

Before the Expert Fast-track Panel

FTAA-2511-1150

Under the Fast-track Approvals Act 2024 (**FTAA**)

And

In the Matter of an application for approvals by **MCCALLUM BROTHERS LIMITED** for the Te Ākau Bream Bay Sand Extraction Project located at Te Ākau Bream Bay, Northland

**Evidence of Lawrence McIlrath on behalf of McCallum Brothers Limited in
Response to Minute 14**

(Economics)

Dated 12 October 2026

Jeremy Brabant

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Introduction

1. My name is Lawrence Ryan McIlrath. I am a Director of Market Economics Ltd, an independent economics consultancy. My qualifications and experience are presented in my evidence relating to Minute 4.
2. This evidence is provided as part of McCallum Brothers Limited's (**MBL**) response to the correspondence from Mr Green (Axiom Economic Limited), dated 4 August 2026, as mentioned in para 22 and para 23 of Minute 14.

Scope of Evidence

3. My evidence responds to Mr Green's correspondence, covering:
 - a. The Emissions Trading Scheme (**ETS**) and its relevance to the current assessment;
 - b. Two new points, one regarding double counting, and another about national-level health effects, and
 - c. Remaining concerns.

Code of Conduct

4. Although this is not a hearing before the Environment Court, I confirm that:
 - a. I have read and am familiar with the Environment Court's Code of Conduct for Expert Witnesses as specified in the Environment Court's Practice Note 2023 (**Code**); and
 - b. The report referred to above and any evidence authored by me:
 - i. Is within my area of expertise (except where I state that I rely upon the technical reports of other expert witnesses provided in support of the application);
 - ii. Have been prepared in accordance with the Code; and

- iii. I have not omitted to consider any material facts known to me that might alter or detract from the opinions expressed.

Emissions Trading Scheme and its relevance in this assessment

- 5. Mr Green revisited his position regarding the Emissions Trading Scheme (ETS) and essentially concedes that a key part of his interpretation regarding the ETS was incorrect.
- 6. Mr Green used his ETS-based argument in the February 2026 report to explain why my environmental cost estimates were incorrect.
- 7. Mr Green has withdrawn his conclusions about my analysis, agreeing that:
 - a. Reducing transport emissions can produce economic benefits;
 - b. The benefit is the cost of the avoided emissions;
 - c. Applying a shadow price of carbon can capture economic benefits, and
 - d. These benefits are genuine.
- 8. Mr Green's revisited position removes the basis on which he sought to characterise my assessment as conceptually invalid.

Two new points

- 9. In his letter (section 3), Mr Green lists four remaining concerns. However, two are new points. Firstly, he introduces a point regarding double-counting and another point regarding net national-level health effects.
- 10. For the double-counting point, Mr Green argues that a portion of the transportation cost includes an allowance for the ETS-costs and that this portion must be subtracted from the emissions costs. While he acknowledges that ETS and the shadow price are different measures, he seeks to subtract (net out) the ETS cost portion.

11. This approach is conceptually incorrect because:
- a. The ETS and shadow price of carbon apply to two entirely different parts.
 - b. Avoiding the transport function, avoids all the associated costs.
12. The ETS price (NZU) is the market price to emit one tonne of CO₂ and the cost is embedded in the cost of diesel. It can be thought of as part of the input costs. In contrast, the emission during transport is expressed in Dollar-terms using the shadow price of carbon. This cost is not part of the fuel price and is not included in the ETS. Therefore, there is no double counting.
13. I explain this difference in my response to comments from invited parties (para 217). I remain of the view that my assessment of the direct transport cost savings as well as the avoided emissions costs is appropriate and there is no double-counting.
14. Regarding the net national-level health effect, Mr Green appears to replicate his original ETS argument and apply it to national-level health effects. If I understand his position correctly, he indicates that my analysis only accounts for health effects associated with transport of Bream Bay sand and it should be adjusted for health effects elsewhere in New Zealand. This is because the freed-up emissions capacity under the ETS could potentially be taken up by other emitters elsewhere in New Zealand, whose activities may generate emissions causing health harm in other locations. Mr Green acknowledges this outcome is not inevitable, but argues the uncertainty means my health cost estimates are incorrect.
15. Conceptually, Mr Green is applying the same New Zealand-wide spatial scale that he applied in his now withdrawn ETS-argument to the health effect. In my view, such a wide perspective is needless, and unlikely to add to the understanding of the Bream Bay proposal's effects. There is no analytical basis for such a wide assessment envelope in the FTAA context. I am not aware of any FTAA assessment that used such a spatial scope. Further, there is little value in speculating about the health effects caused

by emissions that are generated by activities with no relationship to the Bream Bay proposal. The health effects of the Bream Bay proposal's transport function are localised and there is a line-of-sight link to the emissions and health effects.

Remaining concern

16. In addition to the above, Mr Green lists two remaining concerns. These relate to:

- a. Transparency of the economic assessment, and
- b. The impacts on emissions arising from fleet changes i.e., transitions towards lower-emission technologies.

17. Both these matters were raised in his February report and I have responded to these comments in my response to invited comments:¹

- a. The transparency issue is addressed in paragraphs 195-198, and
- b. Fleet changes and lower emissions are addressed in para 206.

Conclusion

18. Mr Green's correction letter withdraws a key foundation upon which he based his critique of my environmental cost assessment. While he still questions my calculations, he agrees that avoided emissions costs can deliver genuine economic benefits.

19. Mr Green raises two new points.

- a. In my view, his double-counting concern misunderstands the relationship between the ETS price and the shadow price of carbon. These are two entirely different matters that relate to different parts of the transport function.

¹ L McIlrath. Evidence in Response to Invited Comments. McCallum Brothers Limited. 10 August 2026.

- b. Mr Green's net national-level health effect concern applies an unnecessarily wide assessment envelope with no analytical basis in the FTAA context. The approach broadly mirrors Mr Green's analysis requirements associated with the ETS.

20. The remaining concerns regarding transparency and fleet changes were addressed in my earlier evidence.

21. I remain of the view that the Economic Assessment included as Attachment 18 dated 21 December 2025 correctly identifies, and quantifies the benefits of the Bream Bay proposal.

Lawrence McIlrath

12 October 2026