Committee on Climate Change

Independent advice to government on building a low-carbon economy and preparing for climate change

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RE: The Future of Carbon Pricing

Cc: Lesley Griffiths AM, Roseanna Cunningham MSP and Dr. Denis McMahon.

I am writing in response to the request of the UK Government, Scottish Government and Welsh Government of May 2nd to the Committee on Climate Change on the future of carbon pricing in the UK, specifically in relation to the successor to the EU Emissions Trading System after EU exit. In the absence of a Minister, senior Northern Ireland Officials have indicated their support for advice being sought. The coming 12-18 months will be a crucial period for UK climate policy and the global effort to tackle dangerous climate change.

Economic theory characterises carbon pollution as a market failure and an externality that needs to be priced in order to ensure that those responsible bear the costs of polluting. Appropriate pricing incentivises emissions reductions by encouraging investment decisions that reduce the damage that greenhouse gases cause.

However, carbon pricing alone will not provide sufficient decarbonisation – for example the Stern Review also identifies the need for support for innovation and in tackling barriers to behaviour change. Whilst carbon pricing is essential it needs to be used as part of a suite of policy instruments, as confirmed by real-world experience internationally.

There are two main ways to price carbon: through a carbon tax, or in an emissions trading market. The UK currently has a combination of both. Around one quarter of total UK emissions are covered by the EU's Emissions Trading System (EU ETS). The EU ETS – in which the UK has played a leading role – has, after challenges following the financial crisis, had some success in reducing emissions in the power and industrial sectors. The UK recently adopted a net-zero target for 2050, which has not yet been mirrored by the EU, nor in the ambition of the EU ETS.

We agree with the Government's preference for a linked UK-EU ETS in the case of EU exit. This maintains key benefits of membership of the EU system, most notably access to a wider market and addressing competitiveness issues within a level playing field across the EU. Should a linked scheme prove not to be possible, we will offer further recommendations.

We recommend that the cap of the linked UK ETS be set based on the cost-effective path to the UK's new net-zero target. We will provide that trajectory in our advice on the sixth carbon budget (covering 2033-2037), which is due in 2020. Following this advice, the level of the cap should be adjusted as soon as possible to align to the carbon budgets.

- For sectors currently covered by the EU ETS, the UK is decarbonising more quickly than other EU countries, meaning the UK's emissions are lower than its share of the EU ETS cap (the overall limit on allowed emissions during a prescribed period).

- If this remains the case during the 2020s, this risks other EU countries buying UK allowances to continue polluting rather than reducing overall EU emissions. That would provide a net gain to UK Treasury, as the UK sells excess permits to non-UK participants, but reduce the impact of UK actions in tackling climate change as the quantity of emissions assigned to the UK would exceed expected UK emissions.
- A lower cap in the 2020s would avoid this, and be more in line with expected UK emissions over the fourth and fifth carbon budget periods (2023-2027 and 2028-2032).

We note that the Government consultation that ran in parallel to this request solicited industry expertise across many areas. Besides the level of the cap we see our role as providing advice on the long-term merits of carbon pricing in the UK, particularly with regards to the net-zero target:

- Our net-zero advice and recent progress report identified the need for much stronger action across Government to drive emissions reductions, and the potential need for changes in overall approach or institutions to achieve that.[1] In the longer-term, an expansion of carbon pricing, and possibly an emissions cap, to a much larger part of, or all of, the economy could be desirable.
- In meeting the net-zero target for 2050, carbon pricing will have an important role alongside supporting policies. The desired outcome of any system should be to incentivise genuine reductions in emissions, without leading to carbon leakage. That will require a strong and rising carbon price, in order to induce changes to both short-term behaviour and longer-term investment decisions. Past experience of price uncertainty around projected emissions and abatement opportunities in the EU ETS and elsewhere show that cap-and-trade schemes require a stabilisation mechanism to ensure such a price profile. The Government's plan for a UK adjustment mechanism reflects this and in a linked system will need to co-ordinate with the EU's Market Stability Reserve.
- Carbon pricing is important, but market mechanisms by themselves will not achieve full decarbonisation – supplementary policies will be needed to address barriers and overcome preferences driven by factors other than price, as well as to deal with myopia and price uncertainty. We know, for example, that price by itself is unlikely to be an effective mechanism in bringing forward low-carbon innovation and investment in multiple sectors (e.g. Carbon Capture and Storage (CCS) infrastructure, energy efficiency in buildings, low-carbon heat).
- In the near-term, effective carbon pricing will remain important in the power sector for completing the phase-out of coal, and beyond then continuing to incentivise efficient dispatch and use of lower carbon fuels (e.g. ensuring that in electricity generation, lower carbon CCS plants dispatch before unabated gas plants). In industry, carbon pricing can promote energy and resource efficiency, as well as contributing, alongside wider policy, to incentivisation of CCS and use of lower carbon fuels. Carbon pricing can also play a role in incentivising greenhouse gas removal technologies.

[1] See CCC (2019) *Reducing UK emissions: 2019 Progress Report to Parliament*, and CCC (2019) *Net-zero – The UK's contribution to stopping global warming*.

- The EU ETS currently addresses concerns around competitiveness and carbon leakage. Linking to the EU ETS would need to ensure these arrangements are maintained.
- Emissions trading has implications across each of the UK nations. As per the Government's policy, carbon prices in the Northern Irish power sector will need to be harmonised with the rest of Ireland, in line with current arrangements in the Irish Single Electricity Market (I-SEM). For Scotland and Wales, our sixth carbon budget advice will align to recently committed targets.
- Aviation emissions should continue to be covered, as they are in the EU ETS currently.

In summary, our recommendations are:

1) **The Government should not rely on carbon pricing alone.** Whilst carbon pricing is essential it needs to be used as part of a suite of policy instruments, as confirmed by real-world experience internationally.
2) **We agree with the Government's preference for a linked UK-EU ETS in the case of EU exit.** Should a linked scheme prove not to be possible, we will offer further recommendations.
3) **We recommend that the cap of the linked UK ETS be set based on the cost-effective path to the UK's new net-zero target.** We will provide that trajectory in our advice on the sixth carbon budget (covering 2033-2037), which is due in 2020.

These conclusions reflect the Committee's net-zero analysis and a commissioned review of carbon pricing. Further detail on the Committee's analysis on carbon pricing is provided in the attached Annex. Given the uncertainty around possible carbon pricing scenarios following EU exit, the Committee will continue to monitor developments and keep this issue under review.

Yours ever,

Lord Deben

Chairman, Committee on Climate Change