A303 Amesbury to Berwick Down

Response to Examining Authorities' Second Written Questions

From Mike Birkin, Friends of the Earth.

Participant reference number 20020152

Question CC 2.3

i. Please explain further your concerns as regards the cumulative impacts of transport investment decisions and transport policy as a whole and the significance of this scheme in that context.

Introducing their 2019 Progress Report to Parliament, the Committee on Climate Change (hereinafter "the Committee") delivered their verdict that "UK action to curb greenhouse gas emissions is lagging far behind what is needed, even to meet previous, less stringent, emissions targets"[1].

While noting that the government has built a solid foundation from which to pursue the net-zero target, the Committee warn that "…reaching net-zero emissions requires an annual rate of emissions reduction … 50% higher than under the UK's previous 2050 target and 30% higher than achieved on average since 1990. This is an indication of how substantial the step up in action must be to cut emissions in every sector. It is especially acute for those sectors such as transport, buildings and agriculture where emissions have not fallen significantly over recent years[2].

On transport specifically they noted that "Transport is now the highest-emitting sector and must be a key contributor towards the reductions in greenhouse gas emissions needed over the period to 2030. Delays in making policy progress present a significant risk to meeting the fourth and fifth carbon budgets and are also likely to lead to higher costs and worse air quality. Policy progress over the last year has been very limited"[3].

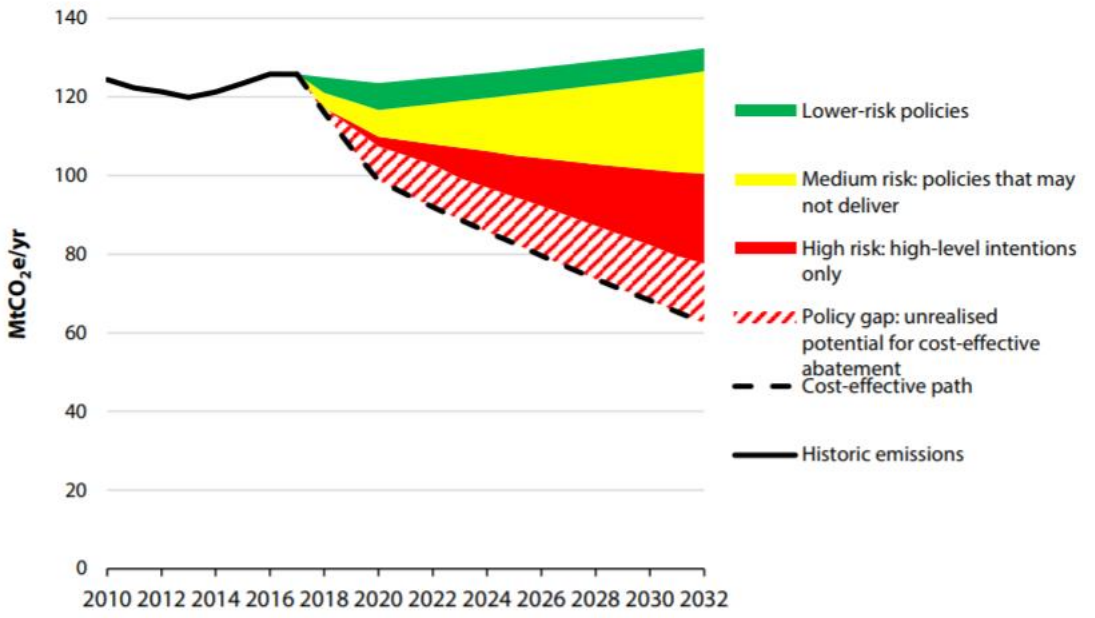
This echoed concerns expressed in the Committee's 2016, 2017 and 2018 reports which all warned of a lack of progress on transport.

The Committee wrote to Ministers in October 2018, responding to the measures the government had outlined in its "Road to Zero" strategy[4]. The Committee identified a serious "policy gap":

"Our assessment of the Road to Zero strategy indicates that there remain significant risks to meeting carbon budgets. The analysis shows there is a policy gap of 14 MtCO2e by 2030 in cost-effective abatement potential for which there are no policies, and 42 MtCO2e at risk due to lack of firm policies and measures or those with delivery risks"[5]

The scale of the gap is starkly illustrated in the graph included in the Appendix to this letter[6]:

Figure A1.1. Risks around the delivery of transport sector policies to meet the cost-effective path



Source: BEIS (2018) *Updated Energy and Emission Projections 2017*; BEIS (2018) *Provisional UK greenhouse gas emissions national statistics 2017*; CCC analysis.
Notes: The top of the green area in the chart represents baseline emissions, based on the latest Government emissions projections published in January 2018. Lower-risk policies have sufficient funding and ambition to deliver with reasonable confidence. Emission reductions from existing policies that we judge to have significant delivery risks (e.g. insufficient funding) are rated 'medium risk'. We have assessed emission reductions from proposals and intentions that were included in the Clean Growth Strategy, which are included as 'high risk'. There remains potential for cost-effective emissions reduction, which we include as the 'policy gap' to the cost-effective path.

It is important to appreciate that this widening gulf between emissions as forecast with current policies on the one hand, and the cost-effective abatement path on the other, derives from the previous carbon budgets, **before the recent commitment to net zero by 2050.** As noted by the Committee above, achievement of net zero requires an annual rate of emissions reduction 50% higher than under the UK's previous 2050 target. This would make the policy gap much larger still.

