

UBC Sustainability Scholars Program

The UBC Sustainability Initiative (USI) is pleased to offer current UBC graduate students the opportunity to work on paid sustainability internship projects. Successful candidates work under the guidance of a mentor from one of our partner organizations, 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.

Don't forget to review the application guide (PDF) before applying.

Applications close **midnight Sunday September 22, 2019.**

Research Project Title

Scoping of a Tri-Cities (Port Moody, Port Coquitlam, and Coquitlam) Electric Vehicle Public Charging Infrastructure Strategy

Sustainability Goal or Operations Plan objective

This project is focused on outlining a scoping document that will guide the development of a potential Tri-Cities Public Electric Vehicle Strategy. Electric vehicle charging infrastructure remains a barrier for the uptake of electric vehicles in British Columbia. Considering transportation accounts for almost half of community greenhouse gas emissions in Port Moody, the increase in requests for charging infrastructure throughout the Tri-Cities, and the interconnected geography with neighbouring municipalities, the strategy serves to support organizational and regional goals. Expanding green transportation, accelerating climate leadership, and fostering collaboration are expected outcomes of this project. In the long term, the project aims to outline mechanisms to advance and support the adoption of electric vehicles throughout Port Moody, Port Coquitlam, and Coquitlam and in turn throughout the broader Lower Mainland of British Columbia.

Outline scope of project and why it is of value to your organization. Describe how and when the Scholar's work will be actionable.

The Scholar will assist in developing the Tri-Cities EV Public Charging Infrastructure Strategy by:

- Reviewing and summarizing the legal context in which public charging infrastructure exists (e.g. provisions around pricing, operation, maintenance, ownership, location etc.)
- Identify levers (e.g., zoning bylaws, outreach, building code, property tax, etc.) that local governments can utilize in order to drive the installation of EV charging stations for public charging.
- Interview local governments that have developed and/or are implementing similar strategies to identify lessons learned and pathways related to using the identified levers.
- Work with Tri-Cities staff to rank the levers by cost, ease of implementation, and ability to meet intended outcomes.

- Methods will include, but are not limited to, literature review, cost/benefit analysis, ranking matrices, and a resource scan (e.g., BC Hydro CEMA-EV tool, Plug In BC calculators, EVCondo.ca EV-Friendly Map, Emotive BC etc.).

Time permitting:

- Perform a gap analysis to identify areas within the Tri-Cities that need EV charging infrastructure or may be influential in the uptake of EVs along with Tri-Cities planning staff.
- Create a GIS map of existing and planned EV charging infrastructure in the Tri-Cities. The map will be based on conversations with Tri-Cities planning staff on future infrastructure. For existing infrastructure, please refer to the NRCAN and Plug In BC databases. The map should include charging level, price, ownership, and density projections for the area it resides in.

Deliverables

- A final report, containing a summary of completed work including methodologies with recommendations, complemented by a final presentation to key stakeholders.
- A matrix comparison on the identified levers based on conversations with local government staff, cost, ease of implementation, and ability to meet intended outcomes.
- Assistance with facilitating and presenting summary information at meetings.
- Appendix summary report of interviews with local governments.
- An Executive Summary for the UBC Sustainability Scholars online project library.
- Time permitting: A map of existing and planned electric vehicle charging infrastructure in the Tri-Cities including charging level, price, ownership, density projections, and future anticipated construction dates.
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Time Commitment

- This project will take **250** hours to complete.
- This project must be completed between October 21, 2019 and March 15, 2020
- The Scholar is to complete hours between 8:00 AM to 4:00 PM Monday to Friday, approximately 12 hours per week. Project work can be completed remotely; however, the Scholar is expected to be able to attend occasional meetings in the Tri-Cities area. Meeting dates and times will be agreed upon between the Scholar and Mentor with consideration of the Scholar's academic schedule.

Required/preferred Skills and Background

- Excellent research and writing skills
- Demonstrated interest in sustainability
- Experience conducting stakeholder engagement events, including facilitation skills, is an asset
- Familiarity with research methodologies and survey techniques
- Statistical analysis
- Excellent public speaking and presentation skills
- Familiarity conducting focus group research
- Strong analytical skills
- Ability to work independently
- Deadline oriented and demonstrated time management skills
- Experience collecting, analysing and reporting on qualitative and quantitative data
- Familiarity with electric vehicle charging technology or policy an asset

- ☒ Experience with financial modelling and analysis
- ☒ Familiarity with GIS an asset

Applications close **midnight Sunday September 22.**

Apply here:

<http://sustain.ubc.ca/scholarsopportunities>

To learn more about the program here:

<https://sustain.ubc.ca/ubc-sustainability-scholars-program>

Read the FAQ and application guidelines to confirm your eligibility to participate in the program here:

<http://sustain.ubc.ca/scholarsopportunities>

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