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: Research on Scope 3 Non-Energy Sources of Greenhouse Gas Emissions in Water Systems Operation: Improvements and Innovation

Project Background & Overview:

Metro Vancouver has committed to ambitious climate action goals, aiming to reduce greenhouse gas emissions and enhance sustainability. The region's Climate 2050 strategy outlines plans to improve water efficiency, promote green infrastructure, and reduce reliance on energy-intensive processes.

While methods to capture energy consumption through purchasing of electricity and fuel use has been established, another area of concern that needs to be explored and accounted for are the GHG emissions generated from non-energy sources coming from water system operations such as use and purchase of disinfectants in treatment plants or materials used in maintenance activities.

Project description

The objective of this research project is to conduct a comprehensive jurisdictional scan to identify and evaluate innovative approaches for quantifying and mitigating non-energy sources of greenhouse gas emissions in water systems operations. This scan will focus on best practices, technologies, and policies implemented in various jurisdictions, aiming to inform Metro Vancouver's strategies for enhancing sustainability and reducing the environmental impact of its water management operations. By integrating findings from leading examples, the project seeks to develop actionable recommendations tailored to the region's sustainability goals.

Project scope

Jurisdictional Scan: Identify and analyze existing best practices, approaches and methodologies used in various (5 to 10) jurisdictions for quantifying and benchmarking non-energy sources of greenhouse gas emissions in water systems.

Case Studies: Based on the jurisdictional research, compile detailed case studies of successful initiatives that address non-energy emissions, focusing on innovative practices, technologies, and regulatory frameworks.

Benchmarking. This will include:

- Based on the scan of best practices and the case studies develop a benchmarking protocol that lists the approaches most appropriate for the MV context.
- Interview 2 to 5 subject experts at MV to collect data.
- Conduct a benchmarking analysis of Metro Vancouver's water systems against the identified best practices and approaches from other jurisdictions to evaluate performance, identify gaps, and highlight areas for improvement.

Deliverables

- A final report containing a summary of the work completed
- A final report for the online public-facing <u>Scholars Project Library</u>.
- A final presentation to the project team and other internal stakeholders
- A final 5-minute (high-level) presentation to the Corporate Planning Committee

Time Commitment

- This project will take 250 hours to complete
- This project must be completed between May 1 to August 15, 2025
- The Scholars is to complete their hours between 9 am and 5 pm, Monday to Friday, approximately 17 to 20 hours per week.
- Ideally, the scholar will be available to attend some in-person meeting including kick off meeting at the beginning of the project, bi-weekly progress meetings, and during the final presentation in August.

Required/preferred Skills and Background

- oxtimes Excellent research and writing skills
- oxtimes Demonstrated interest in sustainability
- Experience conducting stakeholder engagement events, including facilitation skills, is an asset
- oxtimes Familiarity with research methodologies and survey techniques
- oxtimes Statistical analysis
- oxtimes Strong analytical skills
- $oxed{interms}$ Ability to work independently
- oxtimes Deadline oriented
- oxtimes Project management and organizational skills
- ☑ Familiarity with benchmarking methods and tools
- $oxed{interaction}$ Comfortable interacting with strangers to conduct public/in person surveys
- ⊠ Familiarity preparing feasibility studies

SUSTAINABILITY SCHOLARS PROGRAM

☑ Interest in or familiarity with assessing non-energy sources of GHG emissions
☑ Interest in or familiarity with Scope 3 emissions and reporting

Applications close **at 11:59 pm Sunday January 26, 2025** Apply here: <u>Click here to apply</u> Contact Karen Taylor at <u>sustainability.scholars@ubc.ca</u> if you have questions

Useful Resources

We are holding a special **resume preparation workshop for prospective Scholars** on January 21, 2025. <u>Click here for details and to register.</u>

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