From these repeated warnings from the Committee, it is clear that fundamental changes in practice and attitude are demanded of UK transport strategy. In my submission to the Open Floor Hearing of 22 May I drew attention to the many declarations of Climate Emergency being adopted across the UK, to which further instances may now be added. Not only have more individual councils adopted such declarations since then; on 2 July the general assembly of the Local Government Association voted unanimously to declare a Climate Emergency. And since the date of the Open Floor Hearing the government itself has of course accepted the Committee on Climate Change's recommendation and put the net zero by 2050 target into legislation.

In the wider public sphere too there is a growing sense of urgency about climate breakdown, evidenced by many extraordinary developments but perhaps above all by the growing school

strike movement and the actions of Extinction Rebellion. As I write this response Bristol Bridge is currently under occupation and expected to remain so for a week.

These all add up to a strong political and public demand for change – a sense that much higher priority needs to be given to the threat of climate breakdown and that there needs to be a radical step up in the scale and speed of the policy response.

The decision on the Stonehenge Scheme sits squarely within this frame. In my submission to the Open Floor Hearing I pointed to its high carbon impact, and the high public profile that the project has.

ii. Question: ii. Please also explain further why the use of cleaner or electric vehicles alone would not bring about the necessary reductions in GHG emissions and why overall road traffic would need to be reduced?

The Committee on Climate Change's "Assessment of key indicators required to meet carbon budgets" includes reduction in vehicle-km as a key transport indicator[7]. In 2018 there was a slight fall in this indicator, from 550.6 to 549.1 billion vehicle-kms, after three consecutive years of rise. The Committee state that more work needs to be done on this indicator as part of their development of a sixth carbon budget and a pathway to net zero by 2050.

The government's 'Road to Zero' strategy failed to include any measures to reduce traffic, and the Committee subsequently stated there is an "urgent need for stronger policies to reduce growth in demand for travel"[8]

While we still await a pathway to net zero by 2050, the likely scale of traffic reduction is summarised in research commissioned by Friends of the Earth from Transport for Quality of Life and published in the briefing "More than Electric Cars" in December 2018[9].

This reports provisional work carried out by the Tyndall Centre for Climate Change Research, which has found that even if all new cars were ULEVs by 2035 (80% battery electric, 20% plug-in hybrids), a 58% reduction in car mileage between 2016 and 2035 would be needed for car CO2 emissions to be in line with a 'well below 2°C' pathway (i.e. in line with the Paris agreement).

A separate study by University College London implies car CO2 emissions would need to be cut to around 17 MtCO2 by 2030[10]. Transport for Quality of Life estimate that this would require reductions in car mileage of around 35-45% between 2017 and 2030 based on the 'Road to Zero' target for uptake of electric cars.

Such estimates are highly dependent on many factors including the rate of uptake of electric vehicles, improvements in conventional car efficiency, and grid carbon intensity, as well as the calculation of the cost-effective pathway to net zero by 2050. However all research so far by independent climate researchers indicates that electrification of the vehicle fleet alone is not sufficient to meet the required emission reduction pathway, and that a reduction in traffic is therefore also required.

iii. How and to what extent would the scheme itself impact upon the achievement of net-zero GHG emissions by 2050?

The scheme in isolation would impact negatively on the achievement of carbon reduction goals, especially in its operation, because of the additional carbon emissions it gives rise to by itself. This is reflected in the high negative value assigned to its carbon emissions.

The scheme also has knock-on effects, particularly in its implications for the remainder of the A303 corridor. Part of its justification is the creation of a high speed corridor directly to the south west, yet the cumulative impact of all the separate projects needed to carry out this aim has not been calculated – there has been no Strategic Environmental Assessment (although Friends of the Earth and other participants have argued that there should have been).

The applicants argue that the emissions from the scheme are acceptable because by itself they are only a very small percentage of the overall carbon budget – stated as .03%. This figure will rise as budgets are recalculated in the light of the net zero by 2050 target, but not by an order of magnitude – it would be no more than 0.1%.

I argued at the Open Floor Hearing that the approach of slicing up a road building programme into sufficiently small pieces so that each on its own appears to be of little account does not do justice to the response now required in a climate emergency. Given the scale of the transformation required, and the shortfall of existing policy levers to achieve it, the question needs to be asked whether a major investment project on a scale of billions that moves us further away from the prospect of rapid emissions reduction and achievement of the net zero target can truly be justified.

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[1] https://www.theccc.org.uk/2019/07/10/uk-credibility-on-climate-change-rests-on-government-action-over-next-18-months/

[2] https://www.theccc.org.uk/wp-content/uploads/2019/07/CCC-2019-Progress-in-reducing-UK-emissions.pdf - Executive Summary

[3] Committee on Climate Change, *ibid*, "Progress in policy development".

[4] Reducing emissions from road transport: Road to Zero Strategy

[5] https://www.theccc.org.uk/wp-content/uploads/2018/10/Lord-Deben-to-Chris-Grayling-Greg-Clark-on-Road-to-Zero.pdf

[6] Figure A1.1, Appendix 1, *ibid*

[7] Committee on Climate Change 2019, *ibid*, table 3.1

[8] Committee on Climate Change 2018, ibid

[9] https://www.transportforqualityoflife.com/u/files/1%20More%20than%20electric%20cars%20briefing.pdf

[10] Achieving net-zero emissions through the reframing of UK national targets in the post-Paris Agreement era