



SELECT COMMITTEE ON THE EUROPEAN UNION

Energy and Environment Sub-Committee

Brexit: Environment and Climate Change

Oral and written evidence

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Aldersgate Group — Written Evidence (ECB0009)

The UK's Climate Change Act 2008 (CCA) states that the UK must reduce its greenhouse gas emissions by at least 80% by 2050 compared to 1990 levels. This will require significant investment in low carbon projects from energy efficiency in buildings and renewable energy, to district heating and low emission transport.

The UK's leadership on climate action has raised ambition within the EU and around the globe, making it influential in the shaping of EU policies. In fact, "there is now close integration between UK, EU and international environmental law."¹

Global agreement to tackle climate change has now been reached. The Paris Agreement came into effect on 4th November 2016, setting an imperative for international action on climate change with 195 countries committing to keep the global average temperature increase well below 2°C on pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5°C. The Paris Agreement was the second fastest-ever international agreement to enter force, demonstrating that the global political momentum to tackle climate change has significantly increased.

Political progress has been accompanied by a rapid growth in low carbon investments led by developing countries, who according to Bloomberg represented 55% of global clean energy investments in 2015. Many fast growing economies with whom the UK will want to establish strong trading relationships with such as China, India, Brazil, Mexico and South Africa all feature within the top 10 global investors in clean energy.

The Agreement will drive further growth in the global low carbon market that is worth over \$5.5tn.² The UK is already engaged: our direct low carbon sector generates £46.2bn in turnover, supports nearly a quarter of a million jobs³ and as the Chancellor has noted, has shown faster growth than the economy as a whole.⁴ British businesses are leading exporters of clean technologies and services such as offshore wind, ultra-low emission vehicles (ULEVs) and green finance. The global shift towards a low carbon economy offers considerable potential for growth, productivity and jobs across the UK.

As it leaves the EU, the UK should remain engaged with EU initiatives that support the delivery of its climate commitments and develop a strong and comprehensive low carbon policy to attract domestic and foreign investment at low cost. These include membership of the internal energy market which has

1 IEEP (March 2016) The potential policy and environmental consequences for the UK of a departure from the European Union

2 New Climate Economy (2015) Seizing the Global Opportunity

3 ONS (18th May 2016) "UK environmental accounts: Low carbon and renewable energy economy, final estimates: 2014". Figures refer to 'direct' low carbon sector only.

4 Speech by the then Foreign Secretary, The Rt Hon Philip Hammond MP (10th November 2015) "A conservative response to climate change"

helped increase the resilience of our energy market and the EU ETS that has allowed us to embed a carbon price within our economy. We must insist upon strong product standards to ensure we attract and retain the best manufacturers and retailers.

The government's role will be to create a clear, stable policy environment that allows businesses and investors to plan ahead with certainty. Strategies such as the Emissions Reduction Plan and Industrial Strategy must complement one another and support the transition to a low carbon economy.

QUESTION 1: What are the opportunities and challenges for the UK's approach to environment and climate change arising from the UK exiting the EU?

The UK's Climate Change Act sets the pace for domestic policy, but for the past 40 years EU Membership has built a set of shared priorities that have created a level playing field for businesses. Decision making between 28 Member States has occasionally been protracted, but once agreed EU Directives have provided stability beyond domestic policies and confidence in the direction of travel, which otherwise could be vulnerable to the national parliamentary cycle.⁵

In the short term the UK's Great Repeal Bill will transfer into British legislation, all applicable European legislation in order to ensure as much stability as possible. However in the medium to long-term, businesses face the prospect of every piece of European legislation being re-assessed. The possible loss of the EU policy 'back stop', coupled with short notice changes over the past two years that led EY to describe the UK government's attitude to energy policy as "noncommittal, if not antagonistic"⁶, have created an uncertain and challenging landscape for investors. The investment climate needs to be rapidly improved given that the UK needs to attract significant investment from both British and overseas investors to fund its low carbon transition.

From 2010 to 2014, global investors provided circa £15 billion for UK energy and infrastructure sectors and in 2014-2015 increased investment in high tech R&D intensive industries, such as the automotive sector, by 12%.⁷ Yet, recent figures warn that the UK risks losing its lead, with UK attractiveness for renewable energy investment far behind competitors such as Germany, France and Japan.⁸

For international investors with a large choice of potential investment locations, domestic low carbon policies will be key in justifying their decisions. For example, Siemens looked at over 200 sites across Europe for its new wind blade manufacturing facility, eventually settling on Hull partly due to the expectation of a large offshore wind market.⁹

The government must put in place a robust low carbon policy framework to ensure businesses have clarity about government priorities and confidence in the

⁵ IEEP (March 2016) The potential policy and environmental consequences for the UK of a departure from the European Union

⁶ EY (May 2016) Renewable energy country attractiveness index: What happens when grid parity hits?

⁷ UK Trade & Investment (June 2015) UKTI Inward Investment Report 2014 to 2015

⁸ EY (October 2016) Renewable energy country attractiveness index. Green bonds: power surge.

⁹ Aldersgate Group (September 2016) Setting the pace: Northern England's low carbon economy

future market. Considerable amounts of affordable private sector investment are needed in low carbon and energy efficiency infrastructure, plus emerging sectors such as ultra-low emission cars and smart ICT solutions. The upcoming [Emissions Reduction Plan \(ERP – read briefing\)](#), which will set out the policies by which the UK will meet its fifth carbon budget, is one opportunity to do this.

We recommend the ERP:

- Provides clear commitments in key sectors, so that private investors understand the commercial and regulatory conditions of particular infrastructure sectors.
- takes a whole system approach with cross-departmental buy in, particularly given that developments in different infrastructure sectors (overseen by different departments) are increasingly interdependent (e.g. transport and power).
- complements other policies, such as the forthcoming industrial strategy. Policies to attract investment in low carbon technologies often overlap with the policies needed to grow supply chains in areas where the UK has a competitive advantage, which the industrial strategy could prioritise. For example, a clear pipeline of offshore wind projects can not only accelerate cost reductions but also grow the supply chain in regions with existing and emerging capabilities. Similarly, clarity of energy efficiency goals will generate additional jobs in the sector and visibility of growing demand for ULEVs will build confidence that could help support a growing supply chain. Low carbon opportunities should be an area of focus in the industrial strategy and further detail can be found in the Aldersgate Group briefing, "[Industrial Strategy should have a strong low carbon element](#)".
- is supported by a green finance strategy to help better connect investors with low carbon projects and help increase financial flows towards low carbon projects.

QUESTION 2: What will the UK's legislative position be with regard to the environment and climate change after Brexit?

The government has announced that it will transfer the entire body of EU law on to the UK statute book in a Great Repeal Bill. This is intended to maintain the status quo and allow the government time to work through EU legislation and reject what it does not want.

It is imperative that the government conduct this work with the maximum transparency, legitimacy and legislative quality. We recommend that a timetable be published to show when laws and regulations will be tackled and an open consultation process be created to ensure all stakeholders' voices can be heard.

QUESTION 3: Is there a rationale for developing UK environmental policy in line with the EU beyond Brexit?

It will be desirable to keep UK policies aligned with the EU as much as is possible and preferably to retain UK influence in helping to shape them. Half of the UK's

trade (import and export) is with the European Union,¹⁰ which means the UK will remain heavily exposed to EU targets and policy initiatives priorities.¹¹

Internal Energy Market & EU ETS

For example, centralised energy production within national boundaries is an outdated model.¹² To build a low carbon, secure and affordable energy system, collaboration with other EU Member States is essential. The UK is importing more energy today than at any time since the 1970s¹³ - half of its gas, and about 6.5% of its electricity,¹⁴ which makes continued membership of the internal energy market (IEM) essential. The IEM was established to create a more transparent, competitive and cost effective energy market. It has also become important in helping deliver a cost-effective and secure decarbonisation of the energy system through a focus on more efficient sharing of energy resources at a regional level.

The IEM supports greater investment in interconnection, greater trading across borders (capacity and balancing) and market coupling. Studies from DECC¹⁵, National Grid¹⁶ and Policy Exchange¹⁷ have all concluded that greater levels of interconnection would allow the UK to meet its emission reduction targets and maintain robust security of supply in the most cost-effective manner. Leaving the IEM could therefore undermine the UK's energy policy objectives in terms of decarbonisation, system security and affordability.

Linked to the UK's future participation in the IEM, we recommend that the UK remains part of the EU Emissions Trading Scheme (EU ETS). This was the first multi-state greenhouse gas emissions trading platform in the world and remains the largest¹⁸. It is also the single most important policy instrument for the potential reduction of greenhouse gas emissions in Europe and will account for over 50% of the emissions reductions required by 2020 under the UK's Climate Change Act.¹⁹ Despite its structural weaknesses, the low carbon price and poor investment signal it has provided to date, on balance the UK should remain part of the EU ETS because as the scheme reforms over time, it has the potential to

¹⁰ HMRC, Overseas Trade Statistics – Non-EU and EU Trade. Figures for June 2016: "The proportion of total exports to the EU was 49 per cent in June 2016. The proportion of total imports from the EU was 51 per cent in June 2016."

(https://www.uktradeinfo.com/Statistics/OverseasTradeStatistics/Pages/EU_and_Non-EU_Data.aspx)

¹¹ IEEP (March 2016) The potential policy and environmental consequences for the UK of a departure from the European Union

¹² Joint declaration by a group of industry associations (April 2016)

<https://windeurope.org/fileadmin/files/library/publications/position-papers/Joint-Declaration-by-a-Group-of-Industry-Associations.pdf>

¹³ ONS (15th August 2016) UK energy: how much, what type and where from?

¹⁴ Grubb, M & Tindale, S (May 2016) Brexit and Energy: cost, security and climate policy implications <https://www.bartlett.ucl.ac.uk/sustainable/documents-news-events/brexit-and-energy>

¹⁵ DECC (December 2013) More interconnection: improving energy security and lowering bills

¹⁶ National Grid (March 2014) Getting more connected. The opportunity from greater electricity interconnection

¹⁷ Policy Exchange (2014) Getting Interconnected. How can interconnectors compete to help lower bills and cut carbon?

¹⁸ FT (30th June 2016) "UK move to set CO2 target faces challenge"

¹⁹ DECC & Environment Agency (8th May 2015) "Policy Paper. 2010 to 2015 government policy: greenhouse gas emissions."

play a greater role within the UK's suite of policies to meet its domestic carbon budgets cost-effectively.

Importantly, remaining part of the EU ETS might allow the UK to support a structural reform of the scheme to strengthen its carbon price and bring it into line with the international Paris Agreement.

EU Product Standards: Energy Efficiency and Resource Efficiency

UK policy would benefit from remaining in sync with the Ecodesign Directive and the Directive on Energy Labelling. These have driven innovation in domestic appliances such as washing machines and fridges, through to lighting in homes, businesses and the street. The first introduces minimum standards to ban the most inefficient products, and the second uses labelling to drive consumer demand for efficient and environmentally friendly products.

The UK is now consuming 17% less energy than it was in 1998, partly thanks to more efficient appliances and technologies.²⁰ By 2020, the annual net savings to the UK economy resulting from EU eco-design standards will be in excess of £850 million per year, with reductions in greenhouse gas emissions of more than 7 million tonnes per year.²¹ To consumers, this means an average saving of £60 on energy bills, rising to £120 by 2020.²²

Without eco-design, it is often consumers that lose out as they are purchasing from a market where products are not lasting as long as they should. As noted in a recent Green Alliance report, improving product design is not a call for new technologies but rather new market rules that drive businesses to compete over the quality of their products²³.

These measures have been well supported by industry for being pro-innovation, market-focussed and helping to provide a level playing field across the Single Market.²⁴ Bearing in mind that many UK-based manufacturers will continue to export to the European market and will therefore still be subject to EU standards, the UK must ensure that energy efficiency and eco-design standards applicable in the UK are of equal or greater ambition than what is in place in the EU.²⁵ Moreover if the UK relaxes its standards, it would risk a "dumping" of inefficient products on the UK market, with consequent higher running costs and emissions.²⁶

²⁰ ONS (15th August 2016) "UK energy: how much, what type and where from?"

²¹ DECC (July 2014) Energy efficient products – helping us cut energy use

²² Then Secretary of State for Energy and Climate Change, Amber Rudd, speech (24th March 2016) "On the energy benefits of staying in the EU"

²³ Green Alliance (November 2016) Better products by design: Ensuring high standards for UK consumers

²⁴ E3G Briefing Paper (November 2014) Ecodesign – European Commissioner land grab or market facilitator. See for example, Philips – Our Green Products. <http://www.philips.com/a-w/about/sustainability/sustainable-planet/green-products-and-green-innovation.html>

²⁵ Guardian (16th March 2016) "Most electrical goods bought online have misleading energy labels, study finds"

²⁶ Committee on Climate Change (October 2016) Meeting Carbon Budgets – Implications of Brexit for UK climate policy. Briefing note.

Policy developments in this area will be important. The EU has announced a list of products²⁷ for which it will extend the scope of EU eco-design standards to include resource efficiency, in addition to energy efficiency, as part of the ongoing Circular Economy Package.

QUESTION 5: How can the UK maintain its role as a leader on climate change?

The positive work that the international climate teams at the then Department of Energy and Climate Change (DECC) and the Foreign and Commonwealth Office (FCO) have undertaken in increasing ambition on climate change action has had impacts far beyond the EU, and has influenced development of climate laws and policy initiatives in countries such as Mexico, China and India. There is no reason why this work cannot continue after the UK has left the EU.

The UK has played an influential role over several years in the international climate change negotiations as well as in the development of national climate policies in key emitting countries. In December 2015, Amber Rudd was chosen by COP21 President Laurent Fabius as one of 14 facilitators at the summit and tasked with responsibility for pre-2020 actions. There is no reason why the UK cannot retain this influential role after leaving the EU, especially if it retains and builds on the expertise of its international climate team and network of climate attachés within BEIS and the FCO.

Meanwhile at home, the UK must seek to meet its legally binding emissions reduction budgets in a way that is timely, cost effective and maximises the benefit for UK plc. Innovation will be key in the low carbon transition, meaning research and development (R&D) funding deserves attention. EU R&D funding pots and targets such as Horizon 2020, which earmarks 85% of its energy research funds for renewables, energy efficiency and smart grids,²⁸ have been used to support new energy technologies and stimulate private sector investment.

The UK government has guaranteed to underwrite the payment of Horizon 2020 awards, but only until the UK leaves the EU²⁹. The Prime Minister voiced her determination to have “a better research and development policy that helps firms to make the right investment decisions”³⁰. There is ground to make up: government R&D funding is ranked 19th in the OECD.³¹ Government must show leadership on innovation by committing the UK to an R&D roadmap, meeting the OECD average by proportion of GDP invested by 2020, and creating a strategy for continued progress thereafter.

²⁷ EC website (8th November 2016) “Commission to set out new approach to Ecodesign”.

<https://ec.europa.eu/energy/en/news/commission-set-out-new-approach-ecodesign>

²⁸ Horizon 2020 overview <http://eneru.eu/wp-content/uploads/2015/05/Horizon-2020-Secure-Clean-and-Efficient-Energy.pdf>

²⁹ HM Government news story (13th August 2016) “Chancellor Philip Hammond guarantees EU funding beyond date UK leaves the EU”

³⁰ Speech by Prime Minister Theresa May (11th July 2016) “We can make Britain a country that works for everyone”

³¹ OECD Research and Development Statistics, latest figures relate to 2014:

<http://www.oecd.org/innovation/inno/researchanddevelopmentstatisticsrds.htm>

QUESTION 7: What relationships, internal and external, should the Government cultivate when developing its environment and climate change policy?

As covered in the introduction, UK leadership on climate action has given it considerable influence in shaping other countries' climate legislation and, within the EU, to raising ambition on emissions reductions. The EU's contribution to emissions reductions agreed at the Paris COP in December 2015 included the UK, and will be differentiated across the bloc on the basis of Member States' relative wealth. Under the EU Effort Sharing Decision, the wealthiest countries such as the UK have committed to greater emissions reduction (16%) by 2020 than the poorest (Bulgaria), which is permitted a 20% increase.³²

A priority for the UK government whilst it is still in the EU should be to ensure the Paris Agreement's 'ambition ratchet' mechanism is hardwired into the EU's Climate and Energy Framework, which should ultimately lead to an upwards revision of the EU's current emissions reduction target for 2030.

The UK formally signed up to the Paris Agreement on 17th November 2016, thus adding its weight to the global momentum to tackle climate change. The same week saw ambitious new climate targets from Germany³³ and a call for stronger action by 360 US businesses³⁴. While Brexit and the election of the new US President have ushered in a new political era, the commitment by countries around the world to climate action is unwavering and Britain has a role at the heart of that action. We urge the government to build on the UK's domestic and diplomatic achievements by continuing to support the growth of its low carbon economy, pro-actively engage in international climate change discussions and prioritise climate change as a topic of positive engagement with the new US Administration.

16 November 2016

³² See European Commission website for ESD breakdown:
http://ec.europa.eu/clima/policies/effort/index_en.htm

³³ Independent (12th November 2016) "Germany to cut carbon emissions by 95%"

³⁴ <http://lowcarbonusa.org/>

Alan Andrews, Jacob Hayler, and Sarah Mukherjee — Oral Evidence (QQ 23 – 35)

Wednesday 2 November 2016

10.30 am

[Watch the meeting](#)

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

Examination of witnesses

Jacob Hayler, Executive Director, Environmental Services Association; Sarah Mukherjee, Director of Environment, Water UK; and Alan Andrews, Clean Air Project Manager, ClientEarth.

Q23 The Chairman: We will start this session on our inquiry into Brexit and the environment. I welcome our witnesses and remind you that this is a formal evidence taking session for the Committee. Notes will be taken and it will be webcast. You will be sent a transcript of what we record for the official record and you will have the opportunity to change that if there are any errors. I remind Committee members to declare any interests that they have. I am a board member of the Marine Management Organisation, in case we get on to marine issues. Other members will declare their interests as we go through. This session is particularly around transboundary issues on the environment, clearly a core part of issues around Brexit, what they are and how we manage them for the future and what the challenges are. I will ask our witnesses to introduce themselves.

Sarah Mukherjee: I am Sarah Mukherjee. I am director of environment at Water UK which is the body that represents all the water companies in the UK, as our name suggests.

Alan Andrews: I am Alan Andrews. I am a solicitor and lawyer at ClientEarth where I head our air quality programme.

Jacob Hayler: I am Jacob Hayler. I am executive director at the Environmental Services Association. We are the trade body that represents the waste and recycling industry.

Q24 The Chairman: Thank you. I will start with a fundamental question and perhaps something to which you would all like to contribute. Would you identify what you see as the key transboundary issues to which we should draw the Government's attention in our recommendations and report?

Sarah Mukherjee: For the water industry, as you may suspect, our key issues are more transcatchment than transboundary. There are two areas where there is concern. Obviously I preface all of this by saying, as with so many sectors, this is all very emerging thinking at the moment and we do

not have any defined policy. We are talking to our members about where they are sitting regarding Brexit. The two are obviously in Ireland, the Northern Ireland Water and the transboundary issues with Irish Water in southern Ireland and potentially, hypothetically speaking, should there be a referendum and should there be an independence movement which is successful in Scotland, there may be transboundary issues. That is obviously hypothetical.

The Chairman: I think we probably will not work on that assumption at the moment. It is an interesting question but we will not take it into consideration for this inquiry.

Sarah Mukherjee: It may be beyond your scope but it is still something we have to think about in our back pocket.

The Chairman: Of course, thank you.

Alan Andrews: Air pollution is obviously a transboundary environmental problem par excellence. I am going to focus today on the environmental and health impacts of air pollution rather than climate change, but it is worth saying that climate change remains one of the biggest transboundary problems that we face in the UK. Regarding air pollution that is harmful to human health and harmful to the environment, I have just come from the High Court where the Court has ruled in favour of ClientEarth in our challenge against the UK Government, finding that their current plans to achieve nitrogen dioxide limits in the UK are illegal and they will now be required to prepare an improved plan by a required timeline. That is a perfect example of where EU law is relevant to the transboundary issue of air pollution. That case is based on EU law. It is based on a right to go before courts and enforce EU laws. Obviously Brexit poses a serious risk to that.

It goes without saying that air pollution knows no national boundaries but the Government's own evidence suggests that of the PM_{2.5} pollution, the microscopic harmful particles that we breathe into our lungs and which are very harmful to human health, causing something like 29,000 early deaths each year, only about half originates in the UK. There is a huge amount of transboundary air pollution that we currently deal with through EU and international law which we need to consider very carefully how Brexit will impact.

Jacob Hayler: There are two aspects for the waste and recycling sector, one on the policy side and the other on the practical side. I do not know exactly what is within the scope of the inquiry but certainly the policy sets the strategic direction for the industry across the whole continent, so we are obviously affected by the levels of recycling and recovery we might wish to achieve and the amount of material we might wish to divert from landfill. On the policy side it also sets technical standards for how we manage our treatment facilities, how we engineer our landfill sites, et cetera. In addition to that, there are practical issues. We export around 15 million tonnes of sorted materials to be recycled back into products around the globe. Just over a quarter of that currently goes to the EU. In addition to that, we export around 4 million tonnes of waste as fuel to the EU, principally to

parts of Scandinavia, Germany and the Netherlands, for example. A big fear for the industry at the moment is that we are facing what we consider to be a bit of a looming capacity crunch where landfill capacity is closing throughout the country. We are not bringing forward investment in new domestic energy recovery facilities. To date we have been relying on exporting a lot of that material to other parts of northern Europe but already we have seen the sterling impact which has massively increased the costs of that option. There are fears about potential future tariffs that might come on top of that and might limit that even further. All of these would drive up our costs and create difficulties for waste management in the UK.

The Chairman: This is not a criticism but you have all answered that very much in your own areas of very specific interests. Are there any broader ones such as migration of species, natural environment, invasive species, marine? Are there other areas that we need to make sure we take notice of?

Sarah Mukherjee: To pick up on Jacob's point, if we look at the policy area then a lot of water company investment is driven by European environmental regulations, primary among them the Water Framework Directive, the Urban Waste Water Treatment Directive and the Drinking Water Directive. I will save some of my comments for your next question, but there is an awful lot tied up in water company operations that is European based. The great uncertainty is: what will happen on Brexit day one? That is causing considerable concern not just within water companies but in the water sector more widely, including environmental NGOs.

The Chairman: We will come on to that.

Baroness Wilcox: Alan, you said something about us creating 50% of something but the other 50% of it comes from somewhere else.

Alan Andrews: I was talking about a particular pollutant called PM_{2.5}. This is a form of particulate matter, basically microscopic particles commonly regarded as public health enemy number one when it comes to air pollution. Exposure to PM_{2.5} is thought to be responsible for something like 29,000 early deaths each year. That is based on the Government's own figures.

Baroness Wilcox: How would I see that if I saw it in a street? Is it from a car?

Alan Andrews: You would not be able to see it. It is largely invisible. When it gets to very high levels, maybe about 10 times a year, you might be able to see it as a haze in the sky. You might remember the Saharan dust episode from a couple of years ago. That was blamed on the Saharan dust particles which made it visible. That was really a marker for the invisible pollution.

Baroness Wilcox: Did you we say we create 50%?

Alan Andrews: Of the average levels of PM_{2.5} only around 50% originates in the UK. Another big portion is from natural biogenic sources but a big chunk of it originates on continental Europe and blows over. Equally,

prevailing winds tend to take our pollution over to the continent more often than not, so we are a net exporter.

Viscount Hanworth: PM_{2.5} is a measurement presumably.

Alan Andrews: That is right.

Viscount Hanworth: Do microcarbons come predominantly from our own cars? Can you break it down?

Alan Andrews: Yes, PM_{2.5} refers to the diameter in microns. The sources of PM_{2.5} are very varied. They can come from combustion sources, for example from cars, from industrial processes, from power generation, heating homes or whatever. They can also come more indirectly from condensation of gases. For example, ammonia from farming will condense and form PM_{2.5} which then forms in the atmosphere and harms human health.

The Chairman: I do not want to get too much into a master class of chemistry. I am keen to move on.

Q25 **Baroness Sheehan:** We have read a little bit in a briefing we had about Britain failing to meet NO₂ targets. Where do we stand on meeting levels for particulate matter PM_{2.5}? I know PM₁₀s and PM_{2.5}s were quite a problem a few years ago. Have we met the EU limits on these?

Alan Andrews: In strict legal terms we are now in compliance with PM₁₀ and PM_{2.5} limits. London's compliance with PM₁₀ is questionable; we are just there. I think it is worth remembering that the current EU standards for PM_{2.5} and PM₁₀ are quite lax and they are considerably more lax than the World Health Organization guidelines. We know from the scientific evidence that significant health effects occur well below the current EU limits, so people are dying or are admitted to hospital more when they breathe the higher levels of pollution.

Baroness Sheehan: Brexit is not going to impact too much on the way we deal with PM_{2.5}.

The Chairman: We will come on to all of that as we go through the questions.

Lord Cunningham of Felling: As a general comment, is it possible to benchmark the UK performance as opposed to the performance of other EU Member States in these areas? Is it good, bad, indifferent or very poor?

Sarah Mukherjee: For all three?

Lord Cunningham of Felling: Yes, for all three.

Sarah Mukherjee: With the Water Framework Directive—WFD—we have a certain amount of knowledge about other countries because we are all part of the same Directive. River basin management plans are done for every single EU country and, on the whole, compliance with that Directive across Europe is not brilliant, to say the very least. We are better than most but the bar is very low. If you look at countries such as Norway that are

outside the European Union but part of EFTA, which have their own surveillance mechanisms and an EFTA Court to make sure they follow the directives that they have agreed to follow, compliance is not terribly high in some parts of Norway. Waste water treatment works are only 50% compliant. Leakage is very high and so are bills. There is a certain amount of benchmarking that is available. There is the Bathing Water Directive as well. All of this information is internationally compiled.

Jacob Hayler: With waste the way we would generally compare ourselves to other Member States would be headline figures for household recycling rates and for landfill diversion. There are targets for both of those contained in the Waste Framework Directive and the Landfill Directive respectively. We have come a very long way on recycling. We were among the worst performers back in the 1990s; we are now respectable mid-table. You could caveat that as well by saying that up to this point different Member States measure what constitutes recycling in different ways. One of the ambitions of some forthcoming EU legislation, part of the Circular Economy Package currently being negotiated, is to try to come up with a harmonised definition of recycling so that we can compare these things on a more equal basis. I suspect you might actually find that we are not doing too badly at all once you harmonise the definitions. In some of the best performing Member States they include items for recycling which we do not necessarily include in our definition here.

We have again gone a very long way on landfill diversion. We used to be quite reliant on landfill pre-Landfill Directive which was in 1999. There are targets for 2020 which we met around six years early. However, one could argue that they are not terribly stringent given that we have met the targets but are still landfilling about 15 million tonnes of mixed waste every year and, as I have already mentioned, exporting a further 4 million tonnes to the EU to be used for energy recovery. That is almost 20 million tonnes of material that we have not found a proper home for, yet we are meeting the target.

On the recycling side, we are currently struggling to meet the 2020 target which is set at 50% household recycling levels. We are around the mid-40s per cent but there is quite a lot of regional variation. In Wales they are already comfortably meeting that 50%. That is influenced by the different devolved policies that have been put in place.

Lord Cunningham of Felling: Air quality, Mr Andrews?

Alan Andrews: It is possible to benchmark but I am always a little wary of doing so. I do not think there is a very sound scientific basis on which you can do that. You would have to agree on the exact metrics you were using and which pollutants you were talking about, whether you are talking about human exposure to those pollutants, health effects and so on. It is difficult. The European Environment Agency does a very good annual report which gives an overview of levels of air quality and their effects in EU countries, which is a very useful tool. We know from that that air pollution is an EU-wide problem. The UK is not alone in having serious problems with air quality.

Lord Cunningham of Felling: What effect do you think Britain's quitting the European Union will have on these performances?

Sarah Mukherjee: That is probably the thing we are all struggling with at the moment.

Lord Cunningham of Felling: You are not alone in that.

Sarah Mukherjee: It is a little bit like hacking your way through a forest. The minute you clear a little bit, there is another enormous tree that rushes up to meet you. We had a group of water company lawyers discussing exactly this question yesterday for about four hours. Every time we raised a question, there was another question behind it. For example, what happens on Brexit day one? If we assume we are transposing all the directives into UK law, then what is the status of ECJ verdicts and decisions? You cannot bind your successors but if there is anything less than that, what would stop a company with deep pockets deciding to challenge any piece of legislation or any Regulation that has been made on the back of an ECJ decision in a court on day one? That could happen not just in our sector but any sector at all.

Looking at the data itself, I think we do very well in this country and my colleagues will probably agree. The Environment Agency and companies are very good at collecting data and in many cases, in many parts of the Water Framework Directive, we have a far richer data set than many other countries.

Lord Cunningham of Felling: Is that reflected in a better performance? Having the data is one thing; solving the problems is something different.

Sarah Mukherjee: Exactly. It is better than some, not better than others. Having said that, how much of that is specifically driven because we have to gather that information because of the directive? Water companies would not want to see any diminution in the current environmental standards, but it is not necessarily a race to the bottom; it could be a stroll to the bottom. You could just have a little bit of this legislation taken off or rounded off, or at the next price review we are not looking so hard at this. We had a conversation recently with a colleague from Norway who said that it is very difficult, even with the EFTA surveillance and court process, to get the national government to meet WFD standards because it is not a national issue.

Lord Cunningham of Felling: And on air quality?

Alan Andrews: I am afraid I am going to be rather pessimistic. We understand that there will be a Great Repeal Bill which will transfer the current EU acquis over into UK law. Obviously the devil will be in the detail and I am deeply suspicious that during that very long, difficult and complex process we will see certain aspects of air quality law significantly weakened. We have seen that the Government have been trying to weaken the Ambient Air Quality Directive, particularly in relation to nitrogen dioxide, for years. The EU conducted a review of air quality law in 2013 and the Government were very open about their intention to use that process to avoid the risk of infraction, which is code for avoiding the risk of being sued

by the Commission. That failed and the Ambient Air Quality Directive remains unchanged. I think that shows the vulnerability of the Ambient Air Quality Directive in a post-Brexit world. It might be politically very difficult to actually try to repeal something such as the Ambient Air Quality Directive given the public profile it currently enjoys, but I think you could get to the same result by more subtle means. Some very subtle amendments could rob the Directive of its legal effect. Simply by not replacing the enforcement mechanisms that we lose when we leave the EU we could render the air quality laws pretty much ineffective. At the moment enforcement is primarily the responsibility of the European Commission. Post-Brexit they will have presumably no role at all in enforcement and it will therefore be left to national actors to enforce compliance through judicial review. It would be very easy to make judicial review difficult or impossible for environmental NGOs such as ClientEarth as it was five years ago when the cost of bringing legal action was so prohibitively expensive we could not even consider it. Either by repeal or weakening of the current laws or more subtly through eroding the enforcement mechanisms by which we uphold those laws, we could see a significant weakening in the legal protections we currently enjoy.

Jacob Hayler: We are in a slightly different position in the waste sector in that all of the directives are currently being renegotiated; the main ones that affect us. At the moment we are anticipating that around the time that Brexit might actually occur in 2019 there will be a whole new swathe of rules, regulations and targets that might come in from the EU. We are expecting those to be quite ambitious in what they are trying to achieve in higher rates of recycling and recovery of waste. Those targets will be applicable for 2030. We are anticipating that none of that new legislation will come to apply to us here in the UK. We will have the existing suite of targets which will apply through to 2020 and then nothing beyond.

There are three main ways in which Brexit will impact us. There is the strategic direction, there are the technical rules and regulations and then there is the economic. On the strategic direction we can look at what the UK Government are saying is part of those Circular Economy negotiations in the Council. They are not altogether keen on some of the higher targets, some of the more ambitious aspects of those proposals. We can anticipate that perhaps the strategic direction might not be as ambitious as if we remained as part of the EU, if we chose to leave.

On the technical side, the Government are already looking at possible opportunities not so much regarding the fears already expressed of reducing environmental protection but having a bit more of a flexible risk-based approach to some of these regulations. There is a feeling that some of those rules might be quite prescriptive. The Landfill Directive is quite a good example where we are fully supportive of the direction of travel—getting material out of landfill—but that is accompanied by a lot of quite prescriptive detail on how sites should be engineered and how emissions from those sites should be monitored which perhaps are not necessarily applicable in a UK context. Maybe there is scope for making those a bit more flexible and risk based.

On the economic side, I have already touched on some of those transboundary movements and increasing the costs of that and putting pressure on our domestic waste industry.

The Chairman: You think that in your area there is quite likely to be a divergence between UK and EU legislative areas quite soon after Brexit is likely to happen, so that is quite an important point.

Jacob Hayler: Absolutely. Some of the regulations that might be frozen in 2020 may include things such as standards for end of waste which might govern some of the rules of those transboundary movements. We might freeze those at that point in time so they will be identical, but over time we would expect an increasing divergence.

Q26 **The Chairman:** Exporting waste into the rest of EU and international movement of waste are quite sensitive areas. By being outside the EU, forgetting tariffs et cetera, is there anything in our international obligations that will suddenly stop us from doing that export?

Jacob Hayler: Movements within the EU are governed by the Waste Shipment Regulation which is a transposition of international agreements such as the Basel Convention. We are currently able to export waste as a recycled material, which is a product and has a positive value. Within the EU we export waste which is more like an import of a service. The physical movement is away from the UK but the payment is in the opposite direction. We are paying German and Dutch facilities to treat some of our waste materials.

The Chairman: By being outside the EU, does that change what we can do?

Jacob Hayler: I would not anticipate that, no.

Q27 **Lord Cunningham of Felling:** Mr Andrews, given that we have this well-known and well-documented problem of particulate air pollution which is directly linked to serious ill health and death, does it concern you and your colleagues in the environment movement that there is apparently no dialogue going on between the EU, let alone the UK Government, with manufacturers of vehicles who go on producing more and more diesel engines which are the biggest source of the pollution? I could name one British company that refuses to sell petrol engine cars in the United Kingdom but it offers them for sale in the United States of America. That is the same manufacturer making petrol engine cars for the US but will not sell them in the UK.

Alan Andrews: We are certainly very concerned by the role that diesel has played in Europe's air quality problems. When it comes to particulate matter, diesel is starting to improve. The more recent diesel models contain a particle filter which is relatively effective in cutting out particle pollution provided it is not tampered with and works effectively.

When it comes to nitrogen dioxide, there is a big problem, especially with diesel cars emitting something like four or five times the legal emission limit when they are driving on the roads compared to when they are being

tested in the laboratory. Here again the role of the EU in regulating vehicle emissions is critical. The Euro standards impose certain emission standards for pollution on new vehicle sales. We urgently need to improve those standards to ensure that manufacturers are actually producing cars that meet the limits on the road, not just in a test. The UK needs to play a very big leadership role in ensuring that the big car manufacturing Member States—that is, Germany, Italy and France—do not bow to the pressure from the manufacturing industry. What ability the UK will have to play such a leadership role in the light of Brexit remains to be seen.

Q28 Lord Trees: Picking up the governance issue, I do not think we have a question on that and it is very important. It has come up before in other evidence sessions and is a hugely critical issue. Let us suppose that everything in the great repeal Act gets transposed into UK law, we can scrutinise that in Parliament, everything is hunky-dory, we are all watching hawk-like for any sort of amendments. However, as two you have suggested, it is going to be the slower degradation that we have to watch for. We are not going to have the Commission; we are not going to have the ECJ. What single or double measures would each of you put in place to ensure continued oversight in the future, in the post-Brexit era, to ensure that the legislation was properly operating and being enforced and obeyed?

Alan Andrews: I have three points. First, transfer ECJ case law over into the UK system so that we benefit from case law which has guaranteed individuals' rights to enforce, hold governments to account, access information and so on. Secondly, there is an international treaty to which the UK is a party called the Aarhus Convention. We currently rely on the EU to implement that on our behalf; we should now implement that in UK law through an environmental rights Act. Thirdly, we need proper enforcement agencies armed with powers of inspection and the power to issue fines and penalties, something akin to the US Environmental Protection Agency.

Sarah Mukherjee: The reason I hesitate is that I think, without wishing to sound too "weasel words" about it, it depends on what sort of post-Brexit deal we have. If we are within EFTA then there are mechanisms, although as we have already discussed, not necessarily the most robust, to ensure that there is some following of whatever law was put in place. The ECJ case law is fine unless it gets challenged in the domestic courts on day one. I think the point about enforcement agencies is right. The Environment Agency is a good and effective enforcer and there needs to be a way to ensure that that rigour stays on after the impetus of the directives may have fallen away.

A lot of the data gathering and the enforcement is driven specifically by directives and UK Government concerns about being infracted against those directives. That of course is another issue; who becomes the infractee, as it were? At the moment it is the UK Government and that drives an awful lot of thinking by the Government about how not to be infracted. If it is not the Government, but a sector, or the Environment Agency in any of the four UK Administrations that raises the question, would there be that impetus and that brainpower behind assuring an avoidance of infraction?

Alan Andrews: Just adding to that point, the Commission's role is vital, not just in bringing infraction cases but its role in ongoing scrutiny of various quite technical matters relating to environmental legislation. One of the big air pollution directives requires the Commission to approve various flexibility mechanisms, but who is going to do that role post-Brexit?

Jacob Hayler: In ensuring that domestic environmental standards are maintained at waste sites, the role of the Environment Agency is very important. I am not sure I would necessarily agree with Sarah that the Agency is good enforcer from our perspective, given that about 2 million tonnes of household and commercial waste goes missing every year and ends up bailed in farmers' fields. However, I would agree that is an important role to play.

Q29 **Lord Rooker:** I am more pessimistic than when I started listening. In some ways question 3 starts off optimistically but I do not think it is. We have already identified that a loss of Commission functions is pretty catastrophic and there is no mechanism to replace it. Before I pose the question, you did refer to the Great Repeal Bill and I would put money on the fact that when the Great Repeal Bill appears it will have a clause in stopping judicial review. Whitehall will not want this. They will argue that it is complicated, it has never been done before, we have to incorporate all this legislation and we cannot afford to have anything messed about with. I would put money on the fact that there will be an attempt to stop it being available for judicial review. There will be arguments about deregulation and getting rid of a bit of "red tape"—the Brexiteers love that. If you are going to be optimistic this morning, this is the one opportunity to do so. Is there an opportunity in the UK for us to make the regulations that govern transboundary protection more effective from a UK context? I fully accept that we do not know under what conditions we will be out, but is there anything that we would like to do now, but cannot because we are in the EU, that we could do to help ourselves because we were out? In other words, could we make things better for the public, on a transboundary point of view, and are not able to do now but could do if we were out?

Sarah Mukherjee: The one little ray of sunshine that I can bring to the table is what happens after the end of the Common Agricultural Policy. This is very early days. It is talks about talks at the moment with colleagues across the sector. There is an opportunity to produce a system where farmers can be paid for public goods, such as water management, flood protection and environmental management, more than they are already. As with all these things, the devil will be in the detail but we can maybe move towards a system where there is a much more direct and obvious benefit for the public. At the moment is quite diffuse. CAP money goes into Brussels and it comes out again and the vast majority of people have no idea how the Common Agricultural Policy works, and why would they? Once it is actually on the Government's balance sheet and you can see there is a direct link to the amount you are paying farmers, questions will inevitably be asked about what we are paying for.

Lord Rooker: You are saying "Put it all in Pillar 2" in a way.

Sarah Mukherjee: Yes, moving towards a more Pillar 2 idea. There is a lot of enthusiasm and optimism with not just water companies but the wider water sector about what we could do, what we have the opportunity to do, but we realise it is a very small window.

Alan Andrews: Theoretically, yes. The current legal framework from the EU is far from perfect. I have already spoken about the problems with vehicle regulation and I will not repeat that. Theoretically, there is an opportunity here to correct and come up with a world-leading legal framework. We have been calling for a new Clean Air Act 60 years after the Clean Air Act 1956. There is a whole host of things that you could do to improve current regulation. The question you have to ask is: is that likely, given the current Government's position? We have seen it negotiating very much the other way in Europe. From a more practical point of view, is there going to be parliamentary and Civil Service time for these kinds of things? At the moment the priority really has to be holding on to what we have got and making sure that the Great Repeal Bill really does transfer all existing legal protections. Only then can we think about actually taking things forward and improving them.

Jacob Hayler: There are certainly opportunities and we should all be optimistic for the longer term about what those opportunities might be. I have broken things down into strategy versus technical. On the strategy side, some of the future targets proposed by the Commission are certainly ambitious and, some would say, perhaps unrealistic when coupled with how they might define recycling to meet those targets. We could perhaps come up with something that is more focused on meeting our environmental ambitions and creating value from our resources in a more sensible way and in a more industry-friendly way for the users of those resources. On the technical side, the important thing about regulations is that they are sensible and they are enforced. I have already mentioned that there are gaps in enforcement that could be tightened and there is nothing to stop us tightening that domestically. There are opportunities for more UK-specific risk-based approaches contingent on our unique, specific geology, et cetera. There is certainly scope for opportunity in a number of technical areas on some of the regulations.

Sarah Mukherjee: We would agree on waste as well. The water industry is the biggest user of anaerobic digestion. A lot of waste water treatment plants are completely self-sufficient in energy as a result, but some waste regulations hinder the circular economy rather than supporting it, such as in co-digestion and those areas. There may be an opportunity for a regime in which waste is really what you are left with when you cannot do anything else at all with it.

The Chairman: That is a very useful comment. Mr Andrews, perhaps I could just challenge you a bit. Partly because of the work that ClientEarth has done, and partly because there has been a movement in people's understanding of the issues about air quality, can you not be a little optimistic and say that, because public awareness of this is getting so much greater, which is what you said earlier, there is an opportunity here and that the British Government could ride some of that and respond to public demand maybe quicker than Brussels would be able to do?

Alan Andrews: I hope you are right and, now that we have the legal case out of the way, that is going to be the focus of my work. It is going to be a real challenge for the reasons I explained. The cultural mindset that we see within the Government—the mantra, really—is “Flexibility, flexibility, flexibility”.

The Chairman: I have to remind you, we will not necessarily have the same Government forever. It may seem like it but perhaps we can take a slightly longer view.

Alan Andrews: In a different political climate then certainly there is an opportunity. The Clean Air Act 1956 was an excellent piece of legislation that was replicated across the world. We would like to develop the same thing to tackle modern air pollution.

Q30 **Baroness Sheehan:** We are told that Brexit means Brexit so let us cut ourselves adrift from Europe. How far is it possible to deal with transboundary pollution through purely domestic measures?

Alan Andrews: With air pollution, because of the statistics I mentioned, it is possible to almost come up with numbers. Putting it very simply, if we produce about half the air pollution, we can deal with about half and then we are left with the other half. I know it is a very crude explanation and I am not trying to be flippant; it just shows the challenges we would face outside the EU. We would then be relying on bilateral and other multilateral negotiations with European countries to bring down pollution. The main mechanism for doing that will be an international agreement called the Gothenburg Protocol but you would be relying on political horse-trading between the UK and other European countries.

Baroness Sheehan: Would you not just deal with the pollution here in the UK and let the continent deal with their pollution? Would that be a good way to tackle it?

Alan Andrews: Certainly we can and should get our own house in order first. There is a lot that we could do to improve air quality.

Baroness Sheehan: We do not differentiate between pollution that comes from the continent. We just accept that some comes from there and we deal with it here and that some of ours will go there and they can deal with it there.

Alan Andrews: We can do that but that is an approach that has not been enormously successful in the past, looking back to the problems with acid rain in the 1970s. At the moment central and eastern European Member States in particular have very high emissions of pollution. We will no longer be at the table and able to influence those Member States in bringing down their pollution.

Viscount Hanworth: Are we not exporting more sulphates than we are importing? Can you give us some notional balance of these things?

Alan Andrews: We are a net exporter of the precursors to PM_{2.5} because of the direction of prevailing winds.

Viscount Hanworth: How important is Saharan dust?

Alan Andrews: Not very. In southern Spain it contributes quite a high percentage but for the UK it is negligible.

Viscount Hanworth: What about nitrates and microcarbons?

Alan Andrews: I could not give you numbers but certainly agricultural emissions lead to a lot of the nitrate particles—80% of ammonia emissions come from agriculture. That gives you some idea.

The Chairman: Did anybody else want to comment on Baroness Sheehan's question?

Jacob Hayler: Waste moves across boundaries in two forms: it is either for recycling or it is to be treated. Recycling is a product which operates in global markets and that will continue to be the case. We will continue to rely on overseas manufacturers to soak up the material we are collecting for recycling. We collect about 10 million tonnes of paper and cardboard every year but we only have about 3 million tonnes of domestic paper mill capacity. We are going to have to keep relying on those overseas markets to fulfil our recycling ambitions. On the treatment side, we are exporting a load of stuff to northern Europe which perhaps in the long term we should be looking to treat domestically and we should be looking to be more self-sufficient in the treatment of that waste material, but that is going to take a big investment programme. Estimates range from £5 billion to £15 billion of infrastructure that would need to be put into place to treat all that waste domestically.

Baroness Sheehan: That is a slightly different issue to water and waste pollution. It is more trade related.

Alan Andrews: Absolutely, yes.

Baroness Sheehan: Do you have anything to say about how we might tackle water pollution issues?

Sarah Mukherjee: Obviously we have our own water and the issues are much more around the policy aspects and how the various directives will or will not affect us. We have a similar situation to waste in that the water framework directive is being revised and we will probably have that revision in 2019. Again, do we follow that path? At what point do we lock in the water framework directive to UK law? At what point does it perhaps go its own way?

Baroness Sheehan: Air pollution and water pollution are very important issues. We have air pollution and we have water pollution. We can tackle the technology we need but the main issue is whether we have the will to enforce our own laws. Would that be correct?

Sarah Mukherjee: In order to ensure enforcement of the standards that we have at the moment the impetus is currently being driven through the directive. Before I joined the water industry I was a journalist and having seen this from this side and from the other side I know that governments

pay a lot of attention to the risk of being infringed because it is very expensive and it is not brilliant for your reputation.

Baroness Sheehan: I think your point of who is the infractee is an interesting observation.

Alan Andrews: During the course of this last round of litigation against the Government it was revealed that the main driver behind their new air quality plan was not the Supreme Court order from the UK in 2015, but the threat of being infringed by the Commission. They aimed to comply based on when they thought the Commission might move to issuing fines.

Q31 **The Chairman:** Moving on to the next question, what ways could the geography of the UK and its physical location in relation to Europe affect its relationship with the EU on environmental issues? Brexiting is Brexiting but we are still going to be there geographically. Are there challenges with regard to Northern Ireland? Are there additional points to be made here that we have not gone through before?

Jacob Hayler: Certainly our proximity opens up the possibility of this 4 million tonne export of waste as a fuel. There is a lot of overcapacity for that sort of treatment in other parts of northern Europe and they are very keen for us to maintain those flows of materials into their facilities. It would be a cost issue. If we were further away it would be too expensive to do that, whereas for recycling that material has a positive value which means it can travel a lot further.

Viscount Hanworth: Can you say which countries?

Jacob Hayler: Scandinavia, the Netherlands and Germany are the principal ones.

The Chairman: Did we use to send a lot of plastics to China?

Jacob Hayler: Yes, some plastic goes to China. A lot of paper and card also goes to China.

Q32 **Lord Selkirk of Douglas:** I should mention that I am aware that one of my four sons is working on a drinking water project and my wife is supporting that. To that extent I have an indirect interest, although I have a direct interest in drinking water like all my colleagues here today. What action should the Government take to make certain that transboundary environmental concerns are properly addressed? Should the Government be pursuing co-operative arrangements to achieve transboundary environmental management? Do any cooperative structures need to be thought through and negotiated fully as part of the Article 50 process or can they be dealt with subsequently?

Alan Andrews: On air pollution the structures are already in place and are pretty effective. In information sharing and intellectual power the UK plays a very positive role. We have the Gothenburg Protocol which is the international treaty which includes the US and Canada, Russia, the EU and other European countries. That has various technical groups. It allows information sharing and sharing of scientific information. It has a very good

architecture. We should remain committed and involved in those processes. At the EU level we have very good systems and structures in place under what is called the NEC Directive. That is essentially a directive that sets overall targets on emissions from all EU Member States. That directive was recently revised and it establishes a clean air forum which will allow for sharing of best practice and scientific information. Rather than trying to set up new structures we should continue post-Brexit to engage fully in the structures that are already in place and are relatively effective.

Lord Selkirk of Douglas: In your view should there be a presumption that there will not be a change rather than that there will be on the grounds that the protection should remain in place until something better is thought of?

Alan Andrews: I think that should be a very sensible assumption. Let us hold on to what we have until we have developed and put in place a better system that we know will work.

Sarah Mukherjee: It very much depends what we are left with when we pop out the other side from Brexit and whether we have a boutique solution or whether we have decided to join one of the extra-EU organisations that are already there. Bearing in mind we have this big review on the water framework directive already, for the UK it is very difficult to influence elements of that which of course still may affect us if we decide to lock in whatever happens after this review before we leave the EU. I sit on the board of our European federation of water industries and it is really only through that that we are being able to have any influence at all in what is one of the foundation structures for a lot of the environmental aquatic legislation in this country.

The Chairman: Is that a trade body or is it an official body?

Sarah Mukherjee: It is an organisation made up of the membership organisations of not just EU countries but Norway and Switzerland as well.

The Chairman: Whatever happens, would you expect to remain a member of that group?

Sarah Mukherjee: The argument we would make to our members is that that is all the more important because it becomes the only way we have of directly influencing. EurEau is considered a super-stakeholder by the Commission. We have a lot of conversations between the Commission officials and EurEau.

The Chairman: There is no question that that organisation would expel you from it?

Sarah Mukherjee: No, because we pay our membership fees—paying the piper and calling the tune.

The Chairman: There could still be that quite significant influence through trade bodies into the Commission?

Sarah Mukherjee: I would not say that the influence would be significant but it certainly is a lot more than we, as Water UK, can expect at the moment, even now whilst we are still a member of the EU.

Jacob Hayler: We are a trading sector with the EU so like every other trading sector we think we are incredibly important and would like to see us included as part of the negotiation process. The big fear for us is that all of Defra's capacity is going to be used up focusing on agriculture and farming and what on earth is going to happen post-CAP. There is a real fear in our sector that we might be overlooked, which has economic implications of cost increases and environmental implications of a lot more waste going to landfill.

Lord Trees: What are the World Trade Organization's tariffs for waste or recycling? Is it fixed very low?

Jacob Hayler: To be honest, I do not know. I would have to come back to you on that. The fear is that any tariff is more than no tariff. You could export waste for about £60 a tonne to northern Europe. Currency movements could be pushing that up closer to £75. Landfilling it domestically is about £100. It is all adding up to quite a lot.

Q33 **Lord Curry of Kirkharle:** Incidentally, the concern in the farming industry is that they are well down in the pecking order of priorities anyway. To declare my interest, I farm in Northumberland. To some extent we have encroached on my question but nevertheless I think there is probably more to come. I would like to ask about non-EU countries and our current relationship with them. We have mentioned Norway and others that clearly have a relationship with the European Union currently and we will be in that position afterwards. To what extent are they able to influence us and are we able to influence them currently as members of the European Union? Where do you think we would sit afterwards in that positioning?

Sarah Mukherjee: Through the work that we do through EurEau, through our European federation, we do have this but it is bilateral, particularly around technical information. Again this is a very interesting point that has come out of our conversations with those members of EurEau who are not members of the EU. The reason they are there is because it is very difficult otherwise to get that sort of technically specific information. If you have agreed to mirror the water framework directive, or other directives which you need to have but which are not necessarily available to you, you cannot just rock up to a Commissioner and ask, "What are you thinking of doing on pipe lengths or pipe widths or diameters?" Another potentially significant issue for the water industry would be exactly those technical specifications. At the moment we have them across Europe. If we close the door and decide to stay with what we have, we could end up with a niche threepenny-bit type of piping infrastructure which would be incredibly expensive because no one else will produce it or their standards will have changed. It is that sort of technical information that we will all struggle with potentially when we are outside the European Union.

