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### DEADLINE D3

**In so far as the facts in this statement are within my knowledge, they are true. In so far as the facts in this statement are not within my direct knowledge, they are true to the best of my knowledge and belief.**

### Contents

DEADLINE D3.....		1
Contents .....		1
1 INTRODUCTION.....		3
2 PRELUDE.....		3
Figure 1: Antarctic Sea Ice Extent Anomaly .....		4
Figure 2: North Atlantic Sea Surface Temperature Anomaly.....		5
3 POLICY CONTEXT UPDATE.....		6
3.1 Transport Select Committee “Strategic Road Investment” report.....		6
4 CUMULATIVE CARBON ASSESSMENT .....		7
5 TWO YEAR DELAY TO START OF PROPOSED CONSTRUCTION AND OPENING YEAR.....		8
Table 1: Ballpark annual construction emissions.....		8
6 COMMENTS ON REP2-052 .....		9
6.1 Generic comments .....		9
6.2 Claims of 1.5-degree compliant budgets.....		10
6.3 Construction emissions and the UK NDC and 5 <sup>th</sup> carbon budget.....		11
6.4 Greenwashing the Construction emissions .....		12
7 FURTHER COMMENTS ON SIGNIFICANCE ASSESSMENT AND DECISION MAKING BY THE SOS.....		13
7.1 Assumption 1 .....		13
7.2 Applicant’s approach to significance and Assumption 2 .....		14
7.3 Sequentiality.....		16
8 APPENDIX A: “Earth’s hottest month: these charts show what happened in July and what comes next”, Nature commentary, 18 <sup>th</sup> August 2023 .....		17
9 APPENDIX B: British Antarctica Survey, August 3 <sup>rd</sup> 2023, “The mystery of the missing Antarctic Sea ice” .....		17

10 APPENDIX C: TSC REPORT: Strategic Road Investment” (Published 27 July 2023) ..... 17

11 APPENDIX D: Factor of Two paper (2023) ..... 17

12 APPENDIX E: “World will miss 1.5C warming limit - top UK expert”, BBC, July 2023..... 17

## 1 INTRODUCTION

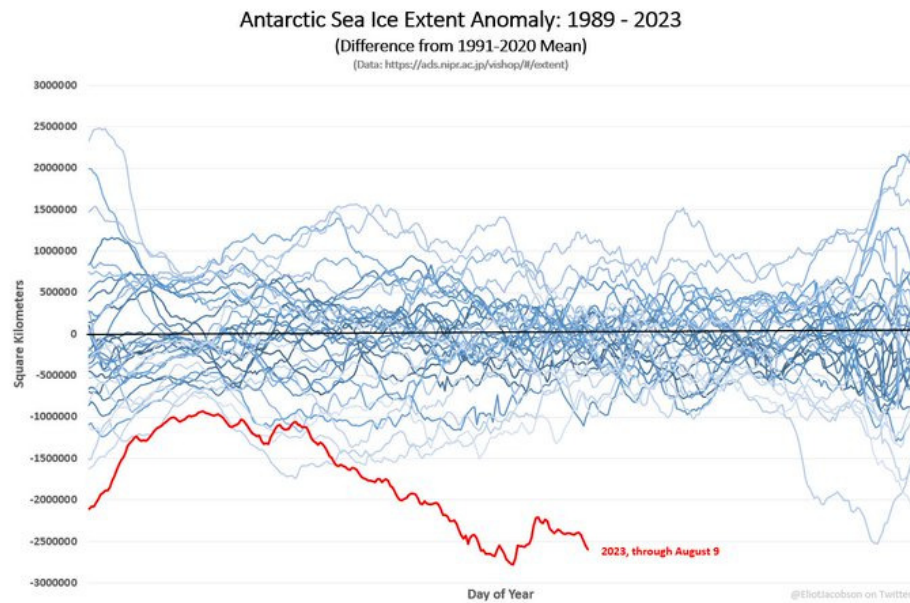
- 1 This submission responds to the applicant's comments on my WR at REP2-052. I also provide submissions to assist the ExA and SoS in putting these comments in context with respect the significance assessment of the scheme with respect to GHGs.
- 2 I usually restrict my submissions to technocratic matters relating to policy and law. However, due to the very disturbing events this year relating to planetary level climate disruption, I feel that I have a responsibility as someone with an active interest in these events and the scientific response to it, to provide a short Prelude section next, and put these matters on record before the examination. I respectfully request that these brief points about the emerging planetary crisis are noted in the ExA's report.
- 3 I also provide a section with an update on the policy context.

