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Case No: CO/126/2022
CO/163/2022
CO/199/2022

IN THE HIGH COURT OF JUSTICE
QUEEN'S BENCH DIVISION
ADMINISTRATIVE COURT

Royal Courts of Justice
Strand, London, WC2A 2LL

Date: 18 July 2022

Before :

THE HON. MR JUSTICE HOLGATE

Between :

THE QUEEN
on the application of
(1) FRIENDS OF THE EARTH LIMITED
(2) CLIENTEARTH
(3) GOOD LAW PROJECT AND JOANNA
WHEATLEY

Claimants

- and -

SECRETARY OF STATE FOR BUSINESS,
ENERGY AND INDUSTRIAL STRATEGY

Defendant

David Wolfe QC, Catherine Dobson and Nina Pindham (instructed by **Leigh Day**) for the
First Claimant

Jessica Simor QC and Emma Foubister (instructed by **ClientEarth**) for the **Second**
Claimant

Jason Coppel QC and Peter Lockley (instructed by **Baker McKenzie**) for the **Third**
Claimants

Richard Honey QC, Ned Westaway and Flora Curtis (instructed by **Government Legal**
Department) for the **Defendant**

Hearing dates: 8 and 9 June and 15 July 2022

Approved Judgment

Mr Justice Holgate:

Introduction

1. Climate change is a global problem. In *R (Spurrier) v Secretary of State for Transport* [2020] PTSR 240 the Divisional Court gave a summary of some of the main issues involved at [558]-[563].
2. In 1992 the United Nations adopted the United Nations Framework Convention on Climate Change (“UNFCCC”). Following the 21st Conference of the parties to the Convention, the text of the Paris Agreement on Climate Change was agreed and adopted on 12 December 2015. The United Kingdom ratified the Agreement on 17 November 2016.
3. Article 2 of the Agreement seeks to strengthen the global response to climate change by holding the increase in global average temperature to 2°C above pre-industrial levels, and by pursuing efforts to limit that increase to 1.5°C. Article 4(1) lays down the objective of achieving “a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases [“GHGs”] in the second half of this century.” That objective forms the basis for what is often referred to as the “net zero target”, which will be satisfied if the global level of any residual GHG emissions (after measures to reduce such emissions) is at least balanced by sinks, such as forests, which remove carbon from the atmosphere.
4. Article 4(2) requires each party “to prepare, communicate and maintain successive nationally determined contributions [“NDCs”] that it intends to achieve”. Each party’s NDC is to represent a progression beyond its current contribution and reflect its “highest possible ambition” reflecting *inter alia* “respective capabilities” and “different national characteristics” (article 4(3)).
5. The UK responded to the Paris Agreement in two ways. First, section 1 of the Climate Change Act 2008 (“CCA 2008”) was amended so that it became the obligation of the Secretary of State for Business, Energy and Industrial Strategy to ensure that “the net UK carbon account” for 2050 is at least 100% lower than the baseline in 1990 for CO₂ and other GHGs, in substitution for the 80% reduction originally enacted (see the Climate Change Act 2008 (2050 Target Amendment) Order 2019 (SI 2019 No.1056)). That change came into effect on 27 June 2019. Second, on 12 December 2020 the UK communicated its NDC to the UNFCCC to reduce national GHG emissions by 2030 by at least 68% compared to 1990 levels, replacing an earlier EU based figure of 53% for the same year.
6. According to the Net Zero Strategy (“NZS”), the UK currently accounts for less than 1% of global GHG emissions (p.54 para. 31).
7. Section 4 of the CCA 2008 imposes a duty on the Secretary of State to set an amount for the net UK carbon account, referred to as a carbon budget, for successive 5 year periods beginning with 2008 to 2012 (“CB1”). Each carbon budget must be set “with a view to meeting” the 2050 target in s.1. The ninth period, CB9, will cover the period 2048-2052 for which 2050 is the middle year. Section 4(1)(b) imposes a duty on the Secretary of State to ensure that the net UK carbon account for a budgetary period

does not exceed the relevant carbon budget. Thus, the CCA 2008 has established a framework by which the UK may progress towards meeting its 2050 net zero target.

8. The net UK carbon account referred to in s.1 and s.4 relates to carbon dioxide and the other “targeted” GHGs listed in s.24 (methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride). GHG emissions are expressed for the purposes of the Act in tonnes of “carbon dioxide equivalent” (s.93(1)). That term refers to either a tonne of CO₂ or an amount of another GHG with “an equivalent global warming potential” (“GWP”).
9. The Secretary of State has set the first 6 carbon budgets. Each has been the subject of affirmative resolution by Parliament. CB6 came into force on 24 June 2021 (The Carbon Budget Order 2021 – SI 2021 No. 750) and sets a carbon budget of 965 Mt CO₂e (million tonnes of carbon dioxide equivalent) for the period 2033 – 2037.
10. The six carbon budgets and their relationship to the 1990 baseline are summarised below:

Carbon budget	Period	Target emissions Mt CO ₂ e	Percentage reduction from 1990 level
1	2008 – 2012	3,018	25%
2	2013 – 2017	2,782	31%
3	2018 – 2022	2,544	41%
4	2023 – 2027	1,950	55%
5	2028 – 2032	1,725	60%
6	2033 - 2037	965	78%

Sources: NZS: p. 306 para.5 and p. 310 Table 1; *R (Transport Action Network Ltd) v Secretary of State for Transport* [2022] PTSR 31 at [50].

11. The UK overachieved CB1 by 36 Mt CO₂e and CB2 by 384 Mt CO₂e. It is on track to meet CB3 (NZS p.306 para.5 and endnote 4).
12. CB6 is the first carbon budget to be based on the net zero target in the amended s.1 of the CCA 2008. The previous budgets were based on the former 80% target for 2050. CB6 is also the first carbon budget to include emissions from international aviation

and shipping attributable to the UK. It is common ground that the target in CB6 is substantially more challenging than those previously set.

13. These three claims for judicial review do not involve any legal challenge to the setting of the net zero target in s.1 or to the setting of any carbon budget (including CB6). Instead, it is alleged that the defendant has failed to comply with s.13 and/or s.14 of the CCA 2008.
14. In summary, s.13 imposes a duty on the Secretary of State to “prepare such proposals and policies” as he considers will enable the carbon budgets which have been set under the CCA 2008 to be met. It is common ground that this is a continuing obligation. Section 14 provides that “as soon as is reasonably practicable” after setting a carbon budget, the Secretary of State must lay before Parliament a report setting out proposals and policies for meeting the current and future “budgetary periods” up to and including that budget.
15. Following the setting of CB6, the Secretary of State laid the NZS before Parliament on 19 October 2021 as a report under s.14 of the CCA 2008.
16. The claimants apply for judicial review in relation to the decisions on 17 October 2021 (a) to approve the proposals and policies prepared under s.13 (as set out in the NZS) and (b) to publish the NZS as a report under s.14. In summary, the grounds which they pursued at the hearing were as follows:-

Ground 1: the Section 13 ground

The defendant erred in law regarding his obligation under s.13 of the CCA 2008, in that:

- (i) On a proper interpretation of s.13, he was not entitled to reach the conclusion that the proposals and policies in the NZS would enable the carbon budgets to be met where the quantified effects of those measures were estimated to deliver less than 100% (i.e. around 95%) of the emissions reductions required to meet CB6;
- (ii) Through insufficiencies in the briefing material with which he was supplied, the defendant failed to take into account relevant considerations which were “obviously material”, and therefore matters he had to consider under s.13 of the CCA 2008, namely:
 - (a) the time-scales over which the proposals and policies were expected to take effect;
 - (b) the contribution which each quantifiable proposal or policy would make to meeting the carbon budgets; and
 - (c) in relation to his qualitative judgment, which proposals and policies would enable the 5% shortfall for CB6 to be met.

Ground 2: the Section 14 ground

The defendant failed to include in the NZS the information legally required to discharge his reporting obligations under s.14 CCA, namely:

- (i) an explanation for his conclusion that the proposals and policies within the NZS will enable the carbon budgets to be met;
- (ii) an estimate of the contribution each of those proposals and policies is expected to make to required emissions reductions in so far as they are judged to be quantifiable; and
- (iii) the time-scales over which those proposals and policies are expected to have that effect.

Ground 3: the Human Rights ground

In the alternative, ss.13 and 14 of the CCA 2008 have the effect for which the Claimants contend applying s.3 of the Human Rights Act 1998 (“the HRA 1998”), because to construe them in the way for which the defendant contends would contravene or risk contravention of Convention rights.

17. Friends of the Earth Limited is a not-for-profit organisation which undertakes campaigning and other environmental work in pursuit of environmental objectives. It includes over 300 community groups and has over 300,000 supporters. It was involved in campaigns contributing to the enactment of the CCA 2008. It is now concerned with what it describes as the pressing need for action to be taken on climate change, to ensure a safe and just outcome to the problem for current and future generations.
18. ClientEarth is an environmental law charity. Its charitable objects include the enhancement, restoration, conservation and protection of the environment, including the protection of human health for the public benefit.
19. Good Law Project is a not-for-profit campaign organisation that relies upon the law to protect the interests of the public. One of its three priority areas of work is the protection of the environment. Because the defendant contended that Good Law Project could not rely upon s.3 of the HRA 1998 in relation to ground 3, being a party not affected by any breach of a human right, a successful application was made to join Ms. Joanna Wheatley as a second claimant in CO/199/2022. It is submitted that her witness statement shows that she has sufficient status as a “victim” for the purposes of the human rights claim, in so far as that may be necessary for ground 3.
20. The claimants acknowledge that much of the content of the NZS is commendable. Accordingly, they do not ask the court to quash the NZS. Instead, in the event of one or more of the grounds succeeding, they ask the court to grant declaratory relief.
21. On 1 March 2022 Cotter J granted permission to apply for judicial review in each of the claims. He ordered that they be heard together because of the significant overlap between the grounds. He indicated that the submissions in all three proceedings

should be presented in a single skeleton on each side of the argument. The parties did so in an exemplary manner. Likewise, through good co-operation, they were able to agree reduced bundles containing only material necessary for the legal argument and a timetable dividing responsibility for different subjects between counsel. I am very grateful to all counsel and their respective teams for this assistance.

22. The courts are well aware of the profound concerns which many members of the public have about climate change and the steps being taken to address the problem. So it is necessary to repeat what was said by the Divisional Court in *R (Rights: Community: Action) v Secretary of State for Housing Communities and Local Government* [2021] PTSR 553 at [6]: -

“It is important to emphasise at the outset what this case is and is not about. 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.”

23. The remainder of this judgment is set out under the following headings:

Heading	Paragraph numbers
The challenge to the Heat and Buildings Strategy	[24] – [27]
The statutory framework	[28] – [59]
The setting of CB6	[60] – [68]
The Net Zero Strategy	[69] – [99]
The defendant’s evidence on the process leading to the Net Zero Strategy	[100] – [146]
The assessment of the Net Zero	[147] – [154]

Strategy by the Committee on Climate Change	
Ground 1	[155] – [222]
Ground 2	[223] – [260]
Ground 3	[261] – [275]
Section 31(2A) of the Senior Courts Act 1981	[276] – [278]

The challenge to the Heat and Buildings Strategy

24. On the same day as it published the NZS, the Government also issued related policy documents including its Heat and Buildings Strategy (“HBS”), Net Zero Research and Innovation Framework and HM Treasury’s Net Zero Review. In its Statement of Facts and Grounds, Friends of the Earth also challenged the HBS because of a failure to comply with the public sector equality duty under s.149 of the Equality Act 2010. Here again, the claimant did not ask for the Strategy to be quashed, rather that a declaration be granted that the defendant had failed to comply with s.149.
25. The parties have submitted a draft consent order in which the defendant accepts that ground 4 is made out. He agrees that no Equality Impact Assessment was carried out for the HBS and that one should now be carried out.
26. The parties also agree that: -
- (i) The defendant did comply with s.149 of the 2010 Act in relation to the NZS;
 - (ii) That compliance does not overcome the failure to comply with s.149 in relation to the HBS;
 - (iii) That failure in respect of the HBS does not taint the NZS or the process followed in relation to that document.
27. Accordingly, it is agreed between the parties, and I accept, that the Court should declare that the defendant did not comply with s.149 of the 2010 Act in relation to the HBS. There is support in the authorities for the approach which the parties have agreed to take (see e.g. *R (West Berkshire District Council) v Secretary of State for Communities and Local Government* [2016] 1 WLR 3923 at [86] – [88]; *R (BAPIO Action Limited) v Secretary of State for the Home Department* [2007] EWHC 199 (Admin) at [64] – [70]; *R (Cushnie) v Secretary of State for Health* [2015] PTSR 384 at [95] – [117]).

The statutory framework

Climate Change Act 2008

28. Part 1 of the Act deals with “carbon target and budgeting”. Section 1(1) provides: -

“It is the duty of the Secretary of State to ensure that the net UK carbon account for the year 2050 is at least 100% lower than the 1990 baseline.”

The “1990 baseline” is the aggregate of net UK emissions of CO₂ for that year, plus the net UK emissions of each of the other targeted GHG in the base years specified in s.25. “Net UK emissions” means the emissions of a GHG from a source in the UK less the removals of that gas from the atmosphere over the same period through land use, land-use change or forestry activities in the UK (s.29(1)). That amount must be determined in accordance with “international carbon reporting practice” (as defined in s.94).

29. The target in s.1(1) is set by reference to the “net UK carbon account”. The account shows the amount of net UK emissions of targeted GHGs over a period (see s.29), less the amount of “carbon units” credited plus the amount of carbon units debited to that account during the same period (s.27(1)). Carbon units and carbon accounting are dealt with in s.26.

30. Regulations made by the Secretary of State under s.26 define carbon units. These include GHG emissions controlled by a cap-and-trade scheme. This is a market-based pricing mechanism to incentivise the reduction of emissions in a cost-effective way. A cap is set on the total amount of GHG which may be emitted over a period by those sectors which fall within the scheme. The cap is divided into allowances which may be bought and sold. The cap is reduced over time so as to provide a long-term market signal to encourage business to plan and invest in abatement.

31. Following the departure of the UK from the EU, the UK Emissions Trading Scheme (“UKETS”) was introduced on 1 January 2021. UK businesses are not trading emissions allowances with operators outside the UK. It is common ground that the NZS does not rely upon carbon trading for meeting the approved carbon budgets. Consequently, the NZS focuses on “net UK emissions”.

32. Section 4 imposes duties on the Secretary of State to set carbon budgets and to ensure that the UK carbon account does not exceed those budgets:-

“ (1) It is the duty of the Secretary of State—

(a) to set for each succeeding period of five years beginning with the period 2008–2012 (“budgetary periods”) an amount for the net UK carbon account (the “carbon budget”), and

(b) to ensure that the net UK carbon account for a budgetary period does not exceed the carbon budget.

(2) The carbon budget for a budgetary period may be set at any time after this Part comes into force, and must be set—

(a) for the periods 2008–2012, 2013–2017 and 2018–2022, before 1 June 2009;

(b) for any later period, not later than 30th June in the 12th year before the beginning of the period in question.”

33. Accordingly, for the carbon budgets beginning with CB4 the Secretary of State is obliged to set the budget 11½ years before the beginning and 16½ years before the end of the relevant 5 year budgetary period. As we have seen, s.4 involves the setting of a net amount for the whole of any such period. Additionally s.5 requires that the annual equivalent of the figure set for CB3 is at least 34% lower than the 1990 baseline and that for CB9 (which includes 2050) is lower than that baseline by at least 100% (i.e. net zero). Section 5(1)(c) enables the Secretary of State to specify by order annual equivalent levels for budgets after CB9.

34. Section 8 deals with the setting of a carbon budget:

“(1) The Secretary of State must set the carbon budget for a budgetary period by order.

(2) The carbon budget for a period must be set with a view to meeting—

(a) the target in section 1 (the target for 2050), and

(b) the requirements of section 5 (requirements as to level of carbon budgets) and complying with the European and international obligations of the United Kingdom.

(3) An order setting a carbon budget is subject to affirmative resolution procedure.”

35. Prior to laying a draft order before Parliament setting a carbon budget, under s. 9(1) and (2) the Secretary of State must take into account the advice provided by the Committee on Climate Change (“CCC”) under s.34 (see below) and any duly made representations made by the other national authorities¹. If the draft order would set a budget at a different level from that recommended by the CCC the Secretary of State must publish a statement setting out the reasons for that decision (s.9(4)).

36. Section 10(2) sets out matters which must be taken into account by the CCC in giving its advice under s.34 and by the Secretary of State in making any decision under Part 1 of the Act in relation to carbon budgets: -

“(2) The matters to be taken into account are—

(a) scientific knowledge about climate change;

(b) technology relevant to climate change;

¹ By s.95 “national authorities” refers to the Secretary of State and the devolved administrations.

