

Summer 2024 Sustainability Scholars Program Internship Opportunity

The UBC Sustainability Hub is pleased to offer current UBC graduate students the opportunity to work on sustainability internship projects. Successful candidates work under the guidance of a mentor from the partner organization, and are immersed in real world learning where they can apply their research skills and contribute to advancing sustainability across the region. These opportunities are paid. The pay rate for the summer 2024 program is \$27.50/hour or \$6,875 for a 250-hour project.

- 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 28, 2024.

Project title: Developing a covered buildings list to inform an energy reporting bylaw in Whistler

Project Background & Overview:

In 2020, Whistler adopted the Big Moves Climate Action Strategy. This strategy commits Whistler to reducing greenhouse gas (GHG) emissions by 50% below 2007 levels by 2030. The strategy focuses on transportation, buildings and waste and articulates the key strategies Whistler will need to further reduce GHG emissions to meet this target. More information on Whistler's Big Moves Strategy can be found here: [Climate action strategy: Big Moves | Resort Municipality of Whistler](#)

In Whistler, natural gas consumption in commercial buildings is the second largest contributor to GHG emissions. Big Move 5 of Whistler's Big Moves Strategy is to "Make existing buildings better", with the goal of reducing operational emissions from residential buildings by 20% and from large commercial buildings by 40% by 2030.

To achieve this goal, Whistler must address operational emissions from both new buildings and existing buildings. In 2024, the Resort Municipality of Whistler (RMOW) will adopt the Zero Carbon Step Code. This update to the Plumbing and Building bylaw will limit GHG emissions from all new buildings in Whistler. However, reducing emissions from existing buildings is much more challenging and costly. To reduce operational emissions, building owners must implement low carbon retrofit measures, which as a local government, the RMOW does not currently have jurisdiction to regulate. Instead, the RMOW and other local governments are using other tools to encourage decarbonization of existing buildings. These include incentives, engagement, outreach, policy, and partnerships.

Project description

To reduce operational emissions from existing commercial buildings, the RMOW aims to develop an energy reporting bylaw. This bylaw would outline the requirements for building owners to report on energy consumption annually to the municipality.

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The purpose of collecting energy consumption data will be to first generate a more detailed understanding of commercial GHG emissions so that the municipality can support the largest emitters on their decarbonization journey. Secondly, this information will be used to develop a benchmarking program similar to [Building Benchmark BC](#). Benchmarking is a fundamental tool for informing, progressing, and tracking jurisdiction wide energy and carbon reduction goals. Outcomes from benchmarking efforts help to identify underperforming buildings, help guide energy efficiency and policy efforts, and inform decision making.

One of the first steps in implementing an energy reporting bylaw is identifying the buildings to which it will apply. This requires the development of what is often called a covered buildings list. The goal of this Scholars project will be to develop this list. From there, the RMOW will use this list to draft the energy reporting bylaw.

Project scope

The final deliverable for this project will be a covered buildings list for the development of an energy reporting bylaw in Whistler. The scholar will work with both the Climate & Environment, and Building departments at the RMOW to develop this list.

To develop the covered buildings list the scholar will:

- Work with the RMOW Building Department to gain access to and understanding of relevant databases and building permits.
- Conduct a review of existing building permits to generate a database in Excel of all commercial buildings in Whistler. Note that this will build on existing work started by RMOW staff.
- Utilize existing building permits, internal RMOW databases, external databases such as BC Assessment data and outreach with stakeholders to determine relevant building attributes including:
 - building name/address
 - building owner name and contact information
 - building type
 - building GFA
 - year of construction
 - major envelope restoration
 - types of construction
 - number of storeys
- Conduct a literature review of 3 to 5 existing energy reporting bylaws in Canadian jurisdictions to identify best practices for applying threshold criteria to develop covered buildings list.
- Work with the RMOW Climate & Environment and Building Department to identify the appropriate threshold criteria for the covered buildings list.
- Utilize the threshold criteria to develop a covered buildings list.
- If time allows, assist RMOW staff with drafting the energy reporting bylaw.

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Deliverables

- A final report containing a summary of the work completed.
- A final report for the online public-facing [Scholars Project Library](#).
- An excel database with all commercial buildings in Whistler with key attributes.
- A recommended covered buildings list for the energy reporting bylaw based on the results of threshold criteria literature review.

Time Commitment

- This project will take 250 hours to complete
- This project must be completed between May 1 to August 15, 2024
- The Scholars is to complete their 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
- Familiarity with research methodologies and survey techniques
- Strong analytical skills
- Ability to work independently
- Project management and organizational skills
- Demonstrated experience in reading building drawings
- Familiarity with benchmarking methods and tools
- Comfortable interacting with strangers to conduct public/in person surveys
- Familiarity with Microsoft Excel, database management and quantitative analysis
- Understanding of decarbonization in buildings and operational energy consumption is an asset

Additional information

This position can either be in person or remote (but located within BC). Should the successful applicant indicate their preference for remote work, they are encouraged to come to Whistler initially for orientation and to meet the project team in person. The RMOW would provide a stipend for mileage for this trip. However, this is not a requirement.

The scholar will also be required to sign an NDA for this project.

Applications close **midnight Sunday January 28, 2024**

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, 2024. [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>