



# MetroWest+

## Portishead Branch Line (MetroWest Phase 1)

**TR040011**

**Applicant: North Somerset District Council**

**Addendum to the Environmental Statement**

**The Infrastructure Planning (Applications: Prescribed Forms and Procedure)**

**Regulations 2009, regulation 5(2) (a)**

**Planning Act 2008**

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## Document history

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# Acronyms and Abbreviations

DCO	Development Consent Order
GHG	Greenhouse gas
MtCO <sub>2</sub> e	Megatonnes of carbon dioxide equivalent
NPSNN	National Policy Statement for National Networks
NSIP	Nationally significant infrastructure project
RIS2	Road Investment Strategy 2

## SECTION 1

# Introduction

## 1.1 Introduction

- 1.1.1 The Secretary of State has requested further information in his letter of 13 August 2021 on the Environmental Statement of the Portishead Branch Line (MetroWest Phase 1) Development Consent Order Scheme (the DCO Scheme) regarding:
- a) the scheme's compliance with the sixth carbon budget as set out in the Carbon Budget Order 2021 including an assessment of the impact of the scheme on the carbon budgets, and
  - b) building on paragraph 18.3.13 in Chapter 18 of the Applicant's Environmental Statement, the direct, indirect and cumulative likely significant effects of the scheme with other existing and/or approved projects on climate, including greenhouse gas emissions and climate change adaptation; which should be set in light of the requirements contained in the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 and in light of paragraphs 5.17 and 5.18 of the National Policy Statement for National Networks.
- 1.1.2 This addendum to the Environmental Statement presents the Applicant's response to the Secretary of State.





## SECTION 2

# Carbon Budget and Cumulative Effects

## 2.1 Carbon Budget

2.1.1 The Environmental Statement Chapter 7 Air Quality and Greenhouse Gases [REP6-074] and Appendix 7.5 Climate [REP6-113] are amended as set out below.

2.1.2 The ES Chapter 7 paragraphs 7.2.10 and 7.2.11 [REP6-074] are amended and a new paragraph 7.2.11A added to describe the carbon budget values, including the Sixth Carbon Budget. The revised text is provided below.

“7.2.10 In 2011 (the latest figures available at the time of the assessment), the UK's progress against its Climate Change Act targets was a reduction of 29.1% (i.e. 549 Megatonnes CO<sub>2</sub>e abbreviated to MtCO<sub>2</sub>e) from 1990 levels excluding the effects of emissions trading<sup>4, 5</sup>. In terms of overall UK emissions, transport accounted for 135 MtCO<sub>2</sub>e (25%) and rail for 4 MtCO<sub>2</sub>e (less than 1%).

7.2.11 Carbon budgets were introduced as part of the Climate Change Act 2008. At the time of assessment, the first four, five-year budgets had been set in law from 2008 to 2027. Since the time of assessment, the fifth<sup>1</sup> and sixth<sup>2</sup> carbon budgets have been set in law to cover the two budget periods that span 2028 to 2037. The budgets are split into traded and non-traded carbon. A limit on UK carbon emissions is imposed for each five-year period. The budgets are prepared by the Committee on Climate Change, which was set up under the Climate Change Act as an independent evidence-base advisory body to the UK Government and Parliament, advises on setting and meeting carbon budgets. The Third Carbon Budget (2010) was accepted by Parliament and covers the period 2018 to 2022, setting out that annual UK emissions should be reduced to around 509 MtCO<sub>2</sub>e (a 37% reduction relative to 1990 baseline levels). By 2025, in accordance with the Fourth Carbon Budget, The key recommendations for the budget include:

the need for the UK to be on a pathway to at least an 80% cut in GHG below 1990 levels by 2050, with maximum 2050 emissions of 160 MtCO<sub>2</sub>e; and by 2025, annual UK emissions should be reduced to around 390 MtCO<sub>2</sub>e (a 50% reduction relative to baseline levels). The Fifth Carbon Budget sets the annual emissions limit at 345 MtCO<sub>2</sub>e (a 57% reduction relative to 1990 baseline levels).