## 2 PRELUDE

- 4 This year has seen the Climate Emergency unfold before the world's eyes in real time. This has been shocking to many scientists involved in the field with a common response being this is happening "much faster than we expected". There is currently a wide discussion on whether the planet is currently undergoing some tipping point (or combination of tipping points).
- 5 The effects of climate change are usually seen by the public in terms of increasing extreme weather events. Examples abound such as the record-breaking temperatures in the UK last year, and temperature records being widely broken around the globe this year. We have seen widespread flooding events, and of course, we have all witnessed the distressing and devastating wildfires in Hawaii, Rhodes, and Canada. All attributable to man-made climate change. However, shocking as these events are, they are superficial in comparison with some of the more unprecedented deeper geophysical signals being seen. I just highlight a couple of these very briefly below.
- 6 This year has seen, from the satellite record, a massive loss of sea ice reforming in this year's Antarctic winter. The signal (or "canary in the mine") of this is shown on the graph below<sup>1</sup>:

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<sup>1</sup> Source: <https://twitter.com/EliotJacobson/status/1689651022862643200?s=20>

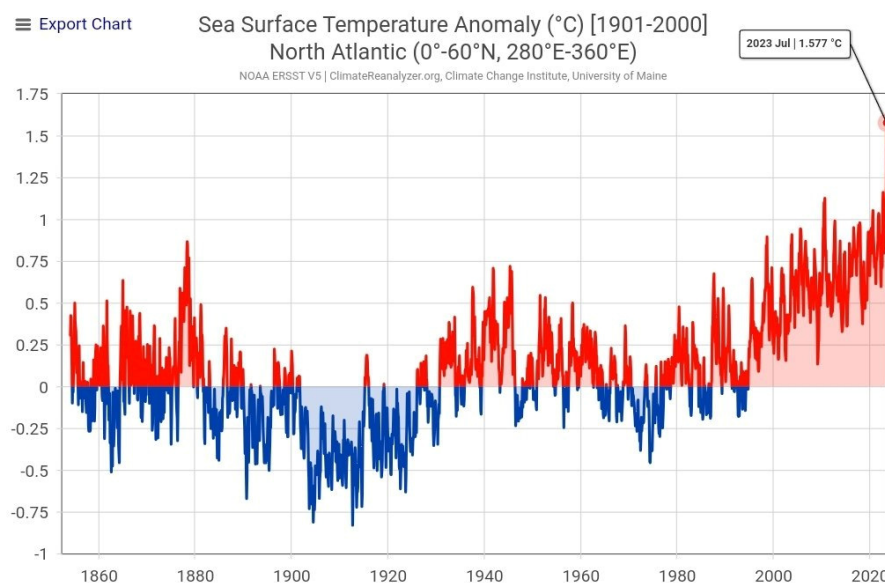


*Figure 1: Antarctic Sea Ice Extent Anomaly*

- 7 The graph shows the anomaly – the extent of sea ice loss compared to the recent average (1991-2020). In real terms, this is sea ice which would be expected to reform in a typical Antarctic winter is simply not reforming this year over a massive scale of area. Scientists are currently grappling to understand the causes for this large deviation this year which is statistically extremely unlikely (please see the British Antarctic Survey commentary at Appendix B). The loss amounts to an area around 10 times the size of Britain, and the impact could be to weaken land ice and glaciers on the Antarctica continental shelf itself. If this is the signal of a tipping point starting in which the sea ice around Antarctica ice is permanently lost at this scale, then this in turn would lead to land-based ice moving into and melting in the sea giving rise to very large sea level rises, and impacts to low lying cities around the world. Whilst this has always been a possible impact of climate change over centuries, the key takeaway concerning this year's data above is that scientists are shocked to see this happening now and it had not been predicted by modelling to occur at this stage of global heating.
  
- 8 This year has also seen sea temperatures rise unusually high, globally, and also in the North Atlantic, as shown on the next graph<sup>2</sup>. This has contributed to some of the marine heatwaves (for example off Ireland the UK earlier in the year) which have caused serious impacts to marine life. Again, the sharp increase for the 2023 data point is what is shocking and concerning.

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<sup>2</sup> Source: <https://twitter.com/LeonSimons8/status/1688188964027486208?s=20>



**Figure 2: North Atlantic Sea Surface Temperature Anomaly**

- 9 There are many other examples, and there is a very energised debate on-going in climate science circles about these geophysical scale climate events. Please see the Nature science journal commentary at Appendix A.
- 10 In terms of the examination, all parties should be in no doubt that that the Climate Emergency is here, and **it is crucial that the UK does not make decisions which make the build-up of atmospheric carbon dioxide worse.**
- 11 As the judgement in the first Net Zero Strategy legal challenge<sup>3</sup> says:

*“Given the nature of the problems posed by climate change, the need for substantial changes across the country and the challenges involved, telling Parliament how the Secretary of State proposes to meet the carbon budgets does indeed require him to explain the thinking behind his proposals and how they will enable the carbon budgets to be met.”*

<sup>3</sup> Para 233, R (Friends of the Earth) v Secretary of State for Business Energy and Industrial Strategy [2022] EWHC 1841 (Admin)

### 3 POLICY CONTEXT UPDATE

#### 3.1 Transport Select Committee “Strategic Road Investment” report

12 The Transport Select Committee published a report on “Strategic Road Investment” on 27 July 2023, and referred to here as TSC\_SRI. I provide the report as Appendix C.