- (c) economic circumstances, and in particular the likely impact of the decision on the economy and the competitiveness of particular sectors of the economy;
- (d) fiscal circumstances, and in particular the likely impact of the decision on taxation, public spending and public borrowing;
- (e) social circumstances, and in particular the likely impact of the decision on fuel poverty;
- (f) energy policy, and in particular the likely impact of the decision on energy supplies and the carbon and energy intensity of the economy;
- (g) differences in circumstances between England, Wales, Scotland and Northern Ireland;
- (h) circumstances at European and international level;
- (i) the estimated amount of reportable emissions from international aviation and international shipping for the budgetary period or periods in question”

Thus, the setting of a carbon budget for the UK involves decision-making at a high strategic level involving a wide range of environmental, socio-economic, fiscal, political, scientific and technological considerations.

37. Under s.2 the Secretary of State may by order alter the 2050 target percentage in s.1. By s.6 the Secretary of State may alter the target levels under s.5 for CB3 and budgets after CB9. Those powers may only be exercised in limited circumstances, which include significant developments in scientific knowledge about climate change or in international law or policy. They reflect the evolving nature of the science, international law and policy, and the predictive judgments which fall to be made. The procedures are subject to requirements for consultation with the CCC and the other national authorities (ss.3 and 7). Where the Secretary of State’s draft order differs from a recommendation of the CCC, he must publish a statement setting out the reasons for that decision (s.3(6) and s.7(6)). The Secretary of State is required to lay an order under ss.2 or 6 before Parliament for approval by the affirmative resolution procedure.
38. An order setting a carbon budget may not be revoked after the date by which it was required to be set (s.21(1)). But it may be amended after that date, provided that the Secretary of State is satisfied that since the budget was set (or previously altered) there have been “significant changes affecting the basis on which the previous decision was made” (s.21(2)). Once a budgetary period has begun, those changes must postdate that commencement and once it has ended, the budget may not be amended (s.21(3) and (4)). An order under s.21 is subject to similar consultation requirements (s.22) and the affirmative resolution procedure in Parliament (s.21(5)). If the draft order differs from a recommendation made by the CCC then the Secretary must publish a statement setting out the reasons for that decision (s. 22(7)).

39. Sections 16 to 20 deal with the determination of whether the objectives of carbon budgeting have been met.
40. Section 16 requires the Secretary of State to lay an annual report before Parliament stating for the year in question the amount of UK emissions, removals and net emissions for each GHG and aggregate amounts for all GHGs, along with the total amounts and details of the number and type of carbon units credited to or debited from the UK carbon account. The statement must be laid before Parliament no later than 31 March in the second year following that to which it relates (s.16(10)).
41. Section 17(1) and (2) allows the Secretary of State to carry back up to 1% of a carbon budget to the preceding budgetary period. Section 17(3) allows the Secretary of State to carry forward the whole or part of any overachievement in relation to a carbon budget to the next budgetary period.
42. By s.18 the Secretary of State must lay before Parliament a final statement for each budgetary period no later than 31 May in the second year following the end of that period. The statement must state the final amount for each GHG of UK emissions, removals, net emissions, the final amount of the carbon units credited to or debited from the net UK carbon account, and the final amount of that account. The report must state whether the powers under s.17 have been used. By s.18(7) the figures laid before Parliament in a final statement are determinative as to whether the carbon budget for the relevant period (and the duty under s.4(1)(b)) have been met. Section 18(8) provides that: -
- “If the carbon budget for the period has not been met, the statement must explain why it has not been met”.
43. Section 19 provides that where according to the s.18 statement, the net UK carbon account has exceeded the carbon budget, the Secretary of State must lay before Parliament “a report setting out proposals and policies to compensate in future periods for the excess emissions”. Thus, the CCA 2008 provides mechanisms to assist Parliament in holding the Secretary of State to account in relation to his duty under s.4.
44. Section 20 requires the Secretary of State to lay before Parliament no later than 31 May 2052 a final statement for the year 2050 setting out for that year essentially the information required under s.16. The issue of whether the target in s.1 for 2050 is met will be determined by that final statement. If the 2050 target is not met, the statement must explain why that is so (s.20(6)).
45. Sections 13 and 14 deal with the Secretary of State’s duties to prepare proposals and policies for meeting the carbon budgets and to report on those matters to Parliament after each carbon budget is set, once every five years. These provisions lie at the heart of the claims for judicial review.
46. Section 13 provides: -

“Duty to prepare proposals and policies for meeting carbon budgets

- (1) The Secretary of State must prepare such proposals and policies as the Secretary of State considers will enable the carbon budgets that have been set under this Act to be met.
- (2) The proposals and policies must be prepared with a view to meeting—
 - (a) the target in section 1 (the target for 2050), and
 - (b) any target set under section 5(1)(c) (power to set targets for later years).
- (3) The proposals and policies, taken as a whole, must be such as to contribute to sustainable development.
- (4) In preparing the proposals and policies, the Secretary of State may take into account the proposals and policies the Secretary of State considers may be prepared by other national authorities.”

47. Section 14 provides: -

“Duty to report on proposals and policies for meeting carbon budgets

- (1) As soon as is reasonably practicable after making an order setting the carbon budget for a budgetary period, the Secretary of State must lay before Parliament a report setting out proposals and policies for meeting the carbon budgets for the current and future budgetary periods up to and including that period.
- (2) The report must, in particular, set out—
 - (a) the Secretary of State's current proposals and policies under section 13, and
 - (b) the time-scales over which those proposals and policies are expected to take effect.
- (3) The report must explain how the proposals and policies set out in the report affect different sectors of the economy.
- (4) The report must outline the implications of the proposals and policies as regards the crediting of carbon units to the net UK carbon account for each budgetary period covered by the report.
- (5) So far as the report relates to proposals and policies of the Scottish Ministers, the Welsh Ministers or a Northern Ireland department, it must be prepared in consultation with that authority.

(6) The Secretary of State must send a copy of the report to those authorities”

The NZS was laid before Parliament as the Secretary of State’s report under s.14 following the setting of CB6.

48. In addition, s.12 imposes a duty on the Secretary of State to lay a report before Parliament after a carbon budget is set giving “indicative annual ranges” for the net UK carbon account for each year falling within that period. Section 12 provides: -

“(1) As soon as is reasonably practicable after making an order setting the carbon budget for a budgetary period, the Secretary of State must lay before Parliament a report setting out an indicative annual range for the net UK carbon account for each year within the period.

(2) An “indicative annual range”, in relation to a year, is a range within which the Secretary of State expects the amount of the net UK carbon account for the year to fall.

(3) Before laying a report under this section before Parliament, the Secretary of State must consult the other national authorities on the indicative annual ranges set out in the report.

(4) The Secretary of State must send a copy of the report to those authorities.”

49. The statute expresses the time limit for the laying of a report under s.12 and s.14 in the same language: -

“as soon as is reasonably practicable after making an order setting the carbon budget for a budgetary period”

It appears that for earlier carbon budgets the Secretary of State has laid a single report before Parliament under ss.12 and 14. However, the s.12 report for CB6 was not laid until 14 December 2021. The Court has not seen this document, but was told that the information provided was in substance the same as that set out in the Technical Annex to the NZS at table 7 on p.322 (see below).

50. Part 2 of the CCA 2008 deals with the CCC. Section 32 and schedule 1 establish the Committee. It comprises the chairman and up to 8 other members appointed by the national authorities. The appointments must have regard to the desirability of securing that the Committee as a whole has experience in, or knowledge of, the areas set out in para.1(3) of schedule 1: -

“(a) business competitiveness;

(b) climate change policy at national and international level, and in particular the social impacts of such policy;

(c) climate science, and other branches of environmental science;

- (d) differences in circumstances between England, Wales, Scotland and Northern Ireland and the capacity of national authorities to take action in relation to climate change;
- (e) economic analysis and forecasting;
- (f) emissions trading;
- (g) energy production and supply;
- (h) financial investment;
- (i) technology development and diffusion.”

That list reflects the matters set out in s.10(2) which the CCC are required to advise upon and the Secretary of State is required to take into account (s.10(1)).

51. Under s.33 the CCC is under a duty to advise the Secretary of State on whether the percentage target for 2050 in s.1(1) should be amended and to publish that advice (s.33(5)). It did so following the Paris Agreement.
52. Under s.34 the CCC is under a duty to advise the Secretary of State not later than 6 months before the last date for setting a carbon budget for CB4 onwards on the matters set out in s.34(1). They include the level of the budget, the extent to which the budget should be met by reduction in emissions or by carbon units credited to the UK carbon account, and the contributions that should be made by sectors of the economy covered by carbon trading schemes under Part 3 of the Act and by sectors outside those schemes. The advice must be published (s.34(6)).
53. The CCC must lay before Parliament each year a report setting out its views on the progress made towards meeting carbon budgets that have been set and the 2050 target, and whether those budgets and target “are likely to be met” (s.36(1)). The CCC’s report in the second year after a budgetary period has ended must also give the Committee’s views on the way in which the budget was or was not met and on action taken during the period to reduce UK net emissions (s.36(2)).
54. Section 37 obliges the Secretary of State to lay before Parliament a response to the points raised by each of the CCC’s annual reports under s.36.
55. Section 38(1) requires the CCC to provide advice or other assistance requested by a national authority in connection with its functions under the CCA 2008, progress towards meeting the objectives set by the statute, and any other matter relating to climate change. Section 39 gives the CCC a general ancillary power to do anything that appears to it necessary or appropriate for or in connection with its functions. I accept the submission made by Mr Honey QC, on behalf of the Secretary of State, that ss. 38 and 39 enable the CCC to engage in ongoing dialogue with the Secretary of State and to respond publicly to documents he publishes, such as the NZS.

Human Rights Act 1998

56. Section 3(1) of the Act provides: -

“So far as it is possible to do so, primary legislation and subordinate legislation must be read and given effect in a way which is compatible with the Convention rights.”

57. Article 2(1) of the ECHR provides: -

“Right to Life

Everyone’s right to life shall be protected by law. No one shall be deprived of his life intentionally save in the execution of a sentence of a court following his conviction of a crime for which this penalty is provided by law”

58. Article 8 of the ECHR provides: -

“Right to respect for private and family life

1. Everyone has the right to respect for his private and family life, his home and his correspondence.

2. There shall be no interference by a public authority with the exercise of this right except such as is in accordance with the law and is necessary in a democratic society in the interests of national security, public safety or the economic well-being of the country, for the prevention of disorder or crime, for the protection of health or morals, or for the protection of the rights and freedoms of others.”

59. Article 1 of the First Protocol to the ECHR provides: -

“Protection of property

Every natural or legal person is entitled to the peaceful enjoyment of his possessions. No one shall be deprived of his possessions except in the public interest and subject to the conditions provided for by law and by the general principles of international law.

The preceding provisions shall not, however, in any way impair the right of a State to enforce such laws as it deems necessary to control the use of property in accordance with the general interest or to secure the payment of taxes or other contributions or penalties”

The setting of CB6

60. On 9 December 2020 the CCC published its advice under s.34 on the setting of CB6. In a detailed and lengthy report the Committee explained why it was recommending that net UK GHG emissions for 2033-2037 be set at 965 Mt CO₂e, an implied reduction of 78% from the 1990 baseline. As the Chairman said in his foreword, this effectively brought forward the UK’s previous 80% target for 2050 by nearly 15

years. This required *inter alia* the “scaling up” of new policy development and of low carbon investment.

61. In their discussion of how CB6 can be met (p.24) the CCC explained that at the core of their advice were the multiple “scenarios” they had developed exploring the actions required in each sector of the economy to reach the net zero target by 2050. The scenarios explored uncertainties, particularly over how far people will change behaviour, how quickly technology will be developed and the balance between alternative options. The scenarios were “ambitious”, but bounded by “realistic assumptions” over the speed at which low carbon technologies could be developed and rolled out, and allowed time for supply chains, markets and infrastructure to scale up. The scenarios also recognised other priorities, such as maintaining security of energy supply.
62. The CCC used the insights they gained from this analysis to develop a “Balanced Pathway” as the basis for their recommendations for CB6 and the UK’s NDC. The CCC then summarised actions required in four key areas in line with that pathway, giving a broad indication of the scale of change envisaged and key “phase out dates”, such as the sale of diesel vehicles and gas boilers (pps.25-28).
63. These matters were explained in more detail in chapters 1 and 2. The CCC recognised that while many choices can be made now “over the broad shape of the transition, there remain some decision points for the Government in the coming decade” (p.83). Two “critical decision points” were identified. First, a decision will be required in the mid-2020s on the balance between the use of electrification and hydrogen in decarbonising the heating of buildings. Electrification may reach limits of cost-effectiveness and feasibility in certain parts of industry and the heating of buildings. Second, decisions will be needed in the second half of the 2020s on whether HGVs should be decarbonised through hydrogen or electrification, or a combination of the two (p.83).
64. In chapter 3 of its advice the CCC presented its analysis of future scenarios at a sectoral level, setting out options and impacts for each sector separately. In chapter 5 the Committee assessed the impacts, costs and benefits of its advice across the UK economy.
65. The CCC recommended that in the first half of 2021 the Government should set CB6 and publish its net zero plans and policies to deliver the budget in full, noting that many had been in the course of development since 2019 (pp. 15 and 440). The Committee advised that “the expected impact of policies, including those in early planning, should be quantified and in sum should be enough to meet [CB6] and [the NDC]” (p.15).
66. The CCC expressed their view that sections 13 and 14 of the CCA 2008 required the Government to demonstrate clearly and quantitatively how its proposals will deliver CB6 (p.440). The Government’s response should set out a “quantified set of policy proposals” to deliver CB6 and the 2050 target. CCC referred to the Government’s Energy and Emissions Projections (“EEP”) where the impact of “implemented, adopted and agreed” policies had been quantified. The latest projection to 2035 fell short of the reduction recommended for CB6.

67. The CCC noted that many other policies had been announced or were being developed. They advised the Government to set out the intended effect of these policies and the time-scales over which they are expected to take effect. If “the proposals in sum are insufficient to deliver [CB6] the Government should set out the areas where it will develop further and stronger policies to deliver deeper emissions reductions, and quantify the expected effect of those”. If as individual policies are progressed their expected effect is lower, then the impacts of other policies would need to be increased to fill the gap. Accordingly, the Government’s response should set out “an approach to its own tracking of policy development and progress to ensure that it stays on track to the Sixth Carbon Budget as circumstances and expectations change” (pp. 440-1).
68. Ms. Sarah James is the Co-Director of the Net Zero Strategy Directorate in the Department for Business, Energy and Industrial Strategy (“BEIS”). In her witness statement she explains that Ministers began to consider the setting of CB6 in early 2021. In March 2021 they agreed that CB6 should be set at the level recommended by the CCC and began discussions about the development of NZS policies with other Ministers across Government, including the Treasury. The Secretary of State made the final decision to set CB6 in April 2021 when he laid the relevant order before Parliament. That order was accompanied by an impact assessment which considered *inter alia* the measures which might be put in place to meet the proposed CB6 level and alternatives. However, no specific proposals or policies were considered or put forward in the impact assessment (WS paras. 15 to 17).

The Net Zero Strategy

69. The NZS states at p. 17: -

“We have hit all of our carbon budgets to date. This document sets out clear policies and proposals for keeping us on track for our coming carbon budgets, our ambitious Nationally Determined Contribution (NDC), and then sets out our vision for a decarbonised economy in 2050.

Whilst there are a range of ways in which net zero could be achieved in the UK, we set out a delivery pathway showing indicative emissions reductions across sectors to meet our targets up to the sixth carbon budget (2033-2037). *This is based on our current understanding of each sector’s potential*, and a whole system view of where abatement is most effective. But we must be adaptable over time, as innovation will increase our understanding of the challenges, bring forward new technologies and drive down the costs of existing ones.”
(emphasis added)

70. In para. 40(b) of her witness statement Ms. James explains the use of the word “indicative” in the NZS. The Government’s approach to meeting carbon budgets needs to adapt in response to changes over time, such as developments in technology or markets, which may result in a different “optimal distribution of policy effort”. Accordingly, the “delivery pathway” is described as “indicative” rather than as a fixed target trajectory with emission limits for sectors.

