

Summer 2023 Sustainability Scholars Program Internship Opportunity

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 on the Apply page to confirm your eligibility before applying.

Applications close at midnight on Sunday January 29, 2023.

Project title: Development of a draft zero emissions municipal building policy for the City of Port Moody

Project Background & Overview:

Municipalities have full control over the construction, maintenance, and operation of the facilities that they own. The City of Port Moody owns and operates many buildings for operations, and the delivery of services within the community. The energy used at these civic facilities is responsible for 54% of the City's corporate greenhouse gas (GHG) emissions. Most of this energy use is attributed to natural gas for heating and hot water in a few buildings: the Recreation Complex (42%), Westhill Centre Pool (12%), Rocky Point Park Pool (9%) and the Civic Centre (9%).

To increase low-carbon resilience in municipal buildings, Port Moody has set the following target through the 2022 Climate Ready Homes and Buildings Plan: 80% reduction in operational emissions by 2030

Building and retrofitting civic facilities to be low carbon and resilient shows Port Moody's commitment to climate action through innovation and leadership, demonstration of technical and policy solutions, building industry capacity, creating jobs, and ensuring residents are safe and healthy in community buildings.

In 2022, the City undertook energy audits of all civic facilities. The audit recommendations will guide the City's investment and prioritization of low carbon and resilient renovations and construction related to City facilities. Energy audit reports will be finalized in early 2023. Through this work the City is tracking and benchmarking energy and GHG emissions for all civic facilities.

Action 3.6 in the 2022 Climate Ready Homes and Buildings Plan includes direction to use future climate data in building maintenance, renewal, and design to identify and address relevant hazards. The 2020 Climate Action Plan also includes an action to develop and implement a green buildings policy for the construction and renovation of City-owned facilities.

Through this action the City intends to create a municipal policy that guides renovations and retrofits of city owned buildings to ensure they are low carbon and resilient to climate change. Having a strategic policy in place will ensure that all construction activities related to municipally owned buildings is working towards decarbonization while implementing climate adaptation solutions. A policy ensures

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consistency, assists staff in project planning, creates more streamlined asset management and renewal processes, and embeds the City's commitment to climate action in an area that the City can directly control.

Project description

Action 3.6 in the 2022 Climate Ready Homes and Buildings Plan includes direction to use future climate data in building maintenance, renewal, and design to identify and address relevant hazards. The 2020 Climate Action Plan also includes an action to develop and implement a green buildings policy for the construction and renovation of City-owned facilities.

Under this project the City plans to apply the net zero-emissions standard to address operational emissions and include measurement and targets for embodied emissions and develop a process to integrate future climate considerations into the maintenance, renewal, and design of municipally owned buildings. This work will include:

- Reviewing maintenance, renewal, and design procedures and policies for municipal buildings;
- Gathering climate data to inform climate conscious design making throughout building lifecycles for municipally owned buildings;
- Reviewing and gathering information about similar policies in other jurisdictions;
- Developing and documenting a process to guide the integration of climate change considerations into the maintenance, renewal, and design of municipal buildings;
- Developing a zero emissions municipal building policy; and
- Tracking progress against GHG reduction targets for municipally owned buildings.

While the above-mentioned bullets include the full scope of the work needed to develop and complete a municipal building policy, the scope of the work to be completed by the Scholar will focus on the following:

- Reviewing maintenance, renewal, and design procedures and policies for municipal buildings;
- Gathering climate data to inform climate conscious design making throughout building lifecycles for municipally owned buildings;
- Reviewing and gathering information about similar policies in other jurisdictions through interviews and research
- Creating a Zero Emissions Municipal Building Policy template with bullet points of information to be completed post-scholar by City staff

Project scope

Through this project, the Scholar will focus on the following activities:

- Review maintenance, renewal, and design procedures and policies for municipal buildings: Work with the City's Facilities, Engineering and Operations, and Policy Planning teams to gather and review city documents related to maintenance, renewal, and design policies and procedures for city owned buildings. The Scholar will prepare a memo that identifies gaps of information and outlines opportunities based on policies and procedures for the zero emission municipal building policy. Please note that few policies and procedure documents exist so the majority of the information will be gathered through focused meetings with staff.
 - Estimated hours: 40 hours (2 1-hour meetings with staff + review and memo preparation)

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- Review and gather information about similar policies in other jurisdictions: The Scholar will research, interview and review related documents from other jurisdictions who have similar policies in place. The City will provide a list of jurisdiction contacts to interview. Interviews will be conducted virtually. The Scholar and city staff will work together to develop interview questions. The Scholar will prepare a summary report of interview findings based on jurisdictional interviews.
 - Estimated hours: 80 hours (~10 jurisdictions 1-hour interviews each + research and report preparation time)
- Gather climate data to inform climate conscious design making throughout building lifecycles for municipally owned buildings: Based on research and recommendations from other jurisdictions, the Scholar will develop and gather climate data (e.g., Pacific Climate Impacts Consortium future climate files, BCIT zero emissions building lab wall assemblies etc.) to inform climate conscious decisions in municipal building lifecycles. The Scholar will produce a list of climate data to use matched with building lifecycle stages, to be included as an appendix of the final policy.
 - Estimated hours: 80 hours (research and data gathering + preparing appendix)
- Create an outline of a Zero Emissions Municipal Building Policy : The Scholar will prepare an outline of a zero emissions municipal building policy for city staff to use in drafting the final policy. The outline will include information to include based on research and earlier phases of the Scholar's work. The Scholar will present the outline to City staff along with other deliverables as identified above.
 - Estimated hours: 50 hours (outline preparation)

Deliverables

- Gap and Opportunities Memo
- Interview Findings Summary Report
- Appendix of Climate Data and Sources per Building Lifecycle Stage
- Zero Emissions Municipal Building Policy Template/outline
- A final report for the online public-facing Scholars Project Library

Time Commitment

- This project will take 250 hours to complete
- This project must be completed between May 1 to August 15, 2023
- There are no critical dates for the project at this point, however, jurisdictional interviews and staff meetings should occur before July & August as these months are common for staff vacation
- The Scholar is to complete hours between 9 am and 5 pm, Monday to Friday, approximately 17 to 20 hours per week

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
- Familiarity conducting focus group research
- Strong analytical skills

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- ☒ Ability to work independently
- ☒ Deadline oriented
- ☒ Project management and organizational skills
- ☒ Demonstrated experience in building and construction practices related to sustainability (e.g., mass timber, low carbon concrete, high performance building techniques etc.)
- ☒ Comfortable interacting with strangers to conduct public/in person surveys
- ☒ Familiarity with and understanding of sustainable building terms (e.g., operational emissions, lifecycle or embodied emissions etc.)

Applications close **midnight Sunday January 29, 2023**

Apply here: [Click here to apply](#)

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

Useful Resources

We are holding a special **resume preparation workshop for prospective Scholars** on January 23, 2023. [Click here for details and to register.](#)

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>