CONSULTATION RESPONSE

East West Rail: Pre-DCO Public Consultation

Carbon Assessment: Whole-Life Carbon Analysis

Submitted by: Cambridge Approaches

Date: June 2026

EXECUTIVE SUMMARY

EWRCo.'s April 2026 consultation brochure — the document issued for this consultation — states that EWR would "offer a sustainable alternative to road travel, allowing people to make better transport choices." That is an explicit claim that EWR is lower carbon than the alternative of road travel. EWRCo.'s Environmental Sustainability Strategy reinforces this, describing EWR as "greener for the environment" and asserting that "rail is an inherently lower carbon form of transport than many alternatives" — a claim presented as "an important EWR business case drive." This response examines whether those claims are substantiated. They are not.

Construction carbon dwarfs modal shift savings

EWRCo.'s technical partner, in a document released under Freedom of Information, estimates construction carbon for the southern approach to Cambridge at 322,500 tCO_2e — a figure the document's limitations table acknowledges excludes viaducts and earthwork spoil disposal. A cross-check against the Government's published HS2 Phase 2a carbon assessment (a comparable route length) produces a figure of approximately 1.51 million tCO_2e — five times higher. Modal shift savings for existing residents over a 60-year appraisal period amount to approximately 5,400 tCO_2e. On EWRCo.'s own understated figures, construction carbon exceeds modal shift savings by a factor of approximately 60; on the HS2-scaled estimate, by a factor of approximately 280.

The induced housing makes the position substantially worse

EWRCo.'s Economic and Technical Report (May 2023) implies approximately 100,000 new homes around EWR stations (213,300 people from Appendix 4 Table 4.1, divided by 2.1 persons per household). Their construction generates a further estimated 8.1 million tCO_2e. Additional modal shift savings from new residents amount to approximately 18,500 tCO_2e over 60 years. The net carbon position across construction of the railway and the housing attributed to it is approximately +8.4 million tCO_2e — a very large net increase in emissions.

The "low carbon rail" claim does not apply to EWR

Heavily used existing railways are genuinely low carbon: their construction carbon was incurred long ago and amortised across billions of passenger journeys, and high load factors keep operational carbon per passenger low. EWRCo. borrows those credentials — expressed as Network Rail system-wide averages — and presents them as if they apply to EWR. They do not. EWR is a new railway with fresh, unrecouped construction carbon, EWRCo.'s forecast that only 3% of Cambourne residents would commute to Cambridge by EWR, and off-peak services that will run near-empty. Its primary economic purpose, as EWRCo.'s case makes explicit, is to unlock approximately 100,000 new homes — not to decarbonise existing travel. No load-factor adjusted carbon figure specific to EWR's actual service pattern has been published.

Cambridge Approaches calls on EWRCo. to publish a full whole-life carbon assessment — including embodied construction carbon, carbon from induced development, and load-factor adjusted operational carbon — one that substantiates their sustainability claims, or to withdraw those sustainability claims that cannot be substantiated without it. There is good reason to believe those claims will not survive scrutiny, as the evidence in this

response sets out.

EWRCo.'s claims are materially misleading

EWRCo. is a government-owned arm's length body, not a private developer. As a public body spending taxpayer money, it is subject to Government Communication Service standards that prohibit materially misleading public communications. The claims that EWR is "greener for the environment" and "delivers reduced whole-life carbon emissions" are comparative statements: greener than what, and reduced compared to what baseline? Neither claim specifies a comparator or a counterfactual. A comparative claim without a stated baseline cannot be verified even in principle — that is a structural defect in the claim, not merely an evidential gap. Those claims cannot be substantiated by any published evidence and are contradicted by the evidence set out in this response. EWRCo. is legally required, under the EIA Scoping Opinion, to have produced a whole-life carbon assessment for the Environmental Statement; it has chosen not to publish that assessment during the consultation.

