations with the UN are satisfactory.

Matthew Bell: I am often accused of thinking things are more straightforward than they are in reality. They may be more complicated but, in principle, I think the UK could sign up to the Paris Agreement, as it already has, and Parliament has ratified it, but it has not yet submitted an individual pledge or an individual plan. In principle, under the Climate Change Act, we have to do that domestically, and we could submit that to the UN as well.

Q84 **Lord Rooker:** Good morning. A short declaration: I am a director of the Ludlow Hydro, which resulted from 200 people funding an Archimedes screw on the River Teme in Ludlow. We have not generated much in the last two months as we have had no rain, but I suspect in the last week we have done quite well. When I set out, much to my surprise, to guide the Climate Change Act through this House before it went to the other place, I was constantly invited to boast about the legally binding targets that we were imposing on ourselves. It would be interesting if you could give us a view about what you think the impact of having those legally binding targets has been. Are these legal targets necessary for the UK to deliver on its international obligations?

Matthew Bell: First of all, on the impact of the legally binding targets, climate change is only tackled if we take a medium to long-term view of things. There is always a temptation—I think it is a universal temptation, not only by politicians in Parliament but by businesses and individuals—to think about the very near-term things and put less focus on the longerterm things. Were we to do that we would fail to tackle climate change. The key benefit of the legally binding targets is that it creates a framework whereby, on at least an annual basis, and in my experience much more frequently than that, there is a focus on whether we are we making slow and steady progress towards those medium to long-term objectives. The risk would be—and there are other countries that do not have legally binding targets that still progress, so it is only a risk, not a certainty—that in the absence of that legal process we would not make the slow and steady progress, and the consequence of that would be that either we would have to do something much more expensive and much more costly because we would have to do it at the last minute to, all of a sudden, meet an urgent requirement. Or, indeed, we would not be prepared in a positive way; we would not be developing the low-carbon industries and low-carbon sectors that could contribute to growth going forward. They have quite a subtle impact, I would say, on the interaction between the Government, Parliament, ourselves, industry and the private sector, which means there is an ongoing conversation, dialogue and process of formulating policy and decisions that means that slowly we make progress. That is the biggest strength—you can come up with others—of having the legally binding targets, and indeed of having those targets as something that the UK Parliament has legislated and is clearly outwith the Brexit discussion.

On your second question—are they necessary?—I think they have proved hugely valuable in a UK context. Indeed, partly as a consequence of those, we are seeing that, most recently, the Welsh Assembly has legislated its own set of targets, Scotland is legislating a new climate change Act—it has an existing one but it is legislating a new one following on from Paris, and Ireland has just legislated its own climate change Act with its own targets. We are seeing a process whereby this is spreading around the world as a consequence of people seeing the value in it. That is another indication of the value that it provides.

Lord Rooker: It worked then. We were told at the time by the sceptics, and I will not mention any names—

Viscount Ullswater: Please do.

Lord Rooker: They are not in this room. We were told that we do not do much, we are only 2%, nobody will follow our lead and this is too much gold-plating to go this far. You are saying that others have found it useful to have the strength of having a legally binding target to prevent a bit of back-sliding, which I think we will probably always have to look for. It has been an exemplar to other countries.

Matthew Bell: It has. I guess there are two parts to that. We are straying a bit away from Brexit, but I will continue.

The Chairman: No, that is fine. I will tell you why it is relevant. It is because, on the broader environmental side, one of the biggest feedbacks we have had from the environmental lobby, if you like, is because we have fear of infraction from the Commission. Because we have the European Court of Justice, then there are strong legal imperatives to comply with legislation and that disappears. This is why, in particular, I think Lord Rooker is pushing this issue.

Lord Rooker: Once the infraction from the Commission has gone, there is nothing to sanction the Government, as it were, if they do not do what is necessary.

Matthew Bell: That is very useful context. You are right that in this case there is a process, of which my committee is a part, that tries to hold the Government and Parliament more generally to account. As we have said throughout the discussion, there are a range of mechanisms that currently also have sanctions around them, whether it is water framework directives or various elements around fisheries policy, nature directives and the EU Emissions Trading Scheme. There are mechanisms where the current definition of them—and, in that respect, the sanction of them—is governed at an EU level. The question will be how those are translated into UK law through the Brexit process and, at a very high level, whether we are doing enough to adapt to the risks from climate change and to meet our greenhouse gas emissions reduction targets. That high-level assessment is purely a domestic institution—my committee and the interactions between various stakeholder groups and how the Climate Change Act operates. That part of it is a domestic institution.

The Chairman: There are one or two issues I would like to move towards summing up on. One of the benefits of Brexit has been Britain being able to become a trading nation more than it is at the minute, and all the other things we might be able to do as an economy. But if, as a nation, we stress international competiveness post-Brexit when we are possibly out of the single market, does the question not come back: are we not helping our competitive position by having all these green extra costs on us and will there not be a temptation, perhaps, for us to junk a lot of this green stuff to be competitive in the new post-Brexit world?

Matthew Bell: First of all, the Climate Change Act sets out very clearly and creates a legal duty on my committee to consider the issues of competitiveness and affordability on households in the advice we provide to Parliament. We spend quite a lot of time assessing whether there is an impact on competitiveness from climate change policies. It is important to emphasise the second part of that sentence—that competitiveness is influenced by a whole range of things, as we know. International trade is developing by relative prices of labour, by relative taxation, by a whole range of issues that determine where companies locate and where companies invest. For us, in this context, the important thing is the contribution specifically of climate change action with respect to all those broader decisions. We have assessed that in the past and we have made recommendations where we have thought that, for particular industries or particular sectors, compensation needs to be paid or adjustments need to be made to ensure that their competitiveness is not adversely affected by actions to tackle climate change. The prime examples are the energy-intensive industries, such as steel and cement, which we were discussing earlier. In the very important but relatively small number of cases where there are competitiveness issues, we have flagged those up; we have said something should be done and the Government has responded to that. We can then have a separate discussion about whether it is responding quickly enough or how, but we have been very clear about where we think there is an impact.

There is then the vast majority of GDP and employment where you cannot detect, based on the evidence we have, any impact on competitiveness of climate change policies. Then there is a completely different question, which is: are there benefits from the action that we take to address climate change which positions the UK in a world that is gradually transitioning to a lower-carbon world and where competitive advantage will come from being able to sell electric vehicles or wind turbines, or indeed insurance services and other services, such as flood defence services—where there will be competitive advantage from the fact that the UK economy has been positioned in a way that reflects the world as it will look in 2050 rather than the world as it did look in 1950? There are two sides to that question, and we try to understand both of them. Indeed, we have a piece of research out currently to try to update all our evidence around both of them. We are very careful to make sure we identify negative consequences specifically from climate action and that action is taken to address those, as well as thinking about the potential positive impacts.

The Chairman: Mr Bell, that brings us to the end. Can I thank you for your very concise and authoritative answers? It has been a very useful session and we thank you very much indeed for your contributions. I bring this public session to an end.