7.2.11A The Sixth Carbon Budget for 2033 to 2037, set by the Carbon Budget Order 2021, which took effect on 24 June 2021, sets the limit for annual UK emissions at 965 MtCO<sub>2</sub>e over the Sixth Carbon Budget's five year period (i.e. 193 MtCO<sub>2</sub>e per annum). This represents a reduction in

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<sup>1</sup> The Carbon Budget Order 2016

<sup>2</sup> The Carbon Budget Order 2021

annual emissions to 2035 of 78% from 1990 levels. The Sixth Carbon Budget is the first budget to take account of the UK Government's 2050 net zero target."

- 2.1.3 A new paragraph 7.6.40A is added to Chapter 7 Air Quality and Greenhouse Gases [REP6-074] to include a worst-case calculation of regional greenhouse gas emissions, showing <0.001% contribution to the Sixth Carbon Budget emissions.

"7.6.40A This assessment was undertaken prior to the release of the Sixth Carbon Budget for 2033 to 2037. In the absence of available data for this time period, the total quantity of emissions for the period 2033 to 2037 is reasonably approximated to be 6,040 tonnes CO<sub>2</sub>e i.e. the annual rail CO<sub>2</sub> emissions for 2021 multiplied by five to represent the five year budget period. This equates to less than 0.001% of the Sixth Carbon Budget. This calculation assumes constant rail emissions per year, as per Table 7.16, and that there will be no offset of rail emissions associated with reduced road transport emissions in future years. This is a worst-case assumption that accounts for projected reductions in road transport emission factors and does not take into account the Department for Transport's plan, published on 14 July 2021, titled "Decarbonising Transport: A Better, Greener Britain", which sets out the path to achievement of a net zero emission rail network by 2050 through measures that include:

- delivery of a net zero railway network by 2050, with sustained carbon reductions in rail along the way, and aiming to remove all diesel-only trains (passenger and freight) from the network by 2040
- an ambitious, sustainable, and cost-effective programme of electrification guided by Network Rail's Traction Decarbonisation Network Strategy
- supporting the development of battery and hydrogen trains and deploying them on the network as it decarbonises. Also using technology to clean up diesel trains until they can be removed altogether
- building extra capacity on the rail network to meet growing passenger and freight demand and support significant shifts from road and air to rail
- working with industry to modernise fares ticketing and retail to encourage a shift to rail and cleaner and greener transport journeys
- improving rail journey connectivity with walking, cycling and other modes of transport
- introducing a rail freight growth target
- incentivising the early take up of low carbon traction for rail freight.

It is concluded that the DCO Scheme will not have a material impact on the government's ability to comply with the carbon budgets"

- 2.1.4 In the Environmental Statement Appendix 7.5 Climate [REP6-113], a sixth bullet and final sentence is added to paragraph 1.7.6.

"1.7.6 The Government has a legally binding framework to cut greenhouse gas emissions by at least 80% by 2050. Emission reductions

will be delivered through a system of five year carbon budgets that set a trajectory to 2050. The following budgets have been made:

- 1st carbon budget (2008 to 2012) of 3,018 MtCO<sub>2e</sub>;
- 2nd carbon budget (2013 to 2017) of 2,782 MtCO<sub>2e</sub>;
- 3rd carbon budget (2018 to 2022) of 2,544 MtCO<sub>2e</sub>;
- 4th carbon budget (2023 to 2027) of 1,950 MtCO<sub>2e</sub>; ~~and~~
- 5th carbon budget (2028 to 2032) of 1,765 MtCO<sub>2e</sub>; ~~and~~
- 6th carbon budget (2033 to 2037) of 965 tCO<sub>2e</sub>.

In accordance with the Climate Change Act 2008 the Climate Change Committee will continue to advise successive UK governments on setting and meeting subsequent carbon budgets and preparing for climate change.”

- 2.1.5 In the Environmental Statement Appendix 7.5 Climate [REP6-113], a new paragraph 1.7.8A is added relating to the worst-case calculation (as per point b above).

“1.7.8A The Sixth Carbon Budget was set in law after the climate assessment was undertaken for the DCO Scheme. However, the worst-case contribution of the DCO Scheme to GHG emissions is estimated to be 6,040 tCO<sub>2e</sub> in total for the budget period of 2033 to 2037 (see paragraph 7.2.12 in the core assessment), equivalent to <0.001% of the Sixth Carbon Budget.”