13 Under the TSC report section “Managing traffic demand on the Strategic Road Network”, bullet 19 says:

***“Transport remains the biggest greenhouse gas contributor in the UK and the Government’s strategy for decarbonising transport by 2050 is reliant on a rapid switch to zero emissions vehicles. However, in all future scenarios modelled by the Department for Transport, traffic on the Strategic Road Network is forecast to increase, and there is a great risk that uptake of cleaner vehicles will not be fast enough to mitigate that increase. The Government’s determination to accommodate demand for new roads through investment without also considering steps to manage that demand is a risky strategy.”*** {bold emphasis in original}

14 To expand, this relates to, and supports, my WR where I submit that there is no evidence that delivery of the CBDP – a critical and statutory climate policy required by the Climate Change Act 2008 - is secured [REP1-323]. This also supports the Climate Change Committee 2023 Progress Report finding that “a pathway that is almost exclusively technology-dependent is likely to be less cost-effective, entails higher delivery risk” [see quote under REP1-323/ bullet 39]. “Technology-dependent” refers primarily to the electrification of vehicles.

15 It is significant that this high-level body of MPs highlighted that accommodating demand for new roads in the context of increasing forecasts of traffic on the SRN as a risky strategy. The LTC is one of the projects generating the demand. This is an issue which the SoS must consider in the decision making in addition to those submitted at REP1-323 / section 11.1 where I conclude, on my WR evidence, that there is not sufficient emissions space in the 4CB and 5CB (Industry) residual emissions allocation for the project to be constructed, and there is not sufficient emissions space in the 5CB and 6CB (Surface Transport) residual emissions allocations for the project to be operated.

16 The MPs then go further at bullet 21 from the TSC SRI:

***“The Government should model and report on scenarios where traffic levels on the SRN are a) reduced and b) maintained at current levels, alongside the transition to a cleaner vehicle fleet, in order to assess the potential contribution of demand management to reaching net zero.”*** {bold, italic emphasis in original}

17 This links to REP1-323 / section 6.5 and supports the very point which I am making there that the CBDP identifies the risk that traffic demand may go beyond the Government’s high-end projections, and critically that there has been no risk assessment of this. The LTC application quite clearly forecasts significant growth rates of traffic from the scheme [APP-

518, Table 6.3] and longer trips which would contribute to an increase in the (sector emissions trajectory) baseline. At REP1-323 / section 6.5, I ask “*how does that fit in the overall risk assessment of not delivering on the new baseline and policies in the revised NZS?*”.

- 18 Following the TSC report, I go further and submit that given the risks identified to net zero delivery, and the MP’s call for modelling of scenarios with no or reduced traffic growth “*to assess the potential contribution of demand management to reaching net zero*”, that there can be no justification to approve a scheme which forecasts significant traffic growth before such modelling has been undertaken and reported. The issue of increased traffic from the scheme, and its impact on delivery of net-zero must be given strong weight in the planning balance. Further the SoS must have all the relevant data, and that includes the additional traffic forecasts and understanding of demand management for reaching net zero.
- 19 At minimum, the decision on the LTC scheme should wait until the additional modelling recommended by the MPs has been carried out, and the effects of demand management on the delivery of the UK’s carbon budgets and net-zero is better understood.

#### 4 CUMULATIVE CARBON ASSESSMENT

- 20 The ExA at ExQ1, 2.3.1 [PD-029] has requested comments from IPs on the implications of the recent judgement *R (Boswell) v Secretary of State for Transport [2023] EWHC 1710 (Admin)* for the consideration of carbon and climate matters in the LTC Examination and decision.
- 21 As the claimant in the Boswell case, I make some initial comments here which I may extend for the D4 deadline on September 19<sup>th</sup> 2023, and, of course, later if there are updates on the case.
- 22 I have done forensic analysis of the EIA Climate Change chapters provided by the applicant on a number of schemes: a common approach is used on all the DCO road applications. My analysis looks at how the numbers move “through the system” from the traffic modelling outputs to the tables published in the ES. The analysis has been both scientific and legal. In scientific terms, I remain completely convinced that no assessment of the climate change impacts of the cumulative carbon emissions associated with the scheme has been made in Chapter 15 for the LTC.
- 23 With respect to legal matters, my lawyers and I have used the same forensic analysis to examine each step in the processing of the data and the presentation in the tables, and any assessment made, and also the associated decision-making process by the Secretary of State, against the relevant law and case law. On the basis of this, my lawyers have applied (on July 28<sup>th</sup> 2023) with what we submit is an arguable case for permission to appeal the Boswell judgement above.

