# Critical review of group 13

***Present some overall comments on your impression of the report.***

The overall impression of the report is that it’s well structured; everything seems to be in place regarding tables, figures and headlines. The report gives the impression of being complete and professional. Some minor mistakes can be viewed where a dot is used instead of a comma on page 6. If viewing the tables, they are large and have a simple design, which makes it easy for the reader to understand and collect the required information to move on in the report. The process flow chart on page 4 could perhaps be enlarged, because if printing out the report on an A4 it could be perceived as small. However, if viewing the figure 1 on the computer, there is always the option to zoom in. Figure 6 and 8 used in the report are difficult to see when the cut-off ratio is 0 %. However, they included these figures in a landscape view in the appendix which makes it easier to see the text in the figures. The text of the figures should be smaller, size 9 for instance.

Moving on the graphs displayed in the report. The colors used are well chosen, and easy to for the eyes to catch the important staples and numbers, no abstract colors are used, which is good for the reader's eyes.

The sensitivity analysis in section 3.2 on page 15 is well written and describes different scenarios, which provides the reader with useful information when reading the result and conclusion. It also gives the reader different perspectives and therefore provides a background to draw own conclusions regarding transportation, waste scenarios of coffee capsules and filter coffee sensitivity.

The discussion brings up the essential topics that cover the thoughts of the impact categories and whether or not filter coffee or capsule coffee is better depending on different scenarios, this gives the reader more information to understand the result and conclusion. The discussion brings up an important result that the consumer should choose capsule coffee over filter coffee, although, strictly viewed from an environmental perspective. However, other factors might be affecting the choice. This is useful information and could perhaps be further discussed. Maybe this is the reason why filter coffee is used in such a large scale, or could there be other factors that affect the choices? The conclusion is kind of short, but it brings up the essential information and concludes the result.

***Do you have any reflections on the choice of topic?***

The topic chosen in this project work is very interesting, since the introduction mentions that coffee is the largest consumed beverage in the world. And it is also an essential comparison between filter- and capsule coffee since relative new developed technology makes capsule coffee available.

***Was the language good?***

The language in the report is overall good. The sentences are well structured and the grammar is good. Some sentences here and there could perhaps be improved, but overall, the language is correct.

***Does the report have the required structure?***

The report has the required structure if viewing the document for this project regarding the report structure. However, there is one thing that bothers us, when entering a new chapter, for instance, chapter 2 “Life cycle inventory analysis”, there is not text underneath the chapter, which leaves an empty space. There could be a short text added just to explain what the chapter is about.

**Transparency and completeness**

This LCA study shows a satisfactory level of transparency. This is motivated firstly by a sufficient use of references (it is easy to understand why sentences should be, and is, supported with a reference), but also since assumptions are clearly motivated. The LCIA contributes to the impression of an overall high level of completeness in this LCA thanks to a detailed and elegant presentation of the life cycle flowchart of the capsules and brick packs (Figure 1), as well as a thorough depth of the inventory data assessment (Chapter 2). However, one question arises concerning the term “waste factor” that appears in the same chapter, which isn’t explained and thus may confuse the reader’s ability to follow the results. Another part that seems to be left out from the LCA is an explanation or reasoning behind the choice of waste management process - this cannot be found among the assumptions and limitations.

**Methodology**

***Is some issue not correctly handled in the LCA?***

In their assumptions they do not include anything about the waste scenario. They could easily add a topic of organic waste in the LCA to include the coffee. The coffee ground is still left in the capsules and in the filters, so they should include this in the waste scenario in the LCA.

***- Ask for clarifications wherever necessary***

Most of the text is well defined, but some parts in the assumption regarding the waste scenario are missing.

**Clarity of results and conclusions**

***Are results sufficiently documented and explained?***

The results are explained well with the parts which substantial impact pointed out and connected to the graphs and figures. When keeping previous parts of the report in mind, not much is left unclear.

***Are the conclusions supported by the results?***

The conclusions are consistent with the results and well argued for in the discussion part. The conclusions could be more elaborated since it seems a bit short in relation to discussion and results.

***Do results and conclusions answer the aim and objectives?***

Both the results and conclusions correspond well with the goal and scope of the study. As presented in the discussion, some aspects of the life cycle is not accounted for (as with the used coffee ground), but this is something the authors show an awareness of. It could however be something that affects the relation between results and aim and objectives.

**Improvements**

Both larger and smaller improvements can be made, although the report was nice to read in general. The largest improvement area considers the waste management, since no assumptions or limitations seem to support the absence of a waste treatment for the used coffee. Smaller improvements concern the report structure - such as the format of the table- and figure descriptions, and the lack of text below some headings.

The flowchart on page 4 in section 2.1 could be presented in two flowcharts because this flowchart includes both the production chains. It could be clearer for the reader if this was separated in two different chains.