71. Page 39 of the NZS states that decarbonisation measures will not cause emissions to fall to “absolute zero” for all sectors. Some sectors, such as industry, agriculture and aviation, are difficult to decarbonise completely. Accordingly, techniques for removal of GHGs, such as afforestation and carbon capture and storage, are essential to compensate for residual emissions so that net zero can be reached by 2050. That approach accords with the concept of net UK emissions upon which the CCA 2008 is based (see e.g. s.29).
72. Chapter 2 of the NZS sets a framework for the policies which follow. Page 62 explains that the Government has taken a “systems approach” which acknowledges firstly, that society, the environment and the economy are interrelated such that changes in one area may impact on others and secondly, that policy-making needs to be dynamic, responding to technological innovation and continuing to update assumptions which have previously been made. The systems approach also helps to identify interdependencies between policies.
73. There are a range of ways in which net zero may be achieved in the UK by 2050, but the exact technology and energy mix cannot be known as it will depend on how new technologies evolve in future (pp. 68-9). However, the Government expects to rely on the following green technologies and energy carriers: -
- *Electricity* from low carbon generation;
 - *Hydrogen* to complement the electricity system, especially in harder to electrify areas e.g. parts of industry, heating, aviation and shipping;
 - *Carbon capture use and storage* (“CCUS”) which can capture CO₂ from power generation, hydrogen production and industrial processes, and then store it underground or use it;
 - *Biomass* combined with CCUS which can support low carbon electricity, hydrogen generation and low carbon fuels.
74. BEIS used a similar approach to that of the CCC. It developed three modelled scenarios up to 2050 to explore possible energy and technology solutions (pp. 70-73). These are further explained in the Technical Annex (pp. 315-320). Scenario 1 (“High Electrification”) assumes a widespread use of electrification to support decarbonisation of transport, heating and industry, with “deep decarbonisation” of electricity supply relying on renewables, nuclear power and gas combined with CCUS. Scenario 2 (“High Resource”) uses hydrogen to a greater extent than in Scenario 1, particularly for decarbonising buildings, power and heavy vehicles. Both Scenarios 1 and 2 balance residual emissions by relying upon carbon removal, through afforestation and engineered measures, with Scenario 2 assuming a higher level of tree-planting. Scenario 3 (“High Innovation”) assumes greater reliance upon innovation, such as the development of carbon capture, sustainable fuels and zero-emission aircraft. The electricity and hydrogen generation requirements for Scenario 3 fall between those assumed for Scenarios 1 and 2.
75. The NZS states that a key decision on the relative roles of hydrogen and electrification for heating will be taken in 2026 (pp.22, 80, 88, 132 and 136-146). The importance of this decision had been acknowledged in the CCC’s s.34 advice given in

December 2020. It goes directly to a major difference between scenarios 1 and 2 and reinforces the explanation given by Ms. James that any pathway produced by a Government at this stage is “indicative”. The decisions which the UK Government and other governments are having to make involve issues of this nature and some unavoidable, substantial uncertainty in making future projections.

76. BEIS used its conclusions from analysing the three 2050 scenarios to develop an “indicative delivery pathway”, or trajectory, of emissions reductions to meet targets up to and including CB6. This was broadly consistent with the scenarios. The pathway was “designed only to provide an indicative basis on which to make policy and plan to deliver on our whole-economy emissions targets”:-

“The exact path we take is likely to differ and must respond flexibly to changes that arise over time.” (p.74)

77. The delivery pathway was based upon the Department’s understanding of each sector’s potential to reduce emissions up to 2037 (p.74). The pathway prioritised emission reductions where known technologies and solutions exist and minimised the use of GHG “removals” to meet the targets (p.75). The claimants criticise the use of the expression “theoretical potential” in one part of the NZS. But I see nothing objectionable in that. Inevitably, the making of national policy on climate change depends upon modelling future circumstances. That involves a number of judgmental assumptions, variables, interactions and uncertainty. It is not a matter of simply making empirical measurements.

78. The NZS distributes the indicative delivery pathway between sectors (figure 13, p.77). The Strategy explains (para. 20 on p.77):-

“Broken down by sector, our indicative delivery pathway *implies* the reduction in emissions up to 2037. These indicative sector pathways, presented as ranges for residual emissions to reflect the inherent uncertainty, help to drive change and *to plan how we can remain on track to meet our targets*. Given the interdependencies and interactions within and between sectors, the exact areas for emissions savings may shift, as our understanding increases. *These pathways are therefore not predictions* or targets: the emissions savings ultimately contributed by each sector are likely to differ as we respond to real-world changes.” (emphasis added)

79. The NZS summarises key requirements for each sector assumed in the work on the delivery pathway, together with a level of reduction by 2035 from UK emissions in 1990 (pp. 78-79). So for the power sector, all electricity will need to come from low-carbon sources by 2035 (subject to security of supply) whilst meeting a 40-60% increase in demand. Based on the technology assumed, it is expected that GHG emissions from the power sector “could fall” by 80-85% by 2035 (pp.78 and 96).

80. The NZS explains at p.82 that meeting the increased demand for low carbon energy relies upon significant scaling-up of *inter alia* new green technologies. The Strategy then sets out the capacities which low carbon electricity generation, hydrogen production, carbon capture and biomass will need to reach over the next 15 years

(p.82). Figure 15 (p.83) gives an overview of “the scale and pace” of some of the changes required, according to assumptions used in the pathway (pp.82-3). The Strategy recognises that “new innovations may emerge, enabling the market to move more quickly or at lower cost than expected, while in other areas progress may be hindered by unexpected deployment challenges as technologies are brought to scale.” Accordingly, the document puts forward a pathway “which maintains flexibility in the future, while ensuring we do not delay action we know is needed in the near-term” (p.84).

81. The NZS refers to the “critical activities” driving decarbonisation across the economy in figure 16 (p.87). This focuses on the new technologies which need to be developed and deployed over the next decade. Figure 16 identifies the year in which milestones are expected to occur and the periods over which activities are expected to start and finish. The NZS states that policies and proposals for achieving these activities are presented in subsequent chapters.

82. Chapter 3 sets out policies and proposals for seven different sectors: -

- Power
- Fuel supply and hydrogen
- Industry
- Heat and buildings
- Transport
- Natural resources, waste and fluorinated gases
- Greenhouse gas removals.

The NZS states (at p.253) that:

“Sector chapters set out policies and proposals in line with this indicative pathway to ensure we are on track for net zero. While it is impossible to predict every path to net zero, this pathway sets out the decisive action we know is needed and acts as the best plan we have to measure progress against.”

83. The NZS adopts the same structure for each sector. I take as an example the first section of chapter 3, dealing with “power”. The NZS first summarises progress made to date (paras. 1-3). It then summarises how the sector needs to change so as to contribute to the net zero target. Using “whole system modelling” to 2050, the strategy quantifies by how much emissions in this sector “could need to drop” by 2050 and then states by how much emissions “could fall” by 2030 and by 2035 (paras. 4-6 on p.96). Figure 17 shows for the power sector an indicative pathway to 2035 and a “range” for the position in 2050. The diagram enables a comparison to be made between two projections: first, the delivery pathway and second, a projection taking into account policies *before* the NZS and Energy White Paper (see [91] below).

84. Paragraphs 7 to 21 describe the challenges and opportunities in the power sector. Electricity generation must be further decarbonised whilst at the same time increasing supply substantially to meet demand in other sectors e.g. from increased electrification. The trajectory or delivery pathway for CB6 suggests that low carbon technologies will need to be built “at, or close to, their maximum technical limit”, which is “a considerable delivery challenge” (paras. 11-12). Unabated gas generation currently plays a critical role in maintaining a secure and stable electrical system, but will be used less frequently in the future, running only when most needed for security of supply. Low carbon technologies capable of replicating that role are to be brought forward, such as CCUS, and hydrogen-fired generation. There will also be measures to ensure that any new combustion power stations, including gas, can be converted to clean alternatives in the future. The NZS also summarises the public and private investment that will be required: £280 to £400 billion on electricity generation, of which £150 to £270 billion relates to CB6, and £20 to £30 billion on transmission and distribution networks by 2037 (para.18).
85. Paragraphs 22 to 43 on pp. 100-105 of the NZS describe the policies and proposals for the power sector to address the needs and opportunities previously identified. This needs to be read together with the milestones and activities shown in figure 16. Some of the matters discussed, such as CCUS and hydrogen generation, also feature in the subsequent treatment of other sectors.
86. The NZS applies the same approach to other sectors in turn. Inevitably, the level of detail and certainty varies, for example, in relation to technologies yet to be developed.
87. Chapter 4 sets out “cross-cutting” policies and proposals which affect more than one sector, or the economy as a whole. They include Government-funded programmes for research and innovation, public funding and private investment (including leveraged investment) in green finance, labour supply with skills for net zero schemes, net zero in government decision-making and regulation, and international collaboration (e.g. through COP26, G7 and G20).
88. The Technical Annex of the NZS is set out at pp. 306-359.
89. At [8] above I referred to the use of the GWP of GHGs other than CO₂ to express the emissions of those gases as a CO₂ equivalent for setting and monitoring compliance with carbon budgets and the 2050 target. The UK follows international conventions set by the Intergovernmental Panel on Climate Change (“IPCC”) (see NZS at pp. 308-9). At the time the NZS was issued it had been agreed internationally that the reporting of GHG emissions under the Paris Agreement would use 100-year GWPs in the IPCC’s Fifth Assessment Report (“AR5”). But that report published two sets of values for 100-year GWPs, one with “climate carbon feedbacks”, reflecting more indirect effects of GHG on the climate and the other without. The “with feedback” GWPs give higher values for GHG emissions. In October 2021 no decision had yet been taken on which GWPs should be used and so the pathways in the NZS were based on the higher, more conservative GWPs “with feedback”. The NZS states at p.309: -

“The use of AR5 GWPs without feedback results in a lower CO₂-equivalent value for UK GHG emissions compared to

AR5 GWPs with feedback, meaning that less abatement would be required to meet the same carbon budget. As a result, it may appear that the policies and proposals in this strategy overachieve on our carbon budgets when based on AR5 GWPs without feedback. *However, these provide additional headroom with which the Government could seek to manage uncertainty in emissions projections. We would review the cost effectiveness of maintaining this headroom as the necessary policies and proposals are implemented.*” (emphasis added)

It will be noted that this headroom was to be “maintained” until a future “review” during the implementation of the policies and proposals in the NZS. I return to this subject under ground 1.

- 90. The Technical Annex to the NZS deals with “meeting the carbon budgets” at pp. 321-327.
- 91. The baselines for the indicative delivery pathways in the NZS took into account policies implemented, adopted or planned as at August 2019, so that the additional emissions reductions required to meet the carbon budgets could be identified (NZS p.311 para.25 and James WS para. 38). BEIS’s EEP 2019 projections were adjusted for a range of changes which had occurred, such as GDP projections, the GWPs in AR5, technological improvements and more recent projections from other government departments and agencies (pp 312-3).
- 92. The NZS says (para. 43 on p.321) that the section between pages 321-327 shows *inter alia* the “future performance implied by the delivery pathway” together with some deployment assumptions that illustrate some of the real-world changes required to meet carbon budgets.”
- 93. Table 6 (p.321) shows projections of UK emissions “implied” by the delivery pathway: -

	CB3	CB4	CB5	CB6 (incl. IAS) ²
Years covered	2018-2022	2023-2027	2028-2032	2033-2037
Baseline	2,499	2,052	1,889	2,029
Budget limit	2,544	1,950	1,725	965
NZS emissions pathway	2,499	1,854	1,312	962
Performance	-45	-96	-413	-3

² “IAS” refers to international aviation and shipping

against carbon budget				
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The figures are given in Mt CO₂e. The figure of 962 Mt CO₂e for CB6 is 3 Mt CO₂e less than the budgetary limit set for that period.

94. Table 7 of the Technical Annex shows the indicative *range* of the UK’s carbon account for each of the 5 years of CB6. The same figures were subsequently published in December 2021 as the Secretary of State’s report under s.12 of the CCA 2008. The implied performance of the delivery pathway for CB6 (962 Mt CO₂e shown in Table 6) corresponds to the “central estimate” given in table 7. Table 7 also shows the upper and lower estimates which are said “to represent the best evidence of the uncertainty in the projections for the sixth carbon budget period” (para.45). The range is quite wide. The upper projection is 1217 Mt CO₂e and the lower 763 Mt CO₂e. The NZS acknowledges that “the [delivery] pathway is highly ambitious”. Downside risks to estimated policy savings include, for example, delays to delivery (para.47 p.322).
95. Table 8 of the Technical Annex (p.323), like tables 6 and 7, is taken from the modelling for the delivery pathway. The implied performance of the pathway is shown as UK emissions by sector for CB4, 2030 (the NDC year), and CB6. The CB estimates are annual figures averaged over the 5 years of the relevant budgetary period. The estimates are given using AR5 GWPs “with feedback”, the basis selected for the NZS. The annual figure for total emissions in CB6 is 192 Mt CO₂e which (allowing for rounding) equates to the 5 year figure of 962 Mt CO₂e in table 6.
96. Table 9 of the Technical Annex (p.324) is comparable to table 8 but uses instead the “without feedback” GWPs in AR5. Here the annual figure for total emissions in CB6 reduces to 182 Mt CO₂e, or 910 Mt CO₂e over the 5 year budgetary period. By comparing tables 8 and 9 it appears that the use of the higher “with feedback” GWPs increases the projected emissions by about 52 Mt CO₂e³ for the whole 5 year period of CB6.
97. Paragraph 52 of the Technical Annex explains that table 10 shows some of the “real world deployment assumptions” for each sector underpinning the pathway analysis. “Not all of the policies and proposals underlying the delivery pathway are represented by [the assumptions shown in table 10].” Ranges are given, for example, where values differ between the electrification and hydrogen scenarios. The NZS acknowledges that some of the deployment assumptions are early “assessments” based on “maximum technical potential”. Because of ongoing uncertainties, the policy mix that will meet carbon budgets, and related deployment assumptions, are subject to change. In that sense table 10 is said to be “illustrative”.
98. The figures in tables 6-8 of the Technical Annex were a puzzling feature during the hearing because they appeared to imply that the defendant had produced projections showing that the *quantified* effects of his proposals and policies would enable CB6 to

³ However, para. 51 on p.323 of the NZS states that the exercise in table 9 has been carried out on an assumption that it would be “optimal in cost and non-cost terms to implement the same set of policies and proposals modelled in the AR5 with feedback pathways”.

be met. If so, ground 1(i) of the challenge simply would not arise on the facts. But Mr Honey accepted that that was not the case.

99. The explanation in the NZS of those tables and the delivery pathways is far from clear. It certainly did not explain the basis upon which the defendant decided to approve the NZS. It was therefore necessary for Ms James to explain in her witness statement the work carried out in preparing the NZS and why it was approved by the Minister. However, that evidence was also unclear on certain important points. Ultimately those matters were clarified at the hearing on 15 July 2022 by reference to the evidence already before the court.

The defendant's evidence on the process leading to the Net Zero Strategy

100. Ms. James and her team worked on developing the proposals, policies and supporting analysis from early 2020 until publication in October 2021. They were assisted by a team of analysts responsible for modelling and analysis of pathways, proposals and policies (WS para. 24). The pathways and scenarios were developed in close collaboration with sector teams across Government (WS para. 29).
101. The team used previous s.14 reports as examples of what such a report should contain: the UK Low Carbon Transition Plan (2009) covering CB1 to CB3, The Carbon Plan: Delivering our low carbon future (2011), covering also CB4, and The Clean Growth Strategy (2017) covering also CB5 (WS para. 25). The NZS was also to address the 2030 NDC and the 2050 target.
102. The NZS built upon a number of recent, sectoral decarbonisation plans, including the Energy White Paper, the Transport Decarbonisation Plan and the Industrial Decarbonisation Strategy, but did not duplicate their level of detail, instead leaving them to be read as complementary documents. (WS paras. 26-27 and 65). Many of the policies had been developed by other Government departments and so their officials worked closely with BEIS between November 2020 and October 2021 on the development of measures for the NZS and on analysing their effects to enable the 2037 pathway to be met (WS paras. 65-69).
103. During the spring and summer of 2021 BEIS Ministers worked with Ministers across Government to reinforce this process. Over the same period BEIS Ministers met regularly with Ms. James and her team to review successive drafts of the NZS. The Secretary of State held monthly sessions to direct the development of policies for the Strategy, including the package of measures for each individual chapter. Officials also collaborated with the devolved administrations to identify and include their emissions reduction proposals and policies in the NZS (WS paras. 70-72).
104. The three 2050 scenarios presented in Chapter 2 of the NZS were developed and refined between March and September 2021. They were used to explore different ways in which CB6 and 2050 targets could be met (WS para. 32-33). The design of the scenarios was influenced by key strategic policy decisions and technological dependencies provided by the cross-Government sector teams and then brought together so as to be compatible with net zero (WS para. 34). An iterative process was carried out involving about 200 modelling runs. This said to have produced coherent *scenarios* to match the carbon budgets (WS para. 35).

