

The Rt Hon Alok Sharma MP Secretary of State, Department for Business, Energy & Industrial Strategy 1 Victoria Street SW1H 0ET

## Advice on the UK's 2030 NDC

Dear Alok,

We will publish our formal advice on the UK's Sixth Carbon Budget on December 9th. You requested that the Climate Change Committee share our recommendation on the UK's 2030 NDC prior to that date. I am pleased to do so.

We welcome your insistence on ambitious UK climate leadership ahead of COP26. Its importance cannot be overstated. Global ambition for 2030 must increase significantly if the goals of the Paris Agreement are to be met.

We recommend that the UK commits to reduce territorial emissions by at least 68% from 1990 to 2030, as part of the UK's nationally determined contribution (NDC) to the UN process. This would constitute a decisive commitment to a Net Zero emissions trajectory, consistent with the Paris Agreement. It would place the UK among the leading countries in climate ambition.

We encourage the Prime Minister to make a 2030 commitment that is as bold as possible, to inspire other world leaders to follow suit. As such, the Government may choose to go beyond a 68% reduction. My committee would support the use of international credits to do so. We would not expect credits to be used towards the 68% reduction.

This trajectory for UK emissions is eminently achievable, provided effective policies are introduced across the economy without delay. These would bring significant benefits for the UK's economic recovery.

The NDC is more than just a number. It should be accompanied by wider climate commitments, including the development of a policy package and Net Zero Strategy to deliver against the UK goal, clear commitments to reduce international aviation and shipping emissions, and greater support for climate finance, particularly for developing countries. It is also imperative that the NDC is accompanied by strengthened climate change adaptation plans – with new commitments - for the UK to show its leadership on emissions reduction and adaptation.

Hook forward to discussing our recommendations for the Sixth Carbon Budget.

Yours,

Climate Change Committee 151 Buckingham Palace Road London SW1W 9SZ

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## Excerpt from the Sixth Carbon Budget Advice – published 9th December CCC recommendations on the UK's Nationally Determined Contribution for 2030

Climate Change Committee

The UK will host the next UN climate talks – the 26<sup>th</sup> Conference of the Parties (COP26) – in Glasgow in November 2021. The period leading up to these talks is vital for increasing global ambition. To support that process the UK must adopt a world leading NDC that reflects best practice under the Paris Agreement.

- Ambition on reducing emissions. The UK should submit an NDC based on the path to the Sixth Carbon Budget, requiring at least a 68% reduction in territorial emissions from 1990 to 2030 (excluding emissions from international aviation and shipping, IAS, in line with UN convention)<sup>1</sup>, to be delivered through domestic action, with additional actions to reduce the UK's contribution to IAS emissions.
  - This is a clear progression from the UK's existing commitments: its expected effort share of the EU's NDC (-53%), the existing fifth carbon budget (-57%), and the expected reduction in actual emissions under the fifth carbon budget (-61%).<sup>2</sup>
  - It would be world leading compared to existing NDCs, and amongst the
    front-runners for proposals for increased ambition. For example, if the EU
    adopts its proposed 55% reduction for 2030, our proposed budget
    would be towards the top of the range that we estimate for the UK's
    possible effort share had it still been a Member State.
  - It would align with the published pathways from the Intergovernmental Panel on Climate Change (IPCC) for a 1.5°C goal. UK emissions would fall by 54% from 2010 to 2030, compared to the 45% that the IPCC identifies for the world as a whole.
  - It is equivalent to a 64% reduction including IAS emissions, the basis of our recommended Sixth Carbon Budget.
- International aviation and shipping. While these emissions are treated separately by the UN, they must be addressed if the temperature goal of the Paris Agreement is to be met. The UK's NDC should include clear commitments to act on emissions from international aviation and shipping, including both long-term and interim targets.
- Adaptation. Even if the Paris goals are delivered in full and global temperature rise is limited to 1.5°C, there will be further impacts from climate change beyond those already occurring today. If the Paris goals are missed, the global and UK impacts will become much more severe. The UK needs to increase its ambition on climate change adaptation, as it is not prepared even for the 1.5-2°C world. The UK's NDC should signal how national adaptation plans will be strengthened, as well as highlighting how the UK is supporting climate adaptation overseas.
- International collaboration. The UK has been a strong contributor to international climate finance, recently doubling its commitment to £11.6 billion in aggregate over 2021/22-2025/26. The UK's NDC should highlight this commitment, along with other UK contributions to technology development and capacity building.

