## **UBC Sustainability Scholars Program 2019**

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 organizational sustainability goals.

For more information about the Sustainability Scholars Program and to apply to work on this project, please visit the <u>Student Opportunities</u> page.

Please review the application guide (PDF) before applying.

Applications close midnight Monday February 25, 2019.

## Research project title

Local government policy and opportunities analysis for accelerating deep energy retrofits on Vancouver Island

## **Sustainability Goal or Operations Plan objective**

- To mobilize government and industry collaboration and accelerate energy- and carbon-reduction strategies and projects to double the emissions reductions achieved from residential (Part 9 building) retrofits in program communities by 2021 while establishing a clear path to achieving medium-term and long term targets.
- Climate Leadership
- Long Term Goal: Eliminate dependence on fossil fuels, 100% Renewable energy community-wide by 2050, 61% reduction in GHGs by 2038 and 80% reduction in GHGs by 2050, based on 2007 levels

## Outline scope of project and why it is of value to your organization. Describe how and when the Scholar's work will be actionable.

- Provide insights for the Transition 2050 Residential Retrofit Acceleration Project (see description in Appendix
  A). Focused on Southern to mid- Vancouver Island and the Gulf Islands, the UBC Sustainability Scholars
  project would gather and analyse opportunities and best practices to inform local government building
  energy retrofit strategies, projects and programs.
- Identify opportunities and best practices from North America and globally that local governments can utilize to support and encourage residential retrofits that result in significant energy and emission reductions. Consider policy, regulation, leadership, communications, programming, etc. approaches. This effort will identify opportunities and best practices related to:
  - Heat pump permitting options
  - Community based incentive structure options and framing of incentives (ex. pay no tax)
  - Community based social marketing approaches
  - Behavioral marketing based approaches
  - Community based energy coaching models
  - Adaptive and targeted marketing campaigns (targeting homes with oil heating, using consumer and industry tested marketing messaging)

- Understand and analyse the applicability and requirements for execution of the opportunities/best practicies for small to mid-sized local and regional governments on Vancouver Island.
- Provide recommendations on most applicable opportunities/best practices for local governments Southern to mid-Vancouver Island and the Gulf Islands to inform forthcoming energy retrofit strategies.

#### **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 (August 12, 2019). The deliverable will be archived in the online public-facing <u>Scholars</u> <u>Project Library</u>.

- Comprehensive research (i.e. literature review, stakeholder interviews) and analysis.
- A final report, containing a summary of completed work with recommendations, complemented by a final presentation to key stakeholders.
- A final report [or Executive Summary] for the UBC Sustainability Scholars online project library.

#### **Time Commitment**

Please indicate the total numbers of hours your Scholar will need to complete the project, the completion period (between April 29 and August 12), any critical dates for the project, and the optimal schedule for your Scholar's work.

- This project will take **250\*** hours to complete.
- This project must be completed between April 29, 2019 and August 12, 2019.
- The Scholar is to complete hours between 9am and 4pm, Monday through Friday, approximately 16 hours per week.

## Required/preferred Skills and Background

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

- □ Ability to work independently
- □ Deadline oriented
- □ Project management and organizational skills
- ☑ Demonstrated experience in local government jurisdiction and authority (British Columbia context)
- ☐ Comfortable interacting with strangers to conduct public/in person surveys
- ✓ Most of the work can be done remotely. On-site time and meetings in Victoria will be arranged based on the needs of the project and in consultation with the Scholar. Mileage and ferry costs for travel to Victoria will be reimbursed by the CRD.

Applications close midnight Monday February 25.

Apply here:

https://sustain.ubc.ca/student-opportunities

# To learn more about the program here: <a href="https://sustain.ubc.ca/ubc-sustainability-scholars-program">https://sustain.ubc.ca/ubc-sustainability-scholars-program</a>

Read the application guidelines to confirm your eligibility to participate in the program here: <a href="https://sustain.ubc.ca/student-opportunities">https://sustain.ubc.ca/student-opportunities</a>

Contact Karen Taylor at <a href="mailto:sustainability.scholars@ubc.ca">sustainability.scholars@ubc.ca</a> if you have questions.

