Neutral Citation Number: [2024] EWCA Civ 145

Case No: CA-2023-01482

IN THE COURT OF APPEAL (CIVIL DIVISION)
ON APPEAL FROM THE KING'S BENCH DIVISION
ADMINISTRATIVE COURT
PLANNING COURT
Mrs Justice Thornton
[2023] EWHC 1710 (Admin)

Royal Courts of Justice
Strand, London, WC2A 2LL

Date: 22/02/2024

Before :

LORD JUSTICE PETER JACKSON
LORD JUSTICE DINGEMANS
and
SIR LAUNCELOT HENDERSON

- -

Between :

THE KING **(on the application of)** **ANDREW BOSWELL**	**Claimant/ Appellant**
- and -	
THE SECRETARY OF STATE FOR TRANSPORT	**Defendant/ First Respondent**
- and -	
NATIONAL HIGHWAYS	**Interested Party/ Second Respondent**

- -
- -

David Wolfe KC, Peter Lockley and Ben Mitchell (instructed by **Richard Buxton Solicitors**) for the **Appellant**
James Strachan KC and Rose Grogan (instructed by **Government Legal Department**) for the **First Respondent**

Reuben Taylor KC (instructed by **Womble Bond Dickinson (UK) LLP**) for the **Second Respondent**

Hearing date : 16 January 2024

- -

Approved Judgment

This judgment was handed down remotely at 14.00 hrs on 22.2.24 by circulation to the parties or their representatives by e-mail and by release to the National Archives.

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Sir Launcelot Henderson :

Introduction

1. In these three related, but procedurally independent, claims for judicial review, which were heard together in the Administrative Court by The Hon Mrs Justice Thornton DBE ("the Judge") over two days in May 2023, the claimant, Dr Boswell, challenges the decisions of the Secretary of State for Transport to grant development consent for three road improvement schemes to the A47 trunk road in the environs of Norwich. The Judge dismissed the claims by her order of 7 July 2023, for the reasons given in her judgment of the same date ("the Judgment"): see [2023] EWHC 1710 (Admin). She also refused permission to appeal. Dr Boswell now pursues a single ground of appeal to this Court, with permission granted by Coulson LJ on 17 October 2023.

2. The single ground of appeal for which permission was granted relates to the main issue argued below, which was (in short) whether the Secretary of State had in the three separate Decision Letters for the schemes lawfully discharged the obligation to examine and assess the cumulative greenhouse gas ("GHG") emissions likely to result from each of the proposed developments. The obligation arises under *The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017* (2017/572) ("the IEIA Regulations"), which lay down the process of environmental impact assessment ("EIA") required on an application for development consent under the Planning Act 2008. It is common ground that the three road improvement schemes in issue constitute "nationally significant infrastructure projects" within the meaning of section 14 of the Planning Act 2008, and that development consent is accordingly required for them under section 31. The developer is National Highways, the interested party.

3. The Judge held that the approach adopted by the Secretary of State in each Decision Letter to the assessment of the cumulative impacts of carbon emissions, although in parts unhelpfully expressed, did not breach the IEIA Regulations and was lawful: see the Judgment at [6], where she set out a summary of her main reasons for so concluding in seven numbered sub-paragraphs. At the end of [6(vii)], she observed that:

> "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 …".

The three schemes

4. The three schemes are briefly described by the Judge at [20]. They formed part of a wider programme intended to improve journeys and safety on a 115-mile section of the A47 between Peterborough and Great Yarmouth.

   (1) **Scheme 1** (the A47 Blofield to North Burlingham scheme) was to upgrade to dual carriageway an existing short section of the A47, 1.61 miles (2.6km) in length, running between those locations, and associated works. Development consent for it was granted by the Secretary of State (who was then The Rt Hon Grant Shapps MP) in a Decision Letter drafted on his behalf by officials on 22 June 2022.

(2) **Scheme 2** (the A47 North Tuddenham to Easton scheme) was for the construction of a new "offline" section of dual carriageway, 5.59 miles (9km) in length, running between those points, and associated works. Development consent for it was granted by the same Secretary of State a few weeks later, in a Decision Letter dated 12 August 2022.

(3) **Scheme 3** (the A47/A11 Thickthorn Junction scheme) was for a new connector road from the A11 to A47 and improvements to Thickthorn Junction, and associated works. Development consent for it was granted by Mr Shapps' successor as Secretary of State for Transport, The Rt Hon Anne-Marie Trevelyan MP, in a Decision Letter dated 14 October 2022. (To avoid possible confusion, I should mention that this Decision Letter consistently uses the masculine pronoun when referring to the Secretary of State; and with no disrespect I will do likewise when quoting from or referring to it).

