

# TR010034 – A57 Link Roads

## DEADLINE 7 SUBMISSION, PART 1

### Comments on a Deadline 5 submission

**9.59 Applicant's response to Issue Specific Hearing 2 Item 6 c) and d)**

**Cumulative Carbon Assessment - REP5-026**

Daniel Wimberley, Date Monday, 16 March 2022 *zzz*

*Unique Reference: 20029775*

## LEGAL AND OTHER ISSUES AROUND THE ASSESSMENT OF THE CARBON IMPACTS OF THE SCHEME, AND OF ALTERNATIVE TRANSPORT SOLUTIONS

### Explanatory Notes

#### *Documents referred to*

1. Cumulative Carbon Assessment (Library ref: REP5-026)  
[https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010034/TR010034-001106-TR010034\\_9.59\\_Response\\_to\\_ISH2\\_Item\\_6c\\_6d\\_D5\\_230222.pdf](https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010034/TR010034-001106-TR010034_9.59_Response_to_ISH2_Item_6c_6d_D5_230222.pdf)
2. ExA 2<sup>nd</sup> set of Written Questions Q 8.3
3. Approved Judgement in R (Transport Action Network Limited) v The Secretary of State for Transport, HIGH COURT OF JUSTICE QUEEN'S BENCH DIVISION PLANNING COURT, Case No: CO/2003/2020.
4. **IPCC Report: Climate Change 2021: The Physical Science Basis – being the first part of the 6<sup>th</sup> Assessment report (AR6) – 9<sup>th</sup> August, 2021**
5. **IPCC Report: Climate Change 2022: Impacts, Adaptation and Vulnerability – being the second part of the 6<sup>th</sup> Assessment report (AR6) - 27 February 2022**  
  
ES Chapter 14 [REP1-019], Chapter on climate change impacts
6. 9.51 Written summary of Applicant's case at ISH2: (Library ref: REP4-008)

[https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010034/TR010034-001054-TR010034\\_9.51\\_Written\\_Summary\\_of\\_Applicants\\_case\\_at\\_ISH2\\_D4\\_160222.pdf](https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/TR010034/TR010034-001054-TR010034_9.51_Written_Summary_of_Applicants_case_at_ISH2_D4_160222.pdf)

7.

### *Abbreviations*

AR6	Assessment Report 6 of the IPCC, 2021 - xxxx. The first 2 reports of AR6 are listed at Notes 4 and 5 above
BEIS	Department for Business, Energy and Industrial Strategy
CB	Carbon Budget (thus, CB6 = Sixth Carbon Budget)
CCC	Climate Change Committee
DfT	Department for Transport
DTP	Decarbonising Transport Plan
EiP	Examination in Public
ES	Environmental Statement
GHG	Greenhouse Gas
HE	Highways England
IPCC	Intergovernmental Panel on Climate Change
IPCC SR1.5	The IPCC Special Report on 1.5 Degrees C (IPCC, 2018)
NZS	Net Zero Strategy
SPM	Summary for Policymakers (IPCC Reports always have one)

Climate change is a race to zero. But the race is not between countries, the race is against time, and unless everybody finishes the race, nobody wins

DR FATIH BIROL, EXECUTIVE DIRECTOR,  
INTERNATIONAL ENERGY AGENCY

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## Chapter 1 - Introduction

1. This first part of my Deadline 7 submission is about Highways England's Cumulative Carbon Assessment and the limitations which they say should be placed on their approach to carbon.
2. Highways England's refusal to engage seriously with the issue of carbon is connected with their refusal to engage with the matter of alternatives. The principal benefit of an alternative package for transport in the area (but not the only benefit, I hasten to add) is the very large reduction in carbon emissions which would be expected. But if the carbon emissions of the scheme being put forward are of no consequence then why bother with alternatives?
3. On the face of it, HE's claim that 'this little bit of road' will make 'no noticeable difference' to greenhouse gas emissions (and therefore have no impact on our climate) is bizarre. It feels wrong – it does not pass the sniff test.
4. The future of the planet depends on our making the right choices now. So I think all parties at this EiP can agree – *I hope* we can all agree – that the question of whether or not the scheme makes an appreciable difference to GHG emissions is a vital question. The thing is that *one can only answer that question by taking a different approach to assessing carbon* than the one which Highways England chooses to use.

5. HE justify their approach by reference to what the law says. Before looking at the ins and outs of these legal matters, I think it is wise if we pause to consider the context and in particular consider all the weight of the *non*-legal.
6. We cannot escape moral questions as we weigh up the carbon impact of this scheme and in particular as we weigh up the argument of HE that ‘we don't have to do such and such (do a proper full and cumulative assessment of all carbon impacts) since legally we don't have to.’
7. This is a very narrow interpretation of how to take a decision about what matters at this EiP and what does not. However, in Chapters 3 and 4 of this submission I look at the legal issues and conclude that HE’s approach to carbon cannot be justified by reference to the law.
8. But the way we read the law and the way we approach the issue of climate change, and the way we make such a judgement depends in part on our moral framework. And so in Chapter 2 I look at various considerations which shed light on what that framework might be.
9. I cite the latest information about the reality of the Emergency. I consider recent happenings and the lessons which they bring, I consider the questions of urgency and intergenerational fairness and the implications of the fact that laws and policies do not always match the moral imperatives of the day.
10. All these matters have a bearing on the role of this EiP in being part of the process of shaping the nation’s response to the Climate crisis.

## Chapter 2 - The Context

### *Section 1 Overview of the Climate Emergency*

11. Our planet, other species, the balance of nature at this moment in our planet's history, human civilization as we know it, all face massive painful disruption due to the effects of global heating. At present the situation in Ukraine dominates all news outlets: social media broadcast media print media. And yet the disruption which will be wrought by climate change will be 10 times worse.
12. That is a rhetorical phrase, not an exact quantification. But a glance at the 2 most recent IPCC Reports – which I cite later on in this chapter – shows that the suffering will be enormous. It already *is* enormous, it's just not as newsworthy as Ukraine. For instance, the “rain bomb” floods in Australia in late February of this year killed 8 people and left tens of thousands homeless and was in the news for one day, if that. <sup>1</sup>
13. It may appear to us in Britain, lulled by the apparent benefits of earlier springs and late autumn sunshine, that the catastrophic effects of climate change; wildfires on an unimaginable scale, hurricanes more frequent and more violent, unprecedented floods and heat waves, with all their dreadful human consequences, happen for away. But we are not immune to the effects of climate disruption and ecosystem collapse.
14. The village of Litton which burst into flames during the extraordinary heatwave in Canada last year was at the same latitude as Penzance. The floods in Germany and the Netherlands which killed nearly 200 people were a couple of hundred miles away from London.
15. And in this country we have experienced triple gales and ‘once in a century’ floods. Agriculture is certain to be disrupted by the wholesale changes in seasonal weather patterns, and taken together with global disruption of food production this will have an immediate impact on the supermarket shelf. There will be migration on a scale that we have not yet seen and can hardly imagine, with possibly extraordinary consequences at the borders of our country, a country which may well look to desperate others like a ‘liveable’ haven.
16. Taking action to tackle the Climate Emergency is thus not only an altruistic act to prevent damage and loss to others, but also an act of self-preservation.

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<sup>1</sup> **Eight dead and hundreds rescued from rooftops as rainfall in Eastern Australia exceeds annual averages in just a few days.** In the city of Brisbane, more than 1.5 metres of rain – close to the average annual rainfall – has come down in the last three days. NSW premier, Dominic Perrottet, said that the rainfall was “unprecedented.”

## **Section 2    *The reality of the Climate Emergency***

### **COP26**

17. It is hard, if not impossible, to deny the existence of the climate emergency. At COP26 world leaders and activists alike lined up to declare that we were indeed facing catastrophic consequences if we failed to act at scale and with urgency. Our own Prime Minister memorably compared our situation to that of James Bond defusing a bomb, and said that we stood at 1-minute to midnight. And of course this sense of impending catastrophe is rooted in the science, as are the realities which I describe in the next two sections.

### **Public attitudes**

18. The BEIS conducts a public attitudes survey each quarter, covering the twin aspects of awareness of Net Zero and level of concern about climate change. The latest survey was conducted in Autumn 2021. Regarding awareness of Net Zero, almost nine in ten people (87%) said they had some awareness of the concept of Net Zero (Figure 1.1). Just under half (46%) said they knew at least a fair amount about Net Zero, including 13% who said they knew a lot. Regarding level of concern, 85% of people said they were concerned about climate change, including 44% of people saying they were very concerned.<sup>2</sup>

### **Local authorities and government declarations of Climate Emergency**

19. Of the 404 local authorities in this country, 74% have declared a climate emergency and 325 have published a plan to tackle the emergency.<sup>3</sup> 182 have a target date of 2030 or before.
20. Locally Derbyshire Dales and High Peak Borough Council have declared a Climate Emergency with a target date to be carbon neutral by 2030 and have a published plan. Derbyshire County Council has a climate emergency target date to be carbon neutral by 2032 and has a plan.
21. Greater Manchester Combined Authority (2038), Manchester City Council (2038) and Tameside Borough Council (2038) have all declared a Climate Emergency with target dates

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<sup>2</sup> BEIS Public Attitudes Tracker: Net Zero and Climate Change Autumn 2021, UK , on government website. 5558 people were surveyed using random probability sampling.

<sup>3</sup> 300/404 (74%) of District, County, Unitary & Metropolitan Councils have declared a Climate Emergency to date. Also 8 Combined Authorities/City Regions. Source: List of Councils who have declared a Climate Emergency, Feb 24, 2021. 325 have a published plan to tackle climate change, these are “of very varying quality and ambition” Nevertheless these plans exist. 86 councils have an area-wide net-zero target of 2030 or earlier. All facts from climateemergency website.

as shown. GMCA has a written plan, I am not sure about the others and do not have the time to check right now. In addition Greater Manchester has a 50/50 vision for local travel.

22. Sheffield City Council has declared a Climate Emergency to the best of my knowledge and is preparing a plan with a target date of 2050. They are working to a carbon budget prepared for them by the Tyndall Centre (*see footnote 26 for details*), involving a 90% reduction in CO2 emissions over 2015 by 2035.

### **The science: the IPCC Report: “Climate Change 2022: Impacts, Adaptation and Vulnerability”**

23. It could be theoretically the case that all this is a matter of Hysteria and fake news, and so it is wise to also check with the most authoritative source of scientific consensus on this matter, the IPCC. Their latest report was published in February 2022, title as above, the full report, Technical Summary and Summary for Policymakers are all on their website.
24. I reproduce in Appendix 1 a few key summary paragraphs from the Summary for Policymakers (SPM) concerning *future risks* and a Table which shows impacts *already observed* across the world. Here I pick out the key points.

- 1 There are many *different yet interrelated climate hazards* affecting both ecosystems and humans which result from global warming caused by human activity.
- 2 These hazards *impact unevenly across the world* for reasons to do with how events caused by heating occur and how vulnerable different countries and regions are.
- 3 Reaching *an increase of 1.5°C above the IPCC base line* of emissions between 1850 and 1900 *will cause unavoidable increases in these hazards*.
- 4 However *"near-term actions that limit global warming to close to 1.5°C would substantially reduce projected losses and damages related to climate change in human systems and ecosystems."*
- 5 Levels of risk for “Reasons for Concern” (RFC’s) <sup>4</sup> are assessed to have risen substantially since 2014. They have not actually increased; *they have risen because we know more about the science and the reality of what we are facing*.
- 6 *These RFC risks increase at lower levels of warming than previously thought*, in other words the sensitivity of the earth to global heating is now known to be greater than we thought before.

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<sup>4</sup> Reasons for Concern (RFCs) are defined in the Glossary of IPCC SR1.5 as:

**Reasons for Concern (RFCs):** Elements of a classification framework, first developed in the IPCC Third Assessment Report, which aims to facilitate judgments about what level of *climate change* may be dangerous (in the language of Article 2 of the *UNFCCC*) by aggregating *risks* from various sectors, considering *hazards, exposures, vulnerabilities, capacities to adapt*, and the resulting *impacts*.

7 From 2041 onwards, 127 key risks are “up to multiple times higher than currently observed.”

8 *The level of risk at all time-scales is entirely dependent on global emissions.*

25. In summary, our predicament, which is already bad, is getting worse. Increasing our greenhouse gas emissions in the near future has a major impact on near-term, mid-term and long-term climate risks. In the IPCC’s chilling words: **“Losses and damages escalate with every increment of global warming.”**
26. **I am absolutely at a loss to understand how any government agency can bring forward a proposal which will increase carbon emissions at this time of crisis with not a word about climate-friendly alternatives which are both practical and available and with a complete refusal to engage on this in a serious way.**
27. Highways England are sheltering behind the law and “the guidance,” and we will come to that in Chapter 3 of this submission, but there is over and beyond that an inescapable moral problem with what they are doing.

### ***Section 3 The nature of the moral imperative***

28. The science is clear and ostensibly the public, the politicians and local authorities have all taken it on board and are “talking the talk.” But there is a disconnect between what I have written so far and what is happening at this EiP where we have an applicant intent on side-lining the issue, and no guarantee that this issue will weigh as a paramount factor in the balance, having the effect of dramatically “raising the bar” which the scheme must jump over pass in order to gain a recommendation from you.
29. I think it is essential to spell out what I am calling the “moral imperative” as a backdrop to what we are discussing at this EiP. And so I look for examples and aspects to illustrate what I mean.

#### **1 Ukraine, Covid and the lessons for our response to climate change**

30. We in this country and in other countries too are going through two epochal events at the same time. The first is the global pandemic and the second is the war in Ukraine.

