

9 July 2024

Dear Editors:

My co-authors and I are pleased to submit revised versions of a pair of original research articles to *The Energy Journal*.

#### TITLES

- Energy, expenditure, and consumption aspects of rebound, Part I: Foundations of a rigorous analytical framework (23-007)
- Energy, expenditure, and consumption aspects of rebound, Part II: Applications of the framework (23-008)

#### AUTHORS

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#### SHORT HISTORY OF THIS SUBMISSION

- In March 2022, Prof. Yatchew suggested that we “...submit [our long paper] to the *EJ* in its current form. Once it has undergone an initial review, we can make a determination how best to proceed.” We submitted in late March 2022.
- In June 2022, our manuscript was rejected, as expected, primarily due to manuscript length.
- Following reviewer guidance, we re-submitted the manuscript as two papers (Parts I and II) in January 2023.
- Referee reports for both papers (Parts I and II) were received in March 2024.
- In response to referee reports, revised versions of both papers (Parts I and II) are being submitted under this cover letter in July 2024.

### *RESPONSE TO REFEREE REPORTS*

We are grateful for the referee reports on both papers, as they have significantly improved the papers in ways large and small. We addressed all referee comments, as detailed in the attached document. Major improvements to the papers include:

- All monetary flows are now discounted.
- Three utility models are now compared in a new table:
  - the constant elasticity of substitution (CES) utility model from the original submission.
  - a new non-homothetic model that assumes satiated energy service consumption.
  - a new constant price elasticity (CPE) utility model.
- The macro factor ( $k$ ) is no longer calibrated. Rather, we rely upon a sectoral productivity growth literature to motivate a value for  $k$ .
- A producer-sided energy price rebound is now estimated.

In addition, many smaller improvements have been made throughout both papers, as can be seen in the track-changes versions.

Again, we are very grateful for the review comments, and we trust that our extensive revisions satisfactorily address the issues raised by the referee. We look forward to seeing these papers in *The Energy Journal* soon.

Yours sincerely,

A handwritten signature in black ink, reading "Matthew Kuperus Heun". The signature is fluid and cursive, with the first name "Matthew" being the most prominent.

Matthew Kuperus Heun (for co-authors Gregor Semieniuk and Paul Brockway)