As the Judge recorded at [1], the three Schemes all lie within a 12-mile radius of Norwich.

The legislative and planning policy framework

5. I have already referred to some of the key provisions of the Planning Act 2008: see [2] above. It is also relevant to note sections 5 and 104, which relate to national policy statements. Section 5 empowers the Secretary of State to issue and designate a national policy statement ("NPS") for the purposes of the Act, relating to one or more specified descriptions of development, while section 104 requires him to have regard to any relevant NPS which has effect when determining an application for development consent. One such NPS is the NPS for National Networks 2014 ("the NPSNN"), which sets out Government policy on the strategic road network.

6. At [19] of the Judgment, the Judge set out the relevant extracts from the NPSNN 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)

7. I draw attention, in particular, to paragraph 5.16 of the NPSNN, and to the statement in paragraph 5.18 that "any increase in carbon emissions is not a reason to refuse development consent, unless the increase[s] 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".

8. The carbon reduction targets which the UK is now required to meet by the year 2050 are stipulated by the Climate Change Act 2008 and statutory instruments made thereunder. The relevant provisions are common ground, and are conveniently summarised by the Judge at [17] and [18]:

> "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 LR 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)."

9. The current net zero target of a 100% reduction below 1990 emission levels by 2050 was set by *The Climate Change Act (2050 Target Amendment) Order 2019*, which amended the figure of 80% previously contained in section 1 of the 2008 Act. As counsel for Dr Boswell point out in their written submissions, the sixth carbon budget, which covers the period from 2033 to 2037, is the first to be set in line with the revised net zero target, and it will accordingly be significantly harder to meet than the fourth

and fifth budgets. As the Judge records, the sixth budget is set at a level which is equivalent to a 78% reduction in net GHG emissions over the five-year period.

The IEIA Regulations

10. The Judge set out the main relevant provisions of the IEIA Regulations at [9] to [16], beginning with regulation 4(2) which in mandatory terms prevents the Secretary of State from making an order granting development consent "unless an EIA has been carried out in respect of that application". It follows that an EIA was required, and was duly carried out, for each of the three Schemes in issue.

11. Regulation 5(1) then provides that the EIA is a *process* (my emphasis) consisting of (a) "the preparation of an environmental statement" by the applicant (here National Highways), (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 under regulation 21 …". Regulation 5(2) states that 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 a list of "factors" which includes, at sub-paragraph (c), "land, soil, water, *air and climate*" (again, my emphasis). By virtue of regulation 5(3), the "effects" referred to in paragraph (2) "must include the operational effects of the proposed development"; while regulation 5(5) requires the Secretary of State to ensure that he has, or has access as necessary to, "sufficient expertise to examine the environmental statement … as appropriate".

12. Regulation 14 deals with environmental statements ("ES"). By regulation 14(2), an ES must include at least "(a) a description of the proposed development …, (b) a description of [*its*] likely significant effects … on the environment" and "(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."

13. Schedule 4 is headed "Information for inclusion in environmental statements". Paragraph 4 requires "A description of the factors specified in regulation 5(2) likely to be significantly affected by the development", including "air, climate (for example greenhouse gas emissions …)". Paragraph 5 of Schedule 4 then requires, so far as relevant:

> "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……"

14. It is paragraph 5(e) of Schedule 4 which expressly introduces the requirement for an ES to contain 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". This duty is then underlined by the general provision at the foot of paragraph 5, which requires the description of likely significant effects on the regulation 5(2) factors, which (as we have seen) include air and climate, to cover not only direct effects, but also "any indirect, secondary, *cumulative*, … effects of the development". The description of any significant cumulative effects under paragraph 5(e) will then feed into the further description required under (f) of "the impact of the project on climate", including the nature and magnitude of GHG emissions.

15. Returning to the main body of the Regulations, regulation 21 lays down the process that the Secretary of State must follow in deciding whether to grant development consent:

> "21. (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 evidence considered necessary;
>
> (c) integrate that conclusion into the decision as to whether an order is to be granted; and
>
> (d) if an order is to be made, consider whether it is appropriate to include monitoring measures.
>
> (2) The reasoned conclusion referred to in paragraph (1)(b) must be up to date at the time that the decision as to whether the order is to be granted is taken, and that conclusion shall be taken to be up to date if in the opinion of the Secretary of State it addresses the significant effects of the proposed development on the environment that are likely to arise as a result of the development described in the application."