##### **The pandemic**

31. The pandemic showed us that we truly live in one connected world as it spread at amazing speed, and it demanded solidarity in that the developed countries had the vaccines and yet the vaccination programme had to be rolled out on a global scale if we were all to be protected from the emergence of new variants.
32. It turned out that the rich nations were a little generous but not generous enough when it came to sharing the vaccines and the vaccine technology. More solidarity would have made



for a better outcome. But the general truth that the safety of all can only be assured by showing solidarity gained ground as it was self-evident.

### **Ukraine**

33. In the Ukraine a nation was invaded by a larger neighbour. This was widely recognised as a threat to all and called forth a massive response at the humanitarian level as countries and their populations heart-warmingly welcomed millions of refugees, at the practical level of supplying defensive weaponry to the citizens of Ukraine and at the diplomatic level too.
34. We reacted to the suffering of the Ukrainians with sympathy, and we offered help. We also understood that what is happening to Ukraine may very well one day happen to us, whether “us” is people in Estonia, Finland or Poland.

### **Our response to climate change**

35. The qualities of empathy and solidarity and the understanding of the interconnectedness of our world have been brought out and put into sharp relief by these twin events of the war in Ukraine and the Covid pandemic. These same qualities and understanding are the drivers of an adequate response to the climate emergency.
36. And in all these situations, Ukraine, Covid and Climate Emergency, in helping others you are helping yourself also. You feel better, your psychological health improves, but also you benefit from reduced risk yourself by reducing the risk “out there.” You are no longer a “victim” or a “bystander” but an “agent.”
37. Equally, swiftness of response has been a feature of both events. Vaccines were developed at astonishing speed, and war, once it starts, is relentless in the focus it demands. This same swiftness is also a feature of any adequate response to climate change. This seems to be more challenging than the other features I have mentioned here for us to practise, as we are seeing exemplified by the bringing forward of this scheme with no alternative in sight. Swiftness? Focus? I’m sorry I did not quite catch that.

## **2 So what should we do?**

### **We cut our own emissions**

38. The IPCC is now confident that global heating is as near as makes no difference directly proportional to emissions. Hence the mantra repeated virtually word-for-word in all three paragraphs cited in Appendix 1: *“Near-term actions that limit global warming [to close to 1.5°C] would substantially reduce projected losses and damages related to climate change in human systems and ecosystems”*
39. So when thinking about climate change, or when taking decisions which have a bearing on climate change, **the moral impulse to lessen the suffering of others so far as we are able implies reducing our greenhouse gas emissions**, since we are now certain that doing this reduces human suffering, death and disruption, including large –scale migration, and damage to ecosystems across the globe.

40. It is worth noting that there is a kind of temptation for our minds to play tricks on us, to imbue the figures of 1.5°C and 2°C, which we have adopted as target figures, with a kind of magic, as if reaching them somehow makes us safe. Feeling safe is naturally a comforting and desirable feeling, but the idea that we arrive at “safety” if we hit either target is a complete illusion.
41. The two figures of 1.5°C and 2°C were always arbitrary. They serve to provide a focal point for governments, societies, and even scientists to organise activities around and to galvanise action. But they are not safety barriers - they are steps on a ladder.
42. **Given the uncertainties involved and the fact that climate change operates as a continuum where the impacts increase with increasing emissions, the lower we aim for, the safer we are.**

### **3 How soon should we act?**

43. The question of urgency with regard to climate change is absolutely fundamental to this Examination in Public. Do we decide to stop building new road capacity now, (with perhaps a very few exceptions <sup>5</sup>) or do we leave this decision till later? The Department for Transport is notable in its failure to reduce carbon emissions since 1990. <sup>6</sup> What is the appropriate time to stop digging the hole we are in, that is the question.
44. There are three facts which have a bearing on the question of urgency. The first is that every tonne of emissions increases harms. The second is that an early tonne of emissions avoided is worth more than a later tonne. And the third is that the odds of success are so bad that we have to act now. I will look at each of these considerations in turn.

#### **Urgency 1 - every tonne of emissions increases harms.**

45. There is a simple formula: More emissions lead to more heating of the planet, and more heating of the planet leads to all the ill-effects which we know about.
46. Starting with the last bit first, more heating of the planet will cause more “losses and damages” as the IPCC puts it. The evidence for this is incontrovertible. These losses and damages have been happening for decades and are now accelerating. All this has been documented by the IPCC and is part of the lived experience of millions around the globe.

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<sup>5</sup> Schemes that were absolutely indispensable – if there are any such – could be let through this new, far finer, sieve. The Welsh Government has paused most new road building schemes and set up a body to review all schemes, in the light of climate concerns.

<sup>6</sup> Domestic transport emissions have decreased by 5% since 1990, while total UK domestic emissions fell 44% in the same period. Source, DfT website

47. And the IPCC is now convinced also of the truth of the first part of the simple formula above: more emissions lead to more heating of the planet, and the relationship is linear. <sup>7</sup>
48. Figure SPM.10 from the first IPCC report in the AR6 cycle, published in August 2021, is reproduced in Appendix 2. <sup>8</sup> The figure is headed “**Every tonne of CO2 emissions adds to global warming**” and is a visual representation of this scientific fact, together with the necessary footnotes. The IPCC has never before said this so clearly in one of its major reports and the reason is that the science has advanced to the point where they are confident that they can and should spell out this message loud and clear.
49. Piers Forster, an IPCC coordinating lead author and member of the UK’s Climate Change Committee, writing on the CCC website about this August 2021 IPCC Report, says:
50. “The IPCC report is unequivocal that past emissions of greenhouse gases have led to the unprecedented rates of climate change (including heatwaves and intense rainfall) that we are seeing around the world today. It further details how we are already locked into centuries of sea-level rise and that **each tonne of greenhouse gases we emit will further increase climate-related hazards around the world.**” <sup>9</sup> (*my emphasis*)
51. Fortunately this truth can also be expressed the other way about. Hence this positive statement made repeatedly in one form or another in the IPCC report: “***near-term actions that limit global warming would substantially reduce projected losses and damages***” Moral imperatives do not come clearer than that.

### **Urgency 2 - an early tonne of emissions avoided is worth more than a later tonne**

52. The reason is clear. CO<sub>2</sub> and N<sub>2</sub>O once in the atmosphere remains there for a very long time and so their radiative forcing effect also lasts a very long time. It follows that all the tonnes of long-lasting GHG which we emit have a *cumulative* effect. Therefore the earlier that a tonne is emitted the greater its impact over time will be.
53. There is another aspect to this. Tipping points, such as greatly increased ice melt from the Arctic and Antarctic, the Amazon rainforest transitioning from net carbon sink to net carbon emitter and the melting of the Arctic permafrost leading to methane release may be triggered in a major way at any point by rising temperatures.

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<sup>7</sup> And they are now able to put a figure on the amount of warming which each Gigatonne of CO<sub>2</sub> induces. “This Report reaffirms with high confidence the AR5 finding that there is a near-linear relationship between cumulative anthropogenic CO<sub>2</sub> emissions and the global warming they cause. Each 1000 GtCO<sub>2</sub> of cumulative CO<sub>2</sub> emissions is assessed to likely cause a 0.27°C to 0.63°C increase in global surface temperature with a best estimate of 0.45°C ° ( IPCC AR6 Working Group 1 Report, “Climate Change 2021: The Physical Science Basis” published 9<sup>th</sup> August 2021, SPM, para. D.1.1 )

<sup>8</sup> Copied from the same IPCC Report.

54. We do not know exactly when this will happen, but we do know that the risk increases with warming, and that these processes are already under way.<sup>10</sup> We know that triggering these tipping points would be truly catastrophic. To do anything which makes these tipping points more likely to happen is verging on the insane.

### **Urgency 3 - the odds of success are so bad that we have to act now**

#### **The IPCC chart**

55. I reproduce in Appendix 3 a table from the Working Group 1 IPCC report of August 2021.  
<sup>11</sup> The table shows *the amount of CO2 emissions which have already happened* since the IPCC baseline of 1850 to 1900.
56. The table also *estimates remaining carbon budgets* as calculated from the beginning of 2020 and extending until global net zero CO2 emissions are reached. The table gives budgets for temperature limits of 1.5°C, 1.7°C and 2°C warming above baseline.
57. We should remember that these are in no sense “safe limits” as discussed above (see paras. 24 and 40). 1.5°C is already well beyond where we are now with impacts well in excess of the impacts we now experience; 1.7°C is substantially worse; and 2°C should not really be on our radar at all.
58. When considering morality, and in particular the question: ‘when should we act?’ the key part of table is the figures in the chart for the *likelihood* of limiting global warming to a range of possible temperature limits. *The table shows carbon budgets with different odds or probabilities that these budgets will actually achieve the target temperature limits stated.*

#### **What odds are acceptable when taking life and death decisions?**

59. If you were buying a house near to the edge of a cliff which has known erosion problems, and you were told that the house had a 50% probability of falling into the sea in the near future, you would not buy that house. You would not give that decision a second thought.
60. If you were sending your child across the road to get some milk from the shop, and the probability of her coming back alive and uninjured was 66% then you would not send her. It would be out of the question, at a 1 in 3 chance of safety the risk is obviously too high.
61. I think these are obvious and absolute certainties. **In our private lives we would not accept these odds for any decision with such grave consequences. And yet these are the odds which underlie our entire framework of dealing with climate change.** I suggest that imposing these odds on the whole of society in fact on the whole world is utterly immoral.

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<sup>10</sup> IPCC “**Climate Change 2022: Impacts, Adaptation and Vulnerability**” WGII Sixth Assessment Report, published 27<sup>th</sup> February 2022, paragraph 16.6.3.5 “large-scale singular events”, pages 116 – 119 of Chapter 16.

<sup>11</sup> See Explanatory Notes at the beginning of this submission for the reference.

### The odds in the IPCC Table

62. So returning to the probabilities in the Table, the IPCC say that *the remaining global carbon budget is 500 Gigatonnes of CO<sub>2</sub> to give a 50% chance of keeping below 1.5°C*. So worldwide we are working towards staying below 1.5 degrees, a temperature rise which already would cause massive harm, with just a 50% chance of “success.”
63. I assure you that this is the probability to which the Climate Change Committee is working and which guide their recommendations to government. I give some extracts from their Sixth Carbon Budget report in a footnote to justify this assertion. <sup>12</sup>
64. If you are not happy with a mere 50% chance, maybe a 66% chance would be more acceptable? For this probability of success in reaching the 1.5 degrees target, the remaining global carbon reduces to 400 Gigatonnes of CO<sub>2</sub>. This is indeed a lot less and therefore even harder to achieve, but these are odds which are still entirely unacceptable as they give us a 1-in 3 chance of failure.
65. There are uncertainties in the budgets too, uncertainties which are bigger than the budgets themselves. Figure 8.5 in the Sixth Carbon Budget report graphically shows what these are: non-CO<sub>2</sub> GHG's, the effect of choosing a baseline which is not 1850-1900, the definition of warming, and effect of aerosols in different pathways.
66. We could of course “hope” that all these uncertainties play out in our favour. This is in fact gambler's folly and not a serious or appropriate response to the existential threat we are facing.

### 4 And our response should be?

67. Carry on as we are? Put our fingers in our ears and our hands over our eyes? In matters of global life and death I think not. **I urge upon you the conclusion: if the odds we are being offered are utterly unacceptable and bearing in mind also the huge uncertainties which**

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<sup>12</sup> “Within the model a constraint is applied to keep global cumulative emissions to the remaining carbon budgets **for a 50% probability** of keeping warming to below 1.75°C from IPCC-SR1.5, we explore the range of climate outcomes consistent with this global emissions pathway in Chapter 8.” (Within the model a constraint is applied to keep global cumulative emissions to the remaining carbon budgets for a 50% probability of keeping warming to below 1.75°C from IPCC-SR1.5, we explore the range of climate outcomes consistent with this global emissions pathway in Chapter 8. (CCC, 6<sup>th</sup> Carbon Budget report, note on page 334)

“The largest uncertainties in Figure 8.5 would by themselves suggest a range of 290 – 1060 GtCO<sub>2</sub> (from 2018) **for keeping warming to 1.5°C with 50% probability**. The IPCC-SR1.5 central budget for this probability of keeping warming to 1.5C with 50% probability was 580 GtCO<sub>2</sub>. These factors also underlie the 319 – 751 GtCO<sub>2</sub> range in cumulative CO<sub>2</sub> emissions (from 2020 to date of Net Zero CO<sub>2</sub> emissions) in modelled global emissions pathways assessed to keep warming to below 1.5°C with no or low overshoot by IPCC-SR1.5.” (*Ibid*, footnote on page 369)

**lie in these figures which are stated by the IPCC note then the only rational and moral response is simply to reduce our emissions not only as soon as possible but also as drastically as possible. And then consider this: it is hard to reconcile a world where this response is called for with the scheme before this examination.**

68. There is a further cause for taking immediate action – namely, unfairness between generations.

### **unfairness between generations**

69. In March 2021 the German Federal Constitutional Court, the Bundesverfassungsgericht, the highest court in Germany, published their ruling on a case brought by a number of citizens against their government saying that the way the government intended to tackle climate change was unconstitutional.

70. The court ruled that "the legislator has violated its duty [. . . ] to ensure that the reduction of CO2 emissions to the point of climate neutrality that is constitutionally necessary under article 20A [of the German Constitution] is spread out over time in a forward-looking manner that respects fundamental rights."

71. The fundamental rights in question were freedom rights. The court found that the pace of emissions reductions in the German climate protection act was too slow at the start and that left citizens after 2030 with an unfair burden of sacrifice compared to those affected by restrictions now. <sup>13</sup>

72. In the UK we have a slightly different version of the same problem. Our targets are stricter than the German ones were before the Constitutional Court's ruling, (the Germans have now caught up!) but the policies and measures to actually achieve the targets are largely missing as we shall see in the section on government policy below.

