SUSTAINABILITY SCHOLARS PROGRAM

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 <u>application guide</u> to confirm your eligibility before applying.

Applications close at midnight on Sunday January 31, 2021.

Defining and Mapping the Low/No Carbon Construction Technology Sector in BC

Overview

The Vancouver Economic Commission (VEC), in partnership with Scius Advisory wishes to research, analyse and map the construction technologies being developed in British Columbia. Construction Technology ("con-tech") can be thought of as the technology used to innovate the way structures (buildings, roads, bridges, etc.) are planned, designed, and built, as well as the manufacture and installation of their components.

The findings from this work will be extremely valuable. Knowing that such a sector exists enables catalysts such as VEC to develop programs and services to support these companies, and to connect them to markets. At the same time, industry can gain further confidence that the solutions they need to achieve high performance buildings efficiently, profitably and safely are right on their doorstep. Not only that, with a looming labour shortage of 15,000 jobs by 2029, the findings from this project will help policymakers understand how to attract the construction workforce of tomorrow.

Project Scope

In 2019, we undertook the first project to document the size, make-up and characteristics of Vancouver's con-tech sector. We found 66 Contech companies in Vancouver that had generated \$426 million in revenues 2018 – this was a revelation. However, the focus of this study was on technologies that improved the process of construction and did not extend to building products. This, we would now like to do. This project seeks to update and expand on that work by documenting BC-based low/no carbon contech companies in terms of their size (revenues, number of workers), the technology (description and category/ies) and location (BC-wide). Then if time is available, to expand the research areas to include first clean/green tech and then "timbertech".

For each research area, we suggest the following phases of work:

1. **Secondary research:** undertake a desktop search of listings (starting with the list in the 2019 White Paper, articles and reports to create a landscape scan of companies and technologies in BC organized into the categories or "clusters".

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- 2. **Primary research:** Based on the outputs from the secondary research, develop and implement a primary research plan that will include key informant or expert interviews, etc. with technology providers and industry stakeholders (industry associations, government agencies, etc) to fill knowledge gaps.
- 3. **Technical analysis:** undertake a gap analysis to identify technical areas of strength and weakness and determine areas of technical and competitive strength and weakness. What is the estimated size of BC's con-tech industry? Which are the ten largest companies? What is BC good at, and what is missing?
- 4. Communications: Develop a summary report that describes the key characteristics of BC's con-tech sector. This includes an inventory and (preferably) a visual map of the con-tech companies and technologies in BC that will be posted on the VRCA and Vancouver Economic Commission's websites. A short form of the report summarizing top line findings will also be shared with key stakeholders (such as the Energy Step Code Council) for distribution to their networks. The VEC and/or the VRCA will host a webinar to present the findings to industry.

The key deliverables of this project are to:

- 1. Develop a concise report that describes BC's con-tech sector in terms of size, strengths, top ten largest companies, key markets, and other relevant parameters.
- 2. Create an inventory of key con-tech companies (name, technology, markets served, contact information, logo) that are marketing commercialized technologies or plan to do so within the next 12 months.
- 3. Create a map or infographic of the con-tech industry organized into technology categories
- 4. A final report [or executive summary] for the online Scholars Project Library

Links:

VEC/Scius Contech White paper https://www.vancouvereconomic.com/blog/news/the-426-million-sector-youve-never-heard-of-meet-vancouvers-contech-ecosystem/

VEC Green Building Market Forecast https://www.vancouvereconomic.com/research/green-buildings-market-research/

Required/preferred Skills and Background

- ☑ Demonstrated interest in sustainability
- ☑ Familiarity with research methodologies and survey techniques

- ☑ Ability to work independently
- ☑ Deadline oriented
- ☑ Demonstrated experience in the real estate and construction sector is an advantage but not essential.
- ☑ Comfortable interacting with strangers to conduct public/in person surveys

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Apply here: <u>Click here to apply</u>
Contact Karen Taylor at <u>sustainability.scholars@ubc.ca</u> if you have guestions

Useful Resources

We are holding a special **resume preparation workshop for prospective Scholars** on January 19. <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