Lord Cunningham of Felling: Sarah, would your main contact be through your trade bodies?

Sarah Mukherjee: Yes. We have good relations with Norway and Switzerland as a result of that.

Alan Andrews: Perhaps it is useful to think of this in three categories. There are countries such as Norway that are in EFTA. There are other European countries that are not—Switzerland being the obvious example. There are then non-European countries. Norway is bound by the ambient air quality directive, which is the NEC directive that I mentioned. Last year, it was found guilty by the EFTA Court of breaching the ambient air quality directive. The EFTA Court does not have power to issue fines so that is not nearly as dissuasive as it would be against an EU Member State. Norway is bound by these EU air pollution laws but has very little say in how they are shaped. I have sat in stakeholder expert group meetings and the chap from Norway is there. He listens and takes notes and makes the odd helpful comment, but he really has very little say. When the chips are down, Norway has very little influence on the process. It is a similar story with Switzerland. They are not bound by EU air quality laws but they follow them very closely through their domestic legislation and in some cases really lead the way. Sometimes the EU looks at Switzerland as an example of best practice. That might happen post-Brexit but I think it quite unlikely. Outside the EU, under the auspices of the Gothenburg Protocol, the international agreement, it is really the big power blocks who have an influence. It is Russia, the US, to a lesser extent Canada, and the EU as a negotiating block. Individual countries, Norway for example, have relatively little influence other than through soft power, funding research, contributing good ideas and that sort of thing.

Jacob Hayler: Regarding transboundary movements of waste we are in quite a unique position in the UK because nobody else is closing their landfill capacity faster than they are developing alternative capacity and therefore relying on that movement of material into the EU. It will become a trade issue rather than an environmental one.

Q34 **Duke of Montrose:** I speak as a farmer and land manager. We see that the effort will be made to maintain all the controls, so that they come across as they are, although you worry that they will be nibbled away later. Obviously, there should be no problem maintaining regulations on emissions into the atmosphere that impact negatively on human health. However, on greenhouse gases—there are quite a lot of them—when it comes to CO₂ there is quite a strong lobby trying to weaken the regulations on that. Where do you see that going? The other question that the Committee is asking is: what information does the Government need to manage transboundary environmental issues? How can we ensure that they get access to it?

Alan Andrews: On CO₂ we are a little less worried partly because the UK has played quite a leadership role and has been relatively good on climate change. Of course we have the UNFCCC providing the negotiating and legal framework for addressing climate change. When it comes to information on air pollution, you need to know the source apportionment, so you need to know what is causing the air pollution and where it is coming from so you can manage it. You need to know what impacts it is having, so you need to know the health impacts and other impacts, such as impacts on

environment, crops, water and so on. You need to be able to share best practice on the solutions and how to come up with strategies to address those problems. I would say they are the three most important things. Scientific research is essential. At the moment the UK contributes excellent first-class science on air pollution issues. There might be a risk that that is undermined by the UK not being able to access EU scientific grants and not being involved in these big cross-European studies which are so important.

The Chairman: Does much of the research come from the Horizon 2020 programme?

Alan Andrews: Not being a scientist myself, I could not tell you any sort of estimate but certainly my sense is that European money is very important at the moment.

Sarah Mukherjee: We could agree with those points. The Climate Change Act was the first of its kind in the world and Lord Krebs has been an intrinsic part of making sure that governments have been kept in order on those particular targets.

The Chairman: We also have Lord Rooker who actually steered it through the house.

Lord Rooker: I was the legislator.

Sarah Mukherjee: I am sorry, my Lord; I should have acknowledged you as well. We have a unique piece of UK legislation and companies are very keen to ensure that we keep our carbon down as low as possible and we recycle as much as possible. Regarding the information points that Alan makes, again it is back to this idea of soft influence as well. Without those conversations that happen at European Commission special interest or expert committee meetings that we have access to at the moment, which we will not in the future, without the international research projects that go on and in the coffee-break moments that you have that are so important, I think we lose an awful lot by not being at the table and actually not even being in the room.

Q35 **The Chairman:** We often talk of product divergence and product standards, but regarding data standards, is Eurostat the body that defines what the statistics may be? As we have seen with devolution within the UK, sometimes we will start measuring things slightly differently to the others, so we have a divergence. Or is that something I do not have to worry about at all?

Alan Andrews: Certainly in air pollution there is already quite a bit of divergence between how air quality is measured. Member States are given a certain amount of leeway in, for example, where you position a monitoring station.

The Chairman: So it is pragmatic.

Alan Andrews: It is, yes.

The Chairman: That is all I need to know.

Sarah Mukherjee: Likewise there is already a certain divergence.

Lord Rooker: Could I ask a brief supplementary of Jacob because I am not clear. On the waste that we are exporting to Europe, other than paper and board, what in the main is it? Are we exporting material for digesters? What is the main waste that we are exporting to Europe?

Jacob Hayler: It is less organic material, because that is heavy and tends to be low value. It falls under two broad categories. One is recycling, so that is paper, board, plastics, metals, et cetera. The other is waste-derived fuels which is where mixed waste is taken, often from commercial sources. It goes through some sort of treatment process to make it suitable for input into an energy plant, so it is shredded to a certain level of consistency. It is blended to make sure it is the right calorific value. It is essentially mixed-waste inputs.

Viscount Hanworth: I find it very hard to imagine what are the substances involved.

Jacob Hayler: It could come from small shops, for example, from retail. A lot of plastic and paper. It is the same sort of stuff but it is mixed up predominantly. Then it is shredded and blended to create a relatively consistent fuel.

Lord Rooker: Do you send food waste?

Jacob Hayler: Not deliberately.

The Chairman: Colleagues, we need to bring this session to an end. I thank our witnesses very much for going through this with us and the important evidence you have given us today. Thank you very much indeed. I bring this part of today's session formally to an end.

Matthew Bell — Oral Evidence (QQ 75 – 84)

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.

Examination of witness

Matthew Bell, CEO, Committee on Climate Change.

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 billion 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 longer-term 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 competitiveness 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

Matthew Bell — Oral Evidence (QQ 75 – 84)

and we thank you very much indeed for your contributions. I bring this public session to an end.

Abi Bunker, Leah Davis, and Trevor Hutchings — Oral Evidence (QQ 12 – 22)

Wednesday 26 October 2016

11.45 am

[Watch the meeting](#)

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

Examination of witnesses

Abi Bunker Head of Policy and Advocacy, RSPB, Trevor Hutchings, Director of UK and EU Advocacy, WWF, and Leah Davis, Acting Director, Green Alliance.

Q12 **The Chairman:** Welcome to our second session on the UK leaving the European Union and its effect on environment and climate change. This is a formal evidence-taking session. A note will be taken and a transcript will be put on the public record in printed form. A copy will be sent to you. If there are any errors, please bring them to our attention. The session is on record; it will be webcast and will be available on the parliamentary website in due course. Once again, I ask members to declare any interests they might have when they put their questions. Before we start, not so much for our benefit but for the public who will be listening, could you introduce yourselves briefly, and then we will move on to the questions?

Trevor Hutchings: I am delighted to be here. My name is Trevor Hutchings. I work for WWF, the global conservation charity. I am the C there and am very interested in the impact of public policy on environmental objectives. Before WWF, I worked in various Government departments and with the European Commission. My last role was with the then DECC, heading its energy efficiency programme.

Abi Bunker: My name is Abi Bunker, head of policy and advocacy at the RSPB. I am delighted to be here, and thank you for the invitation. I head the RSPB's policy and advocacy teams. I have been at the RSPB for about 10 years. Prior to that I had various incarnations, including five or six years at the National Audit Office as a principal auditor.

Leah Davis: Likewise I am delighted to be here. Thank you for the invitation. I am Leah Davis, acting director at Green Alliance, which is an environmental think tank and charity that works for ambitious leadership on the environment, certainly at the political level. We are convening a coalition of some of the larger environmental NGOs on their response to the referendum.

The Chairman: To state the obvious, the Committee is looking at this item forwards, not backwards, in relation to the referendum result. We want to

understand how we move forward, and how Parliament can call the Government to account and advise them, and suggest how we might move forward. The first question is based on that. What are the opportunities, as well as the challenges, for the UK and the global environment and climate change arising from the UK leaving the EU? What are the UK's key interests and objectives? If you want, you can throw in the wider global interests.

Trevor Hutchings: As I am sure the Committee appreciates, in our view the EU has established over the past 40 years probably the most comprehensive suite of environmental legislation anywhere in the world. It is a world-class system. As the UK exits the EU, that system is potentially at risk of being degraded, and clearly that has consequences for the state of the natural world. In addition to that suite of legislation, the EU has established a system of accountability, if I can call it that, ensuring that Member States are able to implement their obligations under EU legislation, whether through access to justice or access to environmental information or through a system of audit and infraction proceedings. A whole range of accountability mechanisms are potentially at risk as we leave the EU.

We are very encouraged that the Government have announced that a body of legislation will be rolled across into domestic legislation, where practicable. Clearly, there are some questions around quite what that means in practice, but as a starting point it is exactly what we would like to see. It is clear that, even with that existing established body of legislation, we are still experiencing environmental decline both in the UK and globally. The RSPB's recent *State of Nature 2016* report set out the case, and tomorrow WWF will publish its *Living Planet Report*, which puts some stark reality into the state of global biodiversity.

We want to build on that established framework of legislation. We are encouraged that the Government have committed to a 25-year plan for nature, and we would like it to be an ambitious and robust plan that builds on the established framework but goes beyond it by implementing international commitments, such as those under the sustainable development goals agreed last year by more than 190 countries. Likewise, on the climate side, with the commitment to a low-carbon plan, how are the Government going to meet their obligations when we know there is a policy gap in meeting the fourth and fifth carbon budgets? There is a risk that that body of legislation is undermined, but there is an opportunity for the UK to become a world-class leader in environmental protection through the exemplar arrangements it could put through under its commitment to a 25-year plan for nature.

Abi Bunker: I heartily agree with everything Trevor has just said. The interests and objectives of the UK are pretty good at the moment in relation to the natural environment: the commitments we have made internationally through the Convention on Biological Diversity—the Aichi targets; the global conventions on climate change; and indeed the Government's commitments to leave the natural environment in a better condition for the next generation. All those commitments remain.

Theoretically, there is now an opportunity to regalanise and refresh, and invest in delivering those commitments through implementation. As Trevor,

and we and others, have set out, we perceive the greatest risk—it is very real—in the loss of not only the environmental protection legislation and other commitments and policies that have been built up over 40 years, but the governance, accountability and oversight to make that real. The Great Repeal Bill and the idea of bringing legislation over is a great first step, but it needs to be made substantial and real by robust implementation through accountability and oversight mechanisms.

Leah Davis: I echo Trevor and Abi's points. I completely agree. We have talked about the Great Repeal Bill, and another important point is that, certainly in the short term, huge amounts of legislation will be transferred, so accountability is significant. At the moment, our accountability and regulations lie largely at EU level, so trying to find a replacement that is at least as strong at UK level will be a challenge. In the short term, we may face more challenges, but in the longer term there may be opportunities, particularly in what we can do at domestic level while all this is happening—while we are focused on Brexit—to drive through some of the longer-term outcome-focused activity through the 25-year plan and carbon plan. That provides real opportunities.

The Chairman: I have read that one of the characteristics of the role of the UK in the European Union on the environmental side is that it has been very strong and leading on climate change but reluctant and resistant on environmental legislation. Is that characterisation reasonable or not, and what does it say for the future?

Trevor Hutchings: It depends on which point in time you are referring to. For example, the UK played a leading role in the design of the Habitats Directive when it was first derived in Brussels, and it has pushed very hard on reform of the Common Fisheries Policy more recently, but there are other examples where perhaps the UK has not been as progressive as other Member States. We have had a bit of a see-saw, with the UK in the lead and the UK being pulled along; the UK has a proud history of largely pushing a very progressive agenda, but with notable exceptions.

Abi Bunker: It depends on the area of policy and the point in time. Agri-environment is one of the main funding sources for delivering nature conservation in the UK; more than 50% of public funding of nature conservation is reliant on agri-environment funding. The UK has been an incredibly strong long-term leader in developing a good agri-environment, providing good evidence and science to improve it. On marine protected areas, it required a marine complaint and the intervention of the European Commission to remind the UK Government of their obligations to designate areas at sea to protect wildlife. We are now seeing a suite of marine protected area designations from across the four countries of the UK. It depends very much on the area.

Leah Davis: We see from our domestic legislation that the UK is a climate leader. The other example is pollution controls and air pollution, where there has been a greater challenge in recent years.

Q13 **Lord Rooker:** Because the UK has been a leader and a pusher in a lot of regulations, we have been accused internally of gold-plating because we

want to set an example to everybody, so irrespective of the Great Repeal Bill, there is an inevitability that the leavers will attempt to unstitch some of the environmental regulations. Off the top of your head, can you tell us the top three environmental and climate change regulations that, after Brexit, we should and must preserve against attack? What are they, and on what grounds should they be preserved? I do not want you to go too wide. What are the really important ones?

Abi Bunker: I would certainly propose that the most important from a nature conservation perspective have been the Birds and Habitats Directives, which are often referred to as the Nature Directives. There have been a number of reviews, one by the previous Government in 2012, to look at the nature directives and how well they have or have not delivered. That concluded, as did the recent fitness check in Brussels, which took evidence from across Europe on their effectiveness, that they are fit for purpose. The problem has been poor implementation, and arguably inadequate funding, to make them really work. I would argue that for the protection and restoration of the natural environment and biodiversity those are critical bits of legislation for us to bring across and make work in the UK context. The evidence shows that over the past 30 to 40 years they have done enormously beneficial things.

Trevor Hutchings: The whole suite of environmental legislation derived from the EU is very much interconnected and should be seen as a whole. As soon as we start to play around with bits of it, potentially we unravel it. The point has been made about gold-plating. The particular challenge is that we need to ensure better implementation. Gold-plating is more a perception than a reality. The Government's own balance of competences review was unable to find specific examples of gold-plating. It is very much about seeing it as a body of protections that, to go back to my earlier point, are not delivering the outcomes we want to see anyway, before we start picking and choosing which of them we think we should keep.

Lord Krebs: I want to pick up what Abi told us about the success of the Birds and Habitats directives. In his introduction, Trevor referred to the rather poor state of biodiversity in the UK. I know that many bird populations are in decline. I declare an interest in that I am one of the people who provided scientific evidence to the RSPB on those matters, and I am also on the Committee on Climate Change. If it is the case that things are in a bad state, how come these directives are doing such a good job? They cannot both be true at the same time.

Abi Bunker: I would argue that they can. I suspect you have heard this from more competent scientists than me. Trevor referred to the complexity and interrelatedness of different policies and legislation. The Birds and Habitats Directives set some responsibilities and ambitions for the outcomes we want. They set a clear framework for countries to deliver those through their own mechanisms and the ways that can happen, but the delivery of restoration and protection requires policy in other sectors—for example, agriculture and fisheries—to be aligned, and not to act in contradiction to the environmental protection legislation but to help deliver it. We have not seen that over the last 30 to 40 years. Through the Common Agricultural Policy, we have seen a lot of perverse incentives and policy

levers that were in contradiction to the stated aims of the Birds and Habitats Directives.

In the last year or two, there was a good, groundbreaking study by Donald et al that looked at the Birds and Habitats directives, with a lot of evidence from the UK and across Europe showing how they have helped to designate sites that would not otherwise have been designated and protected, and to recover species that otherwise would not have been saved, in some cases from extinction. They could do better, but they have been really important.

Lord Trees: Defra is working on two 25-year strategies. One is farming and one is environment, and they are not connected. Is that very sensible in view of what you said?

Abi Bunker: No, probably not. We have had a number of conversations with Defra to suggest that keeping those in separate silos is ecologically not very sensible, because it is in the interaction between agricultural production and the natural environment that the problems arise. Keeping them separate means that you continue to lose opportunities to tackle negative interactions and build on positive interactions, so I totally agree.

Q14 **Lord Selkirk of Douglas:** How important are policy stability and predictable review cycles to the effective management of the UK's environment and climate efforts? To what extent will Brexit affect that stability? I was an environment Minister for five years. I always found it very puzzling that soft green issues seemed to attract much more attention than hard green issues, because the latter were much more dangerous.

Leah Davis: The best example to use is predictability in policies where we already have them. The cycle is important. We have a Climate Change Act and we have climate change budgets. That gives us a clear policy direction, goal and focus over a predictable period. The best example I can give of where policy direction is really important is the Government's infrastructure pipeline. Towards the end of this decade, we see a drop-off when policy certainty ends, and therefore the infrastructure investment ends. We see a 96% drop in the investment from about £7.7 billion to £0.3 billion. That is an example of where those sorts of cycles are helpful, particularly in driving business investment and delivery on the ground.

I am not sure whether we have those sorts of cycles for some of the softer green measures. I would argue that it would be helpful to replicate them in other spheres.

Lord Cunningham of Felling: I declare an interest as a lifelong card-carrying member—rank and file—of the RSPB.

Lord Rooker: I should have done that as well.

The Chairman: It looks as though we have House of Lords membership of the RSPB.

Q15 **Lord Cunningham of Felling:** My question is for each of you. Have you been able to identify any necessary urgent actions that the Government

will need to take when the UK leaves the European Union to ensure continuity of adequate policy cover in the areas that concern you?

Abi Bunker: There are some clear steps from our perspective, and there have already been good signs from the Government. We have existing laws on environmental protection. Let us implement them and designate the places that need to be designated and take the actions we can. For the next two years, the UK is still part of Europe and there are important decisions on Common Fisheries Policy and yields for next year that still need to be made, so there should be implementation in the immediate term. We should retain the laws post-Brexit and, in the Great Repeal Bill, bring over the *acquis* of environmental protection legislation. We should address the governance gaps that will inevitably arise from our exit from the EU: the role the Commission has played in resolving transboundary problems, because nature does not respect political boundaries even if sometimes perhaps we would like it to; the role of the European Court of Justice and the statutory agencies across the UK countries; avoiding a race to the bottom so that, if there are further amendments to the legislation that the Government wish to undertake, there is full parliamentary scrutiny; and good collaboration and close working across the four countries of the UK, because a number of these areas are devolved responsibilities, so that is important.

These two are really important: a commitment to cross-border co-operation across the four countries of the UK and with our neighbours in Europe, who will share nature with us, and finally—a fundamental one—because so much of the money to pay for nature conservation comes from Europe, we have to fund and invest in nature conservation and environmental protection and restoration. They were perhaps not clearly set out, but those are six very important actions for the next months and years.

Leah Davis: There are some urgent ones: funding across the Common Agricultural Policy, funding that drives a lot of our energy efficiency and investments in some of our carbon reduction programmes, particularly at local level.

Another thing is the uncertainty at the moment about what our future product standards will be; for example, some of the energy performance and vehicle emission standards. Will we still be subject to those? Will we align with those? There could be new ones coming through, particularly on ecodesign. What will that mean for our products and their performance, and for the people—the businesses—who produce them in this country?

Trevor Hutchings: All of that could be clearly articulated in the Government's forthcoming plans on carbon, food and farming and the environment. Those should be the vehicles that offer certainty to those who are regulated and those who need to be offered certainty. That is the place where the Government should be able to articulate it.

Lord Cunningham of Felling: They are what I would describe as urgent requirements. What about the longer-term implications of our leaving?

Trevor Hutchings: It comes back to what I said earlier about certainty on day one. We are pushing to go much further than that and to set out a

long-term trajectory for halting the decline and restoring the natural environment in the UK, and indeed the UK's footprint internationally. It comes back to the long-term 25-year plan commitment. We very much want that articulated in such a way that it is about reversing the decline, and about restoration. On the point made earlier about the Climate Change Act providing us with carbon budgets and a pathway to an end point, we do not have that clarity in the wider natural environment, but a 25-year plan can articulate that outcome and the pathway to get there, with five-yearly milestones that offer clarity and an understanding that we are progressing towards an outcome that everyone has agreed.

Q16 **Lord Trees:** The next section is about environmental opportunities. There are a number of environmental regulations that may not have transboundary implications but have more localised ones. Could you say a little about what we could do to implement more effective environmental legislation in a UK-specific context? In your answer, perhaps you might reference newts. I do not wish to be flippant, but newts is a subject that exercises the media greatly, and they might be relevant in this context.

Abi Bunker: I knew I should have put money on newts or bats being mentioned. I did not. I have been talking about the Birds and Habitats Directives. Forgive me for going back to them. There was a very good study undertaken by the Government in 2012 on the Birds and Habitats Directives and whether they were doing the job they needed to do, not least to look at the claims and accusations of gold-plating or problems. The study found that they were doing a pretty good job and were fit for purpose. You are absolutely right that there are problems with implementation, but that is not about what is in those bits of legislation, or indeed in the appendices; it is about the unsexy area of policy below that. How do you implement it and develop guidance that will tackle and provide clarity for businesses that need to operate in the environment but wish—most of them—not to damage it unnecessarily?

Until Brexit, which unfortunately stalled the process, RSPB and other NGOs were working very closely with the Government, Defra and other agencies and industry partners on a memorandum of agreement to look exactly at those problematic cases, some of which are real and some a matter of perception, and how to do the implementation. It is not the case that there is a need to remove things from appendices or change the legislation; it is about developing guidance and best practice for industry on how to implement them well. We would love to regalanise that work, which stalled after the Brexit result. It would be very good to try to move it forward and get good guidance to help address some of the problems.

Q17 **Viscount Hanworth:** In the Brexit circumstances, we shall need to develop policies to replace the CAP and the Common Fisheries Policy. What opportunities will arise for improving environmental protection?

Trevor Hutchings: The UK Government have played a leading role in reforming the CFP, which was not an effective instrument. Through that reform, we now have a framework that is providing a much greater approach to regionalised management to deal with discards and so on. Many of the fish stocks the UK fishing fleet depends on are shared with

other nations, so it comes back to the point about managing fish stocks and the wider marine environment on a cross-boundary basis.

Having said that, I am sure there will be examples where with an even more specific regional approach tailored to UK needs, perhaps particularly in inshore waters, the UK Government can take the opportunity to tailor marine management to that situation. I suspect those opportunities will be less widespread than the need to manage the fisheries and marine environment on a collective basis, because fish stocks and the vessels fishing them are in other Member States' waters, so a common regime to manage their activities is paramount.

Viscount Hanworth: On the CFP, there is a strong, or at least vociferous, fishing lobby that looks forward to unrestrained opportunities under Brexit. Does that worry you?

Trevor Hutchings: Certainly, unrestrained opportunities do. The underlying premise is that fishing activity should be undertaken at a level that fish stocks can sustain. We need the best scientific evidence; we need a precautionary principle in setting fishing opportunities; and we need to manage fishing effort with fishing opportunity. A free-for-all would be very alarming.

Viscount Hanworth: That we all understand, but are you worried about the politics of the fishing lobby as currently manifested?

Trevor Hutchings: Only last week, I was with somebody from the Scottish Fishermen's Federation. They were not advocating a free-for-all or overfishing. Most fishermen understand that healthy fish stocks are absolutely crucial to their livelihood, so I am not hearing that. What I am hearing is that the fishing industry, or elements of it, would like to see a redistribution of quota between what UK fishermen are allowed to access and what other nationalities are able to catch within UK waters. That becomes a political rather than an environmental issue.

The Chairman: We will not go too far down that route, because we have dealt with that in another inquiry. I declare an interest as a board member of the Marine Management Organisation, which is effective in this area. We might talk about renewable energy, where I have a non-financial interest as a trustee of Regen South West. Ali Bunker, I think you want to comment on Viscount Hanworth's question.

Viscount Hanworth: And on the CAP.

Abi Bunker: I am happy to talk a bit about fisheries. I echo what Trevor said. I would like to thank you for the inquiry you undertook earlier in the year on fisheries. A number of the statements from the Minister about a commitment to sustainable fisheries have been welcomed. It is vital to have an ecosystem-based approach to fisheries and not one focused just on quota. We would be keen to work collaboratively with WWF and others who have lots of experience in this area and with Government to find a way forward.

Land use policy, and what comes next to support and drive how we manage our countryside and our agricultural land, has been identified as perhaps a once-in-a-lifetime opportunity to tackle some of the inconsistencies and perversities that, despite very good reforms over the last 50 years in the Common Agricultural Policy, still persist and in some ways have come about because 27 Member States are negotiating on probably the most important sector for their country. We and others are keen to provide evidence, and to work with government and others to secure some of those opportunities. Much money has gone into farming and much has been achieved, particularly through agri-environment schemes, but there is greater potential to use that public money to deliver public policy goals, public goods and public benefits for the greater good, be they environmental, social or otherwise. There is an opportunity to build on the progress of the past, learn the lessons and get rid of some of the perversities that we have been tackling over the last 20-odd years.

Viscount Ullswater: As was mentioned, environmental legislation is a devolved matter. Would you be worried if different parts of the UK evolved their environmental legislation in different ways, specific to the nature of the country in which they are operating?

Abi Bunker: I start from ecology and how the natural environment works. We need to operate in a way that accommodates and tackles the opportunities and challenges specific to the natural environment, and it is different throughout the UK. The fenlands of East Anglia are very different from the uplands of Wales, and the interactions between farming, forestry or other sectors and the natural environment are different.

Our experience at international level right through to regional level is that nature does not have political boundaries; it moves around, and that requires supranational action. There is real value within the UK, and the UK with other states, in operating and working collaboratively to deliver what the natural environment needs to be restored and to succeed. Working together on common principles and ambitions, but utilising the mechanisms that will work best in the different kinds of environment in the UK, has happened to some degree already. I think we can build on that success and make it work even better.

The Chairman: You say it has happened. I am sorry to put you on the spot, but it would be useful for us to have a practical example.

Abi Bunker: As an example, agricultural policy has been a devolved matter for some time. There has been an EU framework, but within that framework agri-environment schemes have been developed by each of the four countries slightly differently, arguably some more successfully than others. It is important to keep learning the lessons from across the four countries and to develop appropriate tools and mechanisms that really work to tackle the problems in those countries.

Trevor Hutchings: Another example would be marine protected areas, where the Scottish Government have probably moved further ahead in many respects in some of the designations they have made. In Wales, an example is the Well-being of Future Generations (Wales) Act, which is a

ground-breaking piece of legislation, showcased at UN level as an exemplar of how to go about managing the environment in recognition of the social and economic benefits that come from looking at sustainable development in the round. There are examples where the devolved Administrations have perhaps gone ahead, but the point remains that, if we can have a more coherent management regime, it offers certainty for organisations working in the different countries.

Lord Rooker: Abi, when you were answering Viscount Hanworth you referred on three or four occasions to the opportunities from controlling the CAP. Can you give us any examples? What do you want to do? Do you want to re-wild the hills, put in more hedges and stop farming and food production in certain places? You did not give any examples. Do you have any, because I assume you are working up campaigns for the future?

Abi Bunker: There are a couple of things. I mentioned perversities. Currently, there are some perverse incentives to plough up permanent grassland, for example. Permanent grassland can be incredibly important as a carbon store, and some of it can be very valuable for biodiversity. There are opportunities to tackle perverse incentives. The main opportunity is to target any funding to agriculture to deliver greater value for money for the public purse through public policy to deliver social goals, environmental goals or nature conservation goals.

Currently, a significant proportion of funding distributed through the Common Agricultural Policy is through direct payments on the basis of land that is owned. There is scope to learn lessons from the past and clearly link funding much more directly to the delivery of public policy goals; to have objectives that are set for the money and deliver much more for the citizens and farmers of the UK; and to co-ordinate and integrate nature conservation and environmental delivery with more truly sustainable farming. Invest in farmers and give them the certainty and incentives to move to much more sustainable farming. Integrate it. To go back to a point your colleague made earlier, the interactions between farming and the natural environment are intrinsic to our success or failure in both of them, because being able to produce food in the long-term future relies on a resilient, healthy and thriving natural environment.

Viscount Hanworth: Could we do any better on nitrate pollution?

Abi Bunker: I think we could. There is the nitrates directive and a few other bits of legislation, but again the key is implementation and building that into any replacement for the CAP.

Viscount Hanworth: Many of our farmers will be pleased to get shot of regulations about nitrates.

Abi Bunker: There are varying perspectives about the interactions between farming and the natural environment. We have to look at and follow the evidence. We now have a lot more evidence than we did in the post-war period, and we need to build that into how we design our public policy and support farmers to tackle the problems.

Trevor Hutchings: Another specific example would be flood prevention. The market does not value farmers holding water upstream in catchment areas on their land; they cannot use that land for other purposes if they do so, but there is a public good in their doing that. That public good should be recognised through the payments scheme. Those are the kinds of examples we would cite.

Q18 **Baroness Wilcox:** Has there been a history of gold-plating environmental legislation? If so, are there opportunities now to help SMEs by reducing it?

Leah Davis: We have touched somewhat on the question. It depends on the definition of gold-plating. If it is that we have done more than was agreed with the EU, there are not that many examples. We have talked about them already. On climate, we have certainly gone further, but there are lots of examples where we have not. We mentioned some of the red tape reviews that have taken place to look at whether there is too much regulation with a negative impact. Those reviews have found that on the whole that is not the case. We have the standards we need.

I would question the sense that all the environmental protections and the body of legislation we have is entirely negative for SMEs. Huge opportunities have been created with some of the new markets across a range of environmental areas. That is the balance we need to strike.

Baroness Wilcox: That is a very good answer. Thank you very much indeed. Thank you too for the answer to my colleague's question about our inshore fisheries raping everything in sight. I must declare that I come from a fishing industry: the south-west English inshore fleet.

The Chairman: We turn to questions about alignment with the EU.

Q19 **Lord Curry of Kirkharle:** It was very difficult to sit on my hands during that debate about farming and the environment. First, let me pick up the last point. I chaired the Better Regulation Executive until last December. We spent a lot of time trying to bear down on and identify gold-plating, with great difficulty. I absolutely agree that there are very few examples. I declare an interest. I farm in Northumberland and I benefit from the basic payments scheme. I have been actively involved in environmental stewardship and conservation, probably for 30 years.

I am interested in any concerns you might have about whether as a consequence of Brexit we will find ourselves in a disadvantaged position relative to the rest of Europe. Currently, as part of it we have the financial influence of environmental stewardship schemes and the like, and the potential continuation of those incentives to try to improve biodiversity, natural environmental habitats, et cetera. As a supplementary point, you mentioned a free-for-all in fishing; there is a real risk if we pursue hard Brexit of a potential free-for-all in global trading. We could find ourselves in a world where our food production declines and we rely more and more on imported food produced under environmental conditions that are much worse than our own. I am interested in those two questions.

Trevor Hutchings: To pick up the latter one, greater understanding of the environmental impact that our consumption in the UK is having on the rest

of the world is absolutely key; for example, the way we purchase and consume our fish. Is it coming from a sustainable source? Do products contain palm oil? Has the meat that we eat been fed on soy, which is leading to deforestation? Our awareness of our consumption habits in the UK is probably little understood. Businesses are becoming more aware of the resilience of their supply chains. If you sell garments, you need water in the areas where your cotton comes from. What is the resilience there as a result of the overextraction of water? There is a whole range of threats related to the UK's global footprint that this debate can often miss. Your point about potentially greater reliance on food imports brings into stark relief the need for better understanding of our UK footprint internationally.

Abi Bunker: I apologise, Lord Curry. Could you repeat your first question?

Lord Curry of Kirkharle: You may be aware that I have been involved in policy design in the past. I am concerned that we will be operating in a post-Brexit world where one must assume, even though the Common Agricultural Policy will continue to be reformed, that there will be financial incentives to encourage farmers in the European Union to adopt environmental standards and incentives through stewardship schemes, conservation measures, et cetera. How concerned are you that we may not be operating in the same environment with the same incentives here in Britain?

Abi Bunker: I would be very concerned if the UK were to develop a replacement for the CAP that did not have at its heart the use of public money to restore, maintain and protect the environment, which is at the heart of our agri-environment schemes. Over the last 30 years, the UK Government have been a European leader on the science, evidence and monitoring of agri-environment. We have probably moaned a bit that they are too slow at improving it and taking the opportunity to make it better and invest more, but that is there. The commitments on agri-environment we have had thus far from the Treasury, in the short term, have been very good. You are absolutely right that that needs to continue and be at the heart of the approach to our farming system. A sustainable food and farming system of high environmental quality will be very important. As you say, a hard Brexit where we are not part of the single market and want to make trade deals with other parts of the world may indeed be likely to increase the risks.

There are some choices. To some degree in areas of its food, farming and fisheries, the UK already has a pretty good reputation internationally for quality, not just quantity and selling into global commodity markets. It is more along the lines of what, say, Switzerland does in investing in the environment, with the sustainability of its food and farming being part of its sales pitch to the rest of the world. If we had a hard Brexit scenario, the trade deals would have enormous implications. We would want to see environment as a core part of those trade deals, so that is an area of concern.

Q20 **Viscount Ullswater:** This question is an attempt to look into the future. In your view, will the environmental and climate change aspirations of the UK and the EU be similar after Brexit? How much influence will the UK have

over the direction of EU environmental policy after Brexit? That is crystal ball gazing.

Trevor Hutchings: It is a bit. The climate change aspirations are set out largely in domestic legislation, the Climate Change Act and carbon budgets, so we very much anticipate that that will be the framework within which the UK continues to operate, and would advocate for that to be the case. To meet those aspirations, more policy needs to be forthcoming from government, particularly in meeting the fourth and fifth carbon budgets. There are international commitments as well. The Government have committed to ratify the Paris accord, and likewise the sustainable development goals. Those international commitments would help to drive action in the UK after we have left the EU.

Abi Bunker: It is important to remember that some of the European legislation we have been talking about, the Birds and Habitats Directives and others, takes its lead from international conventions—the Berne and Bonn conventions and the Convention on Biological Diversity. Those are all important international commitments where we hope the UK will continue to take a leadership role, on the UNFCCC in the case of climate. The EU has that role too. Those conventions set ambitions and targets, and hopefully we will get new targets under the CBD post 2020. If the UK Government take those commitments seriously, and if the EU does, there will need to be alignment to some extent.

Leah Davis: I agree about alignment. We have international obligations, particularly on the climate side, which we have both agreed to. The question is how we share some of that effort. At the moment we have effort-sharing in decisions on climate and emissions trading, and the question is about how that is split further on. That is where the unknown is. The positive point is that we have the same ambitions, certainly on climate.

Trevor Hutchings: The UK will have a real interest in how environmental legislation develops in the EU. We benefit from migratory birds, but they will be affected by regulations applied in other parts of Europe where they migrate to and from. Likewise, some of the air quality challenges we face in the UK are a consequence of what happens in continental Europe, and surely the UK will want to influence the regime in Europe.

Q21 **The Chairman:** We share our environment with the rest of Europe, and we will not be floating off towards the Caribbean or anywhere— unfortunately, in some ways. We have talked about migratory species and the marine environment. We share all of that. What sort of aspiration should we have in a hard Brexit environment? I am not saying whether that will or will not happen, but let us assume that there is not the EEA liaison that goes on. What should we aspire to in our relationship with the European Union in future, and the shared resource that none of us can manage, because the natural environment does not respect borders? How do we get that to work post Britain leaving the EU? In the energy world there is a wider energy community, mainly for less developed countries, and for trade there is the EEA. Do we need something like that for the environment, or is that shooting too high?

Abi Bunker: To save the environment, which is shared and mobile, the UK needs to maintain and enhance relationships with regional and international nature conservation bodies and others, and to seek to cut through some of the politics to deliver what that shared nature and environment needs. That will be challenging. I do not have clear views on what shape it could take. The RSPB works in that way. Brexit creates challenges for each of our organisations. WWF is international in nature. We are part of the BirdLife International partnership, and we will continue to liaise and collaborate with partners across Europe and the world to try to understand the problems and the solutions for nature and then create mechanisms, collaborations and partnerships that will deliver what nature needs. I hope that the UK aspires to operate in a similar way for the natural environment, because, more than any other part of the world we live in, the natural environment transcends political and national boundaries. I am sorry that is a bit fluffy.

Trevor Hutchings: The EU has provided the framework. When the UK leaves the EU, there needs to be a mechanism to enable cross-border co-operation. That happens already with third countries—for example, Norway—in fisheries management and access agreements to each other's waters. There are examples, but they are largely under existing EEA agreements, or whatever it might be. Depending on the nature of the exit, there will need to be something in place, and a lot of effort will need to be put into ensuring that the UK is still influential in the rest of Europe in that regard.

Leah Davis: There are certain institutions and places where we have shared resources. The regulation of chemicals sits at European level. For certain things, we have institutions that are working; we have the effort-sharing we have already talked about, which we know has reduced the cost of meeting some of our climate change obligations. You touched on the idea of having access to the energy union for some of our renewables, and balancing that and meeting our carbon targets. We think that will be a cheaper way of doing it. For me, it is about having an assessment both of where it is most sensible to share institutions, and of the opportunities and markets that we want to access.

Q22 **Lord Trees:** We do not know what our relationship with continental Europe might be. There is another big land mass contiguous with Europe with which there are not close political ties. I am thinking of Russia, with which there are a lot of shared environmental issues. Are there international conventions that embrace, for example, Russia and Europe talking about migratory birds, pollution and so on? Are there any models that exist already, or will we have to create a continental European convention on the environment?

Abi Bunker: I do not know the answer to that.

Trevor Hutchings: There are no obvious ones, but the UK already has bilateral arrangements with other countries outside the EU, and those are used to manage cross-border issues as well. There are mechanisms, but the challenge is that for the last 40 years or so we have had a very established mechanism for dealing with these issues. One needs to be assured that once we Brexit there will be a mechanism for doing that. I do

not think there are many obvious ones that provide the comprehensive suite we have at the moment.

Abi Bunker: I suspect the political challenges of doing something with Russia might be even greater than the political challenges of continental Europe. You are right. The geese landing in Norfolk at the moment come from Siberia.

The Chairman: As a couple of the members of this Committee know, in the Arctic Council that co-operation tends to work, but we are not a member of that.

Trevor Hutchings: CCAMLR in the Antarctic has been meeting this very week. There has been evidence of progressive negotiations with Russia on marine protected areas in the southern ocean, so there are examples.

The Chairman: Thank you very much indeed for your evidence. If there is anything on which you wish to give us further evidence, we will be very pleased to take it in written form.

Country Land and Business Association — Written Evidence (ECB0001)

Summary

There are many areas in which, if the UK is to meet its ambitions for the climate and the environment it will need to continue to work closely with the EU. This is not just to meet the ambitions themselves, it is also to reduce the risk of UK producers being put at a competitive disadvantage.

The UK must develop a fully funded Food Farming and Environmental Policy to replace the CAP. This should set out enhanced ambitions for the environment and climate but be underpinned by an aspiration for a more resilient farming and land management sector better able to meet the challenges.

The 25 Year Food and Farming Strategy and the 25 Year Environmental Plan must together set out a long term vision for the climate and the environment to ensure that public authorities and private investors have the confidence to engage.

Introduction

The CLA represents the interests of farmers and rural businesses, we have in the region of 33, 000 members who between them own or manage over half the rural land in England Wales.

For many decades, the EU has provided the policy and regulatory framework supported by specific funding mechanisms to protect and enhance the natural environment and decarbonise the economy. The UK has played a significant part in shaping these laws and policies and they have been central to the delivery of environmental benefits in the UK. These laws are based on international commitments such as the Bonn and Berne Conventions and the Paris Climate Change Agreement and these obligations still remain.

The UK's exit from the EU must not lead to any decline in our collective commitment to achieving positive environmental outcomes, and addressing our aspirations for the climate and the declines in biodiversity in particular.

Landowners and farmers are the people who deliver environmental management across the British countryside. This involves day-in-day-out work by thousands of people. The predominant reason that landowners and farmers undertake this work is because of their commitment to the land they live and work upon. However there is no doubt that the regulations, and crucially the direct funding that is available, are a critical factor in making this work affordable and ensuring that the efforts are co-ordinated and above all that they are directed at the right outcomes.

One of the biggest determinants of whether we will be successful in managing our natural environment will be the continued presence of a robust, resilient, farming sector that means we have people living and working in our countryside and available to do the work that needs to be done to deliver environmental

outcomes. So as the UK prepares for Brexit it is vital that policy provides the tools and funding required to support it.

(1) Identify the United Kingdom's national priorities for a post-Brexit relationship with Europe in relation to environment and climate change.

Domestic Priorities

The UK must produce a fully funded Food, Farming and Environmental Policy which sets out the necessary ambitions for the climate and environment. This needs to be underpinned by proposals to create a more resilient farming and land management sector better able to deliver on environmental targets as well as food production.

The 25 Year Food and Farming Strategies and the 25 Year Environment Plan must set out the necessary environmental and climate targets to provide the long term certainty required by public authorities and private investors if they are to engage and deliver.

All of these policies must have the funding necessary to meet their objectives.

EU Relationship Priorities

The UK must continue to work with the EU on the cross border aspects of environmental and climate policy. Many issues are better addressed by co-operative action rather than unilaterally. This is necessary not just for the policy goals themselves, but to ensure that UK business is not put at a disadvantage to their mainland European competitors. So, for example, the UK should remain within the Emissions Trading Scheme.

(2) Explore the opportunities and challenges the Government will face, highlighting key areas where co-operation should continue.

Future relationship with the EU

The challenges and opportunities the Government will face depends on whether the UK remains a member of the EEA post Brexit. If it did, it would be obliged to continue to comply with most EU environmental legislation.

The list includes water and air quality requirements, waste management and REACH. The UK would also be subject to most climate change legislation and would be able to remain in the Emissions Trading System. The state aid rules would continue to apply to incentives for renewable energy generation.

However, outside the EU the UK would lose its ability to influence the legislative agenda which may result in increased environmental obligations. For example, the UK was one of the countries most opposed to the Commission's proposal for a Soil Directive. Without the UK, opposition would be reduced and chances of a Soil Directive becoming law increase.

Not all environmental regulation would continue to apply however. Compliance with the Birds and Habitats Directives is not required under EEA membership and neither is compliance with agricultural policy in the form of the CAP.

There are a number of possible relationships outside the EEA, including a bilateral agreement, a customs union or WTO rules; all of these would give the

UK considerably greater freedom of action. But it would not be unrestricted altogether.

- The UK would continue to be subject to its treaty obligations to which it is a signatory outside the EU, for example the Berne Convention, the Ramsar Convention and the Kyoto Protocol.
- Even outside the EEA the UK would want to trade with countries with significant environmental and climate ambitions. In many cases those countries will be reluctant to accept goods produced to lower standards and therefore at lower cost than can be produced domestically.
- In most cases, the relevant regulatory requirements were introduced in response to an identified problem, if that problem remains then in most instances so will the need for the regulatory requirement.

This, of course, assumes that a post Brexit UK government would want to significantly reduce its ambitions. In practice, in many areas notably climate, water quality and permitting it has been amongst the EU member states most enthusiastic for higher standards.

Opportunities

Environment

The main opportunity presented by Brexit is that we can build on existing policy and do better. The CLA has set out its vision for a UK Food, Farming and Environment Policy that deliver better outcomes for our environment than have been achieved to date.

The UK could retain its commitment to its international obligations in terms of the objectives it sets itself, but look at better, more efficient mechanisms for achieving them.

There are opportunities in design. Agri-environment schemes have had as one of their main determinants avoiding the risk of 'disallowance' fines from the Commission. This has led to a system which is overtly bureaucratic and inflexible and where process takes precedent over environmental outcomes. In particular the current approach to control and verification, demonstrating that what needs to happen has happened, is unnecessarily detailed and not designed to take account of how the UK design agri-environment schemes. This has created major administrative burdens for agreement holders and administrators with little benefit to the environment. Under a future scheme there is potential for a proportionate approach to control and verification.

As part of this and where it is appropriate we should consider the use of results based payments. These are schemes where payments are linked to the delivery of pre-agreed environmental outcomes. This approach is only likely to be relevant to some types of activities – for example where bio-diversity can be defined and monitored – but the flexibility and ownership these schemes offer should not be overlooked.

Climate

There is no reason to suppose UK's cross party ambition to decarbonise its economy will reduce post Brexit.

The UK has long been amongst the most ambitious member states on climate change issues, for example, it was a particularly important player in promoting the adoption of the Emissions Trading Scheme and subsequently, when the economic recession led to a surplus of allowances, the UK was in the lead in finding solutions. On the domestic front, the UK enacted the ambitious Climate Change Act.

The big opportunity outside the EU and EEA would be to adopt a more ambitious approach to incentivising renewable energy generation than are permitted under the EU state aid rules, though the WTO rules on subsidising businesses would continue to apply.

In addition the UK could take steps to introduce energy efficiency policies more suited to national circumstances than the current EPC regime.

Challenges

Environment

The main challenge that is presented from Brexit is that the UK Government will fail to provide the long term certainty that is required. The EU may take a long time to produce policy and legislation, but one they have been agreed they do not change frequently, so providing public authorities and private investors with the certainty over the long term that allows them to make decisions with a significant degree of confidence.

A further concern is that the government may choose to end or significantly reduce investment in environmental land management. Over recent years more and more farm businesses have been able to include participation in environmental schemes as part of their business plan, effectively as a form of business diversification. The longer there is uncertainty about what future policy will be the more businesses will develop business plans that do not include participation in environmental schemes.

This uncertainty is already present. The Treasury confirmed on 13th August that the UK Government would continue to fund all existing agri-environment schemes even if the contracts extend beyond Brexit. They also stated that basic payment schemes would be funded to the end of 2020 irrespective of the Brexit timetable. However they have not yet fully clarified whether the existing environmental schemes will be open to applications in 2017, 2018 or any subsequent years. This uncertainty is creating difficulties for farmers and landowners right now not knowing whether they should be planning to make applications for environmental stewardship schemes next year or not.

It is vitally important, not only that the Government, continues this funding but also that it makes an early commitment that there will be a continued permanent budget beyond 2020 to fund environmental land management after Brexit.

If the UK were to set more ambitious environmental standards there would be the risk that those sectors that compete with EU member states, such as agriculture, could end up subject to far stricter requirements, and therefore having to pay additional costs, compared with their competitors.

Post Brexit trading relationships could also have significant environmental impacts. If the UK were to adopt a liberal stance and so be competing with Australia, New Zealand and the Americas, UK farming would face considerable challenges. It is hard to see how it could compete without major changes to current farming practices, including reduced environmental and welfare standards. There would also be changes to the landscape as farmers created larger holdings with larger fields and reduce livestock numbers.

Climate

On climate change, the risk is that the UK will be left out of significant decisions. Norway, for example is a member of the Emissions Trading Scheme but being outside the EU, it has no influence on the carbon price applied or the overall direction of policy.

Similarly, post Brexit, the UK will inevitably have less ability to influence the EU's position in international negotiations. This is likely to result in a reduction of the EU's ambitions, which, notwithstanding its ambitions for the climate, the UK is unlikely to be able to compensate for unilaterally, even if it were willing to incur the expense of seriously engaging in the negotiations.

If the UK were to set more ambitious emissions targets for itself, there would be the risk that those sectors that compete with EU member states, such as agriculture, could end up subject to far stricter requirements, and therefore having to pay additional costs, compared with their competitors which in an EU no longer subject to UK pressure for more ambitious targets have fewer constraints upon their activities.

The UK's departure from the EU will inevitably lead to a period of uncertainty, in many sectors of the economy, but this could be particularly acute in the energy sector. The EU has traditionally underpinned UK commitments to move to a low carbon economy and that has helped provide degree of confidence to encourage investment in low carbon technologies. Outside the EU there will inevitably be a greater element of risk.

15 November 2016

Leah Davis, Abi Bunker, and Trevor Hutchings — Oral Evidence (QQ 12 – 22)

Leah Davis, Abi Bunker, and Trevor Hutchings — Oral Evidence (QQ 12 – 22)

[Transcript can be found under Abi Bunker, Leah Davis, and Trevor Hutchings — Oral Evidence \(QQ 12 – 22\)](#)

**Department for Environment, Food and Rural Affairs —
Supplementary Written Evidence (ECB0016)**

We stand by our manifesto commitment to be the first generation to leave the natural environment in a better state than we found it and we will uphold our obligations under international environmental treaties. Much EU environmental legislation is in line with UK environmental aims.

The Government is aware of the desire for certainty around what exiting the EU means for our environmental policy and legislative framework. That is why the Prime Minister announced last year our plans for a Repeal Bill that will convert current EU law into domestic British law. Our intention is to ensure a smooth and orderly transition via the Repeal Bill. There are decades of EU law to consider, and we must ensure our statute book works on exit and that we provide the maximum possible stability, without pre-judging future decisions Parliament may make.

All Government departments are currently reviewing the EU laws that apply in their policy areas and how our withdrawal from the EU will affect the operation of those laws. Defra has a significant challenge in handling the return of legislative competence from the EU. Over 1100 core pieces of directly applicable EU legislation and national implementing legislation have been identified as Defra-owned. Some areas (such as chemicals or ozone-depleting substances) might present more challenges than others because they are currently delivered by EU agencies, systems or resources. But where laws need to be fixed, that's what the Government will do. We will provide more detail on the Repeal Bill in due course. 24 January 2017

24 January 2017

Finella Elliott, Steve Elliott, and Dan Lewis — Oral Evidence (QQ 46 – 56)

Wednesday 9 November 2016

10.30 am

[Watch the meeting](#)

Members present: Lord Teverson (The Chairman); Viscount Hanworth; Lord Krebs; Duke of Montrose; Lord Rooker; Lord Selkirk of Douglas, Lord Trees; Viscount Ullswater and Baroness Wilcox.

Examination of witnesses

Steve Elliott, CEO, Chemical Industries Association; Finella Elliott, Climate and Environment Policy Adviser EEF; Dan Lewis, Infrastructure Policy Adviser, Institute of Directors.

Q46 **The Chairman:** Can I welcome our witnesses to the inquiry we are undertaking on Brexit and the environment? This is the third of our sessions, and we are looking this time particularly at the industrial and business aspects of environmental policy and Brexit. Can I remind our witnesses that this is clearly and obviously an open and public session? It is being webcast and transcript is being taken. You will have a copy of that transcript and the opportunity to change it if you think that anything has been recorded incorrectly. I ask Members, if they have any interests, to remember to declare them. It is probably not completely relevant today, but in case we mention marine I declare that I am a board member of the Marine Management Organisation. Could I ask that each of the witnesses introduce themselves for our listeners and viewers? Mr Lewis, perhaps I could start with you, and then we will work across.

Dan Lewis: My name is Dan Lewis. I am from the Institute of Directors. My brief covers infrastructure and energy policy.

Finella Elliott: My name is Finella Elliott. I am from EEF, the manufacturers' organisation, and I would like to take this opportunity to thank you for inviting me to your Committee today. My brief is the climate and environment area.

Steve Elliott: Good morning everybody. My name is Steve Elliott—no relation. I work with the other CIA, the Chemical Industries Association.

Q47 **The Chairman:** Thank you all. Could I start with a more general question? From a business perspective, what should the UK's future relationship with the EU look like with regard to environment and climate change issues? It would probably be useful if each of you started off with that. Perhaps we can start from the other end. Steve Elliott, would you like to start us off on that one?

Steve Elliott: Thank you very much, Lord Teverson. Maybe just a word about why this whole subject matter is so important to us for members of the Committee. The CIA represents the chemical and pharmaceutical manufacturing industry of the UK. If you put those two communities together, that is the UK's largest export earner, posting something like a £4 billion to £5 billion surplus every year. We are a key foundation industry. Anything from the plastic that forms the cups in front of you, the active ingredient in a household detergent and the material and the polymer that makes the new £5 note is all chemistry and all comes from UK chemical companies.

