

Response to reviewers on the article

“Advancing a Global Transition to Clean Energy – The Role of International Cooperation”

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Reviewer 1 – Jörg Peters

Thank you for the comment and the suggested literature. We have now included a box in the paper to highlight the issue.

Reviewer 2 – Andrea Prontrera

Thank you for the supportive comments and the point on participation. We have expanded the paragraph and added a reference. We have chosen not to expand the point more substantially, as this would go beyond the scope of the paper in our view.

Reviewer 3 - Nils Ohlendorf

Thank you for your critical and constructive comments. We have tried to respond to the suggestions by adding some analysis and restructuring certain sections. Here the specific changes we have made in response to the **major comments**:

- We have added section 2.4. It now provides a problem analysis, which leads up to the suggestions on socio-economic analysis in section 3.2. This was indeed missing previously.
- To improve the coherence in section 2, we have not only added section 2.4 but also restructured the section to avoid mixing issues that are not directly related. The point on infrastructure lock-ins has been moved to the discussion of continuing high-carbon infrastructure investments in section 2.2.
- We have strengthened the discussion of off-grid systems as a potential solution to clarify why the very strong dominance of grid-connected systems (in financial terms) is a problem in our view. It might be noted, however, that the point is slightly broader. There is a focus on the deployment of existing technologies more generally, as demonstrated not only by investment flows but also a qualitative review of international energy cooperation. We argue that more support for investment in innovation in developing countries offers important potential, as exemplified by the growing market for solar home systems and the related studies on employment creation in developing countries. We hope that this point is clearer now.



In addition, here the responses to the **minor comments**:

- Data on installed capacity: This very closely mirrors investment figures. Approximately 75 percent of installed capacity was in EU, BRICS and the US. Moreover, it is difficult to get data that distinguishes between industrialized and developing countries. Hence, we have decided not to add this information.
- The figure on energy-related ODA provides an overview of ODA volumes (not only shares) over time. Hence, the requested data is already in the paper.
- Thanks for pointing out the discrepancy between the SE4ALL figures and the BNEF figures. The SE4All figures relate only to 20 high-impact countries. This was lost in the editing process and was indeed misleading.
- We have included a more nuanced discussion of trends in fossil-based ODA since 2008. This was indeed a bit misleading.
- We have included a figure on the volume of ECA financing for fossil-/coal-based energy sector financing.