RESPONSE TO THE CLAIMANTS’ REPLY TO THE SUMMARY GROUNDS
for the permission hearing on 4 July 2018

Introduction

1. This is the response of the Committee on Climate Change (CCC) to the material part of the Claimants’ Reply to the Summary Grounds as it affects the CCC. The CCC was ordered to respond to the Claimant’s Reply by order of Mrs. Justice Nicola Davies dated 20 March 2018.¹

2. In their Reply, insofar as the submission relates to the CCC, the Claimants submit that the Secretary of State (SoS) has misunderstood the CCC’s advice. Two other allegations appear to be being made, which will also be addressed here, namely that (i) the CCC advice is “untenable”; and (ii) that the CCC has changed its position.

3. Although clearly a matter for the SoS as to how he has interpreted the CCC’s advice, the Claimants primary submission appears incorrect.

4. Before setting out the material content of the CCC’s advice, an outline of the expert role of the CCC, and of the Paris Agreement are set out below.

¹ To such extent as may be necessary, the CCC will refer to other documents as part of its response to the Claimant’s Reply.
Role of the Committee on Climate Change

5. The Committee was established by section 32 of the Climate Change Act 2008. It has a statutory duty under the Act to provide independent advice to government, Parliament and the devolved administrations on: the 2050 emissions target (section 33); the five-yearly carbon budgets (limits on UK emissions) which provide stepping stones to the 2050 target (section 34); and, annually, on progress made towards meeting the carbon budgets (section 36).

6. The Committee is chaired by Lord Deben, previously Secretary of State for the Environment (1993 to 1997). It has 7 other independent, expert members drawn from disciplines including climate science, economics, technology, forestry and behavioural science, with business and academic experience. The Committee is recruited through open competition and appointment and is supported by a secretariat of around 28, mainly analytical, staff.

7. The Committee has a 10-year track record of provision of climate change policy advice to government and Parliament, taking account of the international context and the very latest climate science. This includes:
   i. The 2050 target for reducing UK greenhouse gas emissions by at least 80% on 1990 levels. The target was set at the level recommended by the CCC.
   ii. The Government has accepted the CCC’s advice on all of the first five carbon budgets (covering 2008 to 2032) on a path to the 2050 target and legislated those budgets in line with that advice.
   iii. At other times, in relation to progress towards meeting carbon budgets for example, the CCC has been critical of the level of progress achieved and of Government actions. The analytical bases for those assessments have been widely accepted.

8. Domestically and internationally, the CCC is widely recognised as an independent provider of expert advice on complex issues, and held up as a model for others to follow.

9. In any consideration of the need to amend the 2050 target for reducing emissions, there is an explicit role for the CCC. The Climate Change Act (2008) sets out (section 3(1) (a)) that before amending the 2050 target, the SoS must obtain and take into account the advice of the CCC. Following on from the Paris Agreement, reached towards the end of 2015, the CCC decided – and in the absence of a request from the Government - that it should provide advice to the SoS. This advice was provided in October 2016.²

² CCC (2016), UK climate action following the Paris Agreement. Available at: https://www.theccc.org.uk/publication/uk-action-following-paris/
The Paris Agreement

10. The Paris Agreement aims to strengthen the global response to the threat of climate change. Its overarching aim is to do this by achieving the following long-term temperature goal:

“Holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels” (Article 2, para 1(a)).

The Agreement also specifies the need for emissions reduction so as to achieve:

“a balance between anthropogenic [i.e. relating to human activity] emissions by sources and removals by sinks of greenhouse gases in the second half of this century” (Article 4, para 1), i.e. net zero global emissions at some point between 2050 and 2100.

11. In considering the implications of the Paris Agreement for UK emissions reduction targets, the following points are worth highlighting. These are important because they underlie the approach of the CCC in providing its advice:

i. The Paris Agreement is a political agreement that specifies a goal for limiting the temperature increase globally. However, it does not set out in detail what this means for global greenhouse gas emissions over time. There are inherent uncertainties over the precise levels of emissions consistent with different warming limits that mean it is not straightforward to translate a global temperature goal into a specific level of allowed emissions.

ii. The long-term temperature goal refers to the sub-paragraph of Article 2 in its entirety, covering “well below 2°C” and “pursuing efforts towards 1.5°C”. Contrary to the position taken by the Claimants, there is no separate 1.5°C limit or goal.

iii. The long-term temperature goal belongs collectively to the countries which have ratified the Agreement. It does not entail a specific quantitative obligation on any one party. This is the bottom-up architecture of the Agreement.

iv. The achievement of net zero emissions in the second half of the century is a global aim. Clearly it cannot be met globally unless either: it is met by all countries; or, the net negative emissions of some countries balance the net positive emissions of other countries. We have undertaken analysis of the range of currently known opportunities to reduce emissions. We noted in our 2016 Report that the set of currently identified options is insufficient for the UK to reach net zero. Where feasibility has been raised as an argument for not setting a new target, this can only relate – in relation to our advice - to achieving net zero UK emissions at a point in the second half of the century.

