

A12 Chelmsford to A120 widening scheme

TR010060

9.81 Judgement Boswell v Secretary of State for Transport and National Highways

Rule 8(1)(k)

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Infrastructure Planning (Examination Procedure)
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A12 Chelmsford to A120 widening scheme
Development Consent Order 202[]

Judgement Boswell v Secretary of State for Transport and National Highways

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1 Summary

- 1.1.1 On 7 July 2023, judgment was handed down in R (Boswell) v Secretary of State for Transport [2023] EWHC 1710 (Admin). The judgment is in respect of three separate judicial reviews that were joined (cases CO/2837/2002, CO/3506/2002 and CO/4162/2002). All three claims were brought by Dr Boswell and asserted that the cumulative assessments of carbon emissions in the environmental impact assessment process in three applications by National Highways for Development Consent Orders (DCOs) for road schemes on the A47 were unlawful and contrary to the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017. A copy of the judgment is attached in Appendix A. The Court confirmed that the approach taken to the assessment of cumulative impact of carbon emissions in all three decisions did not breach the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 and was lawful.
- 1.1.2 The applications for three judicial reviews were raised in the Deadline 2 submission written representations of Climate Emergency Policy and Planning [REP2-044]. Those written representations alleged that the assessment of cumulative carbon emissions undertaken by the Applicant and presented in the Environmental Statement (ES) for the A12 Chelmsford to A120 Widening Scheme was in breach of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 and that an absence of the assessment of cumulative carbon emissions in the way that Dr Boswell asserted should be undertaken rendered the ES unlawful.
- 1.1.3 The judgment is relevant to the ExA's consideration of the greenhouse gas emissions assessment for the A12 scheme because National Highways has taken the same approach to undertaking the assessment of likely significant climate effects in the case of the A12 as in the three A47 highway schemes that were the subject of the judicial reviews brought by Dr Boswell. R (Boswell) v Secretary of State for Transport confirms that the approach taken by the Applicant is lawful and that the ExA and the Secretary of State can adopt that approach in their assessments of likely significant effects as part of the EIA of the A12 Chelmsford to A120 Widening Scheme.

Appendix A Full text of judgement



Neutral Citation Number: [2023] EWHC 1710 (Admin)

Case No: CO/2837/2022, CO/3506/2022,
CO/4162/2022

IN THE HIGH COURT OF JUSTICE
KING'S BENCH DIVISION
ADMINISTRATIVE COURT
PLANNING COURT

Royal Courts of Justice
Strand, London, WC2A 2LL

Date: 7th July 2023

Before :

The Hon. Mrs Justice Thornton DBE

Between :

THE KING
(on the application of)
ANDREW BOSWELL

Claimant

- and -

SECRETARY OF STATE FOR TRANSPORT

Defendant

-and-

NATIONAL HIGHWAYS

**Interested
Party**

David Wolfe KC, Peter Lockley and Ben Mitchell (instructed by **Richard Buxton Solicitors**)
for the **Claimant**

James Strachan KC and Rose Grogan (instructed by **Government Legal Department**) for
the **Defendant**

Reuben Taylor KC (instructed by **Womble Bond Dickinson (UK) LLP**) for the **Interested
Party**

Hearing dates: 10th and 11th May 2023

Approved Judgment

This judgment was handed down remotely at 11:00am on 7th July 2023 by circulation to the parties or their representatives by e-mail and by release to the National Archives.

.....
THE HONOURABLE MRS JUSTICE THORNTON DBE

The Hon. Mrs Justice Thornton :

Introduction

1. The Claimant, Dr Boswell, challenges three decisions of the Secretary of State for Transport, to grant consent for three road schemes along the A47 in Broadland, Norfolk. The schemes are all within a twelve-mile radius of Norwich. They are designated as nationally significant infrastructure.
2. Before deciding to grant consent for the schemes, the Secretary of State assessed the carbon emissions expected to be generated by each scheme, in particular, the emissions from vehicles using the roads once operational. He acknowledged that each scheme will lead to an increase in carbon emissions. However, he concluded that when compared with the UK's national carbon budgets which span the period from 2023 to 2037, the increase in emissions from each scheme is not significant (ranging from 0.001% - 0.004% of any carbon budget). In each case he concluded that the scheme is compatible with the UK's trajectory towards 'Net Zero'. The term 'Net Zero' refers to the statutory duty on the Secretary of State, under the Climate Change Act 2008, to ensure that the net UK carbon account for the year 2050 is at least 100% lower than the 1990 baseline.
3. The Claimant, Dr Boswell is a scientist with a background in computer modelling of complex phenomena, including climate change. The thrust of his challenge is that the Secretary of State is under a legal duty to assess the cumulation of environmental effects with other existing and/or approved projects and he acted unlawfully in failing to meaningfully assess the combined carbon emissions from the three road schemes. The particular focus of Dr Boswell's criticism at the substantive hearing of the claim was that, in coming to his view about the carbon impacts, the Secretary of State did not consider it necessary to compare the combined carbon emissions from the three A47 schemes against the UK's national carbon budgets.
4. Dr Boswell calculates that, together, the carbon emissions from the three schemes in combination with other developments in the local area, amounts to 0.47% of the UK's 6th national carbon budget). Dr Boswell contends that using up almost half a percent of the UK's 6th carbon budget for relatively small schemes in a small area of Norfolk is significant and leaves very limited emission space for other sectors of the economy. Considerable amounts of carbon will need to be offset somewhere else in the economy if the road schemes are built.
5. The question for the Court is whether the approach adopted by the Secretary of State in assessing cumulative impacts breaches the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (2017/572). If it does, the Court must then decide whether a fallback position adopted by the Secretary of State, of assessing the cumulative impacts for the second and third road schemes, is sufficient to correct any legal deficiency in the earlier decision making.
6. For the reasons that follow, I have reached the view that whilst, in parts, unhelpfully expressed, the approach taken to the assessment of the cumulative impacts of carbon emissions does not breach the Infrastructure Planning (Environmental Impact Assessment) Regulations and was lawful. My conclusion is based on the following:

- i) The question of what impacts should be addressed cumulatively; how the cumulative impacts might occur; whether the effects are likely to be significant and if so, how they should be assessed are all matters of evaluative judgment for the Secretary of State (§43 and §77 of this judgment). The task for the Court is to consider whether the evaluative judgment(s) made by the Secretary of State in this respect fall outside the range of reasonable decisions open to him or whether there is a demonstrable flaw in the reasoning which led to his decision (§46). As the primary judges of the fact, the views of the Secretary of State and the Planning Inspectors who publicly examined the road schemes are entitled to considerable weight (§46).
- ii) The carbon emissions from each road scheme were calculated and compared against the UK's national carbon budget (§54).
- iii) Consideration was given to the cumulative impacts of carbon emissions from the three road schemes. A figure was produced for the combined emissions from the three schemes (and other local schemes), thereby satisfying the requirement of Schedule 4 paragraph 5 of the Regulations for a 'description' of the likely significant effects of the development on the environment resulting from the cumulation of effects with other existing and/or approved projects (§78). The figure produced was not however assessed for significance against the UK's national carbon budgets. This was a matter of evaluative judgment for the Secretary of State
- iv) The Secretary of State's reasons for not comparing the combined emissions against the national target were, broadly speaking, threefold: 1) there is no single prescribed approach to assessing the cumulative impacts of carbon emission; 2) the approach to assessing the cumulative impact of carbon emissions differs from that of other environmental impacts because carbon impacts are not geographically limited to a local area and 3) the appropriate basis for assessing the significance of the emissions was to compare them against the UK's national carbon budgets (§63).
- v) Recent caselaw confirms that, on the basis of current policy and law, it is permissible for a decision maker to look at the scale of carbon emissions relative to a national target (§69). The proposition that the impact of carbon emissions is not limited to a geographical boundary is a scientific assessment to which the Court should afford respect (§73).
- vi) Accordingly; there is a logical coherence to the Secretary of State's decision not to compare the combined carbon emissions from local road schemes against the UK's national carbon target, when those carbon emissions do not have a local geographic limit. Independent guidance counsels against the arbitrary cumulation of projects in these circumstances. As Counsel for the Secretary of State put matters; for present purposes it does not matter whether the emissions are from a road in Norfolk or Oxford. Their impact is the same and the target against which they are being assessed is national not local (§81-83). A different approach might have been required had a different target been used (§86).
- vii) Dr Boswell's concerns about the limited value of the exercise undertaken, of assessing the significance of an individual development project against a

national carbon target, is acknowledged in independent guidance and in recent caselaw (§85). However, on the state of present scientific knowledge, such an approach cannot be considered unlawful. Dr Boswell’s case is, on analysis, a challenge to the acceptability of the carbon impacts from the three road schemes. Acceptability of impact is not a matter for the Courts, who must be astute to avoid being drawn into the arena of the merits of climate decision making (§84).