The expression "environmental information" in paragraph (1)(a) is widely defined in regulation 3 (Interpretation) to mean the ES, "including any further information and any other information, any representations made by any [*invited body*] and any

representations duly made by any other person about the environmental effects of the development …".

The decision-making process

16. Each of the three decisions with which we are concerned was made after a separate public examination of the Scheme conducted by an Examining Authority (in practice a Planning Inspector) appointed pursuant to provisions contained in the Planning Act 2008, and the submission of a detailed report by the Examining Authority to the Secretary of State. Dr Boswell was an active participant in the three examinations, and he made both written and oral representations on several climate-related issues, including the approach to the cumulative impact of carbon emissions. There was a different examining Planning Inspector for each Scheme, and in each case the recommendation in the report was that development consent should be granted. The reports thus formed an important part of the "environmental information" considered by the Secretary of State in reaching the decision whether to grant consent for each Scheme.

The approach to the quantification of GHG emissions

17. It is important to appreciate that no challenge is now made to the methodology that was used in each case to quantify the likely increase in carbon emissions that would be generated by the relevant Scheme, both viewed in isolation and when taken in combination with emissions from other selected sources (including, in each case, the two other Schemes on the assumption that they were implemented). For that reason, it is unnecessary for me to provide a detailed explanation of the methodology, which is clearly set out by the Judge at [47] to [56] (being the same for each Scheme) and at [57] to [60] (for cumulative impacts). To make this judgment intelligible, however, a basic understanding of the methodology is needed. What follows draws on the concise summary in the skeleton argument of counsel for Dr Boswell (David Wolfe KC, leading Peter Lockley and Ben Mitchell, all of whom appeared for him below), as well as on the Judge's fuller account.

18. (1) The carbon emissions from the construction of each project were assessed over an assumed construction period of 22 months, using the Highways England Carbon tool to produce a figure of tonnes of carbon dioxide equivalent ("tCO2e").

(2) The bulk of the emissions, however, would be from traffic using the roads when they were operational. This was assessed by using a traffic model based on the existing road and a wider network (together referred to as the affected road network or "ARN"). There was a different ARN for each Scheme. There has been no challenge in these proceedings to the selection by National Highways of the roads comprising each ARN.

(3) The forecasts of future traffic took account of demographic projections as well as likely future developments in the area, including other major road schemes, and they specifically included the other two Schemes. Thus, in the case of Scheme 1, the baseline included traffic growth from Schemes 2 and 3 on the assumption that they were implemented, and so on.

(4) The carbon emissions from the ARN were calculated for the base year (2015), the year of expected opening of the new road (2025) and the design year (2040). The

resulting baseline figures are referred to as a "Do Minimum" or "DM" scenario, and they represent an estimate of expected traffic growth *without* the Scheme in question in place, but *including* the other two Schemes. Emissions from the Do Minimum scenario were forecast for each year up to 2085.

(5) A further "Do Something" or "DS" scenario was also modelled, with corresponding annual emission forecasts. In essence, it differed from the Do Minimum scenario only in that it assumed the Scheme in question *was* built. Thus, the Do Something figures assumed that all three Schemes were implemented. The total Do Something amount was then sub-divided into figures for the fourth, fifth and sixth UK carbon budget periods, and the final period from 2038 to 2087 for which no budget has yet been set. The amount apportioned to the final period was about 61% of the total.

(6) A simple process of subtraction of the DM from the DS figures yielded estimates of the carbon emissions from the Scheme alone, which were then compared with the three existing UK carbon budgets down to the end of the sixth budget period in 2037. The net change in carbon emissions resulting from the Scheme was then estimated as a percentage of the relevant UK carbon budgets.

(7) Unsurprisingly, the resulting percentages were very small indeed. They are shown in tables contained in each of the environmental statements, and they are summarised by the Judge at [55] (where the figure for Scheme 1 needs to be corrected to 0.001%). The figure for Scheme 2 was approximately 0.004%, while the figure for Scheme 3 was no greater than 0.0015%. These figures represented the comparison with the fourth, fifth and sixth budget periods. There was, of course, no carbon budget with which a comparison could be made after 2037.

19. With regard to the assessment of cumulative impacts, each environmental statement included a separate chapter on this topic. As the Judge recorded at [57], the chapter examined these impacts in relation to a number of environmental receptors, but in relation to carbon emissions it was said (in one case) that the emissions assessment in the preceding climate chapter was "inherently cumulative" and was therefore not included in the assessment of cumulative effects "to avoid double counting"; and in another case that the traffic model used in earlier chapters "includes future other developments" and so "included cumulative impacts by default" which had already been taken into account.

