

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: Current State of Heat Pump Adoption in the Township of Langley

Project Background & Overview:

The Township of Langley is committed to reducing greenhouse gas emissions by 45% by 2030, and 100% by 2050. In order to meet these goals, our Climate Action Strategy consists of five Big Moves which represent specific targets to focus our efforts and resources. Big Move 3, Zero Emission Existing Buildings, aims to have all hot water and heating system replacements in existing community buildings be zero emissions by 2030.

With 30% of our emissions from buildings, decarbonizing residential homes as soon as possible is essential to meeting Big Move 3 and our 2030 emissions reduction goal. Heat pumps are a key solution in decarbonizing homes around BC, given our clean hydroelectricity grid. This project consists of developing, administering and analysing a resident survey to determine heat pump adoption and barriers and will be used to help the Township understand why some residents have switched to heat pumps, while others have not.

Project description

The purpose of the project is to help meet Big Move 3 of our Climate Action Strategy, related to switching to zero emissions heating and hot water systems in existing community buildings, and in turn to meet our 2030 emission reduction goal of 45% fewer emissions.

The Scholar will survey Township of Langley residents to find out why some residents have switched to a heat pump while others have not. Understanding barriers to heat pump adoption will be critical in informing the design of a future large behaviour change campaign to support our residents in the switch from predominantly fossil gas-heated households to electrically-heated homes.

Another goal of this project is to find heat pump owners who would be interested in engaging with us in the future as part of heat pump case studies or testimonial videos. The Scholar will

include a couple related survey questions on this and keep track of those who are interested in participating.

The project will be actionable immediately after completion. With only seven years to meet our 2030 emission reduction targets, there is no time to waste.

Project scope

The project will include design and development of a public survey, analysis of results, and a final report which includes next steps/recommendations for the Sustainability team.

1. Survey

The survey will answer the following questions (question list can be expanded/adjusted):

For those that have switched to a heat pump:

- Why did they switch to a heat pump?
- How was their whole experience from researching options to the end of installation and receiving their rebates?
- How has the heat pump been performing? Any issues?
- What is your maintenance plan for the heat pump?
- What was the installation cost and how much have home heating/cooling bills increased or decreased?

For those that have not switched to a heat pump:

- Why have they not switched to a heat pump?
- What would convince them to switch?
- What do they think of heat pumps?

The survey will be advertised to all Township of Langley residents through email lists, social media, and print media. The Scholar will draft the advertising messaging.

2. Analysis of results

Ideally, the scholar will have experience with survey analysis and statistics. The scholar will decide on how the survey will be analyzed. Experience with SPSS, or a similar data analysis software, is preferred.

3. Final report and presentation

The final report will include project objectives, background, survey analysis and findings, and recommendations/next steps for the Township of Langley Sustainability Team. The presentation will cover the key points of the report and be a maximum of 30 minutes long, with an additional 30 minutes for Q&A.

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Deliverables

- A final report containing a summary of the work completed, including analysis of the survey and recommendations on next steps
- A presentation to the Sustainability team based on the contents of the final report
- A final report for the online public-facing [Scholars Project Library](#).

Time Commitment

- This project will take 250 hours.
- This project must be completed between October 17, 2022 and March 15, 2023
- The scholars are to complete hours between 8 am and 5 pm, Monday to Friday, approximately 10 to 12 hours per week.

Required/preferred Skills and Background

- Excellent research and writing skills
- Demonstrated interest in sustainability
- Familiarity with research methodologies and survey techniques
- Statistical analysis
- Excellent public speaking and presentation skills
- Community engagement experience
- Strong analytical skills
- Ability to work independently
- Deadline oriented
- Project management and organizational skills
- Comfortable interacting with strangers to conduct public/in person surveys
- Demonstrated experience using Excel, SPSS or other statistical software to analyse data

Additional project requirements.

The Scholar will be expected to have access to a computer capable of doing the statistical analysis and with appropriate statistical software. We will provide funding to cover the cost of a software license if the Scholar does not have access to it through UBC student software licensing. Details about how to manage this will be determined in discussion with the preferred candidate.

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>