

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: Comparative analysis of fenestration Environmental Product Declarations (EPDs) data to reduce embodied carbon in buildings

Project Background & Overview:

Over that last 20 years, the construction industry has accelerated efforts towards lowering the carbon emissions associated with buildings—which some estimates place at nearly 40% of global totals.

Largely thanks to high-performance product innovations to meet regulatory requirements, these efforts are starting to deliver buildings with substantially reduced *operational* carbon emissions. However, efforts towards quantifying and reducing a building's *embodied* carbon emissions—i.e., the emissions produced when creating the products used in a building—continues to be a challenge.

This challenge is particularly apparent in complex products, such as fenestration. A robust comparative study into the embodied carbon of different fenestration products—and their impacts on a building's overall embodied carbon—would be a valuable resource for architects, policy makers and occupants. With this information, they could make more informed product decisions about their fenestration choices and subsequently reduce the overall carbon load of buildings.

Project description

This project will deliver a robust comparative analysis of the Environmental Product Declarations (EPDs) of different fenestration products from North America and Europe.

Currently, fenestration EPDs use a variety of different rules to govern their reporting, depending on where and when the EPD was produced. This data inconsistency makes it difficult for those in the Architecture, Engineering and Construction (AEC) community to make informed product choices, and thus inhibits their ability to reduce the embodied carbon of the buildings they create.

With the data from this comparative analysis, educational tools, white papers and marketing materials will be produced targeting AEC decision-makers. The ultimate goal is to provide them with crucial information on EPDs and empower them to make informed product decisions that can help reduce the embodied carbon of buildings.

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Project scope

The project scope will include:

- Conduct background research into the current AEC approaches to calculating the embodied carbon of buildings (Product Category Rules -> Product Lifecycle Assessment -> Environmental Product Declaration -> Building Lifecycle Assessment) - (15%)
- Research publicly available fenestration EPDs from manufacturers in North America and Europe, identifying inconsistencies with EPDs across jurisdictions and timeframes - (20%)
- Prepare a comparative analysis of the EPD data from different manufacturers, highlighting inconsistencies and providing normalized data comparisons to offset them - (45%)
- Produce a report outlining the challenges and potential impacts of using inconsistent EPD data when calculating the carbon emissions of buildings—both operational and embodied - (20%)

Deliverables

- A final report containing a summary of the work completed
- A final 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
- Familiarity with research methodologies and survey techniques
- Statistical analysis
- Strong analytical skills
- Ability to work independently
- Deadline oriented
- Project management and organizational skills
- Demonstrated experience in the Architecture, Engineering & Construction (AEC) space
- Familiarity with principles of Embodied Carbon in building materials, an asset
- Interest in or familiarity with fenestration in buildings, an asset

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

Contact Karen Taylor at sustainability.scholars@ubc.ca if you have questions

Useful Resources

SUSTAINABILITY SCHOLARS PROGRAM

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>