LCA XV Vancouver, Canada, October 6 to 8, 2015 LCA at UBC Student Poster Contest (for UBC and non-UBC students)

UBC SEEDS Sustainability Program in collaboration with American Center for Life Cycle Assessment (LCA) is announcing this exciting LCA poster competition for undergraduate and graduate students from post-secondary education institutions. The posters will be judged by LCA experts attending the LCA XV International Conference, held on October 6 to 8, 2015 at UBC.

Posters will be displayed on Wednesday in a common venue. There will be a prize for the best submissions, including:

First Place: CAD\$750 X 2 = \$1,500 Second Place: CAD\$500 X 2 = \$1,000 Third Place: CAD\$250 X 2 = \$500

Competition content

The students can choose one of the two options for their poster content:

1. An LCA comparison of two materials/products/services that are commonly used in an event or conference (similar to the LCA XV), in its venue (such as the AMS Nest building), or generally in a campus context (similar to UBC).

Examples of topics that students can choose for comparison are:

- Paper cups vs. reusable mugs for beverages; Context: The AMS Nest
- Reusable containers and/or cutlery vs. recyclable; **Context:** AMS off-site food catering
- Pedal powered vehicle (e.g. bicycle) vs. large motor vehicle for delivery of food; **Context:** AMS off-site food catering
- Single use water bottles vs. reusable water bottles; Context: The AMS Nest
- Food produce from AMS Nest rooftop garden vs. UBC Farm vs. regional farm (e.g. Tomatoes, Lettuce); **Context:** The AMS Nest food vendors or LCA XV conference meals
- Cooked vs. raw meal; Context: The AMS Nest food vendors or LCA XV conference meals
- Plant-based meal vs. meat-based meal; **Context:** The AMS Nest food vendors
- Public transit (bus) vs. car vs. carpool; **Context:** UBC staffs and students
- Printed conference materials vs. emailed materials; Context: LCA XV conference at the AMS Nest
- Treatment of 1kg of conference waste to landfill vs. waste to compost vs. waste to recycling; **Context**: LCA XV conference
- Using a downtown hotel room vs. UBC residence room; Context: LCA XV conference
- Taking the stairs vs. taking the elevator ; **Context**: The AMS Nest (it is obvious that taking the stairs has less environmental impacts; however the extent of this influence is of interest)
- Carpet tiles vs. Linoleum flooring; Context: The AMS Nest offices
- Aluminum widow frame vs. PVC (vinyl) (with emphasize on human health impacts); **Context:** The AMS Nest
- Engineered wood structure vs. hardwood structure (the same load-bearing capacity not the same sizes of the structure); **Context:** The AMS Nest
- Concrete structure vs. steel structure; Context: The AMS Nest
- Wood studs vs. steel studs; Context: The AMS Nest offices
- Drywall partitions vs. MDF; Context: The AMS Nest offices

A UBC staff or faculty member can support each of the above topics. When you choose any of the above topics, you can contact Liska Richer (liska.richer@ubc.ca) to connect to the UBC staff who can provide you with some basic information for the selected topic.

2. A thorough LCA study of a material/product/service that is commonly used in an event or conference (similar to the LCA XV), in its venue (such as the AMS Nest building), or generally at a campus context (similar to UBC). Students can choose any one material/product/service from the dual topics in option 1, such as: paper cups, single use water bottles, PVC (vinyl) window frame, Linoleum flooring, or carpet tiles.

This LCA study should be conducted using the existing LCA literature on the selected material/product/service(s). The student should then try to adapt the data in the used reference(s) to the UBC context. If there is any lack of information for adapting the data to the context, students should specify the information they needed for adapting the study and methods they used to achieve that information. In addition to the environmental analysis, student are encouraged to include their social, economic, and human health impact analyses of the selected subject.

If students select a topic other than the above examples, they are encouraged to contact the SEEDS Sustainability Program at SEEDS.coordinator@ubc.ca, with their selected topic prior to conducting their research.

Suggested resources

Some examples of the resources for students to find previous studies for their reference are:

- International EPD[®] System: A program based in Sweden that verifies and registers EPDs (Environmental Product Declaration) and keeps a library of EPDs
- <u>ASTM verified EPDs</u>: ASTM is a US based leader in the development and delivery of voluntary consensus standards
- <u>UL-certified EPDs</u>: EPDs certified by UL (a global independent safety science company)
- Product specific EPDs, published in the products' websites. Such as:
 - o EPDs of Forbo flooring systems
 - o <u>EPDs of Interface</u>, a carpet manufacturer
- Industry-wide EPDs, such as EPDs from FPInovations (a not-for-profit research organization supporting Canadian forest sector
- Academic papers and publications

Deliverables

Posters should include the following information:

- Abstract
- Background/Introduction
- Goal and Scope
- System Description
- Functional Unit
- Assumptions
- Process/Methodology
- Data Description and results
- Conclusions and future research opportunities,
- Photos/illustrations (optional)
- References

Poster Preparation

- The poster may not exceed 4'x 4' and must be printed on a single sheet of paper.
- The first author of each poster is expected to attend the poster reception (Wednesday during the morning and afternoon breaks) to be available to discuss the poster with meeting attendees.
- The poster header should include the title of the project, the authors, and their institutional affiliation

Judging Criteria

The posters will be scored and ranked by highest score for first, second, and third place awards per the criteria given below. Additionally, reviewers are asked to provide separate blind comments.

Scoring Criteria: An award winning poster should clearly present a thorough review of the existing literature on the selected topic (the comparison of two items or analyzing one item), present a well-established argument in adapting the existing LCA to the UBC context, and discuss the data that may be lacking in doing so. Posters will be scored for the following criteria:

- Content: the quality of the research presented on the poster such as: data is adequate; analysis and summaries are appropriate; illustrations are appropriate, understandable, and informative.
- Presentation: clear, logical and concise. Title is a good index to content; abstract provides an accurate synopsis of content; objectives, results, and conclusions. Text is sufficient to explain illustrations, methods and to state objectives and conclusions, but not excessive.
- ✓ Visual appearance: refers to the organization and layout of the content on the poster and the effectiveness of conveying the content.
- Oral presentation: refers to the effectiveness of the presenter at verbally explaining the content on the poster and ability to demonstrate knowledge of the project work by responding to judge's questions.

Submission

To submit a poster in the poster contest you will first need to send your poster to: Liska.Richer@ubc.ca

The deadline for submissions October 1st, 2015. A review will be conducted of your poster and if approved you will be notified that your poster will be displayed at the conference and you will need to prepare a 5 minutes presentation of your poster.

If you have any further questions please contact the SEEDS Program at: <u>SEEDS.coordinator@ubc.ca</u> or Liska Richer at: <u>Liska.Richer@ubc.ca</u>.