The particular reason why this is important for us is that we are very trade intensive as a sector, as the earlier statistics reveal. Some 60% of all chemical exports go to the continent and 75% of chemical imports come from the continent. When we surveyed our members we found that we were the one constituency that registered a zero appetite for leaving, with those credentials in mind. As a key customer industry, just to give an example, there is always something like £2,000 worth of chemistry in an automobile—another sector impacted by this. That is a bit of background.

My response to the first question is a plea that we stay engaged for the next two years. We have not left. With regard to some of the policy issues that we face as an industry, staying the course over the next two years will be incredibly important for us, whether those policy issues relate to the industrial emissions directive, endocrine disrupters or REACH. All of these issues we see the UK, as a Government and as a regulatory community, approaching in a very risk-based, pragmatic and proportionate way.

If we look at where the endocrine disrupter issue is at the moment—I am exaggerating a little, but not much—it is 27 countries versus one in the way this is being approached, with the one being the UK. If that one voice is lost, we could end up with every substance categorised as either a known endocrine disrupter or a suspected endocrine disrupter. It is as crude as that. That is one example. I think it is about staying the course over the next couple of years on a number of policy fronts, because we have a very strong reputation for risk-based proportionate and pragmatic regulation.

Any differences in compliance requirements could be a financial burden on exporters and importers. In one area, there is an opportunity to balance the Brexit costs by reducing some of the climate change policy-related costs alongside environment. We may expand on that in subsequent questions. I hope that is helpful.

The Chairman: Finella Elliott, would you like to follow on?

Finella Elliott: We would completely concur with everything that Steve has said. EEF members want to maintain unfettered access to the single market. I think that 45% of UK exports go to the EU, and although they are perhaps not as great as the chemical industries, around 52% of manufacturing exports go to the EU, so it is a real key ask of our members who we have spoken to so far.

Another thing that our members are talking to us about is trying to prevent as much disruption to trade as possible during the negotiations. In the discussions we have had, we cannot see a scenario where in order to maintain access to the single market we will not have to continue complying in some way with climate and environment policy. Dan, I do not know whether you have anything in addition.

Dan Lewis: We have 34,000 members. They are all individual; 70% of them work for SMEs. We surveyed them before the Brexit vote; the split was roughly that 60% wanted to stay in and 30% wanted to leave. We did not, as an organisation, take a position on that vote. We saw no need to split our own membership. Yes, of course, access is beneficial. Common rules or even fairly shared rules are an enabler to business. Having said that, we will see how this is going to proceed and whether, if there is a deal, it is a good deal, or whether, if there is no deal, it is a bad deal. Then there are all the other variables: what we chose to do next as a country and what other countries choose to do with us.

The Chairman: That has started us off generally. Lord Krebs, do you want to take us on to some of these issues?

Q48 **Q46 Lord Krebs:** I declare an interest as a member of the climate change committee and the chair of the adaptation sub-committee of the climate change committee.

My question builds on the first one, which is to ask each of you to tell us a bit about the potential benefits to your industry/business sectors of aligning post-Brexit UK environmental policies with the EU. Conversely, what would the benefits be of having different environmental standards to the EU? We are interested in whether you think that after Brexit we should continue to match whatever the EU does, or go our own way. Also, perhaps as a supplementary, do you think that the view on that would vary between big and small companies? I do not know whether, Steve Elliott, you would like to kick off on that one.

Steve Elliott: That is a big question. If I may, Lord Krebs, I will split it into looking at some of the product-related issues and plant and process-related issues that we face and then move on to climate change.

The first thing to say—and this is from a capital-intensive business perspective, where investment cycles obviously tend to be that much longer than for fast-moving consumer goods—it is about stability in the short term and looking at the business development benefits of aligning the UK with environmental policy. That is even more so where we are EU-dependent, given those import and export statistics. I should also have mentioned at the outset that three-quarters of our membership is headquartered somewhere outside the UK, and a lot of those headquarters are continental European, so there are a number of good reasons for aligning ourselves going forward.

In the product area, one thing to consider is whether, when the UK goes it alone, it will have sufficient resource and skill—this is probably applicable to many areas—to govern, for example, certain regulations that we face. The biggest, because it is the largest piece of environmental legislation, is

REACH. That is currently managed by an EU body that is headquartered out of Finland, Helsinki, and supported by national experts from 28 member states. There will be a big question about alignment, but how do we manage that resource-wise and skill-wise from the UK?

The Chairman: What is the name of that body?

Steve Elliott: It is called the ECHA, the European Chemicals Agency, and it works out of Helsinki.

Lord Krebs: It is an official EU institution?

Steve Elliott: It is.

The Chairman: Do non-EU member states live in that office?

Steve Elliott: No. It is a European regulation. There will be lots of technical experts sitting there. There may be some nationalities providing expertise that is not from the EU, but essentially this is a regulation that is determined by and driven for regulation within all those trading in and out of the European Union.

The Chairman: That is fine, thank you.

Steve Elliott: On the processes, we see no real benefit in adopting something that is different from environment permitting. The concept of what we know as Best Available Techniques reference documents—BREFs—is widely supported throughout the continent of Europe, including the UK. To try to look at, adapt and adopt alternatives would be very complex and incredibly resource-intensive. Our question about BREFs is how we influence at the start and how we implement at the end at a national level. That is another area where we would see continued alignment with the European Union. Health and safety regimes are perhaps slightly beyond the remit of the Committee, but I would say that we do not see very much need for change to health and safety regimes from what we currently see.

In the area of climate change, on the one hand, and the benefit of sticking with the European Union emissions trading regime—phase 4 comes towards us in 2020—it is increasingly recognised internationally by the investment community tracking the performance of the emissions reduction and environmental responsibility of companies that, and we would say this, if it was delivered in a cost-effective way we would see sense in it continuing. As it currently stands, we do not believe that the design of the phase that is coming is business-sensitive enough, but if it took on board those concerns we could see continuity there. There are others, but I will leave it there.

Dan Lewis: One specific example is the measuring instruments directive, which came into force at the end of last month and lowered the accuracy requirement for meters to measure gas and electricity from +/-2%, which was the British standard, to +/-3%. It is not in the consumer interest to do that, especially if we have smart meters coming in where you will have in effect spike pricing at peak times with time-of-day pricing. You compound

that. That is one area where there would be a very useful divergence or shift of emphasis towards more accuracy if we were to choose to do that.

Air pollution is another area that we could look at again. I do not think that the shift towards diesel, which has been driven by sections of the European motor car industry, has been an environmental success. Local air quality has become a big issue, particularly in London and our metropolitan areas, so that is another area that we could look at again, certainly.

Finella Elliott: I would only add a couple of extra points, the first being that there are obviously, as Steve has said, the regulatory stability benefits of grandfathering the existing environmental legislation in the short term. It is something that our members are calling for.

On the question of large and small companies and the differentiation between SMEs, size is not perhaps as important for manufacturers. We are hearing from our members that their trade profile is far more important. Some 84% of our members trade either directly or indirectly with the EU, so at least in the short term it seems far more beneficial to them to be closely aligned with the EU.

Lord Krebs: I have a brief follow-up question for Dan Lewis about air quality. I understand what you are saying—that it turns out that diesels may have been a bad thing in terms of PM2.5—but as I understand it, and from the other evidence that we have taken in this inquiry, the pressure to improve air quality standards in our towns and cities is, to a very large degree, driven by the threat of infraction proceedings and fines from the Commission. In that sense, therefore, when we leave the EU are we not going to face the difficulty that we will have no one to enforce higher standards?

Dan Lewis: I think there is a strong case for having stronger regulators right across the board if, come day one of Brexit, the regulators at the European level, or at least the actions, are not there to oversee and to push. You could look at other areas too, such as cleaning up beaches and a number of other areas. It seems to me that diesel is a particularly tangible issue insofar as we have had such a huge shift in the national vehicle fleet from something like 10% of vehicles using diesel to now just over 50%. This is odd, because most of our diesel is also imported, quite a lot of it from Russia, too. I think there would be a lot of public good will towards a shift towards cleaner air, and I think that vehicles are going to get cleaner anyway. Although vehicles using diesel produce fewer CO2 emissions per mile, the data from the RAC shows that people drive more miles with diesel, so it has not been a success, even in that respect.

The Chairman: I should also declare an interest in that I am a director of a company called KCS, which uses chemicals and exports to the EU.

Q49 **Lord Rooker:** Good morning. In a way, my question is a follow-up question, because it is almost an extension of the previous question. I should add as an aside that I drive a diesel car, and I bought my first diesel about six or seven years ago on government advice that diesel was cleaner, or whatever. There was also a financial advantage at the pump, if I

remember rightly. It may be older diesels that cause the problem. I want to almost extend that. Would it be a good idea if the UK made the context of environmental legislation more UK-specific? I will give you an example: the Common Agricultural Policy does nothing about, say, methane emissions. We give farmers direct payments for the land they have, but we do nothing about tying that to methane emissions and other emissions from animals. We could, if we were on our own, do something about that as an air quality issue. Do you have any examples of where we could be more UK-specific, outside where we are now, without causing a problem with ongoing trade?

Steve Elliott: I can think of a couple of examples of where some of our members are reflecting the sorts of views your question suggests, Lord Rooker. For example, our businesses have complied with the demands of REACH from its infancy, and there is another deadline to come in 2018. Even beyond that, once the UK has left the European Union, for all our trade within and without the European Union we will continue to comply with REACH. If you are a UK-based chemical business whose trade is perhaps much more with other parts of the world, such as the United States and Switzerland, there is a feeling among that community and our membership that there is some scope for REACH-lite, although those are not quite the right words. By that I mean something that they would view as a regime that is a bit more risk-based, pragmatic and proportionate than the demands that REACH puts upon their trade with the European Union. Having said that, you would have to balance the questions earlier on resource and competence to run in effect two inspection or regulatory regimes in the UK to allow that to happen, as well as the ongoing relationship with the European Union. That is one area.

The other area may be climate change. The removal of state-aid requirements could allow us to simplify the UK policy mix in the climate change area. Currently, our members who are energy-intensive have partial relief from renewables, partial relief from the European Union Emissions Trading Scheme, partial relief from the carbon price floor mechanism and partial relief from the climate change levy. That is very nice but incredibly bureaucratic. Does the sum of the parts equal the whole that we might achieve if we followed the line of your questioning?

The Chairman: In order to understand this, do your member companies that currently have manufacturing plants or are exporting from the UK to non-EU members tend to have production lines that are of a lesser standard or a different standard to REACH in order to go into those markets? Do you tend pragmatically to be REACH-compliant in a way that on the whole, because of equivalence, is accepted elsewhere? Could you take us through that simply?

Steve Elliott: It is not in the interests of, say, a UK-domiciled or a German-domiciled company to invest in China or Brazil with different standards from those that they would typically design and build to. From a reputation, investment and performance point of view there is no value in doing that. That is not to say that the environment in which they are working would be at the same level, but that is the first thing to say. Having said what I said about the United States having a slightly different testing regime from

REACH, on the other side of that there are many countries and regions of the world that are now following the example which the European Union has set with REACH. South Korea is an example, and others are following.

This is not a drive to the lowest common denominator; this is not businesses looking for a much more environmentally substandard opportunity, but in many cases it is about the extent to which we really are adopting a risk-based, proportionate, pragmatic approach. Does that help?

Q50 Viscount Hanworth: Can you briefly tell us how the REACH standards are monitored and enforced?

Steve Elliott: REACH—registration, evaluation, authorisation and restriction of chemicals—is the acronym. The enforcement of REACH is done at a national level, in our case through the Health and Safety Executive, to ensure that companies are responding to registering their substances. You have to register to be able to place on the market. Then there is an analysis that may take you all the way through that acronym. You might register a substance that might need evaluation, might need authorisation because of its particular properties or exposure, and might even need a restriction for a particular use. That is the route that it takes, and there have been three timelines, if you like, for compliance, with the final one coming in 2018. They are linked to the tonnage bands. Anybody producing or importing 1,000 tonnes will need to comply with REACH by 2018, and the bigger tonnage band started earlier in the process.

Viscount Hanworth: Does the EU have a strong oversight of this process?

Steve Elliott: Yes, and the oversight for consistency of application and enforcement sits with the central agency in Finland.

Viscount Hanworth: Are the enforcers and monitors numerous on the ground?

Steve Elliott: That is a very good question. I guess that with many aspects of regulation there will be easy entry points in parts of the continent for imports that may not comply. That is anecdotal. I hear that from certain countries.

Lord Rooker: They do audit visits as well?

Steve Elliott: They do audit visits, yes. I would say that the UK Health and Safety Executive, in our case, operates a very well-informed, targeted risk-based approach to enforcement.

The Chairman: Following on from Viscount Hanworth and to clarify this, when we are no longer in the European Union, or for a country that is currently not in the European Union—we have the Health and Safety Executive, which acts as that enforcer, has been approved and is a national authority—how does it work then?

Steve Elliott: If we were to leave—and this remains to be worked out—all our import and export trade with the continent would continue to have to respond to the requirements of REACH. The question then is whether we would need to set up our own agency, if you like.

The Chairman: Before this agreement comes in, how does Canada, say, do it now?

Finella Elliott: People act in the UK only as representatives, so they will register substances on behalf of the country.

Steve Elliott: For importers, yes. If your question is about how you get your product into the marketplace from somewhere else, the answer is yes, through representatives.

Finella Elliott: Who will register the substance for you.

The Chairman: Thank you.

Q51 **Viscount Ullswater:** We keep talking about not disrupting trade, but we have not mentioned tariffs. If we have what is called a hard Brexit, would your association in particular suddenly be faced with a lot of tariffs by exporting to the continent?

The Chairman: Forgive me, Viscount Ullswater; we are not doing that because that is the economic side.

Viscount Ullswater: We need an informed debate.

Steve Elliott: Very briefly, on tariffs, if we were to move to a WTO status, for example, that would typically, for the chemical sector, imply tariffs of either 5.5% or 6.5%. It is sometimes twice that—on the imported raw material and then the re-export out. Our industry's biggest customer is itself, so there is the complexity of supply chains. That is if we went to WTO.

Dan Lewis: This is a very interesting area, and I have been doing some work on tariffs. We currently have 12,651 tariffs that we have to comply with as members of the European single market, which we levy on imports from outside of the single market. Having said that, it is interesting that countries such as Norway, which have full access but are not members of the EU, are free to levy their own tariffs or not, so they only have about 1,000. Of course, if we had a completely hard Brexit then we would still be free to impose tariffs or not. It is a very live area and we will certainly need to look at all these tariffs and see how much they are in the strategic interests of this country or not. They raise revenue of roughly £3 billion at the moment, which is part of the membership fee.

Q52 **Lord Selkirk of Douglas:** May I ask a question about the costs of administration and bureaucracy? Are there administrative burdens relating to EU environmental legislation that could be significantly reduced post-Brexit? Has there been a history of what might be described as "gold-plating" environmental legislation? If so, are there opportunities to help small and medium enterprises by reducing the costs and the extent?

Dan Lewis: If I could give you one specific example of gold-plating, the smart meters that came in through a new directive were only meant to roll out to 80% of the country. We effectively gold-plated and said, "We want to take them out to 100%". On top of that, we have come up with an extremely complex and expensive way of doing this, which is equivalent to

just over £400 per household under the programme for smart gas and smart meters and all the communications technology to send all this, when we know that there are SMEs that can effectively upgrade the existing “dumb” meter stock to smart capability at a cost of something like £50 or £60. I do think it would be a mistake to think that all EU regulation is bad, all UK regulation is good, and vice versa; there are good and bad sides to all of this. I would like to offer that as one specific example.

Lord Krebs: Your explanation about the £400 versus the £60 was nothing to do with the EU, was it? That decision was made in—

Dan Lewis: Absolutely.

The Chairman: It was an example of gold-plating. That was the point.

Dan Lewis: Yes.

Finella Elliott: From speaking to our members, there is a general feeling that EU regulation is not perfect and there is definitely scope to reduce admin burdens. We have campaigned for a long time for the streamlining of environmental regulation. In one of our recent surveys, something like 70% of our members wanted to see this stock of environmental legislation rationalised and reduced. We have no specific examples at the moment. We are discussing this with our members and we are happy to provide further details once some of that work is done.

Steve Elliott: I would perhaps repeat an earlier answer to Lord Rooker when I gave an example in the climate change area, where I think we could seek and gain some relief. The removal of the EU state-aid requirements that I mentioned could allow us to have a UK policy mix that is significantly simplified. At the moment, chemical businesses face limited eligibility for partial relief from policy-related costs via the instruments I mentioned earlier. There is an energy-intensive industries’ compensation scheme for renewables, there is the energy-intensive industries’ compensation scheme for European Union Emissions Trading Scheme and the carbon price floor, and so on, as I mentioned earlier. That strikes us and our members as an opportunity to simplify that policy mix.

A very practical example in the climate change area is the energy efficiency directive and its audit requirements. That is implemented in the UK through the energy savings opportunity scheme—ESOS. That requires businesses already covered by EU ETS to conduct energy-efficiency audits, creating an overlap that we think is unnecessary because of what we need to do under the European Union Emissions Trading Scheme. Practically, you end up with diverting manpower from energy efficiency project work because the audit requires past evaluations to be repeated using external auditors, whilst not requiring the improvements identified to be implemented. There are a couple of examples in that area, but we are looking to do more work.

Q53 **Baroness Wilcox:** The question is about policy stability and long-term goals. Do you expect the UK’s withdrawal from the EU to affect policy stability? The second question is: is any uncertainty in environmental policy delaying investment or research decisions? Any one of the three of you, or all three, please, would be great.

Steve Elliott: In the short term, the announcement of the great repeal Bill and the transfer of all existing EU law into UK law provides some stability to the industry. Looking at the longer term, there is currently very little indication on future environmental policy goals for the UK post-Brexit, so that inevitably brings some uncertainty to those long-term investment decisions for business. On the impact of that now, very rarely will a business pin itself to one particular piece of legislation and say, "It is because of that we have not done this". What I can say is that we have not seen a signal that all investment spend committed before the referendum vote is being stopped. You have seen some quite high-profile confirmation of that through investments by the likes of GlaxoSmithKline and AstraZeneca, and the work that is going on around Grangemouth on Teesside to import ethane to take advantage of US shale gas economics. All those things are carrying on, but there is no indication that new investment is proceeding whilst we have this uncertainty.

Baroness Wilcox: There is the rub.

Steve Elliott: Yes.

Dan Lewis: I do not have any special insight on the research side of things. I cannot help on that.

Finella Elliott: Talking again about investment, we do not have any specific examples in relation to environmental or climate change standards, but we regularly survey our members on their wider investment intentions. A lot of our findings concur with what Steve is saying, in that although we have not seen a big difference between March and April in our investment survey we are seeing that these elevated levels of uncertainty are precluding businesses from accurately forecasting business demand into the future. That will have the implication of slowing down investment. We have also seen a spike in political uncertainty. That has quadrupled from 5% to 20%-odd in our March and August surveys, which is quite significant. I am more than happy to share our latest investment survey with you, if that would be helpful.

Baroness Wilcox: So, for you, the quicker the better?

Finella Elliott: Yes.

The Chairman: To follow that up a little, obviously this whole area gives a certain amount of uncertainty, good or bad—we are neutral on that, obviously. How important is environmental regulatory uncertainty in comparison, say, with other aspects of uncertainty that come from Brexit? Is the environmental side particularly important in terms of the UK, as a Government, setting that out pretty quickly, or does it need to be only number five or six on the list? Do you see what I am trying to get at? I am trying to understand whether this environmental policy area is particularly important for business decisions, whether it is investment, recruiting, growth or exports. Do you have a view on that?

Steve Elliott: Yes. I am representing a capital-intensive industry that is demanding in its energy requirements, for example, both for energy as a source and for feedstock. I could not say it is number one, two or three,

Lord Teverson, but I would say it is very important. There are some areas where the ball is already rolling, and we have talked about some of those—whether it is REACH and compliance with REACH or whether it is the industrial emissions directive and how that pans out—where, in most respects, we would wish to see continuity of what we currently face; better the devil you know.

If I look at the energy piece then a certain proportion of our membership is very energy-intensive, and we are talking about 50%, 60%, or 70% of its total cost-base coming from energy. That is why, I think, we would be looking for scope in that area as a big opportunity for the UK beyond departing from the European Union.

Dan Lewis: We survey our members very regularly, and we did a comprehensive survey on energy quite recently. Whilst they liked decarbonisation and renewables they also liked fracking and nuclear. They were very disappointed with policy in terms of its outcomes in energy security and cost. To take a step back, I have a very broad brief with energy and infrastructure, and consistently they tell us the number one infrastructure issue for them is broadband. If we are to move to a much smarter grid that whole telecommunications side could be addressed much more.

Lord Rooker: I have a question directed to Steve about the industry. From my travels round the country—which I do an average amount of, like anybody else—I take it that your industry is highly concentrated in certain geographical areas of the country. By “the country”—this is what I want to ask about—we do not mean that it is all England, do we?

Steve Elliott: No.

Lord Rooker: What is the effect or potential effect in Wales and Scotland, or indeed in Northern Ireland, in that case?

Steve Elliott: You are right on our geographical spread. A lot of our industry and its related jobs sit north of the M62, with clusters around Teesside, Runcorn, Liverpool, Grangemouth, as you say, Lord Rooker, in Scotland, and in Wales as well, though to a lesser extent. We already face different environmental regulators, whether it is SEPA in Scotland or Natural Resources Wales. By and large, that co-ordination work currently tends to work very well. I would say our relationship with our regulators is good, and increasingly good. Many of our businesses have to respond to something called COMAH, which is for the high-hazard businesses. COMAH is administered by the joint competency of the Health and Safety Executive and the Environment Agency, or the Health and Safety Executive and SEPA in Scotland, and the Health and Safety Executive and Natural Resources Wales. That co-ordination increasingly works well for us. If Scotland chose to take the independence route that would beg another series of questions for us, but at the moment it works well and there is an ability for each regulator to learn from one another and for the businesses to share the experience across borders as well.

Q54 **Duke of Montrose:** In some ways we have touched on a lot of this already, but would UK businesses and industry continue to comply with EU environmental standards, for example product standards or environmental quality regulations, post-Brexit, in the absence of rules requiring them to do so? I would also like to add a small rider to this question: should the UK maintain a policy of pursuing a more ambitious target on climate change than other industrialised countries? What is the mood of industry in that regard? There is a question for the Chemical Industries Association: when speaking to the EU External Affairs Sub-Committee you suggested that businesses trading outside the EU would seek a more pragmatic, risk-based regime than they feel REACH is. Could you expand on that? I should declare a slight interest in that I was involved in environmental management in farming in Scotland.

Steve Elliott: Thank you, Duke of Montrose. I have referenced the REACH example in response to an earlier question. We will have to continue to comply with the demands of REACH. We want to influence it in the run-up to our departure from the European Union because there is still work to be done. There is a review of REACH and there is the 2018 registration, which all happens before whenever we depart in 2019. Going beyond that, for the reasons we discussed earlier, for those imports coming from the European Union into the UK and exports going to the European Union, we will need to comply with the demands of REACH

The point I was making in an earlier evidence session was this point around where you, as a business, have less of your business focused on the European Union and the opportunity to trade with the United States. Our proportion of EU trade is gradually diminishing as other parts of the world become the opportunity. The United States has relatively recently introduced a new regime which businesses would say—and maybe I would say this, wouldn't I—is more business-friendly and business-sensitive. First of all, it prioritises the chemicals of concern in a way that is a bit more refined than REACH; it enables you to place the product on the marketplace, and then there is the subsequent analysis, approval and review, so you are more able to invest with confidence in providing what we would say are building blocks to North American customers. That was the point I was making there about not having a uniformity of view in our membership because it depends, as Finella said earlier, on where you are geographically exposed, and if you are small. Some of the bigger companies, for efficiency's sake, would probably say, "We want to comply with REACH because we have operations and exposure all around the world and this is an increasingly influential regime around the world"; but if you are a small company sitting in the UK with more trade somewhere else, particularly in the States, that is an example where we might have a different view.

Lord Krebs: Very briefly, on some of the things you were saying there about the US system being more business friendly, in your industry sector do you see any conflict or trade-off between what is good for you as a business and what is good for the environment and for human health?

Steve Elliott: Absolutely, and I understand that fully. I went to great length in an earlier question to say that it is certainly not in our interests

to seek a lowest common denominator solution, whether it is where we build our plant or where we sell our products. All I am reflecting here is that—and it is my personal view—we see and feel an increasing misuse of the precautionary principle in a European environment, which we see less evidence of in a North American environment.

The Chairman: Viscount Hanworth, did you want to come in on that?

Viscount Hanworth: I will start with what I thought you were suggesting, which is that America conducts ex-post assessments of chemical hazards whereas the EU conducts them ex ante. Is that the case?

Steve Elliott: The regime the United States has introduced allows you to place on the market a substance³⁵ which may well be a substance of concern but—and it is very early days with this, so we need to understand the detail of the American legislation a bit more—there is already a prioritised list of substances of concern and they are working through the extent to which there is risk in exposure around those substances.

Viscount Hanworth: That rather horrifies me, I must say, if I have understood it correctly.

The Chairman: Finella Elliot, did you want to come in on the general question?

Finella Elliott: Just to agree with what Steve was saying. Our members absolutely will continue to comply, and there are many reasons for them to continue to comply—most important is retaining that access to the single market. Many of our members tell us that there are advantages of having one set of regulations and rules with the EU, and our manufacturers tell us they do not want to have to create multiple products for multiple markets; they want to create one product that they can export to a number of markets, at the same time as maintaining the current level of commitment to environmental standards.

Dan Lewis: To answer one part of the Duke of Montrose's question—should we unilaterally have much tougher decarbonisation targets—I think we are already doing a lot. The levy control framework is set to cost, I think, £9 billion per year by 2020. As I say, we are already doing a lot, but to go beyond that and unilaterally impose additional costs on business and so render it, unless you are in that specific industry, less competitive, would not be a good move. I cannot see that going down. We know from surveying our members that they are very concerned about energy costs. There is plenty of scope for finding more cost-effective ways to decarbonise and I think that is something we could certainly look at.

Steve Elliott: Perhaps I could add a comment on that because I did not answer that part of the question. There is a difference between relative and absolute here. If I look at our industry, ever since 1990 our energy-efficiency improvement has been about 35%. We are getting to the lower-

³⁵ Note by the witness: "without the significant compliance costs that REACH brings. Parallel to REACH the regime in the United States prioritises substances to determine if they are substances of concern."

hanging fruit element now. We do not see enough of the incentive for growth in the climate change area; we do not see enough that enables companies and businesses to respond to the energy-efficiency improvement requirements and also, when they are looking to grow, ensures they are not handicapped in that growth because of an absolute ceiling on carbon emissions.

The Chairman: What is the absolute ceiling on carbon emissions? Forgive me; you mean the UK economy as a whole?

Steve Elliott: The climate change agreements that we have under the climate change levy is a good example that enables us to respond.

The Chairman: I understand; forgive me.

Q55 **Lord Trees:** I can understand that if a factory here in the UK, post-Brexit, is wanting to export substances or products it needs to meet regulations in the EU around those particular products. Are there situations where that trade could also be negatively influenced by EU demand for environmental controls which had only a local influence at the place of manufacture? Do you see what I am getting at? If there is a factory in Birmingham producing widgets that meet the conditions for safety and quality of widgets in Europe but they are polluting the environment locally in Birmingham, or they are not meeting EU standards in environmental control, but which have a purely local impact, could that affect the sale of the widgets? Could there be an indirect inhibition of trade through regulations that have only a local impact?

Steve Elliott: If I have understood that correctly, if the Health and Safety Executive, or the Environment Agency, in the case of Birmingham, were doing their job they would have the powers to penalise that company, obviously, if it is not compliant with the Health and Safety at Work etc Act or not responding to its environmental permit. There are national and local regulatory controls that would inhibit their trade, certainly, but that would be regulators doing their job.

Lord Trees: What if the local controls in the UK were to a lower standard than the EU environmental controls which would be in force then? We have heard from others about the vulnerability of our environmental controls post-Brexit. You do not foresee that sort of situation arising?

Steve Elliott: I think there is a question around how we might implement. I know you are not saying this, but in our part of business I do not see a reduction in standards being either expected or desired.

Lord Rooker: I have a brief question on this American thing, because I am a bit confused. An American chemical manufacturer importing into the UK surely has to agree and follow REACH.

Steve Elliott: Correct. Ultimately, correct.³⁶

Lord Rooker: What is their incentive for lowering their standards? Why would they introduce a system that they could not operate to import into

³⁶ Note by witness: "but responsibility for compliance lies with the EU based importing company."

Europe? After we are out they might be able to dump it here but they still would not get it into Europe unless it follows REACH.

Steve Elliott: They would say that their version of that is a more risk-based, proportionate and pragmatic one that is informed by science.

Lord Rooker: Do they have an agreement with the EU, the European Chemicals Agency, that they can do that?

Steve Elliott: No, but your point is right. Any product coming into the European Union from wherever would need to meet the requirements of REACH. That would need to happen. That does happen. The interest for them in adopting a regime that is different and, as I say, pragmatic is obviously with their own interests, domestic and in other parts of the world.

Lord Krebs: Can I ask you, Dan, to clarify what you were talking about when you responded to the Duke of Montrose on our climate change targets? As I understand it—and as I declared earlier, I am a member of the Climate Change Committee—what is enshrined in UK national legislation under the Climate Change Act 2008 is consistent with the requirements of the Paris Agreement. If we were going to lower our commitment to reducing greenhouse gas emissions we would be going against our own national legislation and our commitment under the Paris Agreement. I was not quite sure what you were talking about.

Dan Lewis: All of that, of course, is true. Forgive me if I have misunderstood, but I thought the Duke of Montrose was asking whether we could go a step further. Could we decarbonise more quickly? Could we unilaterally do more? That is what I was saying: I do not think that would be a good idea.

Lord Krebs: You do not want to go beyond the Climate Change Act 2008, at this stage?

Dan Lewis: No. Certainly we are always interested in how to decarbonise more cost effectively and I think there is plenty of scope to do that.

Lord Trees: This question is about what influence businesses here, post-Brexit, will have over EU environmental standards. Would that differ whether we were within or without part of the single market? Would we have any influence, to start with, and, if so, what and how?

The Chairman: Is that important or not?

Dan Lewis: If you are in a situation where you have no control over the policies, the regulations and the standards, but you have the legal obligations and the budgetary contributions, that is not a very good place to be. We will see how this emerges. It does seem to me that the more you can work with others to agree common standards the more potential opportunities you have. Having said that, there are lots of variations within that: there are bilateral-type deals, as exist with Switzerland; there are Canadian-type deals—CETA, as we have just seen—where there is much less overlap; and then of course there is full European single market. I am very hopeful that some sort of agreement can be reached. I am sure Steve

would know much more about this than I do, but it seems that a lot of standards are set not just within Europe but outside Europe as well.

Steve Elliott: Yes.

The Chairman: You represent, maybe, a smaller-sized business than our other two witnesses. Presumably, some of your members will export into what remains of the EU, so having some influence there might be quite useful and, as individual businesses, you would like to have some influence on standards or whatever goes on. Maybe not. Could you put me right? I do not know whether you are affiliated with sister organisations that you work with, or how you lobby Brussels at the moment. Would some of those channels still be open to you? I am looking at this in a pragmatic way for business. Maybe not.

Dan Lewis: We do have a branch in Brussels. I would say even if you are a very big company, it does not always go your way, and I think the example of Dyson is quite well covered. They felt they were not able to influence the regulations and the standards to what they felt was a fair outcome. Of course, if you are a small business you have, invariably, much less access in Brussels to do that sort of work. I am not sure I have answered your question specifically, but it is something to ponder.

The Chairman: You have. You are saying, effectively, you are a regulation taker anyway, so the situation is not going to be different, which is a completely valid answer.

Finella Elliott: Our members are telling us it is absolutely critical. They want to maintain as much influence as possible, and if there is any scope for that to be formal and direct that would be the ideal. EEF would still have access through our sister trade associations in Europe, so institutions such as the BSI, the British Standards Institution, and through some of our multinational member companies as well. To reiterate, it would be far more advantageous to us to have something more formal.

Steve Elliott: I come back to the point I made earlier: staying the course for the two years that we remain in, from whenever the clock starts ticking, is very important. As Finella says, the British Standards Institution currently maintains the UK's membership of three European standardisation organisations. One of those is the European Committee for Standardisation, which is the one most relevant to our sector, CEN. It is an organisation which sits formally outside the EU and it co-ordinates the work of around about 33 countries, I think, in making and disseminating European standards. Irrespective of the vote, UK businesses, I think, will continue to play a part in encouraging and influencing the work of BSI through to the CEN committee.

The Chairman: I am sorry; I am intervening a bit too much here, but you said earlier on that most of the headquarters of your members were somewhere else.

Steve Elliott: Correct.

The Chairman: A number of those, presumably, will be in remaining

European states.

Steve Elliott: Correct.

The Chairman: It is quite important for us to remember that not every manufacturer here is UK-based—in fact, quite the opposite, perhaps.

Steve Elliott: Absolutely, yes.

The Chairman: The lines of communication you have had—however good, bad, ineffective or effective they are—would still be there.

Steve Elliott: Yes. That is a very good example. Over the two years that we remain, we are already picking up intelligence that either the UK's voice is not being listened to or our representatives are being less encouraged to speak up on certain dossiers. That makes it all the more important for us to keep networked with our continental European headquarter businesses and others to keep the pressure up from other member states on the things where we agree.

The Chairman: You are specifically saying that influence is already going down and evaporating, to a degree, and that is something that you think is very important to reverse.

Steve Elliott: I did not say evaporating, but it is diminishing. I suspect that is not a chemicals-specific comment; I think it is an inevitable outcome from the vote, and we are seeing that in the continental Europe meetings we attend.

The Chairman: Thank you. Viscount Hanworth, you have our final question.

Q56 **Viscount Hanworth:** I understand that sustainability considerations are embedded throughout the Canada-EU trade agreement. Can you cast further light on this, and is it possible that a similar approach could be taken by the UK in its future trade relations with the EU? You are nonplussed. I cannot pursue it much more because I was simply asking for a commentary on the Canada-EU trade agreement, but perhaps it is too soon to have understood what has arisen from it.

Steve Elliott: I think it is a bit too soon for us. It is clearly signalling that these are not straightforward deals, and increasingly the ability at a very local level to influence those outcomes as well. One agreement that we had been looking to play a supportive role in, and still are, is the Transatlantic Trade and Investment Partnership. The interest for the chemical sector there is about tariff elimination, but it has also been about the ability to start to mutually recognise testing requirements, data, and those sorts of things. I guess we are hostage to wider agents with regard to the fortunes of TTIP.

The Chairman: That is probably true, I think, after this morning, as a comment which is slightly outside our remit, the other side of the Atlantic. Can I ask one final question, very briefly? Viscount Ullswater mentioned tariffs, which are important, but the other area concerned is technical barriers, so you can have free trade but your customs officials can be very

difficult, if you like. It depends on the degree of Brexit we have; but if it is a more extreme Brexit, are non-tariff-barrier technical issues in the environmental area going to be particularly important where, I do not know, mischief could be made by the other side afterwards? Or is that not of concern?

Steve Elliott: We are doing a piece of work now with our members. We are surveying them on that level of detail: on a scale of “nuisance” to “a real impediment to business”, what do these non-tariff barriers suggest for us, depending on the outcome? We would be very happy to share the outcome of the survey results. I cannot tell you now the extent to which environmental non-tariff barriers might play their part, but we will be in a position to share the evidence, probably in an anonymised way, with the Committee.

The Chairman: That would be very useful, thank you. Are there any other comments?

Finella Elliott: No, we would say this is still quite early on; we are still in a consultation phase with our members. Again, if we have anything we are more than happy to share.

The Chairman: I thank you very much indeed for going through some of the detail with us. If we have tried to drill down here it is because we do not necessarily deal every time with the business issues to do with the environment. It has been a really useful session. I thank you very much indeed for your evidence, and I bring this session to a close.

Steve Elliott, Finella Elliott, and Dan Lewis — Oral Evidence (QQ 46 – 56)

Steve Elliott, Finella Elliott, and Dan Lewis — Oral Evidence (QQ 46 – 56)

[Transcript can be found under Finella Elliott, Steve Elliott, and Dan Lewis — Oral Evidence \(QQ 46 – 56\)](#)

Game and Wildlife Conservation Trust — Written Evidence (ECB0010)

Agricultural land makes up at least 70% of the total land use in the UK so in order to support our wildlife and natural environment, action must continue on farmland. At its peak, 70% of farmers in England were involved with CAP-funded environmental stewardship schemes and consequently CAP-related payments supported climate and environmental protection initiatives across a significant area of the UK. The discontinuation of agri-environmental subsidies therefore poses a significant risk to UK environmental and climate protection goals. Agri-environmental subsidies help farmers to provide ecosystem services that cannot be provided any other way through the market such as soil and water resource protection, carbon sequestration, etc. and the scope could and should be increased to include flood protection measures and air pollution controls.

The replacement of CAP farming subsidies with a similar funding mechanism would offer an ideal opportunity to pursue water, soil and air quality goals originally set by the EU and exceed them, through UK policy. Importantly, this will also provide a compliance mechanism and increase our food security aspirations by ensuring farmers continue to farm and produce food, in a sustainable manner, if fluctuating costs and prices are temporarily not conducive to continuing production.

Much of EU environmental and agricultural legislation detail was written with strong leadership from the UK, so most of it will remain relevant post-brexit and should be patriated through inclusion in the Great Repeal Bill. Whilst the existing stewardship schemes are imperfect they do essentially contain the key options to improve biodiversity and the environment on agricultural land and in the countryside generally, so should be continued. With each CAP reform, farmers have been asked to re-focus their efforts, implementing the measures which have been shown to provide the greatest environmental benefits, in order to generate the greatest return for public money. The public should have confidence that their money is being invested in protecting the environment and those proven to deliberately make false claims should be subjected to appropriate fines. Therefore, mechanisms of enforcement and regulation must be secured prior to enactment of the Great Repeal Bill, in the place of Commission. There is little use of having good legislation if there is limited means to enforce it.

Of course there are current elements of EU-imposed environmental, agricultural and climate policy that are widely accepted as obstructive or having little benefit, and these should be the first areas to be amended. One such example is the energy efficiency regulations which are not suitable or attainable for rural properties and discourage investment. Any major changes however should take time and careful consideration and consultation. Commitment to long-term plans is required to bring about the benefits to the environment we need. Policies should be reviewed and created with the needs of all stakeholders taken into account, which could be achieved through the establishment of an independent policy commission, and should complement and align to other linked policy areas such as climate change, education, nutrition and health etc.

Resource protection has fast become one of the top priorities for policy makers in the UK and rightly so; most British soils have been classed as degraded or severely degraded and only 17% of UK freshwaters are in “good” health. EU policy such as the Water Framework Directive and Cross Compliance has provided the UK with a framework to address these states, with targets for their improvement. It would be prudent to review the detail of these policies, remove irrelevancies and some over-burdening constraints which are known to bring little benefit, and repatriate them into UK legislation to ensure that improvements continue to be made.

Soil conservation should be given greater emphasis within environmental legislation where possible. Making soil and water resource protection practices a basic benchmark from which more complex environmental stewardship funding or assurance scheme awards can be gained would be one option. Similarly, riparian boundaries should be awarded more protection, including ponds, due to their recognised high biodiversity value. Diffuse and point source pollution should be tackled through measures such as those being shown to be effective in landscape scale projects such as the Water Friendly Farming Project, and Catchment Sensitive Farming Initiative as a basic practice benchmark to be gained prior to being able to apply for more complex environmental assurance scheme funding or awards.

The regulatory mechanisms of CAP pillar 1 funding were designed to offer some basic protection of the environment. Cross compliance environmental measures should be re-examined and the detailed rules on their management should be reviewed. However, it is important to be aware that any wholesale withdrawal of Basic Payment Scheme “type” direct payments from farmers will remove an important compliance mechanism, beneficial to UK biodiversity, the environment and climate, which currently requires limited policing. Direct payments should be degressed over a period of time, a minimum of 5 years, in order to allow farmers to plan for the alternative and a small but inviting proportion retained to maintain this compliance mechanism.

The valuable environment supporting practices of cross compliance could also be enshrined within “earned recognition” schemes such as the LEAF Marque or accreditation through assurance schemes. This accreditation could then be a mandatory pre-requisite for stewardship funding. It is unlikely that farmers could afford to fund compliance without subsidy so this would encourage more participation in environmental stewardship, particularly if a flat payment rate to cover a farmers’ administration costs could be made as part of any additional stewardship funding.

We suggest that, as modulation has done part of in the past, the majority of funds be moved from direct payment to farmers and made available through environmental stewardship schemes, without a reduction in the overall budget. This will release the resources sorely needed to fund the more complex and successful stewardship offerings which Lawson highlighted are vital for a thriving ecological network and to pursue our national environmental and climate protection goals. However recent reductions in funding, a competitive bidding process and more onerous requirements, alongside the uncertainty which departure from the EU brings, are seeing significant numbers of farmers choosing not to re-new their environmental stewardship agreements and

detering others from applying. Many good environmental provisions, and benefits they brought, some of which are only accrued long-term, will be lost unless these issues are addressed.

The RPA (Rural Payments Agency) are charged with ensuring that EU funds are correctly allocated to those entitled to receive the Basic Payment Scheme (BPS), cross compliance and "greening" payments. They also oversee the payments for environmental stewardship Schemes. In the RPA's place we suggest responsibility be given to Natural England (NE) for aspects of habitat, species and biodiversity generally and to the Environment Agency (EA) aspects to do with soil, water and resource protection generally. This would allow both NE and EA to combine their advice and enforcement roles, eliminating the antagonistic impression created by the RPA's inspection-only role and developing a culture of greater support for farmers who wish to deliver environmental benefits.

In the fullness of time we would like to see the majority of the current BPS transferred to into wider environmental payments to farmers administered by an Environment & Nature Payments Agency operated under the auspices of NE and EA. This has been effectively managed in Wales through combination to create Natural Resources Wales (NRW) whilst Rural Payment Wales (RPW) retains farmer confidence.

The divergence in environmental stewardship approaches, which has developed in the devolved administrations, should be continued and broadened where necessary, as they foster appropriate prioritisation and action within local areas. The consequential divergence in policy is inevitable and necessary but realistically manageable. What is vital is that the practices which have been proven to benefit our common resources, habitats and species underpin the individual approaches and policies. The Environment (Wales) Act 2016 and Wellbeing of Future Generations (Wales) Act 2015 are current examples of this approach. Information sharing to ensure that each administration learns from each other is key. For example, in Wales the strict interpretation of the CAP rules on the density of trees on farmland has led to farmers being reluctant to plant trees or worse still remove them, whilst in England provided a farmer can demonstrate that he has trees planted in a grazed field, rather than livestock grazing in a wood, the land remains eligible.

A centrally-driven initiative should begin to remind private businesses of the positive contribution of being involved in such local conservation initiatives would make to their environmental and social targets, such as carbon sequestration, water resource protection and employee volunteering for example, as a type of voluntary biodiversity offsetting. The imposed form of biodiversity offsetting policy, through planning applications, should be reviewed as soon as possible as the perception is that it has become a "licence to destroy". The weakness in Local Government with regards to supporting biodiversity conservation overall is in assessing the successes of their conservation attempts. This is largely due to the lack of competent resource able to conduct or understand post-provision assessments, or lack of resource available to even ensure that agreed conservation efforts are begun and completed as planned. Biodiversity offsetting has the potential to significantly contribute to the UK's environmental and conservation "bank" but it must be adequately and competently resourced to ensure that the expected environmental gains are brought to fruition.

It is a concern that our exit from the EU may restrict access to EU research funds. We must therefore ensure that our output of agricultural, environmental and climate related research continues at a good rate and at a consistent quality as this is likely to ensure that our opinion on such matters continues to be sought and national interests are better represented in the EU and further afield.

Recent innovations in agricultural production techniques have focussed upon technological advances. This means that the majority of new “techniques” are out of reach for most farmers who do not have large capital budgets to obtain the necessary equipment. A focus should be made upon advancing techniques and holistic approaches which are more attainable to everyday farmers. It is unlikely that industry will focus on this approach as the development of their own products is likely to be more profitable, although they are beginning to recognise the potential in backing environmentally supporting producers. Government should therefore ensure that the research gap, particularly in sustainable farming intensification, should become a top priority for funding.

If the government are, as reported, considering the regulation and development of genetically modified food in England, this would be welcomed but we recognise that such moves must be considered alongside negotiations on trade. The production of GM crops has the potential to be a significant factor in achieving our environmental improvement goals, such as reductions in the need for inputs such as nutrients and pesticides.

23 November 2016

The Geological Society — Written Evidence (ECB0002)

Environment

There are many areas of policy and regulation that could be significantly impacted by the UK leaving the EU. These include the regulation of industrial activity, controls on substances, regulation and standards for chemicals, materials and levels of contamination as well as the focus of current environmental legislation around ecosystem services and natural capital to name a few.

Much of the regulation around industry codes and standards for materials and chemicals is governed by EU legislation. Health and safety regulation such as REACH, the regulation concerning the Registration, Evaluation, Authorisation and restriction of Chemicals has particular relevance to geoscience industry. The aim of this legislation is to provide a high level of protection for human health and the environment from the use of chemicals. The legislation aims to allow free movement of substances on the EU market and enhance innovation in the EU chemicals industry. It is not clear how the UK's exit from the EU will affect REACH legislation in the UK but changes and amendments to this structure will have impacts on UK industry that should be investigated.

The Water Framework Directive (WFD) is an EU directive and a significant body of policy which was designed to commit EU member states to achieve good qualitative and quantitative status of all water bodies. It was designed to shift the management of water resources to river basins, which can cross political borders, and has contributed to a more holistic way of managing water and natural environment. This programme is widely considered to be effective and progressive in how it manages water across regions and borders and has yielded very positive results thus far. If the UK's decides to remain in the EEA then adherence to the WFD along with many other environmental directives will be a requirement of membership. But if we choose to leave then the government could proceed with altering or repealing these existing laws. This could pose a number of challenges, including the management of water across the border between Northern Ireland and the Republic of Ireland. There are also a number of other directives which could be affected including the Bathing Water Directive, Drinking Water Directive – which provides minimum microbiological and chemical standards for what is fit to be consumable and the Nitrates Directive, all of which could be impacted depending on the nature of the Brexit negotiations.

EU directives such as the Birds and Habitat Directive and the Water Framework Directive have contributed to a growing body of environmental policy which outlines a more holistic approach to environmental management which takes into consideration the complex interactions between subsurface, surface, atmosphere etc and has moved away from environmental management along political boundaries. The EU was also instrumental in taking up the idea of ecosystem services as a framework for environmental management and developing policy in the context of 'natural capital' and its fundamental importance to the economy and the welfare of society. The impact of the UK's exit from the EU on these wide ranging environmental protections and policy frameworks needs to be fully

examined and assessed if we are to understand the potential impacts of the different routes to leaving the EU.

Climate Change

There are a number of ways in which Brexit could have an impact on the future of UK climate change policy and much of this will depend upon the outcomes of future negotiations. The prevailing uncertainty following the vote is having a destabilising effect on all areas of government, whether directly or indirectly, through impacts on research, the economy and business.

The loss of a UK voice in EU negotiations on climate change and setting decarbonisation targets will have an impact on EU (as well as UK) climate policy. As a global and cross-border issue, the value of influence on climate change policy cannot be overstated. The UK has had a strong voice in EU climate negotiations and if the EU's 2030 target is recast without the UK there is a risk that the ambitious headline goal of a 40% emissions reduction on 1990 levels will be lowered. Climate change is more effectively tackled with broad multi-lateral agreement rather than policies of individual nations. The Paris agreement was a welcome step in the international effort to tackle Climate Change but the effect of leaving the EU on both the EU and UK governments could result in a delay in ratification which will put further pressure on decarbonisation timelines.

Following the cancellation of the UK Government's £1bn carbon capture storage (CCS) fund at the end of 2015, the EU is now the sole remaining funding source for CCS commercialisation projects via the New Entrants Reserve programme (NER 300). In 2014, the White Rose CCS project in Yorkshire won €300 million from the NER 300 fund. Since then, as a result of the cancellation of the UK commercialisation competition, it has been announced that the White Rose project will close and there have been no further updates on the future of UK CCS either from the former Department of Energy and Climate Change or the new Department of Business, Energy and Industrial Strategy.

In order to meet UK climate change targets and those outlined in the Paris agreement, in light of the continued use of fossil fuels, rapid development of CCS is crucial to avoiding dangerous climate change. The significant storage potential under the North Sea and the UK's strong research base and history of academic/hydrocarbons industry collaboration ideally place the UK to take a leading role in global development of CCS. Full chain demonstration at scale and development of storage capacity are urgently required. The carbon storage potential of the North Sea is only viable while existing infrastructure is in place (pipelines and platforms). The recent decline in oil price will accelerate the decommissioning of many older, less economic fields which reduces the options for reinjection of CO₂ and therefore the window of opportunity is closing. The potential loss of further CCS funding streams puts the CCS programme, and therefore successful meeting of the UK's decarbonisation targets, at significant risk.

14 November 2016

Jonathan Gaventa, Professor Michael Grubb, and Bob Ward — Oral Evidence (QQ 36 – 45)

Wednesday 2 November 2016

11.45 am

[Watch the meeting](#)

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

Examination of witnesses

Bob Ward, Policy and Communications Director, Grantham Institute; Jonathan Gaventa, Director, E3G; and Professor Michael Grubb, University College London.

The Chairman: Good. Let us start this second session today, which is of the EU Sub-Committee on Energy and Environment looking at Brexit and the environment. This session is primarily on the issue of climate change. I welcome our witnesses. Thank you very much indeed for attending. Perhaps I could just remind you of the blindingly obvious: that this is a formal evidence-taking session. It is being both recorded in shorthand notes and webcast, so you are on the public stage. You will be sent a copy of the transcript and if there is anything that you think is inaccurate in it, you are very welcome to come back to us to change that. I remind members once again to declare any interests that they have, and I will declare—although I probably will not get into this area—that I am a board member of the Marine Management Organisation. I am also now a designate director of the Green Purposes Company, which holds the golden share in the Green Investment Bank.

Perhaps we could have the witnesses explain who they are and go from there. Professor Grubb, perhaps you could start us off.

Professor Michael Grubb: My name is Michael Grubb. I am professor of international energy and climate change policy at UCL.

Bob Ward: I am Bob Ward. I am the policy and communications director at the Grantham Research Institute on Climate Change and the Environment at the London School of Economics.

Jonathan Gaventa: My name is Jonathan Gaventa. I am a director at E3G, a not-for-profit think tank focusing on climate and energy issues, with a presence in the UK, Brussels, Berlin and Washington.

Q36 **The Chairman:** Thank you very much indeed. Perhaps we could start with the fundamental question of what you view as the opportunities and challenges for the UK post-Brexit in the area of climate change policy. I am

going to ask each of you to do that, and perhaps, Professor Grubb, you could start us off.

Professor Michael Grubb: In a slightly academic fashion, to kick off, I will run through the areas, because I think it is quite important to be clear. One is legal dimensions of energy policy per se, where in legal terms there are not huge implications, in the sense that energy has always been the preserve of national policy and is protected under the EU articles as such. Countries have very divergent energy policies and the UK has in many ways ploughed its own furrow. Technically, legally, that would not change. Obviously, what could change is environmental policy, where the EU has had a much stronger hand, and its dimensions of climate policy, and those would include, for example, EU ETS, renewable energy targets, and energy efficiency and ecodesign directives.

There are the economic impacts in the short term—and here a lot of analysts were in a somewhat different position from the politics; on the politics of Brexit, a number flagged concern over short-term costs. There have been some impacts arising from exchange rate effects, some impacts on investor uncertainty, but probably the bigger issues accumulate over the longer term.

There are definitely regulatory issues that will be among the challenges, in the sense that EU energy regulation has been increasingly bound up, particularly with the third package of European legislation. The UK has chaired the Council of European Energy Regulators and ACER, and as from about 2019 there would therefore be questions over where and how the UK derives its specific regulations. We would also lose the legal protection of an independent energy regulator, which is stipulated under European law; it has to be independent.

