

Eco-Auditing:

Assessing sustainability impacts in design

Spring 2021 / Teaching Period III

Tuesdays 12.1., 19.1. & 26.11. (13:15-16:30)

Teachers: Tatu Marttila (@aalto.fi)

26.1.

Eco-Auditing with CES Edupack:

Eco-Audit Examples

Project Work & Report

Course Assignment: Project Work & Report

Project work: Status reports

Describe your project work so far:

- How has your project work progressed? Describe your assessment, and your initial findings...
- What problems have you encountered? How to solve them?
- What will be the outcome of your work? What is its impact on sustainability?

Course assignment:

Project work step-by-step

1. Describe the prime objective in your project idea, eg. product assessment/comparison/redesign (step 1); Define (system) boundaries for the assessment (step 1)
2. Review stakeholders and both production system and product components (step 2)
3. Perform fact-finding on stakeholders and components (Materials & Manufacturing; Environment; Society; Economics; Regulation; Design) (step 3)
4. Refine focus and boundaries...
5. Assess selected material(s) & process(es), with eco audit tool
6. Reflect back on context and progress; Document your work
7. ***Compile into a project report...***

Course deliverable:

Project work report

As a final course assignment you will produce a project report of your work with the project idea during and after the workshop days.

The project report should be 5-10 pages with 1) description of the project idea, 2) project context research (inventory, system boundaries, life phases), supported with selected tools (e.g. EcoDesign strategy wheel, META, CES fact-finding sheet), and 3) the eco-auditing process and its 4) results.

Include some desk research, findings from eco-auditing process, and reflection on background research and context. Include some images/screenshots of your assessment.

- > *5-10 pages long PDF document (+ possible appendices)*
- > *Final report on project work is due 21.2. (not a strict deadline...)*
- > *Upload to MyCourses (...if late then email to: tatu.marttila@aalto.fi)*

Course Assignment:

Project work report

Structure of a project report is rather open, but should include:

- Description of your objective in your assessment project
- Description of system boundaries, stakeholders (primary, secondary), product components or compared products/materials
- Reflection on all life phases of the product-service system under study (with tools like Ecodesign strategy wheel; META matrix; CES fact-finding; or can be simply text)
- Description of the actual assessment and eco-auditing process
- (Short) description on overall process and findings
- Reflection on the initial problem context and progress of your work

Initial ideation, stakeholder & system analysis and research:

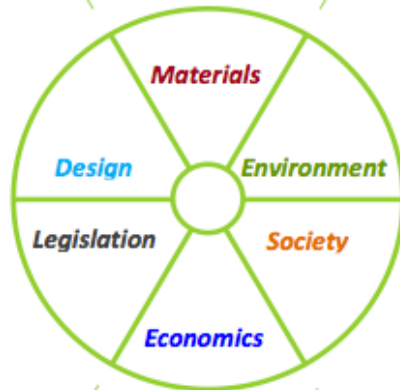
Impact category	Material production	Manufacturing	Use-phase	End-life	Transport
M-Materials					
E-Energy					
T-Toxicity					
A-Socio-cultural					

Initial ideation, stakeholder & system analysis and research:

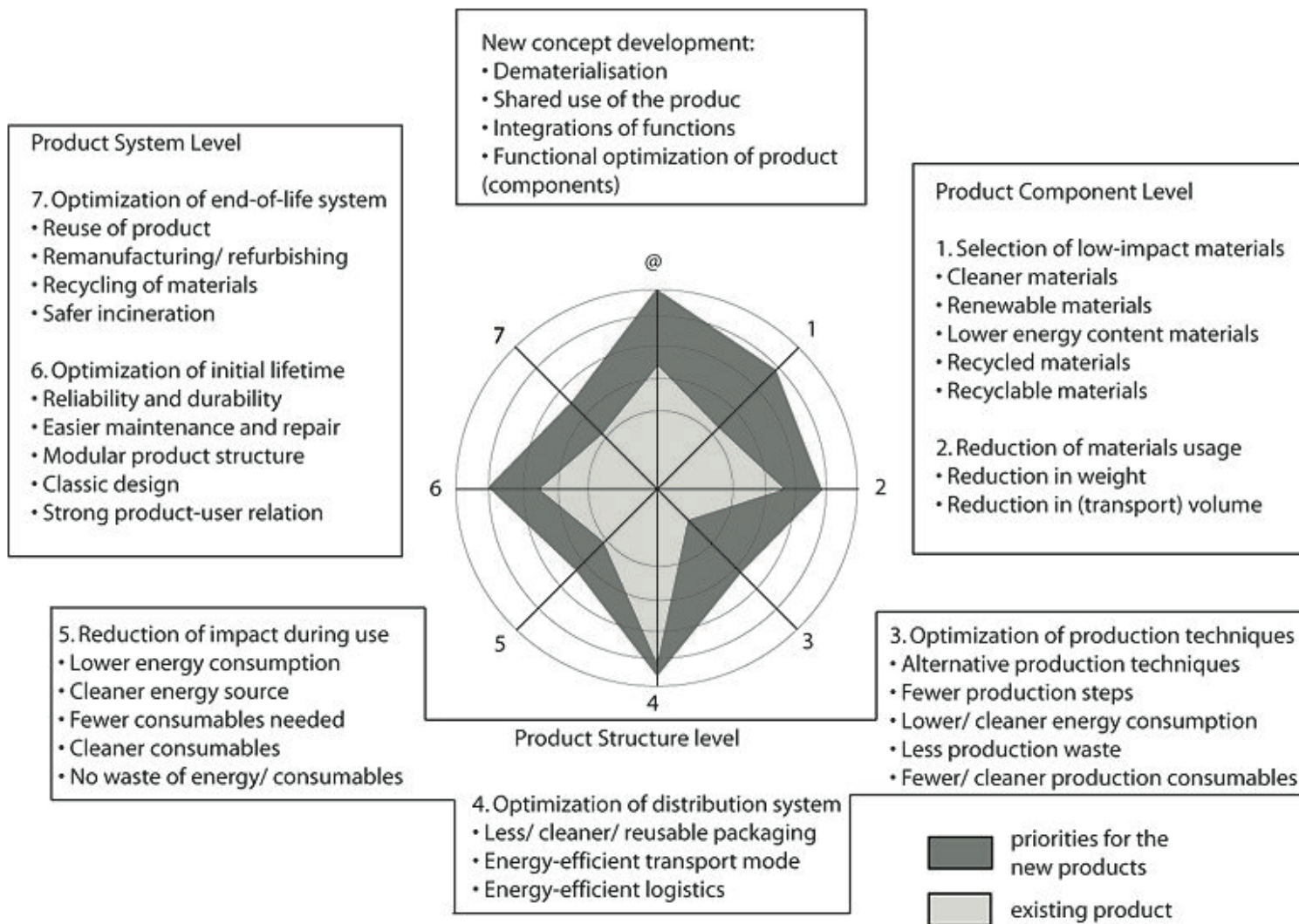
1. Prime Objective and Scale:

3. Fact - finding

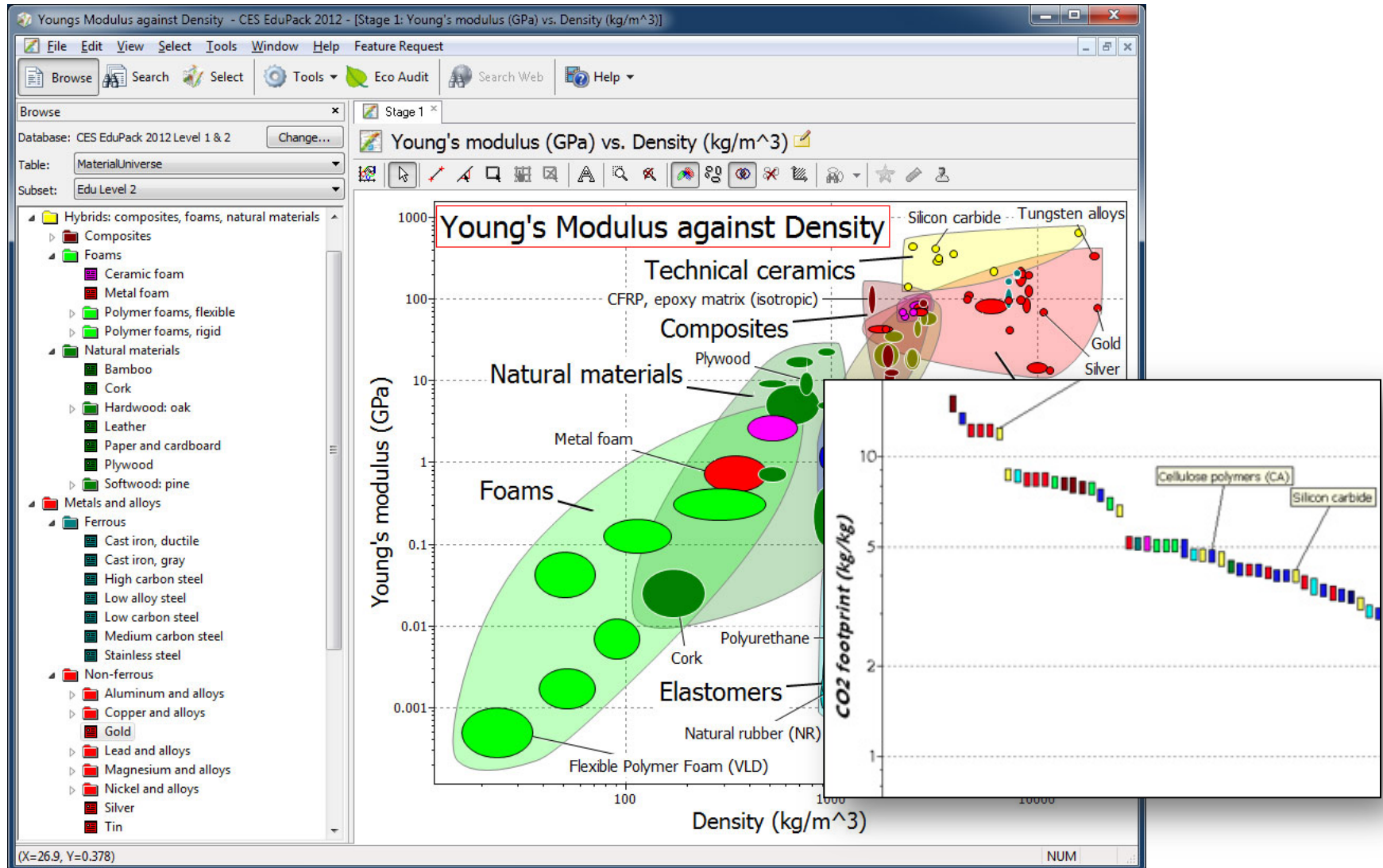
2. Stakeholders



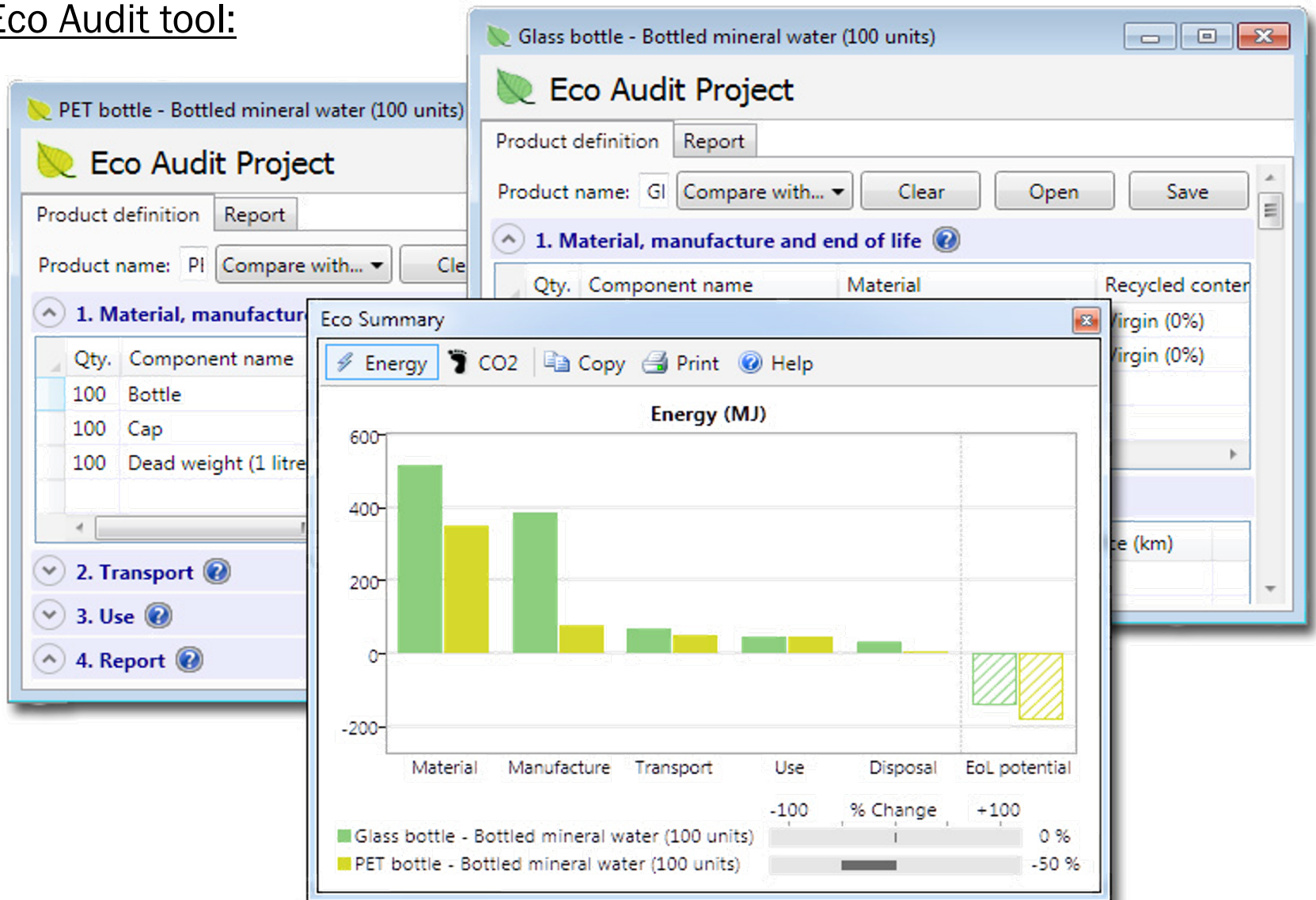
Initial ideation, stakeholder & system analysis and research:



Comparing material & systemic qualities with CES Edupack:



Assessing impacts with Eco Audit tool:



THANKS!

Project reports by 21.2. Upload to MyCourses...

(if you're late that's okay but then email your report to me directly!)