EWRCo.'s April 2026 consultation brochure contains a critical admission in its carbon section: "We're carrying out a whole life carbon assessment. This involves calculating emissions across the project lifecycle, including construction, operation, use, maintenance and decommissioning." EWRCo. cannot simultaneously claim to be reducing whole-life carbon and still be in the process of calculating what that carbon will be. The brochure's admission that the assessment is in progress confirms that EWRCo. holds the analysis and has chosen not to publish it during the consultation period. [7]

Making sustainability claims that are unsubstantiated and, as comparative statements without a stated baseline, incapable of independent verification, in the non-statutory consultation material, while withholding the supporting analysis, is inconsistent with the requirements of lawful consultation established in *R (Moseley) v London Borough of Haringey* [2014] UKSC 56 — which requires that consultees have sufficient accurate information to make an intelligent response.

EWRCo. may say that the whole-life carbon assessment will be published in due course, as part of the Environmental Statement. That does not address the problem. This is the fourth round of non-statutory public consultation EWRCo. has conducted — following consultations in 2019, 2021, and 2024 — and the last before the DCO application is submitted in 2027. There will be no further public consultation after this. Responses are being submitted now, shaped by claims EWRCo. has not substantiated and which may prove inconsistent with the evidence it holds internally. If those claims prove false, EWRCo. will have used all four rounds of consultation to present the project as low carbon while withholding the evidence that would test that claim. The obligation not to mislead is not discharged by correcting the record after the consultation is over.

Cambridge Approaches calls on EWRCo. to withdraw or correct those specific claims in its sustainability strategy that are contradicted by the available evidence, and to publish the whole-life carbon assessment before the DCO is submitted. Cambridge Approaches further calls on the Planning Inspectorate to take account of the misleading nature of EWRCo.'s non-statutory consultation sustainability communications when assessing the adequacy of the non-statutory public consultation.

Abbreviations

CS3 Connection Stage 3 (Bedford to Cambridge new-build section)
DCO Development Consent Order (under the Planning Act 2008)

EIA Regulations - Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (SI 2017/572)**.**
EIA Scoping Opinion Issued by the Planning Inspectorate (TR040012-000022) 12 Feb 2025.
ETR Economic and Technical Report (EWRCo, May 2023)
EWR East West Rail
EWRCo. East West Railway Company
FOI Freedom of Information
GHG – Greenhouse Gas
tCO_2e Tonnes of carbon dioxide equivalent

1. EWRCo.'s Sustainability Claims

1.1 EWRCo.'s stated carbon objectives

1. EWRCo.'s April 2026 consultation brochure — issued for this fourth non-statutory public consultation — states that EWR would 'offer a sustainable alternative to road travel, allowing people to make better transport choices.' [7] That is an explicit claim that the railway is lower carbon than road. EWRCo.'s Environmental Sustainability Strategy (October 2024, updated May 2025) reinforces this, describing EWR as 'greener for the environment' and asserting that 'rail is an inherently lower carbon form of transport than many alternatives' — a claim it describes as 'an important EWR business case drive.' This section examines whether those claims are substantiated.[1]

2. EWRCo.'s carbon pillar sets four strategic objectives: (i) enable net zero carbon emissions from passenger services by 2050; (ii) enable zero emission door-to-door journeys; (iii) deliver a railway which reduces whole life carbon emissions in line with the UK net zero carbon trajectory; and (iv) deliver new depots and stations capable of being net zero carbon from day one of operations.[1] The stated ambition is to 'deliver a railway that enables operational net zero carbon by 2050 through robust carbon management during design and construction, delivering sustained reductions in whole life carbon emissions.'[1]

3. Two features of these objectives require examination. First, the headline commitment — 'operational net zero by 2050' — applies only to the carbon emissions from running trains: traction energy, station operations, and supporting infrastructure. It makes no commitment regarding construction embodied carbon. Second, objective (iii) — 'reduces whole life carbon emissions in line with the UK net zero carbon trajectory' — is framed as alignment with a national trajectory, not as a commitment that the project will itself achieve a net reduction in carbon. No quantified whole-life carbon assessment has been published. Nor has a target level even been set.

