UBC Sustainability Scholars Program 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 <u>Student Opportunities</u> page.

Please review the application guide (PDF) before applying.

Applications close midnight Monday February 25, 2019.

Research project title: A Feasibility Study for On-Street Electric Vehicle Charging from Light Poles

Research supports the following City of Vancouver policies -

- Greenest City Action Plan. Specific goal area (s): Clean Air, Climate Leadership
- \boxtimes Healthy City Strategy. Specific goal area (s): A Good Start
- \boxtimes Renewable City Action Plan.

Outline scope of project and why it is of value to the City of Vancouver and describe how and when the scholar's work will be actionable

The outcome of this project will help to determine next steps for piloting various curbside electric vehicle charging opportunities. The use of light-poles as a source of power has been used to varying degrees in several cities around the world. The City of Vancouver would like to learn from these jurisdictions, and to determine what is possible for our own such trial.

Scope of Work:

- Conduct a scan to identify other jurisdictions around the world that have light-pole charging projects or programs in place.
- Identify key jurisdictions where experiences have the greatest potential applicability in Vancouver.
- Conduct desktop research and interviews with staff in key jurisdictions to understand their programs and identify factors for success in deploying light-pole charging.
- Conduct interviews with technical experts to identify the technical requirements and limitations of light-pole charging.
- Technology scan: identify technologies that could be applied to light-pole charging
- Internal review: work with City staff to understand present conditions of light-poles and supporting electrical infrastructure in a range of neighbourhoods across Vancouver.
- Create a status report of present conditions of light-pole infrastructure and supporting electrical infrastructure
- Prepare a feasibility study that identifies opportunities for light-pole charging projects in Vancouver

Deliverables

- A feasibility study identifying possibilities for light-pole charging in Vancouver, including a gap analysis of improvements required in either City infrastructure or charging technology
- A summary of other light-pole charging projects and programs including a summary of status, outcomes, etc., including where possible, contact information for project leads.
- A public facing final report (or executive summary) for the UBC Sustainability Initiative website

Time Commitment

- This project will take **250** hours to complete.
- This project must be completed between *April 29 and August 2, 2019*
- The scholar is to complete hours between *830am and 5pm,* approximately **15-20** hours per week.

Skill set/background required/preferred

- \boxtimes Excellent research and writing skills.
- Demonstrated interest in electrical design, electric vehicles
- \boxtimes Strong technical writing skills
- ⊠ Strong analytical skills
- ⊠ Ability to work independently
- oxtimes Demonstrated time management skills
- oxtimes Deadline oriented
- S Familiarity with qualitative research methodologies and implementation
- Comfortable interacting with strangers to conduct public/in person surveys
- ⊠ Familiarity preparing feasibility studies
- ☑ Other: Understanding of electrical infrastructure and electric vehicle charging equipment

Applications close midnight Monday February 25.

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: <u>https://sustain.ubc.ca/student-opportunities</u>

Contact Karen Taylor at <u>sustainability.scholars@ubc.ca</u> if you have questions.