



Fall 2022 Sustainability Scholars Program Internship Opportunity

The UBC Sustainability Hub 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 September 18, 2022.

Project title: Re-evaluating the role of incentives and regulations in promoting equitable energy efficiency and decarbonization for residential homes

Project Background & Overview:

This project will contribute to a body of research on energy insecurity (also called energy poverty) in Canada. Energy insecurity occurs when households struggle to pay for basic energy-related services like heating, cooling, lighting, cooking and communication. Energy insecurity can arise as a combination of lower incomes, energy-inefficient housing, and rising energy prices. Energy insecurity has a profound impact on human health and well-being. As the climate warms and extreme heat and air quality events become more frequent, these impacts are increasing.

In particular, this project will examine the procedural and distributive justice aspects of energy efficiency programming for residential homes. Current home energy retrofit policy is heavily based on rebates and incentives, many of which are available for high-income as well as lower-income households. Therefore, a significant amount of “free ridership” takes place, in which wealthy households are incentivized for making home energy improvements that they already have the means and/or plans to undertake.

At the same time, the pace and scale of retrofits that are needed to meet climate and energy efficiency targets are currently highly inadequate. Regulations will be required in order to shift the market away from the use of fossil fuels like natural gas in homes, and toward highly efficient and low-carbon alternatives such as electric heat pumps. A redistribution of public funding for incentive and rebate programs toward lower-income households exclusively could enable those households to adapt to more ambitious climate regulations for buildings without impacting affordability.

This project will involve a scan of this issue in BC and other jurisdictions, and produce recommendations for government in scaling up and redesigning current policies to better meet climate, housing and justice objectives.

Project description

The purpose of this project will be to broadly evaluate different approaches to buildings policy from a climate justice perspective (i.e., comparing regulatory tools, such as building codes, equipment standards) vs. incentive tools (rebates, financing) in deploying household energy efficiency retrofits.

An analysis of the effectiveness and justice dimensions of programs in other jurisdictions will be valuable in evaluating the extent to which “free ridership” is hampering efforts to decarbonize BC’s building sector and improve energy efficiency in the housing stock. Current efforts on this front are largely based around rebate and incentive programs, rather than regulations requiring the use of low-carbon and highly energy efficient technologies in homes (e.g., heat pumps).

A key hypothesis to be tested is that incentive and rebate programs largely benefit higher-income households, many of whom would have had the means and ability to perform the same retrofits in the absence of incentives. Therefore, public funding for incentives should be directed to lower-income households, while regulatory tools should be used to shift the overall sector away from fossil fuels and towards greater energy efficiency.

Project scope

The scope of this project will include desktop research of existing incentives, policies and regulations in place to promote equitable energy efficiency and decarbonization in BC, as well as a survey of other jurisdictions that are introducing regulations for the building sector in addition to voluntary (incentive) measures. It will, ideally, include interviews with program administrators in some of these jurisdictions in order to gather lessons learned and best practices.

The research should be strongly grounded in an understanding of climate justice and equity, including the principle that the cost of climate mitigation and adaptation should primarily be borne by the industries most responsible for carbon pollution, as well as the higher-income households which have the means to afford the transition to low-carbon technologies.

These findings should be synthesized into a research report, along with recommendations for policymakers in BC. Recommendations will focus on pathways to introduce ambitious regulations phasing out the use of fossil fuels in buildings, while protecting affordability and advancing climate resilience for households facing energy insecurity.

Recommendations will be developed in collaboration with Ecotrust Canada’s energy and buildings policy experts.

Deliverables

- A final report containing a summary of the work completed
- A final report for the online public-facing [Scholars Project Library](#).
- A final presentation summarizing the results and findings of the work

Time Commitment

- This project will take 250 hours to complete
- This project must be completed between October 17, 2022 and March 15, 2023

SUSTAINABILITY SCHOLARS PROGRAM

- The Scholars is generally to complete hours between 9 am and 5 pm, Monday to Friday, approximately 10 to 12 hours per week. We are, however, flexible on working arrangements and hours, to best suit the Scholar's schedule.
- Meetings and check-ins will be performed remotely or by phone; there are no in-person meetings expected or anticipated (with the exception of the optional event described below).

Required/preferred Skills and Background

- Excellent research and writing skills
- Demonstrated interest in sustainability
- Familiarity with research methodologies and survey techniques
- Community engagement experience
- Ability to work independently
- Project management and organizational skills
- Familiarity with or interest in distributive and procedural justice, particularly as they pertain to public policy design.
- Understanding of energy efficiency and energy policy, particularly as they relate to climate mitigation in the building sector, would be a strong asset.

Additional project requirements.

If the Scholar is interested and available, we would welcome their participation in an event that we will be hosting in Apr. 2023 in Vancouver. This event will bring together policymakers, NGOs and community leaders from across the province to chart a path toward ending energy insecurity in BC. As the Scholar's research will form a foundational piece of research supporting one of the main sessions of this event, we would welcome having the Scholar attend to present their findings.

Applications close **midnight Sunday September 18, 2022**

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

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>