Fall 2020

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.

Note: Projects must be completed remotely during the COVID-19 pandemic.

- Visit the <u>Sustainability Scholars Program website</u> to learn <u>how the program works</u> and to <u>apply</u>.
- Be sure to review the <u>application guide</u> to confirm your eligibility before applying.

Applications close at midnight on Sunday September 20, 2020.

Research project title: Research to develop an action plan for a Green Industrial Innovation District in the False Creek Flats

Project Overview:

Many European countries such as the Netherlands, Denmark, France and Belgium have successfully pioneered Circular Cities models (See C40 Cities), as a key aspect of their Adaptation and Resilience planning (both environmentally and economically) to address the Climate Crisis.

These models are based on the increased understanding that infrastructure for production, manufacturing, distribution, and, operational urban supporting functions (such as food production and distribution, waste management and materials recovery), should be strategically positioned close to the demand areas for these needs, goods, services and urban infrastructure, in order to reduce environmental impact, drive economic resilience and create sustainable, equitable, green cities and complete communities.

Establishing the new models for these 'climate-smart, green cities' is reliant on urban planning and zoning strategies that take into account the critical role industrial land and industrial land use will play in delivering these circular functions by performing the work, producing and distributing the goods, and offering the services, required to service the needs and demands of our urban centres.

These industrial activities need to be located in proximity to dense urban populations, if we are to reduce the environmental impact of supplying and servicing consumer and infrastructure demands.

Regional Strategic and Regulatory Context: On July 3, 2020, the Metro Vancouver Board of Directors unanimously passed the Region's **Industrial Land Strategy**, with an urgent acknowledgement, expressed by all Board Directors (regional Mayors and Councillors) who spoke to the motion, that, like most cities around the world, the Lower Mainland is facing a crisis in terms of critical short supply of industrial land

availability close to our urban centres, due to multi-decade encroachment or elimination of industrial land in the region for residential and commercial development. The growing population in the Metro region will increasingly require sustainable production, distribution and infrastructure models to meet the Region's climate action goals and drive for sustainable and resilient communities. Similar to the creation of an Agriculture Land Reserve, which recognized the importance of protecting agricultural land from development and encroachment for the region's food production and food security, a similar strategy may look at the need to protect and activate industrial land, to ensure supply chain security, city supporting infrastructure, services and goods, and a resilient local economy.

City of Vancouver Context: The City of Vancouver, is currently undergoing an Employment Lands and Economy Review, which has exposed the critical short supply of industrial land in Vancouver, (under 7% of all land use), while emphasising the diverse employment and critical city supported services and production, Vancouver will need to facilitate to address its Climate Emergency Action Plan, as well as bolster its resilient city and local, green economy strategy, amidst increasing climate change disruptions.

Recycling Alternative, along with other businesses and community partners is leading a movement to create the province's first **Green Industrial Innovation District (GrIID)** in the False Creek Flats (FLATS). Housed in the FLATS, the **GrIID** brings together green innovation businesses that are developing and delivering services, products and resource recovery that support local, circular models and distribution, such as materials recycling, materials re-purposing, de-construction, industrial symbiosis, local production, share and repair services. The GrIID fosters collaboration, is founded on principles of responsible production and consumption, creates diverse and inclusive green jobs and establishes a resilient supply chain approach that drives local economic growth.

Purpose of the Project:

Recycling Alternative is already working in collaboration with a number of local green innovation business in the FLATS and circular economy organizations, to create a Green Industrial Innovation District (GrIID) in the FLATS, and would like to understand the key levers and how best to develop and implement this local, circular model, including identifying the core elements of resource recovery, production, distribution and services and the collaborative opportunities amongst businesses operating such models.

The scholar would engage with the various partners to document the various contributions of the participating GrIID businesses and co-ordinate the messaging-(stakeholder engagement and communication) and work with the project Mentor to format a structure and messaging to present to groups such as potential participating stakeholders, City of Vancouver, Metro Vancouver, Province of British Columbia.

Scope of Work:

- 1. Preliminary project research and context familiarization of similar circular economy districts in other jurisdictions, including their operating models, governance structures; use this information to confirm project criteria and GrIID guidelines
- 2. Using the provided list of potential GrIID organizations, and any additional potential GrIID participants, create a GrIID database of these Vancouver enterprises

- 3. Develop an interview survey and script for potential GrIID stakeholders
- 4. Survey and interview 10-15 potential GrIID organizations and enter information gathered into GrIID database
- 5. Draft a matrix outlining the potential benefits of GrIID models (i.e. green jobs, local economic, environmental and community benefits). Quantify the benefits where possible.
- 6. Create a rough map of the physical GrIID layout, linking the potential collaborative, circular, resource, production, or service opportunities based on the information collected in the interviews and recorded in the GrIID database
- 7. Develop a draft Action Plan and key messages for implementation of the GrIID model in the FLATS

Deliverables

Note that a final deliverable (either a full report or, if the report contains confidential information, an executive summary) is required by the end of the program (March 12, 2021). The deliverable will be archived in the online <u>public-facing Scholars Project Library</u>.

The Scholar will deliver a final report containing a summary of their completed work complemented by a final presentation to key stakeholders. The report should include:

- Summary (list and brief description of circular district models in other jurisdictions, including their operating model and governance structure)
- Summary of interview and survey results
- Database of potential GrIID partners, including their operating models and key circular assets/needs
- Rough sketch of the proposed GrIID district and the participating organizations
- Draft Action Plan
- 5 to 10 key messages
- Final report (or Executive Summary) of project for UBC Sustainability Scholars online library

Time Commitment

The program runs for 22 weeks from October 19, 2020 to March 12, 2021, during which students work an average of 12 hours per week for a total of 250 hours.

- This project will take 250 hours to complete.
- This project must be completed between October 19, 2020 and March 12, 2021
- Monday to Friday 9-5, approximately 12 hours per week.
- Bi-weekly meetings with Project Mentor

Required/preferred Skills and Background

- □ Excellent research and writing skills
- ☑ Demonstrated interest in sustainability
- ☑ Familiarity with research methodologies and survey techniques
- □ Community engagement experience
- $oxed{\boxtimes}$ Familiarity conducting focus group research
- □ Ability to work independently
- ☑ Project management and organizational skills

- ☑ Comfortable interacting with strangers to conduct public/in person surveys
- ☑ Familiarity preparing feasibility studies
- ☑ Design and layout skills are not required, but would be an asset
- ☑ Interest in or familiarity with the circular economy, recycle/reuse symbiosis programs or models

Applications close **midnight Sunday September 20, 2020**.

Apply here: http://sustain.ubc.ca/scholarsapply

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

Useful Resources

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.

Resume workshop for prospective Sustainability Scholars: https://www.eventbrite.ca/e/resume-workshop-for-prospective-sustainability-scholars-tickets-117422877989

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