The legal framework for the challenge

The Planning Act 2008

7. The three road schemes are designated as nationally significant infrastructure projects under the Planning Act 2008 (sections 14(1)(h) and 22). Development consent is required for their development (section 31). A decision on consent is taken by the Secretary of State after the application has been examined by an Examining Authority and a report produced setting out the Examining Authority’s recommendation on consent (section 83).

The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017

8. The Infrastructure Planning (Environmental Impact Assessment) Regulations (2017/572) (‘the IEIA Regulations’) form the basis of the challenge. They set out the process of environmental impact assessment for development consent under the 2008 Planning Act.
9. Regulation 4(2) provides that:

“...the Secretary of State...must not make an order granting development consent...unless an EIA has been carried out in respect of that application.”
10. Regulation 5 provides that:

“(1) The environmental impact assessment (EIA) is a process consisting of

 - a. The preparation of an environmental statement by the applicant
 - b. The carrying out of any consultation, publication and notification as required under these Regulations...and
 - c. the steps that are required to be undertaken by the Secretary of State pursuant to Regulation 21

(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

.....

(5) The Secretary of State ... must ensure they have or have access as necessary to sufficient expertise to examine the environmental statement.”
11. Regulation 14 provides that:

“(2) An environmental statement is a statement which includes at least

- a) a description of the proposed development...
- b) a description of the likely significant effects of the proposed development on the environment

.....

- f) any additional information specified in Schedule 4 relevant to the specific characteristics of the particular development ...and to the environmental features likely to be significantly affected.

(3) The environmental statement...must

.....

- b) include the information reasonably required for reaching a reasoned conclusion on the significant effects of the development on the environment, taking into account current knowledge and methods of assessment

and;

4) In order to ensure the completeness and quality of the environmental statement

- a) the applicant must ensure that the environmental statement is prepared by competent experts and
- b) the environmental statement must be accompanied by a statement from the applicant outlining the relevant expertise or qualification of such experts.”

12. Regulation 20 provides that where an examining authority is of the view that it is necessary for the environmental statement to contain further information, the information must be provided and consulted upon.

13. Regulation 21 provides that:

“1) when deciding whether to make an order granting development consent for EIA development, the Secretary of State must

- a) examine the environmental information;
- b) reach a reasoned conclusion on the significant effects of the proposed development on the environment, taking into account the examination referred to in sub paragraph a) and where appropriate any supplementary information considered necessary;
- c) integrate that conclusion into the decision whether an order is to be granted....”

14. Schedule 4 is headed information for inclusion in environmental statements. Paragraph 3 requires a description of the current state of the environment and likely evolution so far as can be assessed on the basis of scientific knowledge. Paragraph 4 requires:

“A description of the factors specified in regulation 5(2) likely to be significantly affected by the development: population, human health.....air, climate (for example greenhouse gas emissions, impacts relevant to adaptation)...”

15. Paragraph 5 requires in relevant part as follows:

“A description of the likely significant effects of the development on the environment resulting from, inter alia—

.....

(e) the cumulation of effects with other existing and/or approved projects, taking into account any existing environmental problems relating to areas of particular environmental importance likely to be affected or the use of natural resources;

(f) 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;

.....

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.....”

16. Paragraph 6 requires a description of the methods or evidence used to assess the significant effects on the environment, “including details of difficulties (for example technical difficulties or lack of knowledge) encountered compiling the required information and the main uncertainties involved.”

The Climate Change Act 2008

17. The Secretary of State is subject to a duty to ensure that the net UK carbon account for the year 2050 is at least 100% lower than the 1990 baseline. This is commonly referred to as ‘net zero’ (section 1 of the Climate Change Act 2008). Section 4(1) of the same Act imposes a duty on the Secretary of State to set carbon budgets to cap carbon emissions in a series of five-year periods (subsection (1)(a)), and to ensure that the net United Kingdom carbon account for a budgetary period does not exceed the carbon budget (subsection (1)(b)). Carbon budgets must be set with a view to meeting the target for 2050 (section 8(2)). Thus, this ensures progress towards the 2050 target in the period before 2050. The process by which a budget is set has been summarised by the Court of Appeal in R (Packham) v Secretary of State for Transport [2021] Env L.R. 10 at §83. No issue arises in this respect and it is not necessary to repeat the process here.
18. The relevant statutory instruments specify a figure expressed in tonnes of CO₂ equivalent which represents the total allowable net greenhouse gas (‘GHG’) emissions over the relevant budgetary period of 5 years. The budgets of relevance to the present claim are the 4th to 6th budgets. The fourth carbon budget is 1,950 MtCO₂e for 2023 - 2027. This represents a reduction of 50% on 1990 levels of GHG over the 5 year period. The fifth carbon budget set a budget of 1,725 MtCO₂e for 2028-2032. This represents an average reduction of 57% on 1990 levels of GHG over the 5 year period. The 6th carbon budget is 965 MtCO₂e for 2033 – 2037. This represents a 78% reduction over the 5 year period. Carbon budgets have not yet been set for the remaining projected lifespan of the schemes (2038 – 2087).

The policy framework

19. Any application for development consent under the 2008 Planning Act must be determined in accordance with the relevant national policy statement (NPS), where one has effect (sections 5 and 104 Planning Act 2008). The NPS on National Networks (2015) is a national policy statement which sets out Government policy on the strategic road network. The following is said in relation to carbon emissions:

“...the impact of road development on aggregate levels of emissions is likely to be very small.” (5.16)

“...It is very unlikely that the impact of a road project will, in isolation, affect the ability of Government to meet its carbon reduction plan targets...” (5.17)

“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. It includes a range of non-planning policies which will, subject to the occurrence of the very unlikely event described above, ensure that any carbon increases from road development do not compromise its overall carbon reduction commitments. The Government is legally required to meet this plan. Therefore, any increase in carbon emissions is not a reason to refuse development consent, unless the increase in carbon emissions resulting from the proposed scheme are so significant that it would have a material impact on the ability of Government to meet its carbon reduction targets.” (5.18)

Factual background

The three schemes

20. The three schemes are:
- (1) The A47 Blofield to North Burlingham scheme to upgrade a short section (2.6km (1.61 miles)) of the A47 to dual carriageway running between Blofield and North Burlingham and associated works. Development consent was granted on 22 June 2022 (Scheme 1).
 - (2) The A47 North Tuddenham to Easton scheme for 9km (5.59 miles) of offline construction of the A47 between North Tuddenham and Easton and associated works. Development consent was granted on 12 August 2022 (Scheme 2).
 - (3) The A47/A11 Thickthorn Junction scheme for a new connector road from the A11 to A47 and improvements to Thickthorn Junction and associated works. Development consent was granted on 14 October 2022 (Scheme 3).

The decision-making process

21. The Secretary of State made three separate decisions in relation to the development consent for each scheme. His decisions were made following separate examinations of each of the schemes which produced three reports by three different Planning Inspectors (the Examining Authority). In coming to their recommendation which was, in each case, to grant consent for the particular scheme the Planning Inspectors examined the environmental statement for the scheme under consideration. The environmental statement was produced by the applicant for consent, National Highways.

22. Dr Boswell actively participated the examinations and made representations in relation to a number of issues relevant to climate, including the approach to the cumulative impact assessment of carbon emissions.

