

## Summer 2026 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 February 1, 2026.**

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## Project title: Quantifying Alternative Feedstocks for Hydrothermal Liquefaction in Metro Vancouver

### Project Background

Hydrothermal Liquefaction (HTL) uses heat and pressure to convert wet biomass into biocrude oil, which can be refined into low-carbon fuels for aviation, shipping, rail, and trucking. Metro Vancouver is building North America's first demonstration-scale HTL facility integrated into a wastewater treatment plant.

Following initial testing with wastewater sludge, Metro Vancouver is interested in extending its HTL demonstration to process additional feedstocks, after the first year of testing with wastewater sludge as the feedstock. Metro Vancouver is seeking a Sustainability Scholar to quantify the availability, value, and carbon intensity of 5–10 priority feedstocks in the Metro Vancouver and Fraser Valley regions. This project seeks to identify new markets for regional resource recovery from waste and maximize the information gained during the HTL demonstration.

This project supports BC's Low Carbon Fuel Standard and Metro Vancouver's Climate 2050 Strategy in the areas of waste, energy, and transportation.

### Project description

The Scholar will conduct a targeted literature review (regional, provincial, and selected global case studies) to identify feedstock characteristics such as transportability, lipid content, processing requirements, regulatory constraints, and sustainability. Feedstocks that are currently not accepted in wastewater treatment (e.g., plastic-contaminated biomass) or accepted in limited volumes (e.g., de-icing fluid, hauled liquid waste, grease trap waste) may be compatible with HTL processing. Some novel feedstock that is otherwise difficult to recycle or compost is fast-food restaurant waste, pet waste, and fatburgers. Other solid wastes such as

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agricultural residues, manures, and food processing waste may improve the HTL biocrude quality when mixed with the wastewater sludge feedstock.

The scholar will create a model for evaluating the alternative feedstock based on financial and qualitative factors to rank feedstocks for input into HTL. The final deliverables include a ranked list of feedstocks, model for evaluating trade-offs to current practices, and an estimate of total potential biocrude production from the various feedstocks.

## Project scope

- Conduct a literature review of feedstock compatible and tested by existing HTL systems using the criteria; ease of processing, energy value, and key criteria for accepting feedstock to HTL.
- Conduct a jurisdictional (regional/provincial) scan of feedstock sources using criteria of: total available quantity, proximity, aggregated vs. distributed, ease of transport/storage, and qualitatively describe current sustainability practices with each feedstock (e.g., disposal, re-use, recycling).
- Research policy and regulatory drivers (e.g., BC LCFS, Climate 2050, organic waste bans) which may encourage HTL of novel feedstock for increased regional sustainability.
- Develop a multi-criteria decision model to rank feedstocks
- Estimate biocrude yield and quality from the top 3-4 feedstocks as identified by the decision model
- Engage with internal stakeholders through one to two structured meetings to validate assumptions and refine model inputs. Share findings with internal stakeholders upon project completion.

## Deliverables

- A final report containing a summary of the work completed
- A final report for the online public-facing [Scholars Project Library](#).
- A decision-support model (e.g., Excel spreadsheet) for evaluating HTL feedstocks
- Presentation of findings to Metro Vancouver's Collaborative Innovations team

## Time Commitment

- This project will take 250 hours to complete
- This project must be completed between May 1 and August 14, 2026
- The Scholars is to complete their hours between 9 am and 5 pm, Monday to Friday, approximately 17 to 20 hours per week.
- A kick-off meeting (virtual or in-person) will be arranged during the first week of the assignment. Subsequent check-in meetings will be scheduled at mutual convenience of Scholar and mentors.

## Required/preferred Skills and Background

- Excellent research and writing skills
- Strong analytical skills

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- ☒ Ability to work independently
- ☒ Project management and organizational skills
- ☒ Strong verbal communication skills
- ☒ Interest in one or more of these fields: climate policy, low-carbon fuels, waste management, wastewater resource recovery
- ☒ Educational background in engineering, science, economics, business, or geography (environment and sustainability)

Applications close at **11:59 pm Sunday February 1, 2026**

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

Contact Karen Taylor at [sustainability.scholars@ubc.ca](mailto:sustainability.scholars@ubc.ca) if you have questions

## Useful Resources

We are holding a special **resume preparation workshop for prospective Scholars** on January 19, 2026. [Click here for details and to register.](#)

Below are some links to useful resources to help you with your resume, cover letter and preparing for an interview (there are many more online).

<https://students.ubc.ca/career/career-resources/>

<https://www.grad.ubc.ca/cover-letter-cv-resume-templates-ubc-career-services>