

Summer 2025 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. The pay rate for the summer 2025 program is \$31.25/hour or \$7,812.50 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 11:59 pm on Sunday January 26, 2025.

Project title: Analysis of NRCan EnerGuide Rating System data for Part 9 homes to inform climate policy

Project Background & Overview:

The modelled pathway to achieving the District of Saanich's Climate Plan targets (50% reduction in GHG emissions by 2030 and net zero by 2050) includes having 40% of all building envelopes upgraded by 2030, and 80% by 2050. While a large focus of Saanich policy and programs in recent years has been on electrification, energy efficiency improvements can be complementary actions that help achieve GHG reduction goals, while also supporting and improving affordability for residents. Saanich staff currently have very little data about these upgrades in the community, so this project is focused on getting a better understanding of what energy efficiency upgrades are happening in our community, their efficacy, how they interact with electrification/fuel-switching upgrades, and how that data can be better used to inform climate policy and programs we are offering.

Project description

NRCan's pre- and post-retrofit energy evaluations offer a rich dataset for Part 9 homes that can provide insights into retrofit rates, energy efficiency gains from different upgrades (e.g., window replacements, attic insulation, air sealing, etc.), geographic or temporal trends in retrofits, and analysis on the most cost-effective measures. This project will take these data and analyze them to inform the Climate Plan Update (currently underway, to be completed end of 2025), as well as develop recommendations for specific Saanich or partner-led programs, such as the Heat Pump Financing Program, the Home Energy Navigator, the Heat Pump Direct Install feasibility study, and more.

Through this project, we hope to answer some of the following questions:

- What energy efficiency improvements are being realized by different upgrade types
- What can we infer about the rates of upgrades and the efficiency improvements as they relate to the Climate Plan targets?

SUSTAINABILITY SCHOLARS PROGRAM

- Which are the most cost-effective upgrades, and what kind of payback are they realizing with and without available incentives?
- How does the number and type of upgrade vary by neighbourhood in Saanich, and how does this correlate to social and economic factors such as income, age of homes, homes in need of repair, etc.?
- What is the estimated operating cost savings of homes that switch from gas to a heat pump without doing additional efficiency upgrades vs. those that do?

Project scope

- Become familiar with the District of Saanich's Climate Plan, their modelling methodology, existing retrofit programs, and NRCan EnerGuide Rating System (ERS) data (if not already familiar)
- Work with the project mentor to identify and refine specific research questions that can be answered with analysis of ERS and supplemental data. This may include interviews (minimum of 3) with municipal staff and program managers (project stakeholders) and collection of additional data.
- Analyse the data and present initial findings to project stakeholders. Based on the stakeholder feedback refine and finalize the analysis, as needed
- Develop a final report that provides an overview of the findings in a clear, visual manner, and includes finding summaries or recommendations for each of the program areas identified (e.g., Climate Plan Update, Home Energy Navigator, general communications/messaging, etc.)
- Deliver a final presentation to project stakeholders, and share the PowerPoint (with speakers notes) for stakeholders to use in future, if needed
- Provide an orientation to the Excel based analysis, which may be referenced for more details or queried (e.g., through pivot tables) by members of the project stakeholder group

Deliverables

- A final report containing a summary of the work completed
- A final report for the online public-facing [Scholars Project Library](#).
- An interim presentation with preliminary results
- A final PPT presentation, with speakers notes
- An excel document with the analysis that can be used and referenced by staff in the future

Time Commitment

- This project will take 250 hours to complete
- This project must be completed between May 1 to August 15.
- The Scholar is to complete their hours remotely between 9 am and 5 pm, Monday to Friday, approximately 17 to 20 hours per week.
- Regular check-in meetings will take place at a time that works for all parties via Microsoft Teams

Required/preferred Skills and Background

SUSTAINABILITY SCHOLARS PROGRAM

- ☒ Excellent research and writing skills
- ☒ Demonstrated interest in sustainability
- ☒ Familiarity with research methodologies and survey techniques
- ☒ Statistical analysis
- ☒ Excellent communication and presentation skills
- ☒ Familiarity with building science, including retrofits in single family homes an asset
- ☒ Strong analytical skills
- ☒ Ability to work independently
- ☒ Deadline oriented
- ☒ Project management and organizational skills
- ☒ Demonstrated experience in data analysis and a high level of proficiency with MS Excel
- ☒ GIS training or experience an asset
- ☒ Experience with financial modelling and analysis an asset
- ☒ A background in understanding energy use in buildings and retrofitting single family homes will be an asset
- ☒ Familiarity with using and interpreting large datasets from the EnerGuide Rating System an asset
- ☒ Familiarity with HOT2000 energy software an asset

Applications close at **11:59 pm Sunday January 26, 2025**

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 21, 2025. [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>