73. So the Next Generation will be left, just as the Court found in Germany, holding the baby, and bearing the brunt of quite possibly drastic reductions in consumption and in freedoms too (think Covid pandemic) which will be needed at that later time because of the government's failure to act early enough.

74. In Germany there was a rights-based remedy in law for the intergenerational injustice. Here there is only morality and forums such as this inquiry.

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<sup>13</sup> The case was written up by 2 German lawyers working for British law firm Pinsents and Masons.

## ***Section 4 The government's response***

### **1 Introduction**

75. The government's targets, policies and measures for implementation including monitoring and evaluation, form part of the backdrop to this Examination in Public. You Sirs, refer frequently to the need to take them into account. But what if they are flawed – a false guide? And what if they are not legally sound?
76. Highways England have used in the defence of their approach to carbon assessment a court judgement which refers to the fact that there were no sectoral targets on emissions reductions laid down by the government. (For wording, see below at para. 175)
77. The implication is that the emissions from this scheme cannot be placed in a context of detailed policy, sectoral targets and specific measures because there aren't any. So we have a situation where our side of this argument cites the DTP Decarbonising Transport Plan pointing out that within that plan there is a target that “*active travel should make up at least half of all journeys in towns and cities by 2030*” (page 29) and “*to reduce urban road traffic overall*” (page 6) – with both of which aims this scheme is clearly in contradiction – while Highways England repeatedly say that this same plan says that new road capacity is needed to “ensure the functioning of the nation and to reduce the congestion,” and is policy. (for example, they say this in answer to REP2-021 Q8.1). It is in the French phrase a “*dialogue des sourds*” – a conversation between deaf people.
78. *Place filler to keep the numbering the same!!*
79. In the meantime it matters also because it will lead us on to look at the question of whether it is always the right thing to do to “follow government policy” and to act as if there is no other basis for action. And so, first I address the question of the adequacy of government targets on climate change, then the adequacy of policy and implementation, with a close look at a court case currently under way, which tests that adequacy, and finally the implications for this examination.

### **2 The adequacy of government targets**

80. We have already seen that the government, on the recommendation of the CCC, is working with carbon budgets to reach the target of net zero by 2050, which have a 50% chance of failure built-in, as stated by the IPCC. (*see section “the odds of success” above on pages 11 and 12, zzz and on the ‘50%’ figure, see especially footnote 12*)
81. The book of Greta Thunberg’s speeches entitled “No one is too small to make a difference” makes repeated reference to this question of the odds. And rightly so, for they are indeed absolutely shocking. I look at why it might be that such odds are still built into global consensus in the next section: “The nature of law and policy – a brief inquiry” *zzz*. The

movement she founded, “Fridays for the Future” has 14 million people signed up and active in 7500 cities on all continents and most countries of the world. <sup>14</sup>

82. Scientists like those at the Tyndall Centre in Manchester (see footnote 26 for details) , who have created a carbon budgeting tool for local authorities, and who work with many local authorities including Sheffield and Manchester, and whose work is quoted with approval by the Royal Town Planning Institute, see fn 30 or 31) opt for stricter targets and earlier cuts in emissions. And indeed very few of the local authorities who have adopted targets have opted for 2050 (just 26 of local authorities with targets have targets beyond 2040, 182 have 2030 or earlier <sup>15</sup> )
83. In summary I would say that the *evidence* points to the government's targets being worryingly on the conservative side and that this is very widely recognised.

### 3 The adequacy of government policies and implementation

#### The overall situation

84. As Lord Deben, chair of the CCC, puts it pithily in his foreword to the CCC’s 6<sup>th</sup> Carbon Budget Report, the situation in the field of climate change is as follows <sup>16</sup> :
85. *“The basis of the British approach to tackling climate change is contained in the mix of responsibilities that the Act lays out so clearly. An independent body, the Climate Change Committee, advises on targets and delivery and measures progress. The long-term emissions goal is determined by the UK’s international obligations, themselves reflecting the scientific imperatives. Interim targets, expressed in the carbon budgets, are set in line with that long-term goal, stimulating short-term action. **But the responsibility of meeting these carbon budgets – of actually delivering on the advice and the commitments – rests with Government.**” (my emphasis)*

#### Carbonbrief’s reporting, including the CCC view, mid-2021

86. Carbon Brief describes itself as “a UK-based website covering the latest developments in climate science, climate policy and energy policy. We specialise in clear, data-driven articles and graphics to help improve the understanding of climate change, both in terms of the science and the policy response. We publish a wide range of content, including science explainers, interviews, analysis and factchecks, as well as daily and weekly email summaries of newspaper and online coverage.”

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<sup>14</sup> Source: Fridays for future website

<sup>15</sup> See climateemergency website.





87. Given that I quote from their website extensively, I spell out their excellent credentials in this footnote.<sup>17</sup>

*DW NOTE: All quotations are from, and my text is based on, “CCC: UK will miss climate goals by "huge margin" without new policies,” published 24th of June 2021. Quotations from Carbonbrief are in Calibri font, where Carbonbrief quotes from the CCC or from NZS, those words are in italics.*

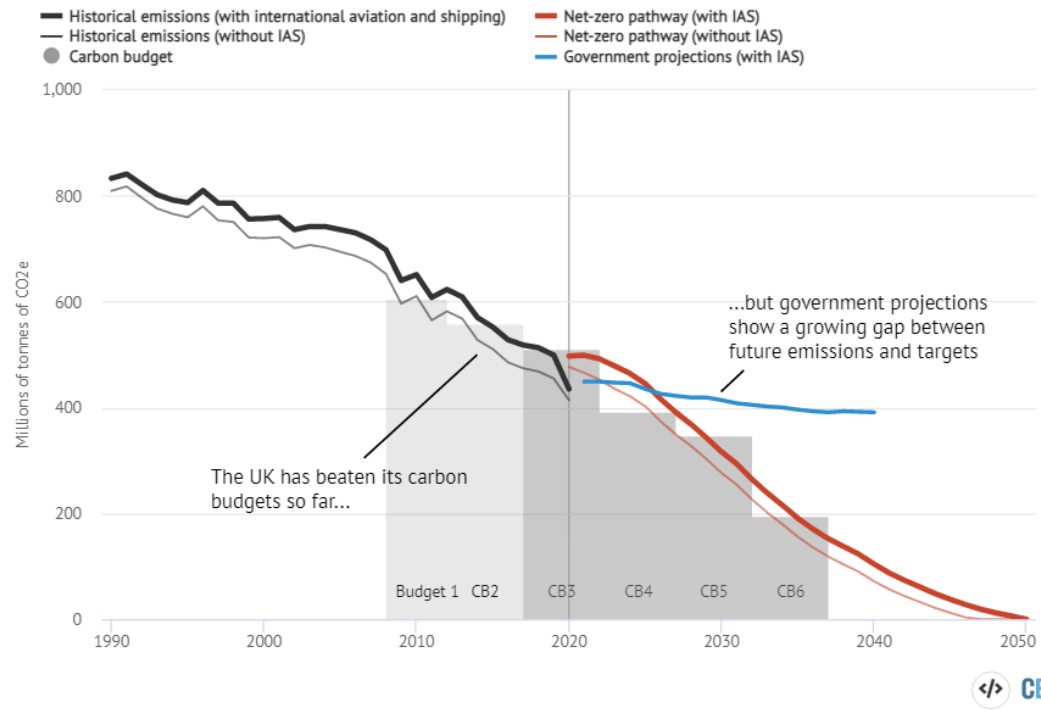
88. “The UK government has [once again](#) failed to come forward with sufficient policies to meet the ambition of its climate goals, according to the [Climate Change Committee](#) (CCC).
89. “Across nearly 500 pages examining the government’s [net-zero](#) and [adaptation](#) targets, the climate advisers spell out the gap between aspirations and reality in a pair of new reports.
90. “Only four of 21 key decarbonisation areas outlined in the report have seen sufficient ambition and only two have adequate policies in place for cutting emissions, according to the CCC. None of the 34 adaptation priority areas it identifies have seen strong progress.
91. “The committee says it is “disappointing” that many “vital and long-promised plans”, concerning everything from clean transport to hydrogen, have yet to emerge.
92. “The first report focuses on efforts to reduce emissions in line with the UK’s legally binding five-yearly carbon budgets, which set out the path to its [target](#) of net-zero emissions by 2050. .... It comes a year after another CCC [progress report](#) that similarly warned of insufficient action from the government on tackling climate change.
93. **“It [the CCC] notes that the majority of emissions cuts so far have come from a rapidly decarbonising power sector, which saw emissions fall 65% from 2009 to 2019. If progress does not extend outside the power sector, the sixth carbon budget will be missed by a huge margin,” it states (my emphasis).**
94. The policies in place so far will only cut – at most – a fifth of the emissions required to hit the sixth carbon budget in 2035, the CCC says.”

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<sup>17</sup> Carbonbrief has a large team of well-informed specialist writers, backed up by a handful of UK-based scientists each specialising in various areas of climate science and acting as contributing editors. This panel is not paid by Carbon brief and do not endorse their content. Carbon brief has won numerous awards for specialist journalism since 2017 including being highly commended by the Royal Statistical Society and winning awards from the Association of British Science Writers and the Press Gazette’s British journalism awards. Carbon brief is funded by the European Climate Foundation, for example they had funding of £573,000 for the financial year of 2020. *All information from the Carbon brief website.*

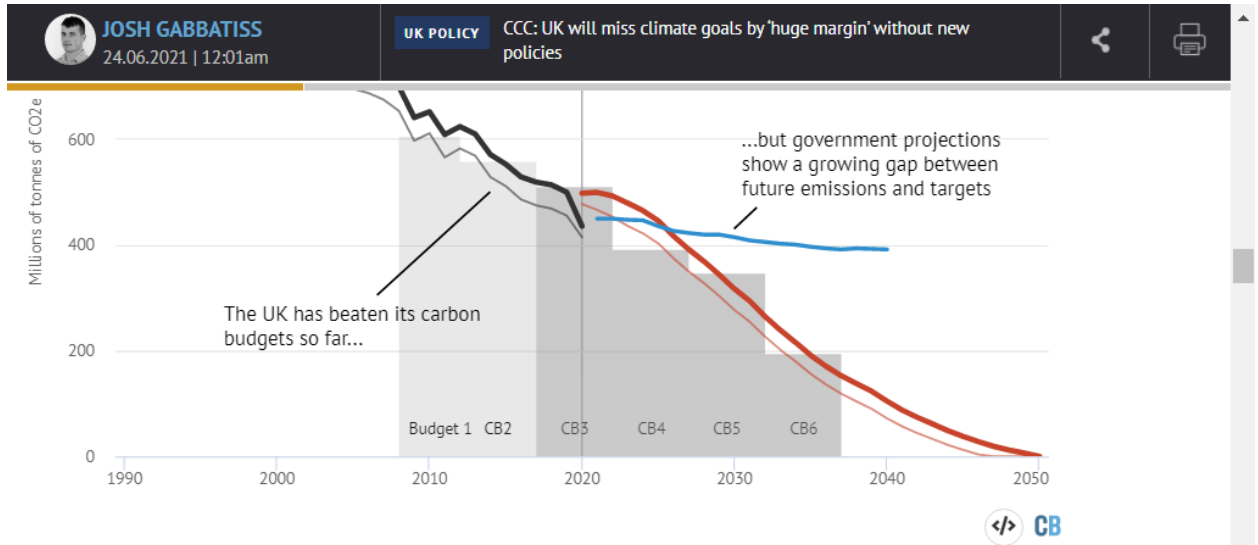
### The gap between UK emissions and a net-zero pathway is expected to grow

Government projections suggest the UK will not meet its fourth, fifth or sixth carbon budgets



95.

96. And for the notes to the chart:



UK greenhouse gas emissions (black/grey), government projections (blue) and net-zero pathways (red/pink) and without (pink), millions of tonnes of CO<sub>2</sub>e. Legislated carbon budgets are shown as grey columns. The grey historical emissions line is based on figures as they appear in the official government greenhouse gas inventory, including updated values for peatland emissions. The black historical emissions line also includes international aviation and shipping (IAS) emissions, calculated by the CCC, as the sixth carbon budget will include IAS. The government projections are based on official government projections added to CCC estimates for IAS and peatland emissions. Source: Department for Business, Energy and Industrial Strategy (BEIS) [emissions data](#) and [projections](#), CCC figures and Carbon Brief analysis. Chart by Carbon Brief using [Highcharts](#).

Moreover, the CCC has repeatedly warned of a policy gap between the government’s plans and

97. [carbonbrief.org/cc-uk-will-miss-climate-goals-...](https://carbonbrief.org/cc-uk-will-miss-climate-goals-...) cent progress reports.