The Secretary of State's assessment of the significance of the carbon impact

23. In each scheme the Secretary of State concluded that the net carbon impact of the scheme would be unlikely to have a material impact on the UK Government meeting the relevant UK carbon budget. Whilst the assessment was the same for each of the schemes, the most developed explanation for his view is set out in the decision letter for the third scheme and is as follows (the references to NPSNN are to the National Policy Statement on National Networks):

“Assessing carbon emissions and their significance

93. The Secretary of State is aware that all emissions contribute to climate change but considers that there is no set significance threshold for carbon. The Secretary of State does not consider that net zero means consent cannot be granted for development that will increase carbon emissions. The Secretary of State considers that, as set out in NPSNN paragraph 5.18, it is necessary to continue to evaluate whether (amongst other things) the increase in carbon emissions resulting from the Proposed Development would be so significant that it would have a material impact on the ability of Government to meet its carbon reduction targets. The Secretary of State considers that the NPSNN allows for development consent if the Proposed Development's carbon emissions do not have a material impact on the Government's ability to meet its carbon reduction targets. Though the Secretary of State acknowledges that the Proposed Development will result in an increase in carbon emissions, adversely affecting efforts to meet the 2050 target, he does not consider that this means the increase would be so significant as to have a material impact on the Government's ability to meet its carbon reduction targets.

94. The Secretary of State considers that the approach set out in the NPSNN continues to be relevantand aligns with the approach to significance set out in the Institute of Environmental Management & Assessment ('IEMA') 2022 guidance Assessing Greenhouse Gas Emissions and Evaluating their Significance ('the IEMA Guidance'). This sets out that the crux of significance is not whether a project emits GHG emissions, nor even the magnitude of GHG emissions alone, but whether it contributes to reducing GHG emissions relative to a comparable baseline consistent with a trajectory towards net zero by 2050 (section 6.2).

95. The IEMA guidance also addresses significance principles and criteria in section 6.3 and Figure 5...

...

97. The Secretary of State notes that the carbon budgets are economy-wide and not just targets in relation to transport. The Secretary of State considers that the Proposed Development's contribution to overall carbon levels is very low and that this contribution will not have a material impact on the ability of Government to meet its legally binding carbon reduction targets. The Secretary of State therefore considers that the Proposed Development would comply with NPSNN paragraph

5.18. *The Secretary of State also considers that the Proposed Development's effect on climate change would be minor adverse and not significant and this assessment aligns with section 6.3 and Figure 5 of the IEMA guidance.*

.....

99. *Overall, the Secretary of State considers that: over time the net carbon emissions resulting from the Proposed Development's operation will decrease as measures to reduce emissions from vehicle usage are delivered; the magnitude of the increase in carbon emissions (from construction and operation) resulting from the Proposed Development is predicted to be a maximum of 0.0015% of any carbon budget and therefore very small; the Government has legally binding obligations to comply with its objectives under the Paris Agreement; and there are policies in place to ensure these carbon budgets are met, such as the Transport Decarbonisation Plan and the Applicant's own Net Zero Highways plan. The Secretary of State is satisfied that the Proposed Development is compatible with these policies and that the small increase in emissions that will result from the Proposed Development can be managed within Government's overall strategy for meeting the 2050 target and the relevant carbon budgets. The Secretary of State considers that there are appropriate mitigation measures in place to ensure carbon emissions are kept as low as possible. The Secretary of State is therefore satisfied that the Proposed Development would comply with NPSNN paragraph 5.19. The Secretary of State also considers that the Proposed Development will not materially impact the Government's ability to meet the 2050 target."*

The assessment of the cumulative impacts of the carbon emissions for the three schemes

24. The approach to assessing the cumulative impacts of the carbon emissions from the three road schemes became a material issue at the public examination of all three schemes. All three Inspectors addressed the issue in their reports.

Scheme 1

25. The Inspector in Scheme 1 took relevant matters as follows:

"4.13.25 I asked the Applicant whether it was appropriate to include other major road schemes in the baseline and how, given the change in carbon emissions reported would primarily be as a result of the Proposed Development (DS-DM), this represented a cumulative assessment. On the matter of a cumulative carbon emission / climate change assessment, the Applicant maintained that a cumulative assessment of different projects (together with the Proposed Development) is inherent within the climate assessment methodology, given:

- The inclusion of the Proposed Development and other locally committed development (including the A47 North Tuddenham to Easton NSIP scheme, the A47 / A11 Thickthorn Junction NSIP scheme and the Norwich Western Link) within the traffic model so as to understand the effects of the Proposed Development along with other committed developments in the ARN; and*

- *Consideration of the Proposed Development against the UK carbon budgets, which are inherently cumulative as they consider and report on the carbon contributions across all sectors.*

4.13.26. I have no substantive reasons to doubt the reliability of the Applicant's traffic model, the details of which can be found in the TA [REP1-044]. However, I asked the Applicant why, whilst embedded carbon emissions had been taken into account for the Proposed Development, this was not the case for the other committed developments considered, including the major road schemes identified. I also asked the Applicant at ISH2 (Action Point 12 of [EV-036a]) whether a cumulative effects assessment should take into account other proposed major road schemes, such as all those identified within RIS2.

4.13.27. The Applicant indicated that whilst such exercises could be carried out, it was not necessary for it to do so. This was primarily given that the Applicant considers its carbon emissions / climate change assessment complies with the NNNPS, EIA Regulations and relevant DMRB guidance. Further justification on this is provided by the Applicant at Appendix A of submission [REP7-025]" (4.13.25 – 14.13.27).

26. The Inspector was prepared to accept that the cumulative impact of the development with other relevant proposed road schemes in the Government's strategy for the strategic road network would not give rise to significant climate effects given they would not have a material impact on the UK carbon budgets but nonetheless stated that:

"the SoS may wish to consider further the adequacy of the Applicant's consideration of cumulative carbon emissions / climate change effects for the purposes of the NNNPS and EIA Regulations." (4.13.30)

27. In his decision letter for Scheme 1, the Secretary of State noted that concerns had been raised around the assessment of the cumulative impacts of carbon emissions but concluded that:

"59. The Secretary of State considers that as there is no single prescribed approach to assessing the cumulative impacts of carbon emissions, there are a number of ways such an assessment can acceptably be undertaken ...

60. The Secretary of State is also conscious that the impact and effect of carbon emissions on climate change, unlike other EIA topics, is not limited to a specific geographical boundary and that the approach that needs to be taken to assess the cumulative impact of carbon emissions is different from other EIA topics. Noting this, and that there is no defined distance for assessing the impact of carbon emissions, the Secretary of State considers that the Applicant's approach to assessing the impact of the Proposed Development on carbon is acceptable as it takes into account the Proposed Development as well as all other developments likely to have an influence both on the Proposed Development and on the area the Proposed Development is likely to influence.

61. The Secretary of State also notes that the Applicant argued that consideration of the Proposed Development against the UK carbon budgets is inherently cumulative as these account for carbon contributions across all sectors [ER

4.13.25]. *The Secretary of State agrees that assessing a scheme against the national carbon budgets is an acceptable cumulative benchmark for the assessment for EIA purposes with regard to both construction and operation. This is because carbon budgets account for the cumulative emissions from a number of sectors and it is therefore appropriate to consider how the carbon emissions of the Proposed Development compare against this.*”

Scheme 2

28. The Second Inspector noted that the issue of climate change and GHG emissions had featured prominently throughout the examination. He requested further information about the cumulative impacts.
29. The Inspector came to the following view about the approach taken by National Highways:

“5.7.70. The UKs government approach is one of adopting carbon budgets to control carbon emissions and ensure compliance with agreed national targets. These are set by sector, with surface transport being specifically identified. The purpose of these budgets is to ensure that the net UK carbon account for a budgetary period does not exceed the set carbon budget. These budgets are set nationally, with no legal duty to set carbon budgets at a smaller scale. Furthermore, I note that the Government's overall strategy for meeting carbon budgets, along with the net zero target, should be viewed as part of an economy-wide transition.

5.7.71. Therefore, from the evidence before the Examination, I am satisfied that the national carbon budgets represent the most appropriate figures against which to assess the carbon emissions from the Proposed Development.

5.7.74. On the basis of the above, I therefore consider that the carbon emissions from the Proposed Development, on its own, would be unlikely to have a material impact on the UK Government meeting the carbon reduction targets in place at the time of the assessment.

5.7.79. It is clear from the Applicant's own traffic model that the Proposed Development, once operational, will support additional traffic movements and therefore, ultimately result in an increase in vehicle emissions. However, this needs to be viewed against long-term Government policy which aims to remove all road emissions at the tailpipe, through the gradual switch to low emission vehicles. This Policy is one part of the Governments approach towards achieving Net Zero and should not be discounted. I am also mindful of the Government's legally binding obligation to comply with its objectives under the Paris Agreement.

5.7.82. I agree with Dr Andrew Boswell [REP6-020] and others that the emissions from Proposed Development should not be viewed in isolation.