My headline is that it seems to me that all the above are broadly subsumed by the political ramifications, which I think have both opportunities and threats, but those I can return to perhaps in the second area of questioning: carbon pricing, the EU ETS, et cetera.

Bob Ward: As Michael described, there are many areas, but the main thing to stress is that the UK has very clear national legislation that guides primarily our action on climate change, the Climate Change Act. It provides the overall targets that we aim for. Inasmuch as Brexit will affect UK policy, it will be in implementation. As Michael said, there are question marks over whether we are inside or outside of the ETS, which will make a big difference. There will be opportunities around, for instance, whatever replaces the Common Agricultural Policy in the UK which gives you an opportunity to make reduction of greenhouse gas emissions and climate resilience a greater priority for the agricultural sector.

Probably one area worth stressing is that one of the downsides, which we can say without uncertainty, is that the UK will participate in international negotiations as an independent state rather than as part of the EU bloc. That seems likely, and that will make it less influential, because the EU collectively is the third largest emitter of greenhouse gas and has considerable influence in the negotiation process, as was seen in Paris, and

the UK has been playing a leading role. The UK will, for instance, have to ratify separately the Paris Agreement, and will need to submit its own nationally determined contributions outlining how it will contribute to the Paris Agreement. Those are some of the major implications.

Jonathan Gaventa: I would add two things to that, and I agree with the previous comments. First of all, we are not looking at this purely as a question of maintaining existing standards, because we are facing a context in which both the EU as a whole and we globally need to move further and faster on climate change. The Paris Agreement set out the context for that but it also recognises that we are not yet on track for those goals.

Within that context there are two areas: the end state, which UK and EU climate arrangements will eventually reach, but there are also some issues around managing the transition risk of what happens between here and there. There are a couple of concerns to put on the table as part of that transition risk. At a time when, internationally speaking, we realise we need to go much further in developing the arrangements under the Paris agreement and increasing ambition internationally, there are challenges around diplomatic capacity, political leadership and focus, in getting bogged down in a very complex area of disentanglement with the EU.

On potential opportunities or areas of benefit, it is hard to say there are particular areas in which we could act that we could not have done previously, but it is certainly the case that there are some big questions about the UK's economic direction as a result of its changing relationship with the EU. As a result, I think there is an opportunity to focus on how the UK's economic and industrial policies can be aligned with some of the opportunities that arise from a global transition to a more sustainable energy system, and how the economic industrial policies align very closely with the objectives of our own Climate Change Act.

The Chairman: Thank you very much.

Q37 **Baroness Sheehan:** Are there any particular elements of EU climate policy and mechanisms that the UK should either maintain or repeal, and why?

Professor Michael Grubb: I think it is worth saying in this context that the UK has traditionally placed more emphasis upon market mechanisms, carbon pricing, as part of the strategy, and rather less perhaps on standards and targets. We acknowledge that carbon pricing has not been clear or strong enough to deliver a great deal, and a number of EU policies around energy efficiency, the ecodesign directive, the energy efficiency package and targets, are valuable; they are cost-effective and I think it would be wise to maintain those.

The renewables targets are obviously more controversial. We have the implementation framework in place for renewables policy, with energy market reform for the electricity sector at least. It seems increasingly likely that the UK will over-deliver in electricity and under-deliver in the other sectors concerning its renewables target, and collectively perhaps would have been facing infringement proceedings. Whether in practice that would have had much impact is hard to say; we would presumably not face that per se. Personally, I am of the view that having renewables targets—one

could debate whether or not they were too ambitious—is a helpful organisation framework within which to judge the objectives and adequacy of delivery mechanisms. I am not expecting the UK to adopt renewables targets for 2030, but there would be a case for at least shaping our expectations and ambition levels on renewables. Those would be the most obvious headline areas.

Baroness Sheehan: Are there any we should repeal?

Professor Michael Grubb: No.

Bob Ward: We will come on to a detailed discussion about the ETS, which I think is of particular interest. As Michael described, there are plenty of regulations around efficiency which would be worth adopting in UK law—around fuel efficiency standards, for instance, in the vehicles sector, energy efficiency standards for electrical appliances, those sorts of things. It would make no sense for the UK to step out of line, because whatever the trade between the UK and the EU ends up being, there will still be a considerable flow, one would expect, of products and services that will need to meet a common set of standards. It would make sense to adopt those.

I mentioned the Common Agricultural Policy. I think there is definitely scope there for using whatever replaces it in the UK to give greater emphasis to the agricultural sector reducing emissions and making the UK more resilient, including looking at, for instance, crop mixtures and which ones will be best for our climate in the future.

As Michael described, for UK policy we have tended to set targets for emissions and then let the market decide how best and most cost-effectively to do that. It is certainly the case that the renewables target and the energy efficiency target have helped to undermine the carbon price of the EU ETS; nevertheless, there are elements of how you provide a framework that allows a forward signal that would mean that companies act with a view to the future rather than the near-term, and standards that give a very clear direction can be very effective.

I should have said this at the start: I think the Committee on Climate Change has already produced an excellent guide across the board to all the issues connected with climate policy and the potential implications of Brexit, and it is the expert in implementation of the Climate Change Act and the carbon budget, so I commend that document to you as well.

Jonathan Gaventa: I have two things to add. First, the UK currently negotiates in the UNFCCC as part of the EU bloc. By doing so it has gained considerably more influence than it would have as a lone actor; as part of a bloc of 500 million people it can marshal the forces of its diplomacy more effectively than it would be able to otherwise. This is an area where continuity would be beneficial.

The other area which will be much more complicated to separate out is investment. At the moment, the EU budget for research has had a major focus on climate change and sustainable issues, including for UK bodies. There is a question about how that will continue in future, but that is tied

up in the much broader question of budget payments more generally. There are similar issues with the European Investment Bank, which, again, has been a very useful instrument for low-carbon energy infrastructure investment in the UK and across Europe, and there are, again, much bigger questions about whether and how the UK remains a part of that system.

The Chairman: I am sure we will come on to that later as well. Professor Grubb, I think you want to come back briefly, and then Lord Krebs wants to come in on this.

Professor Michael Grubb: Yes, just a clarification of my previous answer. I was referring to the electricity sector based on the current situation, and assuming we want to continue trading electricity and gas with the EU at scale. Obviously, there are problems in some areas of European policy: for example, around diesel for the transport sector; agriculture I am not really qualified to judge. I did not want my previous answer to sound too all-embracing or overconfident. I am sure there will be areas where I can be persuaded.

The Chairman: Thank you, professor. We note that. Lord Krebs, you wanted to come in on this question.

Q38 **Lord Krebs:** Very briefly, if I may, I will build on the commercial that Bob gave for the Committee on Climate Change, and I declare an interest as a member of the Committee on Climate Change, and chair of the Adaptation Sub-Committee. You referred to the report that we published a couple of weeks ago on the implications of Brexit for climate change, and I wanted to turn Baroness Sheehan's question the other way round, because in the summary of our report we have a table that shows that 55% of the emissions reduction that the Government are now legally committed to to meet the fifth carbon budget is covered by EU-level policies. To put the question the other way round, if we did not comply with the EU-level policies, would we have any chance at all of meeting the fifth carbon budget?

Professor Michael Grubb: It depends what you did instead. It would seem odd to weaken something if you have to strengthen other things all the more.

The Chairman: I think that is as far as we are going to get at the moment. Lord Krebs, do you want to continue?

Lord Krebs: Thank you. My question relates more to adaptation than the mitigation we have been talking about so far, although Bob Ward has alluded to the fact that whatever replaces the CAP may give us an opportunity to build resilience in the agricultural sector. Can you broaden that and tell us what impact UK withdrawal from the EU might have on the national adaptation programme?

Bob Ward: I cannot claim to be an expert on this particular area, but it seems to me that in adaptation policy probably even more than mitigation policy, the UK's actions are largely driven by what it sets as its own agenda. The national adaptation programme I think is among the leading, if not the leading example of how a country should set about understanding the risks

it faces and how to respond to them. The annual reporting, the structure of the Committee on Climate Change and the Adaptation Sub-Committee led by Lord Krebs, and the annual updates every five years, give a very clear direction.

It is not so much the direct impacts where the UK perhaps finds it most difficult to think—and we can see already the direction of the climate for the UK: that is, heavier bouts of rainfall, which increase the risk of inland flooding; rising sea levels, which increase the risk of coastal flooding; and we will probably see more bouts of drought and increased risk of heat stress, which will have wide implications. It is more understanding how climate change will affect the UK indirectly through other parts of the world, and I think there is good evidence at the moment, for instance, that the war in Syria partly had its roots in a record drought in the region, which seems to have been exacerbated by climate change. It is that kind of ongoing impact through the movement of people which it is most difficult for the UK to work out how best to respond to, because it could make a fundamental impact on all countries, of which the UK will be one.

That is an area in which ongoing co-operation with the European Union Member States, either in close relationship, within some formalised relationship, or separately, will be crucial, as well as understanding things such as impacts on food security and food supply. Again, the UK will not be totally self-sufficient in food inside or outside the European Union. We saw in 2010, for instance, with the temporary spiking in the price of wheat, which again is considered as perhaps one of the contributors to the circumstances that led to the Arab uprising; that was down to a series of extreme weather events around the world that affected major wheat-producing countries and Russia's response to that. That is another example where we are going to have to work with EU Member States and other countries to work out how the UK can best make itself more resilient to these impacts in the future. That is shrouded in uncertainty, the nature of resilience being not so much about understanding precisely what the impacts will be but about providing a degree of resilience against potential impacts.

The Chairman: That is certainly a broader canvas, and an interesting one on EU development activity in the climate change area. Would anybody else like to come in on this area? No. Lord Krebs, is there anything else you wanted to follow up on?

Lord Krebs: Just one small question which I do not know whether the panel has any view on: to what extent would the scientific evidence that underpins our risk assessment of the future impacts of climate change be affected by Brexit? The UK has, quite unusually, two major centres of climate modelling, namely the Met Office Hadley Centre and the European Centre for Medium-Range Weather Forecasts in Reading, whose future is in doubt; the future of the UK is in doubt, I think. I wondered whether Brexit interplays with those issues at all.

Bob Ward: The university sector in general is, I would say, very worried by the potential impacts of Brexit on both students and staff being willing to come to the UK. Some of my colleagues have already experienced this

in proposals going forward to Horizon 2020: they have been basically booted off collaborations by European partners, who are not so much punishing the UK for having voted out as have anxieties about the implications for funding. It is well known that the UK has been a net recipient of research funding compared to its input.

The ability to work with the best people around the world is essential for producing high-quality research, and one would expect that if Brexit results in any kind of disincentive compared to now to working with other European researchers on understanding these common issues and finding solutions, that would be detrimental. I do not know enough about the specific case of the ECMWF, but anything that threatened its status or location in the UK would be detrimental to the UK. It is recognised around the world as a world-class institution. It provides information that the UK uses in its understanding of the change in the climate, and it also boosts the reputation of the UK internationally to be the host for such an important body.

Q39 Duke of Montrose: I think we have just been dealing with this question and I am not sure if there is any more to be said. What will be our ability to fund climate change and adaptation measures? That is the issue we have discussed.

Jonathan Gaventa: I see three angles for this question of funding climate change measures. The first is on our international climate change funding commitments, which falls under the category of overseas development assistance. By and large, the announcement of such funds is carefully co-ordinated on a political level with our European partners, so as to have the most impact during the international climate negotiations. However, the disbursement of those funds remains largely a national competence, and we do not expect to see too much change there, although of course continued alignment with our European partners on political announcements is very important.

The second issue around funding is on private-sector funding, and this is perhaps something that we can pick up in more detail. We have heard already that uncertainty about future policy direction and relationships has created concerns in the finance sector and energy investments. This is an area of concern. However, we are seeing support from the UK Government so far for the City of London, for example, to play a much larger role in green financing—potentially even as a partial response to some of the questions of how the City is affected by Brexit overall.

The third area is that of EU public funding, which we have touched on briefly already. Currently, the EU budget earmarks 20% of its overall funding for climate-related activities—this is both mitigation and adaptation measures—and the UK has been a beneficiary of this in a number of different forms: through the Common Agricultural Policy, which has been mentioned; through structural funds; through infrastructure support, such as the Connecting Europe Facility, which has supported the development of some of the interconnection to the UK; and through research funding. In each of these areas there is a significant question about the future of this funding, and in particular whether the climate-related commitments will be

maintained at least at the current level. We would certainly like to see assurances from the UK Government on that point.

The other concern that we have as a European organisation is what happens to the EU budget after the UK leaves. The UK is a net contributor, so we expect for the next budget round, 2020 onwards, there to be considerable pressures on the EU budget. We are certainly hoping that the EU exit would not lead to any weakening of existing commitments on climate earmarking and could potentially, given the international context, even lead to a strengthening of it.

Duke of Montrose: Very interesting that your first two points were to do with outgoing funding and the third one is to do with EU funding coming in here, and, of course, the interplay between those elements. If we suddenly find ourselves short of the EU funding that currently goes into research, what effect will that have on the amount of money that we are prepared to put into helping third-world research or any of these other things?

Jonathan Gaventa: I would say that the UK's commitment to international climate finance has been very closely bound up with the development of the current international regime and the Paris Agreement, so any move away from meeting existing commitments could be very damaging in making sure that other countries remain committed partners of that regime.

Professor Michael Grubb: Just a quick addition, linked to the previous discussion as well. In addition to the hard science centres, one should not underestimate the significance of the European research networks on economic and social science dimensions, and the way that they have helped to build a stronger research infrastructure and a bit more common thinking across the EU. In so far as the European level of the research sector suffered, that might suffer along with that. My only added point on the international funding is as a function of where the UK sits in the international negotiations. Clearly, the dominant decisions in future will be driven between the US, China and the EU, so the UK would perhaps be a lot less directly engaged in shaping the international financial decisions.

The Chairman: Thank you. Perhaps we could move on to the Emissions Trading System and Viscount Hanworth.

Q40 **Viscount Hanworth:** I remember that the UK played a leading role in establishing the EU Emissions Trading Scheme, and I also believe that the scheme has not entirely fulfilled its expectations. Perhaps people could comment on that. However, my question is: if the UK were to remain part of the EU ETS, how important would it be to retain influence regarding its own rules, and indeed, would it be possible to retain influence?

Professor Michael Grubb: It is a hard or soft Brexit question, is it not? If we were in a soft Brexit, part of at least the single energy market, one could remain part of the EU ETS and one would have at least observer status on its future evolution but not voting rights—broadly the situation of Norway. I imagine some attention would still be paid under those circumstances to the UK's views. Under the hard exit, it is a little hard to see how the UK would remain part of the full EU ETS infrastructure, although one could try

and carve out exceptions. At that point, if the UK is not part of that trading apparatus, I think the UK position would be developing some kind of separate carbon pricing system and linking.

Viscount Hanworth: Did you have something else to say?

Professor Michael Grubb: A slightly different aspect of carbon pricing. Maybe we will come back to that.

Viscount Hanworth: Could you also comment on the efficacy and importance of the scheme?

Professor Michael Grubb: It had aspects that are well-designed and initially a significant impact but, as we know, it has sunk under the weight of surplus allowances to a price which is more or less irrelevant to most decision making. In particular, it has proved itself inadequate for investment purposes; it has very little influence or credibility on investment choices, and that is a fundamental problem of the current structure.

Viscount Hanworth: Would Bob Ward share that opinion or is he more sanguine about its prospects?

Bob Ward: I want to flag up the work of a couple of my colleagues, Luca Taschini and Baran Doda. They have looked at the operation of emissions trading schemes around the world, and it is very clear that, for the UK, leaving the ETS would increase the costs for UK companies of reducing emissions. UK companies are essentially responsible for about 11% of the emissions within the trading system, and the ETS is the world's largest emissions trading system. That means that UK companies can more easily sell and buy permits with other companies, which allows a more cost-effective distribution, so it is possible to buy and sell with countries where emissions savings are cheaper.

The cost of leaving the ETS, the UK having to extract itself and set up something domestically would be a one-off hit, and if it only operated as a domestic market, it would not be as effective in distributing the costs. Some 35% of the UK's annual emissions are covered by the traded sector. There are some opportunities if we left the ETS, and one would be to create a carbon-pricing mechanism for the UK economy-wide that was more uniform and with a stronger price. At the moment, the ETS and the patchwork of UK effective pricing instruments mean that you have a very uneven carbon price across the economy which has perversities in it, such as making electricity more expensive due to implicit carbon prices than gas, for instance, so it is providing an incentive not to go to the low-carbon sources. That would be the opportunity but it would essentially be more costly.

People have argued that if we left the ETS we could join China's emerging carbon market, but it would be an immature scheme and there would be a lot of difficulty harmonising ourselves with that market, because there would be a process of harmonising and its ongoing operation would probably be subject to adjustment. Either way, if we can stay in the EU ETS, we should stay, even with its flaws. I agree with Michael that the UK has in general been a voice for strong action within the EU. It has been pushing for stronger measures, including a more effective reform of the

ETS in response to the flaw that it had in it that it allowed adjustment if the price went too high but no adjustment at the lower end. The attempt to try to reform that since, with back-loading and holding out of permits, does not seem to be an effective response. Arguably, the UK continuing to influence the operation would benefit not just the UK but all the Member States.

Viscount Hanworth: So permits are too abundant and underpriced, and if you agree on that proposition, do you have any suggestions as to what might be done to amend the situation?

The Chairman: I do not want to get into an inquiry on the efficient mechanism of the European trading system. We have to keep this within Brexit rather than this issue, which I would love to go through myself.

Viscount Hanworth: With respect, the question is: are there any reforms under way in Europe from which we might profit but from which, if we withdrew from the scheme, we would not be able to benefit? Do you have any optimism about the development of the system?

The Chairman: Could you make a brief comment?

Bob Ward: The ETS should be technically self-correcting in the end. The cap will have to come down in line with the objective but the problem, as Michael described, is that at the moment the problems with the ETS have undermined the confidence of participants, and therefore they are not investing as if they are expecting in the price to go up in future, and therefore are not investing ahead in technologies and systems. My colleagues think the reforms that are being implemented will not be sufficient to address that. In the long term, you may see a correction, but whether that is too late to make the difference to behaviour we need remains to be seen.

Viscount Hanworth: That is what I was driving at.

The Chairman: Mr Gaventa, do you want to come in? Then Lord Krebs would like to ask a supplementary.

Jonathan Gaventa: Very briefly, I wanted to flag up that there is no easy way forward, either if the UK seeks either to stay in the EU ETS or to leave it. If we seek to leave, there is an open and rather complicated question about what happens to emissions permits that might have originated in the UK but are no longer held there. If we seek to stay in, the question becomes closely connected to the issue of wider market relationships, and in particular financial relationships with the rest of the EU 27.

In both cases, vigilance will be needed to make sure that the arrangements eventually arrived at do not weaken still further what is essentially an already weak instrument.

The final point to add on the benefits of the EU ETS as compared to the UK carbon price floor is that it is fairly difficult to amend, so it has a longevity that is potentially different from an instrument that can be changed from one Budget to the next on a national basis.

Lord Krebs: Very briefly, looking at another angle on this, if we were to withdraw from the EU ETS, what impact would that have on the meeting of carbon budgets? At the moment, we calculate the carbon budget on a net basis, which is what the Climate Change Act requires.

Professor Michael Grubb: Can I pick that up and make a wider remark on carbon pricing? I think Bob has already partly addressed that point. There are opportunities—threats and opportunities. The opportunities include the fact that it would be easier for people to understand the UK's commitment, because it would not have the complication that it is a traded commodity for the traded sector, and it would mean we had to deliver the targets domestically, without the flexibility that Bob alluded to. You could also potentially have a rationalisation of the price across different sectors and a simplification overall, because the UK mechanism is messy at the moment, with EU ETS and the carbon price floor as a retrospective top-up tax. So there are potential opportunities.

I am not really expecting official abandonment of climate policy targets or the legal framework, et cetera, but, coming back to my opening remark, a lot hinges on the politics. There is an obvious risk of climate policy being eclipsed by Brexit. The initial reactions and omens were not too bad; the first carbon budget, et cetera, was passed, but I have become increasingly aware of a narrative that basically says Britain is desperate for foreign investment and will do anything to try to make itself industry-friendly, as perceived by No. 10. I have also said that the UK position has been predominantly in favour of market mechanisms—carbon pricing is the most efficient—but there are clearly lobbying pressures, and clearly in some quarters of government there is consideration of abandoning the carbon price floor. That would be an extraordinary decision, which could be impossible to reconcile with the legal frameworks, but it is still being talked about on the grounds that it might make things more friendly to industry. The real risk we face is if Brexit becomes a catch-all excuse for pushing aside anything else in the desperation to attract foreign investment and big business. That is obviously a problem, and sets us up for a direct conflict between the policy and the legal targets.

Finally, as for the opportunities that lie in that area, I think there is a fairly straightforward solution in the carbon pricing arena, where a lot of the concern is driven by fears about carbon leakage, and that is to put the carbon price on materials, so in the electricity sector you have it as is, and in the energy-intensive sectors you put the carbon price on materials consumption, and thereby, wherever it is produced, whether at home or abroad, it is paying the same carbon price; you do not have a carbon leakage problem, but you still have incentive for more efficient materials use, et cetera, potentially funding the CCS, et cetera. It is quite an interesting opportunity, and it is precisely the kind of thing that, although probably it could be considered within the EU—it should be considered, to pick up Viscount Hanworth's question, as a major structural reform of the EU ETS—in practice, it is hard to see the EU ETS getting its head around such a fundamental revision, whereas the UK would be in an easier position to do so perhaps outside of the EU ETS, as part of an overall restructuring.

I think that is the key to putting a serious carbon price in place, if we are serious about these kinds of targets.

- Q41 **Lord Trees:** Good morning. A couple of short questions, and I am sure they will only require short answers. What will be the status of the UK's current climate targets post Brexit? If the Government are so minded, is it straightforward to retain our obligations to the UN?

Jonathan Gaventa: On of the status of existing targets, I suppose there are two aspects: one is the domestic legislation in the form of the Climate Change Act, which should continue relatively unscathed, although the issue of accounting regime has already been raised. As for our international climate obligations, we make commitments to the UNFCCC as part of the EU bubble, and that is shared out by two instruments: one is an effort-sharing regulation which covers the non-traded sector, and then the EU ETS. There are a number of different pathways the UK could pursue in continuing its international commitments. It is likely that at some point the UK would need to develop its own NDC, or nationally determined contribution, towards it, which is essentially merely a restatement of its existing commitments to greenhouse gas reduction.

Bob Ward: On the specific point about accounting, we were persuaded by the Committee on Climate Change's argument that if we are outside the ETS, the fifth carbon budget target should become 61% instead of 57% because that added ambition needs to be there. There is the additional factor that if, as most economists expect, there is a hit to the UK economy from Brexit, either a reduction in growth or even a recession, that will probably reduce our annual emissions, and will then alter what would be a cost-effective path for emissions, arguing for maybe a tightening of the targets.

- Q42 **Lord Selkirk of Douglas:** What has been the impact of the introduction of legally binding targets under the EU framework? Are these legal targets necessary for the UK to deliver on its international obligations?

Professor Michael Grubb: There are obviously three targets under the 2020 framework, as it was known, not specified in the same way under the EU 2030. The dominant target is the one under the UK Climate Change Act. That shapes our path out to 2032 as well as the goal for 2050. In that sense, clearly, the EU renewables target, subject to separate discussions, has had an impact on UK policy, and one can debate whether or how that is useful or counterproductive and whether it should continue in soft or hard form.

One point to note is that presumably one would want some kind of trade agreement with the EU after Brexit under any scenario, and the EU has started introducing renewable energy obligations under some of its trade agreements; it has done so with Singapore and Vietnam, for example, so one does not necessarily escape any international pressure to clarify what you are going to do on renewable energy. At the end of the day, we have a Climate Change Act, we have targets out to 2032, and it would be very natural to embed those under the UN framework as our nationally determined contribution. I do not see any major problems arising in that.

The Chairman: Any other comments on that?

Bob Ward: With the EU, I think it is worth pointing out that, because the UK has been cutting its emissions more quickly than other Member States, the EU's target of 40% reduction relative to 1990 by 2050, set for 2030, will be more difficult for the other Member States to collectively achieve. Essentially, in 2014 in the 28 Member States, if you include the UK, it is 24.4% lower than in 1990; if you exclude the UK it is 22.8%, so they have further to go to reach that 40%. That is worth saying: that the EU will find that 40% target more challenging to reach without the UK.

The Chairman: That is an interesting point. Thank you.

Jonathan Gaventa: Perhaps one supplementary point on the renewables target: I think it is important to draw a distinction between the 2020 renewables target, which includes legally binding targets at national level, from the proposed 2030 renewables target, which is meant to be binding at EU level but does not include binding national commitments. Once you consider the time frames that we are looking at for the UK's exit from the EU, looking forward to 2030 is a more open question than 2020, which is much more proximate.

I think there is a value case for the UK clarifying its relationship to the 2030 package for greenhouse gas, renewables and energy efficiency targets. Even if the UK does not pick up a nationally binding renewables target, investors and our European partners will be looking for a signal of a continued commitment along the path that we have been travelling.

The Chairman: Thank you. We now move on to our continued international roles and influence. Lord Cunningham.

Q43 **Lord Cunningham of Felling:** Gentlemen, do you regard the UK as currently being influential in the development of climate change policies, and if you do, how will leaving the European Union affect our role and effectiveness in the future?

Professor Michael Grubb: I think the UK has been punching above its weight in the international climate process, predominantly through its role within the EU. Obviously, the negotiations have a focal triangle of China, US, EU. The UK was chairing a number of the key negotiating streams at the Paris Agreement. The UK has also wielded a lot of influence through its diplomatic network. It has had the best of both worlds: it has been able to project EU power and shape EU power in the global negotiations, and it has had its substantial diplomatic network globally doing the soft-power work of persuading countries to be more engaged—obviously, David King's role at the Foreign Office as special representative has been a significant part of that. The UK has been very effective.

If we have Brexit, the UK would no longer be part of the EU formal negotiating team. In the UN, one would need to think where else the UK might sit, because it is all organised around groups. I guess perhaps the most likely, or least unlikely, might be what is called the Environmental Integrity Group, along with South Korea, Mexico, Norway, Switzerland and Lichtenstein. That would seem to me the natural group with which to try

and affiliate, but I think that would put into sharper relief what happens with the FCO's diplomatic network in this area.

Jonathan Gaventa: I would emphasise that in principle we see no reason for the UK's influence to be significantly diminished. However, we are very concerned about the UK's diplomatic capacity going forward, in particular given the extensive pressures for diplomatic capacity in the EU negotiation and international trade negotiations. Any diminishment of the FCO and other diplomatic efforts on climate change would be concerning.

Bob Ward: Can I make a point? It is not just about directing the negotiations. The UK is a leader worldwide because of the Climate Change Act and because of the work of the Committee on Climate Change, et cetera, but the real test for this new Government is the extent to which the low-carbon transition is seen to be embedded in its new industrial strategy and is reflected, for instance, in the actions of DFID and the Department for International Trade. The UK has a comparative advantage in many areas of climate change business, from the finance sector to the development of marine renewable technologies. It ought to be, for its own benefit, seeking to extend those, and if there needs to be more emphasis on activity outside of the European Union, if there is a loss of trade with the European Union, the low-carbon economy offers many opportunities to do that, and by being seen to be a leader in implementation, by developing the technologies, products and services we need, we will gain in influence. The UK has been a leader—Pete Betts has led the EU negotiations in the international negotiations—and it is undoubtedly the case that it will be a big loss to the EU when we leave that the UK will not be there playing that same leading role; I do not think we can hide that fact.

Q44 **Lord Rooker:** What relationships that the UK does not have now, or is weak on now, should it seek to cultivate; or what relationships that it has now should it seek to preserve, to build on this leadership, taking it as a given from Lord Cunningham's question and your answers? We are going to be out. We still have a lead, whichever way we look at it, and we have the ambition to lead—we hope that this Government still have the ambition that came out of the Climate Change Act and other legislation, and we hope that they are tuned into the obvious leadership we have. If we are going to be out, what should we do now that we are not doing to cultivate and maintain relationships to help continue that lead once we are out?

Professor Michael Grubb: I think our answers will be slightly speculative but they at least need to be informed by some realism. Let me underline what I mean. Around the time of the G20 summit, I was in China, and it was very interesting to see the perspective from Beijing of Brexit. A region which is half our size has lost one of its Member States that is about 1/20th of our size, and they want us to prioritise trade and other relations. It is not quite going to work that way. The reality—and I am sorry if this may be pouring cold water or be unpopular—is that international relations, including climate change, will be driven to an important degree by the China-US-EU relationship, and the EU, probably without the UK, will be the third in that triad. I do not see how the UK can realistically have a major engagement in that triad. If I were to advise on how the UK could wield

influence in a constructive way—I am not—I would probably say that we have very good relations with Mexico, FOSAD, their Climate Change Act and so forth; with Korea potentially, so the Environmental Integrity Group; and work with countries such as Brazil and South Africa, which are seriously concerned about climate change, have a reputation for a degree of independent thought and engagement in the international negotiations, and collectively can wield quite a lot of clout. That is where I would put the effort.

Bob Ward: There are a number of fora that the UK participates in where it can still influence international climate policy. The Clean Energy Ministerial, for instance, is an effective group. The UK is a member of the commitment to double R&D spend, Mission Innovation; it is a member of the Intergovernmental Panel on Climate Change. At the UNFCCC level, there was the emergence of a new grouping, the high ambition coalition, ahead of Paris, which was very much responsible for driving in the stronger target, and I think the UK can continue to play a leading role in that group. It may become even more important if next Tuesday we end up with a climate change-denier in the White House and the potential for the United States to become a hindrance to international climate policy. A lot might depend on what happens next Tuesday.

The Chairman: That is a big question, which I do not think we will go into. We will keep our fingers crossed, whichever side we are supporting.

Jonathan Gaventa: I wanted to highlight three specific examples of how the UK can maintain influence. First of all, as part of the Paris Agreement, countries will need to develop mid-century decarbonisation plans. The UK will also under its domestic legislation need to publish an emissions reduction plan relatively shortly. There is an opportunity to make that plan not just a box-ticking exercise but something that can become a template and a diplomatic asset with other countries globally about how such exercises are performed.

The other two opportunities are more about co-operation on clean energy. The EU has developed an idea of an energy union, but there are already conversations about how that energy union might go beyond EU borders, for example, looking at south-east Europe, Turkey, North Africa, et cetera. As and when the UK is beyond the EU borders, it makes sense to have a framework that could pick up multiple countries and is not just a question of UK and EU.

The third example is closer to home: the North Seas' Countries Offshore Grid Initiative. It is an existing collaboration seeking to bring down the cost of deploying offshore wind resources in the North Sea. The Netherlands developed a new political declaration on this back in June, which nine countries of the region signed up to. The UK so far has not, not because anyone sees it as against our interests but because the timing was immediately before the referendum. However, it is now November, a number of months later, and it does not seem to have resurfaced on the Minister's in-tray, so this could be an early example of how the UK could demonstrate that it is still a co-operative player in energy.

Lord Rooker: This is a supplementary to something you said an hour ago. How seriously do you view this issue you have raised regarding diplomatic capacity?

Jonathan Gaventa: It is still an open question but I think it is a very serious one. There is a basic question of people and skills and a question of budgets. We are facing negotiations on a whole range of very technical aspects, and it is a concern that is shared, I think, by some other European countries and ourselves that both diplomatic expertise and subject expertise will be devoted to addressing the deep complexities of the disentanglement around Brexit rather than the pressing issues that we were already facing in needing to strengthen action on climate change.

Professor Michael Grubb: We would also want to link that with the industrial strategy and trade agenda. The UK is, for example, an important force in the Environmental Goods Agreement under the WTO, and that presumably requires the diplomatic networks to support effective action.

Q45 **Baroness Wilcox:** This is the last question. I have listened carefully, and I think you have pretty well answered it in the past few moments, but you may want to add something. If any potential negative impacts are identified, are there mitigating steps that could be taken? I think you have identified some.

The Chairman: That is really in relation to the global dynamics of climate change.

Jonathan Gaventa: As a general answer, I would say it is not beyond the gift of the UK Government and the EU institutions to maintain both the UK and the EU as leading lights on climate change internationally, but it is also far from automatic. This is something we will be following closely.

The Chairman: Thank you very much indeed, Professor Grubb, Mr Ward and Mr Gaventa. Thank you very much for your evidence and I bring this public session to a close. Thank you.

Grantham Institute — Written Evidence (ECB0004)

Introduction

This is a submission by the ESRC Centre for Climate Change Economics and Policy and the Grantham Research Institute on Climate Change and the Environment at the London School of Economics and Political Science to the inquiry on 'Brexit: environment and climate change' by the House of Lords EU Energy and Environment Sub-Committee. It highlights and expands upon the key points raised by Bob Ward during an oral evidence session with the Committee on 2 November 2016.

Summary of key points

The UK has excellent framework legislation in the form of the 2008 Climate Change Act which sets overall targets for mitigation and adaptation, and these will not be affected by the UK exiting from the European Union. However, 'Brexit' may have an impact on the achievement of the targets set out under the Act and associated legislation and regulation, including the carbon budgets, creating both opportunities and challenges.

On balance, it would be better for the UK to remain part of the European Union Emissions Trading System (EU ETS). However, withdrawal from the system could create the opportunity for the UK to introduce a more coherent carbon pricing mechanism across the whole of the UK economy.

The replacement of the Common Agricultural Policy could allow the UK to create a better set of incentives for the agricultural sector to prioritise both emissions reductions and increased resilience to the impacts of climate change.

On the international stage, the UK is likely to become less influential by negotiating on its own rather than as a leading member of the European Union, the Member States of which are collectively the world's third biggest annual emitter of greenhouse gases.

The implications of Brexit for UK climate and energy targets

Although the UK's carbon budgets are passed by the UK Parliament on the advice of the Committee on Climate Change and in line with the provisions set out in the 2008 Climate Change Act, Brexit could lead to the revision of the Fourth and Fifth Carbon Budgets. If there is a reduction in the growth of economic activity in the UK as a result of Brexit, as many economists have forecast (e.g. Bank of England, 2016), this would lower annual emissions more than originally expected and hence would alter the cost-effective path towards the 2050 target of reducing annual emissions by at least 80 per cent by 2050 compared with 1990 (CCC, 2016).

It would be sensible for the UK to adopt European Union regulations relating to energy efficiency, including strong fuel standards for land vehicles and product standards for electrical appliances. It would also benefit the UK to retain and enhance interconnections to the European electricity network to supplement domestic generation.

Brexit will mean that the UK does not need to pursue specific targets set by the European Union for the deployment of renewables and energy efficiency. This will make it easier for the UK to achieve emissions reductions through domestically appropriate actions. Targets for renewables and energy efficiency tend to undermine the effectiveness of the signal from carbon pricing (Taschini et al., 2014), although they do incentivise research, development and deployment, potentially leading to a reduction in costs.

In addition, Brexit will make it more difficult for the European Union to achieve its target of reducing annual emissions by 40 per cent by 2030 compared with 1990. The UK has been cutting its annual emissions of greenhouse gases at a faster rate than the average for the European Union. The latest figures published by the European Environment Agency (EEA, 2016) show that emissions from the 28 Member States were 24.4 per cent lower in 2014 than they were in 1990. But without the UK, the emissions of the 27 Member States were only 22.8 per cent lower in 2014 than in 1990.

It should also be noted that the process of leaving the European Union is likely to tie up significant institutional capacity that could negatively impact many policy areas, including climate change mitigation and adaptation.

The UK's participation in the European Union Emissions Trading System

On balance, it would be better for the UK to remain part of the European Union Emissions Trading System (EU ETS). There would be costs associated with extracting the UK from the ETS and to set up new domestic arrangements. In addition, UK companies benefit from being a member of the ETS because it increases the potential market within which they can sell and purchase allowances, reducing the overall costs of compliance (Doda and Taschini, 2016). However, withdrawing from the EU ETS would create the opportunity for the UK to introduce a more coherent carbon pricing system across the whole of the UK economy, with a stronger and more uniform price across sectors (Bassi et al., 2013).

If the UK continues to participate in the EU ETS, it should seek to retain influence over its operating rules. The weakness of the carbon price within the ETS is partly due to over-allocation of free allowances and partly due to a structural flaw that meant it could not adapt to the fall in economic activity that occurred during the economic downturn in 2008 (Taschini et al., 2014). The UK could continue to seek reform of the EU ETS to make it more effective in later phases.

The UK's withdrawal from the EU ETS would require it to change the accounting rules relating to the carbon budgets to take account of the loss of allowances. Under the Climate Change Act, emissions are measured by the Net UK Carbon Account. Under these rules the part of the budget covered by the EU ETS – power and energy-intensive industry – is set by the UK share of the EU ETS cap rather than actual emissions from these sectors. If the UK were to leave the EU ETS, then the accounting of carbon budgets would need to change, and the target would need to be expressed in terms of 'gross' (i.e. actual) emissions. The Committee on Climate Change has suggested that under gross accounting rules the UK ought to reduce its average annual emissions by 61 per cent between 1990 to 2030, instead of 57 per cent when including the ETS (CCC, 2016).

International climate action

Withdrawal from the European Union will mean that the UK is unlikely to undertake international negotiations as a bloc with the other Member States. The UK will, for instance, need to make a separate submission of its 'nationally determined contribution' to the Paris Agreement, and to separately ratify the Agreement, which the UK Government has indicated will take place before the end of the year.

The UK is a global leader on climate change mitigation based on its performance in reducing emissions in line with the Climate Change Act and associated Carbon Budgets (Bassi et al., 2014). It is likely to be less influential in international negotiations outside of the European Union bloc. It can maintain international influence, particularly through the financial support offered by the Department for International Development for efforts by poor countries to make the transition to low-carbon and climate-resilient growth.

The UK Government should embed within its new industrial strategy the transition to low-carbon growth. The new Department for International Trade should actively seek opportunities for exports and partnerships for UK companies that are developing and supplying low-carbon goods and services.

The UK should continue to be an active member of the High Ambition Coalition, which formed ahead of COP21 in Paris in 2015. The UK should also play an active role in other climate-related international fora, such as the Clean Energy Ministerial and the Intergovernmental Panel on Climate Change.

Brexit could also disrupt the agreement between Member States on climate change action. The UK has tended to be an advocate for strong action to cut emissions, and Brexit may make it more difficult for the European Union to agree on strong collective action in the future.

Even after its withdrawal from the European Union, the UK should continue to cooperate with the Member States, particularly to manage those impacts of climate change that cannot be avoided. The refugee crisis which has affected the European Union in recent years is an example of the kind of impacts that require coordinated international response. Research has concluded that climate change contributed both to the circumstances that led to conflict in Syria and the Arab Spring in 2010 (Ward, 2015).

Other impacts on UK climate change policies

The European Union Strategy on adaptation to climate change, was adopted by the European Commission in April 2013, and sets out a framework and mechanisms for increasing the preparedness of Member States for current and future climate impacts. The European Union does not set explicit targets for adaptation activities by the Member States, and the UK has a clear framework through the 2008 Climate Change Act, which mandates an updated Climate Change Risk Assessment and National Adaptation Programme every five years.

The UK's replacement of the Common Agricultural Policy should allow greater priority to be given to incentives for the agricultural sector to reduce emissions and increase climate resilience. This could include the development and use of crops that can better withstand, and even exploit, the impacts of shifts in

precipitation and temperatures as a result of climate change (Fankhauser et al., 2013).

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14 November 2016

Professor Michael Grubb, Jonathan Gaventa, and Bob Ward — Oral Evidence (QQ 36 – 45)

Professor Michael Grubb, Jonathan Gaventa, and Bob Ward — Oral Evidence (QQ 36 – 45)

[Transcript can be found under Jonathan Gaventa, Professor Michael Grubb, and Bob Ward — Oral Evidence \(QQ 36 – 45\)](#)

Jacob Hayler, Alan Andrews, and Sarah Mukherjee — Oral Evidence (QQ 23 – 35)

Jacob Hayler, Alan Andrews, and Sarah Mukherjee — Oral Evidence (QQ 23 – 35)

[Transcript can be found under Alan Andrews, Jacob Hayler, and Sarah Mukherjee — Oral Evidence \(QQ 23 – 35\)](#)

Professor Dickon Howell — Written Evidence (ECB0003)

What are the opportunities and challenges for the UK’s approach to environment and climate change arising from the UK exiting the EU?

All of my responses are specifically relating to marine environment policy. This policy area is on the few areas of UK policy where it is very challenging to take a divergent approach to EU policy development and delivery, simply due to the fact that we are geographically intertwined with our neighbours’ marine space. Nowhere is this more apparent than in the North Sea, where assessment and management of our exclusive economic zone (EEZ) cannot, for the most part, be undertaken without consideration of the regional sea basin. There are, of course, exceptions to this, most notably with place based activities that occur in the inshore region (>12 nautical miles). For the most part, however, effective management of this sensitive environment and the activities that go on within it, has to do be done with consideration of the wider biogeographic region as whole. This calls for some level of cohesion and consistency that previously was provided from working within the EU framework, or that of the OSPAR convention.

Brexit creates some clear challenges for UK marine environment policy, not least the sizeable task of extricating oneself from a sizeable EU policy and legislative framework. The first place to logically start is to undertake a review of policy outcomes and then to determine what mechanisms are available to deliver those outcomes, some of which may be legislative.

The challenge with not getting this process right is that a large amount of uncertainty could be created by not being clear on policy outcomes before starting to review and update the legislation. This lack of clarity could come about due to the need to be secretive around exit negotiations, or simply because the policy landscape is very complex. It is clear that within every Whitehall department they are reviewing those bits of their policy framework that have been negotiated with Europe to confirm whether, from a UK government point of view, they are still content with the policy positions as they were negotiated, and if not, what they would want to change.

It is also important to remember that marine policy doesn’t just address our natural marine environment and the protection that EU derived legislation affords it. We have a marine policy statement, which sets out the UK government’s vision for our marine space, five objectives to achieve this vision, and eleven sectors that UK marine policy can be broadly divided into as set out below.

Marine Protected Areas	Marine dredging and disposal
Defence and National Security	Telecommunications cabling
Energy production and infrastructure development	Fisheries
Ports and shipping	Aquaculture

Marine aggregates	Tourism and recreation
Surface water management and waste water treatment and disposal	

The challenge with Brexit for marine management therefore is not just focused on our natural environment, but also how each of these policy areas may need to be revisited and revised as the aspiration is that they are delivered in an integrated manner. This could include reformulating the policy need, revisiting the evidence base behind it, re-engaging with public consultation, the list goes on and on.

As a session of the Environmental Audit Committee on the 7th September³⁷, Therese Coffey MP, Parliamentary Under Secretary of State for the Environment and Rural Life Opportunities in Defra broadly stated that the Conservatives have committed in their manifesto statement to leaving the natural environment in a better state than that in which we found it so the EAC shouldn't worry that that they were going to repeal EU environmental protection. She also stated that the department wanted to focus on outcomes rather than prescriptive inputs and processes.

In reality, outcomes cannot be delivered without process that is consistent and in line with the principles of better regulation, i.e. it is proportionate, accountable, consistent, transparent and targeted. The delivery framework that built up to support the implementation of the Habitats Directive, for example, may at times be complex, but Defra's own review³⁸ reported that the implementation on the whole was good. To unpick this framework to create more flexibility could have the downside of increasing uncertainty for developers, NGOs, regulators and government itself. However, this shouldn't deter one from making policy changes to reflect advances in science and society over the last 30 years. Aligning UK and EU environmental policy, particularly around the Habitats Regulations and Environmental Impact Assessment Regulations, would mean that developers were operating in a known regulatory and policy environment and there would be certainty around interpretation, guidance and decision making.

In the converse, there could be benefits to reviewing and amending EU environmental policy. Policy areas such as the Habitats Directive and the EIA Directive were put in place at a time when what was needed was strong policy and law to prevent ongoing and severe damage to our environment. At the time, what was required was a means to prevent industry causing harm, to provide red lines that they could not cross. The way the policy and regulation was written was such that if industry didn't cross these red lines, they had little to concern themselves with the natural environment, or any social responsibility they may have to it.

It would be useful to review this policy in light of the world we now live in, one where we can better appreciate the value of our environment and it is broadly accepted that those who profit from it should be socially responsible for it, and not just commit to not damaging it. Red lines that cannot be crossed are absolutely still required, and these should draw on the body of knowledge across

³⁷ <https://goo.gl/MqcVOG>

³⁸ <https://www.gov.uk/government/publications/progress-of-the-habitats-directive-implementation-review>

our regional seas. However, it would be interesting to see the application of the work of the Natural Capital Committee put to good effect in the marine environment. This is not to put a price on nature so it can be traded, but to build natural capital into the decision making process such that decision makers are not just considering whether an activity causes a decrease in natural capital, but can require an increase in natural capital when approving activities, and those carrying out activities can consider this within their business models and take social responsibility for their actions.

What will the UK's legislative position be with regard to the environment and climate change after Brexit?

To assess how the legislative framework may change, it is important that one first looks at how the policy framework may change. It is my view that one should temper any anticipation of wholesale change in the policy framework with two important points. The first is that during the UK membership of the EU, we have been a wholehearted participant in marine environment policy negotiation and more often than not have led the policy debate from the front. The result is that it is likely that much of the policy framework will be retained either wholly or with some adjustments - the challenge will be in ensuring that the delivery framework remains robust. There may well be select flagship policy areas that will be focused on (including the Common Fisheries Policy), whilst a solution is found for alternative delivery or legislative mechanisms for the rest.

The second point is that whilst some pro-Brexit ministers within Whitehall may have publically denounced EU environmental policy³⁹ during the campaigning for the referendum, the political reality is that it would be very difficult, and publically unacceptable to wholly unpick the environmental policy framework that has overseen a fundamental change in the UK's natural environment since the 1970s. Indeed, in a recent appearance in front of the Environmental Audit Committee, Robin Walker MP, Parliamentary Under Secretary of State in stated that in his view it was "hugely important that the UK continues on its course as being an environmental leader and leading in strong environmental policy". This is slightly belied by the fact that DExEU⁴⁰ currently has teams for Economy, Infrastructure, Tax, Customs, Home Affairs, Public Services, Justice, Security, Data, Migration, Trade, International Partnerships and Devolved Administrations but no Environment. The reason given for this is that environment was cross cutting although it is still not clear what this actually means.

There are significant marine policy areas that would still not apply even if the UK were part of the EEA (Habitats Regulations, Marine Strategy Framework Directive, Maritime Spatial Planning Directive, Bathing Water Directive). In OSPAR, there is an international mechanism for cooperation that will become even more important for the management of our seas alongside other UN commitments such as the Law of the Sea, the Convention on Biological Diversity and the various agreements under the International Maritime Organisation.

That being said, the actual task of creating UK legislation that delivers the same policy outcomes should not be underestimated. There are advantages in marine

³⁹ <http://www.theguardian.com/politics/2016/may/30/brexit-spirit-crushing-green-directives-minister-george-eustice>

⁴⁰ <https://goo.gl/OdRhS4>

policy, in that the Marine and Coastal Access Act 2009 (MCAA), a relatively young piece of legislation, already has provisions within it that could partly deliver on some of the EU legislation that will disappear. Again, the most important aspect of any transition is to ensure that any delivery mechanism, legislative or otherwise, is driven by a clear policy outcome, and not the other way round.

For example, the MCAA has powers within in it to designate and manage Marine Conservation Zones (MCZ), which conceivably could be used to manage European Marine Sites (EMS) currently designated and managed under the Habitats Regulations. However, there are distinct differences in the policy outcomes for MCZs and EMSs, which broadly can be summed up as the MCAA allows greater consideration of human activities in designating and managing sites than the Habitats Regulations allows. So, if one was to use the MCAA to manage EMSs in the future, there would need to be assurance that the government was adopting a broad change in policy with regards to the any translation of the Habitats Directive and wasn't just being driven by the legislative tool to hand.

In the marine environment the main administrative burdens will be related to the consenting and licensing of activities in line with EU regulations. If one takes the view that the policy outcomes from which these regulations have been derived are going to have little change, then in the short term administrative burdens could increase as the body of case law becomes less relevant, new legislation has less interpretive precedent, and uncertainty in the decision making process increases. In the long term, there are possibilities for administrative burdens to be reduced, but where these lie remains itself uncertain without clarity over any change in policy outcome.

For the most part, the practical enforcement measures needed would remain the same. What would change would be the need for a clear framework setting out how the role of the European Commission and the European Court of Justice would be replicated in the UK, particularly in holding the government to account on their commitments.

Is there a rationale for developing UK environmental policy broadly in line with the EU beyond Brexit? Is this desirable?

As mentioned previously, marine environment policy is on the few areas where it is very challenging to take a divergent approach to EU policy development and delivery, simply due to the fact that we are geographically intertwined with our neighbours' marine space. Nowhere is this more apparent than in the North Sea, where assessment and management of our EEZ cannot, for the most part, be undertaken without consideration of the regional sea basin. There are, of course, exceptions to this, most notably with place based activities that occur in the inshore region (>12 nautical miles). For the most part, however, effective management of this sensitive environment and the activities that go on within it, has to do be done with consideration of the wider biogeographic region as whole. This calls for some level of cohesion and consistency that previously was provided from working within the EU framework, or that of the OSPAR convention. From a delivery perspective, what is paramount is that any change in policy or regulation continues to abide with the principles of Better Regulation, i.e. that is proportionate, accountable, consistent, transparent and targeted.

Of these principles, that of consistency may come to be seen as being the most important in coming years. For example, if a developer is building an offshore wind farm on the Dogger Bank, they would want to be sure that the way they are being regulated is consistent with other operators developing on Dogger Bank but within other member state's EEZs. Similarly, the delivery timelines and investment windows for nationally significant infrastructure projects are developed with the knowledge of a relatively well developed regulatory framework. The greater the uncertainty within this regulatory framework, the greater the risk that consenting will be delayed, which can have severe impacts on investment decisions. This was seen recently in Scotland with the Neart na Gaoithe wind farm which missed its contract for difference window due to being held up in the consenting process.

Please see my answer to question 1 for more comment on opportunities for UK marine policy.

Are there any environmental standards that UK businesses / manufacturing may particularly wish to preserve post-Brexit? What would be the effect on the UK's trading opportunities if these were to differ?

To reiterate previous comments, one of the most important aspects moving forward is that of consistency and certainty so that business understands the regulatory environment they are operating within. A recent government review found little evidence of gold plating within the Habitats Regulations and this applies as much to the marine environment as to the terrestrial. However, this is not to say that this area is perfect, and as mentioned previously there could be scope to make any translated policy and accompanying delivery legislation more effective for the world we now live in, however, we must be clear on what we want from our policy outcomes before embarking on wholesale reformation.

There are many transboundary issues in marine policy – the lines drawn on maps very rarely line up with marine biogeographic regions, and this means that we must work with our neighbours or we will not be able to manage the system holistically. Management of our marine environment has to be done on a regional sea basis, and this requires coordination and cohesion of policy frameworks and cooperation on the ground in delivery. One would hope that we would be able to agree on similar policy outcomes, but this may become more difficult without the negotiating framework of the EU. More focus will put on the OSPAR Convention to carry out this coordinating role, but one should be aware that the OSPAR Convention, and the guidance that comes out of it, does not have the same weight, either legally or politically, as being part of the EU framework.

The UK government should, at some level, be pursuing an agreement on how we manage our marine environment on a regional sea basis. If this is to be done through OSPAR, then approaches need to be made and agreements need to be put in place that have some strength in UK law.

Fisheries in the main area where environmental standards could plausibly be built into a trade agreement. Currently standards for sustainable fisheries in the EU are set through the Common Fisheries Policy. If the UK wanted to continue to sell fish to the EU, fish in EU waters, or to allow EU fishers to sell fish to the UK

and fish in UK waters, this may be considered as the trade of goods in an overall EU trade deal.