24 It is important to note that no evidence which I have made as an IP on the LTC application depends upon the success of my appeal.

**5 TWO YEAR DELAY TO START OF PROPOSED CONSTRUCTION AND OPENING YEAR**

25 I note the effect of the rephrasing as announced by the ministerial statement has been included in the ES Addendum at D2. This may affect some calculations made in my WR; however, I request respectfully that the ExA allows me more time to consider this and provide a revised WR at a later date if necessary.

26 At this stage, it is helpful to just revisit the data which the Applicant has provided on the construction emissions as this relates to comments on the UK’s international obligations under the Paris agreement and the 2030 Nationally Determined Contribution (NDC). In REP2-040, Annex D1 “Greenhouse gas emissions”, the Applicant provides the original Table 15.17 from APP-153, and a revision of it Table D1.2 accounting for the two-year delay.

27 The applicant has not provided the annual figures for the construction emissions which would be helpful in order to discuss the impact of emissions in the year 2030. From the applicant’s new data at Table D1.2, and also the context from the original data at Table 15.17, I have calculated ballpark estimates (assumptions in footnote) as shown below:

CONSTRUCTION EMISSIONS tCO2e	2027	2028	2029	2030	2031
Annual ballparks <sup>4</sup>	440,234	400,000	302,733	310,000	310,000
Up to and including 2030				1,452,967	

***Table 1: Ballpark annual construction emissions***

28 The key figures are the annual construction emissions in 2030 and the construction emissions up to and including 2030 – these are taken forward below as 310,000 tCO2e and 1,452,967 tCO2e respectively as ballpark estimates.

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<sup>4</sup> Table 15.17 allocated 614,648 tCO2e to the two final years of construction (2028 and 2029). I have allocated 310,000 tCO2e to each of 2030 and 2031 following the two-year delay. Table D1.2 allocates 440,234 tCO2 to 2027, the first year of construction on the new timescales. I have provided guestimates for the remaining two years in Table 1. The total adds up to 1,762,967 tCO2e as before.



## 6 COMMENTS ON REP2-052

29 The applicant has made comments on my WR in REP2-052, and my response is below.

### 6.1 *Generic comments*

30 The applicant has not engaged in my Written Representation in several key respects:

- (A) The response has cherry picked sections and paragraphs of my WR and does not engage with many other points made in the WR. Responses have been given to the two key questions, I posed Q1 and Q2. However, only bullets 141 - 145(A)-(M) have been responded to. Evidence provided in bullets 1 – 140 has been ignored.
- (B) Then the responses are frequently repetitive and indirect
- (C) For example, the response “*The ES concludes that the Project’s GHG emission would not have a material impact on the Government’s ability to meet its carbon reduction targets ..*” is given 4 times on points without engaging specifically to the points being made. The points relate to the ES is reaching this conclusion on the basis of assumptions which are unproven, or not robust to scrutiny (see narrative on Assumption 1 and Assumption 2 later). So the application has not addressed whether their assumptions can be taken as correct, despite the evidence provided in the WR that the assumptions cannot be credible. I have provided further narrative on Assumption 1 and Assumption 2 later to assist the ExA.
- (D) Another example of repetition is a paragraph on the “ground breaking mechanisms” in the Carbon and Energy Management Plan being repeated verbatim, or nearly verbatim, at least 5 times. This paragraph amounts to what is commonly referred to as greenwash. The applicant deliberately misses the point, that despite what innovative construction methods may or may not be employed, the overall construction emissions from the scheme at 1.76MtCO<sub>2</sub>e are massive and have serious implications for the 4<sup>th</sup> and 5<sup>th</sup> carbon budgets, the NDC and the industrial sector residual emissions under the CBDP. Endlessly repeating a greenwash mantra does not somehow allow for the implications of the huge construction emissions footprint to be ignored.
- (E) The applicant has not engaged with the issue of hydrogen in the construction project and the comments in my WR on that matter.
- (F) The applicant’s response has been almost entirely focussed on construction emissions (and making greenwashing arguments as described above). The applicant has not addressed the very serious issues with meeting the Domestic Transport Residual Emissions in the CBDP. The scheme introduces very substantive new operation emissions into the 5<sup>th</sup> and 6<sup>th</sup> carbon budget periods, which according to the CCC Progress Report the surface transport sector has yet

to secure shortfalls of 122.6 MtCO<sub>2</sub>e of emission reductions in the 5CB and 228.6 MtCO<sub>2</sub>e in the 6CB. **I submit that there is no credible way at present that Secretary of State can be certain that approving the scheme would not lead to him/her being in breach of his/her statutory duties of meeting the carbon budgets.**

