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 low carbon facility designs in health care facilities

Project Background & Overview:
New health care facilities are being designed to meet aggressive low GHG emission targets, in order to meet the CleanBC public sector target for 50% portfolio reduction by 2030. There are multiple pathways to reduce carbon. It would be helpful to understand options and trends in the BC health care sector, in terms of facility low carbon design components, predicted energy performance at the design phase, and actual energy performance of newer existing facilities. Often innovative technologies are being considered but there is a sense of risk to try something new. While each new construction project is unique, it would help the Energy and Environmental Sustainability regional team, to see overall trends, be able to speak to innovations and examples, and bring these to the awareness of the Project Teams. In addition, setting a performance target for each project is a balance between wanting to show exceptional results, versus confidence in what is possible, practical and affordable. To do this we need to pull together metrics and descriptions from multiple new construction energy model reports, to analyze correlations between designs and performance where possible, and to build a useful tool.

Project description
The purpose of the project is to understand current trends for low carbon design for BC health care facilities in the Lower Mainland. The goal is to create a database of energy system design components and energy metrics, from new construction projects, and newer existing health care facilities. Design components will include as a minimum: building envelope, heating recovery systems, ventilation systems, electrification, renewable technologies. Data is available in energy model reports for facilities currently in design and construction, as well as reports and utility data for existing facilities built in the last 10 years. Create a tool that can be updated going forward. Identify any trends or examples of successful designs. Identify what's missing in energy model reports that would be useful to include.

Project scope

- Summary of current policies and regulatory requirements driving low carbon objectives for new healthcare facilities in BC
- Identify high level categories of low carbon strategies, by reviewing energy model reports, plus interviewing 1 or 2 Energy Managers on the Energy and Environmental Sustainability team. Gain a high level understanding of energy loads in healthcare, and current best practice design strategies for energy conservation and GHG reduction.
- Review system descriptions in energy model reports and design reports, for 15 - 20 facilities, currently in the design process and create a comparative spreadsheet identifying low carbon strategies, for each facility
- Pull energy performance data available in the same energy model reports, and enter into a spreadsheet.
- Collect and input energy and GHG emissions performance data for 10 existing, newer facilities from the health authorities' own utility database, in order to show trends. Consider if performance can be correlated to high level design choices.

Deliverables

- Useable spreadsheet with instructions
- A final report containing a summary of the work completed
- A final report for the online public-facing Scholars Project Library.
- Present report to monthly Energy and Environmental Sustainability team meeting

Time Commitment

- This project will take 250 hours to complete
- This project must be completed between May 1 to August 15.
- 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
☒ Strong analytical skills
☒ Ability to work independently
☒ Deadline oriented
☒ Project management and organizational skills
☒ Demonstrated experience in building performance
☒ Familiarity with benchmarking methods and tools
☒ Familiarity with building energy modelling, an asset
☒ Comfortable working with and manipulating data sets to identify trends and establish correlations

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