98. Carbonbrief quotes [Chris Stark](#), CCC chief executive, as saying:

*“There’s a general feeling that the government is quite keen to present itself as more ambitious, keen to sign up to ambitious long-term targets as a platform internationally, but less keen to deliver against those things with difficult policy decisions.”*

**Carbonbrief’s reporting, Net Zero Strategy (NZS) – October 2021**

*DW NOTE: All quotations are from, and my text is based on, “In-depth Q&A: The UK’s NetZero Strategy” 21<sup>st</sup> October 2021. <sup>18</sup> Quotations from Carbonbrief are in Calibri font, where Carbonbrief quotes from the NZS, those words are in italics.*

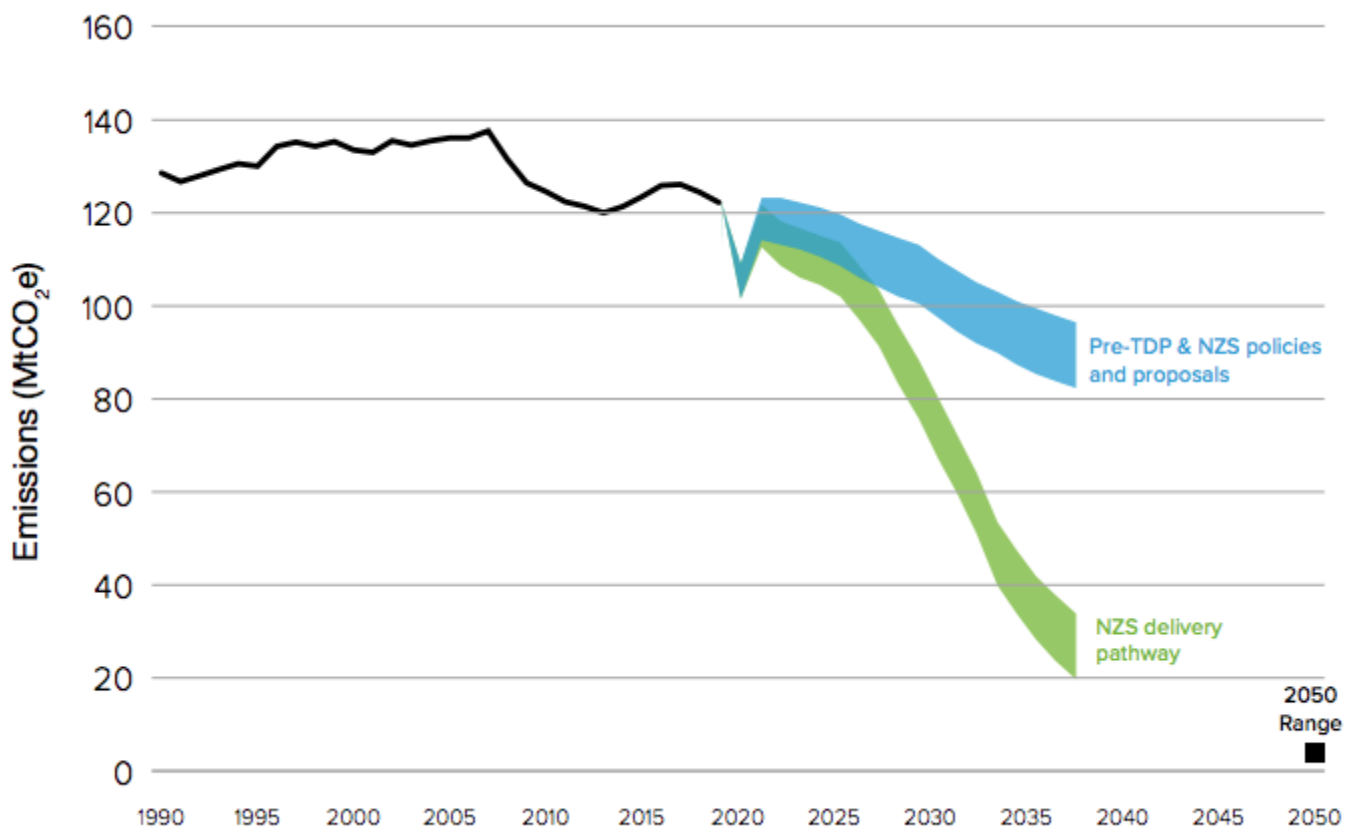
99. The Net Zero Strategy (NZS) is the government's delivery plan for climate change. As the chair of the CCC Lord Deben notes: until this point only the CCC itself had mapped out a detailed path to net-zero for the UK, but now the government has a plan of its own.

100. As Carbon brief points out the Prime Minister gives “strong rhetorical support” to the strategy talking about a “clean and prosperous future” with “jobs everywhere you look” and

“vast new global industries from offshore wind to electric vehicles and carbon capture and storage.”

101. But the question is: How good will the strategy be at delivery?

102. **In the domestic transport sector** (that is, excluding flying and shipping) **NZS** **“envisages emissions from domestic transport falling 65-76% by 2035, from 2019 levels, and anticipates some residual emissions from the sector even in 2050 that will have to be removed.”** *(my emphasis)* See chart below:



103. “ “Indicative” domestic transport emissions pathway to 2037, for a scenario with (green) and without (blue) [transport decarbonisation](#) and net-zero strategy policies. Note that the government is clear that this trajectory is only designed to “plan how we can remain on track to meet our targets”. Source: [Net-zero strategy, BEIS analysis](#) “

104. **The chart shows how dramatic the *anticipated* reductions in emissions really are. But Carbonbrief’s description of the chart is very revealing, pointing up the fact that this chart is an aid to planning, not in any sense a policy.**

105. So, how will these dramatic reductions be achieved? Carbon brief comments:

“Most of the policies and funding schemes included in the strategy are *“already underway”*, according to the document, and have been widely publicised. This includes money for buses, walking and cycling infrastructure.”

106. I would point out here that the sums involved in supporting the transition to buses walking and cycling so far have been criticised widely as totally inadequate with a grand total of well under £10bn. For buses the “transformational” funding is £3bn over the life of this parliament for all bus services in England,<sup>19</sup> and the ring-fenced cycling and walking pot currently is £2bn over 5 years! CyclingUK’s policy Director Roger Geffen estimates that an average of about *£2bn per year* (i.e. not just *£2bn over 5 years*), between now and 2040 is required to get the UK up to a Dutch standard cycle network.<sup>20</sup>
107. As far as the wider picture goes, Carbonbrief says: “to achieve the levels of emissions reductions in the sector required for the government’s “delivery pathway”, it (NZS) says additional public and private investment of around £220bn will ultimately be required.”
108. In its overall comments on the Strategy, Carbonbrief express some reservations:
109. “In terms of the UK’s targets, the strategy says it sets out *“clear policies and proposals for keeping us on track for our coming carbon budgets”*. It does not say the policies will meet those budgets.
110. “The indicative *“delivery pathway”* is designed according to *“our current understanding of each sector’s potential, and a whole system view of where abatement is most effective. These sectoral pathways ..... are explicitly not intended to set sectoral targets.”*
111. “Although it (NZS) sets out target-compliant *“indicative delivery pathways”* for each sector until 2037, it fails to quantify the impact of the new plans and policies it contains, meaning it is not possible to say if the government is now doing – or spending – enough to meet its legally binding goals.”
112. In the next section we will look at a legal case being brought on the precise basis of what Carbon brief alludes to here, namely that there are no actual policies, measures or measurements which will make the emissions cuts actually happen, and no framework of sectoral targets (or budgets as they perhaps should be called).

<sup>19</sup> From: Bus Back Better, DfT 15th March 2021, Government website: see page 4, paragraph 6

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/980227/DfT-Bus-Back-Better-national-bus-strategy-for-England.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/980227/DfT-Bus-Back-Better-national-bus-strategy-for-England.pdf)

<sup>20</sup> See Roger Geffen Cycling UK’s Policy Director, piece entitled “The Government still isn’t on course to meet its 2025 cycling targets. So what now?” Published 28<sup>th</sup> October 2021

From cyclingUK website: [REDACTED]

## The legal case against the government – NZS not legally compliant

### Introduction to this sub-section

113. A legal case is being brought against the government, or to be precise against the Secretary of State for the BEIS, on precisely the grounds which Carbonbrief are describing. I go into details about this case because it's thrown up in sharp relief and in very clear language what the problem is. The government has an overall target but the government is not stating in its strategy either specific measures, or sectoral targets or any quantification of how much emissions reduction will be created by each measure or within each sector.
114. The relevance to this examination in public is that it is precisely these gaps in the Strategy which Highways England partly **zzz** relies on to maintain its stance on not reporting fully on climate.

### Who is bringing this case?

115. Good Law Project (GLP) is bringing this case. The track record of the Good Law Project is remarkable in that not only do they select salient issues – such as the PPE procurement via the VIP Fast lane, use of non-archivable and non-secure apps for conducting government business, and government appointments – but they frequently win. I spell out two recent victories in this footnote.<sup>21</sup>

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<sup>21</sup> In a landmark verdict, the High Court has today found that the process leading to the appointments of both Dido Harding and Mike Coupe were unlawful. It held that Matt Hancock broke the law in appointing Dido Harding as Chair of the National Institute for Health Protection (NIHP) and in appointing Mike Coupe as Director of Testing at Test and Trace (NHSTT). The High Court was also clear that the Prime Minister broke the law in appointing Dido Harding as Chair of Test and Trace.

The Court declared: “The Secretary of State for Health and Social Care did not comply with the Public Sector Equality Duty in section 149 of the Equality Act 2010 in relation to the decisions on how to appoint (i) Baroness Harding as Interim Chair of the National Institute of Health Protection in August 2020 and (ii) Mike Coupe as Director of Testing for NHS Test and Trace in September 2020.”

AND

“We brought our case against the Department of Education and five of the worst offending councils (*DW Note: worst at sending looked-after children to be housed out of area*): Essex, Cambridgeshire, West Sussex, Surrey and Derby City. **Surrey has now decided to take concrete steps – set out in its Sufficiency Plan published in January – to improve its provisions for looked after children**, primarily through creating more in-house accommodation. It has plans to invest £37 million in developing new in-area residential accommodation, including the development of up to 20 to 30 new in-house residential beds, as well as the block-booking of up to 80 supported accommodation beds in-area, some of which will be available for older looked after children, and increasing its network of foster carers.

This is fantastic news. It shows strategic legal challenges can make a difference to people’s lives. In the circumstances, **we have agreed to discontinue our claim against Surrey Council**, with no order as to costs.

116. Closer to the concerns of this examination in public, GLP successfully forced the government in 2020 to rewrite its Energy National Policy Statement, which it did in 2021. *“The proposed new policy is better for our planet, for our children and for our grandchildren. Coal and oil-fired generation are out. Gas is being phased out. Fewer fossil fuel projects will now be rubber-stamped. It’s not perfect yet. And we know more can and must be done”* they wrote in an email to supporters.

117. GLP has been given permission to bring judicial review proceedings on all their grounds. The date for the substantive hearing will be June 8<sup>th</sup> and 9<sup>th</sup>. Client Earth and Friends of the Earth are also bringing similar actions and all three will be heard at the same time

### **The case about the NZS**

118. Here is a brief summary of the letter sent by GLP’s lawyers to initiate proceedings:

*DW NOTE: Quotations from the lawyers’ letter are in Calibri font, where they quote from the NZS, or from the CCC, those words are in italics.*

119. The legal letter begins by setting out the overall 2050 target in the Climate Change Act 2008 (CCA) and how the carbon budgets (CB) system works, including CB6 which covers the period 2032 – 2037 and which is set at a level equivalent to a 78% reduction in GHG emissions by 2035 compared to 1990 levels.

120. Under section 13 of the CCA the Secretary of State (SoS) *“must prepare such proposals and policies as the Secretary of State considers will enable the carbon budgets that have been set under this Act to be met”*

121. Under section 14 of the CCA the Secretary of State (SoS) *“must lay before Parliament a report setting out proposals and policies for meeting the carbon budgets for the current and future budgetary periods up to and including that period (DW: i.e. the budgetary period for CB6)”*

122. *This report must in particular set out the SoS’s “current proposals and policies under section 13 and the timescales over which those proposals and policies are expected to take effect.”*

1 The letter argues that the SoS cannot fulfil the twin duties imposed by these sections, unless he takes steps to:

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We hope that Essex, Cambridgeshire, West Sussex and Derby City do the right thing and follow suit but, until they do, we intend to continue with our action.” *(my emphases)*

Source: Good Law Project website

- a) “assure himself that the proposals and policies will enable the budgets to be met.”  
 And that this means that he has to “make a predictive assessment as to the efficacy of the policies and proposals in enabling the policies to be met, notwithstanding that certainty will never be possible in such a prediction.”<sup>22</sup>  
 and
- b) “present a quantification of the predicted effect of the policies and proposals over time.”

123. The letter says that no such assessment has been made.

124. 2 To show that the NZS does indeed NOT contain specifics of policies and proposals, nor of timelines, nor of sectoral carbon budgets, the lawyers cite paragraph 17 of the NZS: “*It [Our 2037 delivery pathway] is designed only to provide an indicative basis on which to make policy and plan to deliver on our whole-economy emissions targets. [ . . . ]*”

125. 3 On sectoral policies and proposals, the Strategy sets out for each sector “expected reduction by 2035 from 1990 [levels]”

126. The letter goes into the power sector in some detail as an example. **It concludes that what the Strategy says about this sector is an analysis of what is needed not a plan or prescription to deliver it, and that this same failure is repeated in other sectors - that is, they are not policies or proposals to meet or that would enable the UK to meet its statutory budgets and targets.**

127. **The letter points out that the CCC criticise the strategy for the same reason:**  
 “However, the government has not quantified the effect of each policy and proposal on emissions. So while the government has proposed a set of ambitions that align well to the emissions targets, it is not clear how the mix of policies will deliver on those ambitions - albeit in theory they could.”<sup>23</sup>

128. Left intentionally blank

## ***Section 4 Implications for the role of this EiP***

### **1 Round up**

129. In this Chapter I have sketched in some aspects of the context of this examination. We have looked in turn at the science, the morality, and the government's response.

130. *The science* tells us unequivocally to take action immediately and to be resolute in choosing behaviours, plans, policies, decisions which will cut our carbon emissions which in

<sup>22</sup> Here I have bundled two phrasings into one, for brevity.

<sup>23</sup> The letter adduces in favour of its interpretation several Articles of the Human Rights Act as an additional ground for the action, but that is not strictly relevant to the EIP.



turn will automatically lead to less harmful consequences to people and planet. Every tonne saved leads us to a better world; every tonne emitted leads to a more damaged world.