20. The Judge was critical of this approach, observing at [58] that nothing more was said in the environmental statements about cumulative carbon impacts, that no reference was made to any applicable guidance or scientific material to provide context or support for this part of the analysis, and that the "cursory reference" to the traffic model as "inherently cumulative" was unclear. The Planning Inspector who examined Scheme 2 had also "noted a lack of clarity about the traffic model in this regard": see para 5.7.88 of his report. Nevertheless, the Judge also acknowledged that, as had emerged at the hearing before her, the reference to the traffic model being "inherently cumulative" may derive from guidance issued by the Planning Inspectorate, from which she quoted this extract:

> "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."

21. It seems to me very probable that this (or similar) guidance did indeed lie behind the relevant passages in the cumulative impacts chapter in the environmental statements criticised by the Judge. Further, as I have already explained, it was also common ground at the hearing below that the "Do Something" figures used for each Scheme included the projected carbon emissions from all three of the Schemes, so they did in that sense involve an element of cumulation: see the Judgment at [59].

The reasoning of the Secretary of State

22. The Judge described the Secretary of State's assessment of the significance of the net carbon impact of the Schemes in the sections of the Judgment running from [23] to [32]. She began by pointing out that, although the conclusion was the same in each case, namely that the net carbon impact of the Scheme would be unlikely to have a material impact on the UK's ability to meet the targets in the relevant carbon budgets, the most developed explanation for this view is to be found in the Decision Letter for Scheme 3, which (like the Decision Letter for Scheme 2) was issued after Dr Boswell had commenced his first judicial review claim on 1 August 2022. The second judicial review claim followed on 23 September 2022, in the interval between the second and third Decision Letters, while the third judicial review claim was started on 8 November 2022.

23. For present purposes, the most important parts of the third Decision Letter are the sections headed "Assessing carbon emissions and their significance" (paragraphs 93 to 99) and "Cumulative effects" (paragraphs 100 to 111). In the first of these sections, the Secretary of State acknowledged (in para 93) that the proposed development would result in an increase in carbon emissions, adversely affecting efforts to meet the 2050 target, but said he did not consider this meant that the increase "would be so significant as to have a material impact on the Government's ability to meet its carbon reduction targets." The Secretary of State endorsed the approach set out in paragraph 5.18 of the NPSNN (see [6] above), expressing the view that it continued to be relevant in light of international and domestic obligations introduced since the NPSNN was designated in 2015, and that it was also consistent with the approach to significance set out in the guidance issued by the Institute of Environmental Management and Assessment ("the IEMA") in 2022, headed "Assessing Greenhouse Gas Emissions and Evaluating their Significance" ("the IEMA Guidance"). According to the IEMA Guidance, the crux of significance was "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).

24. After making further references to the IEMA Guidance, and noting the measures National Highways would take to minimise carbon emissions, the Secretary of State continued:

> "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."

25. In relation to cumulative effects, the Secretary of State noted the concerns that had been raised by Dr Boswell and others that no proper cumulative assessment had been undertaken by National Highways (para 101), and said he agreed with the Examining Authority that assessing a scheme against the national carbon budgets was "an acceptable cumulative benchmark for the assessment for EIA purposes with regard to both construction and operation" (para 104). The Secretary of State then said he considered 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" (para 105), before again saying he agreed with the Examining Authority that the assessment provided by National Highways "can be

deemed as inherently cumulative", and that it "did not appear to conflict with current policy or guidance" (*ibid*).

26. After referring to various consultation responses on which nothing now turns, the Secretary of State concluded at para 109:

> "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 [Examiner] 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). Furthermore, and in any event, the Secretary of State 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. The Secretary of State therefore considers that there is no defined boundary for assessing the impact of carbon emissions. The Secretary of State therefore agrees with the Applicant that the only statutory budgets are those at a national level. 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.

27. It is convenient to mention at this point that the IEMA Guidance provides clear and authoritative support for the Secretary of State's opinion that "there is no defined boundary for assessing the impact of carbon emissions". The relevant passage in the IEMA Guidance is quoted in the Judgment at [72], and explains that GHG emissions are global, not local, in their impact. It follows from this that "There is no greater local climate change effect from a localised impact of GHG emission sources (or vice versa)", and that "All global cumulative GHG sources are relevant to the effect on climate change". Immediately after the passage quoted by the Judge, the Guidance states:

> "Effects of GHG emissions 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 emissions over any other."