1.2 Construction carbon: EWRCo.'s estimate and its acknowledged limitations

4. EWRCo.'s technical partner produced a construction carbon assessment for CS3 with the southern approach to Cambridge (SATC), released under Freedom of Information.[2] Their figure for the SATC is 322,500 tCO_2e.[2]

5. The same document identifies material limitations in its scope. It explicitly excludes viaducts. For earthworks, it does not include the carbon from transporting and disposing of spoil. The limitations table acknowledges that these exclusions mean 'the absolute CO_2 emissions are likely to be considerably higher.'[2]

6. A cross-check is available from the Government's published carbon assessment for HS2 Phase 2a, which covers approximately 37 miles of new high-speed railway between north of Birmingham and Crewe.[3] That assessment records construction carbon of approximately 1.451 million tCO_2e. EWR CS3 covers approximately 38.5 miles[2] — a directly comparable distance. Scaling proportionally produces a construction carbon estimate for EWR CS3 of approximately 1.51 million tCO_2e. EWRCo.'s FOI figure is approximately five times lower than this HS2-derived equivalent. The absolute construction carbon figure is therefore substantially uncertain and almost certainly significantly understated.

1.3 Modal shift savings for existing residents

7. The carbon savings from EWR arise from modal shift: replacing car journeys with rail journeys. EWRCo.'s trip-end model projects 472 existing residents switching mode to EWR for Cambridge commutes.[4] Applying a 30km average journey — a figure generous to EWRCo, since actual road distances for the Cambourne to Cambridge commute are considerably shorter at approximately 15km, which would reduce the modal shift saving proportionally — 220 working days per year, and a conservative transition to electric vehicles (linear transition 2010 to 2065, EWR service commencing 2035), the modal shift saving for existing residents is approximately 5,400 tCO_2e over a standard 60-year appraisal period.[5] The figures for CO_2 per passenger kilometre used in reference [5] assume an average load factor across the UK rail network of around 30-35%. This may well be lower on EWR because it does not connect a large city like London or even one the size of Leeds/Bradford. Anecdotally, we can affirm that off-peak trains in the Cambridge area even those going to London, often run near-empty.

8. On EWRCo.'s — significantly understated — construction figure of 322,500 tCO_2e, construction carbon exceeds modal shift savings for existing residents by a factor of approximately 60. On the HS2-scaled estimate of 1.51 million tCO_2e, the factor is approximately 280.[5]

1.4 The induced housing materially worsens the carbon position

9. EWRCo.'s Economic and Technical Report (May 2023), Appendix 4 Table 4.1, gives a trip-end model figure of 213,300 people in new housing around EWR stations. Dividing by a standard household size of 2.1 persons per household gives approximately 100,000 new homes — a gross figure before dependency and additionality adjustments.[4] The construction of those homes generates a further estimated 8.1 million tCO_2e, applying a construction carbon figure of approximately 80 tCO_2e per house.[5]

10. The additional modal shift from new residents — 1,618 additional daily EWR commuters to Cambridge on EWRCo.'s projections[4] — saves approximately 18,500 tCO_2e over 60 years.[5] The net carbon position across construction of the railway and the housing attributed to it is approximately +8.4 million tCO_2e — a very large net increase in carbon emissions, not a reduction. This is summarised in the table below. The embedded carbon is 353 times as high as the saving. As with para. 8 this is a huge factor and the conclusion that EWR CS3 is carbon positive holds for a wide range of estimates of passenger numbers, new houses and EWR embedded carbon.

Component	Construction tCO_2e	Modal shift (60yr) tCO_2e	Net tCO_2e
Existing residents	322,500*	−5,400	+317,100
New housing	8,125,700	−18,500	+8,107,200
Total	8,448,200	−23,900	+8,424,300

** EWRCo.'s FOI figure, acknowledged to exclude viaducts and earthwork spoil disposal. HS2-scaled equivalent: approximately 1,510,000 tCO_2e.*

1.5 The 'inherently lower carbon' claim does not apply to EWR

11. The claim that 'rail is an inherently lower carbon form of transport than many alternatives' is true of heavily used existing railways. On a busy mainline, construction carbon was incurred long ago and has been amortised across billions of journeys; high load factors keep the operational carbon per passenger-kilometre low. EWRCo. borrows those credentials — expressed as Network Rail system-wide average carbon-per-passenger-kilometre figures — and presents them as evidence that EWR is low carbon. That is a substitution of a favourable figure for the relevant one.