105. Ms James and her team drew several “key insights” from that work (WS para. 36), which they used to prepare and model a delivery pathway to meet emission targets up to 2037 (WS para. 37).
106. The delivery pathway was developed in stages. In March and April 2021, BEIS gathered “initial evidence” from the sector teams across Government on how much each sector could decarbonise by 2037. The analysts combined this material with evidence from the CCC’s advice on CB6, the Department’s model and further modelling work by cross-Government sector analysts showing how emissions reductions could be pushed further and where. This resulted in the production of an “initial pathway”, which served as a basis for developing proposals and policies, including the scale of the emissions reductions needing to be found in each sector (WS paras. 39-40).
107. The modelling for the delivery pathway was developed with the input and collaboration of policy officials and analysts from several Government Departments. BEIS also discussed with the Department’s group of external experts the insights drawn from the work on the 2050 scenarios, the “systems” approach and the testing of policy proposals (WS paras. 41 and 74-76).
108. Ms. James explained the “multifaceted and complex” relationship between the 2037 delivery pathway and the NZS proposals and policies (WS paras. 45, 63-72 and 123). In summary she said:-
- (i) The 2037 delivery pathway represented the analysts’ assessment of how each sector could best decarbonise in a feasible, credible and cost-effective way (see also [76]-[81] above);
 - (ii) Early versions of the pathway were used as a benchmark for driving the development of proposals and policies across Government from April 2021 through to October 2021;
 - (iii) Once a draft package of NZS proposals and policies had been developed by September 2021, Ms James’s team and the analysts “assessed them against a final version of the 2037 pathway derived from updated sectoral modelling (including of (sic) the proposed proposals and policies” to determine whether the Department could be confident that the NZS would enable the carbon budgets to be met (see WS paras.45c and 123-125); and
 - (iv) The 2037 pathway presents a clear set of trajectories for UK climate change targets against which the Department will monitor performance of proposals and policies over the budgetary periods.
109. Mr Honey explained that in addition to the modelling work carried out in order to develop the delivery pathway, officials also carried out modelling specifically to quantify the predicted effects of the proposals and policies being prepared for the NZS, in so far as those measures were quantifiable.
110. On quantitative prediction of policy effects, Ms James explains at WS para. 59 that the NZS contains two broad categories of proposals and policies: -

- (i) Sectoral proposals and policies which will deliver *direct* emissions reductions in particular economic sectors, set out in chapter 3 of the Strategy; and
- (ii) Enabling proposals and policies, most of which do not deliver direct emissions savings, but are designed to support transition across the economy.

Category (ii) is divided into two subsets. The first comprises “cross-cutting” measures which apply to all or multiple sectors and meet several policy objectives. They are all set out in chapter 4 of the NZS. The second are “sectoral enabling” measures which enable the decarbonisation of a specific sector. Most of these are set out in chapter 3 (WS paras. 59 and 61-62).

111. The quantification was largely done through the use of sectoral models and evidence bases, by which estimates were produced of emissions reductions resulting from policy measures. There is a direct relationship between sectoral proposals and policies and the activities which they incentivise or regulate. Many of the measures in the NZS were expressed in terms of the actions or deployment they would deliver, and so these could be directly quantified (WS para. 83).
112. However, cross-cutting measures are less directly linked to emissions reductions. They enable sectoral measures to achieve such reductions, but more often than not they do not themselves have a direct effect (WS para. 84). Some cross-cutting measures considered necessary for the delivery of quantified emission reductions from sectoral measures were indirectly accounted for through that sectoral quantification. The effects of other cross-cutting measures could not be quantified (WS paras. 85 and 86). The fact that some quantifiable measures may be developed over time makes it inherently difficult to quantify reductions from such a proposal “with certainty”. (WS para. 88).
113. As a result Ms. James and her team judged that it would be appropriate for the Strategy to rely upon “a mix of quantified proposals and policies, which delivered a very substantial portion of the required emission reductions, combined with some emerging proposals and policies which were at earlier stages of development”, especially as the budgetary period for CB6 was some 12-16 years away (WS para. 89). A similar approach had been taken for the Clean Growth Strategy in 2017, where quantified measures were projected to deliver 94% of required emissions reductions for CB4 and 93% for CB5 (WS para. 91).
114. The analysts in BEIS produced a dataset comprising the figures and analysis which underpinned (a) the NZS delivery pathway to 2037 and (b) “all quantified proposals and policies in the emerging draft NZS”. The dataset included inputs from sector analysts and policy leads across Government. Ms. James’s team also collected data on “the time-scales over which NZS proposals and policies would be delivered and take effect” for inclusion in the dataset (WS paras. 77-78).
115. In para. 79 of her witness statement Ms James explains that the dataset contained the following quantitative metrics:-

“a. annual emission reductions in CO₂e against each quantified policy or proposal, split between both traded and non-traded sectors, with further breakdowns for particular constituent gases (methane and nitrous oxide), with totals expressed in both with and without feedback GWP values (as described in paragraphs 48-55 above);

b. a mapping of the emissions reductions from each quantified proposal and policy to the particular emissions pathways included in the NZS (such as the electrification scenario or the high hydrogen scenario), to reflect that some proposals and policies would contribute different emissions reductions under different scenarios;

c. assumptions about potential contributions to UK totals through policy delivery outside of England (including through policy taken by the Scottish Government, Welsh Government and Northern Ireland Executive) for policies or proposals that the UK Government could not otherwise quantify for Scotland, Wales, or Northern Ireland, generally based on UK Government or CCC estimates of technical potential; and

d. totals of emission reductions by sector derived from the underlying data, expressed as an average or per annum figure for each carbon budget period and for our NDC, and conducted for both global warming potentials (AR5 with and without feedback).”

116. In para. 80 she describes the detailed qualitative data in the dataset:-

“The dataset also included detailed qualitative data on the characteristics of proposals and policies, such as the mechanisms by which they would achieve their intended outcomes (e.g. funding incentives, regulations, tax incentives, engagement with the public or businesses); which sector(s) of the economy they would affect; which central Government department would be responsible for delivering them; and whether they required joint working with local authorities to be delivered.”

117. This dataset enabled officials in BEIS to assess the pathways, proposals and policies in the NZS so that they could advise Ministers that the Strategy would enable the carbon budgets to be met (WS para. 81).

118. The modelling to quantify emissions reductions from those proposals and policies which were quantifiable was updated to take into account more recent decisions approving policy and the spending review. As a result officials produced quantitative estimates that the emissions reductions expected from quantifiable proposals and policies would deliver about 95% of the reduction required by CB6. They then compared this estimate to the modelling of the performance of the delivery pathway (see [93]-[95] above). They concluded that the quantified emissions reductions from

the proposals and policies were “not materially different from”, or were “consistent with”, the modelling for the pathway. Those emissions reductions were within the margins of uncertainty identified for the pathway estimates (WS paras. 123-125 and table 7 of the Technical Annex: see [94] above).

119. This comparison exercise formed one important part of the briefing given to the Minister on 15 October 2021 and thus the basis of his decision (see [131]-[132] below). Mr Honey confirmed this to be the case at the hearing on 15 July 2022.
120. The final decision to approve the NZS had to be taken by the Minister of State on behalf of the Secretary of State. The Minister had been appointed on 16 September 2021, only a month before the publication of the NZS. COP26 began on 31 October 2021. Plainly, as Mr. Honey acknowledged, Ministers and officials had to work under a great deal of pressure in the run up to the publication of the Strategy.
121. The Minister was provided with an initial briefing pack on his new responsibilities, the CCA 2008 and the NZS. He was given a more detailed verbal briefing on 22 September 2021. The target publication date was 19 October 2021, timed to coincide with the Global Investment Summit. There were ongoing processes for clearing the proposals and policies in the NZS with No.10, the Cabinet Office, HM Treasury and responsible Ministers in other departments. Some measures were subject to the public spending review, which took place during the summer and autumn of 2021 (WS paras. 102-105).
122. On 29 September 2021 officials submitted to the Secretary of State and the Minister a briefing package for the clearance of policies remaining to be considered by other Ministers, but which did not involve significant policy changes or the spending review. The Minister approved the package on 1 October and the Secretary of State on 5 October 2021. This clearance process was completed before the Minister was given further briefing for his approval of the NZS for publication (WS paras. 113-116).
123. Ms. James describes the complex and intense process relating to clearance of other policies. This involved daily meetings between 4 and 18 October 2021 and advice on certain matters being given to the Prime Minister and the Chancellor of the Exchequer. Some textual changes were being made until shortly before publication to ensure consistency with confirmed policy positions. The Minister was kept abreast of developments (WS paras. 118-122).
124. In the evening of Friday 15 October 2021 officials provided the Minister with their advice to enable him to consider approving the publication of the NZS. He was provided with a “near final” draft of the Strategy. The Minister was advised that his approval was required by 10am on 18 October if the document were to be published the following day.
125. Paragraph 8 of the submission to the Minister stated: -

“Drawing from net zero scenarios in 2050, the Net Zero Strategy presents a modelled indicative pathway to CB6, broken down by sector based on their potential to decarbonise. While the exact areas for emissions savings may shift in

response to real-world changes and as our understanding increases – we use ranges for each sector to reflect this uncertainty – the pathway provides a sound basis on which to plan how we meet our emissions targets. The indicative pathways are supported by specific policies and proposals. If delivered in full, the specific policies and proposals outlined in Annex C are projected to overachieve CB4 by 11Mt p.a. and CB5 by 72Mt p.a. We need to aim to overachieve on CB4 and 5 in order to stay on track for our NDC and CB6 (which were set after we increased our ambition to meet net zero by 2050). They are also projected to achieve our 2030 NDC. The strategy provides a strong foundation for decarbonising in the 2030s, *with the stated policies and proposals projected to directly deliver ~95% of emissions reductions required for CB6.*” (emphasis added)

126. Paragraph 8 referred to Annex C, a 42-page list of a great many policies. The list merely told the Minister whether an individual policy had been “quantified” (because it had a direct effect on emissions) or remained “unquantified”. If the effect of a policy on emissions had been quantified, that effect had been taken into account in the quantitative assessment of the extent to which policies in the NZS were expected to meet the limits in CB4, CB5 and CB6. However, Annex C did not give any indication to the Minister about the scale of any reduction attributable to any specific policy, or even any group of interacting policies, although the information was available to officials. I return to this point under ground 1(ii).
127. Paragraph 8 also stated that the quantified policies were projected to deliver 95% of the emissions reductions required to meet the budget of 965 Mt CO₂e set for CB6. However, no breakdown of that figure of any kind was provided.
128. The briefing to the Minister also included the following table: -

Residual emissions, Mt CO ₂ e/year	Mid 2020s	Late 2020s and Early 2030s		Mid 2030s
	CB4	CB5	ND C	CB6 (incl. IAS)
Emissions after savings (with SR estimates)	379	273		202
Budget	390	345	275	193

Position Against Budget				
... including indicative SR impact	-11	-72	-2	9
... including further capability (from NZS pathways)	-19	-83	-13	-1

“SR” referred to the spending review.

129. The only explanation in the ministerial submission of that table is contained in para. 10: -

“Although our ambitious SR bid for NZS policies did not result in all the funding requested, we advise that the NZS package of policies and proposals credibly enables us to be on track for all our legislated carbon budgets, and therefore fulfils our duty under sections 13 and 14 of the CCA (see Annex F). This is based on current modelling and planned policy work to identify further options over the coming years to deliver CB6 in full, taking advantage of technological progress, innovation and societal trends. It is not necessary for the policies and proposals included on the face of the NZS to deliver 100% of the emissions reductions required for CB6, providing they are sufficient to keep the targets in reach and that we continue to develop further policies and proposals as required in coming years (see paras. 15 and 16, and Annex F, for legal risks associated with this position). It is also worth noting that the Strategy uses conservative assumptions on Global Warming Potentials which will be reviewed in 2022, taking into account any relevant outcomes from COP26 which are likely to improve our performance on our carbon budgets.”

130. The table in [128] gives annual figures. The first line estimates annual emissions during CB6 of 202 Mt CO₂e, which is 5% short of the annual level required to meet CB6, 193 Mt CO₂e in the second line. That first line takes into account emissions reductions from NZS policies, but only those with quantifiable effects (WS para. 141). The annual shortfall is expressed as 9 Mt CO₂e in the fourth line. The fifth line, “including further capability (from NZS pathways)”, shows an annual figure of -1 Mt CO₂e. The reference to NZS pathways is solely to the modelling work carried out on the delivery pathway (WS para. 142). At the hearing there was no dispute that this modelling represents the “implied performance” of the delivery pathway for CB6, resulting in annual emissions of 192 Mt CO₂e (shown in table 8 of the Technical Annex) compared to the annual figure required for that budgetary period of 193 Mt CO₂e (set out in table 1 and effectively also in tables 6-8). In other words, it indicated that the delivery pathway was projected to satisfy CB6. But that raised the question what did the modelling of the “delivery pathway” take into account?

131. The advice given in para. 10 of the ministerial submission was that the NZS package of proposals and policies credibly enables the UK to be on track for all the carbon budgets which have been set based on (a) current modelling and (b) “*planned policy work* to identify *further options* over the coming years to deliver 100% of the emissions reductions required for CB6”. On 15 July 2022 Mr Honey accepted that this was a reference to the same kind of comparison as had been described by Ms James (WS paras. 123-125 and see [118] above) between the modelling of the effects of those NZS policies which were quantifiable (delivering 95% of the reductions required to satisfy CB6) and the estimates of the “implied performance” of the delivery pathway. But here it will be noted that the briefing referred to an additional factor in that comparison, the “planned policy work”.
132. A straightforward description of the advice given in the briefing would have been (a) the quantitative estimates of the emissions reductions from policies with quantifiable effects would deliver 95% of the reduction required by CB6 and (b) as a matter of judgment, the unspecified policies referred to in para. 10 of the ministerial submission would enable that quantitative shortfall and the target in CB6 to be met. During the hearing the judgment in (b) was referred to as a “qualitative” judgment or analysis, as distinct from quantitative analysis. I will use the same terminology.
133. The defendant’s skeleton did not set out this position at all clearly. Paragraphs 69-70 stated that the delivery pathway was not “merely modelling” of what it would be feasible to achieve (cf. para. 26 of the claimants’ skeleton). Instead, as proposals and policies were developed the pathway reflected the expected impact of those measures: “they were fed back (sic) into the delivery pathway.” Indeed, paragraph 70 tried to have it both ways:
- “The proposals and policies fed into the pathway, and were also assessed to be consistent with the emissions savings required by the pathway.”
134. Because of the lack of transparency on this subject, both in the defendant’s case and in the NZS, much time was spent trying to find out whether the modelled results of the delivery pathway for CB6 in tables 6-8 of the NZS, or the figure of -1 Mt CO₂e in the table given to the Minister, represented a freestanding quantification of emissions reductions resulting from NZS policies or whether the quantification of all emissions reductions resulting from the “quantifiable” policies (“the 95%”) was input into the modelling for the delivery pathway. At the hearing on 15 July 2022, Mr Honey said that the evidence before the court did *not* indicate that either exercise had been carried out. If it had, that assessment would have been of a very different kind to that described, for example, at p.17 of the NZS (see [69] above) and the defendant would no doubt have said so in clear terms both in the NZS and in the evidence.
135. Instead, Mr Honey confirmed that the defendant’s case rested on the comparison described in [118] and [132] above between the quantitative analysis that policies would deliver 95% of the emissions reductions required by CB6 and the estimate for the delivery pathway of 192 Mt CO₂e of annual GHG emissions during CB6, together with the exercise of judgment to conclude that the policies in the NZS will enable that carbon budget to be met.

136. It follows, and Mr Honey also confirmed, that the modelling on the delivery pathway did not include or provide any quantification of the effects of the “planned policy work” referred to in paragraph 10 of the ministerial submission. This, of course, is relevant to the issue under ground 1(i) of whether the defendant could lawfully have been satisfied that the NZS would enable CB6 to be met in accordance with s.13(1) of the CCA 2008.
137. The claimants criticised the statement in para. 10 of the ministerial submission (see [129] above) that the policies and proposals did not need to deliver 100% of the emissions reductions required for CB6 “providing that they are sufficient to keep the targets in reach and that we continue to develop further policies and proposals as required in coming years...”. The claimants suggested that the Minister could not have been satisfied in accordance with s.13 of the CCA 2008 that the proposals and policies would enable the emission reductions required by CB6 to be met. In my view that statement was simply referring to the quantifiable policies which were predicted to achieve 95% of the CB6 requirement. The officials judged that other policies would meet the shortfall and accordingly the shortfall was “in reach”. Again the real question is whether the defendant erred in his interpretation of s.13 (see ground 1(i)).
138. I have to say that the defendant’s position could and should have been explained in a clear and straightforward manner both in the evidence and in the skeleton. The court is entitled to such an explanation, particularly in a case of this nature (see [192] below). It would have saved a good deal of court time and resource.
139. One important point to emerge from all this, as the claimants rightly submitted, is that the first time that the Government revealed that it expected its quantified proposals and policies to achieve only 95% of the emissions reductions required to meet CB6 was when the defendant served his Summary Grounds of Defence in response to these challenges (see paras. 31-35). Neither Parliament nor the public would have been aware of the point from the NZS, nor indeed of the way in which the defendant relied upon further “planned policy work” to be satisfied that the NZS would enable CB6 to be met.
140. In the absence of any explanation in the ministerial submission about which policies would or could be the subject of further work, Mr. Wolfe QC, on behalf of Friends of the Earth Limited, submitted that officials were referring to proposals and policies not referred to in the NZS at all and therefore irrelevant to satisfying the duty in s. 13. He based himself upon the penultimate sentence of para. 10 of the submission.
141. However, the court has to keep in mind that it is not construing a legal instrument, but seeking to understand advice given to a minister who had previously been briefed on the subject (WS para. 102). Furthermore, in this instance, the advice was given under great pressure. In judicial review the court does not award marks for draftsmanship, or use infelicities of expression as a basis for inferring unlawfulness. Instead, it looks at the substance of the matter. Read in the context of the material provided to the Minister and his earlier briefing, the sentence criticised was simply referring to the “95% estimate” in relation to quantifiable policies and to the judgmental comparison with the modelling work on the delivery pathway and its margins of uncertainty ([118] above).