The fallback position of the Secretary of State on Schemes 2 and 3

28. By the time the Secretary of State granted permission for Scheme 2, Dr Boswell had already started legal proceedings in relation to Scheme 1 and had raised concerns about

the cumulative carbon assessment in Scheme 2. As the Judge recorded at [33], this led to the inclusion in the second (and, in due course, the third) Decision Letter of a passage intended to answer Dr Boswell's criticisms on the assumption that an explicit assessment of the combined emissions from the three Schemes was also required. We are not concerned with the lawfulness of the Secretary of State's fallback analysis in relation to Schemes 2 and 3, because the Judge did not need to deal with it (having rejected Dr Boswell's primary argument) and permission to raise it as an alternative ground of appeal was refused by Coulson LJ. We have accordingly heard no argument on the fallback position and express no view on it.

Dr Boswell's primary case

29. The primary case advanced by Dr Boswell before the Judge, and in substance repeated before us, is summarised by the Judge at [35] to [38]. It is said that the Secretary of State breached the IEIA Regulations by failing to conduct any lawful cumulative assessment of the combined carbon emissions from the three Schemes, and that the calculation was only done for the particular Scheme under scrutiny. It was a legal requirement to assess the significance of the cumulative impacts of each Scheme with other existing and/or approved projects. The procedure followed in each environmental statement failed to comply with this requirement, and the assessment by the Secretary of State under regulation 21(1) was similarly defective. There was no challenge by Dr Boswell to the numerical analysis in each environmental statement, or to the comparison of the projected emissions from each Scheme with the national carbon budgets, but what was missing was a comparison of the combined emissions from the Scheme and related projects with those budgets. This omission made it impossible to assess whether the combined emissions would have a material impact on the ability of the Government to meet the carbon reduction targets.

The Judge's reasons for rejecting Dr Boswell's primary case

30. The Judge gave her reasons for rejecting Dr Boswell's primary case in the sections of the Judgment headed "Discussion" (running from [40] to [75]) and "Breach of the IEIA Regulations?" ([76] to [89]).

31. The Judge began by examining the legal framework for the court's review of the three decisions. She rejected the submission for Dr Boswell that the question was one of law, and accepted the submission for the Secretary of State that the question is one for the judgment of the decision maker, with supervisory oversight by the Court. She said that the proposition that the question is one of law had been "repeatedly rejected by the Court of Appeal", referring to the judgment of Laws LJ in *Bowen-West v Secretary of State for Communities and Local Government* [2012] EWCA Civ 321, [2012] Env.L.R. 22, at [27] – [30], where he agreed with Sullivan LJ who had said in *Brown v Carlisle County Council* [2010] EWCA Civ 523, [2011] Env.L.R. 5, at [21] that "The answer to the question – what are the cumulative effects of a particular development – will be a question of fact in each case". More recently, in *Preston New Road Action Group v Secretary of State for Communities and Local Government* [2018] EWCA Civ 9, [2018] Env.L.R. 18, Lindblom LJ (with whom Simon LJ and I agreed) described it at [67] as a "principle well established in both European and domestic authority that the existence and nature of … "cumulative" effects will always depend on the particular facts and circumstances of the project under consideration", citing *Bowen-West* and *Brown*, before adding: "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 environmental effects of the development proposed, in the light of current knowledge …".

32. Next, the Judge analysed the language of the relevant provisions in the IEIA Regulations, emphasising the evaluative nature of key obligations and of the EIA itself: see [43]. She then recorded that, by the date of the substantive hearing, there was no dispute that the three Schemes were related projects, and that a cumulative assessment was required. The core dispute, on analysis, was "the adequacy of the assessment of cumulative impacts": [45].

33. The Judge then directed herself, in a passage which neither side has criticised and which seems to me impeccable, at [46] as follows:

> "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 WLR 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)."

34. The Judge then described the methodology used for the assessment of carbon emissions in the three Schemes, much of which I have already summarised: see [17] to [21] above. At [61], she rightly emphasised that EIA is a "process that starts, but does not end, with the environmental statement". She cited from the unanimous judgment of the Supreme Court in *R (Friends of the Earth Ltd) v Secretary of State for Transport* [2020] UKSC 52, [2021] PTSR 190, at [142] and [143], where the Court endorsed the approach to judicial review in cases requiring an EIA laid down by Sullivan J in *R (Blewett) v Derbyshire County Council* [2004] Env. L.R. 29, warning against the adoption of an "unduly legalistic approach", and holding that the EIA Regulations "do not impose a standard of perfection in relation to the contents of an environmental statement". As Sullivan J said in *Blewett* at [41], the Regulations "should be interpreted as a whole and in a common-sense way". The requirement for an EIA "is not intended to obstruct such development", nor are the Regulations based on an unrealistic expectation of perfection. The provision made for publication and a process of consultation allows for any deficiencies in the EIA to be identified, so that the resulting "environmental information" provides the local planning authority with "as full a picture as possible". Sullivan J concluded by saying there will be cases where the document purporting to be an ES is so deficient that it could not reasonably be described as an ES as defined by the Regulations "but they are likely to be few and far between".