12. EWR CS3 will operate under fundamentally different conditions. EWRCo.'s trip-end model (based on a model derived from real 2011 census data) predicts only 3% of Cambourne's working population using EWR for Cambridge commutes.[4] EWR is a new railway with fresh, unrecouped construction carbon. It will run services that are near-empty for much of the day: a train consuming almost as much energy empty as full, serving a handful of passengers, has a carbon-per-passenger figure that can readily exceed that of a modern electric car. And unlike a railway serving an existing population, EWR's primary economic purpose is to enable approximately 100,000 new homes along the corridor. The carbon from that development is not a side-effect — it is the point of the railway.

13. No load-factor adjusted carbon-per-passenger-kilometre figure specific to EWR's projected service pattern has been published. EWRCo. has applied the carbon performance of the national network — built up over a century of heavy use — to a new, lightly-used, development-enabling railway. That is not a credible basis for the claim that EWR is 'inherently lower carbon'. The claim can only be tested against EWR's figures, which EWRCo. has so far chosen not to publish.

1.6 Conclusions and requests

14. EWRCo.'s sustainability strategy sets an operational net zero target and refers to whole-life carbon management. The available evidence does not support the claim that EWR CS3 will reduce net carbon emissions. On EWRCo.'s published figures — which it acknowledges are understated — construction carbon exceeds modal shift savings by a factor of 60. Including the housing attributed to EWR, the net carbon position is approximately +8.4 million tCO_2e and 353 times as high as the savings. The carbon-per-passenger claim relies on network averages that do not reflect EWR's low projected load factors. The characterisation of EWR as 'greener for the environment' and as making a contribution to climate targets is not supported by the available evidence.

15. The Green Book requires that environmental costs and benefits — including carbon — be included in project appraisal. EWRCo. has not published a whole-life carbon assessment that quantifies construction embodied carbon, accounts for the carbon consequences of induced housing development, or adjusts for EWR's projected load factors. Without such an assessment, the Planning Inspectorate cannot properly weigh the environmental claims made in support of the project against its environmental costs. The public consultations have already been misleading affecting people's perception of the project.

16. Cambridge Approaches requests that EWRCo:

    (a) publish a full whole-life carbon assessment for EWR CS3, including embodied construction carbon, carbon from induced development, and operational carbon adjusted for projected load factors, before the DCO application is submitted (it should have been consulted on); and

    (b) withdraw or correct those characterisations of EWR as 'greener for the environment', as contributing to climate targets, and as offering 'a sustainable alternative to road travel', all of which are comparative claims with no stated baseline and cannot be

substantiated by any published evidence, pending publication of the whole-life carbon assessment.

2. Obligations of Accuracy and Calls for Withdrawal

2.1 EWRCo. as a publicly funded body

17. East West Railway Company is a government-owned arm's length body of the Department for Transport. It is not a private promoter: it is a public body spending public money. As such it is subject to public law obligations that do not apply to commercial developers. The Government Communication Service (GCS) standards — which apply to all government bodies and their arm's length bodies — prohibit the use of public funds to produce communications that are materially misleading. The characterisation of EWR as a project that 'delivers reduced whole-life carbon emissions' and is 'greener for the environment', in circumstances where EWRCo. has not published the whole-life carbon analysis that would demonstrate those claims, is inconsistent with those standards [1, 7].

18. The distinction from party political material — to which the Representation of the People Act 1983 applies — does not diminish the obligation. EWRCo. is using taxpayer-funded communications to present an unsubstantiated sustainability case during the non-statutory public consultation. The public interest in accuracy is, if anything, higher in that context than in a commercial one.

2.2 The lawfulness of the non-statutory public consultation

19. The lawfulness of the non-statutory public consultation process is tested against the principles established in *R v North and East Devon Health Authority ex parte Coughlan* [2001] QB 213 and confirmed by the Supreme Court in *R (Moseley) v London Borough of Haringey* [2014] UKSC 56. The *Gunning* principles require, among other things, that consultation be conducted with sufficient reasons and information to enable an intelligent response. *Moseley* confirms that this includes not presenting the proposal in a misleading way, and not withholding material information that would affect the nature of responses received.

20. EWRCo.'s sustainability strategy presents the project as having positive carbon credentials at the same time as declining to publish the whole-life carbon analysis it is legally required to produce. Consultees have been asked to respond to sustainability claims they cannot properly assess because the underlying evidence has been withheld. This undermines the sufficient-information limb of the *Gunning* test and may render the sustainability element of the non-statutory public consultation unlawful.

