

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

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The authors provide a critique of the current state-of-the-art about LCA modelling of the impacts on Ozone Layer Depletion. That includes an interesting discussion about the issues in the characterisation factors in ODP impact categories and the inventories of the Life Cycle Databases. The current draft of the article feels scarce in the methodology defined and in the systematization of the review, according to the results section structure. Besides, the Life Cycle Inventory analysis of a larger number of references where the background databases where a limitation (e.g. https://doi.org/10.1016/j.resconrec.2021.106075) should be recommendable. The reference to the specific legislation that bans CFC compounds is missing. E.g. in the European Union with the Ozone Depletion Substances Regulation (1005/2009/EC) (European Commission, 2009). Moreover, a discussion about how to replace these substances and correct them in the life-cycle inventories seems appropriate.

From my viewpoint is not clear why the article is framed in the prospective LCA... The missing CFs for the ODP category and issues in the background processes affect to both, retrospective and prospective LCA. Although it is true that for the prospective assessment of specific activities, some issues here identified will be critical and could be part of the discussion more than the whole orientation of the article since the title.

To summarise, the article orientates the attention to specific issues in the LCA about the quantification of the Ozone Layer Depletion which is still a relevant environmental issue for humanity. However, it still needs further work in the completeness and structure of the content.

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