35. The Judge then described how the question of cumulative carbon impacts became a material issue, and it was considered by each examining Inspector with the active participation of Dr Boswell who (among other things) wrote a joint letter to the three Inspectors highlighting his concerns. The Judge commented that "[t]he detail and

authority of Dr Boswell's representations was acknowledged by the Inspectors and appears to have focused minds". Similarly, Dr Boswell's contribution was acknowledged by the Secretary of State in each of the three Decision Letters, with the consequence that "a formidable array of expertise had already been applied to the question of cumulative carbon emissions" before the Court became seised of the issue: [62].

36. At [63], the Judge identified "three broad propositions" which were relied upon by the Secretary of State in deciding not to compare the figure for the combined carbon emissions against the national carbon budgets: (1) there is no single prescribed approach to the assessment of such cumulative impacts; (2) carbon emissions are a "sui generis" category, because they have no geographic boundary (unlike, for example, noise); and (3) the appropriate comparator to assess the carbon emissions was the national UK carbon budgets, such a comparison being "inherently cumulative". The Judge then considered these three propositions in reverse order.

37. In relation to proposition (3), the Judge said that the decision to adopt this comparator was a matter of judgment for the decision-maker that could only be challenged on conventional "Wednesbury" grounds. The decision to take compliance with net zero targets as "the crux of significance" in this context was consistent with the IEMA Guidance, and the Secretary of State had concluded that there was no other realistic benchmark to adopt: [68]. Nor had the decision to adopt this benchmark been challenged: [69].

38. The Judge criticised the use of the term "inherently cumulative" by the Secretary of State as "vague and unhelpful for public understanding" at [70], but she reminded herself of the need to read the Decision Letters in a fair and common-sense way and then explained what she understood the term to mean and how it fitted in with the Government's net zero strategy:

> "70. … 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 LR 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."

39. With regard to proposition (2), the Judge quoted and relied on the extracts from the IEMA Guidance which I have described at [27] above, commenting at [73] that the proposition "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)). She also rejected the submission that the Secretary of State had given no consideration to cumulative impacts of GHG: he did not base his assessment merely on the special characteristics of GHG, but also on the use of national targets as the benchmark of significance ([74]).

40. As to proposition (1), the Judge correctly took this to be established by the authorities, referring to *Bowen-West* and *Preston New Road* : [75].

41. Moving on to the question whether there had been a breach of the IEIA Regulations, the Judge observed, at [77], that the identification and assessment of the cumulative impacts of the development was an aspect of the wider assessment of the environmental impact of the project. She then explained how, on the face of it, the "Do Something" figures in each environmental statement satisfied (a) the requirement in Schedule 4 para 5 of the IEIA Regulations for a "description" of the likely significant effects of the development on the environment from the cumulation of effects with other existing and/or approved projects, and (b) the broader requirement in regulation 14(2)(b) for a description of likely significant environmental effects. Further consideration of the question then took place at the public examination stage of the process, and (after that) when the Secretary of State reflected on the recommendations of the Planning Inspector before reaching his own decision. "On its face", said the Judge at the end of [78], "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."

42. At [81], the Judge returned to the point that GHG emissions do not have a geographic limit. In the light of that point, and where the significance of carbon emissions was being assessed against the national net zero targets, there was in the Judge's view "a logical coherence to the Secretary of State's decision not to undertake a comparison of combined emissions against the national target". The reason for this, as explained in the IEMA Guidance, was that there was no basis for selecting any particular cumulative projects in preference to any others: [81]. While compliance with expert independent guidance does not, of itself, demonstrate compliance with the IEIA Regulations, it was, in the Judge's view, "one legitimate way for the Court to assess the exercise of judgment in circumstances where there is no single prescribed approach": [82].

43. The Judge continued:

> "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."

44. At [84], the Judge said that Dr Boswell's approach was, on analysis, a case about the acceptability of the combined impact from the selected projects, whereas that was a matter for the judgment of the decision maker which did not involve any hard-edged point of law: see the recent decision of Holgate J in *R (GOESA Ltd) v Eastleigh Borough Council* [2022] EWHC 1221 (Admin), [2022] PTSR 1473, at [122-123]. *GOESA* was another case about the cumulative impacts of carbon emissions, in an application for "EIA development" (mainly consisting of an extension of the existing runway at Southampton airport) which was governed by the materially very similar provisions contained in *The Town and Country Planning (Environmental Impact Assessment) Regulations 2017* (2017/571). In that context, Holgate J said at [123]:

> "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 …"

45. The Judge went on to observe that, as the IEMA Guidance 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": see [86] and [87], making the point that scientific knowledge in the area is likely to develop, but the Secretary of State is only bound to take account of the current state of knowledge.

