To meet its ambitious ‘net zero’ target, the UK will need to ramp up climate change policies

UK greenhouse gas emissions are declining and have been declining for some time. The UK has a framework of long-run targets developed by the Committee on Climate Change, an independent body of experts advising government. Despite this, things are far from well when it comes to climate change in the UK and there are concerns about the country’s ability to reach the 2050 target. The UK must do more to ensure it meets its climate targets. In doing so, UK policy-makers need to keep in mind that the policy objective must be to reduce global emissions.

The UK can contribute to that most effectively by helping to develop, pilot and improve technology that will make a transition to clean technology the economically rational thing to do, even if households and firms ignore the potential damage from climate change.

Figure 1. UK greenhouse gas (GHG) emissions and projections

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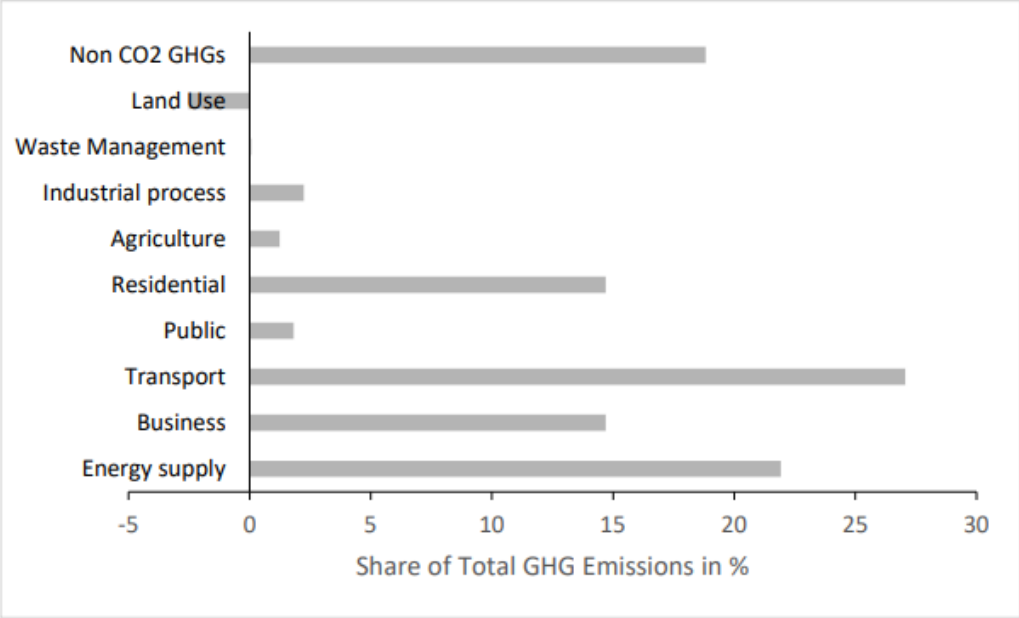

Notes: The figure reports percentage shares in total 2018 emissions by the UK, which were 448 MtCO2e. 'Public' corresponds to public sector emissions (for example heating government buildings). 'Land Use' refers to forests and vegetation that converts CO2 back into its components. Non-CO2 GHGs include methane and nitrous oxide emissions that primarily arise in farming. Source: Authors' calculations based on BEIS data.

Our new report says that a key factor of lower emissions growth over the last 10 years has been the drop in output and slow catch-up in the wake of the global financial crisis. But even without further recovery and continued slow growth due to Brexit, it is unlikely that the future carbon targets will be met. One important channel via which the UK can affect its own climate emissions and what happens in other countries is by pushing the knowledge frontier on clean technologies and practices.

After a dramatic explosion in clean (and grey) technology from 2000 to 2010, there has been a dramatic collapse across both technologies and countries. By embedding support for clean technology in a wider industrial strategy and focusing on areas where social returns are highest, such a strategy can also contribute to further economic growth in the short run.