142. It is also relevant that the advice in para. 10 was given in the context of a high level strategy and set out the position at a particular point in time in relation to a wide range of policies. Some policies were more detailed or specific than others because, for example, they had previously been adopted and were in the process of being, or about to be, implemented. Other policies were in the course of development or intended for development in a few years' time. In this context "planned policy work" should be understood to indicate policies and proposals referred to in the NZS which are to be developed in future, or developed further, and not to matters which were not mentioned in the NZS at all.
143. The unquantifiable cross-cutting measures identified in chapter 4 represent one obvious category of proposals in the NZS intended to produce additional substantial reductions in emissions. The importance of those measures for meeting the carbon budgets was emphasised in para. 12 of the ministerial submission.
144. Ms James says that para. 10 of the ministerial submission referred to the further development of some policies which had not been quantified in the modelling work and other policies which had (WS para. 142). Ms. James has given a number of examples of those measures (WS para 143). For example, it is proposed that substantial public investment be made in research and development and in green finance in order to stimulate and promote "further options". Subsequent s.14 documents can be expected to include more details on such matters as they are developed.
145. Accordingly, I do not accept Mr. Wolfe's submission that paras. 142 and 143 of Ms. James's witness statement sought to put an impermissible gloss on para. 10 of the submission to the Minister. That advice, read fairly and in context, referred to unquantified proposals and policies in the NZS of the kind identified by Ms. James and to quantified proposals and policies in the NZS which may be developed further.
146. The final version of the NZS was approved by the Minister on 17 October 2021. On 27 October 2021 he was given further advice that subsequent editing changes and decisions on the spending review had not materially altered the NZS or the predicted emissions savings for the carbon budgets. No point is taken on those aspects.

The assessment of the Net Zero Strategy by the Committee on Climate Change

147. The CCC produced its "Independent Assessment" of the NZS one week after its publication, on 26 October 2021.
148. The CCC was positive about a good deal of the NZS. The Strategy followed the approach it had recommended in relation to the analysis and modelling of scenarios and the use of an indicative delivery pathway.
149. On p. 3 the CCC said: -

"Our overall assessment is that it is an ambitious and comprehensive strategy that marks a significant step forward for UK climate policy, setting a globally leading benchmark to take to COP26. Further steps will need to follow quickly to

implement the policies and proposals mapped out in the Net Zero Strategy if it is to be a success.

We welcome the Government's recognition that reaching Net Zero and tackling climate change is not only achievable and affordable but essential to the UK's long-term prosperity and can bring wider benefits for society, the economy and the environment.

The pathways for emissions and technologies, and the associated investment, outlined in the Strategy are broadly aligned to those set out by the Climate Change Committee in its advice on the Sixth Carbon Budget. They are accompanied by proposals for credible delivery mechanisms across the economy.

The targets cover all the UK's territorial emissions, including international aviation and shipping, and the plans aim to deliver the targets fully in the UK, without recourse to international carbon credits, while avoiding carbon leakage from industry or agriculture. The strategy as a whole is based on cautious assumptions over the lasting impacts of the Covid-19 pandemic and rules for emissions accounting.

The Net Zero Strategy, with its many supporting publications, is an example of a deliverable sector-based strategy for rapid emissions reductions. Following three decades of sustained emissions reduction in the UK, the Strategy sets the path for future decarbonisation consistent with targets for both the near term and the long term that meet the demands of the Paris Agreement."

150. In the view of the CCC "the Net Zero Strategy fulfils the requirement in the Act for the Government to present policies and proposals to meet the UK's emission targets" (p.7).

151. Mr. Honey also points to the following statement at p.11 of the Assessment:-

"The overall and sectoral ambitions that the Government has proposed align well to those proposed by the Committee in its advice on the Sixth Carbon Budget (figures 1 and 2). The ranges identified by the Government are intended to reflect uncertainty around a central delivery path that aims to keep in play multiple possible scenarios for meeting the Net Zero target in 2050. This is a sensible approach in the face of uncertainty and aligns to the Committee's approach in its advice".

But the CCC went on to point out the Government's range is "somewhat asymmetric: overall emissions will have to be in the lower half of these ranges to deliver CB6".

152. In its “conclusion on proposals for policies to deliver the plans” the CCC said at p.27: -

“Together, the proposals represent a strong foundation for policy to reduce emissions across the economy. In most areas, the Government has set goals aligned to the path to Net Zero and put forward credible policy packages to deliver them. Funding and incentives appear to be being set at around the level required and generally plans involve a balanced mix of the possible solutions.

However, the Government has not quantified the effect of each policy and proposal on emissions. So while the Government has proposed a set of ambitions that align well to the emissions targets, it is not clear how the mix of policies will deliver on those ambitions – albeit in theory they could. This makes it hard to assess the risks attached to the plans and how best to manage these. The Committee will return to these questions in the coming months, and we encourage the Government to increase the transparency of how the policies will support the plans.” (emphasis added)

153. On 11 April 2022 Friends of the Earth wrote to the Chief Executive of the CCC to ask the following questions: -

“1. Do you have any comment on the fact that the NZS does not provide information on the predicted GHG reductions and time-scales for the policies and proposals it describes?

2. Does that impact on the CCC’s ability to comment on the NZS including on whether it will secure compliance with carbon budgets and Net Zero?

3. In relation to those matters, has the CCC a) raised concerns about this with the Government and/or b) asked the Government for any further information?

4. Has the CCC been provided with any further information on those matters, either in response to its request or in any event?”

154. The Chief Executive responded on 22 April 2022: -

“As you will be aware, the Climate Change Committee published an interim assessment of the UK Government’s Net Zero Strategy in October 2021. We will shortly publish a more detailed assessment of the strategy, in June, as part of our annual statutory report to Parliament.

As we stated in October, the Government has not quantified the effect of each policy and proposal on emissions. This makes it

hard to assess the risks attached to the plans and how best to manage these. That remains our view.

We are now in the final stages of completing a new assessment for our annual Progress Report. It will contain new analysis of the Net Zero Strategy and a more complete commentary on its likely impacts.

As part of this assessment, we are in regular dialogue with BEIS to understand the Government's strategy in more detail. So far, we have been provided with some limited clarifications and further breakdowns of the pathway that was published in the Net Zero Strategy. *We have not received any new quantification of emissions savings from specific policies.* These discussions continue and the information we have received is not complete. We expect to receive some further clarification on the emissions pathway in response to our ongoing queries.

It is difficult to provide a fuller response at this point, until we have completed our analysis.”

The claimants emphasised the words I have italicised. The CCC's report to Parliament in June 2022 had not been published by the time of hearing, so it was not referred to by the parties and I have not had regard to it. No party has suggested that it affects the issues that the court has to decide.

Ground 1

155. Some of the submissions made by the parties were wide-ranging, but I will only address those issues which I consider need to be resolved for the determination of these claims for judicial review.

Preliminary issues

156. It is convenient to clear the decks before coming to the issues of real substance under ground 1.
157. One of the main issues which the court has been asked to determine (ground 1(i)) is whether the Secretary of State must be satisfied under s.13(1) that the numerical projections of his quantifiable policies will enable at least 100% of the reductions in emissions required by CB6 to be achieved. The defendant submits that the issue is academic, alternatively relief should be refused, because it was decided at COP26 to adopt the less conservative GWP values rather than the more conservative GWPs used in the NZS. The defendant's suggestion that use of the lower GWPs would result in the quantified policies meeting CB6 is untenable. First, the NZS and the advice given to the Minister on 15 October 2021 proceeded on the basis that international discussion at COP26 on this issue should not be pre-empted (see Ms. James WS paras. 54-55 and 148-149). Second, and in any event, the NZS expressly relied upon the conservatism in the use of the “with feedback” GWPs as providing “additional headroom” with which to manage the uncertainty in the Strategy's emissions

projections in the event of the alternative set of GWP values being adopted. That conservatism was to be maintained until a future review during the implementation of the policies (see [89] above). That formed an intrinsic part of the policy approach adopted in the NZS. It is not permissible to ask the court in effect to ignore or rewrite this part of the Strategy. For their part, the claimants complain that this same subject was mentioned at the end of para. 10 of the ministerial briefing. But in my judgment the language indicates that it did not play a material part in the decision to approve the NZS and I do not think it would be appropriate to grant the claimants any relief in this regard.

158. The claimants submitted that the delivery pathways did not involve any assessment at all of the predicted effects of the defendant's proposals and policies: they simply set out requirements, alternatively aspirations, for meeting CB6. This turns out to be immaterial. The defendant's response to ground 1(i) rests upon the comparative approach taken in the defendant's decision as summarised at [118], [132] and [135] above. In this context I also refer again to Mr Honey's response set out at [134] and [136] above.

159. Complaint was also made about the looseness of some of the language used in the NZS, such as "keeping on track" for meeting the carbon budgets or "putting us on the path for Carbon Budget 6". I accept Mr. Wolfe's submission that there is a difference between s.13(1) and (2) in that the latter uses slightly softer language, "with a view to meeting" when dealing with the 2050 target (and any later target set under s.5(1)(c)). But this is because the central focus of s.13 is the preparation of measures which will enable the carbon budgets to be met. Measures which are considered by the Secretary of State to pass that test are also required by s.13(2) to have the aim of meeting the 2050 target. However, reading the NZS fairly and as a whole, I do not accept Mr Wolfe's suggestion that when he addressed the carbon budgets the Secretary of State made the error of applying the wrong test in s.13(2). Instead, the phrases criticised by the claimants are consistent with the correct test in s.13(1).

160. In his first witness statement, Mr. Michael Childs, the Head of Science, Policy and Research of Friends of the Earth Limited, gave a number of examples of what he considers to be a lack of detail in certain proposals in the NZS or policy gaps. This court is not in a position to adjudicate on matters of that nature in proceedings for judicial review (see [22] above). No doubt the claimants are aware of this, because the points were not advanced in any detail during the hearing. I need say no more about that evidence.

Ground 1(i) - the duty in section 13(1) of the CCA 2008

161. The claimants submit that in order to be satisfied under s.13(1) that "proposals and policies" will enable the carbon budgets to be met, the Secretary of State, or in this instance the Minister, had to make an assessment of the time-scales within which the measures would take effect and their impact on reducing GHG emissions. Such an assessment necessarily required numerical predictions of the contribution which the proposals and policies would make to meeting the carbon budgets.

162. According to the claimants, the Secretary of State fails to comply with his duty in s.13(1) if his numerical projections show that his proposals and policies would reduce GHG emissions by only a proportion (e.g. 95%) of the reductions required to meet the

carbon budgets. They say that to satisfy his duty, the Secretary of State's numerical projections must show that the policies with quantifiable effects will enable at least 100% of those required reductions to be achieved. Provided that that test is met, the claimants accept that s.13(1) does not preclude the Secretary of State from making *in addition* a qualitative judgment about the effects of one or more of his policies on meeting a carbon budget. But what the Secretary of State may not do is to rely upon a *qualitative* judgment of that kind to overcome a shortfall revealed by his *quantitative* analysis, the numerical projections, for enabling the carbon budgets to be met.

163. There are a number of points on the interpretation of s.13 which have become common ground between the parties.
164. Firstly, the obligation on the Secretary of State under s.13 is a continuing one.
165. Secondly, his duty is to *prepare* measures that will enable the carbon budgets to be met. The statutory scheme recognises that proposals will evolve over time and will be introduced and developed at different stages. Policies may need to be reconsidered as circumstances change. I would add that this is reinforced by s.10(2) of the CCA 2008, which requires the Secretary of State to take into account a wide range of considerations (see [36] above) which will be subject to considerable change over time.
166. Thirdly, it is agreed that the phrase "proposals and policies" is deliberately broad. The CCA 2008 received Royal Assent on the same day as the Planning Act 2008. Parliament's consideration of the two Bills overlapped. I agree with the parties that the Supreme Court's conclusion in *R (Friends of the Earth Limited) v Secretary of State for Transport* [2021] PTSR 190 at [105] – [106] that the meaning of "Government policy" in s.8 of the Planning Act 2008 is restricted to "established policy", does not apply to s.13(1) of the CCA 2008. Mr. Wolfe and Mr. Coppel also accepted that the phrase "proposals and policies" includes an emerging policy or a proposal to be further developed. That must be correct. The context in which s.13 sits includes carbon budgets which may cover a period ending up to 16 years into the future, the 2050 target and the innovative nature of important aspects of climate change technology.
167. Fourthly, it is agreed that it is a matter of judgment for the Secretary of State to decide (a) on the proposals and policies which should be prepared and (b) whether they will enable the carbon budgets to be met. I return to this subject below.
168. Fifthly, Mr. Honey submitted, rightly, that s.13(1) does not require the Secretary of State to be certain that his proposals and policies will enable the carbon budgets to be met. Read in context, the word "will" cannot be taken to indicate that certainty is required. It was used simply because the duty imposed by s.13(1) is concerned with a predictive assessment about the future. Similarly, the claimants said that the Secretary of State must make an assessment of "the expected impact" of the proposals and policies (para. 39 of the claimants' skeleton).
169. But the claimants then used various expressions to describe the strength of this expectation, such as "some certainty" or "a degree of certainty". However, in a context where certainty is not required by the legislation or even achievable, I do not think it appropriate to use that word, even with qualifications of the kind suggested by

the claimants. Such language is so ambiguous that the reference to “certainty” is misleading.

170. Instead, in my judgment the word “enable” should be given its ordinary meaning of “to make possible or effective” (Oxford English Dictionary). Here the emphasis is on policies which, taken overall, the Secretary of State judges will be “effective” or efficacious for achieving the reductions set by the carbon budgets.
171. Mr. Wolfe submits that there is a distinction between the language of s.13(1) and that of s.12(1) and (2). He suggests that the latter imposes a less onerous obligation on the Secretary of State to set out an “indicative range” for each of the years of the carbon budget just set, within which he *expects* the amount of the UK net carbon account to fall. I see no material difference for the purposes of the issues in this case. Section 13(1) uses “will enable” and “to be met” because they relate to the object of the proposals and policies being prepared and an assessment of the effect of those measures. That includes consideration of what the Secretary of State expects to be achieved during a budgetary period. In the same vein, s.14(2)(b) refers to the time-scales over which policies are “expected” to take effect.
172. Mr. Wolfe also submitted that because s.13(3) requires that the proposals and policies must contribute to sustainable development, it must be inferred that the Secretary of State is obliged to include in his assessment under s.13(1) the time-scales over which his proposals and policies are expected to take effect. He relied upon the definition of “sustainable development” adopted in Resolution 42/187 of the United Nations General Assembly: “meeting the needs of the present without compromising the ability of future generations to meet their own needs” (*Spurrier* at [635]). I do not accept that the concept of sustainable development can support the highly specific interpretation of s.13(1) for which Mr. Wolfe contends.
173. Nevertheless, in my judgment there are two more straightforward routes by which s.13(1) requires the Secretary of State to assess the time-scales over which his proposals and policies are expected to take effect. First, this must be an obviously material consideration in predicting whether those measures will enable carbon budgets to be met (applying the tests set out in [200] below). Second, s.14(2)(b) implies that the point will already have been addressed when the policies covered by the s.14 report were being prepared under s.13.
174. Returning to the claimants’ main submission, counsel accept that there is no express language in the legislation requiring the Secretary of State to take a quantitative approach nor, in particular, to be satisfied quantitatively that those policies which are quantifiable will enable at least 100% of the emissions reduction required by each carbon budget to be met. Instead, they agree that they have to show that this requirement is necessarily implicit in the legislation.
175. On this point they argue that s.13 (and indeed s.14) must be interpreted so as to support the duties imposed on the Secretary of State by ss.1 and 4. The targets are quantitative in nature and not qualitative. The carbon budgets are set by the Secretary of State having regard to the advice of an expert body, the CCC, and on the basis that he considers them to be realistic. Furthermore, they will have been prepared after taking into account the range of environmental, socio-economic, fiscal, political, scientific and technological considerations referred to in s.10(2). The scheme requires

the Secretary of State to plan to achieve emissions reductions so as to comply fully with those budgets, reflecting the time-scales over which it is expected that his proposals and policies will take effect. Sections 16-20 require the UK's progress in meeting carbon budgets to be monitored on a numerical basis.