## 6.2 Claims of 1.5-degree compliant budgets

31 The applicant frequently refers to a “budgeted science-based 1.5°C trajectory set out through the UK carbon budgets”. This notion, or concept, is scientifically naïve in several respects:

(A) The Climate Change Committee (CCC) sixth Carbon Budget (6CB) report is the most definitive on the UK carbon budgets. However, the CCC do not show anywhere how the 6<sup>th</sup> Carbon Budget (6CB), and other budgets, can be derived directly by a stepwise downscaling from a scientifically established global carbon budget (ie: from the Intergovernmental Panel on Climate Change, IPCC). The derivation of the 6CB is focussed more on meeting the national, politically set, net zero-target of 2050 via an array of policy interventions (ie via the twice legally challenged Net Zero Strategy) rather than fitting the UK economy into a specific global carbon budget, or via a clear sequenced of derivation steps from an IPCC budget.

The point here is that there are many possible pathways to reach net-zero, and each will have different accumulated carbon emissions under the curve – so one can reach net-zero having added more or less emissions to the global atmosphere. Only very stringent pathways have a chance to fit within global carbon budgets, or to be derived from them.

The area under the curve issue has been examined by the Tyndall Centre, research that the UK Department of Business, Energy, and Industrial Strategy supported. Tyndall demonstrate that the area under their curve of their emissions trajectories is consistent with the global carbon budgets from the Intergovernmental Panel on Climate Change (IPCC) – however, not 1.5 degrees. The Tyndall budgets are consistent with IPCC global carbon budgets of 1.7°C degrees of global heating. This is not 1.5°C because, essentially, there are not enough degrees of freedom in the system to produce budgets consistent with 1.5°C, the lowest end of the Paris target.

The Tyndall “Factor of Two” paper<sup>5</sup> is provided at Appendix D. This has the key conclusion “*The UK and Swedish governments’ emissions pathways imply a carbon budget of at least a factor of two greater than their fair contribution to delivering on the Paris Agreement’s 1.5-2°C commitment.*”

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<sup>5</sup> Kevin Anderson, John F. Broderick & Isak Stoddard (2020): A factor of two: how the mitigation plans of ‘climate progressive’ nations fall far short of Paris-compliant pathways, Climate Policy, DOI: 10.1080/14693062.2020.1728209

This statement clearly demonstrates that the UK CCC budgets are **not** science-based 1.5°C trajectories.

(B) Many scientists in recent years have expressed concern that the world will not meet the Paris Agreement 1.5 degrees target. In July 2023, Professor Sir Bob Watson, former head of the UN climate body, affirmed the growing consensus that not overshooting 1.5 degrees is now near impossible, see Appendix E for article. The article notes that it is surprising for someone as senior and well respected as the former head of the UN climate science body the IPCC to be so frank that he believes it [the 1.5-degree target] will be missed.

- 32 For brevity, I do not include much other evidence pertaining to this issue. However, the points being made are that the 1.5-degree target almost certainly will not be achieved, and, in any case, the UK carbon budgets do not provide a trajectory by which the UK can make a ‘fair’ contribution<sup>6</sup> towards the Paris Climate Change Agreement and towards meeting 1.5 degrees.
- 33 Referring to “a budgeted science-based 1.5°C trajectory set out through the UK carbon budgets” is just hopelessly out of touch with the reality of the situation. I request that the ExA’s report and the SoS’s decision should avoid using this incorrect phrasing, and the ExA report should put this issue on record.

### 6.3 *Construction emissions and the UK NDC and 5<sup>th</sup> carbon budget*

- 34 At page 110 of REP2-052, the applicant responds to bullet 145 (J) of my WR. The point is taken that the 8MtCO<sub>2</sub>e shortfall, identified by the Government itself, for the NDC is in the year 2030 when the NDC target is set. The applicant has not provided the construction emissions for that year, so it has not been possible to make the comparison that it suggests for that year only on the applicant’s published data. Therefore, at Table 1 above, I have calculated ballpark estimates for each of the construction years 2027-2031 so that a ballpark comparison can now, at least, be made.
- 35 The construction emissions in 2030 can be expected to be of the order of 300,000 tCO<sub>2</sub>e (ballpark). Given the current 8MtCO<sub>2</sub>e shortfall on the UK NDC for 2030, this is a significant amount of carbon to budget for. The applicant has given no evidence for how first the 8MtCO<sub>2</sub>e NDC shortfall can be eliminated, and then how an additional 300,000 tCO<sub>2</sub>e can be accommodated, and still meet the NDC. As submitted in my WR, this is a live issue for the SoS in his/her decision-making, and needs to be considered against section 104(4) of the Planning Act 2008 and whether approving the scheme would lead to the UK being in breach of its international obligations. **I submit that there is no credible way at**

