LIFE CYCLE ASSESSMENT (AG2800) 2016

INSTRUCTIONS FOR PROJECT SUPERVISION MEETINGS (PS)

Please read the course memo for general information and course requirements concerning projects, project reports, and project supervision.

NOTE: You need to meet with your project group <u>before PS1</u> to start planning your project and prepare according the instructions in this document.

TIP: Start organising your notes in a report structure from the very beginning, and use these questions as a checklist when writing your final report!

Project log book

Before each supervision meeting, you need to upload an updated version of your project log book to Canvas ([Assignemnts/Logbook for supervision](#)), so that your supervisor can read it.

The purpose of the project log book is to force and encourage the project group to make sure it is making progress according to the plan in the course, and for the supervisor to be able to check its progress.

Always bring one paper copy to the meeting.

Include the following in your log book:

1. **Project and time plan**, identifying
     - work tasks,
     - person responsible for each task,
     - estimated time required,
     - when each task should be completed/when it was completed

     Before you start planning, read the course project instructions in the course memo, report instructions (separate document), and the instructions in this document, so that you understand what will be required of you to complete the projectc in time. The time plan should be updated continously throughout the project.
2. **Notes from meetings**, both supervision meetings AND group meetings.
     - What was discussed?
     - Action points and other decisions.
     - What group members attended these meetings?
3. **Answers to questions**, listed specifically for each supervision meeting in instructions below.

Project coordinator

Each group member must act as "project coordinator" at one meeting, with responsibility to present the work of the group to that date, questions, or any other issues. By rotating this responsibility among the members of the group, we make sure that all group members share the responsibility of the project as evenly as possible.

PS1: Problem identification and Tentative goal definition

The main obejctive the first supervision meeting is to identify an interesting research question for the topic area that you have already agreed on. That is, to narrow down and define in detail what you will make an LCA of and what you want to find out through this LCA. We will discuss your plans and, if necessary, adjust them so that you have a manageable task ahead!

Before the meeting:

1. Fill in the "Project group agreement" (available in Canvas) and bring to PS1. If necessary, dicuss it with your supervisor.
2. Update your project log book according to instructions above.
3. Decide who is "project coordinator" for this meeting, with a responsibility to present the work of the group to that date, questions, or any other issues.

Questions to prepare for PS1

What is your research question? What is it that you want to find out?

Formulate this in general terms, in a way that also explains why it is interesting, or what kind of problem you are trying to address.

Tentative goal of the study

- "Tentative", since one purpose of PS1 is to revise your planned goal if necessary.
- Identify background of the problem and reasons for carrying out the study.
- What is the intended application of LCA results (ie what the intended application could be if this were a "real" LCA study)?
- Is it a comparative or stand-alone LCA?
- Is it a change-oriented/consequential or accounting/attributional LCA? (As a general rule, we make accounting LCAs in this course, but we may decide otherwise in some cases.)
- Who is the intended audience (ie who the inteded audience could be if this were a "real" LCA study)?

Functional unit

- What is the function of your product or service?
- Define a functional unit, which quantifies the performance of this product/service.

Unresolved issues

Make sure to take notes of any unresolved questions from your own meetings, so that we can discuss them at the meeting.

PS2: Definitive Goal & scope, Inventory and modelling

The objective of our second meeting is to determine your definitive Goal & scope, and what data you need to collect.

Before the meeting, update your project log book with the following

1. Updated project and time plan.
2. Notes from previsous meetings.
3. Answers to questions for this supervision meeting (below).
4. Upload on Canvas (Assignments/Logbook for supervision) and bring a copy to the meeting.

Questions to prepare for PS2

Revised Goal & scope definition

If your Goal and scope definition was changed during PS1, please bring a revised description according to the instructions for PS1.

Process flowchart and system boundaries

- Draw a simplified flowchart of your product system. Make clear at a "high level" the processes and flows that are included in your product system. Make a distinction between foreground and background processes.
- Use your simplified flowchart to draw a detailed flowchart, with the same system boundaries, but trying to identify in greater detail the foreground processes.
- Indicate if there are processes that are related to your system that have been/probably will be excluded.

System boundaries (other than processes in product system)

The term system boundaries also refers to some less tangible aspects of defining your product system. These are important to consider to collect relevant data. Not all of these may play an important role in your project, but should at least be considered.

- Geographical boundaries. The representative geographical region of your product system. This affects, from which geographical regions you should collect data. Some processes may be defined geographically, others may not.
- Time horizon. For what time period should your LCA be applicable? Is it OK to use old data, must it be very recent, or should you even make future assumptions? Are any processes in the future excluded, e.g. in landfills?
- Cut-off criteria. Are some parts of the product system excluded, for what reasons?
- Allocation procedures. If allocation is used, what allocation criteria were applied? Some data sets from databases may include allocation that you may not be able to influence, but you should be aware of these and ideally this should be documented.

Assumptions and limitations

All kinds of assumptions, methodological decisions, and identified limitations need t be documented. For instance, what is the competing technology if system expansion is made? At this stage you may not be aware of all of these. A good way to get an understanding of important assumptions is to run a sensitivity analysis. You need to come back to this question when interpreting your results and writing your final report.

Unresolved issues
Make sure to take notes of any unresolved questions from your own meetings, so that we can discuss them at the meeting.

PS3: Modelling and Results

The purpose of the third supervision meeting is to make sure that you are on track with building your model in SimaPro and to look at some different ways to present results. To this meeting, you should also have a first rough draft of your report. Use the provided report template as a starting point.

Before the meeting, update your project log book with the following

1. Updated project and time plan.
2. Notes from previsous meetings.
3. Answers to questions for this supervision meeting (below).
4. Upload on Canvas (Assignments/Logbook for supervision) and bring a copy to the meeting.

Questions to prepare for PS3

SimaPro model
You will show and explain your model structure in SimaPro. Use this as an opportunity for us to help you to solve any problems you have run into when building your model. Before the meeting, explore the different features of SimaPro for presentation of results. Depending on how far you have come in your project, you may bring some preliminary results to discuss.

In your project, you should create at least one new process or material data sheet in SimaPro. This may be either data collected by your group, or from some LCA database not available in SimaPro. The purpose is that you should perform data documentation in SimaPro. If you have questions about this, discuss with your supervisor.

First preliminary draft of your report (separate document)
Use the provided report template as a starting point (*"Instructions for report & critical review in AG2800"*).

Unresolved issues
Make sure to take notes of any unresolved questions from your own meetings, so that we can discuss them at the meeting.

PS 4: Results and Interpretation

The purpose of the third and last supervision meeting is discuss your results, how you may interpret them, and how they may be presented in your report.

Before the meeting, update your project log book with the following

1. Updated project and time plan.
2. Notes from previsous meetings.
3. Answers to questions for this supervision meeting (below).
4. Upload on Canvas (Assignments/Logbook for supervision) and bring a copy to the meeting.

Questions to prepare for PS4

Second preliminary draft (separate document)
At this stage, you should have an outline of how you plan to present your results and interpretation. We can discuss for instance how to interprete different charts and diagrams, and what is relevant to include in your repoort.

Unresolved issues
Make sure to take notes of any unresolved questions from your own meetings, so that we can discuss them at the meeting.