5.7.83. The Applicant did not provide a separate assessment of cumulative impacts of the Proposed Development with other highway developments, either locally or nationally. However, they considered that the Government's carbon budgets are themselves cumulative [REP10-005]. Furthermore, they identify that the traffic

model used to assess the Proposed Development is also inherently cumulative for a number of reasons [REP10-005].

5.7.85. It is clear that there is no single or agreed approach towards the assessment of cumulative impacts of carbon emissions. There are a number of ways such an assessment can acceptably be undertaken. I accept that the impact and effect of carbon emissions on climate change, is not limited to a specific geographical boundary and that a different approach needs to be taken to assess the cumulative impact of carbon emissions, than would be used to assessed cumulative impacts associated with other EIA topics.

5.7.86. On this basis, and given the lack of a defined boundary against which to assess the impact of carbon emissions, along with the advice contained within DMRB and the NPSNN, I consider that the approach taken by the Applicant is reasonable.

5.7.87. In terms of Carbon Budgets, the Applicant position is that these are inheritably cumulative [REP10-005] as they include the total carbon emissions from a wide range of sectors. Due to the nature of the budgets and the lack of local figures, the Applicant was unable to produce a local, or regional baseline against which to assess the Proposed Development [REP10-005].

5.7.88. I accept that, the Carbon Budgets represent the only statutory targets in relation to carbon emissions. This approach is advocated by the NPSNN. Furthermore, I also accept that the Applicant's traffic model includes traffic generated from other developments and allows for growth in traffic levels, although I acknowledge that this was less than clear from the submissions.

5.7.89 I acknowledge the submissions of Dr Boswell and others in relation to the Applicants' cumulative assessment and agree that there may be more suitable ways to undertake such an assessment. However, based on the current policy framework and guidance, it is my view that the Applicant's approach, through the use of carbon budgets, sufficiently considers the cumulative effects with other projects or programmes."

30. In his decision letter in relation to Scheme 2 the Secretary of State agreed that emissions from the Proposed Development should not be viewed in isolation and acknowledged that the Applicant did not provide a separate assessment of cumulative impacts of the Proposed Development with other local or national highway projects but concluded that:

"95. Whilst noting the concerns raised and proposals by IPs around alternative approaches to assessing carbon cumulatively.....the Secretary of State agrees with the ExA that there is no single or agreed approach to assessing the cumulative impacts of carbon emissions as there are a number of ways such an assessment can acceptably be undertaken. The Secretary of State also notes that the impact and effect of carbon emissions on climate change, unlike other EIA topics, is not limited to a specific geographical boundary and that the approach that needs to be taken to assess the cumulative impact of carbon emissions is different than would be used to assess the cumulative impacts associated with other EIA topics. Noting this and that there is no defined boundary for assessing the impact of carbon emissions, the

Secretary of State agrees with the ExA that the Applicant's approach to assessing the impact of the Proposed Development on carbon emissions and its cumulative impact is acceptable.

96. It is also noted that the Applicant considered that national carbon budgets are inherently cumulative as they include the total carbon emissions from a wide range of sectors (ER 5.7.87). The Secretary of State notes that the ExA concluded that the Applicant's approach, through the use of carbon budgets, sufficiently considers the cumulative effects with other projects and programmes (ER 5.7.89). The Secretary of State agrees that assessing a scheme against the national carbon budgets is an acceptable cumulative benchmark for the assessment for EIA purposes with regard to both construction and operation. This is because carbon budgets account for the cumulative emissions from a number of sectors and it is therefore appropriate to consider how the carbon emissions of the Proposed Development compare against this."

Scheme 3

31. The Third Inspector accepted the approach adopted by National Highways on the basis the only realistic comparator was the national level carbon budgets, accounting for information which is presently known and can be relied upon for decision making purposes and they are inherently cumulative.
32. The Secretary of State agreed, for the same reasons given in relation to Schemes 1 and 2, adding:

"With regard to the Applicant's methodology for assessing emissions from the Proposed Development, the ExA concluded that it did not appear to conflict with current policy or guidance, also having regard to wider regulatory requirements (ER 5.11.75). The Secretary of State also agrees with this conclusion.

109. The Secretary of State has considered all responses on this matter and notes that whilst various guidance may recommend an assessment of environmental impacts at a sub-national level, in relation to carbon emissions, the Secretary of State agrees with the ExA that the Applicant is not able to meaningfully assess the cumulative effects of carbon from the Proposed Development against anything other than the national level carbon budget (ER 5.11.81).

.....

The Secretary of State is satisfied that an assessment against these budgets, as provided by the Applicant, is consistent with the NPSNN. Given this, the Secretary of State considers that the assessment carried out by the Applicant is reasonable against the information available, sufficient to understand the impacts of the Proposed Development on climate and is therefore compliant with the EIA Regulations."

The fall back position (Scheme 2 and 3)

33. By the time the Secretary of State came to issue his decision to grant development consent for Scheme 2, Dr Boswell had commenced these legal proceedings in relation

to Scheme 1 and had raised concerns about the cumulative carbon assessment in Scheme 2. The ministerial submission seeking a decision on content for Scheme 2 summarised his representations. Shortly before the decision on Scheme 2 was issued the Head of the Transport Infrastructure Planning Unit at the Department for Transport sent an email to the Minister's team in the following terms:

“This is an entirely new paragraph so was not referenced in the submission and was not included in the version of the decision letter that was attached to the submission to ministers. The line that we would like to ensure the Secretary of State is content with in particular, is the one highlighted below in yellow as this is a matter of judgement. The decision on this scheme is due out today. If it is not possible to get the Secretary of State's agreement, we can still issue the decision without this paragraph.

1. The Secretary of State notes that Interested Parties like Dr Boswell have argued that a cumulative assessment requires one to consider the combined emissions from the Proposed Development alongside other developments that are included within the Do Minimum scenario, as against the Carbon Budgets. Whilst the Secretary of State does not agree that it is necessary to do this in addition to what has been done by the Applicant (for the reasons already stated) the Secretary of State notes that such combined emissions are reported within Table 14-9 of the Revised ES. This identifies that the total emissions in the Do- Something Scenario would be 12,190,870 tCO₂e over the fourth, fifth and sixth carbon budget periods where the relevant carbon budget periods are set out in the same Table. These combined emissions would therefore equate to approximately 0.263% of those combined budgets. The Secretary of State considers that such combined emissions also to be very small and not likely to affect the ability of the Government to meet its carbon reduction plan targets in any event.”

(the underlining above is the ‘yellow’ section referred to above in the email from the official)

34. This fallback position was included in the decision letters for the second and third schemes.

Criticisms of the environmental impact assessment

35. On behalf of Dr Boswell, it is said that the Secretary of State acted in breach of the IEIA Regulations in failing to conduct any lawful cumulative assessment of the carbon emissions. In particular, the Secretary of State failed to assess the significance of the combined carbon emissions from the three schemes (and other local projects) by comparing and calculating them as a percentage of the UK's national carbon budgets. That calculation was only done for emissions for the particular scheme under scrutiny.
36. It is said that the related road schemes are ‘existing and/or approved projects’ for the purposes of paragraph 5(e) of Schedule 4 to the EIA Regulations. The Secretary of State was under a legal duty to account for greenhouse gas emissions in the environmental statement and to consider them in his decision pursuant to Schedule 4 paragraph 5. It was a legal requirement to assess the significance of the cumulative impacts of the Scheme with existing and/or approved projects. An environmental statement that failed to conduct this cumulative assessment is defective because it fails to meet the

requirements of the IEIA regulations read with Schedule 4 paragraphs 5(f) and Regulation 5(2). The Secretary of State's reliance on the environmental statement in this regard rendered his decision unlawful and his approach to the consideration of significant effects of the Scheme was contrary to that required by Regulation 21(1).

