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Targeting net zero

Climate ambition needs to be directed by clear, hard targets. The UK has embraced this by enshrining its net-zero emissions target in law

By **Lord Deben**, Chairman, UK Committee on Climate Change

It is sometimes said that setting targets is an easy step for governments. If that's the case, how should we measure the UK Government's decision in June last

year to set a 'net zero' target for 2050? With this target, the UK became one of the first major industrialised economies to commit to the effective elimination of greenhouse gas (GHG) emissions.

This was a historic moment, indicating the UK's clear ambition to become a world

leader in tackling the climate crisis.

▲ A 75-metre-long wind turbine blade, manufactured at a local factory, being installed as a sculpture in Hull, UK. The UK has been a pioneer in offshore wind energy and has 8 gigawatts of capacity in operation, with a further 5 gigawatts under construction

Thanks to the legal duties of the UK's Climate Change Act, the implications of enshrining this target in law are more fundamental than for most government targets. In making net zero law, the United Kingdom, the birthplace of the industrial revolution, has committed to ending its direct contribution to global warming by the middle of the century. It has also indicated that it is ready to make significant changes to how the country's land is managed, homes heated and transport powered.

Climate leadership

To achieve this over three decades will take the UK from the originator of fossil-fuelled industry to the leading green economy. It is a vital step.

I chair the UK Committee on Climate Change, which was set up in law to provide independent advice on emissions targets and UK preparations for the impacts of climate change.

In May 2019, we advised that having a net-zero GHG emissions target by 2050 was necessary to meet the UK's commitments as a signatory to the 2015 Paris Agreement. In our report to the Government, we explained how considerations of 'equity' – the UK's historically high emissions and significant carbon footprint attached to imported products – mean that the UK should aim to reach net-zero emissions ahead of the world as a whole.

The UK is not alone in its ambitions. France, Sweden, Denmark and New Zealand have all enshrined net-zero targets in law, while other nations including Spain and Chile are looking to do so. The next major climate change summit – COP26, to be hosted by the UK in Glasgow in 2021 – will be a true test of the UK's and others' climate leadership. All 'net zero' nations must now grapple with the reality of reducing their emissions to as close to zero as possible.

The challenges of getting to net zero

In the UK, there is already a well-tested and successful framework in place to drive domestic emissions cuts: the Climate

Change Act. Importantly, the Act is designed to deliver the long-term target, net zero by 2050, through a series of 'carbon budgets'. These five-yearly budgets put legally binding limits on UK emissions and require the Government to set policies to drive those emissions reductions.

The next budget to be agreed, known as the Sixth Carbon Budget and covering the period 2033–37, will be the first on the pathway to the new net-zero target. It is likely to ratchet up the level of effort required in both the near and longer term.

A change of this kind will not be delivered by government policy alone. As stewards of the land, farmers will need wide-ranging support to enhance skills, including training in low-carbon farming practices and the sustainable management of lowland peat.

Land use is just one example of the importance of involving citizens in the transition to net-zero emissions. The behavioural and societal changes we will see in the coming years will affect us all. It's therefore vital that the shift is

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For some sectors, such as international aviation, agriculture and industry, this will be exceptionally challenging. Reducing emissions from buildings and transport, meanwhile, will require noticeable changes to the way people live their lives. There is no single, one-size-fits-all solution.

Take the way land is used, for example. Planting trees offers a simple method to reduce emissions by absorbing CO₂ from the air. To help deliver net zero, UK tree-planting rates will need to increase significantly to levels not seen since 1989 – requiring around 100 million new trees per year between now and 2050. In practice, that means changing how we use agricultural and other land. Not least, we must recover the ability of farmland to sequester carbon and restore the fertility of the soil.

Our assessment shows that a relatively limited reduction in food waste and in the consumption of the most carbon-intensive foods can help release enough land to support such levels of tree planting. Other measures, such as low-carbon farming practices, restoring peatlands and encouraging bioenergy crops are all essential too.

carried out, and seen to be carried out, fairly. Setting a target is just the first aspect of the transition. Concrete action must follow.

The global transition to net zero

My Committee's advice was for a net-zero target at a national level. But the UK is only one part of the puzzle, accounting for just 1 per cent of global emissions. Ambition to reduce GHG emissions globally fails to meet the scale of action required under the Paris Agreement and set out in the Intergovernmental Panel on Climate Change's *Special Report on Global Warming of 1.5°C*. Recent extreme weather events in Australia, Brazil and here in the UK act as reminders that time is short to rectify that.

The implications of the global coronavirus pandemic will of course also need careful assessment. The COP26 meeting in Glasgow next year is still one of a limited number of opportunities to ratchet up global ambition to reduce emissions. That starts with targeting net zero. But without concrete, concerted and comprehensive action, all the targets in the world will be worthless. ●