From both sides, either UK or EU, we would want to impose our own standards on either the sale of fish either way, or allowing the extraction of a resource from another territory (i.e. fishing). Unless the UK were to take a completely isolationist approach to fisheries, which is unlikely to be effective for all but the place based fisheries such as scallops and crustaceans, there would need to be environmental standards built into the economic mechanism for trading fish between the UK and EU.

How can the UK maintain its role as a leader on climate change?

No comment

What should the UK's future relationship with the EU look like with regards to environment and climate change policy?

See previous answers. There is a fundamental truth that we have to maintain a very close relationship with the EU on marine environment policy. This will require above all, clarity in the policy frameworks, even if they are divergent, and a cooperative relationship with our neighbours.

What relationships, internal and external, should the Government cultivate when developing its environment and climate change policy? Points to consider might include:

The Government will need to maintain good relationships on almost all aspects of marine environment policy as our marine environment is effectively a shared resource, with environmental, economic and social benefits for all those who share in it. If there is no bilateral relationship with the EU, then the OSPAR Convention would seem to be most appropriate body for regional cooperation. There are challenges even with this approach however, as OSPAR itself may need to be revised to make it fit for purpose and this will require the agreement of all contracting parties.

There are challenges around the relationship between Whitehall and the devolved administrations with regards to environmental policy. Although environment is a devolved matter, European environment policy was negotiated and agreed to by the UK government centrally, and then became an obligation to the devolved administrations. So although environment may be a devolved matter in delivery, that estimated 80% of environment policy which derives from the European Commission has been negotiated and set on a UK basis, albeit with input from the devolved administrations through established mechanisms.

This creates a challenge for the devolved administrations, as it stands to reason that any change following withdrawal from the European policy framework could apply to all devolved administrations equally. As such it would be in the devolved administration's interests to undergo a similar policy review as is taking place in Whitehall to ascertain what their current and future stance is on EU policy outcomes and engage effectively with DExEU. There is a risk that environment policy and delivery could be further fragmented by setting up distinct policy and delivery frameworks in each UK administration, which would be detrimental to the delivery of a coherent environment policy in the UK as a whole.

It could be said that Wales is already well prepared in this instance as they have already put in place a Wales Environment Act⁴¹ that provides the legislation needed to plan and manage Wales' natural resources in a more proactive, sustainable and joined-up way. They are planning to follow this with a Natural Resources Policy Statement which will be submitted in Spring 2017. If you compare this to Defra's 25 year Environment Plan, it could be argued that Wales are on a much stronger footing. Wales have put in place a legislative mechanism which will abide across administrations and gives the delivery agencies a clear basis upon which to act, whereas the current plan in England is a policy strategy, which although it is planned for 25 years, could conceivably only last until the next general election. This situation could be remedied by bringing forward an Environment Bill in England to consolidate the 25 year Environment Plan, although if this will happen, and when, is still uncertain.

15 November 2016

⁴¹ <http://gov.wales/topics/environmentcountryside/consmanagement/natural-resources-management/environment-act/?lang=en>

Trevor Hutchings, Abi Bunker, and Leah Davis— Oral Evidence (QQ 12 – 22)

Trevor Hutchings, Abi Bunker, and Leah Davis— Oral Evidence (QQ 12 – 22)

[Transcript can be found under Abi Bunker, Leah Davis, and Trevor Hutchings – Oral Evidence \(QQ 12 – 22\)](#)

Michael Jacobs, and Dr Doug Parr — Oral Evidence (QQ 57 – 65)

Wednesday 9 November 2016

11.45 am

Members present: Lord Teverson (The Chairman); Viscount Hanworth; Lord Krebs; Duke of Montrose; Lord Rooker; Lord Selkirk of Douglas, Lord Trees; Viscount Ullswater and Baroness Wilcox.

Examination of witnesses

Michael Jacobs, Director, IPPR; Dr Doug Parr, Chief Scientist, Greenpeace.

Q57 **The Chairman:** Can I welcome our witnesses to this further evidence session on Brexit and the environment and climate change? Can I welcome you, and make clear what is obvious, that this is a public session in that it is being webcast and it will also be transcribed? We will send you a copy of the transcription and if there is anything you see that is incorrect, please come back to us. I remind members to declare any interests that are relevant when they ask their questions. From my own point of view, I am a board member of the Marine Management Organisation, if we should discuss anything marine. I am also a director-designate of the Green Purposes Company, which is related to the privatisation of the Green Investment Bank.

If I could ask you both to introduce yourselves, not just to the Committee but to those of the public listening as well, and perhaps, Dr Parr, I could ask you to start.

Dr Doug Parr: My name is Doug Parr. I am policy director and sometimes-called chief scientist for Greenpeace in the UK.

Michael Jacobs: I am Michael Jacobs. My current role is director of the Commission on Economic Justice, which is a new initiative about to be launched by the Institute for Public Policy Research, where I am still currently acting research director. I am also visiting professor in the School of Public Policy at University College London.

Q58 **The Chairman:** Thank you very much. Perhaps I could start with a fairly broad question. What we are trying to do here is look at some of the broader Brexit issues in this area. In your view, how can the UK most effectively position itself to maintain high standards of environmental protection, assuming that we want those, and high levels of climate ambition after we leave the European Union?

Dr Doug Parr: Let us be clear. I think the evidence base indicated that the EU had been a positive force for environmental protection, and so leaving the EU presents some risks, depending on what standards are maintained in different sectors of environmental performance, but it is also true to say it presents some opportunities. Broadly speaking, on climate and energy, climate particularly, domestic action is driven by the Climate Change Act. It is perfectly possible to reconfigure our thinking so that we lead on areas

of international significance—I think, for example, of offshore wind or smart grid—where actually demonstrating to others the possibilities whilst simultaneously generating employment in the UK offers real opportunities here, which were not precluded at all by our membership of the EU, but I think the new politics around government at the moment would allow that.

Perhaps other opportunities would arise thinking about two areas where the European influence has not at all been wholly positive—in fact, it has been pretty negative—the Common Agricultural Policy and the common fisheries policy. Those policies in relation to agriculture and fishing could be reconfigured so as to have environmental protection at their core rather than as an add-on. We have publicly said that we think if there is money ring-fenced for agriculture, or at least money directed towards agricultural activity, it should be for the purposes of public good rather than simply for ownership of land. You can see how some innovative approaches there could be adopted. The same might be true in the fishing sector.

That said, there are opportunities but there are also risks. We see particularly deregulatory risks where regulation has been an important driver of improved performance. I noticed in the previous session you were talking about chemicals. I would particularly point to standards on, for example, vehicles, on air pollution and fuel economy, and on appliances. Those things have been of benefit to the UK population, and continue to be so, although certainly in the case of air pollution and vehicles, not of as much benefit as they should have been, but probably better than if we had not been a member of the EU as they were being drafted. There are certainly opportunities but there are also risks.

Michael Jacobs: I would like to answer this question in two ways. The first is legislative and regulatory. The gloriously misnamed great repeal Bill—misnamed because its purpose is to do the exact opposite of repeal, which is to incorporate all EU law into British law, with possible subsequent repeal, but nevertheless that is what the Bill will do—should, if it is done correctly—and we do not know what will be in it—incorporate all current EU environmental standards to which the UK is subject into British law. The core legislative framework of standards—and the question is about maintaining standards—should remain, and that is a very effective means of doing it. Some of the options for leaving the EU would have left those standards less clear but, if we are going to incorporate it all into British law so as to ease the path of subsequent transition, we should be able to maintain most of it.

The second part of the answer though is about the politics of this. The politics of the environment in the UK have been slightly strange over the last 30 or 40 years, since the European Union basically took competence over most environmental policy. The environmental movement has not had to do a lot of lobbying of its MPs in the UK and has not had to generate vast amounts of public support for strong environmental policy because the policies were being made at European level and the politics of influencing European legislation is different. You need to have public opinion on your side; your own Government, who you are primarily lobbying to make European law and regulation, need to know they have the support of the public; but it is a much more technocratic process, and that has largely

driven the environmental outcomes we have in the UK and environmental standards.

The exceptions, I would argue, are two. One is climate: the UK politics of climate in the late 2000s, and particularly the period 2006-2010, where huge amount of public concern was generated by the environmental movement and the scientists and so on about climate change, led the European movement. We enacted the Climate Change Act in 2008, which was stronger than European legislation and very much influenced the European legislation, and the targets that we have under that Act are stronger than we would have been given had we simply done this through the EU.

The other area I would say is there have been bits of natural habitat and farmer regulation under the modulated parts of the Common Agricultural Policy, the UK spend, which have been subject to quite a lot of British environmental politics. The point I make here is that we will have to reinvent British environmental politics in circumstances where we no longer have the EU as our primary legislative vehicle and it is unknown how that will work out. We think the British public are pretty green but they will be faced with lots of business interests and others who will no doubt argue that some of the things they wanted to do will not be good for business, will not be good for the economy, and so on, and we will have to do that in a different way from the way we have done it before.

It seems to me that there is all to play for there in political terms but it requires the environmental movement to re-energise itself in areas where it has become very technocratic over the last two decades, I would say.

The Chairman: Thank you very much indeed. You are telling Dr Parr he has a far harder job in future.

Dr Doug Parr: I think it is fair to say we are quite aware of that.

Lord Krebs: You have already touched on the questions I was going to ask, particularly Doug in his response, but I wanted to reflect a little bit more on the net impact on the UK's environment and climate change policies as a result of being in the single market and being part of the European Union. You have mentioned some examples where you think it could have been better, CAP and CFP, but overall I had the sense you are saying the net effect has been positive. Perhaps you could just elaborate on that a little bit.

Dr Doug Parr: Reflecting on the sort of trajectory of history here, if you conceive of the modern environmental awareness kicking off around the early Seventies, environmental regulation and policy has grown up with the UK as a member of the EU, and there are clearly a number of areas where it makes absolutely no sense to try to do stuff on your own. Climate is indeed one of them, and a kind of cause célèbre, but in terms of public health, air pollution is clearly one of those where a great deal of the air pollution that we experience is imported from the continent, and vice versa. Some of these measures that have driven improvements in environmental performance and energy performance have been done under a single

market mantra, or a single market legal status. I have already referred to appliance standards and vehicle standards, but the environmental measures, things like bathing water, fresh water, the Groundwater Directive and so on, were also done with a view to common collective standards to improve people's quality of life; for example, quite a lot of the social standards, worker protection and so on. We have those as part of a single market where we collectively trade but we also collectively expect to be raising the quality of life of the citizens, and of their environment, at the same time. That has been happening simultaneously across a whole range of regulatory activity.

We do not really have standards derived from our own politics, a point that Mike was making, and it seems to me that it would be foolish to cast aside some of those standards which, as I say, have potentially made people's lives better. Some of the environmental stuff around habitat protection could be domesticated, for want of a better term, without necessarily a dilution of standards. I am not saying it will; I am not making prognostications about the politics of all that, because I think in some cases it could be quite challenging, but in theory some of it could. Other stuff where we have been participating in a single market—appliance standards, vehicle standards—it makes very little sense for us to start to plough our own furrow when we are so intimately connected with the market elsewhere, and where those standards have been responsible for essentially greater disposable income for our citizens because they have lowered fuel use, they have lowered energy bills, and so on. Does that answer your question?

Lord Krebs: That is very helpful. I should, by the way, have declared an interest in that I am a member of the Climate Change Committee and chair the Adaptation Sub-Committee.

Michael Jacobs: I do not think I have anything to add really. I would say more or less the same. The value of the single market is that countries cannot undercut one another by lowering environmental standards, and that has been very important in this area.

Q59 **Lord Rooker:** I will jump my question, which is 3 on your list, because you have covered it, although I have a couple of points to raise that come out of it. One specifically is that you said, Michael, that the public were green. Were they green in the sense that they were ignorant about the fact that quality of life, clean beaches and clean water were from the EU, which they have been told was the bogeyman, or green in the sense of pushing for the policies, so they were receptive to changes in policy? There are two ways of looking at this.

What I really want to ask about is afterwards, in taking control of our own policy and everything else, what we have picked up this morning and in evidence the other week is the crucial regulatory function of the Commission in the sense that it can infract a Government. I know personally, and I suspect you know as well, that the Government are more fearful of the Commission than of the Supreme Court, and they have moved because they did not want to be fined. If the Health and Safety Executive on the one hand is looking after chemicals, and the Environment Agency is

looking after that, if we are out, who then makes sure that those two bodies make the Government operate the regs? At the moment they do it because they are audited by the European bodies on the basis of trade in Europe, so everybody knows our Health and Safety Executive is following the rules because the EU body has been to audit it, therefore every is okay and we can trade. There will be something missing when that is out. Could you address that? Then I want to ask Doug about the CAP aspects as well.

Michael Jacobs: Perhaps I can answer that. To clarify my previous answer, the word “green” was meant to mean environmental, not innocent. I am no better able to analyse why people voted in the referendum than you are, Lord Rooker. What we know about public opinion is that the environment is one of the things they think the EU is good for, but it did not outweigh the other things that 52% of the population thought it was not good for.

To take your substantive point, I think this is incredibly important. Like you, I have been in government only as an adviser; I was an adviser to Gordon Brown, both at the Treasury and in No. 10, on environmental and energy and climate change policy, and I know very well, like you, that the threat of infraction drove environmental policy. Our recycling targets were driven by the threat of infraction, and the sums of money that we were going to be fined were absolutely at the heart of that process. We know in air quality that it is that threat that has dragged Governments over the last 10 years towards higher standards, so you are absolutely right: without that sanction, what happens? We have to assume that, either because we are in the single market and the air quality regulations still apply, or in practice because we have incorporated them into British law, there is still a court that would be responsible for seeing whether or not the Government had complied.

I defer to lawyers on this but the question in my mind is exactly what kind of sanction the Supreme Court, or wherever this eventually ends up, can impose. The Commission can fine. The Supreme Court does not fine. It is likely to do what it has just done with the Government over air quality, which is a judicial review procedure, and the question is whether the Government have done what the legislation requires them to do in a reasonable and sufficient way, and the Government can be found against. Last week the Government were found against in relation to air quality and they are going to have to produce a new plan, but if the new plan is judged to be reasonable and so on, that is the whole sanction, and it is not a financial sanction. Domesticating environmental law creates a different structure of compliance and requirement, and that seems to me one of the major concerns about shifting away from it. It is less what standards you have; it is what compliance forces government into acting sufficiently to meet those standards.

Lord Rooker: Doug, I am not sure if you were here all the while. I raised this point with the previous witnesses, although, frankly, it was probably outside their remit. If we are outside either the single market or completely outside, there are things we might be able to do to make our environment better because we have more control. The example I gave them, which you touched on in your introduction, was the fact that the CAP does not target greenhouse gas emissions in agriculture, so the farmers get their money

and they are not required to do anything about reducing greenhouse gas emissions, whereas if we were outside we could say, “Hang on a minute, we are not paying any money unless you do something about methane and everything else”, which is huge—you do not need me to tell you—so we can have a lever over that. Do you see an advantage in that, in the sense it is something we could usefully do, or would the industry—this is the other argument—say that you are damaging it as part of the negotiations?

Dr Doug Parr: I completely agree with your premise that the opportunity of being outside Europe and designing our agricultural funding would allow for something like that. In fact, recently Secretary of State Leadsom signed up to improving the carbon content of soil by four parts per thousand every year, an initiative taken by the French. It was all done rather quietly but, nonetheless, that is recognising the role of agriculture in climate mitigation. I think our agricultural industry would not necessarily want to be seen like that, but there is an enormous opportunity for re-imagining our way of doing agriculture such that it meets a series of measures of public good which are not simply about food production. Obviously you want to make sure that food production happens alongside it, but there are examples such as more innovative use of land so that floods become less likely. You have mentioned greenhouse gas and soil carbon, and there are others. Personally, my view would be that you need to involve farmers very early on in designing projects that would allow things like agroforestry, which could simultaneously improve agricultural use, as has been found in various places. The scope for doing interesting things that are supportive of the environment and agriculture at the same time is quite large if it can be got right.

Michael Jacobs: This then becomes a political question of where the balance of political forces will lie when we come to replace the Common Agricultural Policy and the common fisheries policy in particular. Almost all environmentalists will say we do not know what the counterfactual of not being in the EU over the last 30 years would have been, but almost all of us believe that the UK would not have had such high standards as it has now in most areas of environmental quality if we had not been a member of the EU and if we had been doing it domestically on our own. We do not know what the counterfactual is, but our reading of public opinion and business opposition in many cases during the 1970s and 1980s and so on suggests that is the case. I do not think I am speaking out of turn on behalf of the environmental movement.

I do not think that is as clear going forward now as looking back over that period, so I think it is quite likely, particularly as we have the standards at quite high levels now in most areas, that under a counterfactually UK independent situation we would have had a different kind of politics from the politics we have, but who knows? The farming lobby is very strong, and it will want less environmental legislation and less environmental management in general than the environmental movement would, and when it comes to raising standards—air pollution standards are rising gradually—it is not clear whether that will be easier to do outside the EU or not. That is really the unknown politics of this, and we are moving into a

new political era as much as a new regulatory one, because that is where the regulations come from.

Q60 **Lord Selkirk of Douglas:** May I ask what would be the challenges and opportunities of pursuing environmental co-operation bilaterally or through the European economic area? As an extension to that question, you talked about bathing standards for beaches, and in many parts of the United Kingdom the quality of the beaches is very important for tourism and public relations. If a decision were made that that policy should be continued, do you have any comments on how best that could be achieved procedurally?

Michael Jacobs: This is an interesting one because bathing water is outside the single market—it is not a single market regulation—so that directive, along with habitats and birds, would not be covered if we were in the single market, if that happened, but the standards are very highly publicly supported. They are almost all—not completely but very largely—regulated through the regulation of the water companies, which are themselves highly regulated, and by and large, because they pass on their costs in their water rates, they do not mind doing all this stuff. Bathing water is not highly politically charged except, of course, when it comes to consumer bills for water. Every time there is a new investment and pricing framework for the water industry, there are, quite rightly, significant concerns about the effect on low-income households, particularly in certain parts of the country, and it is a very geographically differentiated system, which means that people pay different bills in different parts of the country. Cornwall and the south-west are always justifiably complaining that they have to spend all the money on the beaches but they have some of the poorest communities in the country. So there is a politics of this but it tends to be quite some distance from the bathing standards that have generated those problems. My guess is that we will maintain those standards and we will continue to regulate in that way for them. There are other areas which will be much more difficult to do.

On the EEA, if we had a Norway model, Norway participates in most European things, some of them by law under its EEA agreement and some of them simply through co-operation. It will be very difficult to leave. It will be quite bloody for political reasons but afterwards, assuming we were out and there was an agreement, my guess is that all European countries, including the UK, would want to co-operate on the things it is sensible to co-operate about. There is not much dispute about the value of environmental co-operation and I think it will be relatively easy to do that. Norway and in fact Switzerland, on environmental things have largely very easy, civilised relationships and so on. I do not think that would be very difficult in practice.

The Chairman: Is that somewhere you would see an informal relationship working rather than some sort of high-falutin' treaty arrangement?

Michael Jacobs: That would be the question of the Brexit deal. Is it a formal arrangement like the EEA, which is a treaty between the EFTA countries and the EU, or is it more Swiss, is it bespoke and takes much longer and is more complicated? Either way, I do not think the environment

is likely to be a significant area of dispute, and once the difficulties of Brexit are out of the way, that should come relatively easily.

Lord Selkirk of Douglas: May I ask very quickly what you perceive might be the biggest challenges we would have to face in this connection?

Michael Jacobs: The Common Agricultural Policy and the common fisheries policy are much harder than everything else. Norway is not subject to either of them, and they are areas both where the environmental movement has the most concerns about the existing framework and where, as Doug says, there is an opportunity outside the EU to invent something else, and where there is lots of European money. The European money clearly needs to be replaced in some form or another, so it involves not just a regulatory process, which will be difficult, but a budgetary one, which will be very difficult, under circumstances in which the UK fiscal resources may be less, for economic resources, than they were before, and where the farming community and the fishing community will be competing with everybody else who wants the money that is possibly made available, or not.

Q61 **Lord Trees:** That brings us nicely to my question about EU funding of UK policy. How reliant is the UK on EU funding, including all sources and including the European Investment Bank, for its environmental protection and climate change mitigation and adaptation, and would you expect any of that funding to continue?

Dr Doug Parr: One of my semi-detached colleagues on the Greenpeace energy desk did some analysis of EU funding and what might be put under threat after Brexit. I am quite happy to supply those articles to the Committee. In outline, for what can loosely be called environmental spending, about €5.8 billion is earmarked to flow to the UK between 2014 and 2020. The assumption is that that will continue pretty much up to the deadline. That comes partly through Common Agricultural Policy and the so-called pillar 2. It also comes through other areas like the LIFE pot, and there are one or two other bits and pieces where that money goes. A lot of it is for habitat restoration or habitat maintenance or improvement. It is not at all clear whether that money will be maintained in the post-2020 period, when we are responsible for our own spending and deciding whether or not, for example, to improve the habitat of the bittern, which is one of the success stories of EU funding. I think some of it also goes under structural funds as well, but there is a breakdown that I can supply.

Turning to the question on the European Investment Bank, the numbers from last year are that there was lending of about €3.6 billion. Mostly that went to large renewables projects, such as, particularly, offshore wind. The status of the EIB lending in a post-Brexit world is one of the issues still to be resolved, so whether that money will continue to flow or not is an open question. I think the experts my colleagues spoke to were, shall we say, a little sceptical that it would continue to flow on that scale when the UK ceases to be a member of the EU. There is no formal mandate or statute that says the EIB cannot lend to people outside the EU, but is it likely? I think most people would expect not.

Lord Trees: Are there examples where it does lend to countries outwith the EU?

Michael Jacobs: Yes, mostly developing countries and emerging economies around its borders, which is a different kind of funding from funding its core members. The UK could remain a shareholder and put money in, and under those circumstances it would be quite hard to argue that it should not get some money back—it is not quite clear why we would put it in otherwise—but the flows may or may not be the same. Those are semi-political decisions. They have been absolutely critical. This is a public investment bank and it takes risk, which allows private flows. The leverage it gets from the amounts of money it puts into private investment because of the risk it can take is very significant. The UK and every other country in the EU that has used EIB funding has had far more investment as a result of that. It is a really significant instrument of environmental policy.

The Chairman: I was wrong in my own mind. I understood that we could still receive EIB finance but I did not realise we could remain a shareholder with the rights that obviously go with that.

Michael Jacobs: The UK could presumably, if it wanted to do so, say, “We would like to remain a shareholder. Is that okay?” and it would be up to the remaining shareholders to say whether it was okay. It would be odd for them not to accept UK money, I think.

Q62 **Duke of Montrose:** First of all, let me declare an interest as a farmer for many years in Scotland, receiving money under the Common Agricultural Policy. The question is: what has been the effect on the UK’s environment and climate research outputs of working with the EU? There was a report produced from a Committee of this House that, as far as I can remember, talked about a similar sum of money to that mentioned by Dr Parr as coming from the EU for environment generally. A fairly hefty sum came from for environmental research, which we are likely to lose almost entirely. The pillar 2 funding is environmentally based, under the Common Agricultural Policy, but in fact there is quite a lot of compliance required under the pillar 1 money; it does not just go straight into the farmer’s bank. The other thing of course is that things like nature reserves do not bring in any money; the cost of nature reserves is the cost of running SNH, for example. One should look at what proportion is going into the environment at the moment. Could we find out whether Brexit would have a negative effect on the research relationships and, if so, how it can be mitigated?

Michael Jacobs: There is no question but that it will have a negative effect. There is a lot of money, but it is more than the money; it is the complete intertwining of European research efforts, as many scientists have been pointing out. British science and research, social science as well as natural science, is thoroughly European; in fact, it is pretty global. Scientists work together. Because you have European funding streams, Horizon 2020 in particular, which are joint bids—they have to be joint bids—you have the required integration but you also have a natural cultural integration of research units. This is not just the money; it is the integration of British scientists into European projects, and vice versa, and the cultural richness that that brings—the fact that almost all European environmental research

is pan-European, so you learn about different models of doing things in the whole of the European Union. This is much more than just the money: the money is huge, but the whole way in which science and academic research has been organised since we have been a member of the EU is at risk.

Again, the question will be how much of that can be sustained and, again, as with environmental policy, my general presumption is that most researchers and academics around Europe would want the UK to remain part of those things and the UK would want to remain part of them. Co-operation ought to be available, but it is hard to see the money being available. This is European money for European Union members. People will want to continue the idea of co-operation, but it is hard to see the money going to the UK, and it is huge.

If I can just expand the question slightly, it is not just research; the European Union funds lots of things. We have had 40 years integrating with the EU. I looked this up this morning: there are currently 108 European grant schemes of one kind or another, or calls for proposals, available in the environmental field. Some of these will be small—they are for community organisations, for farmers and researchers and so on. We are very integrated in the way we do things, and lots of money flows come into the UK. Even though some of these are small, it is the breadth that is, I think, very striking. I do not see why this would continue; however much people wanted to co-operate. I do not see why we would have access to European Union money when we were no longer members.

The Chairman: Perhaps I could bring Lord Krebs in to ask a supplementary on that, then bring Dr Parr in.

Lord Krebs: Very briefly on that, is it not the case that certain countries that are not members of the European Union, including Israel and Switzerland, nevertheless participate in European research programmes like Horizon 2020 and the ERC? Obviously, one pays a subscription, but there are mechanisms for remaining within these programmes even if you are outside the EU.

Michael Jacobs: That is indeed the case. Those countries do not have nearly the sums of money that we have, partly because they are smaller and they have less developed academic bases and so on. It is an open question as to what could be negotiated afterwards but I think it is very hard to see us remaining as integrated as we are now.

Dr Doug Parr: I do not want to repeat what Mike has said, but, anecdotally, I think it is very much more than the money. It is about the ability to integrate culturally and in an interdisciplinary way with other centres of expertise across Europe. Anecdotally, people are already finding that they are not likely to be made lead investigator on something where they otherwise would. They may or may not be able to participate in the project but the idea that they are going to be lead investigator, with a package of EU money, when we are outside Europe is just not going to happen.

In some ways, I am less worried about the money simply because this Government have set themselves on a track of saying, “We want to innovate, we want to drive the knowledge economy”. I do not think that money, particularly on environmental but more generally scientific research, is banked, but there is a plausible political pathway towards maintaining the money. However, the prospect of being able to maintain that innovation through our access and involvement with other countries in other parts of the EU I think is threatened.

The Chairman: Mr Jacobs, if you had further information about those however many projects, I think that would be very useful for the Committee.

Michael Jacobs: I will send a link to your clerk.

The Chairman: Thank you. We move on to Viscount Ullswater.

Q63 **Viscount Ullswater:** I just inform the Committee that I am a life member of the Supporters of Nuclear Energy, and I am a trustee of an agricultural estate in Cumbria. Dr Parr pointed out, and as we are talking about co-operation now, that the UK will continue to share the physical environment with the EU, although it will no longer have a formal role in the discussions that will regulate it. Mr Jacobs, you were giving me the impression that the EU had raised the environmental standards—although we were complicit in that, the EU had been the driver. What should the UK’s strategic priorities be with regard to working with and influencing the EU on environmental and climate issues? Are there any policy areas which the EU might put forward that would have a negative effect on the UK?

Dr Doug Parr: Some strategic priorities for working with the EU spring to mind. I have already mentioned air pollution, and there is a whole suite of regulatory standards where we share a common space. Those apply to vehicles, but we should also work with the large combustion plants directive, NEC ceilings, and the industrial emissions directive, because I think it would create quite a lot of animosity if we were effectively lowering our standards and dumping pollution on our European neighbours. We will have to work effectively, and we may even need a new institution—I am not quite clear how this is going to work—around fisheries, because fish move about, and so having an environmental science-driven approach to catches and take is an area in which we will have to co-operate with our neighbours; it will be absolutely essential.

I would also point to the single energy market, because I do not see that it is in anybody’s interests—except maybe some utility companies, but even they do not seem to be pushing against this—not to maintain our relationship in a single energy market. It lowers costs for consumers, it allows more integration of low carbon, and improves security on both sides of the channel. I would hope that continued membership of the single energy market would be applicable.

Michael Jacobs: I agree very much with Doug on those, but I will add one, which is climate policy. The UK has been a leader within the EU on climate policy. Whereas you heard me rightly saying that I think being in the EU has raised standards in most environmental areas higher than they would

have been had we been out, on climate policy the UK has helped to drive European policy upwards over the last 10 years or so. The immediate effect of our leaving will be to lower EU climate targets, because we have a slightly disproportionately high share of the EU total. Our coming out will reduce the targets but it will also, more importantly, take a really important voice out of EU policy-making.

The UK has, on almost all aspects of climate policy, under all three kinds of Government we have had since this started in the mid-2000s, been very progressive and pro action on climate. The question is how you carry on doing that. The EU's domestic—that is, EU-wide—climate policy is decided by itself, and although it talks to Norway about it, it is not made by Norway and Norway obviously has no vote and Switzerland even less, and so it is hard to imagine how we would do it. Even on the international stage, Norway, which is very close to the EU on climate policy—it adopts EU climate targets, so basically takes EU positions—is not part of the EU negotiating bloc; it is part of the umbrella group which includes the US, Canada, Australia and Japan, not all of which have always been particularly progressive on climate. Switzerland is part of a little group with Mexico and South Korea called the Environmental Integrity Group. The UK's voice will diminish hugely not just in the EU's domestic policy but in its international role.

Paris obviously has set a really important framework and the UK was very important to that as part of the EU, but we have not finished; we are going into a new round of international process, to stocktake in 2018 and a new round of commitments in 2020. The world will have to keep pushing at these. The UK has been a really important part of that in the EU and I fear that our voice, even if we take the same stance individually, will be weaker, and we will not have that impact on the EU and therefore on the rest of the world. I think that is very regrettable but I cannot really see how we can do it from outside.

Q64 Lord Krebs: My question builds on what you have just been talking about. You were talking, Mike, about influencing global policy in relation to climate change and the climate change targets, but if we think about how we will influence EU policies from outside the EU, whether we are in a Norway position or in a Switzerland position or something else, are there any examples—you have slightly alluded to this—where countries not in the EU, and therefore not sitting around the table, have nevertheless been effective in influencing EU policy? When we took evidence from the Chemical Industries Association earlier this morning its representative said that the UK had been particularly important in influencing environmental policy because the level of respect for our analysis of risk and the scientific evidence behind it gave us a stronger voice than we might otherwise have had. Once we are outside, will that strong voice still be heard?

Dr Doug Parr: It is difficult to imagine it, because the examples of Norway or Switzerland that we have do not provide a great deal of purchase. Obviously, they are smaller countries, so we are to some extent in unknown territory. At that point I think I should stop, because anything else I say will be pretty speculative.

There is one thing I should add. It is a very particular thing to UK industry and standards, which is that, as an example of the difficulties we might find ourselves in in accessing EU markets, in the vehicle standards, for the cars and CO₂ directive, which essentially mandates fuel economy standards, special provisions were made for a particular niche, mid-range manufacturer, and I do not think it is a secret that that was essentially done to accommodate Land Rover. In the absence of a UK voice on the next stage of those, I do not see what interest there is in the remaining EU states maintaining a nice little special treatment for Land Rover.

Michael Jacobs: It was not only Land Rover; all our niche sports car manufacturers also had special rules. I completely agree with you. We will have to comply with all those standards, because we are trading into the European market so we cannot have domestic product standards, but there will not be any special provisions for UK manufacturers. That is absolutely true.

I think Doug is right. The size of the UK makes the Norway and Switzerland models not necessarily decisive. They have no say. On the other hand, it is hard to see why, however big a country you are outside it, the voice of a non-member would have any weight at all in the politics of the EU, because it is decided by the countries, and they are trading off their own domestic interests. Why would somebody not in the club have a say? I find it hard to see that.

The one exception I would make to this—and this returns us to the politics—is that the European environmental movement does not need to do a Brexit. European environmental organisations collaborate with one another a lot and, particularly in western and northern Europe, they conduct a common conversation about environmental politics and policy. There is no reason for them to say to the UK, “You are no longer part of those forums and discussions and common campaigns”. If we need to do something new in Europe as a whole, of which air quality and fuel standards would be a very good example, and we are trying to get the European Union to raise standards and so on, the European environmental movement could act as one, and the UK environmental organisations, which are particularly strong, well organised, and so on, could be a very important part of that. You could find them pressurising a UK Government to be in the conversation, which is the same conversation that the French and German NGOs are doing. You could imagine a European environmental politics which did not operate with the UK outside and then influenced both UK and EU but separately.

Q65 **The Chairman:** That is very useful. Let us move on to the question I was going to ask, which is: what relationships should the UK seek to preserve or develop with Europe and international partners? We have talked a little bit about that, as to informal or formal areas, influence globally, and the EU influence on climate ambitions and regimes. I would be interested in further comments on that. We have had quite a game-changer this morning around the climate change area, and TTIP, which you mentioned, with the change of regime the other side of the pond. I wondered how you thought, if at all, that might change the dynamics in this area of the EU-UK relationship.

Michael Jacobs: On climate change, the event that you coyly refer to, given that this transcript will be read for many years beyond today, is the election of Donald Trump as American President, I presume.

The Chairman: Thank you for clarifying that. You are right. In history we need to be remembered, yes.

Michael Jacobs: There is no question about that, unless he completely changes his views on climate change, which he might do; we do not really know how much of this was just campaign rhetoric, but he is pretty much on record as a climate change denier. He has said he would support the American coal industry, which is on its way out, as indeed is the coal industry in most parts of the world now—coal-fired power stations and so on—and that he would rip up the Paris Agreement. The Paris Agreement was very cleverly designed. The international community is not stupid. There is a four-year withdrawal period after a country notifies that it might wish to withdraw, which clearly takes you beyond one presidential term, and that is not a coincidence.

My general judgment is it would be very bad—it is very bad—for the general global movement towards reducing emissions and climate change, which received this huge boost in Paris, where finally the world came together around very serious long-term goals for all countries. That has been reinforced by the very rapid transition into international law this year, within a year, the HFCs treaty, the fact that the International Civil Aviation Organization now has a climate policy and so on. There has been a lot of progress, and all of that is without question challenged and put at risk by the election of an American President who does not believe in it, does not want to act and is tearing up American domestic law.

It does not stop it all happening. America will remain part of the Paris Agreement until it formally withdraws, and although American policy will change, a lot of American policy is driven by the states and it is driven by the economy. The reason why Texas is putting in lots of wind power is not that President Obama wants to do climate policy; it is because wind power is cheap, and it is defeating coal and oil on the grid, with some tax credit subsidies but basically without subsidy, and that is happening all over the US. Solar power and wind power are powering ahead in the US, as in the rest of the world, and presidential decree does not change that.

There is no question but that it is very bad, but we should not regard this as the end of climate policy in the US, let alone internationally. The reason why countries are all embarked on the decarbonisation process, slower or faster, is that it is good for the economy, it is good for air quality and so on and so forth. This now has a momentum which is economic and cultural, not just political, and certainly not just driven by an international treaty.

That was my general point about President Trump. In answer to your specific question, I think it will force progressive countries together on this. This will incentivise the EU to remain very close to the UK, assuming the UK remains a climate leader, and there is no reason to think the new Prime Minister is not as much as previous ones have been. I think the same will be true with Norway, with Switzerland and with other countries. The so-

called high ambition alliance, which was the driving force of the Paris Agreement—it was an alliance of European countries, some other developed countries, including the US, the least developed countries, the islands, and so on—I think will be reinforced by this, and those are the vast majority of countries. China is doing this for its own reasons and so on. This will reinforce international co-operation among all those countries that want to continue to act on climate change.

The Chairman: Thank you. That is an interesting perspective.

Dr Doug Parr: I agree with Mike on an awful lot of that. This is not the end. If you look at the factors that underpinned the success of the Paris Agreement—things like, yes, the impacts of climate change were becoming more real and, yes, we had a helpful presidency in the White House—let us not forget there was also a significant change of heart in China, driven by its domestic concerns around air pollution, coal and so on. A massive part of it was also the collapsing cost of renewable power in particular, which made something that looked incredibly expensive in the failed negotiations at Copenhagen start to look a fairly good idea, and those things are not changing. For states like the UK, which sit outside a negotiating bloc—I, too, think that that is a matter of regret, but we are where we are—there could be other initiatives around new technology, like the Indian solar initiative, where trying to effect things that are delivered rather than talking through the metrics of plans and targets would be a way forward, which would obviously change facts on the ground in a helpful and supportive way to the international process.

The Chairman: Thank you very much indeed. Thank you very much, both of you, for your evidence this morning. That is really useful. If there is any supplementary information that you would like to send us, we need it fairly quickly but we would be very pleased to receive it. Thank you very much. At that point I finish this public session.

Professor Andrew Jordan, Professor Maria Lee, and Professor Richard Macrory — Oral Evidence (QQ 1 – 11)

Wednesday 26 October 2016

10.30 am

[Watch the meeting](#)

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

Examination of witnesses

Professor Andrew Jordan, Professor Maria Lee and Professor Richard Macrory.

Q1 **The Chairman:** I open this public session, which is our first witness session in our inquiry into Brexit and the environment and climate change. I remind everybody, and particularly our witnesses, that this is a formal evidence session of the Committee; a full shorthand note will be taken and this will be on the public record in printed form and on the parliamentary website. We will send you a transcript, and if there are any errors on the transcript you are very welcome to let us know and we will change it. Quite obviously, this session, therefore, is on the record. It is also webcast and will be broadcast in due course on the parliamentary website. I also remind my colleagues here to declare any interests that they have when they take part in the questioning.

We have three professors before us, so that is going to be quite easy in terms of referring to people and getting the titles right. Perhaps I could ask each of you, briefly, to introduce yourselves both to the Committee here and to those who are listening in. Professor Lee, perhaps I could ask you to start and we will work across that way.

Professor Maria Lee: Thank you. I am Maria Lee. I am a professor of law at UCL where I work especially on EU environmental law and governance.

Professor Andrew Jordan: I am Professor Andy Jordan. I work at the Tyndall Centre at the University of East Anglia.

Professor Richard Macrory: I am Richard Macrory, also a professor of environmental law at UCL and a barrister. I should also say that I am a patron of the UK Environmental Law Association and am appearing in part on its behalf here. As a charity, it has been consistently neutral on in or out, before and after the referendum, but it is clearly looking very closely at the implications of environmental law for Britain, whatever model is taken. As we get on to the specific questions, because this is a work in progress, it is going to be very much my personal views and not the Association's view.

The Chairman: Thank you very much. Indeed, the Committee is looking at both the opportunities as well as the challenges of Brexit. In fact, that leads on very well to the first question, which perhaps I could ask you. What do you see as the opportunities and challenges for the UK's approach to the environment and climate change arising from the UK leaving the European Union? What do you think are the UK's key interests and objectives? If you would like, you can roll in, maybe, the European—the other side's—interests as well into that. I leave it very much up to you as to which of you want to go first or how you want to take that. As I can see indecision, perhaps I could ask Professor Lee to start us off on this one.

Professor Maria Lee: The opportunities and the challenges are quite similar in that we need to develop and evolve a thorough governance system for environmental protection in the United Kingdom. Currently, all our environmental standards and norms are profoundly embedded in EU accountability, governance and legal structures. It is vital that we create our own architecture for applying environmental standards and environmental norms. That is an enormous challenge. It is also an opportunity. We might do something rather wonderful with our environmental governance system.

As to key interests and objectives, from my perspective, it is to maintain very high standards of environmental protection.

Professor Andrew Jordan: To start with the second part of the question—the key interests and objectives—that is very much the great unknown at the moment. I know that the environmental groups and other organisations are very anxious about the environment, which was not an issue during the referendum and was not discussed very much in David Cameron's New Settlement. It has not really been a feature for discussion since 23 June and there is a real risk of it being forgotten. Defra has also undergone some quite significant cuts in recent years.

To come to the first part of your question—the opportunities and the risks—given that context, the environmental groups feel very strongly that some of the big opportunities, and there will be opportunities, may not be seized. There are opportunities around, for example, the reform of the Common Agricultural Policy and the ability, perhaps, to alter VAT on energy-saving goods and services. These opportunities will not be grasped fully and, significantly, some of the risks will not be mitigated sufficiently because the environmental part of this complex puzzle is not being raised at a sufficiently high level and to a sufficiently satisfactory degree.

Professor Richard Macrory: Taking the UKELA principles of how it is approaching this as a neutral organisation but one concerned with environmental law, it is trying to look at this on three principles. The first is that on exit, in whatever form that takes, we need a period of regulatory stability; and that will come on to the questions about the Great Repeal Bill. The last thing you want is to find that there are gaps, lots of litigation and so on; that will not help business or anybody else. Secondly, the current level of environmental protection, and the ability of citizens to participate in decisions should not be diminished by future changes in legislation. Lastly, we must recognise, as we have heard, that there will be

opportunities to improve things, if we want to. Not everything is right with EU law and the structure of EU law.

In very general terms, because it is very difficult to give specifics until one analyses this closely, from my time as an environmental lawyer, which I am afraid to say goes back a number of years, I saw the changes to the structure of UK law in regard to the EU as it came in. There are two big challenges, and it is a question of whether one wants to preserve that.

First, it is the introduction into law of quite precise emission standards and environmental quality objectives in a way that did not exist. When I first studied environmental law, there was lots of law, lots of procedure and so on, but the actual standards were left to policy guidance and a lot of discretion to government. That has changed. It might have changed anyway, but the EU did that.

Secondly, we see in various areas of EU environmental law legally binding targets and objectives, whether it is renewable energy or whatever. Again, there is going to be a challenge: do we want to carry on with that practice of putting objectives into law? Lord Krebs will know that the Climate Change Act is very unusual in that it has that in the national law. That is an unequivocal duty. One needs a debate about whether that is useful to do on the legal side or whether we are going to revert back to where it is more in policy guidance, can be changed and so on.

The Chairman: We will be exploring that a lot more later on.

Q2 **Lord Trees:** Can I just pick up on the opportunities, because most of our questions will, understandably, be about the problems and challenges? It might be appropriate, Chairman. Are there any good things that you can see on the horizon from Brexit with regard to the environment?

Professor Andrew Jordan: How one defines an opportunity and a risk, of course, is a matter of judgment and political view. I think the environmental groups see a big opportunity in the reform of the Common Agricultural Policy. It could be altered in a way that would mean decarbonisation activities—for example, the planting of trees to soak up carbon or the growth of BECCS-type crops, in the very high mitigation options—could be encouraged. There are other actors who are also thinking, “There is an opportunity in Brexit to push things that have, perhaps, until now, been held back or slowed down”. The exploitation of shale gas, for example, might not have to undergo stringent environmental impact assessment procedures. The commercialisation of GM has been slowed down by things that have gone on at EU level. I guess it depends on where you stand and which way you are looking.

The Chairman: Are there any other comments?

Professor Richard Macrory: Again, as I said, this is something certainly that UKELA, which has a committee, working groups, judges and lawyers and so on, is beginning to look at. It is going to take six months before its work comes out. I could come up with odd examples where the drafting is very strange in some of the European stuff. One could make that much

better. In terms of bigger things, I would not be prepared yet to comment. I do not think the work has seriously been done on that.

The Chairman: Professor Jordan, you mentioned something quite fundamental in a way, which is whether the environment would be left out of priorities among discussions or whether it would be an afterthought. How do you think that that can be changed? How can we make sure that environment does appear, or is it just a matter of getting a Defra Minister on the Cabinet committee? What are your thoughts on ensuring that environment does have profile?

Professor Andrew Jordan: It is obviously important, at all steps in this process, that the environment is involved, so that when the Great Repeal Bill goes through Parliament the environmental connection is flagged, and that when new trade deals are struck, either with the EU or with other organisations, there is a sustainability impact assessment undertaken. Professor Lee also pointed to the much more fundamental governance structures that will exist not simply in the period between now and when the Great Repeal Bill takes effect but beyond that. It is that governance system, as she quite rightly said, that will ensure that the law does not become fossilised or, as I said to you when I appeared in July, that it does not become rather zombie-like.

Q3 **Viscount Ullswater:** Perhaps we could get down to the specifics of the Great Repeal Bill, because the Prime Minister has announced her intention to introduce the Bill, which will turn all EU law that currently affects the UK into domestic law once the UK has withdrawn from the EU. As far as environmental regulations are concerned, do you see particular problems regarding the Great Repeal Bill? Also, are there implications in relying on secondary legislation in the UK in the absence of underpinning EU regulations?

Professor Maria Lee: Pretty much all areas of law are going to be really complicated. The fact that I say environmental law will not be so dramatically different from everything else is not a good thing. That just makes the whole process extraordinarily difficult.

You used the expression that all EU law will be grandfathered by the Great Repeal Bill. That has not been made clear. There is a question over whether it will be, literally, all EU law, treaties, regulations, decisions and directives, or whether it is just EU law that currently finds its home in the domestic system through secondary legislation. If we do not do all EU law, then there will be an enormous gap because we will miss everything that has not already been put into secondary legislation. So, the first thing is that we will want all EU law. There may well be some debate about how that applies to the treaty and how much of the treaty principles we want to continue.

The challenge in all areas, including environmental law, is that the legislation does not stand alone. The legislation is embedded in an EU governance structure, so the obvious example is things like chemicals regulation. How do we continue to participate in EU chemicals regulation when we are no longer a member of the European Union? Presumably, we will want chemicals that have already been authorised to continue to have

access to the UK market. Presumably, we will want chemicals that have been restricted at the EU level to be restricted at the UK level. These are not simple questions and they are not technical questions. They are quite profoundly political questions about who will be governing us and on what basis. The basic answer to your question is that all this legislation is embedded in EU structures, and unpicking that will be very complicated and political.

Professor Richard Macrory: Speaking as a lawyer, the ideal goal, which I think is the Government's goal, is to retain regulatory certainty until a conscious decision is taken to review and revise. That is a very sensible goal. If it was as simple as saying, "The European Communities Act is repealed but any orders or regulations made under it survive", we would be home and dry, but, as Maria said, it is much more complex than that. It is a matter of how law is integrated into the UK. We have to deal with European regulations, which do not require transposition. That can be done. We have examples in this country of legislation that refers to directives—that is called legislation by reference—such as environmental permitting regulations, which require the Environment Agency to have regard to or to follow certain directives. It seems to me, on the surface, that that should survive because they could refer to a WHO standard or whatever. Then there are various guidance notes that come in and so on, and we have to decide their status.

For me, the biggest challenge—I will be very interested in how the drafting deals with it—is what you do about decisions of the European Court that have interpreted directives. Do they survive? If they do not survive and everything is open, then we are in a great area of regulatory uncertainty. I have an example of a case I am reporting on this month about wind farms in Wales concerning the habitats directive. There has been a lot of case law on the habitats directive, such as how the precautionary approach applies and what sort of assessment is required, in fleshing out the details. The judge starts with saying, "I can summarise now in about seven or eight paragraphs what are the key principles that apply from this case law and then we will apply it to a very difficult set of facts".

My concern is, in a sense, that, if one wants regulatory stability, until we revise, we need to keep those interpretations in the law before one deals with it. That will be quite a challenge. Does one do it through the existing law or new cases and so on? I think it can be done, but if it is not done, if something is not done about that, then, potentially, we have a great big gap. I do worry. I did see a ministerial statement in the House of Commons on 10 October, which said that the Great Repeal Bill will convert existing EU law into domestic law wherever practicable. I always worry, as a lawyer, that when you see the words "wherever practicable" they are there for a good reason. That is the area we need to look at very closely.

Professor Andrew Jordan: To add a little more to what the other professors have said, first, the Great Repeal Bill will need in Section 2 to provide for the critical difference between EU laws that are directly effective—Decisions and Regulations—and those that require enabling legislation, namely, Directives. That will have to be made clear in the enabling legislation, because—and this is important—environmental policy

is enacted through a whole range of these different types of policy. It is not just regulations, for example.

The other thing to remember, and this could add some complexity to the process, is that environment is a devolved matter. Therefore, there will be some matters of an environmental nature or matters that could have environmental implications, such as energy and transport, which are reserved matters, and other matters, such as agriculture, fisheries and the environment, which are devolved matters. The potential there for political friction is very high.

There are two areas where there might be friction. The first is in the passage of the Great Repeal Bill. I am sure environmental actors and interests will try to promote the environment at that point. The other is in this process of legislative unpicking, which will occur once the Article 50 process has run its course and the Bill becomes an Act. There, I am sure, the devolved bodies will want to ensure that their views are heard and taken account of.

Professor Richard Macrory: It seems to me that what is required at the moment is a very detailed mapping exercise looking at all our UK environmental law and that which is devolved, saying, "Where has it come from? How has it come from EU law and what is it doing?" Then, when the Great Repeal Bill comes out, we will look to see if that maps in. I am sure the Defra lawyers are doing that. UKELA has working parties that will take about six months to study this Bill in fine detail. I think one will have to do that.

Q4 **Lord Krebs:** I want to pick up on a point that Professor Lee alluded to. I am not sure whether this was what you were referring to when you talked about chemicals. In setting environmental standards, the EU relies on expert groups that are Europe-wide. For example, in relation to GM regulation, EFSA would play a key role on risk assessment. One assumes that after Brexit we will rely on our national committees, such as ACNFP, for GM or ACRE. What would you envisage happening if the risk assessments that our body produced differed from those that were produced internationally at EU level, or would we rely on broader international risk assessment, such as WHO?

Professor Maria Lee: We are talking about products, so EU law applies quite differently if you are talking about regulating a factory, for example, or you are regulating a product, because products enjoy free movement through the internal market. If we, for example, authorise something that has not been authorised in the EU, it will not be allowed entry into the EU. If we are more cautious, then it will depend on the sort of trade relationship we have with the European Union as to whether we are allowed to ban entry of their less well-regulated goods.

In law that is quite straightforward, but in practice that is quite complicated. The bigger problem is rebuilding that capacity at the national level so that we take back, essentially, all the current activities that are being carried out at EU level, with all that vast shared expertise and resource.

Q5 **Viscount Hanworth:** I think my question has been almost superseded, but I will state it again. What are the existing processes by which EU directives and regulations are transposed into UK law? I understand that it is multifarious, complex and piecemeal. Do you have anything further to add to that? Is that an accurate summary?

Professor Andrew Jordan: I would refer the Committee to the comments that the Secretary of State made yesterday before the Environmental Audit Committee. I understand that she said that somewhere between 25% and 33% of EU law could not easily be transposed via the Great Repeal Bill into national law. I do not know the basis for that figure. It could, for example, equate to the total quantity of directly effective legislation—that is, regulations and decisions—versus that which has to be transposed, namely, directives; but I do not know.

Lord Rooker: This is a small point following something that Professor Lee said. In recent years, the impression has got around in this country that the EU, particularly the Parliament, has been a bit flaky on the use of science. Would it be the case that if we were stronger on the use of science for regulating a product, because we had used the science, and the EU, which was still being flaky, was not using the science—it has certainly happened in the pesticides area—but had used political pressure, judgments and lobbying, the chances are that our safer or better product, based on the science, would not get into the market? Is that the case?

Professor Maria Lee: There is so much in that question. It is really interesting, but I will not deal with all of it. It is quite legitimate that when we assess environmental quality, consumer safety and all those things, it is not just about the science. It is, indeed, about the world we want to live in and about politics as well as science. That happens at the EU level and it certainly happens at the UK level as well.

I will answer the real question in the same way as I answered Lord Krebs's question, which is that it depends, in part, on the sort of trading relationship we have. Basically, if they have banned it, we cannot export it to the European Union. If we have banned it, they cannot export it to us. There would be a disagreement; there would be a conflict. That is what the WTO is full of all the time.

Professor Richard Macrory: As Maria said, depending on the terms of the agreement, there may be various forms of reciprocal recognition of authorisations that could deal with that position, or there will be conflicts. That will have implications for trading.