Figure 2. The potential of offshore wind

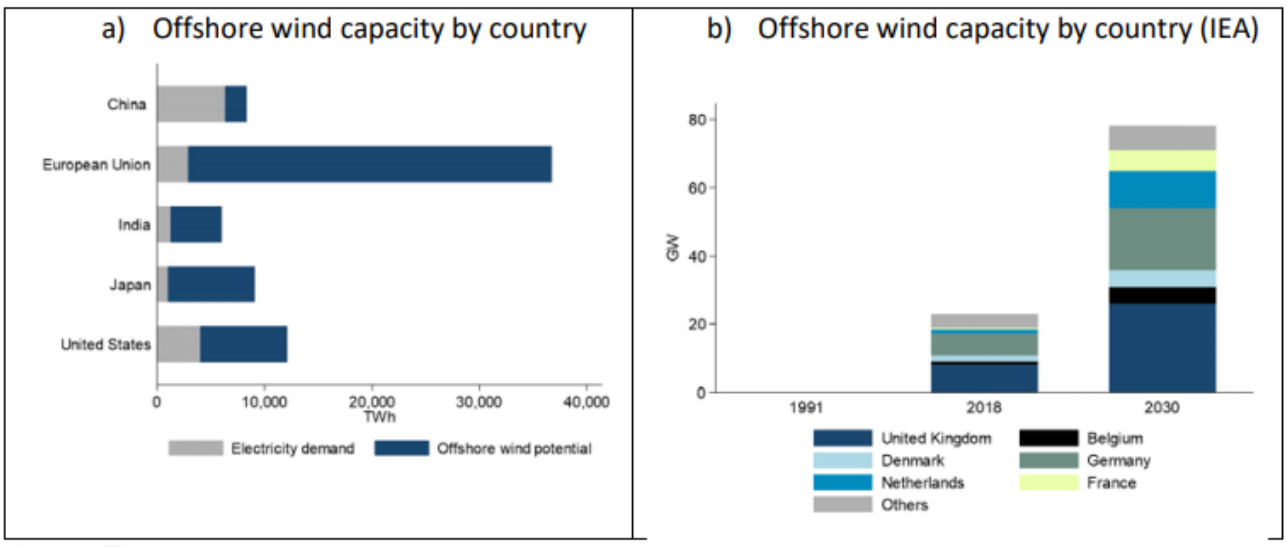

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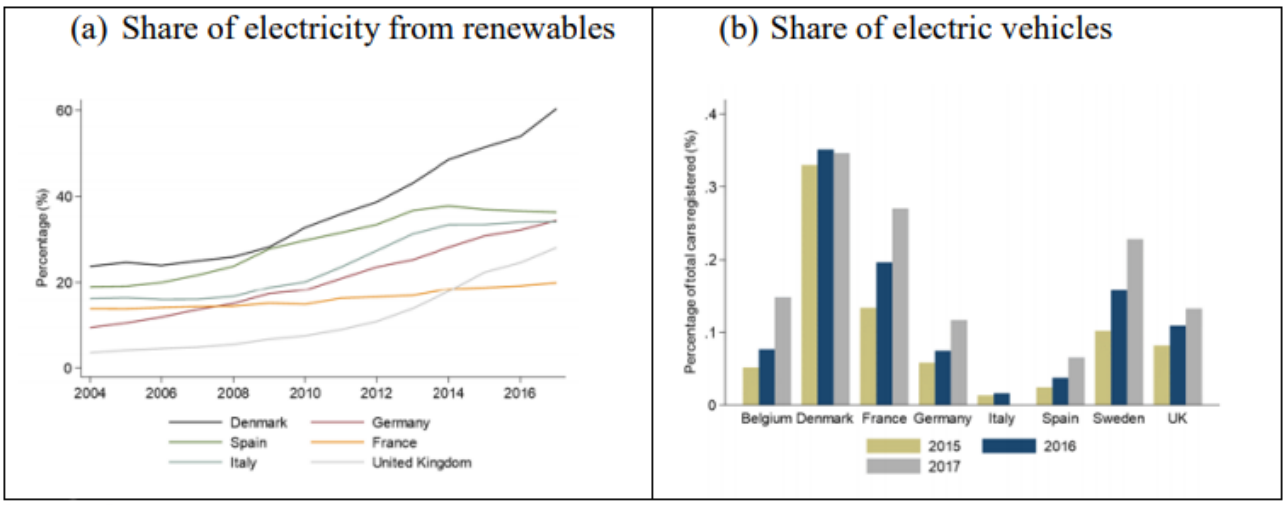
Figure 3. Adoption of clean technologies



The report shows:

- The UK has a framework of long-term targets, which aim to reduce net greenhouse gas emissions to zero by 2050 in line with what is needed on a global scale to prevent the most severe forms of climate change. But there are concerns about the country's ability to reach these targets.
- A key factor causing lower emissions growth over the last ten years has been the drop in output and slow catch-up that occurred in the wake of the global financial crisis.
- While this was helpful for climate change in the short run, the trend will reverse if growth picks up and this will make emissions reduction harder in the long run, unless concerted action is taken to make the transition towards a clean economy.
- The evolution of UK climate change policy is also in danger from Brexit: while slower growth resulting from leaving the EU may reduce emissions in the short run, at the same time less investment in pro-environment research and development (R&D) and infrastructure is likely to result in emissions being higher in the long run. With much of UK climate policy derived from EU policy there is also the risk of policy dilution post Brexit.
- To meet the long-term targets, further action is needed to commit more resources to renewable energy deployment as well as R&D.
- Residential energy use should also be tackled by providing the right incentives to move to gas-free options while ensuring that the poorest households are not unduly burdened.

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- *This blog post is based on the authors' paper Energy and Climate Change, with Petra Sarapatkova and Dennis Verhoeven, part of the 2019 election analysis series produced by LSE's Centre for Economic Performance (CEP).*
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