37. The decision to grant development consent must be based on an assessment of the significant effects of the proposed development on the environment which must, in turn, take account of a description of the likely significant effects of the development on the environment resulting from the cumulation of effects with other existing and/or approved projects. That involves three stages: 1) describing those cumulative effects (i.e. estimating the quantities of carbon emissions) 2) assessment of their significance and 3) integration of that assessment into the decision as to the grant of development consent. The carbon emissions from each individual scheme were compared against each carbon budget and expressed as a percentage of the budget and the Secretary of State then considered whether there could be a material impact from the scheme on the ability of the Government to meet the carbon budget in question. This was not however done for the combined emissions from the scheme and related projects which made it impossible to assess lawfully whether the combined emissions will materially impact on the ability of Government to meet the carbon reduction targets.
38. There was no challenge on behalf of Dr Boswell to the numerical analysis in the Environmental Statement.
39. As to the fall back position adopted by the Secretary of State, it is said that he did not have the necessary information in the briefing from officials to make the judgment he did. There was an obvious error in aggregating the carbon budgets. The analysis does not include the construction emissions for Scheme 2 which is a material consideration. The new material and figures should have been consulted on pursuant to Regulation 20 of the IEIA Regulations because this was a fresh exercise using the Secretary of State's own figures and not figures from the consultation material. A central aspect of the EIA regime is public involvement.

Discussion

The framework for the Court's review

40. The issue for the Court is whether the Secretary of State breached the IEIA Regulations. The parties were in dispute as to the framework for the Court's assessment in this regard. On behalf of Dr Boswell, it was submitted that the question is one of law. It is a legal requirement to assess the significance of the cumulative impacts of a proposed project with existing and/or approved projects (Schedule 4 paragraphs 4 and 5, Regulation 5(2), Regulation 14(2)). Despite accepting the relevance of cumulative impacts National Highways/the Secretary of State failed to conduct any meaningful assessment of their cumulative impact, thereby failing in their legal duty. On behalf of the Secretary of State and National Highways, it was submitted that the question is one of judgment for the decision maker, with supervisory oversight by the Court. The approach adopted to the assessment of cumulative impacts in the decision making cannot be said to have been irrational.
41. The submission on behalf of Dr Boswell, that the assessment of cumulative impacts is a question of law, has been repeatedly rejected by the Court of Appeal:

“27 I turn then to what I regard as the main question: whether the Secretary of State should have concluded that the largest scheme involved indirect, secondary or cumulative effects of the July 2009 proposal?”

28. *First and foremost, this is, in my judgment, an issue of fact. Whether it is such or not has been at the centre of the argument to which we listened yesterday and today. But it is clear, as I see the matter, that it is indeed a matter of fact or of judgment: clear from the judgment of Sullivan LJ with whom Jacob LJ and Sir Mark Waller agreed in the case of Brown v Carlisle County Council: see paragraph 21. Sullivan LJ said in terms:*

‘The answer to the question -- what are the cumulative effects of a particular development -- will be a question of fact in each case.’

29 *It is clear also from the words of the regulation itself: "such information as is reasonably required" and "a description of the likely significant effects". These formulations import, as it seems to me, the application of a measured judgment to the evidence. This is not contradicted by the learning, of which Mr Drabble reminded us yesterday, which shows that the term "likely" in the regulation means "possible": see R(Bateman) v South Cambs DC & Ors [2011] EWCA Civ 157.*

30. *More deeply perhaps, Mr Drabble submitted on this part of the case that the question whether the effects of the larger scheme are cumulative effects of the smaller is itself one of law. This, with respect to Mr Drabble, is in my judgment a mistake.It seems to me that the texts are all consistent with the proposition that what are and what are not indirect, secondary or cumulative effects is a matter of degree and judgment.” (Laws LJ in Bowen-West v Secretary of State for Communities and Local Government Northamptonshire County Council & Ors [2012] EWCA Civ 321).*

42. A more recent expression of the principle appears in R (Preston New Road Action Group) v Secretary of State Communities and Local Government [2018] Env LR 18:

“A principle well established ..is that the existence and nature of ‘cumulative effects will always depend on the particular facts and circumstances of the project under consideration. (see Sullivan LJ’s judgment in Brown v Carlisle City Council, at [21, and Laws LJ’s judgment in Bowen-West v Secretary of State for Communities and Local Government [2012] Env. L.R. 22, at [28]). An equally robust principle is that an environmental statement is not expected to include more information than is reasonably required to assess the likely significant effects of the development proposed in the light of current knowledge.” (Lindblom LJ at [67])

43. Both cases were concerned with the EIA regime but it was common ground that the same principles apply to the IEIA Regulations. Regulation 5(2) of the IEIA Regulations provide that the EIA must identify, describe and assess in an appropriate manner, in light of each individual case, the direct and indirect significant effects. As is apparent from the underlined words, it is inherent in the language used that an evaluative judgment is required of the decision maker about the adequacy of the environmental assessment. More specifically, Regulation 14 deals with the requirements of an Environmental Statement. Regulation 14(2)(b) identifies that a statement is one which includes at least a “description” of “the likely significant effects of the proposed

development on the environment.” Regulation 14(2)(f) requires the inclusion of any additional information specified in Schedule 4 ‘relevant to the specific characteristics of the particular development or type of development and to the environmental features likely to be significantly affected’. Regulation 14(3)(b) identifies that an environmental statement must include the information “reasonably required” for reaching a reasoned conclusion on the environment, “taking into account current knowledge and methods of assessment.” Again, it is inherent in the language of the underlined wording that the question of what additional information specified in Schedule 4, needs to be included in an environmental statement is evaluative, as is the overall content of the statement. Further, the obligation is to identify, describe and assess the “significant effects” of proposed development, as is apparent from the repeated references to the phrase in the provisions listed above.

44. Counsel for Dr Boswell emphasised the analysis of the Court of Appeal in R (Larkfleet) v South Kesteven DC [2016] Env L.R 4. The EIA regulations do not permit technical or artificial steps that create loopholes or conceal or overlook environmental impacts. This is the root of the principle that large projects may not be carved up or ‘salami sliced’ to avoid EIA scrutiny. It is only lawful to divide up a series of works into separate EIA projects so long as the cumulative effect is considered in the environmental statement for each of the projects.
45. The claimant in Larkfleet, contended that the development proposals under scrutiny amounted to one project, an analysis rejected by the court. The fact that two development proposals might have a cumulative effect on the environment did not make them a single “project” for the purposes of the Directive. Where two or more distinct, but linked sets of proposals were contemplated, the environmental protection objective of the Directive was sufficiently secured by considering as far as possible their cumulative effects. In the present case however, Counsel for Dr Boswell did not suggest that the three schemes were one project. Nor did he suggest that the applicant had deliberately separated out (‘salami sliced’) the three projects so as to avoid the requirements for EIA. Each road scheme has undergone its own EIA. Whatever may have been the position earlier on in the proceedings, by the substantive hearing before me there was no challenge by the Secretary of State/National Highways to the proposition that the three schemes are related projects and a cumulative assessment was required. Before the Court, the core dispute between the parties was, on analysis, the adequacy of the assessment of cumulative impacts.
46. Accordingly; I proceed on the basis that the assessment of the cumulative impacts of carbon emissions from the three schemes requires the application of measured judgment to the evidence before the decision maker. In this context the task for the Court is to consider whether the decision arrived at falls outside the range of reasonable decisions open to the Secretary of State or whether there is a demonstrable flaw in the reasoning which led to it (R (Law Society) v The Lord Chancellor [2018] EWHC 2094 (Admin); [2019] 1 W.L.R. 1649 (§98). As the primary judges of fact, the views of the Planning Inspector and the Secretary of State are entitled to considerable weight (R (Bowen West) v Secretary of State (Laws LJ at §28, 29 and 30).