176. The claimants pointed to passages in the defendant's pleadings which suggested that whether *any* quantitative analysis is to be undertaken at all in discharging the obligation in s.13(1) is entirely a matter of judgment for the Secretary of State. However, in his submissions Mr. Honey rightly accepted that the obligations in s.13 and s.14 cannot properly and rationally be satisfied without quantitative projections and analysis of the effects of the proposals and policies in reducing GHG emissions.
177. I conclude that there is no basis in the statutory scheme to justify the court holding that the obligation in s.13(1) requires the Secretary of State to be satisfied by quantitative analysis that measures with quantifiable effects will enable at least 100% of the emissions reductions required by the carbon budgets to be achieved.
178. Plainly the targets are quantitative in nature and the provisions for monitoring the progress made each year and whether targets are being met involve measurement of the UK's actual performance in reducing emissions. But s.13(1) is different in that it involves making a predictive assessment many years into the future. Such predictions inevitably involve significant uncertainty, for example, in relation to future circumstances falling within s.10(2). There are uncertainties about economic growth, energy, prices, population growth, the impact of investment in technological innovation and the implementation of proposals. Even predictions expressed in quantitative terms involve subjective judgment (see below).
179. There is no reason to think that Parliament intended that s.13(1) could only be satisfied by the predicted numerical effects of those policies which are quantifiable. If Parliament had intended to impose such a significant constraint on the Secretary of State's ability to judge how to discharge his duty, it would have said so. It did not and the language it has used does not give rise to any implication to that effect.
180. To some extent the claimants' argument proceeds on the basis that there is a clear distinction between quantitative and qualitative analysis for the purposes of s.13(1) of the CCA 2008. At first glance that might appear to be so: one uses numbers and the other need not do so. But certainly in the present context, the distinction is illusory. The kind of quantitative analysis which is carried out is not focused simply on empirical measurements of past or present conditions. It is not a purely objective exercise. It involves predictions of future conditions over many years in a changing socio-economic, environmental and technological landscape and therefore a good deal of uncertainty. The consideration of matters such as these depends upon the use of judgment, whether the analysis is quantitative or qualitative.
181. In order to carry out predictive, quantitative analysis the defendant's officials have had to use a number of mathematical models. In *R (Mott) v Environment Agency* [2016] 1 WLR 4338 the Court of Appeal recognised that the use of models of this kind involves expert judgment (see e.g. [78]). That formed part of the Court's reasoning for its acceptance that decisions based on scientific, technical and predictive assessments should be afforded an enhanced margin of appreciation in judicial review

(see also *Spurrier* [2020] PTSR 240 at [176]-[179] and *R (Plan B Earth) v Secretary of State for Transport* [2020] PTSR 1446 at [68] and [177]).

182. Here, models were used to link various matters relating to the policies under consideration and to assess their future effects. Judgment is needed in the construction and use of a model, for example, to create the formulae which express numerical relationships between different factors, or sets of factors, and to express the effects of changes over time. Judgment is required in the preparation of inputs for the modelling exercise and in the interpretation of the results. The simple fact that the outcomes of modelling are expressed in numerical terms cannot disguise the dependency of such analysis on the use of judgment.
183. Although the Secretary of State is assisted by the modelling work by his team of experts, the results of that exercise will be subject to uncertainties, some of which may be expressed in numerical terms and others which may not. Ultimately, the Secretary of State's decisions made under s.13(1) on the preparation of proposals and policies are matters of judgment for him. Those judgments will be informed, but not circumscribed, by the quantitative analysis carried out.
184. The claimants expressed concern that if the obligation in s.13(1) could be satisfied by taking into account a qualitative judgment on the unquantifiable effects of policies, then it would be possible for decisions of the Secretary of State to be based not on policies contributing 95% of the emissions reductions required by carbon budgets, but only say 50% or even less. I do not share this concern for a number of reasons.
185. As the claimants have said, s.1(1) and the carbon budgets set numerical targets. The Secretary of State accepts that there must be some quantitative assessment of the effects of the proposed policies (see [176] above). If those quantified effects falls significantly below meeting the whole of the emissions reductions required, then the Secretary of State would need to be satisfied that the meeting of that shortfall by qualitative analysis is demonstrated to him with sufficient cogency. As that shortfall increases, so that task would be likely to become increasingly challenging for the Secretary of State and his officials.
186. Although the measures prepared by the Secretary of State under s.13 do not have to be approved by Parliament (contrast a national policy statement prepared under Part 2 of the Planning Act 2008), they will be scrutinised by the CCC as an expert body, by Parliament, the scientific community, bodies such as the claimants and the wider public.
187. As I explain below, the briefing given to the Secretary of State when approving a package of policies for the purposes of a s.14 report, and the report itself, must address (a) the assessment made by officials of the quantitative contributions that individual policies are expected to make to meeting carbon budgets (and the 2050 target) and (b) the justification for relying upon unquantified policies to make up any predicted shortfall in meeting a statutory target. These requirements enable the scrutiny, firstly by the Secretary of State of the policy package, and secondly by Parliament, the CCC and others of the s.14 report, to be effective and more rigorous.

188. The CCC's annual reports to Parliament under s.36 of the CCA 2008 on the progress made in dealing with climate change include the success (or otherwise) of measures prepared under s.13. The Secretary of State must report to Parliament responding to the points made by the CCC (s.37). In addition, under s.39 the CCC may give its independent assessment of a s.14 report by the Secretary of State, as they have done in relation to the NZS. It is apparent that the CCC as an expert body scrutinises the work of the Secretary of State and his Department with great care and in depth. The CCA 2008 proceeds on the basis that the reports of the CCC will provide much assistance to Parliament.
189. The Secretary of State is accountable to Parliament for his proposals and policies under s.13, for the work undertaken by his Department and for the performance of the UK in meeting the carbon budgets and the 2050 target (see e.g. ss.16, 18, 19, 20 and 37). This includes the obligation to answer Parliamentary questions and to appear before Parliamentary Committees. The Committees have the ability to call for evidence and information, to examine witnesses and to report to the relevant House. By such means, "the policies of the executive are subjected to consideration by the representatives of the electorate [and] the executive is required to report, explain and defend its actions...". Thus, Parliamentary accountability is no less fundamental to our constitution than Parliamentary sovereignty (*R(Miller) v The Prime Minister* [2020] AC 373 at [46]).
190. It is through these mechanisms that the merits, realism efficacy of the Secretary of State's climate change policies can be probed and evaluated, so that he may consider, for example, whether any additional work needs to be undertaken, amendments made, or new measures taken, pursuant to his continuing obligation under s.13(1).
191. Finally, the Secretary of State's consideration of whether his proposals and policies will enable the carbon budgets to be met may be the subject of judicial review. The courts have a duty to give effect to the law, irrespective of a Minister's accountability to Parliament. The fact that he is accountable to Parliament does not mean that he is immune from legal accountability to the courts (*Miller* at [33]). For example, the interpretation of the CCA 2008 is plainly a matter for the court.
192. Sometimes the principle of Parliamentary accountability is used to justify restraint in judicial review, or even non-justiciability (*Miller* at [47]). In this case, the Secretary of State has not argued that his functions under s.13(1) are non-justiciable. He was right not to do so. Although the court may need to tread carefully in relation to some issues and apply an enhanced margin of appreciation, s.13(1) does not merely confer a power on the Secretary of State. It imposes a duty, compliance with which may be the subject of judicial review. If, for example, the court should grant permission for a legal challenge to be brought on the grounds that the "split" between quantitative analysis under s.13 was irrational (a point not advanced in any of the present cases) it may insist, if it considers it appropriate, upon a sufficiently clear and full explanation of the reasoning process of the defendant and his officials, as a *quid pro quo* for that enhanced margin of appreciation (*Mott* at [64]).
193. Accordingly, I conclude that s.13(1) of the CCA 2008 does not require the Secretary of State to be satisfied that the quantifiable effects of his proposals and policies will enable the whole of the emissions reductions required by the carbon

budgets to be met. The obligation in s.13(1) does not have to be satisfied by quantitative analysis alone.

Ground 1(ii) - the legal sufficiency of the briefing provided to the Minister

194. Under the first component of s.13(1) it is a matter of judgment for the Secretary of State to decide which proposals and policies should be prepared and when (see [165]-[167] above). Judicial review does not provide an opportunity for a claimant to challenge the merits or demerits of the Secretary of State's policies. A challenge to the rationality of such policies must not be used as a cloak for a merits challenge. Having regard to the case law summarised in *Spurrier* at [141] *et seq.*, a rationality challenge to the selection and content of policy would involve a low intensity of review, or a "light touch", *a fortiori* in relation to policies of a high level, strategic nature.

195. The second component of s.13(1) is the Secretary of State's obligation to be satisfied that his proposals and policies will enable the carbon budgets to be met. As I have explained, this depends upon the making of a predictive assessment by the Minister. The nature and extent of the work to be carried out is a matter of judgment for the Secretary of State and his officials, subject, of course, to satisfying the requirements of the legislation. Otherwise, such judgments may only be challenged on *Wednesbury* principles (*R (Khatun) v Newham London Borough Council* [2005] QB 37). On that last point, the courts accord an enhanced margin of appreciation to decisions involving, or based upon, scientific, technical or predictive assessments by those with appropriate expertise (see *Mott*). In this case the assessments were carried out by officials whose expertise is not questioned. Not surprisingly, the claimants do not bring a legal challenge to any of the technical assessments.

196. Instead, the claimants contend that: -

- (i) Omissions from the material provided to the Minister in October 2021 rendered his briefing legally insufficient for him to be satisfied under s.13(1) that the proposals and policies would enable CB6 to be met; and
- (ii) The NZS did not comply with s.14 because the same matters were omitted from that report.

I will deal with issue (ii) under ground 2 below.

197. According to the claimants, those omissions were: -

- (a) The lack of an assessment of the time-scales over which the proposals and policies were expected to take effect;
- (b) The failure to identify under the quantitative analysis the contribution each quantifiable proposal or policy would make to meeting the carbon budgets;
- (c) The failure to identify under the qualitative analysis which proposals and policies would meet the 5% shortfall for CB6 and how each would do so.

198. The relevant principles were laid down by the Court of Appeal in *R (National Association of Health Stores) v Secretary of State for Health* [2005] EWCA Civ 154 and by the High Court of Australia in *Minister for Aboriginal Affairs v Peko-Wallsend Limited* [1986] 162 CLR 24. These decisions were analysed in *Transport Action Network Limited* at [60] – [73], and *R (Save Stonehenge World Heritage Site Limited) v Secretary of State for Transport* [2022] PTSR 74 at [62] – [65]. That analysis need not be repeated here.
199. A minister only takes into account matters of which he has personal knowledge or which are drawn to his attention in briefing material. He is not deemed to know everything of which his officials are aware. But a minister cannot be expected to read for himself all the material in his department relevant to the matter. It is reasonable for him to rely upon briefing material. Part of the function of officials is to prepare an analysis, evaluation and precis of material to which the minister is either legally obliged to have regard, or to which he may wish to have regard.
200. But it is only if the briefing omits something which a minister was *legally obliged* to take into account, and which was not insignificant, that he will have *failed* to take it into account a material consideration, so that his decision was unlawful. The test is whether the legislation mandated, expressly or by implication, that the consideration be taken into account, or whether the consideration was so “obviously material” that it was irrational not to have taken it into account (*National Association of Health Stores* at [62]-[63] and [73]-[75]; *R (Samuel Smith Old Brewery (Tadcaster) v North Yorkshire County Council* [2020] PTSR 221 at [30]-[32]; *Friends of the Earth* at [116]-[120]; *Oxton Farm v Harrogate Borough Council* [2020] EWCA Civ 805 at [8]. In this regard, it is necessary to consider the nature, scope and purpose of the legislation in question.
201. I deal first with omissions (b) and (c). There is no dispute that those matters were not addressed in the briefing to the Minister on 15 October 2021. The defendant has not suggested that they were addressed in any other briefing.
202. The statutory context is of paramount importance: -
- (i) Section 1 of the CCA 2008 was amended to incorporate the net zero target because of the recognition internationally and in the UK of the need for action to be taken to reduce GHG emissions more urgently;
 - (ii) The UK’s contribution to addressing the global temperature target in the Paris Agreement depends critically on meeting the net zero target for 2050 set by the CCA 2008 through the carbon budgets;
 - (iii) The Secretary of State is responsible for setting the carbon budgets;
 - (iv) The CCA 2008 imposes the obligation to ensure that the net UK carbon account meets those targets solely on the Secretary of State;
 - (v) Under the CCA 2008 the preparation of proposals and policies under s.13 (and if necessary under s.19(1)) is critical to achieving those targets;

- (vi) The Act imposes solely on the Secretary of State the obligations to prepare such measures and to be satisfied that they will enable the carbon budgets to be met. There is no requirement for Parliament or the public to be consulted on those proposals and policies or for Parliament to approve them;
- (vii) The Secretary of State cannot properly and rationally be satisfied that his proposals and policies will enable the carbon budgets to be met without quantitative analysis to predict the effects of those proposals and policies in reducing GHG emissions ([176] above);
- (viii) The predictive quantitative assessment and any qualitative assessment put before the Secretary of State are essential to his decision on whether his proposals and policies will enable targets to be met which are expressed solely in numerical terms;
- (ix) Although a quantitative assessment does not have to show that quantifiable policies can deliver the whole of the emissions reductions required by the targets, any qualitative judgment or assessment to address that shortfall will have to demonstrate to the Secretary of State how the quantitative targets can be met;
- (x) The carbon budgets and the 2050 target relate to the whole of the UK economy and society and not to sectors. Achievement of those targets requires a multiplicity of policy measures addressing the UK as a whole, individual sectors, and factors falling within s.10(2). Those measures will be operative at different points in time. Some will apply in isolation and others in combination. Whether an overall strategy will enable the statutory targets to be met depends upon the contribution which each policy (or interrelated groups of policies) is predicted to make to the cumulative achievement of those targets;
- (xi) The merits of individual measures, their contributions and their deliverability, together with the deliverability of the reductions in GHG emissions required by s.1(1) and s.4(1), are all essential considerations for the Secretary of State, or the Minister in his place.

203. Given the confusion that has arisen in the defendant's case about the use of the modelling of the delivery pathways, I should make it clear that [198(vii)] above does not refer to the modelling of the delivery pathways as has been described to the court. Instead it refers to the type of quantitative analysis carried out by BEIS to quantify predicted reductions resulting from proposals and policies in the NZS (giving in this instance a cumulative estimate that those measures were expected to deliver 95% of the reduction required by CB6). It is plain that BEIS had information on the contributions of individual policies (or groups of policies) to that cumulative figure. There has been no suggestion that that cumulative figure could sensibly have been produced without an assessment of the effects of individual policies.

204. In my judgment, one obviously material consideration which the Secretary of State must take into account is risk to the delivery of individual proposals and policies and to the achievement of the carbon budgets and the 2050 net zero target. This is

necessarily implicit in the statutory scheme. In turn, this must depend upon the relative contributions made by individual measures to achieving those targets.

205. Ms. Simor QC, on behalf of ClientEarth, pointed to those parts of the s.14 reports published in 2009 and 2011 (see [101] above) which did set out the contributions made by individual policies to achieving CB1 to CB4. It appears, however, that this information was not presented in the Clean Growth Strategy (2017), which also covered CB5. The reason for that change in practice is not clear.
206. Ms. James states that for the NZS the dataset produced by the Department included annual emission reductions in CO₂e against each quantified proposal or policy, split between traded and non-traded sectors (see [1015] above). However, that information was not presented to the Minister in October 2021 in any form, not even in summary form. Apart from the table included in the ministerial submission (see [128] above) the numerical information he received was essentially that set out in the NZS.
207. The NZS presented the delivery pathway to 2037 by sector (figure 13), indicative pathways for each sector, and the projections in the Technical Annex of emissions for the carbon budget periods, specifically CB6, both for the UK as a whole and by sector. The analysis looked at the effect of the NZS policies cumulatively on each of the seven sectors but did not go any further into the policy-specific analysis which BEIS had carried out in order to produce the overall figures placed before the Minister.
208. The Minister was provided with a list of policies and proposals in the NZS which told him which ones had been quantified and which had not (see [126] above). Plainly there was no need for detailed workings to be presented, but nothing more was said about that quantification, not even a summary of individual policy contributions, for example, in the list at Annex C to the ministerial submission.
209. Moreover, Mr. Coppel QC, on behalf of Good Law Project and Ms Wheatley, pointed out that the Minister was told that for some of the “quantified” measures options were still to be explored or that consultation was yet to take place.
210. I accept the submission made by Mr. Honey that individual policies may interact and some may have a combined, rather than a separate effect. But that does not alter the point that individual policy data was generated within the Department, even if it may have been necessary to group some of it together. The material presented to the Minister did not go below the national or sector levels referred to above, to look at the contributions to emissions reductions that would be made by individual policies where quantified, or even policies which had to be grouped together. The subject was not addressed at all.
211. Viewed in the context of the statutory scheme, I have no doubt that the quantification of the effect of individual policies was an obviously material consideration on which, as a matter of law, information had to be provided to the Minister, so that he could discharge his functions under s.13 lawfully by taking it into account. The defendant’s role in approving a package of policies so as to enable the statutory targets to be met is critical to the operation of the CCA 2008. Risk to the delivery of individual policies and of the targets is “obviously material”.