## 2.2 Cumulative Effects

- 2.2.1 The assessment of direct, indirect and cumulative likely significant effects of the DCO Scheme with other existing and/or approved projects on climate, including greenhouse gas emissions and climate change adaptation, is to be undertaken in light of the requirements contained in the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 and in light of paragraphs 5.17 and 5.18 of the National Policy Statement for National Networks (NPSNN).
- 2.2.2 The direct emissions of the DCO Scheme comprise emissions into the atmosphere from direct fuel consumption by construction vehicles and diesel locomotives. Emissions from construction vehicles are considered in Appendix 7.1 to the Environmental Statement [REP6-113] in the context of air quality. Emissions from construction vehicles and from diesel locomotives are considered in Appendix 7.5 to the Environmental Statement [REP6-113] in the context of climate.
- 2.2.3 Indirect emissions from the DCO Scheme are those resulting from the consumption of electricity for the operation of the DCO Scheme and embodied carbon emissions resulting from the construction of the DCO Scheme. These have been identified and assessed in Appendix 7.5 Climate to the Environmental Statement [REP6-113].
- 2.2.4 Cumulative effects on air quality (including emissions of NO<sub>x</sub>, PM<sub>10</sub> and CO<sub>2</sub>) of the DCO Scheme with other existing and/or approved projects are assessed at Section 7.3 of Chapter 7 Air Quality and Greenhouse Gases

[REP6-074], in Chapter 18 In-Combination and Cumulative Effects [APP-113] of the Environmental Statement and Appendix 18.2 [APP-191] of the Environmental Statement. The Transport Assessment used in the modelling of effects in these assessments includes traffic generated by committed developments. The other projects are detailed in the Transport Assessment in Appendix 16 [APP-160] of the Environmental Statement. As explained in Chapter 7 Air Quality and Greenhouse Gases [REP6-074] of the Environmental Statement, the assessment of cumulative effects also considers other projects not incorporated into the traffic model (see paragraphs 7.3.52 – 7.3.53).

- 2.2.5 The vulnerability of the DCO Scheme to climate change is assessed in Appendix 7.5 Climate [REP6-113], which draws on information presented in the Flood Risk Assessment [APP-076 to 092].
- 2.2.6 The UK Carbon Budgets, which provide the context in which emissions from road and rail nationally significant infrastructure projects (NSIP) should be considered, are by their nature cumulative as they encompass emissions across the UK's different economic sectors. In the recent case of R (Transport Action Network) v Secretary of State for Transport and Highways England (2021) EWHC 2095 (Admin) the High Court recognised that there are different pathways forward and that, for each of the carbon producing sectors with their different carbon reduction strategies moving at different rates, there is scope for UK governments to make policy adjustments to keep the UK on track to net zero.
- 2.2.7 The High Court also confirmed that the only cumulative targets against which the cumulative assessment of emissions could be made were the carbon budgets (para 140). The Court noted that there was no reason to question the judgement reached by the Department for Transport that the contribution made by emissions from all of the projects included in the Department's Road Investment Strategy 2 (RIS2) over the period assessed (to the end of the Fifth Carbon Budget) was de minimis (paras 147 and 159). The predicted emissions of the DCO Scheme are no greater than/less than each of the individual road schemes that together make up RIS2.
- 2.2.8 The current NPSNN was issued in 2014 and predates the Government's legal commitment to net zero, the 10 Point Plan for a Green Industrial Revolution, the new Sixth Carbon Budget and the new, more ambitious policies outlined in the Transport Decarbonisation Plan. In a Ministerial Statement issued on 22 July 2021 the Secretary of State for Transport advised that a review of the NPSNN will begin later in 2021 this year, to be completed no later than Spring 2023. "While the review is undertaken, the NPS remains relevant government policy and has effect for the purposes of the Planning Act 2008. The NPS will, therefore, continue to provide a proper basis on which the Planning Inspectorate can examine, and the Secretary of State can make decisions on, applications for development consent."

## SECTION 3

# Summary

3.1.1 It can be concluded with confidence that:

- the DCO Scheme will have no material impact on the ability of the Government to comply with its carbon budgets; and
- the direct, indirect and cumulative emissions of the DCO Scheme will not give rise to any likely significant effects on the climate.

**ch2m.**<sup>SM</sup>