UBC SUSTAINABILITY SCHOLARS PROGRAM
Summer 2019

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 organizational sustainability goals.

For more information about the Sustainability Scholars Program and to apply to work on this project, please visit the [Student Opportunities](#) page.

Please review the application guide (PDF) before applying.

Applications close **midnight Monday February 25, 2019**.

Research project title
Developing value-added EV charging infrastructure at Capilano University

Sustainability Goal or Operations Plan objective
Electrification leadership
Provincial policy support
EV adoption interest
Long Term Goal: EV viability at provincial adoption scale

Outline scope of project and why it is of value to your organization. Describe how and when the Scholar's work will be actionable.
- Explore trickle charging infrastructure and systems change requirements to implement EV type I (slow) charging at lamp stands and/or existing plugs – this is non-trivial and involves considering timer systems, load limits and alternative/custom charging connectors
- Explore high speed charging infrastructure and systems change requirements to implement EV type III (high speed) charging – this is non-trivial and involves investigating the marketing benefits of high-speed charging infrastructure in addition to the technology factors
- Explore marketing, consumer, and financial advantages and disadvantages of both systems, including demand management issues, power resale restrictions, infrastructure costs, on and off campus consumer benefits and marketing impacts – this has interdepartmental ramifications on operations
- Depending upon the findings, either Type I or Type III charging may be implemented at CapU, where we are ready have both public and fleet Type II charging

Deliverables
Note that a final deliverable (either a full report or, if the report contains confidential information, an executive summary) is required by the end of the program (August 12, 2019). The deliverable will be archived in the online public-facing [Scholars Project Library](#).

- A final report, including:
    - Summary of completed work,
    - List of recommendations,

- o List of key links leading to regulations, case studies and technologies
- o Description of cases of successful and unsuccessful implementation of both technologies
- o Summary of revenue v. cost potential (pro forma case for both technologies)
- An executive summary for the UBC Sustainability Scholars online project library.
- A presentation to key stakeholders on the findings of the research (15-30 minutes)
- A presentation to interested students, faculty and staff, followed by discussion

Time Commitment
- This project will take 400 hours to complete.
- This project must be completed between May 1 and August 1
- The Scholar will have access to Facilities department resources Mon-Sat from 7-3, and access to the mentor Mon-Thur from 10-5.
- If applicable, list dates of any mandatory meetings, special events, etc. that you require your Scholar to be available

Required/preferred Skills and Background

☒ Excellent research and writing skills
☒ Demonstrated interest in sustainability
☒ Excellent public speaking and presentation skills
☒ Strong analytical skills
☒ Ability to work independently
☒ Project management and organizational skills
☒ Experience with financial modelling and analysis
☒ Energy management or engineering background or education

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Apply here:
https://sustain.ubc.ca/student-opportunities

To learn more about the program here:
https://sustain.ubc.ca/ubc-sustainability-scholars-program

Read the application guidelines to confirm your eligibility to participate in the program here:
https://sustain.ubc.ca/student-opportunities

Contact Karen Taylor at sustainability.scholars@ubc.ca if you have questions.