Pre-seminar reflection (feedback to group 2)

During the seminar, every group presented the current state of their research. The presentations included research questions, goal and scope of the respective projects, current extent of the LCIA, a brief outline of expected results, achievements and current issues, and a discussion of result accuracy. In this context, we would like to give the following feedback to group 2.

Great work:
- You defined your goal and scope precisely and concisely, and it is evident you have put quite some thought into this process. While the functional unit seems a bit small at first glance, you have provided a good justification for this choice: considering the time needed to complete one FU (26 hours for ten 3D-printed parts), one FU has a significant energy impact and represents a mid-sized production process.
- Your system flow charts have a clear structure, are easy to understand, and seem to be complete to an extent appropriate for this project. In addition, you have highlighted foreground and background processes well in your oral presentation.

Possible improvement areas:
- Specify the exact product that you are looking at instead of stating that it is "a metallic object". This will make the report easier to understand, and it will enable you to closely define the "traditional" manufacturing processes involved. This will make it possible to include a more encompassing analysis of materials and energy needed, as well as the machinery used, in each process (melding machines/ small or large printer; volume of metal to melt/ duration of printing; purity of iron/ mix of metals for printing;...) .
- Presenting expected results is an important step to ensure researchers do not simply rationalize unexpected results, but analyze why the estimate turned out to be false. In order to be able to do this, you may want to consider justifying your expected results.
- Specify the target audience, and adapt the amount of background information provided to that audience. If the results will primarily be presented to other students in this course, some information regarding the metal industry and 3D-metal-printing technology would be helpful.

Lessons learned:
- Unquantifiable factors, such as ease of reading, personal preference, and the added comfort of not needing an electrical outlet need to be included more explicitly in the discussion section of our report than we did in the presentation.
- When discussing the system boundaries, we need to include a discussion that printing itself also requires a computer. However, we will assume this computer to be provided by KTH for other purposes, and therefore not include it in our LCA.
- Provide motivation for the functional unit: why 100 pages, and not 1? (For example)