

Summer 2022 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](#) to confirm your eligibility before applying.

Applications close at midnight on Sunday January 30, 2022.

Research Project Title: Research to evaluate equitable approaches to multi-unit residential rental building electrification retrofits in Victoria, BC.

Project Background & Overview:

Buildings represent a significant source of carbon emissions across the province, and an even more significant proportion of community emissions in most municipalities. While the BC Energy Step Code will help to support a transition towards lower carbon new buildings, the thousands of existing buildings that use natural gas for heating and hot water must still be addressed if we are to meet our provincial and federal climate targets. The [Building Electrification Road Map](#) outlines a number of potential policy directions that provincial and other actors can take to help support a transformation towards low-carbon existing buildings, but much work is yet to be done to actually figure out the best ways to transition this sector in a way that doesn't overburden owners, property managers, and tenants. This research project will help to identify and evaluate the different policy and/or technology options necessary to ensure an affordable, equitable transition to a low-carbon building sector in the City of Victoria. Learnings can be shared and applied across BC.

Within the City of Victoria, buildings account for approximately half of total greenhouse gas emissions (GHGs), with the vast majority coming from larger buildings that include multi-unit residential buildings. To meet the City's climate action targets, the current retrofit rate needs to at least double and include deeper energy efficiency and fuel switch (i.e., electrification) measures. There are many barriers that property owners and managers face to undergo deep retrofits, which include potential tenant displacement in a housing market where the rental vacancy rate has been well below the balanced rate of 3-5% for many years.

Just over 60% of Victoria's population are renters, with 80% living in apartment buildings. The majority of these buildings are aging and require not only require low carbon and energy efficiency retrofits, but potentially other upgrades such as seismic. Recent heat dome events have also illustrated the lack of climate resilience of much of the existing building stock and have increased the urgency of investigating solutions such as the installation of air source heat pumps which can provide climate-friendly heating and cooling.

This project aims to further investigate barriers to installing low carbon solutions such as heat pumps for building owners/ managers, as well as provide recommendations as to how these technologies can be adopted without negatively impacting renters.

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Project description

The purpose of the project is to investigate the barriers that property owners/ managers must face in order to complete a low-carbon energy retrofit for multi-unit residential rental buildings, as well as the potential benefits and negative consequences that renters may experience as a result. Recommendations will be made based on primary (i.e., interviews) and secondary (i.e., desktop review) research that will a) identify a range of approaches to low carbon retrofit upgrades b) provide suggestions on how to help mitigate identified barriers to their adoption in rental MURB and c) provide recommendations on ways to mitigate their impact on renters.

The City of Victoria has declared a climate emergency and is also currently facing housing and affordability challenges. This project will provide valuable information for various departments and will likely inform future works and program design to address these pressing issues. Learnings will also be shared and potentially applied in other jurisdictions across British Columbia.

Project scope

1. Policy and program review to understand the BC low carbon building context
2. Best practices review of similar policies and programs from other jurisdictions (estimate ~6-8)
3. Policy and program review (and staff interviews) to understand the City of Victoria context and related work completed to date
4. Interviews with a range of subject matter experts (i.e. property managers/ owners, technical experts, advocacy groups, etc.) (estimate ~10)
5. Summary of research and recommendations on next steps in a final report

Deliverables

- Summary of best practices in equitable existing building decarbonization policy
- Summary of key themes and insights derived from interviews with key informants
- Final report detailing findings and recommendations
- Preparation and delivery of a PowerPoint presentation
- A final report (or executive summary) for the online public-facing [Scholars Project Library](#).

Time Commitment

- This project will take **500** hours to complete.
- This project must be completed between May 2 and August 12.
- The Scholar is to complete hours between 9 am and 5 pm Monday to Friday, approximately 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
- Ability to work independently
- Deadline oriented
- Project management and organizational skills
- Familiarity conducting in-person interviews and related survey methodologies
- Familiarity with building decarbonization policies and/or technologies would be a definite asset.

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Applications close **midnight Sunday January 30, 2022**

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 19. [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>