131. *The moral imperatives* are the same as they always are and we either subscribe to them or we do not: empathy, helpful and in this case swift action, survival. In this case the Climate Emergency acts like a giant searchlight throwing moral questions into ultra-sharp relief.
132. However *the government's approach* does not match the certainty of the science or the imperatives of the morality which with regard to global heating are in effect the same thing.
133. In common with other governments the target adopted is itself, in the light of the precautionary principle and in the light of the shockingly bad odds with which the human race is faced, inadequate. It is too slow and as we have seen many local authorities in this country have adopted earlier target dates than 2050.
134. And then we have seen, from the court case letter, how full of holes the government's Net Zero Strategy really is. I urge the reader to take a look back at the highlighted paragraphs in my summary of that letter.
135. Government policy in this area as in all others is buffeted by winds from all sides. There are those who stand to lose income streams from this massive change in direction, and there are those who stand to gain.
136. And so, no doubt, there is lobbying by both sets of interests: from for example the fossil fuel interests on the one hand to the bus manufacturers on the other. And then there is an emerging group of MPs and commentators who want to weaken or destroy this new direction in policy completely.

## 2 Where does this all leave this Examination in Public ?

137. There is a very real problem for all of us in the country when we have a government with more or less the right rhetoric and yet with a) under-ambitious targets (in common with most other global actors) and b) with no definite plans policies or measures and no definite programme of monitoring and evaluation to achieve even those targets.
138. There is not really a united, determined position on climate change. As a consequence, departments are free to enact policies in the short term which are plainly in contradiction with the direction of travel which we have to take. For example this government has for many years now **frozen fuel duty**. As Roger Geffen of Cycling UK (*see footnote 20*) points out this has many harmful effects including that on climate change.<sup>24</sup> The **£2bn “green homes grant” was cancelled** after reaching just 10% of the homes it was

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<sup>24</sup> the continued freezing of fuel duty “has already caused [huge increases](#) in traffic ..... as well as reductions in revenue to rail companies and to the Treasury. It also undermines efforts to encourage more walking and cycling to replace unnecessary car trips. *Source cyclingUK website – blog.*

meant to benefit. (*Source: carbonbrief*) In February, the **government overturned North Somerset Council's decision to refuse Bristol Airport permission to expand.** (*Source: Quakers in Britain, article by Olivia Hanks*)

139. As a further consequence departments are free, in particular the Department for Transport is free, to show by their actions that there are unresolved contradictions within them. Thus the DTP, as I mentioned above, has words in it which support two different policy directions at once: that of encouraging active travel and minimising car journeys in urban areas, which HE do not refer to at this EiP, and that of increasing road capacity, which they do. The Department has also refused to suspend NPS-NN even when they have been forced to put that document in its entirety under review. As Professor Goodwin has pointed out there is an inherent contradiction between putting the overall policy under review because it is out of date, (see DTP, page 103) but not reviewing the road schemes which it has spawned.<sup>25</sup> There are other signs that the old habits of thinking that transport = roads dies hard, even though the entire policy landscape has changed completely
140. What are we to make of all this down here in this EiP? There are mixed messages coming from the department and HE can indeed find things to support their point of view. The waters are muddy. The EiP can be, indeed *has* to be, a beacon of fair and objective process, listening to and sifting the arguments and acting as a check and balance in the system. And within that context, I believe that it is our duty as citizens, and we are *all* citizens, to do what we can to influence matters in the right direction. There is an arc of history and we are each part of this arc.
141. This is made easier by the fact that on balance there are clear signs that the Department for Transport itself is getting behind the new and necessary direction of travel. For example, in the course of researching this submission, I read the Bus Back Better bus strategy document which came out of the DFT in March 2021 which looks forward to a radically improved bus transport offer throughout the country, backed by funding and by Prime Ministerial enthusiasm and by a willingness to embrace and enable positive change. This is of course entirely in line with the DTP.
142. I used the words “influencing matters in the right direction” advisedly. There are not many issues which are this clear cut, and yet which seem to pose real problems with implementation due to the diffuse nature of the impacts. There is no one-to-one cause and effect process, it is far more complex than that, and that is part of the problem of achieving the necessary change. And yet the impacts are absolutely real and absolutely terrible.

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<sup>25</sup> However, Goodwin says that it is “entirely illogical and inconsistent” that the government would review the NPS-NN statement, but not individual road plans that come under it. “For most of the schemes the reasons for reviewing them are exactly the same as the reasons for reviewing the NNPS,” he tells Carbon Brief. Prof Phil Goodwin is an emeritus professor of transport policy at University College London. (*source: Carbonbrief website, article Q&A on the UK's net zero plan for transport (the DTP)*)

143. And so, there is no doubt what the right direction with regard to climate change actually is. We have to reduce our emissions and we have to start now. So if the scheme before this examination adds substantially to global emissions of carbon as it undoubtedly does, and therefore contributes to negative impacts over the world including in this country, then serious questions have to be asked, as follows:

First where is the assessment of alternatives to this scheme which would be less damaging to the environment and to climate, and which would be more sustainable (not to mention the numerous co-benefits)?

Secondly, where is the assessment of the impact of the scheme on emissions and therefore on the climate even in the absence of a *legally binding* (as if such a thing could even exist) sector target for transport?

144. It is to such questions which we now turn.

## **Chapter 3 The Applicant's position on carbon**

### ***Section 1 The Planning Act 2008***

#### **1 Introduction**

145. The way this examination in public is run, the way that the Secretary of State takes the decision with regard to this scheme, and the way in which National Policy Statements such as NPS-NN are first created and then if necessary reviewed all come under the Planning Act 2008. It is highly relevant therefore to the behaviour of Highways England with regard to the assessment of the climate impact of the proposed scheme. And so it is to the Planning Act that we turn first in this chapter.

146. I then bring to your attention the licence agreement under which Highways England operates, as that imposes a duty upon Highways England to conform to the principles of sustainable development. After these two background considerations I will examine the cumulative carbon assessment in detail in the light of the rest of this submission.

## **Chapter 5, Section 104 subsections 3 & 7 and subsection 2 paragraph (d)**

147. *Chapter 5 Decisions on applications, section 104* spells out what the Secretary of State "must have regard to" in making decisions on applications for a DCO in cases where a National Policy Statement has effect.

148. *Section 104 subsections (3) and (7) say:*

“(3)The Secretary of State must decide the application in accordance with any relevant national policy statement, except to the extent that one or more of subsections (4) to (8) applies. [. . . .] (7)This subsection applies if the [F12Secretary of State] is satisfied that the adverse impact of the proposed development would outweigh its benefits.”

These sub-sections of the Planning Act trump any limitations or any exclusions which NPS-NN might contain, or might appear to contain which conflict with these caveats. The NPS after all is written under the Act. It is clear that the Secretary of State should not follow the NPS if he or she thinks that "the adverse impacts of the development outweigh its benefits." And clearly the adverse impacts of a development for example the A57 Link Road can and do include its direct impact on greenhouse gas emissions and the indirect impacts of these emissions.

149. *Section 104 subsection 2 says:* “(2)In deciding the application the Secretary of State must have regard to — [. . . .] d) any other matters which the Secretary of State thinks are both important and relevant to the Secretary of State's decision.”

In construing this paragraph we should reflect on why this paragraph should be written into the law. Clearly it allows for changes in circumstances or in the legal and political environment to be considered in addition to what the relevant NPS contains, in other words, it *anticipated* the rapid evolution of our understanding of the threat of global heating and the rapid evolution of policy to combat that threat.

150. We know that NPS-NN has been overtaken by events because it is now under review. At page 103 of the DfT's DTP, we read the following:

"The current National Policy Statement (NPS) on National Networks, the government's statement of strategic planning policy for major road and rail schemes, was written in 2014 – before the government's legal commitment to net zero, the Ten Point Plan for a Green Industrial Revolution, the new Sixth Carbon Budget and most directly the new, more ambitious policies outlined in this document. While the NPS continues to remain in force, it is right that we review it in the light of these developments.”

151. I show in chapter one of my DL2 written representation that the entire Planning Act 2008 is shot through with the importance of the concepts of environment, sustainability, and climate change.

152. For example, when the Secretary of State decides to review a national policy statement then he or she “must do so with the objective of contributing to the achievement of sustainable development” (*section 10, subsection 2*). and . . . “For the purposes of subsection to the secretary of state must (in particular) have regard to the desirability of mitigating and adapting to climate change” (*subsection 3*) .

153. These two key guiding principles of policy-making and implementation, namely sustainability and climate change, are also specifically mentioned by the Act when it sets out how national policy statements are to be created in the first place. Sustainability is arranging

our lives in such a way that those who come after us, our children and our grandchildren, have the same opportunities in life as we do; to ensure that we meet our needs without compromising the needs of future generations. It is self-evident that tackling the Climate Emergency is the clearest possible example of the overall moral imperative to act in a sustainable way.

154. For more detail of the legal points I refer the reader to my DL2 written representation, Chapter 1... For now I simply want to impress on you, Sirs, the ExA, and other readers, that there is no doubt that matters such as a full consideration of the climate impacts of the scheme fall squarely within the considerations which the Secretary of State must address, if they are to “satisfy themselves” that the adverse effects of the scheme do not outweigh the benefits. And if the Secretary of State has to take these considerations into account then it follows that this examination in public must give him the tools to do so.

## ***Section 2 Highways England’s licence***

155. Highways England licence dating from April 2015 is another legal document where sustainability is inscribed as an obligation, this time an obligation laid upon Highways England. Paragraph 4.2 of the licence agreement says:

4.2 Without prejudice to the general duties on the Licence holder under section 5 of the Infrastructure Act 2015, the Licence holder must, in exercising its functions and complying with its legal duties and other obligations, act in a manner which it considers best calculated to:

[. . . .]

h. Conform to the principles of sustainable development.

156. It follows from their licence agreement that Highways England *must* uphold the principle of sustainability and as I have said above tackling climate change has to be one of the most important aspects of sustainability in today's world. So they are obligated to show all of us stakeholders in this examination how this scheme can possibly be seen as promoting sustainability. In particular, as there are self-evidently doubts as to how this scheme can be squared with sustainability, they have to answer the question, for this reason as for so many others, why there is no sustainable transport solution on the table an alternative to what they are offering us.

157. Please can you, Sirs, bear in mind that this failure is not only a practical issue it is a legal issue. The licence agreement makes it quite clear in paragraph 2.1 that when the word “must” is used that is a direction, and in the words of the Licence: “Directions must be complied with by the Licence holder. “

It is not optional it is obligatory. Hopefully Highways England will be called to account on this matter in the forthcoming issues specific hearing. Whether or not this happens the legal problem remains. Too often sustainability is a word used rather like community - a bit of a chocolate box word, but in this context it is diamond hard. There are real consequences to

this in the real world and Highways England have to explain why there are no better options on the table.

### **Section 3 Applicant's response to Issue Hearing 2 Item 6 c) and d) - Cumulative Carbon Assessment**

#### **1 Introduction**

158. In this section I will provide a critique of the cumulative carbon assessment by the applicant. The reference details are at the top of this submission. I go through the document from the beginning.

#### **2 Detailed Critique of Applicant's Cumulative Carbon Assessment**

##### **The wording of the question – and why was it changed?**

159. **Paragraph 2.1.1:** This question advances our knowledge about the greenhouse gas emissions of this scheme to a certain extent. In particular the requirement to state how the assessment complies with the Environmental Impact Assessment Regulations can be the doorway to a useful assessment. However an opportunity was missed by the DfT in that they changed the wording – and with the wording they changed the intent – of the Recommendation from the CCC . This was as follows:

Recommendation 2 from the CCC Joint Recommendations Report to Parliament June 2021 says: *“Decisions on investment in roads should be contingent on analysis justifying how they contribute to the UK’s pathway to Net Zero. This analysis should demonstrate that the proposals would not lead to increases in overall emissions. Wherever possible, investment in roads should be accompanied by proportionate investment in EV charging infrastructure and in active travel and public transport.”*

160. It is as you can see **a much more challenging wording**. I refer readers to my Paragraph 139 in this submission for a possible explanation of this curious choice by the DfT of questions to put to road schemes. They have removed the “point” of the CCC wording and substituted some bureaucratic verbiage which can be “got round” . .

##### **The choice of framework to use when carrying out assessments**

161. **Paragraph 2.2.1 :** On the face of it this list is helpful and comprehensive. By breaking the topic down in this way Highways England have made the ensuing discussion easier.

162. **Paragraph 2.2 3:** I am concerned to see that Highways England *“follow the advice set out in the design manual for roads and bridges for the evaluation of the impact of any of its Road schemes.”* I am concerned because the question posed by the department and subsequently by the ExA at this examination mentions compliance with the Environmental

Impact Assessment Regulations. It does not mention the DMRB methodology. I suspect that DMRB is more lenient on the applicant than the EIA regulations would be but I leave that question for others to probe into or even to answer.

163. The reason that Highways England give for making this choice, is that going with the DMRB “ensures consistency in how any scheme is progressed and how the outcomes are evaluated.” That is indeed an argument for sticking with one methodology but it is not an argument which settles the matter of which methodology to choose.
164. I seem to remember this question occurring at ISH2 in this examination. It is an important question. I remember very well Mr Kate's Mark, if I have the name right, referring to the IEMA guidelines on when severance was a serious matter and when it was not. I was so amazed by the figures for thresholds which he gave that I checked the IEMA website and discovered that that guidance was very very old and was being reviewed because it was so obsolete, so the question of which methodology one chooses is live and germane to this examination.
165. Under the Planning Act 2008 and copied into NPS - NN at para. 1.2, the object of the exercise is to establish what the adverse impacts are, not to sweep them under the carpet. I am not saying this is what is happening in this case of a cumulative carbon assessment, but the suspicion lingers. I think I remember a wording from the EIA Regulations 2017 which is far broader than the DMRB wording quoted in this Highways England response.

