Carbon pricing in the UK post-Brexit: tax or trade?
A discussion paper
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Grantham Institute discussion papers use evidence to present thought-provoking reflections on topical issues. Our students work with our academics to form these opinion pieces.

Is it time to for the UK to leave the EU ETS?

Poised to leave the EU, the UK has important choices to make about greenhouse gas regulations for the sectors covered by the EU Emissions Trading Scheme (ETS) – the electricity generation and heavy industry sectors. There are several reasons to consider a change:

Jurisdiction: The EU ETS legislation falls under the jurisdiction of the European Court of Justice (ECJ), a conflict with the terms of the UK’s Brexit negotiations which foresees a departure from the ECJ.

Ambition: The UK’s carbon reduction targets are already more ambitious than the caps in the EU ETS. Even if the UK were to remain in the scheme, which covers approximately a third of UK greenhouse gases emissions, more stringent policies might be needed – in any sector – to meet these targets.

Simplification: The UK is striving to simplify its carbon pricing policy. The government has committed to having just one carbon price after 2021, a commitment that might be easier to achieve outside the EU ETS.

Limitations: The EU ETS has several limitations. The decision-making process to reform the policy is slow and can be unduly influenced by self-interested parties. The policy is not very resilient to unexpected changes in production levels. For example, the cap – or market size – for 2013-2020 was set on pre-financial crisis growth projections, leading to a surplus of emissions rights which are unlikely to be eliminated before the mid-2020s.

The UK has a number of policies that try to use an economic signal – a carbon price – to stimulate reductions in greenhouse emissions. Such policies include participation in the twelve-year old EU ETS, in which the UK makes up about 10% of the market. The UK’s carbon price floor sets a lowest price for electricity generators in the ETS, to stabilise volatile carbon market prices. The UK also has a tax – the Climate Change Levy that, together with its exemptions, attempts to provide carbon price certainty for businesses.

What should the UK do, in light of its departure from the EU, and therefore possible departure from the EU ETS? The maintenance of the status quo is arguably the simplest, cheapest option for the UK, given money already spent on participating in the scheme, and access to low-cost options for emissions reductions. However, this could also be a good time for reform and innovation, aligning carbon-pricing policy with long-term climate, industrial and economic goals. It is also not clear how complex maintaining the status quo might be if the UK is outside the ECJ.

Making choices: opportunities from change

Although there are many dissenting views on the relative merits of markets, like the EU ETS, vs taxes for carbon pricing, there is a lack of data from existing policies to corroborate theoretical studies suggesting the benefit of one over the other.

Revenue: A robust carbon pricing policy, can raise revenue for the public purse, integrate with future plans for the UK’s tax system (including R&D tax cuts and the Industrial Strategy Challenge Fund), and align with the current policy focus on protecting the poorest and most vulnerable energy consumers, through calibrated rebates and tax cuts.

This goal can be achieved either through a UK ETS, a UK-wide carbon tax or a hybrid scheme. In existing schemes globally, most non-earmarked carbon pricing revenue comes from carbon tax schemes, while most revenue earmarked for specific purposes – such as environmental initiatives – comes from ETS.

A new UK ETS: The implementation of a UK ETS, while feasible in isolation, could open opportunities to link with other ETSs. The UK developed its own, voluntary ETS in the past, which provided some lessons for future developments. The EU would provide the simplest linking option, but the Western Climate Initiative (WCI) could also

1 Dependent on the final system used to account for emissions in the traded sector against UK targets.
4 de Perhuis, C., Solier, B., & Trotignon, R. (2016). Policy Brief #2016-01 How should the EU ETS be reformed following the Paris agreement and Brexit? Chaire Economie du Climat.

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A new UK ETS: The implementation of a UK ETS, while feasible in isolation, could open opportunities to link with other ETSs. The UK developed its own, voluntary ETS in the past, which provided some lessons for future developments. The EU would provide the simplest linking option, but the Western Climate Initiative (WCI) could also be an option. Linking with the Chinese national ETS seems improbable, or at least very far in the future. The benefits of international cooperation under a new linkage must, however, be weighed against the high capital costs incurred by extensive international negotiations.

The hybrid option: Most jurisdictions operate hybrid carbon pricing schemes, which are part tax, part trade. The UK already has a hybrid through the EU ETS, carbon price floor, and Climate Change Levy, which it should build upon using recent lessons from carbon pricing schemes around the world. The UK’s existing carbon tax infrastructure can be repurposed to an economy-wide carbon tax, limiting the administrative burden of policy reform and offering more carbon price certainty to businesses. Successfully building on the experience and infrastructure of a hybrid scheme would also limit pressure from special interest groups, such as industry lobbyists.