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<sup>6</sup> ‘fair’ meaning equitable under the Paris Agreement equity principles between developing and developed nations, known as Common but Differentiated Responsibilities and Respective Capabilities (CBDR–RC) <https://www.oxfordclimatesociety.com/blog/what-you-need-to-know-about-common-but-differentiated-responsibility>

**present that Secretary of State can be certain that approving the scheme would not lead to the UK being in breach of its international obligations.**

- 36 Further, as identified in Table 3 of my WR [REP1-323] 115 MtCO<sub>2</sub>e emissions reductions have yet to be secured for the Industry sector residual emissions trajectory in the 5<sup>th</sup> carbon budget. Table D1.2 shows the applicant calculates that 1.322MtCO<sub>2</sub>e is required for the LTC construction in the 5<sup>th</sup> carbon budget. With such a massive shortfall in securing the necessary emissions reductions, I have submitted that there is not available emissions space for the additional LTC project to be constructed in the 5<sup>th</sup> carbon budget [REP1-323/120]. Again, the applicant has given no evidence of how the shortfall in the Industry sector residual emissions trajectory can first be delivered, nor how the construction of the LTC may then also be accommodated. This potentially contributes to a breach of the statutory duty to deliver 5<sup>th</sup> carbon budget and needs to be considered by the SoS against section 104(5) of the Planning Act 2008. **I submit that there is no credible way at present that Secretary of State can be certain that approving the scheme would not lead to him/her being in breach of his/her statutory duties.**
- 37 Also the applicant has not responded to the matter which I raised on possible use of hydrogen in the construction project, and how GHG emissions related to potential (A) upstream methane leakage; (B) CO<sub>2</sub> emissions from gray and blue hydrogen production; and (C) downstream hydrogen leakage. Nor has the applicant provided any full lifecycle analysis of the carbon intensity of hydrogen used.
- 38 The standard response “*The ES concludes that the Project’s GHG emission would not have a material impact on the Government’s ability to meet its carbon reduction targets ..*” does not meet what is necessary to demonstrate that the project is in anyway lawful under section 104.

#### **6.4 Greenwashing the Construction emissions**

- 39 The applicant makes the claim that because the project is investigating innovative approaches to construction that it is can be justified on that basis. For example on page 104 of REP2-052 : “*This approach would have a long-term positive effect on the construction industry’s future alignment with a budgeted science-based 1.5°C trajectory set out through the UK carbon budgets*”. However, the project is not being assessed in the environmental statement on how it contributes to the construction industry as a whole. It has to be assessed in terms of the environmental impacts of the project itself. In terms of the GHGs and construction, it has to be assessed the impacts of the GHGs. No amount of greenwashing alters the basic fact that the scheme emits over 1.7 MtCO<sub>2</sub>e in a period of 5 critical years for national climate targets and international climate obligations as described elsewhere.

## 7 FURTHER COMMENTS ON SIGNIFICANCE ASSESSMENT AND DECISION MAKING BY THE SOS

40 I have explained above that the applicant has not seriously engaged at all with the thrust of my WR. I believe it will be of help to the ExA for me to expand further on this, and explain the two key assumptions on which the applicant depends, and how these are vital for the SoS to consider in his decision-making.

### 7.1 Assumption 1

41 The Net Zero Strategy (or CBDP) being taken back into court for a second time is of major relevance to decision making on this application. This is because the Secretary of State has always made DCO road decisions on the assumption (**assumption 1**) that Net Zero, and/or previous climate budgets and targets, is going to be delivered (on time and as laid out in the NZS/CBDP) - not just the net zero 2050 target, but also the fourth, fifth and sixth carbon budgets going forward, and also the nationally determined contribution (NDC) under the Paris Agreement, which is of course an international obligation on the UK Government. My written representation lays out why meeting the CBDP, and therefore any of these targets, cannot be assumed – it is not even properly risk assessed - and the legal challenge to the CBDP also shows that any assumption of deliverability of the CBDP and polices within it cannot be taken for granted.

42 Therefore an important consideration is how secure is the policy delivery of the policies with the CBDP. It is necessary to risk assess the policies within the CBDP to understand how secure policy delivery is. The fact that this had not be done is what the judge in the first NZS legal case found to be a material issue in finding the NZS unlawful (see my WR). Now, three NGOs have taken the CBDP back to the High Court, again, on the very same matter of risk assessment of policy delivery – because the risk assessment is still not fit for purpose, or legitimate, in the CBDP.

