GREENEST CITY SCHOLARS PROGRAM UBC Sustainability Scholars Program, Summer 2018

Reducing the Vancouver Parks Board emission footprint through utilizing electric small equipment

Research supports the following policies -

Greenest City Action Plan Specific goal area (s): Zero Carbon Goal

□ Healthy City Strategy Specific goal area (s):

□ Renewable City Action Plan

 \boxtimes Green Operations

Other:

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

Scope of Work:

The Board of Parks and Recreation is looking to test electric small equipment as one of our green initiatives. We would like to measure the impact this 'small' but important initiative has on our environment.

- Review the Board of Parks and Recreation current usage of small equipment (chain saws, lawn mowers, blowers etc.)
- Measure the current footprint of our small equipment
- Review what other cities around the world are utilizing in regards to electric small equipment
- Attend and participate in Ergonomics Field Integration Group meetings
- Participate in the testing and selection process
- Interview stakeholders regarding usability (end users, Park Board mechanics, small equipment mechanics)

Why this work is of value:

This work is of value as it will help us make the right decision when converting our small equipment fleet to an electric fleet. We would also like to measure the reduction of emissions that would result from using electric equipment. Electric equipment use is limited in North America so understanding what other municipalities around the world are utilizing may broaden our selection.

Deliverables

A final report summarizing their findings should include:

- Metrics on the reduction of emissions that would result from converting our small equipment fleet to electric
- Summary report on what other municipalities are utilizing for electric small equipment
- Recommendations for purchase of electric equipment
- A public facing final report (or executive summary) for the UBC Sustainability Scholars online project library

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Time Commitment

- This project will take **250*** hours to complete.
- This project must be completed between April 27-August 10th, 2018
- The scholar is to complete hours between 7am 3 pm, Monday to Friday.
- First Wednesday of every month 1:30-3:00 for Ergonomics Field Integration Group meeting.

City Staff Mentor and Department

Work location: Evans Yard and other Park Board works yards

Skill set/background required/preferred

- ⊠ Excellent research and writing skills.
- Demonstrated interest in equipment operation, mechanical aptitude.
- Experience conducting stakeholder engagement events, including facilitation skills, is an asset.
- Strong technical writing skills
- S Familiarity with research methodologies and survey techniques
- Strong presentation and public speaking skills
- ⊠ Familiarity conducting focus group research
- Strong analytical skills
- \boxtimes Ability to work independently
- ☑ Demonstrated time management skills
- oxtimes Deadline oriented
- ☑ Project management and organizational skills
- Seamiliarity with Microsoft Office, Excel, PowerPoint,
- Seamiliarity with benchmarking methods and tools
- ⊠ Comfortable working with and analysing databases
- \boxtimes Experience with statistical analysis
- ☑ Comfortable interacting with strangers to conduct public/in person surveys
- ☑ Familiarity preparing feasibility studies an asset

Additional Project Needs

- Small Equipment Training Provided by Parks Board
- PPE-Student would need to provide own Certified Safety Boots. All other PPE provided by Park Board.