### **The traffic modelling, the TAR, and the comparisons to be made**

166. **Paragraph 2.2 7:** refers to the traffic modelling and the Transport Assessment Report. The question of whether either of these are fit for purpose for this examination is as far as I am concerned an open question until the applicant in the first case explains the various problems which show up in the outputs of the model and in the second case explains the total inadequacy as a transport assessment. and is made to do the job properly, so that we can all be in full possession of the facts and analysis needed.
167. I note that item 4) of this paragraph mentions “national government regional growth rates” in traffic, and wonder of wonders there are footnotes which have not been redacted out. However these footnotes do not lead to the data which I seek which is the actual growth rates which Highways England are using. I wish to see if they are plausible, if they are compliant with the Net Zero Strategy or anything else I might wish to check. Not too much to ask, is it?
168. **Paragraph 2.2 8:** appears not to be worth of comment except to say that it is pleasantly clear. However it raises important questions. One is that it reveals that the assessment operates solely by comparing changes between one road network and another one - other modes do not exist and the second point is that when they say that “*the comparison takes into account all other developments likely to have an influence on the proposed road scheme*” I am sure they do not mean improvements in rail bus or active travel. Other developments can only mean for HE how many motorised trips will there be?

In paragraph 2.2 we see again how absurd this is as we observe that the with scheme and without scheme scenarios are compared as if they are directly comparable. Keith Buchan has already taken this view apart in one of his submissions: the traffic growth factors mentioned in 2.2 are themselves dependent on other transport policies, plans, and implementation.

### Local carbon budgets

169. **Paragraph 2.2.13:** It is true that there is no legal duty for local authorities to attain any particular targets. However they can and do set their own targets (*see this document, paras. 19-22*).
170. The well-respected Tyndall Centre in Manchester <sup>26</sup> has developed a methodology for setting carbon budgets for local authorities and Sheffield and Manchester are among those working with the Centre on this. If they can do this so could HE.
171. BEIS has a publicly available dataset of CO<sub>2</sub> emissions in the UK greenhouse gas inventory (GHGI) by region and local authority going back to 2005. *“The statistics can be used by local authorities (LAs) and other relevant organisations as an important body of information to help identify high emitting sources of CO<sub>2</sub> and energy intensive sectors, to monitor changes in CO<sub>2</sub> emissions over time, and to help design carbon reduction strategies”* says the BEIS website. The statistics are provided by the NAEI (National Atmospheric Emissions Inventory). <sup>27</sup>
172. And the submission from South Yorkshire Climate Alliance (REP2-087) works out how the scheme’s emissions relates to Tameside BC’s notional emissions budget (which I gather derives from the Tyndall Centre). I wonder if HE have responded to this submission?
173. To read what Highways England say in their document here you would think none of what I have just written about existed. There's none so blind as those who will not see.
174. It does rather look as if the fact that ‘local authorities have no legally binding targets’ can now be seen to be a classic red herring. We see from paras. 170-172 above that there is no impediment to work on carbon assessments on a local basis using this data and

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<sup>26</sup> **We will support national and international public policy based on robust research.** Increasingly decisions will be taken to reduce greenhouse gas emissions from all sectors and increase people’s resilience to a changing climate. We will position ourselves to ensure that our research fully informs decision making within the UK, EU, and wider international fora. We will listen to the concerns of people outside of research, help advise on key issues, understand obstacles to effective public policy, and identify realistic and ambitious paths towards a low carbon future. *source: “vision” page of Tyndall Centre website*

The Tyndall Centre is a unique partnership between the universities of East Anglia (Headquarters), Cardiff, Manchester, Newcastle and Fudan University in Shanghai. *source: “governance” page of Tyndall Centre website*

<sup>27</sup> <https://naei.beis.gov.uk/data/local-authority?view=la-co2> and please do not redact this, as it serves no purpose but to RESTRICT access to valuable information !!!!!!!



methodology. After all the DFT is feeling its way and *specifically asks for feedback* on any difficulties encountered in compiling the information, (*Cumulative Carbon Assessment, para. 2.1.1*) so it is fine to use fresh approaches which have not been around for donkey's years like the WebTAG for example.

### National carbon budgets including sector budgets

175. **Paragraph 2.2.13:** Highways England state:

*“b) Neither Parliament nor Government has identified any sectoral targets for carbon reductions related to transport, or any other sector. There is no requirement in the CCA 2008, or in Government policy, for carbon emissions for all road transport to become net zero.”*

This is both true and not true at the same time and demonstrates graphically why the government's ‘now you see it, now you don't’ approach to climate policy and implementation just will not do (*see paras 108 – 111 and 124 – 127 above*) as it allows agencies like HE, as we see right here in this document, to skate over their ethical and indeed policy duties, by sheltering under the ‘it's not a legal requirement’ blanket. That is indeed what HE are doing, as this paragraph begins and is meant to be framed by, HE's statement: *“The CCA 2008 does not impose a **legal duty** to set carbon budgets at a smaller scale than those set out nationally i.e. regional or local budgets are not required. Specifically: . . . (and then comes paragraph b) as I have just cited)”* (my emphasis)

I suspect, (as I have made clear before, and would substantiate at length if I had the time (sigh . . .) I do not trust Highways England) based on their behaviour at this examination, that they know perfectly well that a target<sup>28</sup> for the transport sector *does* exist, it is just not a *statutory* target, it is a *government strategy* target, it is a government *“expected”* target (*for the wording, see court case description above para. 125*).

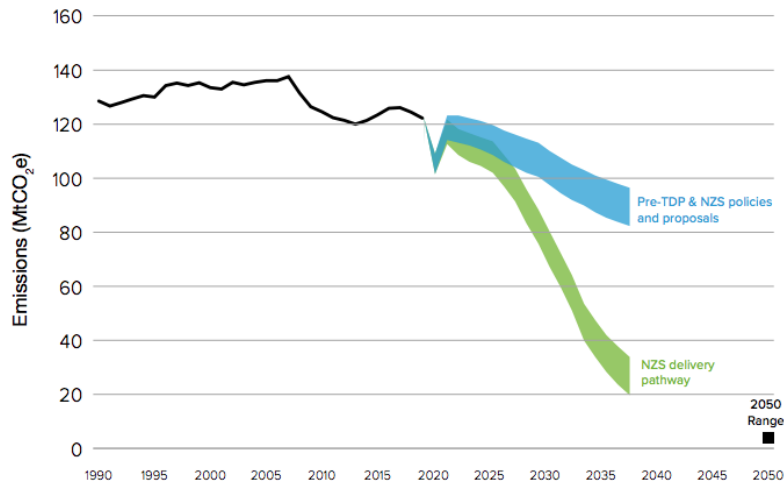
So the learned Justice Holgate was perhaps *technically* correct when he said that: *“there is no sectoral target for transport, or any other sector, and that emissions in one sector, or in part of one sector, may be balanced against better performance in others”* and yes, indeed HE may think that they “have got away with it”. But there IS an *“expected”* target, as we will see in the next paragraph.

176. Yes, Highways England are right to say that the government is studiously avoiding, in its NZS, any firm budgets and any set measures for any department. I have covered this astonishing failure above in my description of the pending court case (paras. 118-127 above). And it should be stressed that the plaintiffs are arguing with strong reasoning (strong enough to be accepted for judicial review) that the failure to have such features is unlawful. So Highways England could very well be leaning on a reed which turns out to be broken.

Someone on the HE team must have read the transport sector part of the NZS. The strategy says, in its transport section, according to Carbon brief: "**In the domestic transport sector (that is, excluding flying and shipping) NZS “envisages emissions from domestic transport**

<sup>28</sup> Actually, it is a target *range*

falling 65-76% by 2035, from 2019 levels, and anticipates some residual emissions from the sector even in 2050 that will have to be removed.” (my emphasis) See chart below:



177.

178. The chart is what HE do not like. They do not want to be constrained by *accountability* to a government target, even an “*expected*” or *indicative* one, and especially not when said target shows a drop in emissions like this one.<sup>29</sup> But these “bendy” targets (bendy as in bendy buses) are what we’ve got to work with, that is the way the game is played in this country.

#### what should we do?

179. So it falls to you, Sirs, to make sense of this and to impose some sanity and transparency and a bit of good faith. This examination is where we can look at things objectively, in order to try honestly to come to the best answer.

180. An assessment of how the scheme fits into a Net Zero-compliant pathway, spelling out all the effects which a proper assessment would reveal,<sup>30</sup> could be made and that would be in line with the CCC Recommendation (quoted in full at para. 158 above) and the need to quantify so far as possible adverse effects (in line with ss.7 s.104 of the Planning Act 2008). **Request to ExA**

181. The Good Law Project has sought judicial review because they do not think that a situation where no one has to do anything at all, because it ‘can all be left till later’ (see ruling of German Constitutional Court paras. 69 – 74 above, for why this is immoral – and in Germany, against their constitution) or it can be ‘picked up by someone else’, is a recipe for Global disaster and the Good Law Project are not going to put up with it.

182. And we don't have to put up with it either. Mercifully, the ExA can instruct the applicant to assess the adverse carbon impact of the scheme (or even better and more in line

<sup>29</sup> The actual wording is ““expected reduction by 2035 from 1990 [levels]”

<sup>30</sup> Zzz I list some of these in para. Zzz below

with the intention of the Act and of NPS-NN evaluate, including in the assessment carbon emissions, the scheme against an alternative. Or this work could be commissioned. RTPI put together a team for similar research,<sup>31</sup> or the Tyndall Centre could be approached . . .

**Request to ExA**

183. The attitude underlying Highways England's refusal to engage is alarming. We are talking life and death we are talking transboundary effects which are patently present,<sup>32</sup> we are talking air quality levels which will be below the new standards coming in later this year under the aegis of the new Environment Act, and all Highways England seem to want to do is to "get our scheme through."<sup>33</sup>

**Making difficulties, overcoming them and why we should do so**

184. **Paragraph 2.2.15:** I do not understand why HE write:

*"To conduct an impact assessment at a local or regional scale some form of baseline would need to be identified, and that baseline would need to comprise:*

*a) A forecast of carbon emissions from all cumulative sources relevant to the geographic / sectoral scale being adopted; [ . . . ]*

Why would a baseline be a forecast? This sounds nonsensical to me. The baseline is already there, provided for example by the NAEI (*see para. 170 above*), and reworked as necessary.

185. **Paragraph 2.2 17:** is classic 'sand in your eyes' stuff but it boils down to "we don't want to do this, so we won't." HE seem to be saying: *"Nothing can be done locally because it's all too complicated. There are all these government policies and things which impact on what we are doing."* Errrr, yes. When I read paragraph 2.2.17 it sounds to me like a description of the way things are in the world we live in. Carbon reduction is a team effort. Government, transport operators, local groups, Local Authorities, all work together. Maybe HE are happier if they stay in their bunker as I suggested in my DL2 submission. 😊

186. More positively it is of course possible that for example the government funding pots for active travel and for bus service improvements could be accessed by local stakeholders such as local authorities working with their communities in order to fund an alternative

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<sup>31</sup> RTPI REPORT "Net Zero Transport: the role of spatial planning and place-based solutions" Publ. RTPI, 25 Jan 2021, "This research was carried out by LDA Design, with City Science and Vectos. It explores how different places can achieve an 80% reduction in surface transport emissions by 2030, as part of a pathway to net zero by 2050." *Source RTPI website (And brilliant work it is too, DW)*

<sup>32</sup> Please can these be put back in, obviously!! I have just seen that they have been scoped out, but that that is reversible. The evidence for why is this document, paragraphs 23-27 and my DL2 main submission, Chapters 5 and 5a **Request to ExA**

<sup>33</sup> (sorry for the cynicism – I have a submission in outline, on just this topic, the behaviour of HE, but this one took so long . . .

package of improvements in transport which would serve everyone and be climate friendly.  
 ☺ ☺

187. For example a city like Manchester is well able to create a baseline and to project the effect of different suites of policies on emissions, and have probably already done this. The government, in its Bus Strategy, clearly wants to work with local authorities on well-conceived ambitious local schemes to cut emissions. Modern data tools are formidable.
188. **Paragraph 2.2.19:** *“There is no reasonable bases (sic) upon which National Highways can assess the carbon emissions impact of the Scheme at a local or regional level and it is not required to do so by law or by the National Policy Statement for National Networks (NPS NN)9*
189. This is untrue as I've shown above (*see paragraphs 147-152*). Planning Act 2008 and NPS-NN Paragraph 1.2 repeating it, both enable the ExA to request such an assessment of the carbon impacts direct and indirect on all receptors, at any level. (there is no restriction in the Act and a close reading indicates that that is indeed how the Act should be construed - see Chapter 1 in my DL2 Written Representation).
190. **Paragraph 2.2 20** is therefore untrue. As I have shown above there are ways to approach this. However it is clear to me that the best way to get at the balance between adverse effects and benefits is to compare the scheme to an alternative package. The reason we hear nothing from HE about alternatives is that they know already which would win in such a comparison. But in that case by failing to look at alternatives they are failing in their duties under Nolan to pursue the public interest. I know it is difficult, they have spent a long time on this project but sadly it may have to be put aside. I will look at alternatives in more detail in Chapter zzz.

#### **The NPS-NN – how we should regard it, and the “in isolation” issue**

191. **Paragraph 2.2 23:** Thanks to Highways England for quoting the source document, the NPS-NN That enables us all to see that it talks about the EIA directive and not the DMRB. There are three points to be made about this paragraph.
192. The first point is the well-worn (sorry!) point, that if the end result of something written within the NPS-NN is to exclude the possibility of making an effort to establish adverse effects in full, then that statement can be and must be put aside in favour of subsection 7 of section 104 of the Planning Act 2008 as copied into NPS-NN at its paragraph 1.2.
193. The second point is about this matter of HE insisting that it is most unlikely that a scheme “in isolation” could affect the ability of government to meet its carbon reduction plan targets. As others at this examination have also said but not perhaps in quite the same words, this is unacceptable both on ethical and practical grounds.