v. In considering the implications of the political agreement reached in Paris for the UK’s 2050 target, it is necessary to translate the temperature goal in the

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3 Claimant’s Skeleton Argument for the Renewal Application on 20 March 2018, Para 10(b).
4 CCC (2016), p10, “We currently have no scenarios for how the UK can achieve net zero domestic emissions”. 
Agreement to what this could mean for UK emissions. Having considered this in our 2016 Report, we noted that “The UK 2050 target is potentially consistent with a wide range of global temperature outcomes” (page 16). The CCC recommended no change to the existing UK 2050 target (at that time, October 2016), not because a more ambitious target was infeasible, but rather because the existing UK target was potentially consistent with more ambitious global temperature goals, including that in the Paris Agreement.

vi. Alongside that recommendation, the CCC’s recommended approach at that time was on the basis that the Government would ensure the UK was on track to meet the statutory requirements of the fourth and fifth carbon budgets, and included waiting for more evidence on the levels of emissions implied by the Paris Agreement temperature goal (e.g. we knew that the IPCC 1.5°C report was due in 2018).

12. In sum, the CCC provided independent advice based on its statutory role. It properly sought to lay out the implications for emissions reduction of the political agreement reached in Paris.

The Secretary of State’s supposed misunderstanding

13. Clearly the CCC position was that it was neither necessary nor appropriate to amend the 2050 target at the time that it provided its advice (October 2016). The Government took the same view.

14. The Claimants suggest that the decision by the Government not to amend the 2050 target is based on a misunderstanding of the CCC’s advice. It is very difficult to believe that anyone could misunderstand this advice, which set out very clearly that emissions reductions of greater than 80% by 2050 are feasible. As the Executive Summary of the CCC advice in October 2016 expressly stated:

“A full and successful roll-out of all options identified in our published scenarios to 2050 would lead to greenhouse gas emissions just over 90% lower than 1990, and CO₂ emissions close to zero”.

This is expanded on in the main body of the report.

15. Indeed, CCC has scenarios pre-dating that 2016 report which go further than an 80% reduction by 2050. So this possibility was well-known.

16. The SoS’s Skeleton Argument makes clear that he does not rely on feasibility concerns as a reason not to amend the 2050 target.

17. Issues of technical feasibility do not arise in consideration of tightening the 2050 target. They do however arise in relation to setting a target to reach net zero emissions. The CCC’s assessment for its October 2016 advice, grounded in the latest available evidence, indicated that the full set of currently identified actions to reduce emissions could achieve a reduction by 2050 of around 92% on 1990 emissions. The

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5 CCC (2012), Scope of carbon budgets: Statutory advice on inclusion of aviation and shipping, p43-44. Available at: https://www.theccc.org.uk/publication/international-aviation-shipping-review/
6 Skeleton Argument on behalf of the defendant, for the permission hearing on 20 March 2018, Para 23a.
CCC was not then (and is not now) able to identify a set of actions to reduce UK emissions to net zero. We entirely support the political desire to find a way to achieve net zero emissions in the UK, and will continue to commission and evaluate evidence on options to reduce emissions beyond the maximum reduction currently identified.

The claim that the CCC’s advice is ‘untenable’

18. The Claimants contend that there is an inconsistency between the positions taken by SoS and the CCC as to whether the current 2050 target is compatible with the Paris Agreement. This is incorrect. The SoS’s Skeleton Argument directly states that the SoS “has never accepted that maintaining the 2050 Target is inconsistent with “targets” set by the Paris Agreement”.

19. The Claimants contend that the CCC position relating to consistency of the existing 2050 target and the Paris Agreement is “untenable”. This conclusion is incorrect. The Claimants’ case essentially rests on contentions that:

a) The CCC misunderstood the Paris Agreement.

b) The CCC has not taken proper account of the scientific evidence.

a) Contention that the CCC misunderstood the Paris Agreement

20. The Claimant characterises the CCC position as an interpretation of the Paris Agreement as only requiring effort “towards 2°C”. That is incorrect and is based on a selective and incomplete quote from the CCC October 2016 advice. The CCC’s position is more fully set out below.

21. The Paris Agreement does not require a specific quantitative obligation on any one party. Further, as described above (para 11), the long-term temperature goal in the Paris Agreement does not set a specific 1.5°C target or limit. The Claimants are wrong to assert that it requires amending the 2050 target to a “1.5°C temperature limit”.

22. The Paris Agreement was an important milestone in tackling climate change, and UK action must reflect what has been agreed internationally. It is important that care is taken to translate its requirements into ambition at UK level and that this is done properly, based on the best available evidence.

