Summer 2021 Sustainability Scholars Program Internship Opportunity

The UBC Sustainability Initiative (USI) is pleased to offer current UBC graduate students the opportunity to work on funded sustainability internship projects. Successful candidates work under the mentorship of a partner organization, and are immersed in real world learning where they can apply their research skills and contribute to advancing sustainability across the region.

- Visit the Sustainability Scholars Program website to learn how the program works and to apply.
- Be sure to review the application guide to confirm your eligibility before applying.

Applications close at midnight on Sunday January 31, 2021.

Research project title:
Fuel Economy Benchmarking: Augmenting the Business Case for Low-Carbon Vehicle Adoption

Project description
Overview:
To support the City of Vancouver’s goal of increasing adoption of low-carbon vehicles (compressed natural gas [CNG], hybrid, plug-in hybrid, and electric), this project will benchmark the fuel economy of end-of-life internal combustion engine (ICE) vehicles compared to new ICE vehicles. The project will also assess how the fuel economy of new ICE vehicles compares to new low-carbon vehicles, providing a robust dataset to strengthen the business case for low-carbon vehicle options.

Purpose of the Project:
When a vehicle currently comes up for replacement, the fuel economy of an old, often 10+ year vehicle is compared against a new, low-carbon vehicle to strengthen the business case for the low-carbon vehicle. This is often done due to limited availability of datasets; however, it is not an apples-to-apples comparison. Ideally, the fuel economy of a new low-carbon vehicle should be compared against an equivalent new ICE vehicle; the technology of which has likely improved during the lifetime of the vehicle being replaced. Performing this analysis will more accurately reflect reductions in GHG emissions when a low-carbon vehicle is added to the fleet.

This is especially true when working on replacements for medium and heavy-duty vehicles, many of which do not have reliable fuel economy datasets; e.g., very little public-domain fuel economy data exists for trucks larger than Ford F-150. The Scholar’s goal will be to create a robust dataset that will be an important contribution to strengthening the business case for transitioning to low-carbon medium and heavy-duty vehicles.

Deliverables
The Scholar will deliver a final report containing a summary of their completed work complemented by a final presentation to key stakeholders. All data for analysis will be provided to the Scholar. The report should include
A benchmarking study identifying recently commissioned electric vehicles against a comparable new, conventionally-fuelled ICE vehicle.

A summary of findings of several recently commissioned electric vehicles compared to the old ICE-fuelled vehicles they replaced and their comparable new ICE-fuelled vehicle option.

Summary report of interviews with stakeholders

A final report, containing a summary of completed work with recommendations, complemented by a final presentation to key stakeholders.

A final report [or Executive Summary] for the UBC Sustainability Scholars online project library.

**Time Commitment**

- This project will take 250 hours to complete.
- This project must be completed between May 3 and August 13, 2021
- The Scholar is to complete hours between 9 am and 5 pm Monday to Friday, approximately 20 hours per week.

**Required/preferred Skills and Background**

- Excellent statistical modelling and benchmarking skills
- Excellent research and writing skills
- Demonstrated interest in sustainability
- Familiarity with fuel economy and emissions reporting an asset
- Familiarity with research methodologies
- Excellent public speaking and presentation skills
- Strong analytical skills, especially with Excel modelling
- Ability to work independently
- Deadline oriented
- Strong project management and organizational skills

Applications close **midnight Sunday January 31, 2021**

Apply here: [Click here to apply](#)

Contact Karen Taylor at [sustainability.scholars@ubc.ca](mailto:sustainability.scholars@ubc.ca) if you have questions

**Useful Resources**

We are holding a special **resume preparation workshop for prospective Scholars** on January 19. [Click here for details and to register](#).

Below are some links to useful resources to help you with your resume and cover letter (there are many more online). Some of these resources also provide information on preparing for your interview.
https://students.ubc.ca/career/career-resources/resumes-cover-letters-curricula-vitae

https://www.grad.ubc.ca/current-students/graduate-pathways-success

https://www.grad.ubc.ca/cover-letter-cv-resume-templates-ubc-career-services