

SUSTAINABILITY SCHOLARS PROGRAM

Summer 2020

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 sustainability across the region.

- Visit the [Sustainability Scholars Program website](#) to learn [how the program works](#) and to [apply](#).
- Be sure to review the [application guide](#) to confirm your eligibility before applying.
- **Applications close at midnight on Sunday March 8, 2020.**

Research project title: Research to support development of a retrofit plan to improve performance of City-owned building systems (City of New West)

Sustainability Goal or Operations Plan objective

Climate Leadership

Long Term Goal: working towards a zero carbon future by implementing projects to achieve New Westminster's Seven Bold Steps in Response to the Climate Emergency, which build on New Westminster's Climate Emergency Declaration, and seek to achieve the City's Climate Emergency Goal, Objectives and Targets.

Project description

In 2019 New Westminster Council was the second municipality in Metro Vancouver to have passed a Climate Emergency Declaration, a call for action that will result in strong policies and programs being enacted to mitigate both corporate and community carbon emissions. As part of this, this City has recently adopted Seven Bold Steps in Response to the Climate Emergency. Over the next 18 months, the new Climate Action Division is tasked with ramping up the City's response to the climate emergency in its beginning stages, through facilitation of development of plans, strategies, programs and projects in support of realizing these Bold Steps. The Sustainability Scholar will work under the Manager of Climate Action on the corporate energy and emissions component of this initiative, specifically on informing next steps towards developing the scope of an implementation project based on energy efficiency measures identified in an existing recommissioning/retrofit study of selected City-owned buildings.

Scope of Work:

1. Identify gaps in available building data with a focus on the building automation system (BAS) energy efficiency measures by:
 - Reviewing existing data and recommissioning reports
 - Reviewing the Kitsilano Community Centre recommissioning project report to identify elements of relevance to retrofitting City of New West buildings
 - Interviewing key stakeholders,

2. Working with City of New West staff from the Civic Buildings and Property Management team and drawing on information obtained through the document review and stakeholder interviews above, outline the key steps to address the identified need for new building automation systems and recommissioning of old building automation systems in a number of City buildings. Work will include:
 - Desk research to identify possible building automation systems through case study reviews, critical analysis of the recommissioning measures presented in the recently commissioned building assessment report, identification of the non-energy impacts of project implementation, etc.
3. Identify the key metrics and specifications to include in a draft Request for Proposals for a detailed design to recommission BAS and introduce new BAS to existing buildings
4. Time permitting, provide recommendations on methods by which energy consumption and BAS data can be shared with building users to help promote ongoing improvements in operation; report on research and make recommendations for implementation

Deliverables

- A preliminary report/ memo summarizing research, including summary of sources and stakeholder interviews, and comparison and analysis of how key findings should shape the following project stages.
- A final report summarizing overall project, survey and evaluation of buildings, and recommendations, and a presentation to stakeholders.
- Draft of a Request for Proposals for a pilot building retrofitting project (City will provide template and detailed oversight)
- A final report (or Executive Summary) for the UBC Sustainability Scholars online project library.

Time Commitment

- This project will take **300** hours to complete.
- This project must be completed between May 4 and August 14, 2020
- The Scholar is to complete hours between 9am-5pm, Monday to Thursday, approximately 15-20 hours per week.
- Scholar to be available, either in person or by telephone as agreed, for project start-up meeting, periodic status updates and final report presentation.

Required/preferred Skills and Background

- Excellent research and writing skills
- Demonstrated interest in sustainability
- Familiarity with research methodologies and survey techniques
- Strong analytical skills
- Ability to work independently
- Deadline oriented
- Project management and organizational skills
- Demonstrated experience in sustainable development and/or policy planning, is an asset
- Familiarity with benchmarking methods and tools
- Familiarity preparing feasibility studies
- Demonstrated knowledge and experience in building science, GHG emission science, GHG emission reductions, climate change mitigation and/or adaptation, is an asset
- Familiarity with building recommissioning or retrofits an asset



Applications close **midnight Sunday March 8, 2020.**

Apply here: <http://sustain.ubc.ca/scholarsapply>

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

Useful Resources

Below are some links to useful resources to help you with your resume and cover letter (there are many more online). Some of these resources also provide information on preparing for your interview.

<https://students.ubc.ca/career/career-resources/resumes-cover-letters-curricula-vitae>

<https://www.grad.ubc.ca/current-students/graduate-pathways-success>

<https://www.grad.ubc.ca/cover-letter-cv-resume-templates-ubc-career-services>

