

Submission to inquiry by the House of Commons Select Committee on Business, Energy and Industrial Strategy Committee on 'Leaving the EU: negotiation priorities for energy and climate change policy'

Bob Ward and Maria Carvalho
Policy paper

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The Centre for Climate Change Economics and Policy (CCCEP) was established in 2008 to advance public and private action on climate change through rigorous, innovative research. The Centre is hosted jointly by the University of Leeds and the London School of Economics and Political Science. It is funded by the UK Economic and Social Research Council. More information about the ESRC Centre for Climate Change Economics and Policy can be found at: <http://www.cccep.ac.uk>

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/>

This policy paper is intended to inform decision-makers in the public, private and third sectors. It has been reviewed by at least two internal referees before publication. The views expressed in this paper represent those of the author(s) and do not necessarily represent those of the host institutions or funders.

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 by the House of Commons Select Committee on Business, Energy and Industrial Strategy on 'Leaving the EU: negotiation priorities for energy and climate change policy'.

2. This submission outlines the latest research evidence from the ESRC Centre for Climate Change Economics and Policy and Grantham Research Institute on Climate Change and the Environment. It updates, and supplements the submission to the inquiry on the same topic by the House of Commons Select Committee on Energy and Climate Change. The submissions focuses on the following questions from the terms of reference of the inquiry:

Which aspects of EU policy should be maintained?

3. The UK should adopt European Union (EU) regulations relating to energy efficiency, including strong standards for land vehicles and product standards for electrical appliances. However, Brexit will mean that the UK does not need to pursue specific targets set by the EU 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. Overall, it would be better for the UK to remain a member of the EU Emissions Trading System (EU ETS), although withdrawal would allow the UK to implement a strong and uniform carbon price across the economy.

How can the UK retain its influential voice in international negotiations?

4. Withdrawal from the EU will mean that the UK is unlikely to undertake international negotiations as a bloc with the other Member States. The UK is likely to be less influential in international negotiations outside of the EU bloc. However, the UK should seek to maintain its influence by continuing to be a global leader on domestic action 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 can also maintain, and potentially boost, its influence 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.

5. The UK should also continue to be an active member of the High Ambition Coalition, which formed ahead of COP21 in Paris in 2015, and play an active role in other climate-related international fora, such as the Clean Energy Ministerial, the Intergovernmental Panel on Climate Change and the G20 Green Finance Study Group.

What are the implications of the UK's exit from the EU on both the UK's and the EU's COP21 pledges?

6. Exiting the EU will mean that the UK will need to make a separate submission of its nationally determined contribution (NDC) to the Paris Agreement. The UK's NDC will likely reflect the emissions target in the fifth carbon budget to limit annual emissions to an average of 57 per cent below 1990 levels over the period 2028-2032, consistent with the cost-effective path to the 2050 target in the Climate Change Act.

7. Brexit will make it more difficult for the EU to achieve its target of reducing annual emissions by 40 per cent by 2030 compared with 1990 because the UK has been cutting its annual emissions of greenhouse gases at a faster rate than the average for the EU. 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. As the UK's domestic target for 2030 is more stringent than the target it is set under EU burden sharing rules this trend will continue meaning that without the UK other EU Member States will have to do more to meet the EU 2030 emissions reduction target. Analysis by researchers at the Institute shows that without the UK, the EU will have to undertake an additional reductions in greenhouse gas emissions of 140 million tonnes of carbon-dioxide-equivalent by 2030, which is equivalent to the combined annual emissions of Belgium and Estonia in 2013 (Fankhauser and Carvalho, 2016).

9. 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 EU to agree on strong collective action in the future.

10. Even after its withdrawal from the EU, 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 EU 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).

What should be the Government's priorities on the EU Emissions Trading System? How viable are alternative options?

11. On balance, it would be better for the UK to remain part of the 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 might make it easier 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 – the power sector and energy-intensive industries – is set in relation to the UK share of the EU ETS cap, rather than in relation to actual emissions from these sectors. If the UK were to leave the EU ETS, 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 and 2030, instead of 57 per cent when the ETS is included (CCC, 2016).

How can the UK maximise future opportunities to cooperate with international partners to retain its standing as a hub for low carbon innovation?

14. 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. Based

on citation analysis, the UK's key partners to date on low-carbon research and development have been the EU, United States, Japan and Canada. (Fankhauser and Carvalho, 2016).

15. The UK should also support low-carbon innovation in sectors in which it has comparative advantages in terms of trade, but in which it is under-performing in terms of low-carbon innovation (Fankhauser et al., 2013). The most prominent example for the UK is the chemicals industry. Through supporting low-carbon innovation in these sectors, the UK can attract other strategic partners that can help with the commercialisation of low-carbon products.

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