

December 2020

The Sixth Carbon Budget

The UK's path to Net Zero



We recommend that the UK sets a Sixth Carbon Budget to require a reduction in UK greenhouse gas emissions of 78% by 2035 relative to 1990, a 63% reduction from 2019. This will be a world-leading commitment, placing the UK decisively on the path to Net Zero by 2050 at the latest, with a trajectory that is consistent with the Paris Agreement. It should be accompanied by a similarly ambitious 2030 pledge, to reduce emissions by at least 68% from 1990, as part of the UK's nationally determined contribution (NDC) to the UN process.*

Our recommended budget would achieve well over half of the required emissions reduction to 2050 in the next 15 years (Figure 1). This early action is vital to support the required increase in global ambition, especially ahead of the UK hosting the next UN climate talks (i.e. COP26 in Glasgow). It can feasibly be achieved at low overall cost and would bring multiple benefits and opportunities for the UK.

- **A leading offer from the UK.** While many countries have followed the UK in adopting Net Zero as a long-term emissions target, global ambition to 2030 remains far short of what is required. As President of the next UN climate talks (and of the G7) in 2021, the UK is in a position to influence others, but to do so must itself adopt an ambitious 2030 goal. Reducing emissions early matters as it is global cumulative emissions that drive climate outcomes.
- **A feasible path for the UK.** Meeting the budget requires average annual reductions in UK emissions of 21 MtCO₂e, similar to those achieved since 2012 (19 MtCO₂e). The analysis in this report shows this is clearly feasible, provided effective policies are introduced across the economy without delay. We estimate net costs of meeting the budget to be low, equivalent to less than 1% of GDP.
- **Benefits for the UK.** Legislating our recommended budget would send a clear signal that the UK is open for low-carbon investment. This will help to encourage private investment at low cost at a time when it is needed to support the UK's economic recovery from the COVID-19 health crisis. It could also help the UK secure competitive positions in growing global markets for low-carbon goods and services. The required changes would also deliver significant positive impacts for people in the UK in terms of health, well-being and the environment.

The budget requires a major investment programme, worth around £50 billion each year from 2030 to 2050.

Meeting our recommended budget will require a major nationwide *investment* programme, led by Government, but largely funded and delivered by private companies and individuals. Low-carbon markets and supply chains must scale up so that almost all new purchases and investments are in zero-carbon solutions by 2030 or soon after. Investments should be made resilient to the expected impacts of climate change. Reduced operating costs in later years will pay back on the initial investment.

A major strengthening of UK policies is required.

More than ever before, future emissions reductions will require *people* to be actively involved. This need not entail sacrifices. Many people can make low-carbon choices, about how they travel, how they heat their homes, what they buy and what they eat. The experience of the UK Climate Assembly shows that if people understand what is needed and why, if they have options and can be involved in decision-making processes, they will support the transition to Net Zero.

* Our budget recommendation (-78%) includes emissions from international aviation and shipping, but UN convention is to report these separately, so they are not included in our recommended NDC (at least 68%). On an equivalent basis (i.e. including international aviation and shipping), the 2030 NDC would be a 64% reduction relative to 1990.

Fairness is also fundamental to public support and must be embedded throughout policy. Only a transition that is perceived as fair, and where people, places and communities are well-supported, will succeed. UK Government policy, including on skills and jobs, must join up with local, regional and devolved policy on the just transition. Vulnerable people must be protected from the costs of the transition.

Recent UK emissions reductions have come from the transition away from coal-fired power, which is almost complete. Future reductions must come from transport, industry, buildings and agriculture, as well as phasing out gas-fired power. There are positive lessons from power sector decarbonisation but each of these sectors raises different policy challenges. Policies must provide a clear direction to millions of people and businesses in the UK, shifting incentives to favour low-carbon options and tackling barriers to action.

The Government has recognised the need for significant policy strengthening and is developing plans in all areas of UK emissions. Now plans must translate to action and Government must organise for the major delivery challenge of Net Zero. A slower path for emissions reduction, and a looser Sixth Carbon Budget, would put the 2050 Net Zero target at risk and reduce the scope for learning-by-doing. New economic opportunities would be missed and the UK's role as President of the UN climate talks would be undermined.

The budget would decisively commit the UK to the transition to Net Zero emissions in 2050.

The Sixth Carbon Budget should cover all sources of UK emissions and be met through domestic action in the UK.

Figure 1 The recommended Sixth Carbon Budget