On *ethical* grounds, because we now know that in the words of the IPCC which have become a meme among scientists, every tonne of greenhouse gases emitted leads to more

damage in the world, including in this country, and every tonne avoided leads to a better future. (*see Urgency 1, page 11, above*) And on *practical* grounds because the end result of such a concept is that absolutely no measure undertaken by any individual or corporate body makes any difference and so we better all get out our sun loungers and wait for the inevitable. There has to be a way round this and I have sketched out how the ExA might react in paragraphs 177, 178 and 180 above.

194. Thirdly, in the second paragraph of the NPS-NN cited by Highways England, namely paragraph NPS-NN 5.1 we read: “*the government has an overarching national carbon reduction strategy (as set out in the Carbon Plan 2011) which is a credible plan for meeting carbon budgets.*”
195. I have looked at this plan and it would not be viewed as a credible plan in the present day. I remember that in the section on transport there was an almost complete absence of any actual *measures* to achieve any carbon reduction at all, which is perhaps why Transport has contributed so little since 1990 to progress on global heating.
196. This is a significant matter for this examination, because it indicates both how far we have come, and how much things have moved on since NPS-NN was written, even though the stripe of the government is the same. This is why NPS-NN is now under review and this is why the ExA should be cautious when assessing its words of wisdom. How can roads be evaluated under guidance from a document which is under review because it is out of date, as we are being asked to do at this enquiry?
197. By all means use it as a guide; there is much that is useful in it. But always bear in mind that its more restrictive passages conflict with the very law under which it is written, and that as the DfT points out when announcing the review of NPS-NN, the policy landscape has changed totally.<sup>34</sup>

## **Chapter 4 The Applicant’s Carbon Assessment – is it acceptable for this EiP and if not what is to be done?**

### ***Section 1 - Introduction***

198. I begin this chapter by offering a detailed commentary on HE's comments on a question posed by the ExA on page 36 of the Written Summary of the Applicants Case at Issues Specific Hearing 2 (library Ref REP4-008). This will serve as a way of getting a grasp of the underlying issues.

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<sup>34</sup> “The current National Policy Statement (NPS) on National Networks, the government's statement of strategic planning policy for major road and rail schemes, was written in 2014 – before the government's legal commitment to net zero, the Ten Point Plan for a Green Industrial Revolution, the new Sixth Carbon Budget and most directly the new, more ambitious policies outlined in this document.” (*Decarbonising Transport Plan, page 103*)

199. I then summarise what the commentary and HE’s original text are saying and the conclusions which can be drawn from them.

200. The summary may be seen as going beyond the evidence of the text and my comments, in that it makes claims about the guidance applicable and says that the applicant has failed to comply with the guidance, and also the law. Some evidence for these statements does lie in the commentary and text, but for complete clarity I then look at the guidance which applies to carrying out a carbon assessment for a scheme such as the A57 Link Roads.

201.

202.

## ***Section 2 - Commentary on HE's approach to their cumulative carbon assessment***

### **Text of section a)**

203. “a) The Scheme has the potential to affect the earth’s climate by increasing the emission of greenhouse gases (GHGs) into the atmosphere, which will occur during construction and throughout its operational life. Due to human activities the concentration of GHGs in the atmosphere has increased dramatically, leading to global warming. This leads to myriad indirect impacts as the climate responds to the increased atmospheric temperature.

204. “The assessment considers the quantity of greenhouse gases (GHG) that will enter the atmosphere (the receptor). What is reported is the direct impact of likely additional and avoided GHG emissions at each lifecycle stage of the project, in comparison with current and future baseline GHG emissions.

205. “The effects of global warming and climate change are wide ranging, diverse and global. It is not possible to define a link between Scheme emissions and indirect climate effects on local receptors, therefore this cannot be assessed. That is, there is no recognised assessment methodology to apportion the GHG emissions from the Scheme to any of the widely recognised and global indirect impacts of climate change.

206. “Both direct and indirect effects are mitigated in the same way, which is either through minimising GHG emissions at source (e.g. managing and reducing embedded mitigation; implementing design measures that would benefit the transition to other the use of other transport modes) or through supporting and being aligned with relevant policy (e.g. DfT’s Transport Decarbonisation Plan; National Highways Net Zero Plan). These are all discussed later in this response.”

### **DW Comments on section a)**

207. First of all thank you to Highways England for making such a clear and comprehensive statement about their approach to reporting on carbon.

208. This section can be summed up as follows: The assessment which Highways England have carried out assesses the actual emissions caused by the scheme. It does not assess impacts which result from those emissions as there is no way of allocating the impacts to specific emissions.
209. Highways England are absolutely correct in stating these facts. That does not mean that the assessment is as useful as it could be, nor does it mean that is compliant with the relevant regulations and law.
210. In stating these facts Highways England use some confusing language and that does not help in a discussion where it is easy to get confused.
211. In the first paragraph Highways England state that “the Scheme has the potential to affect the earth’s climate by increasing the emission of greenhouse gases.” It would be better, and much clearer if they had written: “the scheme will affect the Earth’s climate by increasing the emission of greenhouse gases.” In a previous life I was keen to establish precision of this kind in written reports. “Will” is scientifically justified and clear, while “has the potential to” is unclear and fogs the brain.
212. In the same vein, in the second paragraph, Highways England write: “what is reported is the direct impact of likely additional and avoided GHG emissions at each life cycle stage of the project.” What is reported is not impacts it is the actual additional GHG emissions at different stages of the project. Impacts are downstream from the emissions and should be kept strictly separate (as Highway England do elsewhere in what they write elsewhere in this answer to a question from the ExA).
213. The third paragraph is IMO absolutely correct and for me nothing here is an issue.
214. In the fourth paragraph of section a) Highways England correctly point out at all the effects of global heating or climate change are mitigated in the same way - by minimising GHG emissions. They then imply that part of this mitigation is through “supporting and being aligned with” policies such as the Transport Decarbonisation Plan. As I have shown in this submission (see paragraphs 77 and 139) this plan can be read in different ways as it points in different directions simultaneously. Deciding which way to go is the right way is the task of this EiP as the government in effect leaves the question open.

### **Text of section b)**

215. “b) An environmental statement is required to describe the likely significant effects of a proposed development on the environment (Regulation 14 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017). This includes a description of the likely significant effects on the environment from, inter alia, the impact of the project on climate (for example the nature and magnitude of greenhouse gas emissions) and the vulnerability of the project to climate change. An environmental statement is also required to describe the likely significant cumulative impacts of the development proposed together with those from other “existing and/or approved projects” (see paragraph 5 (e) of Schedule 4 to the 2017 Regulations).

216. “The description of the likely significant effects on the factors specified in regulation 5(2) should cover the direct effects and any indirect, secondary, cumulative, transboundary, short term, medium-term and long-term, permanent and temporary, positive and negative effects of the development. As already stated for the global climate, the assessment has considered direct effects only. The assessment considers construction (temporary, short/medium term) and operational (permanent, long term) phases. The assessment of GHG emissions is considered to be inherently cumulative (see response to Item 6c below). Transboundary effects are scoped out of the EIA under Regulation 32 Transboundary Screening (OD-001).
217. “An environmental statement is only required to include such information as is reasonably required to describe the environmental effects of the development and which the applicant can reasonably be required to compile having regard to current knowledge (see *R. (Khan) v London Borough of Sutton* [2014] EWHC 3663 (Admin) and *Preston New Road Action Group v Secretary of State for Communities and Local Government* [2018] Env. L.R. 18). Accordingly, the assessment of the effect of GHGs produced for the Scheme complies with the 2017 Regulations.
218. “In following the DMRB LA 114 standard, the assessment reported in Chapter 14 of the ES inherently complies with the requirement in s5(2) of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 to assess climate. The procedures and evaluation criteria set out in DMRB LA 114 Climate, are appropriate and sufficient to ensure that the effects (including cumulative effects) of proposed road schemes upon climate change are assessed in accordance with the 2017 Regulations and to provide sufficient evidence for the decision-making requirements set out in paragraph 5.18 of the NPS NN.”

### **DW Comments on section b)**

219. This section is rather more contentious.
220. Highways England say that the requirement for an environmental statement is "to describe the likely significant effects of a proposed development on the environment." They also state that the "likely significant cumulative impacts of the development proposed together with those from other "existing and / or approved projects" must be described.
221. This is a limited view of the requirements imposed on an environmental statement. It appears however to be the view which has determined the way they have carried out the assessment. And yet in the next paragraph of this section Highways England quote the 2017 Regulations as follows: “The description of the likely significant effects on the factors specified in regulation 5(2) should cover the direct effects and any indirect, secondary, cumulative, transboundary, short term, medium-term and long-term, permanent and temporary, positive and negative effects of the development.” Thus, all the effects listed, as they apply to the “climate” are part of the requirements for an ES.
222. After this correct statement of the factors specified in the EIA Regulations Highways England, somewhat surprisingly, state: “the assessment has considered direct effects only,”



and then sweeten the pill by correctly pointing out that: “The assessment of GHG emissions is considered to be inherently cumulative.”

223. This is indeed true as, for example, traffic predictions out to the year 2040 and beyond can be said to be cumulative. However this does not materially affect the fact that “the assessment has considered direct effects only” and that in doing so, in limiting its scope in this way, it can be argued, and I will argue, that the assessment is in breach of the Regulations and the law.
224. HE go on to say: “Transboundary effects are scoped out of the EIA” Initially I was utterly shocked at this as transboundary effects form the bulk of the indirect impacts of the scheme. It is as if someone was to argue that industrial emissions from UK factory chimneys cannot cause acid rain, and the environmental impacts of that acid rain, in Norway, or as if one was to argue that emissions of ozone- destroying gases do not contribute to the destruction of the ozone layer. That boat sailed long ago!
225. However I have since recovered my equilibrium. The indirect effects of the scheme, that is the effects of the emissions which would be caused by this scheme if it were to be built, on the climate and the subsequent impacts on people and planet, are already embedded in government statutory carbon reduction targets. They caused these targets to come into existence. These may not be adequate, as I have argued, but that is not the point here. The point at issue here is that Highways England do not have to concern themselves at this EiP with assessing such downstream impacts. They do however have to concern themselves with the effects of the scheme in making emissions reach the atmosphere in the first place, and the reason they have to do this, is because the *resulting* impacts are so severe.
226. The next paragraph is also critical to this discussion. Highways England begin by saying: “An environmental statement is only required to include such information as is reasonably required to describe the environmental effects of the development and which the applicant can reasonably be required to compile having regard to current knowledge” and following from this they claim that “the assessment of the effect of GHGs produced for the scheme complies with the 2017 regulations.” This is indeed the nub of the matter, and I will show in a later section of this Chapter that Highways England assessment is non-compliant because such information is a reasonable requirement.
227. Finally, in the last paragraph of section b) Highways England make two claims about the DMRB LA 114 standard. The first claim is that that document sets out “procedures and evaluation criteria” which “are appropriate and sufficient to ensure that the effects (including cumulative effects) of proposed road schemes upon climate change are assessed in accordance with the 2017 Regulations and to provide sufficient evidence for the decision-making requirements set out in paragraph 5.18 of the NPS NN.”
228. The second claim is that, in following DMRB LA 114, the assessment reported in chapter 14 of the ES “complies with the requirement with the requirement in s5(2) of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 to assess climate.”

229. This preference for DMRB guidance has been remarked on by others at this EiP. HE are claiming here that DMRB guidance is effectively as good as the EIA 2017 Regulations, and that following LA 114 guarantees compliance with the EIA Regulations. But the fact is that NPS-NN, which they adhere to slavishly in other matters, refers to EIA as the standard. It does not reference DMRB in this context, in fact, the terms “DMRB” and “Design Manual” do not occur in NPS-NN. And furthermore, LA 114 makes no such claims for itself. I have searched on “2017” in that document, and there no instances of that word.
230. And in fact a glance at Chapter 14 of the ES at this examination shows that it is indeed limited and does not comply with the EIA Directives.