The assessment of carbon emissions in each of the road schemes

47. The methodology of the assessment of carbon emissions was the same for all three schemes and may be summarised as follows.
48. The carbon emissions from construction of the road were assessed on the basis construction would take twenty-two months. A figure of tonnes of carbon dioxide equivalent was arrived at using the Highways England Carbon tool. For Scheme 1 the amount was assessed at 25,765 tCO₂e. For Scheme 2 the figure was 87,727 tCO₂e and for Scheme 3 the figure was 25,946 tCO₂e.
49. The bulk of the carbon emissions from the scheme will be from traffic using the roads once they are operational (end user traffic emissions). To assess these, traffic modelling was done for the existing road and wider network, collectively referred to as the affected road network (ARN). The traffic modelling drew on the Norwich Area Transport Strategy Model (NATS Model) which was developed in line with the Department for Transport: Transport Appraisal Guidance (TAG), as well as local traffic modelling.
50. The forecasts of future traffic took account of household and employment growth as well as future developments in the area with a ‘more than likely’ or ‘near certain’ probability of delivery. These included other major road schemes, including the Norwich West Link and, of particular significance to the claim, the two other road schemes. So, in the case of Scheme 1, the baseline included traffic growth from Scheme 2 and Scheme 3; and so on.
51. The carbon emissions from the Affected Road Network were calculated over three key years: base year (2015), year of expected opening of the road in question (2025) and design year (2040). These baseline emissions or baseline estimate are referred to as the ‘Do minimum’ scenario and provided a baseline of anticipated traffic growth without the road scheme under scrutiny in place but which included the two other A47 schemes. For Scheme 1 the baseline emissions were estimated to be 59,396,960 tCO₂e.
52. A ‘Do Something’ figure of carbon emissions was then calculated. This comprised the carbon emissions from existing and future growth, including the two other A47 schemes, together with the proposed scheme in place. For Scheme 1 the figure was estimated to be 59,556,062 tCO₂e. The figure was sub-divided into a figure for the 4th – 6th carbon budgets. For Scheme 1 the figure was 3,214,283 tCO₂e for the fourth carbon budget period; 5,196,417 for the fifth carbon budget and 5,049,193 for the sixth carbon budget, with a remaining figure of 46,096, 170 for the period 2038 – 2087.
53. A comparison of the carbon emissions from the Do-Minimum scenario (without the Proposed Scheme) and Do-Something scenario (with the Proposed Scheme in place) was then undertaken. This produced a figure of the carbon emissions for the scheme only – i.e. an assessment of the carbon emissions associated with the project which was then compared against the three carbon budgets.
54. The net change in carbon emissions resulting from the road scheme in question was then estimated as a percentage of the UK carbon budgets.
55. For Scheme 1 the increase in carbon emissions as a result of the scheme was estimated to be 132,017 tCO₂e, which when compared against the relevant carbon budget, would represent approx. 0.0001% of the fourth, fifth and sixth carbon budgets. In Scheme 2 the increase in carbon emissions resulting from the proposed scheme represents up to

approx. 0.004% of the UK's 4th 5th and 6th carbon budgets over their respective periods. In Scheme 3 the total increase in carbon represents no greater than 0.0015% of the total emissions in any five year carbon budget period.

56. The emissions from 2037 could not be compared against a carbon budget as no budgets have been set for this period. The result was that the comparator could only be used for approximately 39% of the increases in emissions. The remaining 61% of the increase in carbon emissions over the 60 year lifespan of the schemes will occur after 2037 (the end of the last currently published UK carbon budget).

The assessment of cumulative impacts

57. The methodology set out above was contained in a chapter on Climate which formed part of the Environmental Statement for each scheme. The Environmental Statement also included a separate chapter on cumulative environmental impacts. The chapter examined the cumulative impacts in relation to a number of environmental receptors, but said the following in relation to the cumulative impacts of carbon emissions:

“As the construction and operational phase traffic data includes traffic associated with other developments, the emissions assessment reported within the climate chapter is inherently cumulative. Not included in the CEA to avoid double counting.

.....

Some environmental topics in the preceding chapters of this ES, have relied wholly, or in part, on the forecasts derived from the traffic model. As the traffic model includes future other developments, the assessments of the Proposed Scheme's effects within these topics have included cumulative impacts by default and therefore the effects are already reported within their assessments.”

58. Nothing more was said in the Environmental Statement about cumulative carbon impacts. No reference was made to any applicable guidance or science to support the analysis or to provide explanatory context. The cursory reference to the traffic model as “inherently cumulative” is unclear. The Planning Inspector who examined Scheme 2 noted a lack of clarity about the traffic model in this regard (‘I also accept that the Applicant’s traffic model includes traffic generated from other developments and allows for growth of traffic levels, although I acknowledge that this was less than clear from the submissions “(§ 5.7.88 of the Inspector’s Report into Scheme 2)). As it transpired, the reference in the Environmental Statement to the traffic data being ‘inherently cumulative’ may derive from guidance issued by the Planning Inspectorate which was shown to the Court at the hearing. The guidance provides that “Certain assessments, such as transport and associated operational assessments of vehicular emissions (including air and noise) may inherently be cumulative assessments. This is because they may incorporate modelled traffic data growth for future traffic flows. Where these assessments are comprehensive and include a worst case within the defined assessment parameters, no additional cumulative assessment of these aspects is required.”.

59. Nonetheless; it was common ground at the hearing that the ‘Do Something’ figure represents the projected carbon emissions (in tonnes equivalent of carbon emissions) from existing and future growth, which includes the two other A47 schemes as well as the emissions estimated to be generated from the particular A47 scheme under consideration. Thus, as Counsel for Dr Boswell accepted, the ‘Do Something’ figure combined the carbon emissions from the three schemes. A ‘Do Something’ figure was calculated for each carbon budget.
60. Whilst accepting that the ‘Do Something’ figure contained information on the combined carbon emissions, Counsel for Dr Boswell submitted that what matters is what was done with the ‘Do Something’ figure. At the hearing, the focus of his criticism was that the Do Something figure was not compared against the UK’s carbon budgets.
61. The Environmental Statement compared the ‘scheme only’ emissions against the carbon budgets. No reference was made to any further comparison against the budgets. Counsel for Dr Boswell focussed in his submissions on Schedule 4 paragraph 5 of the IEIA Regulations which sets out the information required in an Environmental Statement. However, EIA is a process that starts, but does not end with, the environmental statement. Regulation 5(1) provides that the environmental impact assessment is a process, a position confirmed by the Supreme Court in R (FoE) v Heathrow Airport Limited [2020] UKSC 52 at §142 and 143:

“143. As Sullivan J held in Blewett (paras 32-33), where a public authority has the function of deciding whether to grant planning permission for a project calling for an environmental impact assessment under the EIA Directive and the EIA Regulations, it is for that authority to decide whether the information contained in the document presented as an environmental statement is sufficient to meet the requirements of the Directive, and its decision is subject to review on normal Wednesbury principles. Sullivan J observed (para 39) that the process of requiring that the environmental statement is publicised and of public consultation “gives those persons who consider that the environmental statement is inaccurate or inadequate or incomplete an opportunity to point out its deficiencies”. The EIA Directive and Regulations do not impose a standard of perfection in relation to the contents of an environmental statement in order for it to fulfil its function in accordance with the Directive and the Regulations that it should provide an adequate basis for public consultation. At para 41 Sullivan J warned against adoption of an “unduly legalistic approach” in relation to assessment of the adequacy of an environmental statement and said:

.....

‘In an imperfect world it is an unrealistic counsel of perfection to expect that an applicant’s environmental statement will always contain the ‘full information’ about the environmental impact of a project. The Regulations are not based upon such an unrealistic expectation. They recognise that an environmental statement may well be deficient, and make provision through the publicity and consultation processes for any deficiencies to be identified so that the resulting ‘environmental information’ provides the local planning authority with as full a picture as possible. There will be cases where the document purporting to be an environmental statement is so deficient that it could not reasonably be described as an

environmental statement as defined by the Regulations ..., but they are likely to be few and far between.”

62. The Environmental Statements produced for each scheme were consulted upon and the relevant one was considered by each Planning Inspector for the scheme with which he was concerned. The issue of cumulative carbon impacts became a material issue at the examinations and the issue was considered by each Inspector. Dr Boswell made representations including writing a joint letter to the three Inspectors highlighting the concerns about the cumulative impacts and requesting a pause to the examinations for the matters to be considered further. The detail and authority of Dr Boswell’s representations was acknowledged by the Inspectors and appears to have focussed minds. The process continued with the assessment by the Secretary of State in the three decision letters, which also acknowledged Dr Boswell’s contribution. As Counsel for the Secretary of State pointed out, a formidable array of expertise had already been applied to the question of cumulative carbon emissions prior to the Court becoming seized of the issue.
63. In relation to cumulative impacts, the Secretary of State accepted the approach taken by National Highways in the Environmental Statement and provided further explanation. Although worded slightly differently in each scheme the substance is the same. It is apparent from the decision letters that the Secretary of State relied on three broad propositions in deciding not to compare the figure for the combined carbon emissions against the national carbon budgets:
- i) there is no single prescribed approach to assessing the cumulative impacts of carbon emissions
 - ii) carbon emissions occupy ‘a sui generis’ category for the purposes of considering cumulative environmental effects in that their impacts do not have a geographic boundary, unlike other environmental impacts (e.g noise)
 - iii) the appropriate comparator to assess the carbon emissions was the UK national carbon budgets and “consideration of the Proposed Development against the UK carbon budgets is inherently cumulative”.
64. Starting with the third proposition: it relates to the use of the UK’s national carbon budgets as the benchmark to assess the significance of the carbon emissions.
65. It is well-established that issues as to whether an effect is significant and the adequacy of any assessment of significant effects are matters of judgment for the decision-maker, in this case the Secretary of State. Such judgments are only open to challenge in the courts applying the conventional “Wednesbury” standard, the modern derivation of which is whether the decision falls outside the range of reasonable decisions open to the decision maker or whether there is a demonstrable flaw in the reasoning which led to it (R (Blewett) v Derbyshire County Council [2004] Env. L.R. 29 and R (Friends of the Earth Limited) v Secretary of State for Transport [2021] PTSR 190 at [142] to [145]) and R (Law Society) v The Lord Chancellor [2018] EWHC 2094 (Admin); [2019] 1 W.L.R. 1649 (at §98).
66. The environmental statement proceeded on the basis that the crux of significance for the purposes of assessing the carbon emissions was compliance with Net Zero. Each

