LCA for the HydroContest: EPFL Team (Swath’s boat)

Keywords: Life cycle assessment, Hydros.

Problem: HydroContest is the first “eco-responsible” competition organized by Hydros that involves worldwide engineering schools. Teams of students from all around the world will take part to this competition in Lausanne between the 23 and 27 July 2014. It consists of radio-guided races between boats of a same category. According to HydroContest’s rules, there are two categories. The first category includes light boats (small, one place boat that can carry 20kg) and the other one embraces heavy boats (mass transport that can carry at least 200kg).

Project: The first objective was to compare the environmental impact of 6 different boats from European teams involved in the HydroContest competition with the aim of attributing them an “environmental grade” which could be used to weight the results of the global competition. Due to insufficient contribution of the competing teams the study covered only evaluation of EPFL’s boat. The study aimed to make a first useable LCA analysis for the next students involved in HydroContest.

Plan:

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<th>Starting date</th>
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<td>17.02.2014</td>
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2. Learn how to use Quantis Suite.
3. Define the value chain and define the system boundaries
5. Collect life cycle data and implement in the model.
6. Make the evaluation and generate results. Interpret and collect data if necessary
7. Write a final report.

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Duration: 4 months
Sections targeted: Mechanical Engineering

Abbreviations
LCA: Life cycle assessment