

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.

Review of best practices to enable advanced electricity metering infrastructure in New West

Project Background & Overview:

The City of New Westminster, as part of its holistic electric infrastructure upgrade initiative, is rolling out advanced meters to support safe and reliable power supply to its community. The project is replacing existing analog electric utility meters with advanced meters that support the development of a more modern grid. These meters provide enhanced energy management capabilities able to support intermittent renewable power, distributed power generation from onsite solar and battery systems, and the increasing demand from electric vehicle charging.

The rollout program began on September 16th, 2024 with a target of installing 38,000 meters across residential, commercial and industrial customers by the end of 2025. As of November 2024, 7.5% has been successfully deployed. This program is seen as a critical component in helping manage energy use across the city, reduce carbon emissions, improve operational efficiencies to support the City's Seven Bold Steps for Climate Action, and sustain the City's ability to deliver core services as stipulated within the Asset Management and Infrastructure pillar of the Council Strategic Priorities Plan as well as in the Utility Strategic Plan.

Advanced meters measure and transmit electricity consumption data across a wireless network at frequent intervals, providing the New Westminster Electric Utility with critical information on power outages, the ability to manage the flow of electricity within the grid network, enable remote data collection and create the opportunity to design targeted energy management and energy savings programs for users. Additionally, this information can be utilized by customers to gain insight into their energy consumption patterns to increase control over their monthly bills, and participate in energy management opportunities. Advanced meters ensure that the electricity system continues to evolve to meet modern safety standards and requirements.

Project description

A key challenge in Advanced Metering Infrastructure (AMI) deployment, observed in other countries and regions, is the lack of effective policies and best practices for customer service and maximizing end-user benefits. This includes insufficient communication with key interest groups, limited awareness and education about AMI, and a failure to meet user expectations.

The purpose of this project is to develop a portfolio of strategies and services that may complement and enhance the ongoing deployment of advanced meters in the City of New Westminster. The portfolio will outline actions the City can take to maximize the benefits of having advanced meters installed for both the electric utility and customers, supporting energy efficiency and emissions reductions. By fostering stronger customer involvement, these initiatives will not only support energy and emissions reduction goals but also help ensure the long-term success and acceptance of AMI.

Project scope

The scope of this project is categorized into the following 3 steps:

- 1) Desktop research on best practices for AMI deployment
 - a. Create a list of utilities within North America (preference given to Canadian entities) that have undertaken an AMI deployment program.
 - b. Review and consolidate strategies adopted by 5 to 7 by utilities to support effective AMI deployment. The strategies may include customer engagement tools, software platform support, new tariff rates, and other energy management programs that maximize electric utility and customer benefits of having advanced meters.
- 2) Current state assessment
 - a. Review the City's current strategies to support AMI deployment, including a review of potential software platforms to support data management and customer service.
 - b. Conduct one-to-one interviews with 2-3 representatives from the City's electric utility and vendor responsible for meter installation. The goal of these interviews is to understand the practical challenges and opportunities of the City's AMI deployment and apply learnings from the information gathered through the desktop research to identify potential services and solutions that complement and enhance the deployment of advanced meters in the City of New Westminster.
- 3) Report design
 - a. Synthesize the information into a curated portfolio of services and solutions that would serve as recommendations to the City.
 - b. Highlight challenges and shortcomings perceived within the portfolio.

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Deliverables

- Interim report detailing research approach and preliminary work completed.
- A draft report outlining the problem statement, approach taken to collate information, and final recommendations.
- A final report incorporating draft report feedback.
- A summary report for the online public-facing [Scholars Project Library](#).

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
- Experience conducting stakeholder engagement events, including facilitation skills, is an asset
- Familiarity with research methodologies and survey techniques
- Excellent public speaking and presentation skills
- Community engagement experience
- Strong analytical skills
- Ability to work independently
- Interest in or experience with electricity metering, an asset
- Interest in or experience with knowledge sharing practices through communications and engagement, 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>

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