#### Appendix A - Transition 2050 Residential Retrofit Acceleration Project (January 11, 2019)

#### Introducing the Residential Retrofit Acceleration Project

The Challenge: Programs designed to achieve residential emissions reductions over the past 25+ years have not created the sustained market transformation needed to produce long-term business opportunities for the home performance industry, or the volume and type of retrofits required for governments to meet future targets. Currently, BC governments are committed to making deep cuts in emissions, and BC industry is developing roadmaps for growing the market for emissions reduction products and services. A new opportunity presents itself: to enable the industry-government collaboration which will be essential to accelerating the design and implementation of the strategies and initiatives required to drive innovation, grow and sustain a robust retrofit industry, create a clear and motivational pathway for homeowners, and achieve the transition to 2050.

The Solution: A new approach to government and industry collaboration to develop a model for accelerating energy retrofit and emissions reductions. This program will: help municipalities understand their role in reducing emissions, develop implementation-focused strategies, inform policies and regulations, engage citizens and industry, implement actions, measure impact, and continuously improve strategies and projects. It will help industry provide input, have better avenues to be co-developers of retrofit strategies implementation projects and become the centre of a vibrant green workforce.

This project has been designed to have broad local and national significance and to enable collaboration, innovation, scaling up, acceleration, and replication. This will be achieved through: integrating strategies and roadmaps; diverse partners; strategic partnership with industry, multi-pronged implementation strategies, innovating with new – and variations of – rebate incentives, formal connections and broad networks; and information sharing and replicability.

The Goals: To mobilize government and industry collaboration and accelerate energy- and carbon-reduction strategies and projects to double the emissions reductions achieved from residential (Part 9 building) retrofits in program communities by 2021 while establishing a clear path to achieving medium-term and 2050 targets.

#### The new 'CleanBC' Context

On Wednesday, December 5, 2018, The Government of British Columbia released its <u>CleanBC</u> plan aimed at reducing climate pollution, while creating more jobs and economic opportunities for people, businesses and communities. Several of the CleanBC objectives, incentives and targets are in alignment with the Transition 2050 Residential Retrofit Acceleration Project (RRAP):

- Support for home energy retrofits with incentives to make heat pumps more affordable and home more energy efficient.
- 70,000 heat pump upgrades in single family homes by 2030 (or 6,363 conversions from gas/oil heating systems a year for 11 years).
- Incentives for residential heat pump hot water heaters (for existing homes and new construction) instead
  of natural gas systems.
- Adopt the Model national Energy Code for Existing Buildings by 2024.
- Efficiency initiatives for residential and commercial buildings will reduce carbon pollution by 2 million tonnes by 2030.
- Encourage the development of innovative and cost-effective low-carbon building solutions.
- Exploration of a simple and inexpensive home energy labelling program.

### **Project Partners**

The following organizations have committed to being participants: City Green Solutions, Home Performance Stakeholder Council, Capital Regional District, City of Victoria, District of Saanich, Township of Esquimalt, District of Central Saanich, City of Campbell River, Regional District of Nanaimo, Comox Valley Regional District, Cowichan Valley Regional District, BC Hydro, BC Government.

Organization Representatives for municipalities, provincial government and utilities are responsible for the following:

- Attendance and participation at Energy Retrofit and Deep Emissions Reductions Working Group.
- Attendance and participation at workshops to identify market challenged, cross-sectoral understanding gaps.
- Supporting identification of opportunities (policy, regulation, leadership, communications, engagement, etc.) for learning and co-development of strategies.
- Supporting project team on identification and provision of relevant residential retrofit and GHG reduction data.
- Supporting project team on conducting a comprehensive review of relevant existing bylaws and plans to integrate home energy retrofit and emissions reduction strategies and initiatives.
- For those local governments supporting larger implementation projects these roles will be worked out in the Spring of 2019