46. The Judge expressed her final conclusion at [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 ground of appeal

47. Dr Boswell's single ground of appeal to this Court is that the Judge was wrong to hold that the requirement to consider the significance of the cumulative GHG emissions from the Scheme, pursuant to regulations 14(2) and 21 and paragraph 5 of Schedule 4 of the IEIA Regulations, was discharged in the Decision Letters. This ground is then broken down into three sub-paragraphs:

(a) The Judge was wrong in law to hold that it was adequate for the emissions to be added together, and thus "described" in the Decision Letters and the environmental statements for each Scheme, as even though the Secretary of State saw that cumulative figure, he did not perform any assessment of significance in relation to it;

(b) The Judge was wrong in law to hold that it was lawful to assess the significance of the emissions from each Scheme singly against the national carbon budgets, as a purported way of assessing their cumulative significance; and

(c) The Judge was therefore wrong to hold that the Secretary of State reached a reasoned conclusion on the significance of the cumulative impacts of the Scheme and other schemes, and so was wrong to hold that he complied with regulation 21.

Discussion

48. In evaluating these contentions, which I will consider together because they are all aspects of the same basic argument, it is helpful to remember how much common ground there now is between the parties, and thus how narrow the issue which divides them has become. As I have explained, and as Mr Wolfe KC confirmed in his oral submissions for Dr Boswell, it is accepted that it was in principle open to the Secretary of State to satisfy the requirements in the IEIA Regulations for an assessment of the GHG emissions from each Scheme by means of a comparison between the probable future emissions from the relevant ARN on the Do Minimum basis and the Do Something basis, with the resulting figures then being compared with the fourth, fifth and sixth national carbon budgets down to 2037. There is no challenge to the composition of the three ARNs, or to the methodology employed by National Highways to measure the emissions, or to the accuracy of the figures contained in the environmental statements; nor is there any challenge to the choice of the national carbon budgets as the appropriate comparator, although they do not yet extend beyond 2037.

49. It is also accepted that the Secretary of State did in fact direct his mind, in each Decision Letter, to the question of the cumulative GHG effects of the Scheme under consideration: each Decision Letter contains a separate section of some length devoted to this very topic. The Secretary of State therefore had before him, and must have given consideration to, the forecast emissions from each of the three Schemes, together with the forecast emissions from the other existing roads and planned projects (including the other two Schemes) contained within the relevant ARN. It is thus not the case that each Scheme was viewed in isolation. Rather, it was placed within a wider local context,

and the cumulative future emissions likely to be generated within that context were compared with national carbon budgets which themselves set net cumulative targets which the UK as a whole, by one means or another, is obliged to meet on its trajectory towards the mandatory net zero target in 2050.

50. Furthermore, Dr Boswell does not challenge the crucial scientific fact, reflected in the IEMA Guidance, that carbon emissions have no geographical boundary, with the consequence that their impact is not confined to the local area, but is felt uniformly across the globe. In this important respect, they differ from other environmental impacts (such as noise, pollution, dust or risk of flood) which must be considered in an EIA. Impacts of the latter type are by their nature geographically confined, and it therefore makes sense to consider them in conjunction with other similar impacts to see if their cumulative impact may be greater than the sum of the individual impacts measured in isolation. It was this special character of carbon emissions which led the Secretary of State to conclude (for example, in para 109 of the third Decision Letter) that the only meaningful comparator for the cumulative effects of carbon emissions from the proposed Scheme was the national carbon budgets.

51. Against this background, there is in my judgment an air of complete unreality to the complaint that the Secretary of State was somehow at fault in not having conducted a separate and wider assessment of cumulative emissions from each Scheme (as disclosed in the data and tables contained in the environmental statements), in addition to the ARN-based exercise for each Scheme which I have already described. There is no logical basis upon which any such wider exercise could have been founded, and the inevitably arbitrary choice of the other sources of carbon emissions to be considered would only have given a spurious impression of precision to the resulting assessment. Hence, as the Judge in my opinion rightly recognised at [81], there is "a logical coherence to the Secretary of State's decision not to undertake a comparison of combined emissions against the national target". Indeed, as the Judge also noted (*ibid*), the IEMA Guidance expressly warns against the approach proposed by Dr Boswell, precisely because "Effects of GHG emission from specific cumulative projects … in general should not be individually assessed as there is no basis for selecting any particular … cumulative project that has GHG emission for assessment over any other".