21. EWRCo. will no doubt say that the whole-life carbon assessment will be published as part of the Environmental Statement when the DCO application is submitted in 2027. That does not cure the harm created by the non-statutory public consultation. EWRCo. has conducted four rounds of non-statutory public consultation on EWR — in 2019, 2021, 2024, and now 2026. This is the last of them. There will be no further public consultation after this round closes. Responses are being submitted now, on the basis of sustainability claims EWRCo. has not substantiated. If the whole-life carbon assessment, when eventually published, is inconsistent with those claims — as the evidence in this response suggests it will be — EWRCo. will have run all four rounds of public consultation presenting the project as low carbon while withholding the analysis that would test that claim. The obligation not to mislead the public is not discharged by publishing a correction after the last consultation has closed.

22. This response is itself an example of that pattern. During this consultation period, a member of the public asked EWRCo. for its passenger demand projections. EWRCo.'s written reply stated that passenger demand forecasts are 'currently being developed'

and that ‘station-level passenger forecasts have not yet been finalised’ — they will be published ‘at a later stage of the project, ahead of the DCO submission.’ That is a process answer. It is also a structurally inconsistent position: EWRCo. is simultaneously telling the public that EWR would offer ‘a sustainable alternative to road travel’ — an explicit claim about carbon performance relative to road — while confirming in writing that it has not finalised the passenger numbers on which any such comparison depends. Carbon per passenger cannot be calculated without passengers. EWRCo.’s pattern across multiple difficult issues — passenger numbers, the business case, HGV routes, protected species — is to offer a process commitment in place of a substantive answer. The sustainability claims in the consultation material follow the same pattern: the claim is made; the evidence is withheld; and publication is deferred to a later stage at which the public will have no further opportunity to respond.

2.3 Obligations under the EIA Regulations

23. Under the EIA Regulations, EWRCo. is required to submit an Environmental Statement (ES) as part of its Development Consent Order application. The EIA Scoping Opinion issued by the Planning Inspectorate (TR040012-000022) explicitly requires the ES to include assessment of embodied greenhouse gas (GHG) emissions from construction materials; GHG from transport of those materials; GHG from construction and installation processes; GHG from land use change; and a Carbon Management Plan to be secured by DCO condition. [6]

24. EWRCo.’s technical advisors must therefore already have conducted, or be in the process of conducting, a whole-life carbon assessment. The decision not to publish interim figures during the non-statutory public consultation, while making positive sustainability claims in publicly available material, deprives consultees of the information they need to assess those claims and deprives the Planning Inspectorate of a basis for testing whether the consultation was conducted appropriately.

25. That is not speculation. The construction carbon assessment produced by EWRCo.’s technical partner — and obtained by Cambridge Approaches under the Freedom of Information Act — was in EWRCo.’s possession well before the 2024 round of non-statutory public consultation, and almost certainly before the 2021 round. EWRCo. has therefore held substantive carbon estimates across multiple rounds of public consultation while declining to publish them or to disclose the whole-life carbon analysis that would put those estimates in their full context. The pattern of making positive sustainability claims in consultation material while withholding the supporting analysis, across four successive rounds of consultation since 2019, is more than unfortunate and means that the public do not see the full carbon picture before the DCO application is submitted.

26. The extent of EWRCo.’s carbon modelling capability is illustrated by a document published during this consultation period. EWRCo.’s April 2026 assessment of the Cambridge East Train Care Centre (section 14.3) provides component-level embodied carbon figures for each design option under consideration: the main structure, overhead line equipment, track, access roads, feeder cables, signal units and buffer stops are each individually quantified. [8] The baseline option (CEA2) is assessed at 1,150 tCO_2e; the preferred option (CSM2) at 542 tCO_2e — a 53% reduction that is explicitly cited as a factor in the option recommendation. EWRCo. is therefore capable of calculating the embodied carbon of an 815-metre access road to the nearest tonne. The decision not to publish a corresponding top-level whole-life carbon figure for the railway as a whole is not a matter of analytical capability. It is a choice.