Professor Maria Lee: It will usually be more subtle. It will not usually be a GMO case where everyone is very upset and there is a black and white disagreement. There will usually be little bits around the edges where we decide, mutually, to recognise our different safety standards. It will not usually be quite as political as that.

Viscount Ullswater: Like glyphosate.

Professor Maria Lee: Maybe not like glyphosate.

The Chairman: Let us move on. We have started to talk about regulatory gaps. Perhaps, Lord Curry, you could carry on, on this topic.

Q6 **Lord Curry of Kirkharle:** Thank you. I would like to follow the last conversation, but I want to declare an interest. I farm in Northumberland. I have had farming connections, but until last December I chaired the Better Regulation Executive, which is about trying to remove regulatory burdens and not introduce more, which is why my next question is rather odd.

In introducing this point, it seems to me that one of the reasons why some voted to leave was because of the intrusive nature of the European Union and its overlegislative approach. I would like you to comment on that. Professor Macrory, you mentioned that not everything is currently good. We do have an opportunity to review the landscape. Yes, the Great Repeal Bill will, hopefully, introduce it into domestic law, but after that we will need to review it. Do you think, in reviewing that, there are areas where we could improve or plug gaps?

Professor Richard Macrory: I am sure there are. I will call this the review period. We have a stability period and a review. If we lived in a rational policy world, one would be taking various sectors, such as waste and water, standing back and saying, "How can we improve the legal system?" Unfortunately, we live in a political world as well, so I do not think it will be as simple as that. There will be messy things that will get changed. My concern is that it is done as openly and transparently as can be done and is done with parliamentary involvement.

Let me give you one example, because it is very apposite. Air quality standards have been subject to litigation and there is litigation at the moment relating to EU laws. They are in very unequivocal terms. They simply state, "This standard must be met, and, if it is not, the Secretary of State must produce a plan to meet it". There are no ifs or buts in the EU legislation. Neither is there in the national legislation, because it is reflecting.

The Environment Parliamentary Under Secretary has said in the House of Commons that she wants to keep those air quality standards for health reasons. My concern as a lawyer is that it will be very tempting for somebody in government to try to slip in some words such as "as far as practicable" or "without undue cost". I would if I was the Government. That may be very sensible, but it needs to be done openly. The worry is that there will be such a mass of changes and stuff going on that it will be up to parliamentarians, NGOs and other interests to keep a real watch for the little thing in the back schedule that might change the legal nature of that standard. To me, that is the challenge. As I said, I think there are opportunities, certainly for clearer drafting and things like that, which could be done, as long as it is done in a rather rational way.

Viscount Hanworth: There will be a large schedule for achieving them.

Professor Richard Macrory: We will come back to this later, I hope, on national courts and their remedies. In the ClientEarth case, which was an air pollution case concerned with NOx and traffic, it was very clear that, first, we are in breach of the standards because they had not been met by

a certain date. The next stage of the litigation is that you have to do it as quickly as possible. Does that mean three years or five years? That is now subject to a court case that was going on last week. It will be very interesting as to whether the courts feel that they have something to offer on this, because you are getting into policy areas, practical areas and so on.

Lord Cunningham of Felling: The question is not about having good regulatory control, is it? The question is about enforcing the regulatory control, making people match up to the regulatory control, and Britain is already manifestly failing in that regard in terms of air quality and particulate matter, causing ill-health and death. How would you suggest that that position be rectified when Britain has left the European Union?

The Chairman: Lord Cunningham, we are going to come on to that very specifically, so perhaps I could ask you to hold on that for a moment and come in on a supplementary if it is not answered.

Q7 **Lord Selkirk of Douglas:** Lord Chairman, I should mention that I have an interest in that I am a director of a small company with small land holdings. Also, I have been an advocate for quite a number of years before being a parliamentarian.

My question is a legal one. Maybe we will not know the answer until the legislation is published. Is there a presumption as to how much EU law will be applied or will not be?

Professor Andrew Jordan: A lot of this depends on the model of Brexit eventually selected. If it is a soft Brexit, then virtually all EU legislation will still apply, apart from some particular areas. The expectation is that the habitats and birds directives will not apply. There is also an expectation that the bathing water directive might not apply, and, perhaps, some other areas that, through common interests and issues that Her Majesty's Government feel particularly strongly about, might not apply. We are talking about a relatively small number of areas where the EU's policies would not apply.

They would, of course, also be subject to the current enforcement systems that apply to EEA states. There is an EEA court—the EFTA court—which pretty much tracks the jurisprudence of the ECJ, the European Court of Justice. There is an EFTA Surveillance Authority, like the Commission, which chases up on non-implementation.

If, on the other hand, it is a hard Brexit, and the UK completely pulls out of the single market and has something that is very different from the relationship that Norway or Switzerland has at the moment, then the issues around the governance system that will apply then will be particularly large.

The Chairman: Again, we are going to come to this later on.

Professor Richard Macrory: We are all now becoming EFTA and WTO specialists very rapidly. As I said, there is an EFTA court and an EFTA Surveillance Authority, which has very similar powers and roles to the Commission. It has a complaints procedure where citizens can complain,

and it will look into that. I am told, for instance, that Norwegian environmental NGOs tend to use the Surveillance Authority rather than national litigation.

The main difference is that if the Surveillance Authority brings a case before the EFTA court, which is in Luxembourg, and the country does not comply with the court's judgment, the court has no power to impose financial penalties on the country concerned. In fact, there is currently a case with Iceland about dentists' qualifications, which has just come back to the court. All they can do is say, "You did not comply with the court judgment". So we are in that role.

There are some environmental cases before the EFTA court. In 2015, there was an air quality case about cities in Norway, and the EFTA court held that Norway had not complied.

When you get on to the trade agreements, if you take Switzerland, for instance, this is where it does get very bizarre. Switzerland is a member of EFTA but not the EEA. The EFTA court does not have jurisdiction over EFTA countries but only EEA countries. It is very bizarre.

The Chairman: I do not want to get too far down the enforcement side at the moment.

Professor Richard Macrory: No, you do not want to go down that route, but different arrangements could be negotiated.

The Chairman: We are going to come on to that.

Professor Maria Lee: Can I just add a quick point? We are all learning fast about EFTA. If we join EFTA, we utterly transform that organisation. The EEA is quite small—the EFTA part of the EEA. They seem to do a lot of things by consensus. They seem never to have had to use any provisions of their treaty that deal with big disagreements. If we joined, we would transform the organisations. What we know about the EEA now will change, if that is the case.

The Chairman: I suspect that as a founding member of EFTA they will not be keen to have us back too quickly, to be honest, but that may be for another sub-committee. We will not go into that just for the moment. Baroness Wilcox, would you like to continue?

Q8 **Baroness Wilcox:** Thank you very much. Some stakeholders have noted that EU law takes a long time to develop and then be implemented by Member States, making it difficult for legislative stances to be adapted in a timely manner. It may be possible for the UK to develop more responsive legislation after it leaves the EU. The question is this: could environmental law be developed more quickly after the UK leaves the EU? Are there areas in which increased flexibility could make UK environmental law more effective?

Professor Andrew Jordan: They are two sides of the same coin. It takes time to develop EU law, although it does not often take as long as the EU is sometimes criticised for. Analysis that we have done in the past suggests

that the EU has got quicker at agreeing upon and adopting legislation over time, which is quite interesting given how the EU has involved itself in more and more controversial areas. It does take time, but once it has been adopted it tends to stick. It is not, for the reasons that Professor Macrory gave, as likely to be unpicked by any particular Member State, the Parliament or the Commission: in short, it sticks. Investors like that, particularly those working in the so-called green economy. Water companies and energy generators like the certainty that EU legislation provides. It allows them to plan with confidence. Similarly, the environmental NGOs like the certainty. They can rely upon that for legal remedies when there are damages to the environment.

Where could there be flexibilities? Of course, flexibilities could be introduced after Brexit, but the critical question, first, is that it depends on what kind of model of Brexit is applied. There will be less room for manoeuvre and opportunity for change if we go down the route of a soft Brexit as opposed to a hard Brexit. But, if it is a hard Brexit, how quickly are the changes going to be made and how sure is it going to be that all the various different points of view are going to be brought together and used to inform the development of legislation? Many of the NGOs are worried that, after the Article 50 process has ended, it is going to be open season on environmental regulations and large swathes of policy are going to be quickly deregulated.

Baroness Wilcox: Would you think me very rude if I asked the question again? Could environmental law be developed more quickly after the UK leaves the EU?

Professor Andrew Jordan: It could be developed more quickly if the UK selects the hard Brexit option, yes. But there might be a price paid for doing things very quickly.

Baroness Wilcox: It is the first part of your answer that I am interested in because that was the question I asked you. Thank you very much.

Professor Richard Macrory: There are certainly some classic examples that I could give you about environmental assessment and environmental liability where it took, on environmental liability, 15 years or more before one got an agreement. I would hope that that would not have taken that long in the UK or in a devolved Administration. There are other cases. With carbon capture and storage, which I am very interested in, it took about two years to agree the basic framework directive. One should not generalise too much from one or two specific examples either way.

The Chairman: Following up Baroness Wilcox's question, there are areas where, because of environmental legislation being political, there is compromise. Presumably, there are some areas here in the UK where we did not get the perfect solution that we would want, even from the environmentalists' point of view, that we could then fix which we could not have done otherwise. There must be one or two opportunities there, surely.

Professor Maria Lee: What sort of things would we want to change?

The Chairman: Things that we did not think were perfect as a total

agreement that we are stuck with that we could actually improve.

Lord Curry of Kirkharle: I want to follow up on that. It may be better targeting of legislation in terms of flexibility. We mentioned that the Habitats Directive may not be part of the Great Repeal Bill. There are some elements of that directive that are quite controversial at the moment. If we had the opportunity to reintroduce the habitats directive, which was domestic, it could perhaps be better targeted.

Professor Maria Lee: This is a point that Professor Jordan made earlier. When we start pulling at the environmental legislation, we will all have different positions on what a good piece of legislation looks like. I like the hard edges to the habitats directive. They are very powerful. It is very hard to do harm to an EU protected site. It is not as hard to do harm to a UK protected site. Yes, we can change the legislation, and, yes, we can do it much more quickly than we can do it at the moment. There will be political battles to be had about whether that is a good or a bad thing.

Professor Andrew Jordan: Can I just contrast this with what is going on at the EU level? The EU level has now started a process called REFIT, where it goes through each area of legislation and checks them, scientific studies are undertaken and there is an opportunity for all the different groups, including the public, to come together to make their views known. Surely, that is the best way to do it, i.e. slowly over time. The obvious model here is a royal commission, is it not?

Lord Curry of Kirkharle: We were heavily influential in establishing the REFIT programme in Brussels. It was our influence that led to that.

Professor Andrew Jordan: Indeed. Surely, that is a better model for reforming legislation in a mature area of competence such as the environment, rather than summarising it very briefly in a Great Repeal Bill and pushing it through Parliament very quickly but not clarifying how the process will work in advance.

The Chairman: I want to move on but, on that point, whatever our personal views are, we are going to leave the European Union. That is the policy of the Government and the result of the referendum. Should we say that we should use that model of REFIT in this country? The Great Repeal Bill is a sticking plaster to get us through a transition, is it not? The problems that we have talked about are different. Thereafter, is REFIT a model that we should use?

Professor Richard Macrory: Yes. As I said earlier, if this was a rational world, I would like to see that one would take sectors, such as waste and air, and have a serious look at the existing law as it is, which is reflecting the EU, and say, "Can we do it better?" The question you asked was: would increased flexibility make environmental law more effective? Being a lawyer, I would want to unpick what one means by "flexibility". I gave the example that if you give too much discretion to government "as far as practicable" in its duties, and so on, that form of flexibility may not necessarily be a good thing. There are other forms of flexibility that—I agree with you—are very useful. There will be a lot of opportunities that

can be taken, but I would like to see it being done in a very serious way and in a pretty open way.

The Chairman: Okay. I think we need to move on.

Q9 **Viscount Hanworth:** This is Lord Cunningham's question, which became Lord Selkirk's question, but here is the canonical version or at least the version that I have on the list. What oversight and enforcement mechanisms would apply if the UK remained within the EEA? Secondly, what about the circumstances in the event of a so-called hard Brexit? There is the question.

Can I add some spice to this by reading something submitted by Dr Charlotte Burns, who is writing for the Friends of the Earth? She said: "Without the external pressure and legal avenues afforded by EU membership it is unlikely that policy-makers would make the effort necessary to secure citizens' health, as the reluctance to address air quality in urban centres on grounds of cost testifies".

The question, I suppose, is: what has been the force of the European Union's mechanisms of enforcement and what might happen in their absence?

Professor Maria Lee: We have already outlined the structures that would apply if we were to remain members of the European Economic Area. You have the EFTA Surveillance Authority and the EFTA court. We can come back to that if you want to. If we have a hard Brexit, we would be dependent on domestic arrangements—some domestic mechanisms. It sounds so far-fetched to say that we might replace the Commission, but we have taken the Commission's role in supervising compliance completely for granted for 40 years, and that will go. We should think about whether it is feasible to replace that with a parliamentary body, a government body or some other sort of public body that will supervise government and agency compliance with the law. It sounds ambitious in the current climate, but we have had this for 40 years and we are about to lose it. It is important.

In addition to the Commission's role, we also need to pay close attention to the more subtle governance mechanisms that we are subject to in the European Union, which are, very routinely, obligations to report on how we intend to comply, then to report on how we did comply, and to explain how we will come into compliance if we fail to do so. We report to a well-resourced, well-informed, named body—the Commission.

There are two things. There is the enforcement and how we replace the Commission's role there. There are also these more subtle governance mechanisms that allow political and legal accountability. That is something that we are more than capable of dealing with.

The Chairman: That is very important. That is a good point.

Viscount Hanworth: Dr Charlotte Burns foresees complete dereliction. This may be regarded as a polemical discussion.

Professor Maria Lee: That is the risk, but we would hope that that is not going to happen.

Professor Richard Macrory: I think there is another question about how we could deal with national remedies, which is quite interesting. Yes, the Commission has been an important force, but not the only force. The national courts in certain areas, which have been picking up leads from the European Court of Justice and interpreting their judgments, have been quite powerful. As we have discussed, if it was an EFTA model, then there would be a surveillance model. If we are out, then the Commission will have no role.

To give one very practical example, which is interesting, I mentioned that the Court of Justice has the power to impose financial penalties, which is something that Britain proposed years ago. I advised the Committee sitting here that that was not a good thing, but I have changed my mind now on that.

One of the interesting things in the UK, tucked away in the Localism Act, is a provision that says if Britain is fined by the European Court and it turns out that it was the responsibility of a public authority that caused the breach—the Environment Agency or a local authority, say—the Government can recover the money from that authority. My European colleagues, whom I have talked to about this, think it is a really interesting model. I do not think that it has ever been invoked, but it concentrates the minds wonderfully to make sure that you comply.

Again, that will disappear, presumably, because the European Court will not have a power to impose penalties. The question, when we want to explore that, is: should we be thinking of replicating something like that? Is our current system by itself of judicial review and declarations going to be sufficient to ensure that whatever national environmental law we have is properly enforced? I have some ideas on that.

The Chairman: Lord Krebs, I think you want to say something.

Lord Krebs: I have a small follow-up question to Professor Lee's very clear explanation. Are there other countries outside the EU to which one could look for a well-operating and well-defined model of how the role of the Commission can be replaced at a national level?

Professor Maria Lee: The simple answer is not really, but I hope that Professor Macrory might be able to fill out a little bit on that. There are two things going on here. One is the Commission as a holder to account but not necessarily a litigator. We can do that quite straightforwardly. If you think about the Climate Change Act, for example, that is a system within which we require reporting on how we are going to comply, reporting on how we complied and explanations of how we will come into compliance if we are not in compliance. We will report to Parliament. We have an expert climate change committee that is able to scrutinise. Those sorts of reporting models, which provide for serious political accountability and some level of legal accountability, because you do at least have to let us all know what you are doing, are not easy, because you need to find a public body with resources, but it is conceptually relatively straightforward and very important.

Holding government legally to account in the way that the Commission does feels like a terribly big ask, but one could imagine, in the future, things like a beefed-up environmental ombudsman; some sort of public defender role is not completely unheard of. As to things that we have elsewhere, you might think about places such as India or Pakistan where they have strong constitutional obligations for environmental protection, where the courts have been willing to hold Governments to account and send them away to do better. It is not completely unheard of.

The Commission is something that we have been taking for granted in that role and we are going to have to think really creatively and bravely about Governments who say they might not want to comply with the law.

The Chairman: I know that Lord Selkirk is going to follow this up, but perhaps we could pause there. Professor Macrory, were you going to add anything?

Professor Richard Macrory: This, again, comes to the opportunity to review our legislation and to think how we fill those gaps; and reporting requirements might well be one where we might say that, if one is dealing with waste or water, the legislation needs to be a bit tougher, perhaps equivalent to the climate change legislation, on regular reports to Parliament about what has happened. It is for the legislators to make sure that that is built in, because if it is not it just may not happen.

The Chairman: Perhaps I could bring Lord Trees in at this point, as I am not sure we have covered this area completely.

Q10 **Lord Trees:** I was going to ask about enforcement and oversight, and to some extent you have begun to answer the question. It is very important. We will lose the ECJ and the Commission looking over our shoulders. In my limited experience of a few years in Parliament, we are quite good at scrutinising legislation. What constantly worries me is the enforcement, compliance and active use of the legislation we have. You have mentioned a few possibilities, such as an ombudsman, but have we existing institutions that we can repurpose or use better, or will we need to create other new institutions and mechanisms to ensure that there is compliance and enforcement?

Professor Andrew Jordan: One danger that could be pleaded is judicial review. I do not know if you want to talk about judicial review, but the perception is that it has been going through the roof in recent years. There were several hundred judicial review cases in the 1970s, whereas now there are thousands and thousands of them. I know that a lot of them relate to immigration and issues like that, but, in principle, that is one way in which the Executive can be held to account. There are also weaknesses when it comes to environmental legislation. Correct me if I am wrong, but for a judicial review to be taken the applicant has to be substantially affected and incur substantial hardship. That might be difficult. No?

Professor Richard Macrory: No. We have moved on from that.

Professor Andrew Jordan: We have moved on from that; okay. The other key thing about judicial review, though, is that it relates to the process, does it not?

Professor Maria Lee: Yes.

Professor Andrew Jordan: As long as the right process has been followed, irrespective of what happens to the environment at the end, then that is okay. This is where the hard edges come in of EU legislation. If there is a strict requirement to protect a particular habitat, irrespective of what process you have gone through to decide whether that should not be developed, the habitat still remains or is replaced by an equally good habitat in a different location.

Professor Richard Macrory: If I could wind back for one moment, this whole question of enforcement and so on is going to apply to all areas of law if we leave the EU. One of the questions to ask is whether the environment is somehow a bit different and does require some special treatment. Ludwig Krämer, who is one of the great and most influential figures on EU law, has a phrase: “The environment dies in silence”. What does that mean? From a legal perspective, he is saying that in most areas of law—be it competition law, social security law or welfare law—there will be clear economic interests who will protect themselves, go to court or whatever. With the environment, bits of it may be unowned; there is no clear interest. The response that we have taken, as we have done for the last hundred years, is to set up public authorities—local authorities, environment agencies and so on—to protect the environment.

The question here, and this is where the EU law has been powerful, is: what happens if they do not comply with their duties? That is what we are concerned with. With things like regulation and criminal law, the Environment Agency will continue to prosecute and enforce, sometimes against local authorities and sometimes against government. It is this area of public law duties that is particularly interesting. What we will rely upon, as we have heard, is judicial review and, basically, NGOs to bring their actions.

I think there are three problems with judicial review. Despite some efforts to limit exposure of costs, it is still a very expensive and time-consuming process. I am a great fan of the tribunal system, and I have been trying to argue that the tribunal system could still play a much greater role in this.

Secondly, the courts, even within judicial review, may have to be rather tougher in their remedies. It was very interesting in the ClientEarth case that they made a declaration and an order to the Government to produce a report within a certain time. That is quite unusual in national judicial review, and I think they felt empowered by the EU dimension.

Lastly, and we have touched upon this, we will have to consider creating some form of environmental ombudsman or somebody to be investigating some of these cases, if not, perhaps, to take the litigation. I was asking my European network of environmental lawyers if there are examples in Europe of this. The example that kept on coming up was the Hungarian

Parliamentary Commissioner for Future Generations, which was set up and is now part of the Charter of Fundamental Rights. This is a post that provides opinions on legislation, initiates investigations, can take action before the constitutional court. It does not take litigation against public authorities as such, but I am told that its opinions are normally binding. I think we may have a gap in that area.

The Chairman: We are particularly interested in the soft law and guidance notes side. Without sounding too arcane, perhaps we could hear a very brief comment on that if we need to note that within our recommendations.

Professor Maria Lee: I have one very quick comment. Soft law is not binding on anyone. That is the point. It is already not binding because it is soft; its bindingness is down to its authority. Its authority is based on its quality—who contributed, what sort of expertise, what sort of participation, and the status of the individual who is promulgating it. How authoritative EU soft law will be when we are no longer members of the European Union is completely open to question. It is already not strictly binding. It becomes binding through practice, but in law it is not binding already.

The Chairman: Thank you for that point. We are now going to move on to the international side and conventions. We were going to have two questions here but I think we can put them into one. I ask Lord Rooker to start us off on that and ask Lord Cunningham to come in as a supplementary if we have not followed all of that.

Lord Rooker: In that case, I will cheat and take a point I was going to make. I would be astonished, by the way, if when the Great Repeal Bill is introduced, it does not have a little clause buried away somewhere, which says, "This is not subject to judicial review". The argument the Government will make is that, if it was, because it is complicated in the way that we discussed this morning, it will clog up the court system. There is going to be a get-out there. I speak as a non-lawyer, but I know that what happens in Whitehall is that they will not want "subject to judicial review". That is my experience of half a dozen departments.

Once we have left—and we have to work on the assumption that we are leaving, by the way—as to the significance of international legislation that is currently in place and will be in place in the future, will our relationship with that change or will it become more significant in the sense that some of it gets buried because we are in the EU? Once we are out of the EU, we are then subject to the law of the sea and all the other international legislation. Will its role or significance change, or do we just move out and say, "We are now following international law"?

Professor Richard Macrory: There are two questions. First, yes, we have ratified about 40 international conventions concerning the environment. One of the questions on exit is whether we are still bound by them, because most of those agreements are what are called mixed agreements. The EU and the Member States have signed them.

I am not a public international law expert. I wrote an article recently on this subject and consulted three different groups of international lawyers.

One said that we would definitely still be bound, because we have just assumed all the competences—nothing more. The second said, “No, no, you will have to renegotiate”; and the third said that it was all very difficult. I have tended to come to the first view, which is that we will still be bound. That is all right.

Your second question is much more interesting, because the UK courts have operated up to now what is called a dualist system of law; that is to say, if we do not transpose the international convention into national law, you cannot invoke it directly. You can use it for interpretation, and they do that quite often. They are becoming a bit more adventurous.

Last year in the Supreme Court there was a case concerning children’s law where the claimants wanted to invoke a UN convention, and it had not been transposed. Four of the Supreme Court judges said there was nothing they could do, but the minority judgment of Lord Kerr is very interesting. He said that the reason for the dualist system is that government could then impose obligations on citizens without going through Parliament if it is binding. But here we are talking about a duty on the Government. He could not see why they should not be bound by a duty under international law. Lord Kerr was in the minority and he was quite bold. That may be the future. As you have said, international law will become more compelling in the UK courts than it has been up to now.

Professor Maria Lee: I do not really have anything to add to that. If we have signed and ratified, I agree with Richard that we are probably bound by the thing that we have signed and ratified. International law will become politically more significant as well because that will be the backstop beyond which we cannot fall in terms of environmental standards.

Professor Andrew Jordan: I have two other things to add to that. Generally, the EU has not simply taken an international convention and transposed it into EU law, and left it at that. It has often added in hard edges. It has added in deadlines, timetables and things like that. A classic example is how the Berne convention was gradually developed, evolved and transmogrified into the birds directive and the habitats directive.

To respond to Richard’s point about the active interpretation of international law by national courts, would it not be ironic if that happened, because the Brexiteers criticise the European Court of Justice for overactive interpretation of EU law?

Professor Richard Macrory: I have a very short response. One will have to look at these international conventions, because up to now they have been transposed or extended by EU law, to see how that should be done. Some of them like the Ramsar convention are very vague and they will probably need fleshing out.

The Chairman: Professors, thank you very much indeed for taking us through this rather complex area. Clearly, the challenges will be at least as great as we thought they were before we started the session. Thank you very much. Also, it is very useful to have had some of the practical examples. I understand the Duke of Montrose has a question.

Q11 **Duke of Montrose:** As somebody who has spent a lifetime in livestock farming and looking after areas of the environment, added on to one of the questions here was: what about the principles set out in the treaty such as the precautionary principle? Can we see ourselves revising the precautionary principle to our own standards? What about this balance that was always between risk and hazard?

The Chairman: Can we take one sentence from each witness, because we are constrained by the time? If you want to give us additional evidence, please write in to us on it.

Professor Richard Macrory: The precautionary principle is in the treaty, but it is not a free-standing principle. It is a principle underpinning how you design and interpret the legislation. If we were completely out, it would, probably, still be a policy principle in government. Whether we put it into some form of legislation will be up to the Government to decide.

Professor Andrew Jordan: As Nigel Haigh pointed out some time ago, the UK had already signed up to the precautionary principle before it became a part of the Maastricht treaty. These things have evolved slowly over time.

Professor Maria Lee: The precautionary principle is not a single thing. It has been interpreted in a particular way by the European Court of Justice. It is simply a principle that takes uncertainty very seriously. I cannot imagine why we would want to be without a principle like that or why the courts would want to be without a principle that takes uncertainty seriously.

The Chairman: Quite a bit of our correspondence on scrutiny deals with some of this, and the Government tend to put evidence and hazard as almost an opposite to the precautionary principle occasionally.

We will end the public session here and I thank you very much indeed for your evidence before us.

Professor Maria Lee, Professor Andrew Jordan, and Professor Richard Macrory —
Oral Evidence (QQ 1 – 11)

**Professor Maria Lee, Professor Andrew Jordan, and Professor
Richard Macrory — Oral Evidence (QQ 1 – 11)**

[Transcript can be found under Professor Andrew Jordan, Professor Maria Lee, and
Professor Richard Macrory — Oral Evidence \(QQ 1 – 11\)](#)

Dan Lewis, Finella Elliott, and Steve Elliott — Oral Evidence (QQ 46 – 56)

Dan Lewis, Finella Elliott, and Steve Elliott — Oral Evidence (QQ 46 – 56)

[Transcript can be found under Finella Elliott, Steve Elliott, and Dan Lewis — Oral Evidence \(QQ 46 – 56\)](#)

Professor Richard Macrory, Professor Andrew Jordan, and Professor Maria Lee —
Oral Evidence (QQ 1 – 11)

**Professor Richard Macrory, Professor Andrew Jordan, and
Professor Maria Lee — Oral Evidence (QQ 1 – 11)**

[Transcript can be found under Professor Andrew Jordan, Professor Maria Lee, and
Professor Richard Macrory — Oral Evidence \(QQ 1 – 11\)](#)

Professor Richard Macrory — Supplementary Written Evidence (ECB0015)

Andrea Leadsom MP has stated that “in the region of about two-thirds of the legislation that we are intending to bring into UK law will be able to be rolled forward with just some technical changes, so roughly a third won't”. There are no further details given. As I mentioned in my evidence, various working parties of UK Environmental Law Association are currently examining different sectors of UK environmental law (nature conservation, waste, etc.) to determine in detail how much is derived from EU law, and the mechanisms chosen for transposition. This will help determine the extent to which the Great Repeal Bill is able to fulfill the intention of retaining existing law until revisions takes place.

This note is in my personal capacity, and my initial impression is that the figure seems rather high. But this is not helped by the fact that we do not know the basis of the two thirds/one third figure – individual items of EU law, page length, etc., and precisely why it is felt that a third cannot be retained. But it is possible to break down the issues a little more. When I refer to post-Brexit, I am assuming a situation where EU legislation no longer has any independent legal force within the UK

Transposition of Directives without reference to EU law in the body of national regulations

The core provisions of many national regulations transpose EU Directives without any reference in the legislation to the Directive in question. An example would be reg 17(1) of the Air Quality Standards Regulations providing that “The Secretary of State must ensure that levels of sulphur dioxide, nitrogen dioxide, benzene, carbon monoxide, lead and particulate matter do not exceed the limit values set out in Schedule 2”. The duty and the limit values reflect the obligations in the Directive but are self-standing, and can continue without modification.

EU Regulations and Decisions

The majority of EU environmental law have been in the form of Directives but a significant number are in the form of EU Regulations which do not require transposition and have immediate force of law within the Member State. Kramer’s EU Environmental Law (2011) list 111 Regulations in the environmental sphere between 1981 and 2010 (compared to 256 Directives between 1967 and 2010). The Great Repeal Bill could contain a general provision that all EU regulations are to continue to have force of law within the UK until repealed or amended.

Some of the Regulations are highly technical and specific, and many are concerned with setting up various administrative structures such as the European Environment Agency or the Cohesion Fund. But a number have much broader impact and have been used to implement international obligations or where a large degree of conformity across the EU is required.

A good example is Regulation 1013/2006 concerning shipments of wastes both within the EU and to and from third countries, including detailed procedural requirements concerning consignment notifications and the like. The Regulation in part implements the international Basel Convention 1989 to which the EU and other Member States are party. The UK will post Brexit continue to be a party to the Convention, but the Convention is confined to hazardous wastes while the EU regulation extends its provision to non-hazardous waste movements within the EU. It may prove challenging to preserve the Regulation automatically post Brexit – would competent authorities in other Member States have any obligation to deal with the UK other than in respect of Basel obligation?

One should also mention Decisions which are legally binding on those to whom they addressed. Decisions are often addressed to Member States, though often confined to detail administrative matters such as setting up committees, EU adherence to international treaties, technical standards concerning eco-labelling, etc. Kramer lists some 136 Decisions in the environmental sphere between 1975 and 2010. Post Brexit existing Decisions would have no legally binding effect unless some provision is made in the Great Repeal Bill.

References in national legislation to Directives

Over the past decade, national regulations transposing Directives have increasingly made reference to the Directives in question in the body of the national legislation. The UK seems to have taken this practice rather further than many other EU Member States – known as ‘transposition by reference’ – possibly as a defensive mechanism to reduce the possibility of infringement actions by the EU Commission on the grounds that national law did not fully reflect the obligations in Directives. The EU Commission, though, is known to be uncomfortable with this method, and it certainly adds complexity in trying to understand the full meaning of national law. An extreme recent example is the Environmental Permitting (England and Wales) Regulations 2010 covering permitting of industrial installations such as waste sites, incinerators, etc. which contains 265 references to Directives including such gems as “4.—(1) The regulator must ensure that every application for the grant of an environmental permit includes the information specified in Article 6(1) of the IPPC Directive. (2) But, when interpreting Article 6(1), the regulator must— (a) ignore points (b), (d) and (g);.....”

The extent to which these references can survive depends on the context, and a number of different Categories emerge.

(a) Definitions. National regulations frequently refer the definitions contain in EU Directives.

For example, the definition of ‘estuarial waters’ in s 28(9A) Wildlife and Countryside Act 1981 refers to the definition in the Water Framework Directive. The Environmental Permitting Regulations defines ‘waste’ as “except where otherwise defined, means anything that— (a) is waste for the purposes of the Waste Framework Directive, and (b) is not excluded from the scope of that Directive by Article 2(1) of that Directive”. There seems no reason why these definitional provisions cannot survive – in the same way that a national law could refer to definitions contained in UN or other international material.

(b) Technical specifications. National regulations may refer to EU Directives for technical requirements in relation to matters such as monitoring or characterization. For example, the Water Environment (Water Framework Directive) (England and Wales) Regulations 2003/3242 requires the Environment Agency to characterize river basic districts “in accordance with Annex II to the Directive”. The Air Quality Standards Regulations provide that “measurements must be carried out in accordance with the criteria set out in sections A and C of Annex I to Directive 2008/50/EC, and for the purposes of paragraph (5), measurements must be carried out in accordance with the criteria set out in Annex IV to the same Directive.” (reg 6(6) assessment criteria). In principle, again it seems that these requirements could continue, even though the Directive itself has no independent legal status.

(c) Substantive obligations. National regulations may refer to substantive obligation contained in Directives. For example the Environmental Permitting Regulations provides that in relation to waste permits that the regulator “5.—(1) The regulator must exercise its relevant functions so as to ensure compliance with the following provisions of the Landfill Directive— ...Art 5(3)” (exclusion of certain types of waste from landfill). Or another more general example under the Water Environment (Water Framework Directive) (England and Wales) Regulations 2003/3242 “3.— (1) The Secretary of State, the Assembly and the Agency must exercise their relevant functions so as to secure compliance with the requirements of the Directive.”

Again, in principle, although it is a little odd to have to look to substantive duties in external documentation, there seems no reason why these types of obligation should not survive into national law even though post Brexit the Directive itself has no independent legal status within the national legal system.

There are examples of national regulations referring to ‘obligations’ under Directives – for example the Air Quality Regulations give power to the Secretary of State to issue directions “For the purposes of implementing any obligations of the United Kingdom under Directive 2008/50/EC, Directive 2004/107/EC and Council Decision 97/101/EC establishing a reciprocal exchange of information and data from networks and individual stations measuring ambient air pollution within the member State (reg 31(i))” . If regulations are drafted in this way, since post Brexit, there will be no ‘obligations’ as such under the Directives or Decisions, and this provision would be rendered meaningless in national law.

(d) Obligations in relation to other Member States. Some national regulations refer to obligations in respect of other EU Member States. For example, Sched 5 para 10 Environmental Permitting Regulations require the competent authority to consult with other Member States where it is aware the application for an environmental permit may have a significant effect on the environment in another Member State or where that Member State requests information on the permit. These requirements could survive, even if not reciprocated by other Member States post Brexit. The position is made a little more complex because they also reflect obligations under the UN Espoo Convention 1991 requiring cross border consultation

for certain specified activities. The UK remains a party to that Convention.

(e) References to powers of specific EU institutions. Some national regulations reflecting the provisions of the relevant Directive give specific power or make references to EU institutions. For example, the Urban Waste Water Treatment (England and Wales) Regulations 1994/2841 provide under reg 5 that discharges from very large conglomerations to coastal waters may be subject to less stringent standards in exceptional cases and with the agreement of the European Commission. The REACH Enforcement Regulations 2008/2852 dealing with chemical regulation contains offences for failing to notify the European Chemicals Agency, and other procedural requirements in relation to the ECA. Part 2 The Conservation of Habitats and Species Regulations 2010/490 contains various obligation in relation to the European Commission – for example, the duty on competent authorities to send lists of proposed sites of Community importance to the European Commission, and the duty to have regard to the opinion of the European Commission where proposed project may damage a site hosting a priority species or habitat type.

These sorts of provision could not survive in that post Brexit the relevant Community institution would have no legal authority or obligation to act. The Great Repeal Bill could provide powers to the Government to amend existing regulations to designate national successor bodies before Brexit takes place in order to preserve the coherence existing legislation – for example in the Habitats Regulations the Secretary of State (or even Parliament) could take over the functions of the Commission.

(f) EU emissions trading. The Greenhouse Gas Emissions Trading Scheme Regulations 2012/3038 could not survive in their present form unless the UK makes a separate agreement to remain part of the EU ETS scheme (it currently includes all 28 EU countries plus the EEA countries, Norway, Iceland, and Liechtenstein). The Regulations could be adapted to form the basis of a purely national emissions trading regime but many amendments would be necessary.

6 December 2016

Mineral Products Association — Written Evidence (ECB0005)

Introduction

Whilst opportunities exist post-Brexit there is the potential for considerable uncertainty in the transitional years which has a high potential to delay or defer investment decisions.

Immediately after Brexit ('Day 1 Brexit'), the UK Government must deliver positive regulatory changes to the most important sectors of the economy and ensure that these changes are consistent with a progressive industrial manufacturing strategy.

European environmental and climate legislation and regulation has significant influence in the UK, covers a broad range of topics, and is highly interrelated. When making changes to legislation and regulation, the Government must avoid unintended consequential impacts.

Day 1 Brexit must provide operators with clarity of the conditions under which they are operating – particularly with regard to EU Regulations. Any 'Brexit Bills' must make provision for the transition of environmental laws whilst Regulatory Position Statements from UK Regulators might be a useful tool to provide legal certainty in the advance of longer-term legislative change.

For the mineral products sector, there are four key areas of interest in terms of environment and climate policy for the Government to address when leaving the EU:

1. Emissions Trading System (ETS);
2. Industrial Emissions Directive (IED); and
3. Waste Framework Directive, Landfill Directive and the Circular Economy;
and
4. Transfrontier Shipment of Waste Regulations.

Brexit offers an opportunity for:

5. clearer synergy between industrial policy and climate action;
6. industrial regulation based on environmental outcomes and not 'limit values' in European law; and
7. maximising the use of waste as a resource and minimising the bureaucracy around waste definitions.

The Mineral Products Association (MPA) is the trade association for the aggregates, asphalt, cement, concrete, dimension stone, lime, mortar and silica sand industries. With the recent addition of British Precast and the British Association of Reinforcement (BAR), it has a growing membership of 480 companies and is the sectoral voice for mineral products. MPA Membership is made up of the vast majority of independent SME quarrying companies throughout the UK, as well as the 9 major international and global companies. It covers 100% of GB cement production, 90% of aggregates production, 95% of asphalt and over 70% of ready-mixed concrete production and precast concrete production.

Each year the industry supplies £20billion worth of materials and services to the Economy and is the largest supplier to the construction industry, which has annual output valued at £144billion. Industry production represents the largest materials flow in the UK economy and is also one of the largest manufacturing sectors. For more information visit: www.mineralproducts.org.

As a consequence of the EU referendum vote, current forecasts suggest that the UK will experience lower economic and construction activity through to 2018. Our future relationship with the EU single market is unclear which creates uncertainty, reduces confidence, and will feed into delayed or lower business investment generally and in construction particularly. This is not a “political” judgement on Brexit but a reasonable economic assessment. The real issue is the medium and longer-term impacts that may become more apparent as we move into 2017 and 2018.

MPA has identified six areas of priority it asks Government to incorporate into its response to Brexit⁴². All of these areas have consequences for, or consequences resulting from, climate change policy:

8. UK role in the World:

- (a) maintain the UK’s international reputation and influence.

9. Investment:

- (a) ensure the UK remains attractive for inward and domestic investment.
- (b) encourage & boost public and private investment.

10. Infrastructure:

- (a) make early decisions on major infrastructure projects.
- (b) accelerate existing public sector infrastructure investment plans.

11. Housing:

- (a) take further action to increase housebuilding including more affordable housing.

12. Regulation and standards:

- (a) work with industry to improve the efficiency and implementation of current regulation.
- (b) ensure sound due diligence on post Brexit regulation to improve current competitiveness and productivity.
- (c) recognise the need to continue to engage with EU standards and code setting processes to protect UK interests.

13. Skills:

- (a) guarantee UK residence for valued EU workers.

⁴²Mineral Products Association, ‘Brexit’ priorities for the Mineral Products Industry - http://www.mineralproducts.org/iss_policy01.htm

- (b) think creatively and innovatively to enable the UK to balance access to the EU single market with proportionate and sufficient free movement of labour to help fill our skills gap.

What are the United Kingdom's key interests in environment and climate change policy in relation to leaving the European Union?

European environmental and climate legislation and regulation has significant influence in the UK, covers a broad range of topics, and is highly interrelated. When making changes to legislation and regulation, the Government must avoid unintended consequential impacts. For example, MPA has identified around 30 separate EU-derived legislative environmental instruments used to regulate the cement sector to some extent, with a further five solely related to greenhouse gas emissions.

For the mineral products sector, there are four key areas of interest in terms of environment and climate policy for the Government to address when leaving the EU:

1. Emissions Trading System (ETS);
2. Industrial Emissions Directive (IED);
3. Waste Framework Directive, Landfill Directive and the Circular Economy;
and
4. Transfrontier Shipment of Waste Regulations.

What opportunities arise from Brexit and what challenges lie ahead in the area of environment and climate change policy?

Whilst opportunities arise from Brexit, there is likely to be a transitional period of considerable uncertainty over many years that has a high potential to delay or defer investment decisions in UK manufacturing.

To boost confidence, 'Day 1 Brexit' must deliver positive regulatory changes to the most important sectors of the economy and ensure that these changes are consistent with a progressive industrial manufacturing strategy.

Importantly, Day 1 Brexit must provide operators with clarity of the conditions under which they are operating.

It is vital that the UK Government, and the Governments of Scotland, Wales and Northern Ireland, make adequate legal provision for the transition of all environmental laws in any 'Brexit Bills' so that businesses have certainty about operating on Brexit Day 1.

There are already inconsistencies between different national governments in the UK when implementing EU legislation (for example, implementation of the IED); Brexit offers an opportunity to improve regulatory harmonisation and consistency across the UK.

Regulatory Position Statements from UK Regulators may be a useful transitional tool to provide legal certainty in the advance of longer-term legislative change.

European Directives and Regulations

It is important to recognise the difference between EU Regulations (such as, Regulations for the Registration, Evaluation, Authorisation and Restriction of

Chemicals (REACH) and the Transfrontier Shipment of Waste Regulations) and EU Directives (such as the Industrial Emissions Directive).

Member States incorporate EU Regulations into national legislation simultaneously, through the Treaty on the Functioning of the European Union (TFEU), and hence in the UK, by virtue of accession to the EU under the 1972 European Communities Act. European Directives, unlike European Regulations, go through a separate legislative process to transpose them into national legislation.

Hence, following Brexit there is potential for 'Regulation' vacuum and operators will need immediate legal certainty on these Regulations on Day 1 Brexit.

EU Emissions Trading Scheme

Brexit offers an opportunity for clearer synergy between industrial policy and climate action⁴³.

The EU Emissions Trading System (ETS) is integral to European Economic Area (EEA) membership but is one of the key factors in the future competitiveness of UK energy intensive industries, such as cement and lime manufacturing. Energy intensive mineral producers recognise the need for action on climate change and reduction of CO₂ emissions and are committed to progress on decarbonisation, as illustrated by the involvement of the cement industry in the Industrial Decarbonisation roadmaps.

The redesign of the EU ETS for Phase IV (2020-2030) is currently underway. Left unchanged it is likely to have a profound impact on the international competitiveness of cement and lime production, and thus have the potential to 'offshore' both emissions and production jobs.

MPA supports a successful Brexit negotiation that would see the UK maintain access to the EU single carbon market, where UK emitters participate in a mechanism with a harmonised price for CO₂. MPA maintains that there should be a single price for CO₂ and not a price 'topped up' by the UK-only Carbon Price Support tax and where free allocations of CO₂ shield the best UK producers from imports resulting from a global carbon price differential.

Industrial Emissions Directive

Brexit offers an opportunity for industrial regulation based on environmental outcomes and not 'limit values' or other prescriptive conditions in European law.

UK Regulators must seek all opportunities to reduce regulatory and cost burdens rather than adding further 'gold-plating' through UK-only regulation that will negatively influence the competitiveness of cement and lime manufacturing in the global market.

As two of the first sectors regulated by the Industrial Emissions Directive (IED), cement and lime manufacturers are concerned at the UK's 'gold-plated'

⁴³ Energy and Climate Change Committee, Leaving the EU: implications for UK climate policy inquiry – publications, Written evidence submitted by Mineral Products Association (EUC0022) - <http://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/energy-and-climate-change-committee/leaving-the-eu-implications-for-uk-climate-policy/written/36024.html>

interpretation and the inconsistency this creates with European counterparts. However, European legislation ensures that there is some consistency of regulation across markets and protects UK manufacturing from excessive or progressive UK regulation that is out of step with European neighbours.

The IED derives its emissions limits from reference documents (BREFs) prepared by committees of Member State Regulators and stakeholders. Historically, these reference documents were prepared for information exchange only (e.g. showing what was possible in some locations) and not for regulation (e.g. showing what is achievable across Europe). The cement and lime sectors are disadvantaged by the IED as the reference document implemented by the legislation was prepared for information exchange not regulation and so does not necessarily set realistic standards with wider industry support. The phased introduction of IED means that cement and lime are comparatively disadvantaged compared to other industrial sectors.

Thus, MPA is concerned that, given the history of 'gold-plating' by some UK Regulators and the existing unrealistic expectations embedded in the IED, that post-Brexit, further disparities will develop between the UK Regulatory approaches and those adopted by other countries, both in Europe and more widely, which disadvantage UK manufacturers operating in global markets.

Waste Framework Directive, Landfill Directive and the Circular Economy

Brexit offers an opportunity to maximise the use of waste as a resource and minimise the bureaucracy around waste definitions.

For the cement and lime sectors, the existing waste hierarchy (enshrined in the Waste Framework Directive) acts as a barrier in the transition to the circular economy, rather than encouraging it.

For example, in contributing to the UK's efforts to increase resource productivity, the cement and lime sectors have invested heavily to increase the use of end-of-value, end-of-life materials in the manufacture of high quality products, effectively restarting the value chain. In particular, the cement and lime sectors are taking these materials and recycling the mineral content and recovering the available energy without producing process residues – this is known as co-processing and is not recognised within the waste hierarchy.

The lack of recognition undermines a fully effective waste policy. The problem derives from the waste hierarchy, and follows through to regulatory approaches (which focus on risk rather than benefit) where UK recycling rates do not capture the recycling benefits of co-processing.

Transfrontier Shipment of Waste Regulations

Although mostly domestically sourced, key elements of the mineral industry supply chain, rely increasingly on international trade particularly to source industrial wastes and by-products. Hence, clarity on the Transfrontier Shipment of Waste Regulation is critical to business continuity.

For example, the UK Government's decarbonisation roadmap for the cement sector⁴⁴ identifies cementitious substitution using pulverised fuel ash from coal-fired power station and ground granulated blastfurnace slag from steel production as mechanisms to decarbonise cement products. This underlines the role of international trade in wastes and by-products given the recent downturn in UK steel production, and the planned closure of coal-fired power stations.

Which are the key areas of environment and climate change policy that merit co-operation with the EU and to what extent could, or should, the UK continue to co-operate with the EU in these policy areas?

Energy: Without access to the EU single energy market, the UK may find it more difficult to ensure secure and cost-efficient energy supply. Transnational interconnection is important to avoid capacity shortfalls in the UK, and to minimise energy costs⁴⁵.

Climate Change: ETS links inextricably to EEA membership; hence, it is not clear what co-operation will be required, but it is important to protect UK manufacturers from carbon price differentials it is important that a UK carbon-price is not out-of-step with the European carbon price.

Transboundary Issues: Addressing transboundary movements of materials, including waste, and transboundary emissions/air quality impacts will necessitate co-operation with the EU.

What international obligations and commitments will be relevant in shaping the UK's future policy?

The implementation of the UNFCCC Paris Agreement will be an important step towards a unified global carbon price, but is likely to take many years to materialise. In the absence of a global carbon price, and whilst respecting the commitments made in through the Paris Agreement, the UK needs to ensure that UK manufacturing is able to remain competitive in global markets.

The UK is a signatory of the Convention on Long-Range Transboundary Air Pollution and specifically the Gothenburg Protocol to Abate Acidification, Eutrophication and Ground-level Ozone. Meeting the commitments under this Convention and Protocol remains relevant to the UK following exit from the EU.

How will existing regulations be governed and enforced after the UK leaves the EU and how could the accountability mechanisms be replaced?

Immediately following Brexit, the UK Government must deliver positive regulatory changes to the most important sectors of the economy and ensure that these changes are consistent with a progressive industrial manufacturing strategy. Despite the opportunities that Brexit presents, the possible uncertainty

⁴⁴ Department of Business, Energy and Industrial Strategy, Industrial Decarbonisation & Energy Efficiency Roadmaps to 2050: Cement. March 2015 - <https://www.gov.uk/government/publications/industrial-decarbonisation-and-energy-efficiency-roadmaps-to-2050>

⁴⁵ Energy and Climate Change Committee, Leaving the EU: implications for UK energy policy inquiry – publications, Written evidence submitted by Mineral Products Association (EUE0027) - <http://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/energy-and-climate-change-committee/leaving-the-eu-implications-for-uk-energy-policy/written/38060.html>

of the transitional years has a high potential to delay or defer investment decisions.

The existing regulatory agencies in the UK will need to adapt to new legislation as it is developed, but as this will take time, and, as a result, transitional arrangements are of critical importance. 'Day 1 Brexit' must provide operators with clarity of the conditions under which they are operating. Regulatory Position Statements from UK Regulators might be a useful transitional tool to provide legal certainty in advance of legislative change.

How can the UK maintain its role as a leader on climate change? What part should it play in the future of the ETS?

The UK has contributed significantly to EU climate change policy but not always in a way that is positive for UK industry. The EU's principal climate change measure is ETS, which, as currently designed, is not congruent with industrial growth, particularly in the short to medium-term. Post-Brexit, the UK has a unique opportunity to unite action on climate change with a sensible industrial policy that delivers short-term stability, medium-term growth, and long-term sustainable local manufacturing.

The UK's political influence as a 'leader' in EU climate change policy is clear but the UK does not represent a good blueprint for sustainable decarbonisation. Whilst at the UK macro-level there has been a divergence of economic growth and greenhouse gas emissions, this doesn't tell the full story as the UK is relying more and more on imported goods whilst off-shoring its environmental responsibility; carbon leakage. In the cement industry, imports into GB increased to 17.2% in 2014 (around 1.8million tonnes)⁴⁶, annually representing 1.5million tonnes CO₂⁴⁷ that the British people have imposed on other countries, and, importantly, around £38.5million GVA from which our economy is not benefiting⁴⁸.

To what extent will the UK continue to have interests in the development of EU environmental standards?

The European Standardisation body ('Committee European Normalisation' - CEN) does not base its membership on EU membership, so UK participation in the development of European Standards is likely to remain post-Brexit.

European Environmental Standards are likely to remain a benchmark for international acceptance, and a requirement for access to the EU market. Therefore, it will be important for the UK to retain influence on the development of these standards so that UK industry:

1. is not isolated from European or international best practice;
2. does not have need to comply with multiple or disparate standards for market access; and

⁴⁶ MPA, Industry Statistics: Annual Cementitious -

http://cement.mineralproducts.org/downloads/industry_statistics.php

⁴⁷ MPA, Fact Sheet 18, Embodied CO₂e of UK cement, additions and cementitious material, Weighted Average Cement of all CEM I, II, III and IV factory-made cements supplied by MPA Cement Member Companies in the UK -

http://cement.mineralproducts.org/downloads/fact_sheets.php

⁴⁸ Based on Annual Business Survey Gross Value Added for 2012, Office of National Statistics

3. is subject to consistent regulatory costs compared to businesses operating in other countries.

16 November 2016

Sarah Mukherjee, Alan Andrews, and Jacob Hayler — Oral Evidence (QQ 23 – 35)

Sarah Mukherjee, Alan Andrews, and Jacob Hayler — Oral Evidence (QQ 23 – 35)

[Transcript can be found under Alan Andrews, Jacob Hayler, and Sarah Mukherjee — Oral Evidence \(QQ 23 – 35\)](#)

Northern Ireland Executive — Written Evidence (ECB0013)

Michelle McIlveen, MLA, Minister of Agriculture, Environment and Rural Affairs

Current Legislative/Policy/Administrative position

EU Environmental policy has been translated into Northern Ireland's law via a number of mechanisms:

- Directly applicable EU Regulations;
- UK wide and NI specific Primary legislation;
- UK wide and NI specific subordinate legislation enabled by the European Communities Act 1972;
- Subordinate legislation enabled by domestic legislation.

