

Research Project Title

Impact of public EV charging infrastructure on EV adoption, trip behaviour and lifestyles (Metro Vancouver)

Goal or Operations Plan objective

This project is focused on reducing GHG emissions in the region. Metro Vancouver has committed to achieving regional GHG reductions of 33% below 2007 by 2020 and 80% by 2050. Cars and trucks are the single largest source of greenhouse gas emissions in Metro Vancouver, accounting for 31% of the region's emissions in 2015. Electrification of the light duty fleet is perhaps the most significant near-term action we can take towards reaching our climate targets.

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 intent of this study is to: (1) shed light on the role that public EV charging plays in supporting EV ownership, (2) to assess the impact on host organizations, and (3) to provide data which can help guide future investment in public charging assets. To that end, the Scholars will be asked to:

- Conduct primary field research in Metro Vancouver to answer the research question: *"How does public EV charging infrastructure in Metro Vancouver impact EV adoption, trip behavior and lifestyles?"*
- Work with Staff in the Air Quality and Climate Change Division at Metro Vancouver, with input from the External Relations Department, to design and undertake a field survey that will engage with EV owners at public charging locations.
- Design a survey, with consideration for elements such as format, sample size, geographic locations, etc.
 - Consult with interested stakeholders, such as site hosts, as part of the survey design phase.
- Implement the survey over the summer months, collect the data and develop meaningful summary statistics to report back at the end of the program.

Deliverables

The scholars will be asked to develop:

- A final report detailing the survey design and methodology, and an overview of the most meaningful statistics discovered.
- A final presentation to key stakeholders.
- An Executive Summary for the UBC Sustainability Scholars online project library.

Time Commitment

- This project will take **two students 250** hours each to complete (**500 hours**).
- This project must be completed between **April 30 to Aug 10**.

Skill set/background required/preferred

- Excellent research and writing skills
- Familiarity with research methodologies and survey techniques
- Strong communication and interpersonal skills (Comfortable interacting with strangers to conduct public/in person surveys)
- Strong analytical skills
- Ability to work independently
- Familiarity with qualitative and quantitative research methodologies and implementation an asset
- Any prior knowledge or experience with electric vehicle technology or policy would be an asset.

Submit applications here: <http://bit.ly/2DC2jpP>