scheme was compared against the national carbon budgets. The approach was adopted by the Secretary of State and is consistent with independent guidance published by the Institute of Environmental Management and Assessment (IEMA) in this respect:

“The crux of significance therefore is not whether a project emits GHG emissions, nor even the magnitude of GHG emissions alone, but whether it contributes to reducing GHG emissions relative to a comparable baseline consistent with a trajectory towards net zero by 2050.” (VI (6.2)).

67. The IEMA guidance explains that it is essential to provide context for the magnitude of GHG emissions reported in the EIA in a way that aids evaluation of these effects by the decision maker. The specific context for an individual project and the contribution it makes must be established through the professional judgement of an appropriately qualified practitioner, drawing on the available guidance, policy and scientific evidence.

68. Consideration was given to whether the A47 scheme under scrutiny, could or should, be assessed against different benchmarks but the conclusion was that the national targets were the only realistic benchmark:

“Therefore, the ExA is content that the Applicant is only able to realistically assess the cumulative effects of the GHG emissions for the proposed development against anything other than the national level carbon budgets accounting for information which is presently known and can be relied upon for decision making purposes (ExA report on Scheme 3 at 5.11.81)

.....

109...the Secretary of State agrees with the ExA that the Applicant is not able to meaningfully assess the cumulative effects of carbon from the Proposed Development against anything other than the national level carbon budget.” (Secretary of State’s decision letter for Scheme 3).

69. At the hearing, there was no challenge to the decision to use the UK’s national carbon budgets as the comparator against which to assess the significance of carbon emissions. Recent caselaw confirms that, on the basis of current policy and law it is permissible for a decision maker to look at the scale of carbon emissions relative to a national target:

“The IEMA rightly pointed out that no criteria or thresholds had been set by which to measure the “significance” of the GHG emissions from a particular proposal. Furthermore, no one has suggested that there was any guidance for assessing the acceptability of that contribution, whether expressed as a percentage of national budgets or targets or otherwise. In other words, acceptability is for the judgment of the decision-maker. As a matter of principle there is nothing unlawful in a decision-maker using benchmarks he considers to be appropriate in order to help arrive at a judgment on those issues. The statutory carbon budgets are one example.

There is simply no legal merit in the complaint that expressing project emissions as a percentage of a national budget or target does not enable a decision-maker to decide whether those emissions are compatible with achieving that benchmark.

....On the basis of current policy and law it is permissible for a planning authority to look at the scale of the GHG emissions relative to a national target and to reach a judgment, which may inevitably be of a generalised nature, about the likelihood of the proposal harming the achievement of that target. There was nothing unlawful about the inevitably broad judgment reached in the present case.” (R (GOESA) v Eastleigh Borough Council [2022] EWHC 1221 (Admin) at §122 – 123).

70. The use of the term ‘inherently cumulative’ in the Secretary of State’s decision letter to describe the use of the UK national carbon budgets in the decision making was vague and unhelpful for public understanding. Nonetheless, Counsel for the Secretary of State submitted, and I accept, that decision letters must be read in a fair and common-sense way. Nor is EIA intended to become an obstacle course for developers (R (Blewett) v Derbyshire County Council at §41). I take the reference to ‘inherently cumulative’ to be shorthand for the following well understood analysis. The UK Carbon budgets are science-based targets for the reduction of GHG emissions which have been created based on scientific projections and global carbon budgets. They sit within the UK’s legally binding GHG reduction target for 2050 and have been assessed by the Climate Change Committee to be compatible with the required magnitude and rate of GHG emissions reductions required in the UK to meet the goals of the Paris Agreement. For present purposes, what is key is that these targets aim to mitigate the greatest effects of climate change by limiting GHG emissions for the whole of the UK economy and society. The UK Government has decided not to set national targets on a sector-by-sector basis. There is, in particular, no sectoral target for transport.
71. Some government policies may result in GHG emissions but they are nonetheless promoted in order to achieve other policy goals. It is the government’s role to determine how best to balance emissions reductions across the entire economy. Any net emissions increase from a particular policy or project is therefore managed within the government’s overall strategy for meeting carbon budgets and the net zero target for 2050, as part of an economy-wide transition” (R (Transport Action Network) v Secretary of State for Transport [2021] EWHC Admin 2091 at 46 and 54). The term used in R (Packham) v Secretary of State for Transport [2021] Env L.R. 10 at §87 was ‘an economy wide transition’. EIA for any proposed project must therefore give proportionate consideration to whether and how that project will contribute to or jeopardise the achievement of these targets.
72. The second proposition relied on by the Secretary of State was that carbon emissions occupy a ‘sui generis’ category for the purposes of considering cumulative environmental effects. The environmental statement explains the point as “the impact and effect of carbon emissions on climate change, unlike other EIA topics, is not limited to a specific geographical boundary and the approach that needs to be taken to assess the cumulative impact of carbon emissions is different from other EIA topics”. The proposition is supported by independent IEMA guidance which provides as follows:

“Cumulative GHG emissions

The atmospheric concentrations of GHGs and resulting effect on climate change is affected by all sources and sinks globally... As GHG emission impacts and resulting effects are global rather than affecting one localised area, the approach to cumulative effects assessment for GHGs differs from that for many EIA topics

where only projects within a geographically bounded study area would be included.”

For example air pollutant emissions are dispersed and diluted after emission and only the cumulative contributions of other relatively nearby sources contribute materially to the pollutant concentration and hence effect, as a particular sensitive reception in the study area. Due to the persistence of GHG’s in the atmosphere, that same dispersion effect contributes to the global atmospheric GHG emissions balance. There is no greater local climate change effect from a localised impact of GHG emission sources (or vice versa).

All global cumulative GHG sources are relevant to the effect on climate change and this should be taken into account in defining the receptor (the atmospheric concentration of GHGs) as being of ‘high’ sensitivity to further emissions.” (V-GHG emissions assessment methodology)

73. The proposition that carbon emissions occupy a sui generis category of cumulative impact assessment in EIA is based on scientific assessment of the behaviour of greenhouse gases, arrived at by those with appropriate expertise (as required by the IEIA regime (Regulations 5(5) and 14(4)(b)). The Court should allow a substantial margin of appreciation in this respect (R (Mott) v Environment Agency [2006] 1 WLR 4338 and R (Plan B Earth v Secretary of State for Transport [2020] PTSR 1446 at §176-177).
74. Counsel for Dr Boswell submitted that the drafters of the IEIA legislative framework have required consideration of the cumulative climate effects of projects, despite the impacts of climate change being global rather than local. The fact that climate is unlike noise in its wider impact has not led the statutory scheme to exclude consideration of cumulative effects of carbon emissions. I accept the submission as a point of statutory interpretation. However, consideration was given to cumulative impacts by the Secretary of State. Further, the Secretary of State did not base his approach simply on the particular characteristics of GHGs. He also based his approach on the use of national targets as the benchmark to assess significance.
75. The first proposition; that there is no single prescribed approach to assessing the cumulative impacts of carbon emissions or, in other words, that the approach was a matter of judgment is well established by caselaw (R (Bowen West) v Secretary of State and R (Preston New Road Action Group) v Secretary of State).

Breach of the IEIA Regulations?