The environment is, largely, an area of devolved competence. Section 6 of the Northern Ireland Act 1998 says that legislating incompatibly with community law is outside the legislative competence of the Assembly. At the moment, as all UK jurisdictions have to comply with community law (for significant environmental issues such as air quality, waste, water, environmental quality etc) a degree of consistency on environmental policy has resulted.

The Department for Agriculture, the Environment and Rural Affairs is responsible for environmental policy and legislation (unlike DEFRA, the Department also includes climate change policy). The NI Environment Agency, which is an executive agency of DAERA, is responsible for regulation and enforcement of environmental matter.

Post-Brexit

What the implications might be depend on the form that Brexit takes, and the approaches taken by the different UK jurisdictions in the context of devolved settlements. For NI, the land border with the Republic of Ireland is of unique relevance. It will be important to take the border issue fully into account. Examples of existing connection include the protection and improvement of trans-boundary water bodies within international River Basin Districts; waste repatriation and movements of waste more generally with an EU neighbour; the free movement of goods/services for agri-businesses; management of eel stocks in cross border-catchments; the regulation of power stations and the impact on energy markets in an all-island energy market; the regulation of large intensive pig and poultry farms; the economic impact of differing regimes, e.g. on waste operators both north and south of the border; and the protection of habitats and species, policy on GM crops, invasive species etc.

Co-operation with the Republic of Ireland predates the UK membership of the EU, and the interconnections of the terrestrial, atmosphere and aquatic environment on either side of the border highlight the continuing need for practical co-operation.

Overall

Although not specifically focused on the environment, the overall Northern Ireland view was set out in a joint letter of 10 August from the First and Deputy NI Ministers to the Prime Minister⁴⁹ (her reply of 14 October⁵⁰ refers).

Other significant concerns on the environment will be informed by the following:

- "EU environmental laws" are part of Ni's environmental law including large numbers of directly applicable EU legislation and there is a need to ensure the integrity of existing NI laws upon Brexit;
- The possible implications for trading arrangements need to be considered;
- Considerable effort and resources will be required to address these issues and NI is a small jurisdiction with limited resources;
- More clarity is needed on the Repeal Bill and what it will do including directly applicable EU instruments and instruments enabled by the European Communities Act 1972;
- More clarity is needed on the UK's policy thinking and the extent to which UK wide policy/legislation may be proposed.
- Particular attention will need to be paid to relationships with the Republic of Ireland because of the land border; and
- Consideration should be given to any opportunities that might arise that could improve business competitiveness and economic growth, e.g. through tailored Northern Ireland approaches .

Current NI climate change policy

- NI covered under the UK Climate Change Act 2008.
- NI contributes to the UK target of reducing its GHG emissions, in line with EU and International initiatives.
- The current draft NI PfG framework 2016-2021 has allocated PfG indicator 29 'increase environmental sustainability' with the measure 'reduce greenhouse gas emissions'.

EU negotiations on climate change

- UK takes the lead on EU climate change negotiations. UK complies with the EU Energy and Climate Framework (20% reduction by 2020, 40% reduction by 2030 in GHG emissions) as this provides the basis for the

⁴⁹ 10 August letter from FM and DfM to Theresa May: <https://www.executiveoffice-ni.gov.uk/sites/default/files/publications/execoffice/Letter%20to%20PM%20from%20FM%20%26%20d%20FM.pdf>

⁵⁰ 14 October reply from Theresa May to FM and DfM: <https://www.executiveoffice-ni.gov.uk/publications/letter-first-minister-arlene-foster-and-deputy-first-minister-martin-mcguinness-prime-minister-rt?platform=hootsuite>

UK commitment to a 40% reduction in GHG emissions under the Paris Agreement. NI contributes towards the UK position and we are involved in any negotiations to change the UK position.

- UK also leads on negotiations on the reform of the EU Emissions Trading Scheme and the UK contribution towards the European Effort Sharing Decision, emanating from the Paris Agreement. These initiatives drive GHG emissions reduction across most sectors, not just in the EU, but across the UK and NI. This aligns with UK carbon budgets set under the Climate Change Act and has linkage with wider trading arrangements (energy market, agriculture, waste, transport), all of which apply to NI and any changes to the UK position will involve NI agreement.

Possible impacts from EU policies and measures to limit emissions

There have been a number of measures taken at EU level that reduce emissions across all sectors. Any changes to any of the EU policies listed below may have an impact on our contribution towards UK, EU and International emission reduction targets:

- CO2 emission standards for new cars and vans cut emissions from road transport; emission reductions from buildings is aided by measures to improve the energy performance of buildings;
- Eco-design requirements for energy-related products;
- Energy labeling systems to inform consumers;
- Restrictions on fluorinated industrial gases (F-gases); and
- Implementation of other EU environmental policies, e.g. on soil protection and waste.

6 December 2016

Dr Doug Parr, and Michael Jacobs — Oral Evidence (QQ 57 – 65)

Dr Doug Parr, and Michael Jacobs — Oral Evidence (QQ 57 – 65)

[Transcript can be found under Michael Jacobs, and Dr Doug Parr — Oral Evidence \(QQ 57 – 65\)](#)

RSPB — Written Evidence (ECB0006)

In terms of the environmental opportunities and challenges arising from Brexit (Q12), our view prior to the referendum was that the safer option for nature was for the UK to remain a part of the EU. It remains the case that the environmental risks arising from Brexit are very real and the potential opportunities are very uncertain.

There is a strong body of evidence to demonstrate the positive impact that EU membership has had on environmental outcomes in the UK, in particular through the establishment of robust environmental protections and associated oversight, accountability and enforcement mechanisms. The potential loss of these following our departure from the EU represents a very significant risk to the UK's natural environment. For example, in the case of nature protection, it would potentially mean a significant diminishment in the levels of protection afforded to approximately 80% of the UK's best terrestrial sites for wildlife and a complete loss of protection for over 95% of currently designated marine sites.

While there is a very high degree of uncertainty as regards the UK's future relationship with the EU and the extent to which the UK may still be required to comply with EU environmental standards – uncertainty which in itself risks disrupting and delaying action – there are some notable gaps in the standards that would apply under most scenarios (in particular the Birds and Habitats Directives). We are not reassured by what we have heard from Ministers thus far on the extent to which such vital protections will be adequately secured post-Brexit, not least given the Government's strong emphasis on reducing regulatory 'burdens'⁵¹ and the threat of a deregulatory 'race to the bottom' in the event of a 'hard' Brexit.

Similarly, there are clear risks in terms of the potential for cuts to funding for nature conservation as currently provided through funding streams including Pillar II agri-environment schemes and LIFE. Beyond the UK, there will also be implications for the UK Overseas Territories (UKOTs), which have been significant recipients of funding under the EU Biodiversity and Ecosystem Services in Overseas Countries and Territories (BEST) scheme. New financing mechanisms will be needed to ensure that this globally significant heritage is safeguarded – more than 90% of threatened biodiversity for which the UK is responsible resides in the UKOTs.

In terms of the environmental regulations that are particularly important (Q13), our view is very much that the starting point should be that, at minimum, we seek to retain existing levels of protection for species, habitats, and the wider environment as currently guaranteed by EU law. The announcement of the 'Great Repeal Bill' provides welcome and much needed clarity in this regard as an essential first step, and should help to avoid a serious legal vacuum upon our departure from the EU. However, this will not be enough on its own to ensure

⁵¹ For example, see the findings of NAO (2016). [The Business Impact Target: cutting the cost of regulation](#). Note also the fact that a key element of the [EU reform deal](#) negotiated prior to the referendum was a commitment to introducing deregulatory targets.

standards are not effectively weakened (e.g. due to the loss of key oversight, accountability and enforcement mechanisms). For example, periodic monitoring and reporting to the European Commission on the implementation of laws such as the Birds and Habitats Directives, combined with robust EU scrutiny and enforcement mechanisms, enables progress to be objectively assessed and Member States held to account if necessary. The importance of these mechanisms was confirmed by the recent 'fitness check' of these laws. In future, any changes to this body of legislation should be based on a thorough review of the evidence as to what works and subject to full parliamentary scrutiny and debate.

On the Birds and Habitats Directives, it is clear that nature in the UK is in a poor state as highlighted by the recent State of Nature report. Nevertheless, the evidence is also clear that the situation would be substantially worse in the absence of these laws⁵², and that significant issues remain in terms of fully implementing and funding action so as to fully deliver on their objectives. Action in other key policy areas (e.g. agriculture and fisheries) is also necessary in order to address the threats and pressures faced by nature. For further information, we would draw the attention of the Committee to the evidence submitted by 100 UK NGOs under the banner of the Joint Links (Environment Links UK) – which comprises Wildlife and Countryside Link, Scottish Environment Link, Wales Environment Link and the Northern Ireland Environment Link – to the European Commission's 2015 'fitness check' of these laws.⁵³ The consortium of consultants tasked with carrying out the evaluation study in support of the 'fitness check' published their final report in July 2016. This report represents a gathering together of scientific evidence and stakeholder views regarding the application of EU environmental legislation on a truly unprecedented and impressive scale. There are many key lessons that can be learned from this study.

In terms of the specific issue of the opportunity that might exist for the UK to tailor environmental legislation more to the UK-specific context (Q16), we note that the framework provided by policies such as the Birds and Habitats Directives already provide considerable space for the UK to tailor its policies to deliver for UK wildlife in terms of the specific national context, by setting out the high-level results to be achieved without necessarily dictating the precise means of achieving those results. We are well aware of the controversies that exist as regards the strict protection of certain relatively widespread species that have suffered substantial declines over recent decades. On the specific issue of Great crested newts, evidence from Defra's 2012 Review of Implementation of the Birds and Habitats Directives in England⁵⁴ and the recent 'fitness check' makes it clear that the number of developments affected by the presence of this species is relatively small (<0.05%) and that most problems that occur are a result of inefficient implementation rather than the legislation itself.

⁵² Sanderson et al. (2015). Assessing the performance of EU nature legislation in protecting target bird species in an era of climate change. *Conservation Letters*, 9(34), 172-180; Donald et al. (2007). International conservation policy delivers benefits for birds in Europe. *Science*, 317(5839), 810-813.

⁵³ <http://www.wcl.org.uk/habsregs.asp>

⁵⁴ HM Government. (2012). [Report of the Habitats and Wild Birds Directives Implementation Review](#).

Following the 2012 Review, the Defra-led Great Crested Newt Task Force – a partnership of NGOs, government departments, and statutory nature conservation bodies – was established to work towards a more flexible and cost-effective approach to implementation for the benefit of both developers and newts. A set of pragmatic solutions that work within the existing legal framework are currently being developed and trialled (e.g. addressing evidence gaps and developing clearer guidance and more streamlined licensing processes). In addition, work had been progressing until recently on a Defra-led Memorandum of Agreement (MOA) between industry, NGOs and regulators on better implementation. The MOA was due to be launched in late June but stalled following Brexit. We would particularly welcome a renewal of Defra’s support for progressing this work.

In terms of cooperation and alignment post-Brexit (Q20/21), we would very much hope and expect the environmental aspirations of the UK and the EU to remain similar, noting the current level of policy alignment and the benefits that this has delivered for the UK environment. As set out during the oral evidence session, both the EU and the UK are party to a range of the same multilateral environmental agreements such as the Convention on Biological Diversity and the Bern Convention. Nature does not respect national boundaries and there is a clear logic to continuing with a strong degree of alignment given these shared commitments and our shared natural heritage. We very much hope that the UK’s aspirations will continue to match its commitments under such agreements. In spite of some welcome statements, however, we note here our disappointment/concern that no Defra Minister will be attending the 13th Conference of the Parties to the Convention on Biological Diversity in December 2016.”⁵⁵

Specifically as regards wildlife, an alignment of EU and UK nature conservation policies and actions will increase the chances of UK actions being successful. For example, the EU Birds and Habitats Directives have led to the establishment of a coherent pan-EU network of protected sites based on a common scientific methodology, criteria and set of ecological features. The unprecedented increase in protected area coverage across the EU brought about through this legislation – and the focus on transboundary connectivity – simply would not have been possible without this coordinated approach. This coordination has also provided valuable opportunities to share knowledge, expertise, and best-practice.

On funding, the EU currently has a number of funding streams, such as INTERREG and LIFE, which directly enable transnational environmental projects. Such projects are critical to the effective conservation of species that move across borders, and UK conservation projects currently derive considerable sums from these funding streams.

In terms of the mechanisms that currently exist for dealing with shared environmental issues outside of the EU (Q22), countries within the EEA that are not members of the EU for example are required to apply large parts of EU environmental law. However, there are notable exceptions from these requirements. Important regional agreements that enable cooperation and

⁵⁵ <http://www.parliament.uk/business/publications/written-questions-answers-statements/written-question/Commons/2016-11-02/51657>

coordinated action beyond the EU also exist. An obvious example of such a regional mechanism is the Council of Europe's Bern Convention on the Conservation of European Wildlife and Natural Habitats (to which the UK is a signatory). Fifty countries are currently signed up to this Convention, which covers "*most of the natural heritage of the European continent*" as well as a number of African states.⁵⁶ The Convention's 'Emerald Network' of protected sites is based on the Natura 2000 network under the Birds and Habitats Directives. However, it is important to note that it offers a lower degree of protection, and its impact (e.g. measured in terms of species population trends and protected area coverage) has tended to be much less outside the EU given the lack of strong enforcement mechanisms. It has also failed to stimulate funding for nature conservation to the same extent.⁵⁷

17 November 2016

⁵⁶ <http://www.coe.int/en/web/bern-convention>

⁵⁷ Milieu, IEEP and ICF. (2016). Evaluation Study to support the Fitness Check of the Birds and Habitats Directives.

Scottish Government — Written Evidence (ECB0012)

Roseanna Cunningham MSP, Cabinet Secretary for Environment, Climate Change and Land Reform

The Committee will be aware of the Scottish Government's position on the result of the EU Referendum: We will work to protect Scotland's relationship with, and our place in, Europe. This is in line with the clearly expressed wishes of the people of Scotland. Our priority is to protect all of Scotland's interests; we will seek to embed ourselves as firmly as possible in the UK's process of developing its negotiating strategy. Firstly, we will seek to make common cause with those of like minds across the UK, to try to reach the least-worst outcomes for the UK as a whole. This means remaining in the single market. Secondly, we will seek to explore differential options for Scotland. Our Standing Council on Europe is already working on a spectrum of options. Thirdly, we will ensure the option of independence remains open, if we conclude that it is simply not possible to protect Scotland's interests in the UK.

The First Minister has set out five key interests which must be protected after Scotland voted overwhelmingly in favour of remaining in the EU.

- Our democratic interests -the need to make sure Scotland's voice is heard and our wishes respected.
- Our economic interests -safeguarding free movement of labour, access to a single market of 500 million people and the funding that our farmers and universities depend on.
- Our interests in social protection -ensuring the continued protection of workers' and wider human rights.
- Our interest in solidarity -the ability of independent nations to come together for the common good of all our citizens, to tackle crime and terrorism and deal with global challenges like climate change.

Our interest in having influence -making sure that we do not just have to abide by the rules of the single market but also have a say in shaping them.

1. What are the opportunities and challenges for the UK's approach to environment and climate change arising from the UK exiting the EU?

The Scottish Government will maintain our commitment to our environment and our natural assets. We understand that a healthy natural environment is critical to our success as a nation. It underpins our economy, our health, our landscape, and our way of life. Moreover, Scotland trades internationally on our reputation as a clean, green country which produces wholesome food and drink.

Scotland is recognised as a leader in the international response to climate change. Scotland has already exceeded its 2020 emissions reduction target. We are determined to maintain this position, and we will be setting even more ambitious targets through a new climate change bill and working hard to achieve them. Climate change targets are challenging, and the best way of achieving them is to

continue with multilateral engagement and collective effort, especially to deliver the Paris Agreement commitments.

We believe that our success in developing high environmental standards has been strongly linked to membership of the EU. We have been supported in developing and maintaining our high environmental standards because the EU has arrangements for trade between partner nations which respect and promote progress in social and environmental protection. Moreover, it is clear that many of the environmental challenges we face do not respect national boundaries. Being part of the EU makes it easier to take the collective action needed to tackle these environmental challenges. Scotland gains strength and increased influence through being part of the EU's common voice in international climate negotiations. Any diminishing of that common voice and diplomatic capability would weaken our influence in negotiations, where issues require a truly global response. It is important that bilateral trade deals support the achievement of environmental and climate change objectives. Whatever the good intentions of governments, we know that maintaining high standards is difficult without trading arrangements that allow this to happen.

Shortly after the EU referendum, the Scottish Government hosted an event for environmental stakeholders to discuss the implications of the result. The Scottish Government made clear that Scotland will continue to play its full part in contributing to EU-wide environmental policies. A number of key challenges were identified, particularly over the funding of EU projects (both in the short and longer term), the ability to attract talent from EU countries which is vital for our world leading agri-food and environment research institutes in Scotland, and challenges over maintaining environmental standards outwith the EU legislative framework.

2. What will the UK's legislative position be with regard to the environment and climate change after Brexit?

The majority of matters relating to environment and climate change are within the devolved competence of the Scottish Parliament. For example, Scotland has its own legislative framework on climate change targets, environmental quality and nature protection. EU obligations in these matters are implemented in Scotland in a proportionate way designed to meet conditions in Scotland. Scotland also has its own regulatory and enforcement agencies including the Scottish Environment Protection Agency and Scottish Natural Heritage. The achievement of environmental goals and climate change targets in Scotland can be adversely impacted by matters that are within the reserved competence of the UK Parliament, as we have already seen with levels of support for renewable energy projects. It is important that the enquiry pays due regard to devolved competencies and the separate legislative implementation of EU obligations in the different nations of the UK.

The Scottish Government would welcome clarification from the UK Government on its intentions on legislative arrangements. It is our clear position that Scotland should remain part of the single market, likely requiring the continued adoption of EU environmental law relating to the internal market into Scottish law.

Key stakeholders have raised questions about the future arrangements for nature protection, and how these could be reflected in trade agreements. The Scottish Government is committed to continued protection of natural assets and

biodiversity, and we need to ensure that arrangements within the UK allow for this commitment to be respected in future trade negotiations.

We also note that there are many international treaty commitments and international standards for environmental protection and climate change, many of which are currently met through the implementation of European Directives. In addition, there needs to be clarity about the UK Government's intentions with respect to the separate legal framework of the Euratom treaty.

3. Is there a rationale for developing UK environmental policy broadly in line with the EU beyond Brexit? Is this desirable?

The EU has been a catalyst for driving up environmental standards since the UK joined in 1973. The Scottish Government resolutely believes that membership of the EU delivers considerable social, economic, environmental and cultural benefits for individuals, businesses and communities across Scotland.

There are many EU environmental policies which we would want to introduce anyway, irrespective of whether we are part of the EU. They are the right things to do and will help us to achieve our ambitions for Scotland's environment and society. For example, the Commission's proposals on the circular economy and waste are in tune with the Scottish Government's approach, with Commissioner Vella helping us to launch our own circular economy strategy in February 2016.

The Scottish Government would welcome clarification from the UK authorities of their intentions for the future development of environmental policy, and how this will relate to trading arrangements with the EU and other trading partners. It is our position that Scotland should remain part of the single market, which brings with it a clear set of environmental obligations, which would evolve in line with EU law. Clearly, if we were to leave the EU but remain in the single market, there would be an undesirable loss of influence over the development of EU law compared with the situation with obtains while we continue within the EU.

4. What are the key trans-boundary environmental issues and how can these be appropriately managed after the UK leaves the EU?

Many of the environmental challenges we face do not respect national boundaries, including climate change, and air and water quality. Being part of the EU makes it easier to come together and take collective action to tackle these environmental challenges.

The Scottish Government would welcome clarification from the UK authorities on their intentions for trans-boundary environmental issues. Scotland has key interests, for example with respect to the North Sea and trans-boundary air pollution, and we should be fully involved in the discussion of future arrangements.

5. How can the UK maintain its role as a leader on climate change?

Scotland is recognised as a leader in the international response to climate change. Our work to decarbonise electricity generation has already made a sizeable contribution to the UK's climate change goals, and only one other European nation has achieved a greater cut in greenhouse gas emissions. We are keen to maintain and enhance this position, and will be setting even more ambitious targets through a new climate change bill. Climate change targets are challenging, and the best

way of achieving them is to continue with international collective effort, especially to deliver the Paris Agreement commitments.

The EU, with its commitment to developing a clean, efficient energy system to tackle climate change, has provided powerful support for the Scottish Government's energy and climate priorities. The EU has led global efforts to reduce greenhouse gas emissions. It has driven the liberalisation and integration of national energy markets. EU targets have compelled domestic policy to support vast renewable energy investment throughout Europe. EU regulation has improved the energy performance of products and buildings, and limited the environmental impact of energy developments.

The EU's legislative reach, market influence and climate diplomacy are increasingly intertwined in domestic UK and Scottish efforts to address the energy and climate 'quadrilemma' of ensuring secure, affordable and decarbonised energy supplies whilst ensuring that those energy supplies continue to drive competitiveness and economic growth. Scotland gains strength and increased influence through being part of the EU's common voice in international climate negotiations. Any diminishing of that common voice and diplomatic capability would weaken our influence in negotiations, where issues require a truly global response. The UK or Scotland, acting alone, will not be able to achieve the same impact as the EU in these global negotiations.

The Scottish Government would welcome clarification from the UK authorities on their intentions with respect to future climate change and energy policy and mechanisms. In particular, there is a need for early clarification of the UK Government's plans for key elements of the European arrangements such as the EU Emissions Trading System, which covers 45% of Scotland's emissions and permits Scottish energy intensive industries and power generators to participate in the world's largest carbon market. In addition, we want to understand the UK Government's plans for continued access to the EU internal energy market, and its related targets and legislation for renewable energy and energy efficiency, which are vital to delivering our climate ambitions.

UK and EU energy supply markets are integrated to varying degrees: gas supply is highly integrated; electricity, increasingly; and oil, less so. Already, these supply markets have been affected by exchange rate fluctuations and there is potential for any new trade tariffs or energy security safeguards to further impact on these supply markets.

6. What should the UK's future relationship with the EU look like with regards to environment and climate change policy?

The instability and doubt introduced through the prospect of Brexit could set back the achievement of goals and targets, especially with respect to climate change. The Scottish Government needs to be fully involved in the development of the UK position on the future relationship with the EU, and the UK Government needs to move quickly to reduce the level of uncertainty about these future arrangements.

7. What relationships, internal and external, should the Government cultivate when developing its environment and climate change policy?

The Scottish Government would welcome clarification from the UK authorities on the future relationship they intend having with the EU on environmental and

climate change issues. We would also welcome clarification of how the UK will build international relationships to secure international environmental goals that are currently achieved through EU mechanisms.

We need to ensure that the Scottish Parliament has the full powers and discretion necessary to pursue devolved policy objectives, and if necessary the powers necessary to protect Scotland's place in the single market, including the internal energy market. Remaining in the internal energy market is important to help meet our renewable energy and energy efficiency objectives; and to ensure on-going access for Scottish power generators and industry to EU carbon markets.

There will need to be coordination across the UK administrations on environmental policy, in particular because of important cross-border effects between Scotland and the rest of the UK. However, such coordination cannot be at the cost of discretion over the direction of policy in the separate countries of the UK.

28 November 2016

Society for the Environment — Written Evidence (ECB0011)

Summary

The Society wishes to remind the subcommittee of the important role played by professional individuals and professional bodies in the delivery of aspirational outcomes on climate change mitigation and adaptation. Environmental professionals are a very important resource.

The Society identifies the need for clarity of the boundary of what can be delivered by regulations and what can be delivered by good behaviour in green culture. Improving communication must be part of this.

The result of the Great Repeal Act as part of the Brexit process must ensure that the delivery of aspirational outcomes on climate change are maintained. We advocate processes of reregulation as the next steps.

Organisational Leadership is crucial. The Society advocates an additional value in public life on sustainability and a combined Code of Governance for all Directors. All issues on climate change should be dealt with, with the same level of commitment as health and safety.

Background, the Society and its Policies

First may we introduce the Society for the Environment. The Society is a partnership of 24 professional bodies representing individuals practicing in environmental and natural resources management, ranging from chemists and engineers to ecologists and biologists, and ranging from front delivery to the very highest levels of leadership. Our Royal Charter provides us with the responsibility to oversee the award of the status of Chartered Environmentalist of which there are over 7000. Through the professional bodies licensed to award the Chartered Environmentalist and Registered Environmental Technician professional qualifications, the Society has access to some 500,000 individual members. It is our focus to raise the common standards of competence in individual professionals practicing in natural resources management, to bring a harmony of understanding, but not necessarily uniformity of the diverse views within the bodies belonging to the Society, and to provide leadership in the green cultural contribution to the delivery of sustainable natural resources management

We are aware that you have not invited written comments but we believe that we can provide information to the Inquiry that will bring some benefits to its conclusions. We share a common view that action is needed on the adaptation and mitigation of climate change although there may be different views amongst the bodies within the Society on how we achieve these.

The purpose of this submission is to remind the Inquiry about the importance of professional individuals in the delivery of sustainability, and that as individuals and in combination, we are an important resource of practical wisdom and of effective operations at all level. This is not a comprehensive treatise on climate change, per se.

It will not be a surprise that the Society is already focusing on the implications of Brexit. In July the Society welcomed the new Government appointments with a six-point framework for moving forward

- A. The Society recognises that our Nations face a challenge in moving forward in the wake of the decision to leave the European Union. As members of the European Union, we have made significant progress with the quality and quantity of our natural resources over the last 40 years. The Society wish to help protect that progress and maintain it going forward. But, we believe that there is the now the opportunity to enhance environmental mitigation and protection.
- B. Excessive bureaucracy can be inimical to the objectives of legislation. So we would be pleased to work with the Government in finding ways and means of transposing national legislation made in pursuit of European Union legislation into purely UK driven legislation, which sustain the objectives but which are at the same time efficient and effective. It is essential that this wisdom is applied to new legislation in future. This will add additional impetus to current efforts for better regulation and the work of the Regulatory Delivery team in the Department of Business, Energy & Industrial Strategy. However, we urge the Government not to deregulate essential environmental and natural resources management.
- C. Threats to our natural resources do not recognise national boundaries. For the last 40 years, the UK has shared wisdom with Continental colleagues in pursuit of better environmental standards across Europe. The Society will continue maintain our European contacts. We urge the Governments of the UK to also continue conversing with their colleagues from across the EU and striving for the betterment of Environmental standards.

Because of the international nature of environmental and natural resources management, we have believed that it must be a key component of pan-European policy. This is our description of the Policy which recognises that the UK is part of the 'Great European Project', but as an independent nation and not part of the EU. The objectives shared with the EU and other components of Europe must be in pursuit of the highest principles of individual and environmental wellbeing which transcends the needs of a common trading agreement.

The Society will continue to pursue our European partnerships on that basis and we would be pleased to assist the Government in helping to maintain relationships between environmentalists and decision makers across the EU.

- D. The relationship of the UK with the EU has been a Reserved Matter which has restricted the flexibility of devolved administrations to implement appropriate national legislation. We believe that appropriate devolution of environmental and natural resources legislation to better approach issues at a more local level would be beneficial and will be a key component of the way forward.

- E. We recognise that the result of the EU referendum highlighted a need to re-engage with communities in decision making, in order to replenish their trust in experts, governments and decision making bodies. The wellbeing of society is paramount to a thriving economy. With this in mind, we would welcome an opportunity to discuss potential models for to promote wellbeing, such as the Welsh Wellbeing of Future Generations Act, and how that might be adapted to strengthen community resilience across the UK.
- F. Our preferred structure for political leadership of confronting climate change is that there should be a distinct position within the Cabinet, but we can see opportunities for the new Department of Business, Energy and Industrial Strategy (DBEIS) in embedding climate change awareness and action for adaptation and mitigation at the highest levels in business.

The creation of a link between climate change and business must be beneficial and DBEIS is well placed to properly embed climate change policy within the UK 's Industrial Strategy and to help develop a sustainable circular economy and promote proper natural resource management. We call upon DBEIS to honour the commitments made by the former Department Energy and Climate Change.

There are number of Corporate and Director codes on governance; we would like to see these revised to ensure that those in a position of power, wherever and whatever that might be, will act in the best interests of our future on sustainability.⁵⁸

The Society has used this framework in preparing submissions to the Parliamentary Committees for Environmental Audit and for EFRA. We also made a submission to the Parliamentary Committee on Business Innovation and Skills on corporate governance and called for a convergence of all Codes of Good Governance for Directors of all organisations, and called for sustainability to be a Value in such governance and this re-iterated what we said on World Environment Day. We have further applied this framework when addressing an Environmental Audit inquiry into domestic delivery of the sustainable development goals. The relevant papers are available on our website.⁵⁹

We are developing the framework further through consultation of CEnvS and with the benefit of a Brexit summit organised by Castle debates and sponsored by DLA Piper in September. The intention is to produce report to be launched in Spring 2017 entitled 'Our vision for Excellent Environmental Policy & Practice' and that it becomes a go-to reference tool of widely supported recommendations and practical examples, providing invaluable insight for those tasked with reviewing future environmental policy and regulation. We will champion this report through our professional networks, drawing out supported priorities to be communicated to Government to ensure that UK environmental policy and practice maintains its integrity and leadership position on the world stage, whatever the nature of our future relationship with the EU.

⁵⁸ www.socenv.org/Brexit

⁵⁹ www.socenv.org/Policy

The role of Green Culture and, in particular, organisational leadership

There are deep roots on UK legislation which provide clear boundaries between what the Crown Government, Parliament, Parliamentary laws, and individuals alone, and in corporate combination, can do. So a very important point in the delivery of sustainability is to decide where the boundary lies between legislation and behaviour in the delivery of aspirational goals; nothing demonstrates this more than how we deliver responses to climate change. We commend the initiatives of the Welsh Government in its Environment Act of 2016.

The challenge is that when the needs are of immediately demonstrable urgency - legislative action and behavioural change can be swift. A good example is the way that the Deposit of Poisonous Wastes Act in 1972 followed the dumping of cyanide wastes near a school. But where the effects are in the future, it is much more difficult to mobilise legislatures and personal behaviours.

With the benefit of complex evidence, legislators can bring in frameworks which define the way forward but leave scope for behavioural contributions. The Society recognises that a cultural shift is required and that regulation alone cannot fully alter behaviour. The boundary between culture and legislation has deep roots in our jurisprudence and is sometimes not so simple, so behaviours can be changed by incentives and disincentives outside of penalties - for example through the taxation system. The Society has already made recommendation on green taxation, for example.⁶⁰

This certainly came out in the American Presidential election, where although the environment was not in the top 12 electoral issues for supporters of either campaign, there have been reports of rural support for Donald Trump's call to abolish the Environmental Protection Agency.⁶¹ Whilst there is currently no data to clearly quantify the impact of these issues on voter intention, over regulation and perceived ineffectiveness by these agencies was a part of both the Leave and Trump campaigns. It can leave us to reason, however, that the environment is not on the agenda in the correct way; the burden is a bigger issue than the protection. So a crucial part of the way forward after Brexit is to ensure that our national communications strategies are as clear as they can be.

For example, highlighting that hundreds of millions of years' worth of buried oil and coal has been reintroduced into the atmosphere in the span of 200 years is easier to digest than scientific climate change models which, whilst based on sound science, can have their accuracy questioned or ignored by those without a scientific background. And to talk about the uncertainties of turbulence of weather in simple terms, like watching the effects of slowly heating a bowl of water, is more powerful than talking about jet stream models. Whilst we have given two brief examples, the scope for imagination and innovation in climate change communications is as vast as the issues facing us are.

A significant strand of the green culture is in the quality of leadership in all organisations. As one part of our role in cultural leadership, we are of a strong

⁶⁰ http://c.ymcdn.com/sites/socenv.org.uk/resource/collection/E2DB0A72-17F9-4FA4-B770-99A18C8E39A0/SocEnv_response_to_EAC_inquiry_of_the_role_of_HM_Treasury_in_relation_to_sustainable_development_and_environmental_protection_Version_2_7.7.16.pdf

⁶¹ http://www.gallup.com/opinion/polling-matters/197108/issues-critical-trump-clinton.aspx?g_source=energy%20and%20environment&g_medium=search&g_campaign=tiles

view that commitment to sustainability is a key enabler of corporate success. We believe that it would be beneficial to add an additional value for sustainability to those values required for appointees to public roles and we submitted this idea to the Cabinet Office as a response to the report by Sir Gerry Grimstone on the public appointments system and the commitment by the Cabinet Office to review the Governance Code. We extended this notion by recommending to the Committee on Business Innovation and Skills, as part of its Inquiry into corporate governance, that there should be a combined Code of Governance for all directors incorporating sustainability.⁶² In simple terms a director committed to sustainability is unlikely to behave irresponsibly in other areas of responsibility. So sustainability in its own right can be a general driver of good governance

The relevance of this thinking for the Inquiry

We consider that no matter what the drivers for action on climate change have been through legislation, the impact of what will become the Great Repeal Act must ensure that our commitments at that time continues. So we must continue with the national commitments to the EU Climate Adaptation Strategy and with the targets which derive therefrom. However, as we have articulated, the review of patriated legislation must then provide an opportunity to make the legislation more effective and efficient. We submit that we should think in terms of re-regulation. This term emerged in the financial sector after the events of 2008. It includes the replacement of existing statutes with new or additional legislation and can also refer to the process of reversing deregulation where this turns out to be impractical or unmanageable. This seems like a basis for a better overall term for what we want and what is needed. And then environmental deregulation becomes a small and consequential part of a much bigger process of environmental reregulation.

The Sub Committee should contribute its thinking on what must be achieved by statute and what will be achieved by cultural change. A very good example is the determination of how we should manage the design of new, and retrofitting of old, houses to meet these challenges. What can be achieved in greening the culture of building design and what can be achieved by regulation of building regulations?

We have articulated our suggestions for ensuring that appropriate behaviours by organisational leaders contributes to the adaptation and mitigation of climate change. We now wish to extend our thinking further to embedding responsibility for climate change in organisations. This follows on from there commendations of the RCEP report in 2010 on Adapting Institutions to Climate Change.⁶³ It recognised that if progress is to be made, then commitment to climate change management must be dealt with at the same level as health and safety. Hence there must be a board champion for climate change and regular agenda items dealing with reports on progress and substantive recommendations for continuous improvement.

25 November 2016

⁶² http://c.ymcdn.com/sites/socenv.org.uk/resource/collection/E2DB0A72-17F9-4FA4-B770-99A18C8E39A0/SocEnv_response_to_BEISC_Corporate_Governance_inquiry.pdf

⁶³ http://www.rcep.org.uk/reports/28-adaptation/documents/adaptation_final_summary.pdf

UK Government — Oral Evidence (QQ 66– 74)

Wednesday 16 November 2016

10.30 am

[Watch the meeting](#)

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

Examination of witnesses

Dr Thérèse Coffey MP, Parliamentary Under-Secretary of State for the Environment and Rural Life Opportunities, Department for Environment, Food and Rural Affairs; and Dr Jesse Norman MP, Parliamentary Under-Secretary of State, Department for Business, Energy and Industrial Strategy.

Q66 The Chairman: Can I open this public session of the inquiry we are having on Brexit, the environment and climate change? Can I remind members to declare their interests, if they have any, when they ask questions? First, Ministers, I welcome you very warmly to this House of Lords Select Committee. We look forward very much to your contributions. Perhaps I could start off by saying this is, quite clearly, an open and public session; it is being webcast and we will also take a transcript which we will provide you with copies of. If there are any errors please come back to us and we can have those amended. The best thing, not just for us but for those watching and listening, is to ask you both to briefly introduce yourselves and then we will start off with questions. Dr Thérèse Coffey, perhaps you could start.

Dr Thérèse Coffey: Thank you. My name is Thérèse Coffey. I am the Member of Parliament for Suffolk Coastal and the Minister for the Environment and Rural Life Opportunities.

Dr Jesse Norman: I am Jesse Norman. I am the Member for Hereford and South Herefordshire, and I have been given the most grandiose title in Government of Minister for Industry and Energy.

The Chairman: That is a good start. Perhaps I could start off with a broad question, which is to ask you—hopefully both of you can respond—for your vision for the UK’s future relationship with the European Union post-Brexit with regards to environment, climate change policy and, particularly on the Defra side, how it will affect the 25-year plan which is a major part of Defra work at the moment.

Dr Thérèse Coffey: In regard to moving forward, Members will be aware that we play a full part in the European Union and will continue to do that. We are very active in the negotiations on the circular economy, which is part of elements still coming up, and we will continue to do that as long as we are full members of the European Union. In particular, for our departments, the environment and climate change really do not know boundaries, so it will continue to be a feature of our policies moving forward

to work closely with the EU as well as other countries. You will be aware that we are already members of many multinational agreements, and we will continue to honour those and indeed play a leading part where we have specific expertise.

In regards to the 25-year environment plan, that was in our manifesto anyway. What is different about moving forward, working on the environment plan which will be closely in partnership—hopefully you will see a good dovetailing—with the food, farming and fisheries plan, is that environment will be a key element of our industrial strategy for the agriculture and fisheries industry. We have the opportunity to develop a 25-year environment plan that is more bespoke to the needs of Britain. At the moment, directives cover 28 different member states' needs, and while large elements of what we will do will continue to be business as usual there is an opportunity, thinking ahead, to move to almost having multiple environment plans within England alone, obviously working closely with the devolved nations, but moving to more of a catchment-based kind of thinking with agricultural support, and recognising that different parts of our country have different environmental challenges. I anticipate the environment plan to be an umbrella which will address our international obligations but address very specifically the needs of our country moving forward.

Dr Jesse Norman: I would add a couple of things. First, I very much welcome the work that you and the Committee are doing in this area, and it is a mark of the seriousness with which we take this issue that my colleague Nick Hurd MP at the moment is in Marrakesh on these COP 22 negotiations, taking forward some of the agreements laid down at Paris and thereafter. It is a very important issue. I can only add a few things to what Thérèse has already said very well, but perhaps I can pick up some of them. Of course, our department has industrial strategy in the title, and it is part of our concept of industrial strategy—and we will be seeing consultation documents in due course but I think it is no secret—that we want to see a greater spatiality, a spatial dimension to the way we think about industrial strategy. I think that fits rather well with what Thérèse was saying about the different kinds of standards that might be implied with the environment.

As regards the EU, as a country we have an independent personality from the EU in climate change terms, even a very important part of what climate change has been in this country, but we are well known around the world for the relationships we have with the international groupings and the support we have given to different international conventions. We try to use that influence within those frameworks to influence other emitters.

If we look at the specific kinds of areas in which Brexit may have an impact on this, there are three one could pick in particular. One of them is how we achieve the best deal overall as part of a future relationship, and that means exploiting potential where there may be opportunities having come out, as well as standards we will want to continue to adhere to. The second is what interaction there will be between EU policies and targets and our own domestic policies and targets. At the moment, it is quite a tight interaction; obviously, EU law has a direct effect in this country and the Climate Change Act has been specifically tied into a series of national

commitments of which the EU is part. We need to look at that. The third is specific concerns around things such as the EU Emissions Trading Scheme and, the impact of EU policies in helping us to achieve carbon budgets, and we will have to look at those quite closely as well.

The Chairman: I am sure we will pursue those. In fact, we should have asked you to write the questions because those are exactly the issues we need to explore. I wanted to follow up on the fact that Europe, like other Governments or countries, tends to look at some of these issues in silos. Does Brexit give us an opportunity, particularly on bringing agricultural, environmental and indeed marine policy together more than it is at the moment, to avoid some of those silos?

Dr Thérèse Coffey: I would like to think Defra works closely on those matters. I appreciate you are on the board of the MMO.

The Chairman: I am indeed. As you have mentioned it, I will declare that interest.

Dr Thérèse Coffey: I am sorry.

The Chairman: It is a good point; I am a board member of the Marine Management Organisation.

Dr Jesse Norman: She is brutal, my colleague; she can see your conflict of interest.

The Chairman: It was well picked up, thank you.

Dr Thérèse Coffey: Marine conservation policy within the department has moved into my area away from George Eustice MP, but George still has the lead Minister relationship with the MMO, principally because of fisheries. The framework we are hoping to publish soon is not going to give all the answers; it is a genuine “This is where we are thinking of heading; stakeholders have already had some engagement in it”, but what I would like to think is that you will see a good dovetailing of making sure that environment still continues to be at the heart of, say, fisheries. It is absolutely vital that we have a sustainable fisheries policy, and of course we will need to continue to co-operate with other EU states as well as Iceland, Norway and so on. I do not want to speak on behalf of George but the UK has been at the leading edge in trying to improve marine conservation and we need to make sure that others do not slide back on it. Our engagement after leaving the EU will be really important. That comes across as a science-based approach but George is absolutely passionate on these matters.

I would add a reminder that environment is a shared competence. We are going further than the EU on certain matters and I think we are able to start linking more issues connected with agriculture to the environmental aspects of it. As I say, unfortunately the framework is not out yet, but hopefully you will find it useful reading.

Lord Krebs: I should declare an interest as a member of the Climate Change Committee and chair of the Adaptation Sub-Committee. I wanted

to pick up on something Dr Coffey said, very briefly, if you could elaborate. You talked about bespoke solutions for the United Kingdom that might be available post-Brexit. Could you give us an example of a bespoke solution and explain why the current EU system prohibits us from doing that, whatever the example is?

Dr Thérèse Coffey: It is not top of our priority list because you will appreciate the process that the Prime Minister has announced is about bringing EU law into UK law and we shall take our time to go through these, but you might want to look at every aspect of every directive; everything on the invasive species. Some of those plants do not exist or are not a problem in the UK, so again we might look at whether or not we still need to consider that. That is a transition thing and it still will be, but it is for us to think about in the future.

There are elements about having an agricultural policy that can be much more tailored to the needs of our country. George Eustice MP is the expert on cross-cutting, but we must have and will have a strong environmental influence on that, again allowing us to be a bit more tailored. Water stress is a massive issue in the south and the east; it is not a big issue elsewhere. You might want to design a policy and a scheme that is more tailored, whereas at the moment they have to be quite uniform. I think there are good opportunities for us to think through future agricultural support, as an example, where we want to drive specific environmental outcomes. I keep hearing about the Nitrates Directive, which is very prescriptive in its application, and yet it may not necessarily achieve the outcomes it is intended to anymore, so we need to think about that.

Lord Cunningham of Felling: Would it be safe or accurate to conclude from what you have both said in answer to the Chairman's questions and Lord Krebs that we can look forward to major changes in environmental policy or climate change policy when we have left the European Union?

Dr Thérèse Coffey: My view is we are going to have a smooth transition. As I have already articulated, we recognise that the environment—and I am sure Jesse will say climate change—is not a unique issue to this country and we have to work across borders anyway. If I think of air pollution, a lot of stuff comes in from the continent and we will continue to work for that. I do not think there will be a revolution in our approach at all, Lord Cunningham, but there may be some things that we think are no longer fit for purpose or not achieving the outcomes which they were originally intended to that we have an opportunity to change.

Dr Jesse Norman: Can I add to that? Of course it is right not to speculate in advance of the process on how exactly it will take place and what environmental change might be enabled by the process and by the state of the law at that point. It is worth saying that the overall course of our environmental policies, from a climate change standpoint, is very much set by the structure of our existing commitments, and they will survive Brexit. We have carbon budgets which take us up to 2030 and we have a climate change committee. None of those are EU-dependent and they are a very important part of the enforcement of targets we are internationally committed to.

The Chairman: Dr Coffey, you mentioned the Circular Economy Package earlier on, which has quite a bit of support in various parts of Parliament, if you like, cross-party or whatever. Do you see that as an area which the UK would want to proceed with in principle even though the decisions of that package, probably, will last to beyond the point of Brexit?

Dr Thérèse Coffey: We are not clear exactly when that will come to a head. The Government support the concept of the circular economy. As I have said in the past, I do not particularly like the phrase—but I accept that is the lingua franca—only because I think it often implies a closed loop and no room for growth. The best businesses are already doing this, recognising that resources are scarce and wanting to make the most efficient use of them. The negotiations are ongoing about that. We have our concerns. We would like to focus on one definition; at the moment there are four definitions for recycling and resource reuse. There is also an example I have been made aware of that if an aluminium can is reused as a can it is considered recycling, but if it gets used to build Jaguars in St Athan in the future it will not be considered recycling. There are a few things such as that where you almost do not want over prescription to go against what the best outcomes could be.

The Chairman: I think that answers the question very well, thank you.

Q67 Lord Cunningham of Felling: The EU has had a long-established practice in these areas of underpinning its objectives by making them binding in law in many cases and we have done that with the Climate Change Act. Do you see any need or any likelihood of change in that kind of approach? For example, will we resile from an approach involving air quality controls or will we stick with it? Or is it too soon to say?

Dr Jesse Norman: The answer to that is it is too soon to make binding judgments in many of these areas. There are no plans to set nationally binding targets in key areas such as renewable energy and energy efficiency. One of the features of the EU regime has been the attempt to tie down some of these targets, and historically this Government and previous ones have resisted that because they have wanted it to be more neutral on economic grounds. That is the position that the Commission is coming towards. There is always going to be a balance between wanting to have rules and wanting to have flexibility. As I have said, a lot of the rules that we already obey either come through international conventions, such as COP 21, the Paris agreement, or through matters of internal statute that we have already reached with an overwhelming consensus that are unlikely to change. Therefore, those aspects I do not see as changing. However, I hope there will be flexibility within the new dispensation for us to pursue some of the changes that we have been describing today.

Lord Cunningham of Felling: What about the rules we are failing to meet at the moment, on air quality in particular?

Dr Thérèse Coffey: In the future I fully expect us to try to have a stable and clear legislative framework that underpins our international agreements. On air quality, you will be aware of the court case that happened last week. We went into that on the basis that our projections

were based on the best possible evidence that we had and that we had always committed to updating our modelling on the basis of the new COP factors, which we have been chasing the European Union for, and the real driving emissions tests that we have been chasing for the last six years to get something more realistic. That will be coming out next year. We intend to honour those. It is a top priority for the Secretary of State and it is certainly a top priority for me. Central government cannot do it alone and that is one of the reasons I am encouraging local authorities to honour the duties they have been given for the last 20 years to address air quality issues in their own area. I see it as a shared challenge moving forward.

The Chairman: Lord Selkirk, did you wish to add anything at all?

Q68 Lord Selkirk of Douglas: Yes. First, can I mention that I have an interest as a director in a small family property company which has a possible interest in a turbine on a piece of agricultural land? My question, which you have in large measure answered, is whether there is any intention to add renewables or energy efficiency targets to the emissions reduction targets established by the Climate Change Act.

Dr Jesse Norman: To elaborate on what I said on that, the answer is no. It is quite noticeable, and it is an interesting aspect of the Brexit discussions, in a way, that our voice has been rather a positive one in pushing the Commission in a direction that we have historically taken, which I think is probably better for the EU as a whole.

Lord Selkirk of Douglas: Thank you.

Lord Krebs: I would like to follow up Lord Cunningham's question with Dr Coffey. It was reported in the *Financial Times* on 21 October that you had written to the EU Environment Commissioner calling for a delay to new, stricter pollution control rules for coal-fired power stations. Does that signal that you would, as a Government, wish to have a more relaxed approach to air pollution than we currently have?

Dr Thérèse Coffey: Forgive me, I do not have the precise details at hand; I apologise. I think that is more of an indication triggered by a particular issue where we want to make a sensible transition on elements that have impacts on the local economy, in that particular area of power stations. We felt that we were making progress on that, but of course we want to work in the best interests of the United Kingdom and that is why we are looking to seek a site extension.

Dr Jesse Norman: It is worth adding that we are the first country to have announced that we would consult on the closure of unabated coal-fired power stations, so we are overall setting an international standard in that area.

The Chairman: There was a manifesto commitment to do it, I think.

Dr Jesse Norman: I am not sure that is true; it was regarded with great interest when Amber Rudd, when she was Secretary of State, announced the consultation at the end of last year.

The Chairman: Indeed. Good.

Q69 **Viscount Ullswater:** Perhaps I ought to declare my interests. I am a life member of Supporters of Nuclear Energy and I am also a trustee of an agricultural estate in Cumbria which receives income from a number of wind turbines. What are the most significant international mixed agreements pertaining to the environment and climate change? Do the Government expect the UK to be automatically bound by those conventions post-Brexit? The Committee heard at an earlier session that legal opinion is divided regarding whether the UK will automatically be bound by these international conventions.

Dr Jesse Norman: The lead convention in this area is the UN Framework Convention on Climate Change. We are a party to that individually as well as through the EU. As you know, we have been very clear that we will be seeking to ratify the Paris Agreement as soon as possible in this country and before the end of the year. Once we have done that we will continue to be bound by that agreement independently of our departure from the EU. I think that is the key to the position. There are, obviously, other international conventions that we will continue to be bound by but I think that is the leading one to focus on.

Dr Thérèse Coffey: The UK is party to about, I think, 30 multilateral environment agreements. You have things such as the Berne convention about wildlife and habitats; you have OSPAR, which is a regional agreement focused on the north-east Atlantic; CITES, on trade in endangered species, the Montreal Protocol, the convention on biological diversity and many others. It is my understanding that as the UK is already a party in its own right it absolutely will stick to the commitments, and is obliged to, once we leave. What has happened, particularly on the environmental side, is just a lot more convenient for the rules, in effect, to come into play as EU law in one fell swoop rather than through individual elements of international law. As has already been explained, we expect to bring the European *acquis* into UK law as part of the smooth transition.

Q70 **Lord Trees:** Good afternoon, Ministers. It has been suggested to us by a number of stakeholders that in the light of recent cuts to Defra's budget and the expanded remit of BEIS that the departments may not have enough resources to cope with the colossal workload associated with the whole process of Brexit. How would you address those concerns?

Dr Thérèse Coffey: Defra is probably the government department most closely related and impacted by EU activity. We have already been through a process within the department; we are redeploying some people. We are advertising and recruiting for new staff to make sure that happens. I think the detailed planning has come to an end on what we need, and certainly the Cabinet Secretary, as far as I can tell, agrees that we are a priority in regard to getting good-quality people in to help us. It is fair to say, especially on the environmental angle, given that our approach currently is to bring the *acquis* into law, that the key issue for us is making sure that that works, so operability is our key focus. What is different for other parts of departments is that we need to have in place a new fisheries policy and a new agriculture policy. We do not need a new environment policy that is not already sketched out as part of our 25-year environment plan. There are some activities where that takes priority in that regard. Nevertheless, for the environmental side, thinking in particular on things such as

pesticides and chemicals, operability is the key focus for us in making sure that nothing falls between the cracks.

Dr Jesse Norman: From a BEIS standpoint—I still call it BEIS—

Lord Trees: I am sorry; I did take advice on how to pronounce it.

Dr Jesse Norman: My preference would be “beast”, but that is a separate matter. From a BEIS standpoint, we are a department formed of two departments coming together. The plan is that this should be an absolutely integrated single and fully functioning department of state by April of next year. From the very outset, we as Ministers have been given briefs that sit across both of the previous departments as part of a process of integration. I think it is a little premature, from our point of view, to talk about resourcing. I certainly had not noticed reasons for concern on that front, from a BEIS standpoint. I have noticed that there are clear opportunities for, if not synergy, a more interesting, holistic view of some of the issues. As a department now with Ministers straddling both sides, we can think not just about the cost in the energy side, if you like, but the revenue side. Hopefully that will enable a more intelligent conversation within our department, and possibly within Government, about how to balance some of the priorities we have talked about.

The Chairman: This is where I was going to declare my interests in the Marine Management Organisation. Defra has been one of the departments that has, perhaps, suffered, enjoyed, or whatever, some of the largest of the budget cuts, with these challenges in agricultural policy, particularly. I take the point that environment is one you fix legislatively rather than with people power, but on the marine and agriculture side you feel that Defra is going to be resourced to cope. You feel relaxed about that, do you, Dr Coffey?