212. My general interpretation of the statutory scheme applies *a fortiori* to the circumstances of the NZS. The Minister was told in para. 8 of the submission that the assessment was based on an assumption that the quantifiable proposals and policies would be “delivered in full”. As we have seen, the NZS described the scenarios and the delivery pathway as highly ambitious and referred to considerable delivery challenges. It was in this context that officials projected that the UK would “overachieve” CB4 by 11 Mt CO₂e and CB5 by 72 Mt CO₂e a year, but would achieve only 95% of the emissions reductions required for CB6. Ultimately, the Minister’s decision depended upon unquantified measures and other quantified measures to be developed further (see [144]-[145] above) and upon comparison with a delivery pathway which was said to meet the CB6 target, but only just, and was in any event subject to a wide uncertainty range.
213. In my judgment, without information on the contributions by individual policies to the 95% assessment, the Minister could not rationally decide *for himself* how much weight to give to those matters and to the quantitative assessment in order to discharge his obligation under s.13(1).
214. The briefing to the Minister did not enable him to appreciate the extent to which individual policies, which might be subject to significant uncertainty in terms of content, timing or effect, were nonetheless assumed to contribute to the 95% cumulative figure. This concern is all the more serious because the Minister was told that the assessment by BEIS was based upon the assumption that the quantified policies would be “delivered in full”. The information which ought to have been provided to the defendant would have influenced his assessment of the merits of particular measures. It was crucial so that he could question whether, for example, the Strategy he was being advised to adopt was overly dependent on particular policies, or whether further work needed to be carried out to address uncertainty, or whether the overall figure of 95% was robust or too high. If it was too high, then that would affect the size of the shortfall and his *qualitative* judgment as to whether unquantified policies could be relied upon to make up that gap with what he would judge to be an appropriate level of confidence. Information on the numerical contribution made by individual policies was therefore legally essential to enable the defendant to discharge his obligation under s.13(1) by considering the all-important issue of risk to delivery. These were matters for the Secretary of State and not simply his officials.
215. The role of the CCC is to give advice as an expert body rather than to opine on questions of law. But nonetheless the court should give considerable weight to their advice in December 2020 on the setting of CB6 that the Government’s net zero plans should include a “quantified set of policy proposals” and their criticism in October 2021 of the NZS for failing to quantify the effect of each policy and proposal on emissions reductions ([65]-[67] and [152] above).
216. There remains the manner in which the 5% shortfall was handled in the ministerial submission. Although this was critical to the advice given that the proposals and policies would enable CB6 to be met, the Minister was not told:-
- (i) Which unquantified policies were being relied upon as part of the judgment that was made;

- (ii) Which already quantified policies were assumed to be capable of further development;
- (iii) Alternatively, whether the advice and comparison with the delivery pathway did *not* involve relying upon or identifying any specific policies;
- (iv) Whether any further calculations had been performed, or whether this exercise was solely a matter of judgment.

Although Ms. James's witness statement did supply more detail than was contained in the briefing to the Minister, it did not address those four issues.

217. Having regard to the statutory scheme summarised above, I have reached the firm conclusion that the four matters set out in [216] above were also "obviously material" considerations which the defendant was legally required to take into account so that he could discharge his obligation under s.13(1) rationally. Without that information being included in the briefing the Minister was unable to decide for himself whether to attach any, and if so how much, weight to the manner in which officials advised that the 5% shortfall could be overcome.

218. Lastly, I turn to omission (a). In so far as the effects of the proposed policies were judged to be quantifiable, the periods during which those effects were assessed or predicted to occur will have formed part of the modelling work. Otherwise, this was a matter for qualitative assessment. I accept the defendant's submission that it was a matter of judgment as to how much of this detail should have been included in the ministerial submission, including the draft NZS.

219. There can be no doubt that the NZS did refer to time-scales for a number of policies. Ms. James explains that the NZS contains many statements on the time-scales over which specific policies were expected to take effect (see e.g. paras. 25 and 161 of WS). This was achieved in the description of the delivery pathway, trajectories for each sector, and more generally the text of chapters 2 to 4. Her exhibit SJ17 contains 12 pages of material summarising references to time-scales in chapters 2 to 4 of the NZS. In addition, figure 16, referred to at [81] above, shows the expected milestones and activities for each of the sectors. On the material before the court, the claimants have not demonstrated that the judgment made by officials on the extent to which this subject (viewed in isolation) should be addressed in the briefing to the Minister was legally flawed, applying the *Wednesbury* standard.

220. However, the requirement for the defendant to consider adequate briefing on the matters set out in [211]-[214] and [216]-[217] above is inevitably interrelated with assumptions about when individual proposals and policies will come into effect and produce reductions in emissions. Accordingly, it will be necessary for this subject to be addressed as part of the Strategy and the briefing.

221. For the above reasons, I uphold ground 1, but only to the extent set out above.

222. As I have said, the obligation under s.13 is a continuing one ([164] above). But it is necessary to record that the argument in this case has focused solely on whether the defendant complied with his duty under s.13 at a particular point in time, October 2021, which was directly connected to the discharge of his obligation at the same time

to present a report under s.14, the NZS. His s.13 decision had to include measures to address CB6. The announcement to Parliament and the public of the defendant's proposals and policies was plainly one of the key stages in the operation of the CCA 2008. The parties' submissions did not address any implications of the issues I have had to resolve for compliance with s.13 on a continuing basis, nor was there any evidence on that aspect. Accordingly, my reasoning and conclusions on, for example, the legal adequacy of information before the Minister on quantification, should not be treated as necessarily applying to compliance with s.13 at *any* point in time. No doubt the development of policy measures is kept under review by officials and by the Secretary of State, but my judgment does not address how often and when quantitative analysis might be required to be carried out. Such issues are essentially matters of judgment for the defendant and his officials.

Ground 2

Submissions

223. The claimants submit that one of the purposes of s.14 of the CCA 2008 is to enable Parliament to scrutinise the Secretary of State's proposals and policies for meeting the current and future carbon budgets, including the budget which will have recently been set, and to hold him to account in respect of those matters. The statute expressly requires the report to: -

- (i) set out the Secretary of State's "current" proposals and policies under s.13;
- (ii) set out the time-scales over which those proposals and policies are expected to take effect;
- (iii) explain how the proposals and policies effect different sectors of the economy; and
- (iv) outline the implications of the proposals and policies for the crediting of carbon units to the net UK carbon account for each budgetary period.

224. The claimants submit that for a report to meet the requirements of s.14 it must include (a) a numeric explanation of the basis for the Secretary of State's conclusion that his policies and proposals will enable the carbon budgets to be met and (b) a numeric analysis of the extent to which those policies and proposals individually and in combination will enable those targets to be met. That information is necessary for the purposes of s.14, namely to facilitate Parliamentary scrutiny and accountability and to satisfy the public interest in transparency.

225. The claimants acknowledge that a s.14 report is a "snapshot", in the sense that such a document is produced once every 5 years and therefore will explain how the Secretary of State expects that carbon budgets will be able to be met, viewed as at the time of the report. But they say that the requirements for which they contend are nevertheless consistent with that position.

226. The claimants submit that the NZS failed to set out the numeric contributions of individual policies and proposals toward reducing GHG emissions or the time-scales over which they were each expected to take effect, as had previously been done in the

UK Low Carbon Transition Plan (2009) and the Carbon Plan: Delivering Our Low Carbon Future (2011). They also complain that the document did not even reveal that the quantification carried out by BEIS, and described in the Strategy, of the cumulative effect of the proposals and policies addressed only 95%, rather than the whole, of the reductions claimed, or explain how the 5% shortfall was expected to be made up. The NZS did not contain the explanation in the ministerial submission dated 15 October 2021 or give any clue that that approach had been taken. Rather, tables 6 and 8 of the Technical Annex to the NZS gave the impression that the quantitative analysis carried out showed that the Secretary of State’s proposals and policies would enable CB6 to be fully met.

227. The defendant submits that s.14(1) requires the Secretary of State to publish a report “setting out proposals and policies for meeting the carbon budgets...”. The object is to ensure Parliament is informed of the Secretary of State’s current proposals and policies. Section 14 does not require the report to provide an explanation or quantified information to show that his proposals and policies will enable the carbon budgets to be met. Technical scrutiny of the Secretary of State’s proposals and policies is provided by the CCC, not by Parliament. Subsections s.14(2) to (4) do not lend any support to the claimants’ case on what the report to Parliament is required to contain.

228. Mr. Honey referred to *R (Packham) v Secretary of State for Transport* [2021] Env. L.R. 10 at [87] where Lindblom LJ said: -

“..... the statutory and policy arrangements we have described, while providing a clear strategy for meeting carbon budgets and achieving the target of net zero emissions, leave the Government a good deal of latitude in the action it takes to attain those objectives — in Mr Mould’s words, “as part of an economy-wide transition”. Likely increases in emissions resulting from the construction and operation of major new infrastructure are considered under that strategy. But — again as Mr Mould put it — “it is the role of Government to determine how best to make that transition”.”

229. A report must address the matters referred to in s.14(2) to (4), but it is a matter of judgment for the Secretary of State as to the extent to which any matter is addressed in the report. Mr. Honey sought to draw an analogy with the approach taken by the courts to judicial review of compliance with the requirements for Strategic Environmental Assessment of plans and programmes (*Spurrier* [2020] PTSR 240 at 434 and see also the Supreme Court in the *Friends of the Earth* case [2021] PTSR 190 at [142] – [148]).

230. Mr. Honey emphasised the language in s.14(1), “a report setting out proposals and policies”, and submitted that this provision essentially only requires Parliament to be told what those measures are. He submits that the thinking which lay behind the Secretary of State’s policies, the rationale, does not have to be provided.

Discussion

231. I do not accept the defendant's interpretation of s.14. It treats the requirement to "set out" the defendant's proposals and policies as amounting to little more than a requirement to publish those measures.
232. The phrase "set out" can have a very wide range of meanings (see the Oxford English Dictionary). For example, it may mean simply to lay out or display, or it can mean to express in detail, describe or enumerate, or to put down on paper in express or detailed form. The specific sense used in s.14 must depend on the context and purpose of that provision.
233. The Explanatory Notes for the CCA 2008 state that s.14 "will ensure that Parliament is clear about *how* the Government intends to meet its obligations under the Act" (emphasis added). That plainly indicates that the report which must be provided is something more than a statement simply telling Parliament what the proposals and policies are. Given the nature of the problems posed by climate change, the need for substantial changes across the country and the challenges involved, telling Parliament how the Secretary of State proposes to meet the carbon budgets does indeed require him to explain the thinking behind his proposals and how they will enable the carbon budgets to be met.
234. This is also clear from s.19(1). If a final statement for a budgetary period is laid before Parliament under s.18 and the carbon budget has not been met, the Secretary of State must provide Parliament with a report "setting out" proposals and policies to *compensate* in future periods for the *excess* emissions. In essence, that is the same language as s.14(1). I do not accept that, as a matter of law, it would be sufficient for such a report simply to tell Parliament what those new measures are. In such circumstances, s.19(1) would require the Secretary of State to explain how his proposals are intended to remedy the problems encountered so as to meet the targets.
235. Accordingly, both s.14 and s.19 require an explanation to be provided to Parliament as to how the Secretary of State's policies are intended to meet the statutory targets. I do not accept that those obligations could properly be discharged without any quantitative explanation being provided to Parliament. The defendant submits that the legislation does not require the Department's detailed workings or the modelling to be provided to Parliament. No doubt that is correct, but the claimants have not taken that extreme position.
236. My reading of the obligation in s.14(1) is reinforced by the specific requirements of s.14(2)-(4). For example, s.14(3) requires an explanation of how the proposals and policies affect different sectors of the economy. It could not be said that the report need not address effects upon the economy as a whole. Effects on the national economy and on sectors are plainly relevant to the requirement under s.14(1) for the Secretary of State to explain how his measures will enable the carbon budgets to be met.
237. Section 14(2) requires the Secretary of State to "set out", or explain, the time-scales over which his measures "are expected to take effect". As Mr. Honey rightly points out, the carbon budgets can extend many years into the future. Current proposals and policies will be implemented over a range of different time-scales. Some measures will already be in the course of implementation or almost concluded, some will be imminent, and others for the longer term. The approximate periods over

which different proposals and policies are expected to be implemented will have been taken into account in the modelling and quantitative analysis which enabled officials to advise the Secretary of State that certain measures would enable 95% of the reduction required by CB6 (and all of CB4 and CB5) to be achieved. There is a clear link between the Secretary of State's explanation of those time-scales and his estimates of the reductions in the amounts of GHG emissions. Quantification of the reductions he expects from the implementation of his s.13 policies is legally essential to the explanation which the Secretary of State is required to give under s.14(1) as to how he expects those measures to meet carbon budgets.

238. Similarly, the requirement in s.14(4) to outline the implications of the defendant's s.13 policies for carbon crediting and the net UK carbon account implies that quantitative analysis is necessary in relation to the effects of those policies on the net UK carbon account.
239. The defendant's narrower interpretation of the scope of s.14 is not supported by the expert role given by the CCA 2008 to the CCC. On the contrary. The legislation requires Parliament to be provided with statements each year by the Secretary of State on GHG emissions in the UK (s.16), his final statement after each budgetary period has ended (s.19), annual reports by the CCC on progress made and needing to be made on meeting carbon budgets and the 2050 targets, including whether they are likely to be met (s.36) and the Secretary of State's response to the CCC's points (s.37). Plainly, those requirements could not be met without quantitative analysis being provided to Parliament to show the extent to which the Secretary of State's proposals and policies are meeting, and are likely to meet, the statutory targets. Those proposals and policies are the central focus of the methods laid down in the statutory scheme for meeting the carbon budgets and the 2050 target.
240. Explanation and quantitative analysis are essential to the reports which are to be provided under ss.36 and 37 for Parliament to scrutinise. Those reports look both to the past and to the future. There is no good reason why the legal approach should be any different for the reports to be provided for Parliamentary scrutiny under ss.14 and 19.
241. Because the reports under ss.14, 19, 36 and 37 are required to be laid before Parliament, they will be published. The requirement is not simply to provide unpublished reports to, for example, a regulatory body. The statutory objective of transparency in how the targets are to be met extends beyond Parliament, to local authorities and other statutory authorities, NGOs, businesses and the general public. That transparency requires reports under s.14 to contain explanation and quantification. The purpose of a such a report is not limited to telling Parliament what the Secretary of State's proposals and policies are.
242. How then is the court to assess whether the Secretary of State has complied with s.14? The court is dealing with a report by the Executive to Parliament on matters of national policy. Section 14 facilitates Parliamentary accountability and it is necessary to respect the constitutional separation of functions between the Executive, Parliament and the Courts. Parliament is well able to call for more information to be provided where it wishes to do so. The court needs to tread carefully in this area (see [189] – [192] above). But in addition, ss. 14 and 19 serve the public's interest in transparency regarding Government policy under the CCA 2008. Ultimately, it remains for the

court to interpret the legislation and to resolve legitimate disputes on the scope of the obligations it imposes.

243. Mr. Honey makes the point that the CCA 2008 does not require a report under s.14 to be the subject of public consultation before the adoption of the policies by the Secretary of State. If consultation had been required, then the *Gunning* principles, approved by the Supreme Court in *R (Moseley) v Haringey London Borough Council* [2014] 1 WLR 3947, would have been applicable. A consulting party is required to give consultees sufficient explanation and information to enable intelligent consideration and responses by the latter. On this basis Mr. Honey seeks to distinguish a report under s.14 of the CCA 2008 from the “National low carbon transition and mitigation plan”, adopted by the Irish Government under s.4 of the Climate Action and Low Carbon Development Act 2015, and considered by the Supreme Court of Ireland in *Friends of the Irish Environment CLG v The Government of Ireland* [2020] IESC 49. The Irish legislation did require public consultation on that draft plan.
244. However, in the final analysis I do not think that this distinction makes any substantial difference to the determination of the issues in this case. I say that for two reasons.
245. First, I see no justification for the legal adequacy of a s.14 report required in the context of Parliamentary accountability to be materially lower than that of a report issued for public consultation, certainly not when dealing with the core legal requirements for reports relating to climate change policy. In both instances, the legal object of the reports is to enable its readers to understand and assess the adequacy of the Government’s policy proposals and their effects. Furthermore, a report under s.14 is also required in the interests of public transparency.
246. Second, the reasoning of the Supreme Court of Ireland did not rest solely on the obligation to consult the public. There was another statutory obligation of equal importance. Clarke CJ stated 6.21: -

“Second, the very fact that there must be a plan and that it must be published involves an exercise in transparency. The public are entitled to know how it is that the government of the day intends to meet the NTO. The public are entitled to judge whether they think a plan is realistic or whether they think the policy measures adopted in a plan represent a fair balance as to where the benefits and burdens associated with meeting the NTO are likely to fall. If the public are unhappy with a plan then, assuming that it is considered a sufficiently important issue, the public are entitled to vote accordingly and elect a government which might produce a plan involving policies more in accord with what the public wish. But the key point is that the public are entitled, under the legislation, to know what the plan is with some reasonable degree of specificity.”