<sup>2</sup> The existing EU ambition is for a 40% reduction by 2030 relative to 1990; an increase to 55% is being considered. The fifth budget goal of -57% refers to the net carbon account, which adjusts for emissions trading in the EU Emissions Trading System.

<sup>&</sup>lt;sup>1</sup> Our recommendation of at least a 68% reduction from 1990 to 2030 excludes emissions from international aviation and shipping. It includes expected changes to the UK's emissions accounts to reflect higher estimates for emissions from peatlands and higher global warming potentials (GWP) proposed by the IPCC (and agreed at the UNFCCC) for non-CO2 greenhouse gases. [note added for this letter]

Current NDCs submitted under the Paris Agreement are predicted to lead to global average temperatures rising around 3°C by 2100 compared to pre-industrial levels, with risks of even more severe climate outcomes. The 2015 Paris Agreement aims to limit warming to well below 2°C and to pursue efforts to limit it to 1.5°C.



China, the EU, Japan and South Korea have all announced Net Zero emissions targets for 2050 or soon after (2060 in the case of China). The US is expected to join that list in 2021. Together, Net Zero commitments by Parties to the Paris Agreement cover nearly 50% of global CO2 emissions and 50% of global GDP (around 60% and 75% with the US). Further commitments by businesses and cities/states demonstrate underlying support that will amplify and facilitate the national efforts.

However, existing 2030 commitments globally do not yet match the long-term targets and still fall far short of what is needed to meet Paris Agreement targets. As host of COP26, the UK should send a clear signal that it is contributing fully to the Paris Agreement by setting a world-leading 2030 ambition and taking strong action now to move decisively onto the path to its long-term Net Zero ambition.

Our recommended Sixth Carbon Budget and UK NDC reflect the goals and requirements of the Paris Agreement, recognising the UK's responsibility as a richer developed nation and its respective capabilities:

- Our Sixth Carbon Budget pathway has been explicitly designed to reflect the UK's 'highest possible ambition' within the UK's particular capabilities, as required by the Paris Agreement.
- The **actions** required to meet the budget and NDC (including full decarbonisation of the power sector, full switchover to electric vehicle sales and installation of low-carbon heating, and roll-out of carbon capture and storage) would go beyond those required from the world on average (Table 1), in line with the UK's responsibility as a richer nation with larger historical emissions. The timing of these actions would align to that required from other climate leaders.
- Comparable action from other developed countries with developing countries following slightly later (i.e. where they generally adopt low-carbon measures later, achieve lower percentage reductions to 2030 and reach Net Zero emissions after 2050) would limit warming well below 2°C. We set out such a 'leadership-driven' global pathway in our report.
- We have also highlighted where policies and actions have important crossovers with the need to adapt to climate change, which is also included as a key part of the long-term response to climate change in the Paris Agreement.

To limit warming below 1.5°C, modelling generally suggests that all regions will need to follow paths close to those currently being considered in developed countries. Developed countries will need to play a significant role in supporting those efforts. If additional action to reduce emissions domestically beyond our recommended budget proves possible, then the UK should take that action in further support of the 1.5°C ambition.



Table 1 Comparison of the UK decarbonisation actions with global average pathways.			
	UK – Balanced Net Zero Pathway	Global average – 1.5°C pathways	Global average – 'well below 2°C' pathways
Coal % of electricity generation – 2030	0% (by 2024)	8%1	13%1
Low-carbon % of generation – 2030 <sup>1</sup>	87%	72%1	67%1
Electric Vehicles % of car fleet – 2030	46%	20 - 40% <sup>2</sup>	13% <sup>3</sup>
Electric Vehicles % of car sales – 2030	97%	52% <sup>3</sup>	40% <sup>3</sup>
Average heat pump installation rate – 2030 (heat pumps/thousand people/yr)	15.3	8.83	7.73
Low-carbon hydrogen production – 2030 (kg / person /yr)	8.2	-	0.93
CCS per capita – 2030 (tCO <sub>2</sub> /person/yr)	0.17	0.251	0.11
Engineered removals – 2030 (tCO <sub>2</sub> /person/yr)	0.07	0.041	0.011