

Summer 2021 Sustainability Scholars Program Internship Opportunity

The UBC Sustainability Initiative (USI) is pleased to offer current UBC graduate students the opportunity to work on funded sustainability internship projects. Successful candidates work under the mentorship of a partner organization, and are immersed in real world learning where they can apply their research skills and contribute to advancing sustainability across the region.

- Visit the [Sustainability Scholars Program website](#) to learn [how the program works](#) and to [apply](#).
- Be sure to review the [application guide](#) to confirm your eligibility before applying.

Applications close at midnight on Sunday January 31, 2021.

Research project title

Integrating embodied emissions accounting into implementation of the BC Energy Step Code

Project description

While municipalities in British Columbia are setting more stringent energy performance targets for the operation of new buildings through the BC Energy Step Code, embodied emissions related to new construction remain largely unchecked. The District of North Vancouver is looking to build from emerging research and innovative approaches to help develop policies and tools that could support low carbon new buildings that are energy efficient and low in both operational and embodied emissions. Some of the key tasks anticipated would include supporting the District by:

- A. Researching existing best practices for policy and regulatory approaches for accounting for and reducing embodied emissions in new construction. This will include:
 - Identifying existing and emerging policy and regulatory approaches for accounting for embodied emissions in new construction with a primary focus on local British Columbia communities. This includes reviewing existing literature and conducting information interviews with staff from these municipalities.
 - Identifying and providing comparative research on a few select leading national and international examples that can be used to compare and contrast to current and emergent local approaches. This includes limited web-based research and literature review.
 - Using the information obtained from the research, identify the challenges and opportunities that local governments are experiencing in addressing embodied emissions in new construction and a summary of the policy and regulatory approaches available to address these and how these approaches may be used to advance/support the District's low carbon approach to the BC Energy Step Code (e.g. establishing embodied emissions reporting requirements, GHG intensity limits for new buildings). See Appendix 1 for preliminary resources.

- B. Researching the challenges that industry faces in accounting for and reducing embodied emissions in new construction and recommending how the District can best support industry to overcome these challenges. This will include:
- Leveraging the research, literature reviews and information interviews in Part A to identify how other municipalities have engaged with the development industry and what challenges have been identified.
 - Identifying how the identified challenges are being addressed and recommending other emerging ideas/approaches/tools.
 - Identify existing tools/resources that are available to support industry (e.g. Whole Building Life Cycle Assessment) and what tools or resources may need to be developed (e.g. Low Carbon Construction Best Practice Guide).

This is an important new field of work that can help to identify the key elements for developing a comprehensive approach to reducing embodied carbon in new construction. Staff have compiled an initial list of relevant resources, including a recent research on embodied emissions in the BC Energy Step Code from which to reference. The Sustainability Scholar will have the opportunity to work with District staff and recent community energy and emissions data to support their work as needed.

Deliverables

Deliverables will be informed by the key tasks identified above and will include:

- A final report that summarizes best practices (policies, regulations, and tools) for embodied emissions accounting that includes recommendations for how the municipality and industry can reduce embodied emissions through the District's implementation of the BC Energy Step Code;
- A presentation to relevant District staff on findings of the research.
- A final report (or executive summary) for the online Scholars Project Library

Time Commitment

- This project will take 250 hours to complete.
- This project must be completed between May 3 and August 13.
- The scholar is to complete hours as best suits their schedule, working an average of 17 to 20 hours per week. The scholar must be available for check-ins and occasional meetings between 8am and 4:15pm Monday to Friday.
- Target date for the interim report will be mid-June, but will be confirmed with the Scholar.

SUSTAINABILITY SCHOLARS PROGRAM

Required/preferred Skills and Background

- ☒ Excellent research and writing skills
- ☒ Demonstrated interest in sustainability
- ☒ Familiarity with research methodologies and survey techniques
- ☒ Excellent public speaking and presentation skills
- ☒ Strong analytical skills
- ☒ Ability to work independently
- ☒ Project management and organizational skills
- ☒ Familiarity with benchmarking methods and tools
- ☒ Familiarity preparing feasibility studies

Applications close **midnight Sunday January 31, 2021**

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 19. [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>