

Peer review evaluation questionnaire

Peer reviewer: Henrik Grüttner

REPORTING AND METHODS

1) Scope and Objectives. Does the report address all aspects of the objectives of the study stated in the agreed specification?

- a) all of the stated objectives addressed satisfactorily
- b) most of the stated objectives addressed satisfactorily.
- c) few of the stated objectives addressed satisfactorily

Peer reviewer rating:

b

Comments:

Considerations regarding the differences in impacts of the different fibres during the use- and disposal-phase are weakly covered. This is naturally difficult to cover when the fibres are integrated into different products but the basic differences in performance during washing and drying might have been covered.

2) Quality of Approach. Do the approach and methodology adequately address the objectives? Are there any weaknesses that could cast doubt on the conclusions?

- a) Quality of the approach is sound and robust. It is optimal for the scope and nature of the project.
- b) Quality of approach generally sound. Some parts weaker than others.
- c) Weaknesses in approach could draw doubt on some of the conclusions.
- d) Approach is such that conclusions could be flawed.
- e) Not applicable.

Peer reviewer rating:

b

Comments:

Comparisons of different life-cycle-assessment studies are difficult due to differences in methodology and scope of the different studies. This should have been addressed in some methodological considerations – which are not found. I do miss a section explaining in more details the methodology for transforming the ‘bits and pieces’ found into the summary data they present. This is a complicated issue since the scope and goal of the different studies must somehow be considered. For example it must be considered how the data of each study are collected. Do they represent an average situation or a best practice situation? I think generally it should be made clearer which parts of the production network that are included and which parts are not. This point is quite important for the scientific reliability of the report. Alternatively the results should be presented in a less ‘conclusive’ way.

In the calculation of energy in appendix, there is some doubt whether the energy consumptions for the different steps/processes is calculated back to primary energy – as it is normal practice to do in LCA studies. My concern relates to the fact that the authors summarises heat energy and electricity but I cannot see if the electricity is the MJ or kWhs consumed or it is calculated as primary energy (the fuels for the production of the electricity). This is quite important since the consumption of primary energy will be 2.5 - 3 times higher than the electricity consumption due to the loss in the production and distribution. This needs clarification.

3) Assumptions. Are any assumptions made in the report sound and clearly identifiable?

- a) Assumptions are clearly identified and sound.
- b) Assumptions are identifiable and broadly in line with current thinking and/or are justifiable in the circumstances.
- c) Assumptions are hard to identify and/or could lead to conclusions being incorrect.
- d) Assumptions are not identified and/or are not based on sound judgement.
- e) Not applicable.

Peer reviewer rating:

b

Comments:

The approach of doing analogue-conclusions for areas where no data are found is generally applied in a sound manner and provides an overall more complete impression. In the summary presentations, though, these assumptions are not indentified / tracked and hence the picture seems more complete than provided by the investigated sources of information.

DATA AND ANALYSIS

4) Evidence Base. Does the evidence on which the analysis is based draw on appropriate, recent and relevant studies in this field? Is the evidence considered representative of the evidence that exists?

- a) Evidence for the analysis is drawn from appropriate, recent and relevant studies in the field.
- b) Evidence for the analysis mostly draws on appropriate, recent and relevant studies in the field.
- c) Evidence for the analysis is frequently drawn from inappropriate, dated and/or irrelevant sources.
- d) Evidence for the analysis is not representative of the evidence that exists.
- e) Not applicable.

Peer reviewer rating:

b

Please comment. If your view is that there is a paucity of evidence in the field and this has limited the success of the research project, please make this clear.

Comments:

My only comment here is that I don't see any critical assessment of the independency of the researchers behind the summarised studies.

5) Analysis. Is the analysis sound, clear and appropriate for the report?

- a) Analysis is logical and robust. The most appropriate techniques / analyses have been used throughout.
- b) Analysis is generally sound although more up to date / appropriate techniques could have been used.
- c) Analysis is frequently inappropriate.
- d) Analysis is incomplete or flawed. It may have led to incorrect conclusions being made.
- e) Not applicable.

Peer reviewer rating:

b

Comments:

6) Presentation of Evidence. Are the figures and tables clear, adequate, not actually or potentially misleading, and do they support the inferences drawn from them?

- a) Figures and tables add value to the report and aid interpretation of the results.

- b) Figures and tables are broadly sound and assist the reader. They could be improved to add clarity.
- c) Figures and tables do not add value and in some cases may mislead the reader.
- d) Figures and tables are misleading and do not support the inferences made from them.
- e) Not applicable.

Peer reviewer rating:

b

Please comment

Comments:

*The summary impact tables for energy and water simplifying things too much in my opinion. The appendices are also quite difficult to understand
See also comment in section 3.*

CONCLUSIONS

7) Use of Evidence. Is effective use made of relevant subject matter and evidence - is any evidence ignored or under-represented? (Include evidence from within or outside the report – please give details).

- a) All relevant evidence is considered and given due weight
- b) Generally most evidence is given appropriate consideration with one or two minor exceptions
- c) There are some gaps in the evidence given and some evidence is given inappropriate weight
- d) The report ignores or significantly under-represents pertinent subject matter or evidence
- e) Not applicable

Peer reviewer rating:

b

Comments:

Except for the comments above the evidence is handled and presented very convincingly.

8) Conclusions and Recommendations. Are the conclusions, policy implications, and recommendations clearly set out, based on the evidence gathered and logically argued? Are there any gaps or omissions?

- a) Conclusions, policy implications and recommendations are well presented, evidence based, logically argued and comprehensive
- b) Conclusions, policy implications and recommendations are generally well presented, logically argued, evidence based and comprehensive with some minor exceptions
- c) Conclusions, policy implications and recommendations are frequently not well presented, logically argued, evidence based or comprehensive
- d) Conclusions, policy implications and recommendations are very poorly presented, and are not logically argued, evidence based or comprehensive
- e) Not applicable

Peer reviewer rating:

b

Comments:

9) Reasoning. Are conclusions based on judgement rather than evidence clearly recognisable?

- a) Yes there is a clear distinction between the two
- b) Broadly it is possible to distinguish between judgement and evidence based conclusions
- c) It is not clear whether conclusions are based on judgement or evidence

Peer reviewer rating:

b

Comments:

OVERALL

10) Rigour and Robustness. Does the work represent sound and robust science and are the conclusions supported by the evidence and analysis presented?

- a) Sound and robust science. Conclusions are wholly supported by the evidence and analysis presented
- b) Sound science. Conclusions largely supported by the evidence. Some improvements in the approach, analysis and interpretation would improve confidence in the conclusions
- c) The evidence provided does not fully support the conclusions
- d) The evidence is of poor quality. It is not a sufficient base from which to draw the conclusions made

Peer reviewer rating:

b

Comments:

See comments above.