And then at 6.22: -

“Thus, it seems to me that key objectives of the statutory regime are designed to provide both for public participation and for transparency around the statutory objective which is the achievement of the NTO by 2050.”

247. In my judgment, that approach also applies to a report under s.14 of the CCA 2008. Such a report, and similar documents under ss. 19, 36 and 37, are to be laid before Parliament and hence published, so that there is transparency for the public as to how the Government is seeking to achieve the targets in the legislation, potential effects on different sectors of the economy, the progress made to date, whether more needs to be done and, if so, what.
248. However, there may be one distinction to be drawn with the Irish legislation. That requires the plan to “specify” the manner in which it is proposed to achieve “the national transition objective” and other matters. Hence, the judgment of the Supreme Court of Ireland focused on whether, in the court’s opinion, the national plan satisfied the statutory requirement for “specificity”. No such language appears in the CCA 2008. So I will confine myself to considering the core requirements of “explanation” and “quantification” which derive from the obligation in the CCA 2008 to “set out” proposals and policies “for meeting the carbon budgets”.
249. I rely upon the analysis at [202]-[204] above under ground 1(ii). I emphasise the point made at [202(x)] that the ability to meet the statutory targets depends upon the contributions made by a multiplicity of proposals and policies adopted by the Secretary of State. This is obviously material to the risk of delivery. It is critical to any assessment by Parliament, and by the public, of how the statutory targets are likely to be met, by what means and with what implications.
250. I also gratefully adopt the observations of Clarke CJ in the *Friends of the Irish Environment* case at paras. 6.46 to 6.47:-

“6.46 In that context it must, of course, be recognised that matters such as the extent to which new technologies for carbon extraction may be able to play a role is undoubtedly itself uncertain on the basis of current knowledge. However, that is no reason not to give some estimate as to how it is currently intended that such measures will be deployed and what the effect of their deployment is hoped to be. Undoubtedly any such estimates can be highly qualified by the fact that, as the technology and knowledge develops, it may prove to be more or less able to achieve the initial aims attributable to it.

6.47 However, that is no reason not to indicate how and when particular types of technology are currently hoped to be brought on board. If it proves possible to achieve more than might currently be envisaged then, doubtless, other elements of the Plan can evolve in a way which may place a lesser burden on certain sectors. If it proves that the technology is less useful than currently envisaged, then the burden on some sectors may have to increase. But the public are entitled to know what current thinking is and, indeed, form a judgment both on

whether the Plan is realistic and whether the types of technology considered in the Plan are appropriate and likely to be effective.”

251. Given the analysis set out above, I do not accept Mr Honey’s suggestion that it is significant that s.14 does not include an obligation to give reasons, unlike, for example, ss. 3(6), 7(6) and 22(7) where the Secretary makes a decision differing from a statutory recommendation of the CCC. The functions are plainly different. The language imposing the obligation in s.14 to “set out” policy measures for meeting numerical targets, read properly in context, is sufficient to carry with it requirements to provide explanation and legally adequate estimates of the quantitative effects of those policies.
252. As I have explained, the NZS did not go below national and sector levels to look at the contributions to emissions reductions made by individual policies (or by interacting policies) where assessed as being quantifiable. In my judgment it ought to have done so in order to comply with the language and statutory purposes of s.14 of the CCA 2008.
253. In addition, the NZS failed to explain:-
- (i) that the quantitative analysis carried out by BEIS (which related solely to quantifiable policies with a direct effect on emissions) predicted that those policies would achieve 95%, not 100%, of the reductions required for CB6, and had assumed “delivery in full” of those policies;
 - (ii) how it was judged that that 5% shortfall would be made up (see also [216] above), including the judgment based upon comparing the 95% result with the projections of the implied performance of the delivery pathway;
 - (iii) that tables 6-8 did not present the outcome of the Department’s quantitative analysis of emissions reductions predicted to result from NZS policies;
 - (iv) how that quantitative analysis differed from the modelling of the delivery pathway.
254. All those subjects were obviously material to the critical issue of risk to the delivery of the statutory targets. They were matters upon which the defendant was obliged to inform Parliament under s.14, and thus the public. They were not dealt with at all in the NZS, although it is plain from the evidence before the court that the information existed at the time.
255. In para. 97 of her witness statement Ms. James states that “not all” of the data collected by the Department was “intended or suitable for publication” and goes on to give four reasons. However, two points should be noted. First, the statement does not explain which parts of the dataset were thought to be unsuitable for publication, as opposed to simply being “not intended for publication”. Second, and more

importantly, there is no evidence that this thinking was considered by the Secretary of State or the Minister.

256. It is the responsibility of the Secretary of State, not his officials, to lay a report before Parliament under s.14. The adequacy of such a report is a matter for him, acting on the advice of officials and with legally sufficient briefing. Here, the matters which I have concluded ought to have been addressed in the NZS were not put before the Minister (see ground 1(ii)). The Minister was therefore not in a position to form any view on whether those matters should be included in the NZS in order to satisfy s.14 or to consider the reasons for non-inclusion now put forward in the witness statement. Consequently, those four reasons are, with respect, legally irrelevant.

257. Nevertheless, I have considered those reasons. None of them alter the conclusion I have reached that, as a matter of law, the NZS did not comply with s.14 through failing to address the matters identified above. A clearly presented report would not lead a reader to misunderstand predictions of the effects of each policy as “targets”, or to fail to appreciate the uncertainties involved. Similarly, there is no reason why it could not be made clear to a reader that policies are at various stages of development and that current predictions should not be taken to undermine the need for future flexibility to respond to changes in circumstance. Indeed, these points are clearly explained in the NZS. Problems in publishing details of quantitative analysis of the effects of policies yet to be “fully developed” *may* raise matters of judgment for the defendant as to how much detail should be included in a report. But that cannot affect the legal principle that contributions from individual policies which are properly quantifiable *must* be addressed in the report. Here, they were not at all. Lastly, the existence of other Government mechanisms for making public “granular data about our delivery against carbon budgets and net zero” has nothing to do with the legal requirements of s.14.

258. As I have explained under ground 1(ii), the NZS does address time-scales over which policies and proposals “are expected to take effect” and the court is unable to say that the material before the Minister on that subject was legally insufficient on that subject if viewed in isolation. The same applies to the issue of compliance with s.14(2)(b) of the CCA 2008.

259. However, the requirement to provide legally adequate briefing to the defendant on the matters set out in [211]-[214] and [216]-[217] above is inevitably interrelated with assumptions about when individual proposals and policies will produce reductions in emissions. So it will be necessary for that aspect to be addressed as part of that exercise.

260. For the above reasons, I uphold ground 2, but only to the extent set out above.

Ground 3

261. Mr. Coppel summarised the claimant’s argument in six stages: -

- (i) The UK has obligations under Articles 2, 8 and A1P1 to take effective action against climate change because this represents a real and “imminent threat” to “life, quality of life and to property”. These obligations arise now, notwithstanding that the relevant impacts of climate change may not

be experienced until some time in the future and that it is not possible to predict with certainty exactly who will be impacted and how. The obligation under Article 2 may require protection not only for individuals identifiable in advance as the subject of potential harm, but also general protection for society. The obligation under Articles 2 and 8 may also apply to risks that materialise over time;

- (ii) The greater and more effective the action taken by the state to reduce emissions and to safeguard against climate change, the greater will be the effect in minimising the risk in the future to life, quality of life and property;
- (iii) The CCA 2008 represents an important step in the discharge of the UK's obligations under the ECHR including the provision of general protection to society against imminent threats. In turn, the setting and meeting of carbon budgets is an important aspect of the measures put in place by Parliament to combat climate change and so protect against future threats to life, quality of life and property. Such measures against climate change should be interpreted so as to be more, rather than less, effective;
- (iv) The requirements of sections 13 and 14 are more likely to be effective in ensuring that the carbon budgets are met if they are interpreted in the more stringent way for which the claimants contend. The Claimants' interpretation is liable to minimise future climate change impacts and breaches of Convention rights in that: -
 - Compliance with the obligation in s.13(1) must only be based on quantifiable policies meeting 100% of the carbon budgets; and
 - Greater transparency in a s.14 report enhances scrutiny of the policies and proposals so that carbon budgets are more likely to be met;
- (v) The effect of s.3(1) of the HRA 1998 is to require ss.13 and 14 of the CCA 2008 to be interpreted as the claimants contend, and not as the defendant contends. Parliament should be assumed to have intended that those provisions be interpreted so as to be more, rather than less, conducive to the protection of Convention rights;
- (vi) It is open to Good Law Project to advance these submissions, and to invoke s.3(1) of the HRA 1998 in the interpretation of ss.13 and 14 of the CCA 2008, without itself being a "victim" of an actual or potential breach of Convention rights. Alternatively, Ms. Wheatley is a "victim" for the purposes of s.7 of the HRA 1998 and is therefore entitled to invoke s.3(1).

262. It will be noted that ground 3 depends upon the application of s.3(1) of the HRA 1998. If the claimants are unsuccessful in that respect, they have not gone further by asking the court to grant a declaration of incompatibility under s.4.

263. Mr Coppel has presented a carefully constructed, interlocking argument, but it is too ambitious in a number of respects.
264. First, he accepted that his argument depends upon the proposition that s.3(1) of the HRA 1998 requires the Court to adopt an interpretation which would be more, rather than less, conducive to the protection of Convention rights and, in this context, to minimise future climate change impacts. He also accepted that he was not aware of any authority in which a court has stated that this is a permissible application of s.3(1).
265. The approach for which the claimants contend does not accord with established principle. It is only if the ordinary interpretation of a provision is incompatible with a Convention right that s.3(1) is applicable. Otherwise s.3(1) may safely be ignored. If the court does have to rely on s.3(1), it should limit the extent to which the ordinary interpretation of the provision is modified to that which is necessary to achieve compatibility (*R (Wardle) v Leeds Crown Court* [2002] 1 AC 754 at [79]; *Poplar Housing and Regeneration Community Association Limited v Donoghue* [2002] QB 48 at [75]). Section 3(1) does not allow a court to adopt an interpretation of a provision different from that which would otherwise apply in order to be “more conducive” to, or “more effective” for, the protection of a Convention right, or to minimise climate change impacts.
266. Second, the claimants’ “more conducive” approach does not provide a proper test for interpreting legislation. It raises a question of degree and leaves open the possibility that there might be another interpretation which would be even “more conducive”. On this approach how would it be possible for a court to identify the point at which the alteration of the ordinary meaning of the language used by Parliament should cease? The court would be crossing the demarcation between interpreting and amending legislation (*Ghaidan v Godin-Mendoza* [2004] 2 AC 557 at [121]). Instead, where s.3(1) is applicable, the court should limit the extent to which it modifies the ordinary interpretation of the provision in question to that necessary to achieve compatibility. For each of these two reasons alone ground 3 must fail.
267. Third, although Mr. Coppel’s proposition (i), which is essential to all of the propositions which follow, can in general be derived from jurisprudence of the ECtHR, he accepts that that court has not gone so far as to apply those principles to climate change. In my judgment, the Strasbourg decisions upon which he relies did not involve circumstances or issues comparable to those posed by climate change, for example the national and global effects involved or the extensive nature of the national measures required. I refer also to the recent analysis by the Divisional Court (Bean LJ and Garnham J) in *Gardner v Secretary of State for Health and Social Care* [2022] EWHC 967 (Admin) of the limitations of the principles laid down in the Strasbourg jurisprudence.
268. Consequently, the main source upon which Mr. Coppel relies to support his line of argument is the decision of the Supreme Court of the Netherlands in *The State of the Netherlands v Urgenda* (20 December 2019), in particular, those passages which interpret and apply Convention rights and Strasbourg jurisprudence.
269. Mr. Honey submitted that this court should not rely upon the Dutch judgment because it takes a broader view of Convention rights than is justified. Furthermore, he

says that the central propositions relating to climate change which the claimants seek to take from *Urgenda* are hotly contested in three cases to be heard by the Grand Chamber of the ECtHR.

270. It is necessary to bear in mind that *Urgenda* was concerned with a very specific challenge: the legality of the State's decision in 2011 to reduce its 2020 GHG reduction target from 30% (set in 2007) to 20%. The Supreme Court referred to the need identified in the IPCC's 2007 report for emissions in developed countries to be reduced in 2020 by 25-40%, the subsequent endorsement of that target in annual international conferences of the UNFCCC since 2007, and the stricter targets introduced by the Paris Agreement in 2015. The Court decided that the Government had failed to explain why the reduction of the Dutch target to 20% was justified, in view of the longstanding international consensus that the figure should be appreciably higher. *Urgenda* provides no assistance on the interpretation of a Minister's duty to formulate policy where the legislation gives him a wide scope to exercise judgment on the content of such policy. Furthermore, given the dualist system we have in this country (*Spurrier* at [606]), care is also needed in seeking to apply a decision from a legal system with monist characteristics.
271. In *R (Ullah) v Special Adjudicator* [2004] 2 AC 323 Lord Bingham stated at [20] that, in the absence of special circumstances, a domestic court should follow the "clear and constant" jurisprudence of the Strasbourg court. That duty "is to keep pace with Strasbourg jurisprudence as it evolves over time: no more, but certainly no less".
272. In *R (Al-Skeini) v Secretary of State for Defence* [2008] AC 153 at [106] Lord Brown continued: -
- "I would respectfully suggest that last sentence could as well have ended: "no less, but certainly no more." There seems to me, indeed, a greater danger in the national court construing the Convention too generously in favour of an applicant than in construing it too narrowly. In the former event the mistake will necessarily stand: the member state cannot itself go to Strasbourg to have it corrected; in the latter event, however, where Convention rights have been denied by too narrow a construction, the aggrieved individual can have the decision corrected in Strasbourg".
273. In *R (AB) v Secretary of State for Justice* [2022] AC 487 Lord Reed PSC restated these principles at [54] – [59] and added that they did not preclude "incremental development" by a domestic court of Convention jurisprudence "based on the principles established by the European Court".
274. Whether the claimants' argument accords with the principles in [255]-[257] above is a matter for determination by the courts in this country. It has not been shown that the decision in *Urgenda* sets out a line of reasoning which conforms to those principles.
275. I agree with Mr. Honey that the claimants' argument under ground 3 goes beyond permissible incremental development of clear and constant Strasbourg case law.

Section 31(2A) of the Senior Courts Act 1981

276. Whether it is highly likely that the outcome for the claimants would not have been substantially different if the conduct complained of had not occurred depends upon the nature of the legal errors found by the court to have taken place.
277. Under ground 1(ii) the defendant was not briefed upon, and therefore did not take into account as he was legally obliged to do, *inter alia* the contribution to reductions in GHG emissions estimated by his officials from individual policies (or groups of interacting policies). As I have explained, this was essential to the defendant's decision on whether he was satisfied that the proposals and policies in the NZS would enable the carbon budgets to be met so as to comply with s.13(1) of the CCA 2008. It is impossible for the court to conclude that it is highly likely that the defendant would still have been satisfied that he had discharged his obligation in s.13(1) if he had been provided with, and taken into account, the missing information, to assess for himself *inter alia* risks to delivery of the policies and carbon targets and whether the content of the NZS needed to be reconsidered and amended.
278. Under ground 2 the court has identified matters which ought to have been, but were not, addressed in the NZS in order to comply with s.14(1) of the CCA 2008. Parliament and the public, including the claimants, were entitled to see a report which covered those matters, so that they would properly be able to understand and address the Government's proposals and policies and their effects upon emissions reductions and socio-economic matters. Given the nature of this legal error, it is impossible for the court to conclude that it is highly likely that the outcome would not have been substantially different for the claimants and those they represent if the defendant had complied with s.14(1).

Conclusions

279. For the reasons set out above:-
- (i) ground 3 must be rejected;
 - (ii) the challenge succeeds under grounds 1 and 2 but only to the extent indicated above;
 - (iii) all other parts of grounds 1 and 2 are rejected.