43 This means that when the Secretary of State considers the significance of carbon emissions from the scheme, it is no longer credible, if it ever were, for him/her to consider that we will magically deliver Net Zero (and the CBDP). The logic has previously been that because the Government has published the statutory policy document under the Climate Change Act 2008, now the CBDP, and the UK has the Climate Change Act, that magically all the UK climate budget and targets will be delivered. **I emphasise that this is magical thinking** and I have carefully chosen to use the word here as it accurately describes the situation.

44 In this context, it is important to understand what the *carbon* budgets and other targets are. They are potential outcomes. They are not predetermined. They are outcomes which may only be achieved by a complex set of well secured policies to deliver them. My comments in my WR on the scale and logistical impact of Net-Zero [REP1-323 / section 2] should be taken for context here. Delivery of the carbon budgets is not some simple project: it is a hugely complex programme involving the delivery of many sub-programmes and projects.

- 45 It is quite clear from the first NZS legal case, and the subsequent case, **that those complex set of policies do not fully exist yet, are not secure, and are not sufficiently risk assessed.** Further, the evidence from the Climate Change Committee, Green Alliance, and Professor Marsden presented in my WR all provide further evidence that the necessary, delivery-secured, body of policy does not yet exist.
- 46 The applicant may try to dismiss these latter documents as “not Government policy”: however, that misses the point that these documents provide all important information, extremely well evidenced, on the security of the policy delivery. They cannot just be ignored. They are crucial in being able to get a handle on whether assumption 1 is credible. In fact, they show that assumption 1 is simply not credible, and it is not credible for the SoS to make that assumption as part of his/her decision making on the scheme.

## 7.2 Applicant’s approach to significance and Assumption 2

- 47 Contrast the above with the way that the Applicant proposes that the SoS approaches significance assessment. The crux of this is given at these quotes from Chapter 15 [APP-153] in a section entitled “Determining significance of effects”:

“15.3.65 Paragraph 5.17 of the NPSNN (DfT, 2014) requires applicants to provide evidence of the carbon impact of their projects and assessment against the Government’s carbon budgets. Paragraph 5.18 of the NPSNN states: *‘Therefore, any increase in carbon emissions is not a reason to refuse development consent, unless the increase in carbon emissions resulting from the proposed scheme are so significant that it would have a material impact on the ability of Government to meet its carbon reduction targets’.*

15.3.66 DMRB LA 114, paragraph 3.20 (Highways England, 2021) has a similar requirement: *‘The assessment on climate shall only report significant effects where increases in GHG emissions will have a material impact on the ability of the Government to meet its carbon reduction targets’.*

15.3.68 A quantification of what is considered a material impact on the ability of the Government to meet its carbon reduction targets is lacking in the NPSNN (DfT, 2014) and DMRB LA 114 (Highways England, 2021). However, paragraph 5.17 of the NPSNN states in that regard: *‘It is very unlikely that the impact of a road project will, in isolation, affect the ability of Government to meet its carbon reduction plan targets’.* “

- 48 **Assumption 2** is that it is “very unlikely” that any road scheme in isolation will affect the ability of the Government to meet its carbon reduction targets (ie NNNPS 5.17). Looking at the NNNPS 5.17 assumption, it was written in 2014. This was five years before the Net Zero target was legislated, seven years before the NZS, and nine years before the CBDP. Paragraph 5.17 and the assumption that a road scheme in isolation will not affect the ability of the Government to meet its carbon reduction plan targets is simply no longer credible. The statutory plan required by the Climate Change Act is now the CBDP, and the NNNPS

5.17 is a completely outdated way of looking at things when considered against it. The NNNPS has not been updated against the CBDP, and the emerging draft NNNPS has not been tested against it.

- 49 I have provided evidence in my WR that the delivery-secured policies to deliver the CBDP do not yet exist. The analysis of the CCC, Green Alliance, and Professor Marsden, all show large shortfalls in the necessary carbon reductions, and levels of policy security, and back this up. The second NZS legal challenge, based upon lack of risk assessment of the security of policy delivery of policies in the CBDP backs this up.
- 50 The two assumptions: that no one project will have a material impact on meeting the carbon budgets, and that the carbon budgets are fully secured and will be met anyway, are used in conjunction with each other. They are both false as explained.
- 51 The applicant is attempting to rely entirely upon the assumption at NNNPS 5.17 to reach a conclusion that the carbon emissions from the scheme are not significant. This is just not credible for this scheme with its very large carbon footprint, both from construction and operation.
- 52 Therefore, the SoS cannot depend upon the statement at NNNPS 5.17, written in a very different era, without knowledge of the current policy and legal framework, and the known shortcomings with respect to security of policy delivery for policy such as the CBDP to conclude that the carbon emissions from the scheme are not significant. Further, the SoS cannot either rely on the further assumption that the carbon budgets will be magically delivered (for the reasons given above).
- 53 The applicant has said elsewhere that:

