| Comment   | How we dealt with the comment  |
|---|--|
| Reviewer 3  |  |
| It is how life cycle assessment (LCA) can be implemented in order to address rebound effect. This is the major topic in our article,  | We would like to start by thanking you for your comments.  |
| but the link about can LCA used in rebound effect assessment is<br>not well addressed. You only focus on the areas where LCA can<br>improve rebound effect, but you miss how to do it.  | We now describe in more detail how LCA models and data can be used for the study of rebound effects (I 537-546).   |
|   | It also merits to note that there are many resources in the literature to address rebound effects through LCA, which is not the topic of our paper, the majority of which can be found in:               |
|   | Font Vivanco, D., & van der Voet, E. (2014). The rebound effect through industrial ecology's eyes: a review of LCA-based studies. The International Journal of Life Cycle Assessment, 19(12), 1933-1947. |
| You should also discuss if LCA (i.e. life cycle inventory and life cycle impact assessment) is ready to be used in redound effect. For example, consequential LCI available are much less when compared with attributional LCI. The existent consequential LCIs are enough? The same concerning LCIA methods? If improvements are required, you should address how can these improvements | We now discuss in more detail how to model rebound through consequential and attributional approaches (I 507-511).   |
| You should also address how can LCA decrease uncertainty or increase in rebound effect assessment.  | We now discuss which aspects of rebound effects are omitted when not applying LCA (I 525-537).   |
|   | · · ·  |
| Line 74 to 83. What keywords did you used in you search? How many articles did you found? How many did you covered in the article?  | We now describe the review method and the number of identified studies in the review (I 126-130).  |
| Please check if all references used are in "Reference list". For example, in line 461 you used this reference (Karabulut et al 2018), which is not well formatted, but it is not also in reference list.  | We have corrected this issue and checked the reference list.   |