23. The CCC position that the existing 2050 target is compatible with the Paris Agreement reflects that:

a. The Paris Agreement sets out a long-term temperature goal which covers a range of ambition from “well below 2°C” to “efforts towards 1.5°C”. It does not, however, specify a priority within the range 1.5°C to well below 2°C warming. It

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7 Claimants Reply to Summary Grounds, Para 4(a).
8 Skeleton Argument on behalf of the defendant, for the permission hearing on 20 March 2018, Para 23a.
9 Claimants Reply to Summary Grounds, Para 13.
10 Claimant’s Skeleton Argument for the Renewal Application on 20 March 2018, Para 22.
11 Claimant’s Skeleton Argument for the Renewal Application on 20 March 2018, Para 10(b).
does not set a separate 1.5°C goal. It does not define what “well below” 2°C means. It does not set a temperature goal with probabilities as to achievement.

b. Nevertheless, in order to consider implications for the 2050 target, it is necessary to translate the temperature goal in the Paris Agreement to implied levels of emissions. In doing this the CCC considered the range of ambition within the Paris Agreement temperature goal.12

c. Overall, the CCC assessment is that the existing 2050 target is potentially consistent with a wide range of global temperature outcomes. One end of the Paris ambition (1.5°C) probably implies a greater than 80% reduction by 2050 in the UK; the other part (well below 2°C) does not.

24. The Committee’s advice, which was not to amend the current target at this time, is consistent with this, and was also to aim to meet and outperform legislated carbon budgets. We said that this would support the aim of the Paris Agreement of pursuing efforts to 1.5°C. It would keep open the option of meeting a tighter 2050 target should this become necessary in future. We also set out future opportunities to revisit our advice as the evidence base develops.

b) Contention that the CCC has not taken proper account of the scientific evidence

25. The Claimants assert that the existing reduction target for 2050 of at least an 80% reduction is inconsistent with the aims of the Paris Agreement. This is incorrect. The evidence base at the time of our 2016 advice had moved on since that used in 2008, when the UK’s 2050 target was first set. There is also the prospect of improvements in the evidence base, which it is reasonable to wait for whilst taking actions to retain the potential to meet a tighter target in future should that then be considered necessary.

26. We first note that the existing target is for “at least” an 80% reduction. But beyond this, the Claimants’ position seems to reflect that they do not see how an emissions reduction target of 80%, set in 2008 on the basis that it was a UK contribution to global greenhouse gas emissions reductions broadly consistent with keeping global average temperature rise close to 2°C, could now be consistent with limiting warming to “well below” 2°C.

27. The CCC accepts that the Paris Agreement describes a greater level of global ambition, in terms of limiting temperature rise, than the one which formed the basis for setting the UK’s existing 2050 target. However, the Committee’s advice in its 2016 report was based on an updated assessment, taking account of the latest evidence, including the IPCC Fifth Assessment Report (AR5). That evidence had moved on, reflecting factors including:

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12 In formal terms, and reflecting uncertainties in our understanding of the global climate system, it is necessary to apply probabilities to the temperature thresholds. The CCC has been very clear on its interpretation: ‘In order to assess global emission paths, we interpret the temperature aims in the Paris Agreement to range from (at minimum) a 66% likelihood of staying below 2°C, to (at maximum) a 50% likelihood of staying below 1.5°C.’
a. The latest scientific understanding, including a wider range for climate sensitivity, i.e. the amount of warming that would result from a given amount of greenhouse gas emissions

b. Slower growth in global emissions since 2008 than had previously – in 2008 – been assumed (partly reflecting the effects of the global financial crisis)

c. The latest assessments of options for reducing emissions, including greenhouse gas removal technologies.

On this basis, as assessed in 2016, the evidence suggested an at least 80% emissions reduction target for the UK in 2050 could be consistent with achieving a less than 2°C temperature rise globally.

28. As the evidence base develops, the case for strengthening the UK 2050 target should be examined again. This was an explicit part of our recommendations in 2016. The CCC stands by its 2016 advice that scientific evidence and the Paris Agreement did not require a change to the target at that time.

The claim that the CCC has changed its position

29. The Claimants allege that the CCC has contradicted its own previous statements.\(^\text{13}\) As will be clear from the following paragraphs, there are no such contradictions.

30. The CCC has said that “the aims of the Paris Agreement ... went further than the basis of the UK’s current long-term target to reduce emissions in 2050 by at least 80%”\(^\text{14}\). We stand by that statement. It is not a statement that an “at least 80% reduction target” is inconsistent with the Paris Agreement. The evidence base has moved on since that used to inform the setting, in 2008, of the 2050 target (see also Para 27 above). Hence, taking account of the latest evidence, the existing target is compatible with the Paris goal. As further evidence is expected (the IPCC 1.5°C report is due later this year), we have advised awaiting that publication before again assessing implications for the 2050 and net zero targets.