76. Drawing together the analysis above.
77. The question of what impacts should be addressed cumulatively; how the cumulative impacts might occur; whether the effects are likely to be significant and if so how they should be assessed are all matters of evaluative judgment (Regulation 5(2); Regulation 14 (2) (3) and Schedule 4 paragraph 5 IEIA Regulations; R (Bowen West) v Secretary of State for Communities and Local Government [2012] EWCA Civ 321 at §28 cited

in R (Finch) v Surrey County Council [2022] PTSR 958 at §15(5)). The identification and assessment of the cumulative impacts of development is an aspect of the wider assessment of the significance of the environmental impact of the project.

78. Consideration was given in the Environmental Statement and in the decision letters to the cumulative impacts. Their relevance was acknowledged. The ‘Do Something’ figure provided information on the combined emissions from the three schemes, in conjunction with other existing/planned future development in the area, assessed in carbon tonnes. On its face, the information satisfies the specific requirement of Schedule 4 paragraph 5 of the Regulations for a ‘description’ of the likely significant effects of the development on the environment resulting from the cumulation of effects with other existing and/or approved projects and the broader requirement for a description of likely significant environmental effects in Regulation 14(2)(b). Further consideration was given to the question of cumulative impacts at each public examination of the schemes and the process continued with the Secretary of State reflecting on the assessment of each Planning Inspector and explaining his approach in the decision letters. On its face, the Secretary of State complied with Regulation 21 of the IEIA Regulations in that the environmental information was considered, a reasoned conclusion reached on significant effects and the conclusion was integrated into the decision making.
79. The decision makers chose to assess the significance of carbon emission against a national target (UK carbon budgets). Other benchmarks were considered but discounted. The benchmark for the assessment of significance was a matter of judgement for the decision maker and was not challenged before the Court. As the primary judges of fact, the views of the Planning Inspector and the Secretary of State are entitled to considerable weight (R (Bowen West) v Secretary of State (Laws LJ at §28, 29 and 30). More specific to the carbon context, the use of national carbon budgets as a benchmark for the assessment of carbon emissions has been confirmed as a lawful approach (R (GOESA) v Eastleigh Borough Council).
80. The decision makers also proceeded on the basis that there is no geographic limit to the impact of GHG emissions. Their impact is on the global atmosphere. That is a scientific assessment to which the Court affords respect (R (Mott) v Environment Agency).
81. In circumstances where the significance of carbon emissions is being assessed against a national target and the impacts of GHG emissions do not have a geographical limit, there is a logical coherence to the Secretary of State’s decision not to undertake a comparison of combined emissions against the national target. The reason is explained in the IEMA Guidance, which expressly advises against the approach proposed by Dr Boswell:

“All global cumulative GHG sources are relevant to the effect on climate change and this should be taken into account in defining the receptor (the atmospheric concentration of GHGs) as being of ‘high’ sensitivity to further emissions.

Effects of GHG emission from specific cumulative projects therefore in general should not be individually assessed as there is no basis for selecting any particular (or more than one) cumulative project that has GHG emission for assessment over any other.” (V- GHG emissions assessment methodology) (underlining is the Court’s emphasis)

82. Compliance with independent guidance does not, of itself, demonstrate compliance with IEIA Regulations but it is, in my view, one legitimate way for the Court to assess the exercise of judgment in circumstances where there is no single prescribed approach to the assessment of cumulative carbon impacts or to gauging the significance of the climate impacts of a development project in the context of Environmental Impact Assessment (R (GOESA) v Eastleigh Borough Council at §122)
83. The IEMA guidance may be said to suggest that Dr Boswell’s approach is arbitrary, from a scientific perspective at least. This is because it seeks to assess the significance of carbon emissions, which have no geographical limit to their impact, against a national target which has no sectoral limit, by reference to a collection of local, sector based, development (characterised on behalf of Dr Boswell as ‘proximal’ development). There is no scientific rationale for the selection of a particular collection of local schemes for comparison against a national target. As Counsel for the Secretary of State put it pithily, it does not matter whether the emissions are from a road in Norfolk or in Oxford because their impact is the same and the target against which they are being assessed is a national, not local, target.
84. On analysis therefore, Dr Boswell’s approach to cumulative assessment becomes, in essence, a case about the acceptability of the impact, as may be evident in his conclusion that the combined emissions from the schemes (and related development) will amount to 0.47% of the UK’s 6th national carbon budget and his concern about the extent of the emissions used up on relatively small schemes in a small area of Norfolk. However, the legislation does not deal with the acceptability of an effect identified by environmental information. That is a matter of judgement for the decision-maker, not a hard-edged point of law (GOESA at §122 – 123). The Courts must be astute to avoid being drawn into the arena of the ‘forbidden merits’. Decisions to upgrade strategic roads and their effect upon climate change is a subject attracting many widely differing views, whether for or against.

“Judicial review is the means of ensuring that public bodies act within the limits of their legal powers and in accordance with the relevant procedures and legal principles governing the exercise of their decision-making functions. The role of the court in judicial review is concerned with resolving questions of law. The court is not responsible for making political, social, or economic choices. Those decisions, and those choices, are ones that Parliament has entrusted to ministers and other public bodies. The choices may be matters of legitimate public debate, but they are not matters for the court to determine. The court is only concerned with the legal issues raised by the claimant as to whether the defendant has acted unlawfully.” (R (Rights: Community: Action) v Secretary of State for Housing, Communities and Local Government [2021] PTSR 553, 559 at §6)

85. It was apparent that underlying the submissions on behalf of Dr Boswell is a concern about the value of the information produced by the approach adopted by the Secretary of State. That concern is acknowledged in the IEMA guidance which explains that comparing an individual development project against a national target for all sectors of the economy may have ‘limited value’ because the contribution of most individual projects to national level budgets will be small. In R (GOESA) v Eastleigh BC [2022] EWHC 1221 (Admin), another case about the cumulative impacts of carbon emissions, the Court referred to an ‘inevitably generalised nature of any assessment and an ‘inevitably broad judgment’ as to acceptability.

86. As the IEMA guidance also acknowledges, it might have been necessary for the Secretary of State to adopt a different approach to cumulative impacts had the benchmark been a geographical or sector-bounded carbon target, but it was not:

“The contextualisation of GHG emissions as discussed in Section 6.4 should incorporate by its nature the cumulative contributions of other GHG sources which make up that context. Where the contextualisation is geographically or sector-bounded (eg involved contextualising emissions within a local authority scale carbon budget or a sector level net zero carbon road map, then the consideration of cumulative contributions to that context will be within that boundary).” (V-GHG emissions assessment methodology).

87. At present however, any such concerns do not make the approach adopted by the Secretary of State unlawful. The IEMA guidance explains that *‘The available contextual information base is rapidly developing and will continue to grow in the coming years....’*. The IEMA regime acknowledges that the limits of current scientific knowledge may place constraints on environmental impact assessment. Regulation 14(3)(b) provides that “the environmental statement...must include the information reasonably required...taking into account current knowledge and method of assessment.” The same point is conveyed in Schedule 4 paragraph 3 and in particular paragraph 6 which requires the statement to set out details of the difficulties including lack of knowledge encountered compiling the required information and the main uncertainties involved.

88. Thus, the position was encapsulated by the Inspector who examined the Second scheme:

“I acknowledge the submissions of Dr Boswell and others in relation to the Applicants’ cumulative assessment and agree that there may be more suitable ways to undertake such an assessment. However, based on the current policy framework and guidance, it is my view that the Applicant’s approach, through the use of carbon budgets, sufficiently considers the cumulative effects with other projects or programmes.” (5.7.89)

89. The fact that there may be other approaches to the assessment of cumulative impacts, does not take the Secretary of State’s approach outside the range of reasonable responses available to him as the decision maker, or mean that it was based on flawed reasoning. This remains the position even where an Examining Authority expresses the view, as here, that there may be more suitable approaches. It follows, therefore, that the Secretary of State succeeds on the primary issue raised by the challenge in that the Court is not persuaded that his approach to the assessment of cumulative carbon emissions was unlawful and/or in breach of the IEIA Regulations.

The fall back

90. In light of the Court’s conclusion on the primary issue it is not necessary to address the subsidiary question, which the parties only addressed the Court on briefly, as to the lawfulness of the fall back analysis undertaken by the Secretary of State to assess the combined emissions from the three schemes against the national carbon budgets.

Conclusion

91. For the reasons set out above the claims fail.