27. In the event that the whole-life carbon assessment, when published in the ES, is inconsistent with the sustainability claims made during the non-statutory public consultation, Cambridge Approaches will draw the Planning Inspectorate's attention to

that inconsistency as evidence that the non-statutory public consultation was conducted on a materially misleading basis.

2.4 Formal requests

28. Cambridge Approaches formally requests:

(a) that EWRCo. withdraw or correct those specific claims in its Environmental Sustainability Strategy and April 2026 consultation brochure that are unsupported by published evidence — in particular: the claim in the brochure that EWR would 'offer a sustainable alternative to road travel, allowing people to make better transport choices', which is an unsubstantiated comparative claim that EWR is lower carbon than road; the claim that the railway 'delivers reduced whole-life carbon emissions'; and the unqualified assertion that rail is an inherently lower-carbon transport mode, given EWRCo.'s forecast demand levels;

(b) that EWRCo. publish, long before submission of the DCO application, the whole-life carbon assessment and the full Environmental Statement required by the EIA Scoping Opinion, including embodied construction carbon, carbon attributable to induced development along the route, and operational carbon adjusted for projected load factors at the forecast demand level; so that consultees have time to assess it;

(c) that the Planning Inspectorate take into account, when assessing the adequacy of EWRCo.'s non-statutory public consultation, that the sustainability material presented to consultees contained material claims which could not be independently verified because the supporting analysis was withheld, and that this is inconsistent with the requirements of lawful consultation as set out in the *Gunning* principles and *R (Moseley) v Haringey*.

29. There is no middle ground available to EWRCo. on this point. Either the sustainability claims made in the non-statutory public consultation material are accurate — in which case EWRCo. should publish the whole-life carbon assessment that demonstrates this before the DCO application is submitted — or those claims were not accurate when made, in which case EWRCo. should withdraw them and acknowledge that the non-statutory public consultation was conducted on a misleading basis on the question of carbon. Cambridge Approaches calls on EWRCo. to do one or the other.

3. References and Sources

[1] East West Railway Company, Environmental Sustainability Strategy, October 2024 (updated May 2025), pages 14–15 and 20–21. Available at: http://ewr-production-files.s3.eu-west-2.amazonaws.com/public/Environmental-sustainability-strategy.pdf

[2] East West Railway Company technical partner, Development Phase Environmental Assessment Factor Analysis for ACP7: Worksheet Part 1 (Document no: 133735-MWJ-Z0-XXX-RCD-EEN-000001, Revision P01, dated 22 February 2024). Released under Freedom of Information to Cambridge Approaches. On file with Cambridge Approaches.

[3] HS2 Ltd, Phase 2a Environmental Sustainability Report, section 7.1 (Table: Construction carbon assessment, 1.451 million tCO_2e for Birmingham–Crewe, approximately 37 miles). Available at: https://assets.publishing.service.gov.uk/media/5a803694ed915d74e33f91e7/C5_web_tagged_final_07-09-16.pdf

[4] East West Railway Company, Economic and Technical Report, May 2023, Appendix 4, Table 4.1 (Trip-end model). Available at: eastwestrail.co.uk

[5] Cambridge Approaches, "EWR Bedford to Cambridge: Does it reduce CO_2 emissions?", updated 2 June 2024. Available at: cambridgeapproaches.org/ewr-bedford-to-cambridge-does-it-reduce-co2-emissions/

[6] Planning Inspectorate, EIA Scoping Opinion for East West Rail (Bedford to Cambridge), document reference TR040012-000022, 12 Feb 2025. The Scoping Opinion requires the

Environmental Statement to include assessment of embodied GHG from construction materials, transport of materials, construction and installation processes, and land use change, together with a Carbon Management Plan to be secured by DCO condition.

[7] East West Railway Company, Consultation Brochure: East West Rail Fourth Non-Statutory Public Consultation, April 2026. Pages 2 (CEO foreword), 10 (sustainable alternative to road travel), 31 (whole life carbon assessment admission).

[8] East West Railway Company, Cambridge East Train Care Centre — Preliminary Options Assessment Report, 22 April 2026, section 14.3 (Carbon). Available at: https://ewr-production-files.s3.eu-west-2.amazonaws.com/public/ListsBlockMedia/34d42c2def/Cambridge-East-Train-Care-Centre_22.04.26.pdf