52. Nor can I accept the argument that the IEIA Regulations positively obliged the Secretary of State to perform such a wider assessment, even if it would have been scientifically pointless. The obligation in paragraph 5(e) of Schedule 4 required the ES to give 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": see [13-14] above. It is common ground that this duty was adequately discharged by National Highways, using the ARN data to measure the impact of emissions from the Scheme in its local context when compared with national carbon budgets. The question was then considered in detail at the examination stage, with input from Dr Boswell, and the resulting examiner's report formed part of the package of environmental information which the Secretary of State had to examine when deciding whether to grant consent for the Scheme pursuant to regulation 21. As the Decision Letters show, the Secretary of State carefully considered the issue of cumulative emissions in the manner, and with the result, which I have described. In substance, he considered that the likely future emissions from the Scheme, calculated in the wider local context of the relevant ARN, fell below the threshold of significance,

and that there was no meaningful way in which a wider assessment of cumulative emissions could be carried out in the light of current scientific knowledge and the lack of any geographical boundary for such emissions.

53. In accordance with the well-known authorities reviewed by the Judge, these were all issues of fact and evaluation for the decision maker, and (as such) they are subject only to the supervisory oversight of the court. In common with the Judge, and like Holgate J in *GOESA*, I find myself unable to identify any hard- edged provision in the relevant legislation, or any relevant principle of law, which was breached by the Secretary of State in coming to these conclusions. I am also wholly unpersuaded that the decisions were in any way irrational.

54. Another way of making essentially the same point would be to say that the Secretary of State clearly addressed his mind to the question of cumulative effects, and he took into account the submissions which Dr Boswell had made at the examination stage of the EIA process, but he nevertheless decided that there was no meaningful basis, in this particular context, upon which a wider cumulative assessment of carbon emissions could be undertaken. By virtue of regulation 5(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, among other things "air and climate" (my emphasis). The Secretary of State concluded, for reasons which he adequately articulated and integrated into his decision, that there was no "appropriate manner" in which cumulative GHG emissions from each Scheme could usefully be modelled and taken into account, separately from the elements of cumulation which were already inherent in the use of an ARN baseline which included the other Schemes, and in the use of national net carbon budgets as the comparator. In my judgment, a process of reasoning along these lines would have been more than adequate to discharge the duties imposed on the Secretary of State by regulation 21, and on a fair appraisal of each Decision Letter, read as a whole and with common sense, that is the nub of what the Secretary of State was saying.

55. A point made by counsel for Dr Boswell in this connection is that the inclusion of the other two Schemes in each ARN, and thus in the Do Minimum and Do Something scenarios, did not assist the Secretary of State, because the subtraction of the DM figure from the DS figure then excluded that component from the result. I do not accept that criticism. It is true that the resulting figure represented the likely emissions from the Scheme alone, but that is unsurprising because each Scheme was factually and procedurally independent, and the primary focus therefore had to be on the emissions from the Scheme by itself. The significant point, however, is that the use of an ARN including the other two Schemes placed the Scheme in question is a wider local context, and provided DM and DS figures which did individually involve an element of cumulation. This was therefore part of the wider picture that the decision maker could take into account when considering the issue of cumulative impact.

56. I am equally unimpressed by the argument for Dr Boswell that the approach adopted by the Secretary of State was a dereliction of his duty under regulation 21, because it was tantamount to a decision *not* to assess the significance of the cumulative impacts apparent from the environmental statement against the chosen benchmark of the UK's national carbon budgets. It is said that the fact that there are admittedly alternative ways of assessing cumulative impacts cannot justify not assessing them at all. There might be some force in this point if the Secretary of State had simply ignored the

relevant provisions about cumulative impacts in the IEIA Regulations, or if he had given no reasons for his decision not to conduct a cumulative assessment, but (as I have sought to explain) that is not what the Secretary of State did. On a fair reading of the Decision Letters, it seems to me that he provided adequate reasons for not embarking on a separate cumulative assessment which would inevitably have lacked a logical basis and could not have provided further information of any value. In the current state of scientific knowledge, as reflected in the IEMA Guidance, this was in my judgment a rational position for the Secretary of State to adopt and, in my view, it betrays no error of law.

57. For these reasons, which are broadly similar to those given by the Judge in her full and careful judgment, I would dismiss the appeal.

Lord Justice Dingemans:

58. I agree.

Lord Justice Peter Jackson:

59. I also agree.