

# Review of: "Revisiting the challenges of ozone depletion from a prospective LCA perspective"

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**Potential competing interests:** No potential competing interests to declare.

The author has provided a short review on the major challenges and lacking in our current ozone depletion characterization models and have provided recommendations for the improvement of the inventory and impact identification methods for LCA assessments. Overall, this mini review provides a simplified overview of the ozone depleting mechanism, how current models are predicting the different sources of these depletions from an LCA perspectives, and how the characterization method can be improved.

The following minor review comments need to be addressed:

1. In the introduction, the author used "LCA" without properly clarifying the full form. This needs to be done to improve the readability.
2. In section 3.1 (Life Cycle Inventory), the organization short form "USEEIO" was used without properly clarifying the full form.
3. In section 3.1, the author stated "It was found that this decreased the ozone depletion impacts of heavy-duty transport by a factor of 1000"-- no reference was provided to support this claim.
4. In section 3.2, 2nd paragraph, the author included stratospheric aerosols as probable sources of ozone depletion. More in particular, the author strongly asserted that rocket launches, stratospheric aerosol injections, and supersonic flights "would affect the ozone layer"--has there been any previous publication that the author can refer to in this matter? If so, the author can just cite those references. If not, the author needs to elaborate a bit more on how stratospheric aerosols can deplete the ozone layer.
5. IN section 3.3 (Endpoint Characterization)- the author mentions that LIME is the only method that assesses the damage to human health. Can the author elaborate a bit more on the other methods and what response variable those methods investigate?
6. In Section 3.4 (Interlinkages with other impact categories)- The authors separately describes how CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O affects the climate change and ozone layer depletion. The authors need to provide appropriate literature for this separate claims.