### ***Section 3 - Summary and Conclusions from the Commentary***

231. DMRB cannot be preferred as a source of guidance to the EIA Regulations.
232. The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 are the current applicable guidance.
233. It is correct to say that the carbon assessment *should not* concern itself with trying to establish what specific impacts arising from the scheme’s carbon emissions may be attributable to the scheme. This is indeed a blind alley and one which may have contributed to the judgements in the cases cited. I say “may” advisedly as I have not gone into this closely.
234. It is correct to say that a scheme’s carbon assessment *should* concern itself with its total contribution to emissions, both direct and indirect, according to the EIA Regulations.
235. The Regulations are quite clear that the assessment in the previous paragraph has to be carried out in a wide and all-embracing way.
236. Part of the confusion in this area may be that the exclusion of downstream impacts of additional emissions from the assessment, which is the right thing to do (see point 2), leads by analogy to the exclusion of wider considerations when looking at emissions caused by the scheme, which is the wrong thing to do.
237. Direct emissions arise from a scheme’s construction and in its operation, and indirect emissions arise when it causes trips to be made in carbon intensive ways which could have been made in low carbon or zero carbon ways, or not made at all.
238. Direct emissions arising from this scheme’s construction and in its operation have been assessed in this scheme’s ES. Indirect emissions, as defined in in the previous paragraph, have not.
239. **This non-assessment of indirect emissions in the ES provided by the applicant, is non-complaint with the EIA Regulations, and the law.**

## **Section 4 - The applicable guidance – from NPS-NN, the EIA Regulations and the law**

*DW NOTE: All quotations in what follows, unless otherwise stated, are from the written representation of Dr Boswell, otherwise known as CEPP (library ref: REP2-064).*

*Quotations within what Dr Boswell writes are in italics.*

### **NPS-NN - What it says about assessment**

240. **“Paragraph 40:** The NPS NN section 4.15 invokes the EIA Regs and states that the Directive as transposed into UK law *“specifically requires an environmental impact assessment to identify, describe and assess effects on ... climate ...”*. “
241. The EIA Regs Schedule 4 is invoked which requires *“the likely significant effects of the proposed project on the environment, covering the direct effects and any indirect, secondary, cumulative, short, medium and long-term, permanent and temporary, positive and negative effects of the project”* to be described in the EIA. (DW Note: It seems to me that the 2017 wording has slightly changed from the 2009 wording. HE refer to the 2017 version as the standard to which they are now working)
242. The second highlighted section from NPS NN 4.15 above is directly “cut and paste” from the wording in the EIA Regs themselves, indicating it was the DfT’s intention in the NPS NN that significant effects, impacts or benefits as described are included in the Environmental Statement.“
243. **“Paragraph 44:** The NPS NN directly invokes the EIA Regulations at NPS NN 4.15 and 4.16 (see Appendix A). The NPSNN, therefore, fully accepts that the EIA process must be followed in full. The NPSNN cannot, as a matter of law 23 , in any way limit or constrain what is required by the EIA process; a full assessment of a proposed DCO’s environmental effects and their significance must be undertaken through the EIA process.”
244. For footnote 23, oh dear I cannot check this as the URL has been redacted . . . . .
245. **“Paragraph 33:** Under “Climate change mitigation: Project impacts on climate change” on page 39 of the EIA report writing guidance (as supplied at Appendix B), it states:
246. *“The assessment should take relevant greenhouse gas reduction targets at the national, regional, and local levels into account, where available. The EIA may also assess the extent to which Projects contribute to these targets through reductions, as well as identify opportunities to reduce emissions through alternative measures.”*
247. Note here in particular the last phrase: "as well as identify opportunities to reduce emissions through alternative measures" I return to the matter of alternatives in paras. 287 and 288 below.
248. **“Paragraph 38:** I have not been able to find any UK specific guidance relating to the EIA Regs that would provide different advice to the existing guidance on the official EU

Commission webpage for the EIA Regs. It is therefore rational to apply guidance which was written to “*focus[es] on ensuring that the best possible information is made available during decision-making*” under the EIA Directive within the UK. Failure to even consider such guidance, as is the case in the Environmental Statement, would be irrational.”

## Summary of guidance from the NPS-NN

249. 1 The NPS-NN relies upon the EU EIA directive as transposed into UK law. This means that it is the latest version of EIA Regulations and guidance which apply, hence the use by Highways England of the 2017 version of the regulations.
250. 2 It follows that a wide-ranging requirement of what effects on emissions must be considered applies - both direct and all kinds of indirect emissions caused by a scheme must be considered
251. 3 NPS-NN cannot in other paragraphs limit or constrain what is required by the EIA process. In this context it has to be noted how strange it is that Highways England, by its own admission, have only assessed direct emissions effects.

## The EIA 2017 Regulations

### Section 5 Environmental impact assessment process, paragraph 2

252. “(2) *The EIA must identify, describe and assess in an appropriate manner, in light of each individual case, the direct and indirect significant effects of the proposed development on the following factors—*

[ ..... ]

(c) *land, soil, water, air and climate;*”

### SCHEDULE 4 INFORMATION FOR INCLUSION IN ENVIRONMENTAL STATEMENTS

**Section 1.** *A description of the development, including in particular— [.....]*

**Section 2.** *A description of the reasonable alternatives (for example in terms of development design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects.*

**Section 5.** Part of the wording of section 5 of this schedule is:

253. “*The description of the likely significant effects on the factors specified in regulation 5(2) should cover the direct effects and any indirect, secondary, cumulative, transboundary, short-term, medium-term and long-term, permanent and temporary, positive and negative effects of the development.*”

## the EIA report writing guidance

254. In Dr Boswells paragraph 33, we see that at page 39, firstly *“The assessment should take relevant greenhouse gas reduction targets at the national, regional, and local levels into account, where available.”* and secondly, the assessment should *“identify opportunities to reduce emissions through alternative measures.”*

## Summary of The EIA 2017 Regulations and their bearing on the carbon assessment for this scheme.

255. 1 The EIA must identify and describe and assess the indirect significant effects of the proposed development “on the climate” (as well as the direct effects). As we have already seen, this has to mean the effects of the proposed development on emissions.
256. 2 The assessment should take relevant greenhouse gas reduction targets into account. These can be at national regional or local levels, depending on availability.
257. 3 The assessment must include a description of reasonable alternatives studied by the developer, with an indication of why the chosen option was selected, and including a comparison of the environmental effects, part of which would be a comparison of the carbon emissions.
258. 4 The assessment should identify opportunities to reduce emissions through alternative measures.

## Planning Act 2008

259. A short version of the implications of the Planning Act for this examination is at paragraphs 147 to 154 above.
260. The statutory test which concerns us here is: do the adverse effects outweigh the benefits? NPS-NN is written under the Planning Act, and this test is explicitly written into NPS- NN at paragraph 1.2.
261. And although in the Planning Act, the test is written into a Chapter which is headed: **“Decisions on applications”** NPS-NN *confirms* that it follows, from the fact that the Secretary of State has to consider this test when taking the decision, that the ExA must in turn assess the adverse effects of the scheme. This is what the NPS-NN says:
- “4.3 In considering any proposed development, and in particular, when weighing its adverse impacts against its benefits, the Examining Authority and the Secretary of State should take into account:*
- “• its potential benefits, including the facilitation of economic development, including job creation, housing and environmental improvement, and any long-term or wider benefits;*

*“• its potential adverse impacts, including any longer-term and cumulative adverse impacts, as well as any measures to avoid, reduce or compensate for any adverse impacts.*

*“4.4 In this context, environmental, safety, social and economic benefits and adverse impacts, should be considered at national, regional and local levels. These may be identified in this NPS, or elsewhere.”*

262. These adverse impacts clearly include harmful impacts due to carbon emissions. We know that these impacts are serious, both here and abroad. We also know that these harmful impacts arise in proportion to the size of the emissions. In light of these facts, the government has set both an overall statutory target for carbon reduction, and has a strategy (the NZS) to meet the 2050 target with an indicative pathway for the transport sector which includes a carbon reduction figure which is “expected” to be met.

263. Clearly then, from a legal and policy point of view, the matter of the size of the emissions is important and the applicant must make an assessment along the lines discussed in earlier paragraphs. (see for example paras. 255—258)

### **Does the applicant’s work on carbon assessment comply with EIA Regs and with Law?**

264. As we have seen, indeed as the applicant himself has stated, they have only assessed the quantity of emissions directly due to the construction and operation of the scheme.

265. The applicant has not identified described or assessed the indirect significant effects of the proposed development on emissions. The ExA therefore is not in a position to assess all the adverse impacts which this scheme causes because the carbon emissions which are indirectly caused by the scheme are absent.

266. The applicant has not taken relevant greenhouse gas reduction targets into account neither national targets as contained in the net zero strategy, (these are targets which even if not set in stone are “expected”) nor at local level. However at local level baseline figures for emissions, and targets derived by cascading down the national target to local level as well as targets calculated by the Tyndall Centre are all available.

267. The applicant has failed to describe the sustainable transport alternatives which were studied by the applicant in 2014 as one of the options and rejected, and has provided no comparison of the environmental effects of this option versus the adopted scheme to this examination. (see ES Chapters 1-4, latest version, where the option sifting process is described.

268. **To sum up then the applicants carbon assessment does not comply with the regulations or the law, and as a result the ExA cannot fulfil its task of reporting on the “adverse effects” to the SoS.**

### **If the work done is non-compliant, what is the remedy?**

269. I can hardly imagine a more important adverse effect than the effect on emissions with its knock-on impact on every aspect of everyone's lives. You, Sirs, are charged with reporting to the Secretary of State adequately on the balance between adverse impacts and benefits of the scheme and yet a vital part of the information you need is missing.
270. **The situation cannot be allowed to stand. In a vital element of this examination a key assessment has not been done properly. As a result the ExA cannot fulfil its role.**
271. May I suggest that you, the ExA, request the applicant to deliver a compliant assessment to the examination. **(Request to ExA)**

### **What might a compliant assessment look like?**

272. First of all it would look at the different ways in which the building and operation of this road would affect the behaviour of lots of people and nudge or steer them away from carbon reduction and in the direction of emitting more carbon in their lives.
273. And secondly it would compare the total carbon emissions estimated to be caused, directly or indirectly, by the scheme with the carbon budgets of the affected local authorities. I will touch on each of these in turn.
274. Alternatively a comparison between the scheme as proposed and a sustainable transport package could be carried out.

#### **Indirect effects of the scheme on behaviour**

275. a) the most obvious effect is the intimidation effect. The scheme is now known to increase traffic throughout the minor roads of Glossop. This will make active travel less attractive, and the job of health promotion that much harder. The costs of this will be substantial, let alone the carbon impacts.
276. b) Both the construction of the scheme and its operation will attract massive attention. It acts as a huge billboard advertising the virtues of private vehicle travel. It acts directly as a reminder to get out in the car, to get a car if you don't have one (and can possibly afford it) and as an incentive to move freight by road. Potential increases in local travel could be estimated on the basis of experience elsewhere.
277. c) more subtle but perhaps even more pervasively it makes a loud statement that acting in a climate friendly way is just not important. It creates a permissive environment, one in which all carbon-intensive activities are quite ostentatiously given the thumbs up. It is the exact opposite of statements which would be helpful in a Climate Emergency. We all respond to what we see and hear around us.
278. d) the downstream effects of the scheme and of other similar schemes, are, taken together, massive. After all this road is part of a network, it is part of a strategic choice, and as the Case for the Scheme states on page 59, para. 4.5.7: *"It should be considered that the*

*study has been undertaken on a wider network, which is referred to as the modelled network (general coverage of the whole country). The Scheme predicted increase in traffic within this network, **due to its objective to increase capacity**” (my emphasis). This network effect can be estimated by examining known data from other schemes.*

279. e) and then there are the effects due to the fact that this project by its sheer size sucks up all the oxygen in the room. It takes large resources of political goodwill, officer time, finance materials manpower and perhaps above all space.
280. f) one result of this is very likely to be a lack of financial resources if the area wishes to pursue active travel on an area-wide basis, and/or public transport on the scale required to provide proper frequencies and destinations on a scale large enough to make a real difference. *(DW Note: It is hard to generate figures for extra emissions caused by people not doing something because the option is not there. For the answer to this conundrum, see paras. 287-288 below)*
281. g) another resource issue worthy of comment is space. If more and more people see that active travel is being disadvantaged by more cars and therefore end up trying to get one then all the cars have to sit somewhere for the 95% of time when they don't go anywhere. And this is valuable space which then cannot be allocated to an improved urban environment where people would want to cycle and walk. *(see note at paragraph 280)*
282. h) by giving preference to private travel over public transport, a strong message is conveyed which is likely to depress public transport usage even more, thus reducing still further the viability of public transport. This creates a vicious spiral downwards which would have a definite negative impact on carbon emissions (as well as on public finances!). *(see note at paragraph 280)*
283. i) all these effects should be considered and assessed. What shifts are likely to happen when car use is prioritised? What shifts in the other direction would have happened if car use was not prioritised and a package of sustainable travel was implemented? Data available, I am sure, from numerous sources.
284. Some of those headings might seem hypothetical but others are very practical. The obvious way to make progress is to take a close look at places where sustainable travel has really been promoted and see what the carbon reductions were and then map these reductions onto Glossop Dale.

### **Comparison of total scheme carbon emissions with the carbon budgets of the affected local authorities**

285. Carbon budgets can be obtained from the Tyndall Centre, and from the government's allocation of carbon budget to each local authority, done by cascading down from national targets (with special allowances for such special circumstances as hosting a cement works!), as mentioned if I remember correctly in one of the DL7 submissions which have already been made, and which I had a peek at.



286. Baseline figures for current emissions and past trends in emissions are available at the NAEI website already mentioned above (*see para. 171*).

**Carbon comparison between the scheme as proposed and a sustainable transport package**

287. The other way to tackle the issue of doing a carbon assessment is the obvious one of actually stating a sustainable transport alternative and what it would comprise and then calculating the carbon effects of that new system. Those emissions could then be compared to the emissions arising from the scheme.

288. A suggested package exists in outline at this EiP, and so an indicative carbon comparison could be achieved and might very well be simpler and quicker to do than the method of assessment hinted at above.

## **Chapter 4 Conclusion and Coda**

289. Please can you Sirs, the ExA, insist that the applicant does a proper carbon assessment? I just have to remind you of two things. First, as the climate emergency is a real threat, it cannot be sidestepped, it must be faced. And the second thing is that an EiP process is there to protect us in effect from mistakes, to let the good and useful things through, and to protect the public interest.

### **CODA**

The publication of the UN's latest report on climate change informed by the world's top scientists and endorsed by global governments has been described as a massive 'wake up call' on the climate emergency. Following an IPCC (Intergovernmental Panel on Climate Change) review of more than 14,000 scientific papers concluding that human activities are 'unequivocally' causing climate change, the 'code red' warning for humanity could not be any clearer.

The report acts as a stark reminder that in just 3,000 days, carbon credit runs out. This means we have 3,000 days left to prevent climate catastrophe. The race to net zero has started but we must remember we are not racing against each other, rather, we are racing against time.