*“A net increase in emissions from a particular policy or project is managed within the Government's overall strategy for meeting carbon budgets and the net zero target as part of ‘an economy-wide transition’.”*

- 54 With respect to this, it is essentially repeating what I refer to as Assumption 1 above without taking any account of the many shortcomings of that assumption which I have laid out. It is clearly an aspiration, and, in fact, there is no evidence that such a state of affairs (ie deliberative, secure and reliable economy-wide management of carbon budgets) actually exists. Quite the contrary. The overall strategy for meeting the carbon budgets, namely the CBDP, has been shown by the Government's own advisors (the CCC) not to be delivering on many policy areas such that there are large shortfalls for policy to deliver the residual emission targets (which I laid out in my WR), especially for the surface transport sector.
- 55 There can be no credible assumption that the carbon budgets are actually being “managed” effectively when the CCC have shown the government's progress is hopelessly inadequate. This is backed up by the analysis from Green Alliance and Professor Marsden. Further, application to the Courts has been made for a further legal challenge to the CBDP for the

very reason that there is inadequate (considered legally inadequate by the claimants) risk assessment of policy delivery.

### 7.3 *Sequentiality*

- 56 There is a sequentiality relevant to significance assessment, and the SoS's consideration of it. This is that it is necessary first to establish that the UK carbon budgets and targets are secured before second being able to claim, as the applicant does, that a scheme, or this particular scheme, does not have significant impacts on climate and will not have a material impact on the Government being able to deliver the carbon budgets. It is not credible to do the second before the first, and further to attempt to do so opens up further legal issues under the Planning Act 2008, section 104 (as discussed below). The first step in this sequence cannot be considered to have been achieved until a point where the CCC is able to provide a progress report indicating a high degree of policy security, and the High Court has determined that the risk assessment of the policies in the CBDP have also been achieved to a high degree of confidence and rigour. Both these are clearly far from being achieved at the moment based on all the evidence which I have provided.
- 57 In terms of section 104 of the Planning Act, and this sequentiality, the point is that at present the Government have not established that the NDC, UK carbon budgets and targets are secured. In fact, the Government's own CBDP makes it clear that policies do not exist yet to deliver the 2030 NDC or the 6<sup>th</sup> carbon budget – both have shortfalls identified in the CBDP. And these shortfalls, are before the issues of whether the known policies are actually secured or have actually been risk assessed properly. Therefore, the Secretary of State is in no position to work on the assumption (as he/she has done on previous DCO consents) that the NZS/CBDP and the carbon budgets and targets will be delivered. Further, the first sequential step will not have been achieved at the point of decision by the Secretary of State for the LTC in around nine months' time.
- 58 So the current position is that any additional emissions from the scheme may make the delivery of the 2030 NDC or the 6<sup>th</sup> carbon budget, even less achievable than they already are, as evidenced by the findings of the Government itself in the CBDP. It is at this point that section 104 potentially engages, and consequentially the SoS must consider whether approval of the scheme would lead to the UK being in breach of its international obligations (s104(4)); be in breach of any statutory duty (s104(5)); or be unlawful (s104(6)). I laid out in my WR, section 11 reasons why each of these sub-sections of section 104 may likely be breached by the scheme, especially given that the CBDP policies are currently not secured and not risk assessed properly.
- 59 It should be noted that this state of play is not likely to change over the period of the next nine months before the SoS may be in the decision-making process. Given the very poor assessment in the CCC Progress Report, and lack of progress in recent years, it is going to be years before the first sequential step of being able to establish that the UK carbon budgets and targets are secured can be achieved.



Dr Andrew Boswell,  
Climate Emergency Policy and Planning, August 24<sup>th</sup> 2023

- 8 **APPENDIX A: “Earth’s hottest month: these charts show what happened in July and what comes next”, Nature commentary, 18<sup>th</sup> August 2023**

<supplied in a separate file>

- 9 **APPENDIX B: British Antarctica Survey, August 3<sup>rd</sup> 2023, “The mystery of the missing Antarctic Sea ice”**

<supplied in a separate file>

- 10 **APPENDIX C: TSC REPORT: Strategic Road Investment” (Published 27 July 2023)**

**HC 904**, Published on 27 July 2023 by authority of the House of Commons

<supplied in a separate file>

- 11 **APPENDIX D: Factor of Two paper (2023)**

Kevin Anderson, John F. Broderick & Isak Stoddard (2020)

“A factor of two: how the mitigation plans of ‘climate progressive’ nations fall far short of Paris-compliant pathways”, Climate Policy

<supplied in a separate file>

- 12 **APPENDIX E: “World will miss 1.5C warming limit - top UK expert”, BBC, July 2023**

<supplied in a separate file>