31. Crosland 2 quotes from the minutes of a CCC meeting (held 16 September 2016) to draw a link between the 2050 target and the statement, in those minutes, that “The Committee therefore agreed that whilst a new long-term target would be needed to be consistent with Paris, ...”. Crosland 2 goes on to suggest, therefore, that the CCC’s Summary Grounds “would appear to be the first time the CC Committee have suggested a consistency between the 2050 Target and the Paris Agreement”\(^\text{15}\). This is incorrect:

a. A reading of the full minutes of that part of the 16 September meeting (Annex A) make clear that the statement that a new target would be needed relates to the need for a post-2050 net-zero target, not to an increase in ambition for the 2050 Target.

\(^{13}\) Crosland 2, second witness statement of Timothy John Edward Crosland, para 5.

\(^{14}\) Minutes of CCC meeting, 16 September 2016.

\(^{15}\) Crosland 2, para 7.
b. The CCC October 2016 Report shows the potential consistency of the existing 2050 target with the long-term temperature goal in the Paris Agreement.

**Summary**

32. In summary, the Claimants arguments are based on a misinterpretation of the Paris Agreement and a confusion between CCC advice relating to the 2050 target and that relating to the achievement of net zero emissions. The CCC’s response to the Claimants’ reply to the Summary Grounds is that:

a. **The Secretary of State’s supposed misunderstanding.** Whilst the CCC is not able to comment on the Government’s interpretation of the CCC’s advice, the CCC has been very clear in its advice to the SoS that greater emissions reductions than 80% by 2050 are feasible. The SoS’s Skeleton Argument makes clear that he does not rely on feasibility concerns as a reason not to amend the 2050 target.

b. **The claim that the CCC’s advice in terms of consistency with the Paris Agreement is ‘untenable’.** It was integral to the CCC’s advice that it should be consistent with the Paris Agreement. The long-term temperature goal in the Paris Agreement covers a range of ambition from “well below 2°C” to “efforts towards 1.5°C”. It does not specify a separate 1.5°C goal. The CCC’s 2016 advice reflected consideration of the range and concluded that the existing 2050 target was consistent with a wide range of global temperature outcomes. There will be opportunities, and further evidence, to look at this again.

c. **Alleged inconsistency in the CCC’s position.** A full consideration of the CCC’s statements indicates that there is no inconsistency.
Annex A: Committee meeting minutes of 16 September 2016 in relation to the implications of the Paris Agreement

The Committee discussed progress with development of the report, due for publication in October, on implications of the Paris Agreement for the UK’s long-term targets to reduce emissions. It had agreed in its January 2016 letter to the Secretary of State on implications for carbon budgets to 2032 to provide further advice on the issues.

It was clear that the aims of the Paris Agreement, to limit warming to well below 2°C and to pursue efforts to limit it to 1.5°C, went further than the basis of the UK’s current long-term target to reduce emissions in 2050 by at least 80% on 1990 levels (which was based on a UK contribution to global emissions reductions keeping global average temperature rise to around 2°C).

Emissions pathways also suggest that CO₂ emissions will need to reach net zero by the 2050s-2070s in order to stay below 2°C.

However, we currently have no scenarios for how the UK can achieve net zero domestic emissions. Theoretically, putting all practical difficulties aside, achieving all the options in the “Max” scenario in the Committee’s 5th carbon budget advice would result in around a 93% reduction in 2050 emissions as against 1990. Emissions in “hard to reduce” sectors – aviation, agriculture, parts of industry – would remain.

There is also no single agreed way to define fair contributions of effort between nations. We do not know if a least-cost strategy has the UK reaching zero sooner or later than other countries, or the role of emissions trading or other forms of international assistance as supplements to domestic action.

To the extent that emissions remained in hard to reduce sectors, then greenhouse gas removal (GGR) technologies would be required to achieve net zero. The Committee considered a range of possible technologies, with indications of removal potential, taken from the peer reviewed literature. These were assessed at different stages of technology readiness level (TRL), but were generally characterised by substantial uncertainties.

The Committee therefore agreed that whilst a new long-term target would be needed to be consistent with Paris, and setting such a target now would provide a useful signal of support, the evidence was not sufficient to specify that target now. Further actions to strengthen the achievement of existing targets should be prioritised (which would leave open options to push further in future); and to develop a strategy for GGR (including international co-ordination) and to support innovation in “hard to reduce” sectors. There would be opportunities to revisit the setting of a new target as more information becomes available about potential global paths to well below 2°C and 1.5°C.

The Committee also agreed that if strengthening of measures to meet existing carbon budgets led to over-achievement of budgets then this would support the aims in the Paris Agreement and it is unlikely it would be appropriate to bank such over-achievement.'