Grantham Research Institute on Climate Change and the Environment

Centre for Climate Change Economics and Policy

Submission to the inquiry on 'Brexit: environment and climate change' by the House of Lords EU Energy and Environment Sub-Committee

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Policy paper

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The Grantham Research Institute on Climate Change and the Environment was established in 2008 at the London School of Economics and Political Science. The Institute brings together international expertise on economics, as well as finance, geography, the environment, international development and political economy to establish a world-leading centre for policy-relevant research, teaching and training in climate change and the environment. It is funded by the Grantham Foundation for the Protection of the Environment, which also funds the Grantham Institute for Climate Change at Imperial College London. More information about the Grantham Research Institute can be found at: http://www.lse.ac.uk/grantham/

Introduction

1. 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

2. 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.

3. 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.

4. 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.

5. 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

6. 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).

7. 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.

8. 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.

9. 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.

10. 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

11. 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).

12. 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.

13. 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

14. 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.

15. 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.

16. 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.

17. 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.

18. 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.

19. 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

20. 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.

21. 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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