Dr Thérèse Coffey: Certainly the Cabinet Office is very clear and very aware of our need for more officials to help. We are recruiting and the analysis is pretty intensive. Frankly, I cannot talk beyond what the Secretary of State is still discussing but nevertheless I do not apologise for the cuts that have been made in the past. I am a Conservative Member of Parliament, we have to be a Government who live within our means and I have said publicly before sometimes budget cuts force people to prioritise.

The Chairman: We are not questioning that.

Dr Thérèse Coffey: Nevertheless, there is a recognition that we need some additional posts, and we are recruiting for them.

Lord Krebs: Again to follow up with Dr Coffey, on the environment side, I accept what you say that if the legislation is translated into UK law in the Great Tepeal Bill that will work quite well for the environment, but there are also areas where we rely on European institutions for expertise—in risk assessment, say. Can you tell us how that will be transferred into the UK situation?

Dr Thérèse Coffey: That is still part of ongoing discussion and deliberation. In particular, articulated to chemicals, pesticides and things

such as flourinated gases, where we have a particular focus about operability in the future, it is fair to say we are still working up policy options which will then need to be considered as part of the negotiation.

Baroness Sheehan: We have heard from the Chemical Industries Association that there are legislative proposals it will be important for the UK to engage with over the next two years. Is the UK currently resourcing full engagement with the EU on environment and climate change issues? As an additional question to that, do UK officials still have access to relevant discussions?

Dr Thérèse Coffey: Yes and yes, is the shortest answer I can give. We have to recognise that we are hoping to negotiate a good trade deal. Quite a lot of regulatory equivalence will almost certainly be required, so it is in our interests, as the United Kingdom and for UK industries, that we are very active in the negotiations moving forward. Of course we will still be fully bound by those laws as members of the EU. We are not diminishing our attention on issues that will impact the UK in the near future and in the medium and long term.

The Chairman: The reason for some of the questions we ask, such as on Defra funding and this, is because in the evidence we have taken these have been major areas of concern in terms of the stakeholders you are obviously dealing and consulting with as well.

Dr Thérèse Coffey: I will give you a slight insight; I cannot remember the exact issue off the top of my head, but it came up fairly recently. There are some things where, traditionally, certain countries look to the UK to take the flag forward and they come in behind us. I am thinking of some of the eastern European countries. There are some where we are now needing the eastern European countries to pick the flag and lead things forward because the negotiations may not even be complete by the time that we leave the EU, so that is more about realpolitik rather than trying to reduce our influence in those matters. That is an example of where I have seen it in one policy area, which I just cannot remember off the top of my head, but it came up at the last Council meeting. We are still fully engaged, but we recognise that we are leaving the EU and we cannot just drop the ball on the day we leave and leave the negotiations in mid-air, so other countries are stepping forward.

The Chairman: On the chemical side and REACH, everything becomes part of current legislation at that point, but how do we then keep an equivalence so that, whatever relationship we have, whether it is the single market, a customs union or the WTO, we then continue to enable British business and supply chains that go through the UK to keep that bit? How do we keep that equivalence at that point?

Dr Thérèse Coffey: That is one of the detailed analyses and option forming that we are doing. Some things will be massively interdependent, and I agree that chemicals, in particular, will be one of those particular areas of interest that we need to be very alert to on that regulatory equivalence. I do not know in the future; that is a decision for the Prime Minister ultimately to take on our negotiations.

The Chairman: Obviously, international trade is not part of those, but for trade, industry and business, it is clearly important.

Dr Jesse Norman: A lot of this will depend on the way in which Brexit takes place. Environmental standards are already written into trade agreements that the EU has. It is a well-known issue to try to make sure that the standards, as it were, are applied across a level playing field in trade agreements, so one would expect there to be some recognition of that, whatever the outcome.

The Chairman: We are going to move on to enforcement and oversight.

Q71 **Viscount Ullswater:** Dr Coffey, your Secretary of State has stated that a quarter of EU law will require intervention or will fall away before it can be brought into UK law. What steps will you take to ensure that there are no gaps in environmental legislation post-Brexit? There are three strands to this. We understand that all departments are mapping the effect of Brexit on EU laws under their remit. Have either Defra or BEIS reached any conclusions through this review? What are the most challenging policy areas to deal with, and will the great repeal Bill apply to all EU law regarding the environment and climate change, or only to those laws which have been put into secondary legislation? Finally, will the ECJ interpretations regarding environment and climate change legislation be applicable in the UK after the great repeal Bill becomes law? It is rather a long question, I feel, but it is all around one particular subject.

Dr Thérèse Coffey: The purpose of the Great Repeal Bill is not to repeal all EU legislation, it is to repeal the European Communities Act and, very precisely, the Prime Minister has said that we will bring EU Regulations, which are not already part of UK law and have not already been transposed, into that.

In terms of jurisprudence, that is still an ongoing discussion, but my view is that the laws which we apply today include that jurisprudence, but I do not want to give any cast-iron commitment on that because again that is a decision, dare I say it, for higher up the chain on some of those finer details of the Great Repeal Bill.

Defra has not yet finished doing this mapping exercise because it is so huge for us. What is very clear, and I think I have referred to it a couple of times, is that the key areas where it is most complex are chemicals, pesticides and greenhouse gases, and they are what is consuming a lot of grey matter. Very detailed work is being done to ensure that nothing falls between the gaps in preparation for the Great Repeal Bill. It would not be good for our legal system to suddenly develop a hole, and that is not our intention, but that is where most activity is happening on those three areas of legislation.

Dr Jesse Norman: Just to follow up on that, as you have noted, Lord Ullswater, there is a review going on at the moment in this area. There are aspects of European environmental law or practice which obviously have an enormous impact on us—something like 40% of our emissions are covered by the EU Emissions Trading Scheme under the current budgets. The Climate Change Committee assessment is that something like half of our emissions reductions to 2030 are covered by EU policies, so it is a very complex matter that is being reviewed at the moment. I think the key here

is to give as much stability as possible, recognising that, inevitably, the negotiations and the legislative timetable, to some extent, overlap or run in parallel, which is no small matter.

As regards the Great Repeal Bill and the ECJ, of course, where there are interpretations that are, as it were, already mirrored in UK law separately, those will persist and, where they are brought in under the great repeal Act or similar legislation, they will be imported. There may well be ECJ judgments that sit in, as it were, limbo where they are not imported and it may be open to judges to follow or not follow those, depending on their view of the jurisprudence, so it is not a matter that is precisely capable of definition, even in principle, at this stage.

The Chairman: Has Defra thought about the ECJ issues at all, Dr Coffey?

Dr Thérèse Coffey: I tried to articulate where we currently are. That is how our laws operate. I think Jesse is right, that the whole principle is that we bring this back to the decision of UK judges in the future on interpretation of matters of law.

The Chairman: A number of our witnesses were quite concerned that those judgments had become an important part of policy. and that although clearly, the future is the future, as those were important in the past, there would be a way found to make sure that those continued in the spirit of not moving backwards on B Day, if you like.

Dr Thérèse Coffey: Lord Teverson, you will be aware that the overriding commitment of the Government is to leave the environment in the best place that we found it and to be the first generation to achieve that. People should not have cause for concern all of a sudden that we see Brexit as an opportunity to backslide on the environment; far from it. We want to have a better environment than we inherited. We may have more of an outcomes-focused approach; as I was alluding to earlier, sometimes legislation gets a bit out of date or is no longer achieving the purpose it originally intended.

Dr Jesse Norman: It is worth saying that there are areas that we have not mentioned so far, such as greenhouse gases, where the EU has outperformed its nearest EU counterparts. We should regard this as an opportunity rather than, as it were, just see it negatively in terms of the potential backsliding.

The Chairman: Indeed.

Lord Krebs: I would like to develop the conversation with Dr Norman a little more on the climate change targets. Of course, you have now accepted the fifth carbon budget which takes us through to the early 2030s and, as you said, two crucial elements of that are our membership of the EU ETS and the fact that about 55% of the specific legislative measures that drive the reduction in carbon emissions come from the EU. I did not quite understand your statement about those two matters, where it ended up and what it led to.

Dr Jesse Norman: The first one was a recognition of the size of the task and, therefore, the concern to make sure that there was an adequate joining up between the different parts. Part of the goal of the great repeal Bill is to make sure that that stability is maintained and that those gaps do not exist.

On the issue of the ETS, I think it is widely recognised that it is not functioning perfectly at the moment. It is a further matter for discussion at government level as to whether or not we withdraw from that or what relationship we might have with it in the future, independently of Brexit, but one should again not see that as something that is perfect in its own right or incapable of improvement.

Viscount Hanworth: As an adjunct to Viscount Ullswater's question, Andrea Leadsom MP has asserted that UK courts will be able to deal with any matters concerning enforcement of environmental legislation. However, we have heard that the ECJ has played a major and significant role in raising UK environmental standards. Indeed, I think there have been 30 environmental cases brought by the Commission against the UK which have resulted in a judgment against the UK. The absence of EU enforcement after Brexit would seem to leave a considerable void. What steps will be taken to ensure timely compliance with environmental legislation in these circumstances?

Dr Thérèse Coffey: As the Secretary of State has already articulated, if people want to mount legal challenges to allegations that the Government are not complying with the law, that will still be there. I am a strong believer that it is the role of Parliament to hold the Government to account and, of course, ultimately the Government are accountable to the people through the ballot box, so, if people do not like some of our policies or whatever, they can always choose to get a new one, but I am very confident that they will like our 25-year environment plan and show that this Government are going to be a huge champion of the environment moving forward.

The Chairman: But there might be other Governments after this Government at some point. Are you equally confident about them?

Dr Thérèse Coffey: Part of the role of the Environmental Audit Select Committee in the Commons is exactly to do this kind of work across government—focusing not just on Defra but on others—and hold us to account. I do think Parliament has a strong role to play in that.

The Chairman: But infraction plays quite an important role, does it not, in reality? Pragmatically, the fear of infraction by the European institutions drives civil servants and officials as well as Ministers, and that is going to be gone. It is one of the areas where perhaps the NGO witnesses and some in business as well have a concern.

Dr Thérèse Coffey: I hear what you say, but I am going to stick to the role of Parliament to hold the Government to account.

Viscount Hanworth: You have mentioned judicial review in passing. Do you expect that that will be a fruitful route for enforcing environmental legislation, or do you imagine, in view of the fact that it is expensive and

protracted, that it will be only a minor element?

Dr Thérèse Coffey: It is my belief that, when a Government and Parliament sign up to making laws, it is their responsibility to maintain those laws.

Viscount Hanworth: We are talking about practicalities.

Dr Thérèse Coffey: You are talking theoretically about potential future judicial reviews and I am not going to get into the theoretical.

Viscount Hanworth: We want to know what the mechanisms of enforcement are liable to be. You have told us that we must trust the good will of your party, but that is not really an adequate answer, I think.

Dr Thérèse Coffey: I am saying it is the role of Parliament to hold the Government to account. The Government are accountable ultimately through the ballot box, but, as the Secretary of State outlined, the law is there and, if people believe that we are not complying with the law, they can take the Government to court about it.

Viscount Hanworth: For judicial review and all the rest of it.

Dr Jesse Norman: I do not think it is quite a fair characterisation of what my colleague said. You have Parliament as an entity, and it is not a particularly party matter, but it has a very well developed mind of its own, especially on environmental issues, and you have parliamentary committees and judicial reviews. I do not need to remind the Committee that judicial review has been an extraordinarily effective means of holding the Government to account in many different ways over at least the last two decades, and many of these issues are ones where there is little reason to think that a sufficient body of opinion does not exist to be able to support a judicial review.

If I can turn to the areas that I focus on in climate change, of course, we have had a highly effective mechanism already in place through, if Lord Krebs will excuse me, the Climate Change Committee, which is very widely respected across parties and indeed across countries. The carbon budget process which successive Governments have gone through with the Committee has been an effective means of adding enforcement to a set of longer-term targets. These are not trivial matters. The fourth carbon budget will impose quite a severe further constraint which we will need to meet, and will be meeting, in the emissions reduction plan. I do not think one should worry about the absence of constraint in that area; I think it is pretty effective.

Baroness Sheehan: Could you both say a little bit about the historical enforcement regime before EU mechanisms were implemented and, in your opinion, how well it works and how we could improve on it post-Brexit?

Dr Thérèse Coffey: Given that I was one year old when we went into the EU, I am afraid I have not really thought about the enforcement mechanisms we had prior to that. Of course, environmental legislation did not start just because we joined the EU; we have had a long history in this

country of Acts of Parliament to tackle certain issues, with the Clean Air Act probably being landmark legislation, but there have been other elements of protection of wildlife for some time. I expect that there will have been situations in the past when the Government were held to account on their performance on each of those matters, but I am afraid I cannot give you a very detailed answer.

Dr Jesse Norman: It is worth saying that these issues of climate change and environmental compliance have a prominence in our public life now that no one could have imagined or contemplated even 20 years ago, so I do not necessarily think that the past is a particularly good guide. What I think is a good guide is the flexibility with which British Governments over the years have created standards for themselves and been able to hold themselves to account by parliamentary means in a way that has given comfort to the wider public that these standards are being properly enforced and understood.

Baroness Sheehan: I will not pursue it any further except to say that some of the NGOs have expressed concerns based on our historical performance in enforcing environmental standards.

Lord Krebs: I appreciate Dr Norman's comments about the Climate Change Committee's role. I wondered whether there might be a case for establishing a committee analogous to the Climate Change Committee, a statutory committee with a broader remit to hold the Government to account and report to Parliament on the Government's progress in implementing a broader range of environmental measures.

Dr Jesse Norman: It is very hard to comment on that in the absence of a specific proposal. What we can say is that the question of what balance needs to be struck between discretion and rules and how those rules need to be enforced is an active part of the question of what environmental policy overall ought to be over the next 20 years and is, therefore, certainly and properly, a concern for the Government.

Q72 Lord Krebs: You have partly answered my question because I was going to ask if it would be necessary for the UK to engage with the EU on environmental and climate issues post-Brexit, and I think at the very beginning Dr Coffey answered clearly yes on that and Dr Norman too. Perhaps a follow-up would be: given that the answer is yes, can you tell us anything about which policy areas will be a priority—again, I think you have partially answered that certainly on the climate side—and what are the means by which you will pursue an engagement with the EU?

Dr Thérèse Coffey: Obviously, we have the environmental agreements I have already referred to. The Oskar convention will be crucial, I would suggest, on marine conservation and other elements. The UK plays a leading role on illegal wildlife trade, so I expect us to continue to be leading on elements of CITES, and the Secretary of State is currently on her way to participate in the Illegal Wildlife Trade Conference hosted by Vietnam, but we started this cycle in London a couple of years ago. There are some other things, such as the Convention on Biological Diversity. We have views on synthetic biology which may be akin to those of America and other countries and some of our friendly neighbours across the Atlantic in

Canada, so those might be examples of where we want to increase attention on those sorts of policies.

The Chairman: Just to explore this a bit more, most of that engagement will be through existing international bodies and agreements, effectively, and do you feel that that is sufficient? This is not a pejorative question, it is a real question.

Dr Thérèse Coffey: I do not know the practicalities of it, Lord Teverson, but, just like Norway and the US have embassies in Brussels and are very proactive in their engagement with the EU, I fully expect the United Kingdom to be so. Of course, we also have wider relationships through the Council of Europe, which also has quite a lot of environmental angles to it.

The Chairman: Things like migratory species?

Dr Thérèse Coffey: Yes, but I cannot remember which convention that one is now. As I have discovered since coming to this role, there are meetings going on all the time around the world and, although, of course, we are part of the EU, the UK is a party in its own right and leads an influential role in many of them. Even if we come together on certain aspects of voting as a bloc under the EU, we have to remember, as I said before, that this is a shared competence and not everything the EU votes for on behalf of the United Kingdom at these international conventions.

The Chairman: Absolutely.

Q73 Lord Krebs: This is for Dr Norman. We have heard from a number of other witnesses that, in relation to climate change and our global influence, what has been very important up to now is that we have been part of a large and powerful influencing group, namely the EU, and that, once we have left that group, and some people have put it to us in very blunt terms, we will become a relatively small, solitary voice, unless we join with another group, such as the High Ambition Coalition or the umbrella group. I wondered what you can tell us about the thinking. Would we wish to join another group, or would we be a small, solitary voice on our own in international climate discussions?

Dr Jesse Norman: Possibly, neither of those two things. It is too early to decide what specific relationships we will want to have. I am certainly not of the view that, even if the UK were absolutely, in the fullest sense, independent of the EU or any EU-related bodies, the UK would thereby be somehow marginalised in the sense that we are talking about. We would continue to be a very active member—a leader indeed—in many environmental issues, we will continue to set standards in the way in which we conceive and enforce environmental legislation around the world and we will continue to be part of the UN process. I do not see that one has to be gloomy about that. We might decide, as part of the institutionalisation of our own standards and profile within the world, that we wish to affiliate with, or indeed form, new groupings that would allow us to promote those interests and ambitions, but I think it is quite premature to speculate about that at this stage.

Baroness Wilcox: This is a similar question, but how might the recent developments in the United States of America affect the UK's approach to

positioning itself globally on climate issues? I am dying to hear you give the answer to that, Dr Norman.

Dr Jesse Norman: It is a very tempting fly that you are wafting, if I may say so, Lady Wilcox, in front of me, but I think the fair thing to say is that, whether or not the US continues to maintain the lead that it took when it joined the Paris Agreement so importantly recently, or whether it decides to step back, I have no doubt that we will continue to have a strong voice, and an argument can be made on either side as to why that would specifically help us. If the US does decide to step back, there may well be that much greater need for a voice that has a special relationship with that country to be heard. If it does not, one would love to think that we could be helpful in continuing a process of developing the international environmental sensibility that that suggests.

Q74 Lord Trees: The last question is about devolution and Brexit. Environmental policy is a devolved matter and, to some extent, while we are in Europe, that ensures a degree of consistency across the devolved nations, but that would cease. Have you had discussions yet and, if you have, to what extent do you see, going forward, that there would be a consensus among the devolved nations with regard to environmental policy, and do you see the UK Government co-ordinating that policy in the future?

Dr Thérèse Coffey: You will be aware that the Prime Minister has met the First Ministers of other nations. I personally have met the appropriate Ministers from Scotland and Wales at the British-Irish Council; the Northern Irish ministers who attended were not specifically the environment Ministers, so I have been having some discussions with them, but principally to do with the circular economy. It really matters going forward because the United Kingdom Government are responsible for upholding the multinational agreements to which we sign up. We need to ensure that we honour those obligations, so we will need to build on the protocols that we already have to ensure that we help the environment. As has already been articulated, air quality does not change just when you step over the border from Chester to Wrexham—well, it might change a bit, but not significantly—so we need to ensure that we work together on matters that affect our own residents as well as our commitments to the international community.

Dr Jesse Norman: As regards Brexit, it is DExEU that will be leading the conversations and already, I think, is heavily engaged with the devolved Administrations. As you rightly know, Lord Trees, they are all committed to tackling climate change. That central issue is, of course, not a devolved matter, but it is quite important to make sure that, in so far as devolved Administrations have control over things that bear on policy locally, those things do, as it were, meet the wider emissions targets that we have set ourselves as a country. I do not expect that to be affected particularly by Brexit, as such, but it does mean that we need to continue that process of engagement. Certainly we, as a department, take very seriously what I have described as the “spatial regional dimension” and we have specific Ministers responsible for relationships with the devolved Administrations. I was in Aberdeen yesterday and colleagues of mine are all regularly working with those devolved nations, so I would expect that to continue and, conceivably, even intensify.

Dr Thérèse Coffey: Lord Teverson, I have been given some information which may help improve the answer I gave to Lord Krebs earlier about the letter to the Commission. As I have been helpfully reminded by my excellent officials, we wrote with other countries—Poland, Spain, Finland, Slovakia, Greece and the Czech Republic—to the Commission asking for an extension to the timeline, as you laid out. We did that because we believe that the Commission, when it made its proposal, did not account for some of the technical challenges that we face for certain industrial sectors, some of which were quite bespoke adaptations. In particular, we did it because, apparently, the Commission did not undertake a cost-benefit analysis or impact assessment when proposing the deadline, so that is why we have pushed back on it.

The Chairman: Thank you very much for that very comprehensive reply. I just wanted to follow up one thing on devolution. Because the quoted figure is that 80% of our environmental legislation originates in Europe, clearly, you have a limit on the diversity of environment policy, even though it is devolved within the United Kingdom. Given the fact that that constraint disappears, is there a risk in terms of devolved environmental policy contradicting between nations of the United Kingdom, is it an opportunity to make them more specific, or is it something that someone has to keep an eye on and, if so, who?

Dr Thérèse Coffey: I have tried to articulate that we have to honour our international agreements, and I expect it is the UK Government who take the lead and are the main party on any infractions or judicial review, even if it is happening in another part of the United Kingdom where we do not have direct control. It is fair to say that all the four nations are rather ambitious in their plans for the environment, and you will be aware that the Welsh Government go further now than we do today. We have a baseline on things, such as recycling targets, and the Welsh Government have already legislated for higher. I think the challenge will be where you might be suggesting that other countries want to perhaps take a different route which may then potentially detract from it, and that is where any future workings will conflict and are followed up on and assessed. Although two years, I am sure, will disappear quite quickly, there is still time to go through that level. Our officials already work together extensively and there are conversations between the UK Government and the other Governments on these matters now, so there is already a system in process and we will have to have an even firmer protocol when we no longer have the European regulations there.

Lord Selkirk of Douglas: I just wanted to ask whether discussions amounted to a dialogue or just limited discussions from time to time.

Dr Jesse Norman: Certainly, within BEIS and others, there very much is a dialogue. The whole point of this, in a way, is to construe these potential differences as a fruitful discussion and a fruitful basis for review and consideration rather than, as it were, anything necessarily more conflictual. I would also say that we should not regard the existence of a common standard from the EU or from any other international source or, indeed, a self-imposed common standard as something that could automatically insulate us from perverse regulation. Any students of the effects of lobbying

on the diesel car industry might wonder whether or not that is something to be aware of in the future, whatever one's regulatory set-up.

The Chairman: Indeed. I was in Slovakia at a national parliaments conference under the presidency, and energy and the lobbying of gas problems were particularly mentioned in terms of strength. I think we will bring the meeting to an end at this point. I thank both of you very much indeed for coming before the Committee and taking us through this. Dr Coffey, I wish Defra all the very best because you do have the highest workload in this area in all sorts of ways, and I am sure that is true of BEIS to a degree, but I think Defra has huge challenges, and I am sure we wish you every success in getting over those. I bring this public session to an end, and thank you once again.

Bob Ward, Jonathan Gaventa, and Professor Michael Grubb, — Oral Evidence (QQ 36 – 45)

Bob Ward, Jonathan Gaventa, and Professor Michael Grubb, — Oral Evidence (QQ 36 – 45)

[Transcript can be found under Jonathan Gaventa, Professor Michael Grubb, and Bob Ward — Oral Evidence \(QQ 36 – 45\)](#)

Welsh Government — Written Evidence (ECB0008)

As well as being steeped in the EU's operating framework, these are also areas where 17 years of devolution has resulted in a divergence of both policy and primary legislation between the different parts of the UK, as most recently seen in our Environment (Wales) Act. Going forward, powers which are currently devolved within a regulatory framework set by the EU, will continue to be exercised by the Welsh Ministers / the Assembly even after this framework ceases to apply. Accordingly, where European law falls within devolved competence it must be for Wales to decide which parts of it are to be preserved or repealed. Nevertheless, there will of course be issues which will be best dealt with on a UK-wide basis: any UK-wide frameworks must be based on common consent by all four Governments within the United Kingdom and will need robust and independent dispute resolution mechanisms. It is, therefore, essential the devolved administrations play a full part in discussions, not only to ensure the UK negotiating position fully reflects the UK context, but also to agree collectively the arrangements which will be in place on a UK basis following the departure from the EU.

The role the EU legislative framework has had in providing a mechanism for delivery on international obligations and standards is also an important consideration, particularly as these obligations will continue to apply post EU withdrawal. In Wales, through the Well-being of Future Generations (Wales) Act and the Environment (Wales) Act, we put in place a clear foundation to deliver on the Convention on Biological Diversity, the Paris Agreement and the UN Global Goals. Going forward, there is, therefore, a need for new governance to support how the UK will collectively deliver on such international agreements, particularly in areas which have been devolved to Scotland, Wales and Northern Ireland.

Further clarity is needed in relation to the Repeal Bill announced by the UK Government, particularly in respect of the extent to which it will preserve the frameworks provided by EU Regulations and respond to any forthcoming changes in these areas. In addition, the arrangements for the supporting administrative structures currently provided by European institutions and agencies is also an area on which it is vital for the UK Government to work with the devolved administrations in order to identify the most effective approach for the UK as a whole.

The current EU framework of policy, legislation and finance has delivered important benefits for Wales - from standards which protect people's health and tackled pollution levels, to measures which safeguard the natural environment and promote more responsible uses of our natural resources. As a Government, we are committed to ensuring we safeguard and build on this progress whilst addressing those areas where more needs to be done. In developing future arrangements, there is a need to ensure they recognise the different contexts within the UK and allow devolved policy to continue to evolve in a way which is responsive to our differing opportunities and risks. This is an important

consideration in ensuring the most positive outcome possible for all parts of the UK as we leave the European Union.

16 November 2016

The Wildlife Trusts — Written Evidence (ECB0007)

The Wildlife Trusts protects, champions and acts for wildlife and wild places on land and at sea. We manage over 2,300 nature reserves for the benefit of wildlife and people. We have 840,000 members, over 43,000 volunteers, and we work with many more individuals and businesses. We manage nearly 100,000 hectares of land and own 22 active farms which we manage positively for wildlife. We are a federation of 37 Trusts in England, 6 in Wales and one in Scotland and Northern Ireland respectively.

The Wildlife Trusts has a vision where each year there is more wildlife, more wild places and ultimately more people with a strong connection to the natural world. We are working to bring about Living Landscapes, Living Seas and a society where Nature Matters. We are strongly rooted in the places and communities where we work and where our trustees, staff, volunteers and supporters live. We know the people, places and wildlife of our areas intimately, and have decades of experience working together to bring about nature's recovery and to make wildlife part of people's daily lives.

The Wildlife Trusts' response will address the nature and wildlife legislation aspects of the Inquiry. Other non-governmental organisations will be making submissions that cover the critical issue of climate change.

Executive summary

The Wildlife Trusts believes that EU membership has brought many benefits for wildlife and the environment. Exit from the EU therefore creates many uncertainties and challenges for the future of environmental and climate change policy, alongside opportunities to develop world leading policies for our environment and how we manage it.

There is no evidence that the public intended the referendum vote to result in any diminution of levels of protection for wildlife and wild places. Indeed, over 80% of the public support at least the same level, if not higher levels of protection following exit from the EU⁶⁴. This is regardless of party preference or how they voted in the EU referendum. Against robust evidence of biodiversity decline and the failure to secure adequate recovery, the UK must now take a series of critical measures to ensure that UK biodiversity recovers from its long-term declines.

Measures should include putting in a domestic agricultural policy that delivers high environmental standards for land management, with support in place for farmers and other land managers to do this. On fisheries, it is vital that exit from the EU sustains the positive reforms of the 2012 Common Fisheries Policy. The UK Government should adopt fisheries policies that deliver long term sustainability and improve the health of the marine environment.

⁶⁴ <https://www.foe.co.uk/sites/default/files/downloads/yougov-survey-brexit-environment-august-2016-101683.pdf>

More broadly, there is now an even greater imperative to put in place robust framework legislation to bring about nature's recovery. It is our view that many of the solutions (in England) lie in sub-regional decision making which allows for more intelligent regulation and more integrated land use and support regimes.

Some existing EU environmental legislation may be retained, depending on our trading relationships with the EU following our exit. However, it is crucial that we continue to cooperate on environmental issues, in particular as many are transboundary in nature, taking an active role in international conventions to recognise the shared nature of our natural resources and the benefits of close collaboration.

Detailed responses to questions:

What are the opportunities and challenges for the UK's approach to environment and climate change arising from the UK exiting the EU?

The EU has the single largest body of environmental legislation in the world and has been instrumental in shaping environmental policy in the UK. This includes legislation on biodiversity conservation (including protected sites and species), invasive species and air and water quality. Exit from the EU will also have environmental implications as we replace both the Common Agricultural and Common Fisheries Policies.

There are several opportunities and challenges for the UK's approach to the environment following our exit from the EU and much depends on political will to deliver ambitious policy for our environment. This will additionally be affected by whether we opt for a 'soft' or 'hard' Brexit as there is a high level of integration between UK and EU environmental laws. Retaining access to the single market through EEA membership ('soft' Brexit) means that some EU environmental legislation should still apply (see question 2 for more detail).

The Wildlife Trusts welcomed the clarification that the Great Repeal Bill will bring over existing legislation into UK law. It is vital that the robust protections for our environment and wildlife that we benefited from as members of the EU remain in equivalent form in domestic law. However, the extensive nature of our environmental legislation with foundations in the EU and the number of different instruments that have been used to reflect this in UK law, means that the manner of transposition through the Great Repeal Bill will be complex. Furthermore, several associated supportive mechanisms sit alongside these pieces of legislation, including access to justice and case law from the European Court of Justice, European Commission guidance and interpretation of legislation, research, monitoring and advisory bodies which will need consideration (see comments under question 2 for more information on these points).

Despite some of the assurances made regarding the Great Repeal Bill, there remains profound uncertainty about the future of the positive drivers that legal protection has provided to environmental protection and for funding that has benefitted our environment (for example through LIFE funding, agri-environment schemes and for scientific research). We must ensure that opportunities to invest in and robustly protect our environment are taken.

The great majority (75%) of the UK's land is farmed⁶⁵, and therefore, agriculture has been a significant driver in shaping the future of biodiversity across much of the nation. In the future, we see exit from the EU as an opportunity to develop policy for more sustainable management of our countryside. The Common Agricultural Policy (CAP) provides funding (approx. £3bn p/a in the UK⁶⁶) through the Single Farm Payment (Pillar 1) which requires minimum environmental standards via cross compliance and includes 'greening' measures^{67,68}. Considerably less funding (approx. £500m p/a in England⁶⁹) is channelled through the European Agricultural Fund for Rural Development (Pillar 2) of the CAP via agri-environment schemes. Over the last 25 years, public investment in Agri-Environment Schemes has provided incentives for protection, re-creation and enhancement of crop and non-crop wildlife habitat, woodland and landscape features and protection of soils and water quality. Despite these Pillar 1 and 2 protections and measures, agricultural intensification has been identified as the largest negative driver of biodiversity change in the UK⁷⁰. Intensive agricultural practices have also contributed to soil degradation and water pollution. We now have an opportunity to develop a more ambitious policy which is integrated across a holistic range of environmental elements (soil, biodiversity, food, water quality, flood risk, access and recreation, etc.) and which provides a greater opportunity to farm in a more sustainable and innovative way. The Common Agricultural Policy should be replaced with a policy for the countryside that delivers high environmental standards for land management, supporting farmers and other land managers to do this. The Wildlife Trusts has been working in coalition with other environmental NGOs to consider opportunities that a replacement to CAP could bring⁷¹.

On fisheries, historically, the Common Fisheries Policy has contributed to mismanagement and unsustainable fishing practices across Europe, overseeing the collapse of many commercially exploited fish populations. However, reforms to the policy made in 2012 have resulted in an overhaul of fisheries management across the EU, supporting much more sustainable fishing activity, including reducing discards and the setting of science-based quotas to achieve healthy stock levels. It is vital that exit from the EU does not lead to a roll back of

⁶⁵ 40% is enclosed farmland; 35% is farmed in some other way. The UK National Ecosystem Assessment, UK NEA. Cambridge: UNEP-WCMC. (2011)

⁶⁶ European Commission Factsheet. United Kingdom Common Agricultural Policy. May 2014. Accessed at http://ec.europa.eu/agriculture/cap-in-your-country/pdf/uk_en.pdf

⁶⁷ More information on Greening is available at: http://ec.europa.eu/agriculture/direct-support/greening/index_en.htm

⁶⁸ Greening measure include: Ecological Focus Areas (EFAs) on 7% of arable farmers' land; retaining permanent grassland and crop diversification for arable farmers with 3ha or more of land. Whilst some of these measures (e.g. EFAs) are a step in the right direction, a recent European Commission review found that they have been limited in their impact as most farmers were opting to grow nitrogen-fixing crops such as legumes (45% of area) or catch crops (27%). European Commission. *Commission staff working document. Review of greening after year 1*. 22.06.2016. Accessed at: http://ec.europa.eu/agriculture/direct-support/pdf/2016-staff-working-document-greening_en.pdf

⁶⁹ European Commission. *Factsheet on 2014–2020 Rural Development Programme of England (United Kingdom)*. Accessed at: http://ec.europa.eu/agriculture/rural-development-2014-2020/country-files/uk/factsheet-england_en.pdf

⁷⁰ Burns F, Eaton MA, Barlow KE, Beckmann BC, Brereton T, Brooks DR, et al. (2016) 'Agricultural Management and Climatic Change Are the Major Drivers of Biodiversity Change in the UK'. *PLoS ONE* 11(3): e0151595. doi:10.1371/journal.pone.0151595

⁷¹ http://www.wildlifetrusts.org/sites/default/files/joint_farming_wildlife_policy_leaflet_01-10-16_c.pdf

reforms gained. The UK Government should adopt fisheries policies that deliver long-term sustainability and improve the health of the marine environment. Doing so will help provide a viable future for the UK's rich marine and coastal area and the industries and communities that depend upon it.

More broadly on environmental policy, we now have an even greater imperative to put in place robust laws to bring about nature's recovery. The recent State of Nature report revealed that 56% per cent of the species studied have declined over recent decades. More than one in ten of all the species assessed are under threat of disappearing from our shores altogether⁷². There is a need to take serious action not only to stem declines, but to support nature's recovery and provide robust and ambitious environmental protection. The UK Government stated aim to ensure "*we are the first generation to leave our environment in a better state than we found it*"⁷³ would suggest an ambition to at least maintain standards as strong as they currently are and indeed would indicate the need for more urgent action to ensure this ambition is to be realised. The UK Government's commitment to a 25 Year Plan for the Environment, alongside the 25 Year Plan for Food and Farming provide us with an opportunity to revise fundamentally UK environmental policy, putting in place target driven framework legislation to ensure that we have progressive policies to help deliver a better environment for all. The UK Government and devolved administrations should also work together to ensure robust and coherent protection of our environment across the UK (see question 6 for more details).

There are examples of how we can reinvest in natural assets (as illustrated by the Natural Capital Committee). For example, 'upstream thinking' when developing water policy can demonstrate real benefits for the economy, flood prevention, water quality and wildlife. South West Water is working with a range of partners including Devon Wildlife Trust to invest in effective farmland management at the top of the catchment, demonstrating the impact that this has on our water supplies. They are working to restore species-rich wet grasslands, which act as natural filters, capturing soil particles and nutrients from fertilisers before they reach rivers and reservoirs. This reduces eutrophication and increases the capacity of the upland habitats to store water, relieving downstream flooding risks, as well as reducing soil erosion and diffuse pollution. This restoration work is expected to bring economic value from water resource and carbon storage in excess of £9 million and creates habitat for nationally scarce species⁷⁴.

The natural environment cuts across administrative boundaries and planning for its protection and recovery requires a 'larger-than local' approach. Yet a national approach can preclude effective integration. The opportunities to develop more integrated policy making are therefore at a sub-national level. Strategic level cooperation and spatial planning enable individual and combined impacts to be properly assessed alongside opportunities to restore and reconnect the natural environment to secure multiple benefits for wildlife and people. In England, regional habitat opportunity mapping took place in partnership across every

⁷² http://www.wildlifetrusts.org/sites/default/files/state_of_nature_uk_report_pages_1_sept.pdf

⁷³ Andrea Leadsom speech to Conservative Party Conference 03/110/16
<http://press.conservatives.com/post/151291662770/leadsom-a-rural-economy-and-environment-that-work>

⁷⁴ <http://www.devonwildlifetrust.org/working-wetlands>

region and was embedded in Regional Planning Guidance pre-2010. These provided local authorities and partners with vital information to support a robust, climate-proof, long-term landscape-scale vision for the natural environment, society and the economy. In some areas, ecological network mapping has continued. The maps can be created at a variety of scales and if designed collaboratively across boundaries, can be used to identify where cross-boundary landscape-scale interventions may be needed to establish ecological networks across the country.

What will the UK's legislative position be with regard to the environment and climate change after Brexit?

These are excellent points to consider and we are still determining our sector's full response to these questions. At this stage, it is difficult to determine what the UK's legislative position with regards to the environment after Brexit might be. As stated above, much depends on whether we retain access to the single market through EEA membership. If we chose to remain a member of the EEA, then much of the EU environmental law would continue to apply, although critically, the Habitats and Birds Directives, the Bathing Water Directive and legislation on environmental impact assessments would not. No matter how we chose to negotiate exit from the EU, the Common Fisheries Policies and Common Agricultural Policies will also no longer apply.

How legislation would differ if we do not remain an EEA member would depend on the trade agreement negotiated between the EU and the UK and the areas covered by such an agreement. The UK could adopt a comprehensive trade agreement with the EU, which would likely include adopting several EU standards and regulations (for example the Swiss agreement which covers a relatively high number of sectors). Negotiating access to the single market would mean UK exported products to the bloc would have to meet EU standards. This would mean that that several environmental policies (for example emissions standards) would apply to those wanting to export to the EU.

Regardless of the way we leave the EU, securing the environmental protections that EU membership has brought us is vital. The announcement of the Great Repeal Bill to transpose EU law into domestic law on the day that we leave the EU has brought some certainty in terms of securing legislation in the very short term. However, there are several challenges and complexities that lie ahead, namely how to ensure parliamentary scrutiny of any changes to transposed legislation, how to ensure accountability mechanisms are replaced and access to advice, expertise and traction that being an EU Member State brought us.

The statement by David Davis that EU law will be transposed into UK law "*wherever practical*"⁷⁵ raises concerns that this may mean that not all legislation is transposed. Furthermore, in evidence to the Environmental Audit Committee, the Secretary of State, Andrea Leadsom, stated "*we think that in the region of about two-thirds of the legislation that we are intending to bring into UK law will be able to be rolled forward with just some technical changes, so roughly a third won't, which means that obviously there will be work to do to ensure that we can*

⁷⁵ <http://press.conservatives.com/post/151240065825/davis-speech-to-conservative-party-conference>

*make those measures continue to work once we leave the EU*⁷⁶. Whilst we recognise that there are challenges in bringing over some environmental legislation, particularly those parts with close reference to EU guidance or institutions, it is vital that this caveat does not disguise attempts to weaken or alter environmental legislation.

Likewise, any alteration of legislation following the Great Repeal Bill must ensure that it includes parliamentary scrutiny in both Houses to ensure full transparency and accountability and that any ‘unpicking’ or alteration of EU law does not take place without proper oversight. This will be of particular importance when legislation is transposed from EU law.

Even a direct transfer of EU environmental legislation into UK law will result in an erosion of the protections that this legislation provides. Of concern is the loss of accountability from both the European Commission (EC) and the European Court of Justice (ECJ). The ECJ provides access to justice for all, via a free process that allows breaches of EU law to be raised, potentially resulting in infraction proceedings, judgements and subsequent case law. It is unclear if case law from the ECJ will also come over as part of the Repeal Bill. Exit from the EU also means that the role of both the EC and ECJ in oversight and enforcement will be lost and currently, it is not clear what domestic mechanisms will replace it. This enforcement deficit and need for oversight should be addressed once we exit the EU and serious consideration given to the creation of a specialist forum for environmental cases. Again, a lot will depend on our future relationship with the EU and we and other NGOs are currently scoping out potential options.

The EU also provides a level of expertise, which in many cases, will not be easy to replicate within the UK. For example, the Registration, Evaluation, Authorisation, and Restriction of Chemicals (REACH) Regulations and access to the European Chemicals Agency, which helps us to comply with chemicals legislation, advances the safe use of chemicals, provides information on chemicals and addresses chemicals of concern.

The European Commission also provides a great deal of support on environmental legislation, including sharing information, monitoring progress, facilitating reporting on progress across Member States, providing guidance and interpretation of legislation. We believe this expertise will need to be replicated at a domestic level and consideration should be given to the funding and independence of our regulatory bodies to ensure that they are fit for purpose.

Finally, whilst the certainty brought by transposition of EU legislation into UK law is to be welcomed, it should be recognised that EU legislation is not static, but a constantly evolving regime. There will need to be a process to hold the Government to account on delivery of environmental legislation and to drive forward progress. With regards to climate change, the Committee on Climate Change is an independent, evidence based body which provides guidance to the Government on setting carbon budgets. A similar body providing guidance and targets to the Government on a range of environmental indicators could ensure

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<http://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/environmental-audit-committee/the-future-of-the-natural-environment-after-the-eu-referendum/oral/42022.html>

that progress continues to be made on environmental policy. This may be a role that a strengthened Natural Capital Committee could play.

There are several international conventions to which the UK Government are signatories. Some of these have driven EU policy and should become more important in their own right once. These include the Convention on Biological Diversity (and related Aitchi targets); the Convention on the Conservation of European Wildlife and Natural Habitats (the Bern Convention- ratified by the UK in 1982); and the Convention on the Conservation of Migratory Species of Wildlife Animals (the Bonn Convention- ratified by the UK in 1985) as well as the Convention for the Protection of the Marine Environment of the North-East Atlantic (the OSPAR convention), UN Sustainable Development Goals and the UN Convention on the Law of the Seas. We would urge the UK Government to recognise the importance of these conventions and to reconfirm commitment to their ambition. However, despite the importance of these conventions in setting targets and progress, they do not come with accompanying enforcement measures, so some form of domestic enforcement mechanism would still be vital.

Is there a rationale for developing UK environmental policy broadly in line with the EU beyond Brexit? Is this desirable?

It is the view of TWT that EU membership has led to a cleaner and healthier UK environment. Therefore, following exit from the EU, environmental (and climate policy) regulations should be preserved and not weakened. Much of the legislation currently in place from the EU allows us to meet many of our obligations under international conventions (for example the Habitats Directive allows the UK to meet its obligations under the Bern Convention). It also provides certainty and a level playing field for business and ensures that those wanting to do the right thing for the environment and for future generations are not penalised. There are also benefits to ensuring environmental policy is broadly in line with the EU on issues that are transboundary in nature (see answer to question 4 for more detail). The level of interest that the UK will have in the development of EU environmental standards will depend on our relationship with the EU once we leave. However, generally, our environment is a shared resource and we would hope that the UK would continue to work closely with its neighbours on the continent to strive for better environmental management.

There have been extensive reviews of the impacts of environmental legislation on industry, in particular the Habitats and Birds Directives. The Defra review into the so called '*burden*' that the Habitats and Birds Directives place on industry found no evidence of '*gold-plating*' (although the review did identify opportunities for improvements in communication, information sharing and decision making). In publishing the results of the review, Defra concluded that "*in the large majority of cases the implementation of the Directives is working well, allowing both development of key infrastructure and ensuring that a high level of environmental protection is maintained*"⁷⁷. Whilst we are still waiting for the final official publication of the outcomes of the parallel process that took place at EU

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https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69513/pb13724-habitats-review-report.pdf

level through the Refit process, the consultant's report found that the Directives were fit for purpose.

Unfortunately, good initiatives identified following the Defra review have stalled following the EU Referendum vote. A Memorandum of Agreement (MOA) between industry, environmental NGOs, Natural England and Government that would help deliver greater biodiversity benefits to protected species and reduce regulatory burden was due to be signed in the week following the Brexit vote. Moving forward with this initiative would help to address some of the perceived issues around protected species and development, offering real solutions and benefits to both protected species and business. This MOA has not yet been signed.

What are the key trans-boundary environmental issues and how can these be appropriately managed after the UK leaves the EU?

There are benefits to maintaining environmental standards across the EU, in particular when it comes to dealing with the trans-boundary nature of many environmental issues, including those relating to air quality, the marine environment and migratory species. Indeed, trade negotiations and the ability to export to the EU may rely on the maintenance of several of these standards.

Our natural environment does not recognise political borders and it will be crucial that the UK Government continues to liaise with its neighbours on many environmental issues (including those mentioned above) particularly on migratory species where stringent action in one country will not be nearly as effective if it is not replicated within those countries which share that species' range. Furthermore, the protected sites already in place through designations under the Habitats and Birds Directives (Special Areas of Conservation and Special Protection Areas) form part of an important Europe-wide ecological network of protected sites, the Natura 2000 network. Even outside of the EU, our protected sites still form a vital contribution to both domestic and international networks. The 2010 Defra review chaired by Professor Sir John Lawton, '*Making Space for Nature*⁷⁸' and the Natural Environment White Paper⁷⁹ also highlighted the valuable contribution that these protected areas and ecological corridors have in rebuilding nature and creating a more resilient natural environment for the benefit of wildlife and ourselves.

Specifically, with regards to fish stocks, whether a member of the EU or outside it, the UK Government will need to negotiate appropriate quotas and management with its neighbouring countries. This is a requirement under the UN Convention of the Law of the Sea and there are several regional fisheries management committees to address trans-boundary fish stock management. There are very few fish stocks with a quota entirely within the UK's domestic waters and truly sustainable fisheries cannot be achieved without transnational cooperation.

Likewise, action on a range of chemicals and pollution issues will be much more effective, and logical if managed in collaboration and cooperation with our neighbours. Indeed, much of the expertise, in particular with regards to

⁷⁸<http://webarchive.nationalarchives.gov.uk/20130402151656/http://archive.defra.gov.uk/environment/biodiversity/documents/201009space-for-nature.pdf>

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https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/228842/8082.pdf

pesticides and chemicals lies at a European level (for example, as previously mentioned, through the European Chemicals Agency (ECHA)). It will be important for the UK to ensure that we still have access to high levels of expertise and in the case of chemicals regulation, continued access to the ECHA seems like the most straightforward mechanism to do this.

More broadly though, the UK Government will need to ensure that we can continue to access or replicate expertise on a range of environmental issues and ensure information is shared across country boundaries to allow for well evidenced decision making. There are already forums within which the UK Government can do this, for example through the OSPAR Commission for collaboration on marine issues and it is vital that the Government takes an active role and seeks opportunities to do this where they do not currently exist.

What should the UK's future relationship with the EU look like with regards to environment and climate change policy?

It is the view of The Wildlife Trusts that **all** EU environmental legislation where possible should be transposed and enacted in UK domestic law, to ensure that we continue to benefit from robust environmental protections. Whilst there are opportunities to improve implementation of some of this legislation (for example through MOA mentioned in question 3)), it is vital that exit from the EU does not result in a weakening of any environmental protections. Indeed, there are areas of environmental protection where the UK Government has been less progressive in its implementation of European policy, facing infraction proceedings (for example, on air quality and the recent EU and domestic action on a failure to act to meet targets⁸⁰). It is important that the UK Government continues to focus on effective and full implementation of this legislation.

Political stability is crucial when dealing with environmental or climate change policy as these are often issues that take place over the long term and that require a long-term and stable solution.

What relationships, internal and external, should the Government cultivate when developing its environment and climate change policy?

It is particularly crucial to consider the impacts of devolution on the development of environmental policy moving forward. Environmental and agricultural policies are largely devolved and have previously sat within a framework of EU legislation, making transboundary working more straightforward. It is vital that in development of future policies in these areas, the UK and devolved Governments work closely together recognising the shared nature of our natural resources and the benefits of close collaboration.

Looking internationally, as mentioned in previous answers, there are several regional or transboundary groups and Commissions associated with international Conventions that the UK could engage with on climate change and environmental issues, to drive forward ambition in policy making. Regardless of our trading or political relationship with the rest of the EU, close working with both our

⁸⁰ <http://www.clientearth.org/major-victory-health-uk-high-court-government-inaction-air-pollution/>

The Wildlife Trusts — Written Evidence (ECB0007)

geographical neighbours and those further afield will be vital to ensure that we can tackle some of the biggest challenges currently facing our planet.

16 November 2016

The Wildlife Trusts — Supplementary Written Evidence (ECB0014)

The Wildlife Trusts protects, champions and acts for wildlife and wild places on land and at sea. We manage over 2,300 nature reserves for the benefit of wildlife and people. We have 840,000 members, over 43,000 volunteers, and we work with many more individuals and businesses. We manage nearly 100,000 hectares of land and own 22 active farms which we manage positively for wildlife. We are a federation of 37 Trusts in England, 6 in Wales and one in Scotland and Northern Ireland respectively.

The Wildlife Trusts has a vision where each year there is more wildlife, more wild places and ultimately more people with a strong connection to the natural world. We are working to bring about Living Landscapes, Living Seas and a society where Nature Matters. We are strongly rooted in the places and communities where we work and where our trustees, staff, volunteers and supporters live. We know the people, places and wildlife of our areas intimately, and have decades of experience working together to bring about nature's recovery and to make wildlife part of people's daily lives.

In this supplementary evidence to its earlier response to the inquiry, The Wildlife Trusts will address issues related to **Offshore Marine Protected Areas and adaptive management** that will need to be considered in future policies to manage the marine environment following the vote to leave the European Union.

The UK has the powers to designate MPAs anywhere within the Exclusive Economic Zone⁸¹, indeed it has a responsibility to do so under various international agreements. However, as fishing in waters beyond 12 nm is managed through the Common Fisheries Policy (CFP), any measures to manage fishing effort within these offshore MPAs must be enacted by the European Commission.

Article 11 of the CFP sets out the process by which Member States (MS) can introduce management measures within MPAs to the Commission. This includes a need to seek agreement with other MS who have a fisheries interest in the sites concerned and put forward a joint recommendation within six months of original proposals. However, if agreement cannot be reached, and a joint recommendation cannot be made, then the responsibility for introducing management passes to the Commission itself, a much longer process.

Considering the Article 11 process, The Wildlife Trusts reluctantly accept that proposals put forward by the UK to manage fisheries in offshore MPAs may include a greater level of compromise that we would expect in inshore sites, where a more unilateral approach can be taken. Better to have compromise

⁸¹ Designation of MPAs is devolved to the Scottish Government within Scottish inshore and offshore Waters and to the Northern Ireland Assembly in inshore waters. Currently the Welsh Assembly Government have the power to designate MPAs in inshore waters with offshore waters under discussion.

measures introduced relatively quickly than to hold out for 'perfection' and risk long delays in any management being introduced at all.

Where there is uncertainty over the impact of specific activities on some protected features we would normally push for a precautionary approach, with activities being excluded until it can be demonstrated that they will not damage protected features. However, in offshore sites, where agreement with other MS is required, we believe that a pragmatic approach is more appropriate. Here, we have agreed that in some cases a more experimental approach, based on adaptive management, can be taken. In these cases, part of a feature is closed to potentially damaging activities, essentially as a sort of experiment to find out whether reducing fishing pressure leads to conservation gain.

But we do insist that adaptive management needs to be done well. It must not be used as an excuse for 'business as usual'. Some key principles that need to be applied are:

- The **questions to be tested** by the proposed research/management need to be clear and agreed by all parties.
- **Experimental design** needs to be an effective test of the questions posed, and again needs to be agreed by all parties.
- A thorough and appropriate **monitoring programme** needs to be designed, agreed in advance and implemented.
- There needs to be agreement at the beginning of the process on the **specific management measures** that will arise from different results.

It also needs to be clear who is going to pay for the monitoring. The fishing industry will benefit from having access to areas that otherwise might be closed, so we believe that it is not unreasonable to suggest that they pay to test the impacts, or otherwise, of their activities, especially when fleets from other MS currently make huge amounts of money from fishing in some MPAs.

Finally, the management of fishing in offshore MPAs is one area which could potentially benefit from a new Fisheries Act, replacing the Common Fisheries Policy, following the UK leaving the European Union. While there may be uncertainty around access of other countries' vessels to UK waters and the level of international discussion on levels of quotas, we believe that there will be an opportunity to tighten up the management of offshore MPAs and re-introduce a more precautionary approach.

8 December 2016