

## **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 [Student Opportunities](#) page.

Please review the application guide (PDF) before applying.

Applications close **midnight Monday February 25, 2019**.

---

### **Research project title**

Assessment of Existing Building policies and programs around Surrey

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

For cities, existing buildings are one of the most difficult GHG reduction challenges—if not the most difficult. Many scalable actions to reduce GHG emissions rely on global technology markets such as electric vehicles and renewable energy, while existing buildings are much less affected by new technology and market developments. As such, governments and utilities around the world are working hard to sort out how to achieve and scale up deep energy efficiency and fuel switching retrofits. The City of Surrey will be developing an Existing Building Strategy that builds on the Community Energy and Emissions Plan (CEEP) with key direct and enabling actions to systematically drive down GHG emissions in Surrey's existing buildings.

This project's goal is to conduct an assessment of policies and programs Surrey can access or learn from to achieve widespread adoption of retrofits in existing buildings.

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

#### **Scope:**

This project will (1) assemble and (2) examine a comprehensive list of existing building policies, plans, programs, etc. accessible to Surrey (Federal, Provincial, Regional, utilities, other) and in place around Surrey (other Local Governments).

#### **Value to Organization:**

The City needs additional information to determine how best to support and incentivize homeowners, building owners, and industry to retrofit and decarbonize their buildings. The results of this study will provide Surrey's Sustainability Office with a full inventory of relevant policies and programs, information on how effective other Cities' programs have been, a high level assessment of how well the identified programs fit within an existing market transformation framework, and recommendations that will have staff develop the City's Existing Building Strategy and communicate needs within and outside the City. This work will be a key piece of an Existing Building Backgrounder that will guide work for the next several years. This work will also build on a UBC Sustainability

Scholar's efforts last year to better understand how six leading cities are approaching GHG emissions from existing buildings.

### **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 [Scholars Project Library](#).*

- Become familiar with energy conservation programs, building retrofit strategies, building systems, and Surrey's building stock.
- Review work done by previous UBC Sustainability Scholar on existing building policies of leading cities around the world.
- Use research on and interviews with cities in the Lower Mainland to understand and characterize their approaches to reducing existing building emissions, including policies and programs they have tried, are running now, or plan to implement in the near future. The supervisor will provide guidance in prioritizing leading cities, developing an interview guide, and identifying key contacts.
- Categorize cities by market transformation framework and evaluate how well the existing set of policies aligns with frameworks. Examples of criteria within a market transformation framework include plans and policies around targets, data & reporting, regulations, incentives, and education & training.
- Evaluate the success of energy conservation programs implemented in Surrey/Lower Mainland through uptake and GHG reductions and identify funding sources, agencies, and other relevant information.
- Summarize findings in an executive summary (max 5 pages plus appendices) to supervisor, to communicate key results, preliminary findings regarding objectives, and any challenges or outstanding issues.

### **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 not required to work specific hours during the day, but is expected to:
  - Stick to a pre-determined weekly schedule,
  - Track hours in Excel and share with the supervisor at the end of each workweek,
  - Email the supervisor two bulleted lists summarizing weekly progress and next week's plans, and
  - Contact the supervisor during the week if issues emerge that may require workplan or methods revisions.
- The scholar will not be asked to participate in meetings or special events unless there is specific value for the project, if it is feasible within the time allotment, and fits with the scholar's availability.

### **Required/preferred Skills and Background**

- Excellent research and writing skills
- Demonstrated interest in sustainability
- Experience conducting stakeholder engagement events, including facilitation skills, is an asset
- Familiarity with research methodologies and survey techniques
- Excellent public speaking and presentation skills
- Strong analytical skills

- Ability to work independently
- Deadline oriented
- Project management and organizational skills
- Comfortable interacting with strangers to conduct public/in person surveys
- Comfortable in conducting a limited number of short interviews
- Demonstrated interest in Climate Change policies

Applications close **midnight Monday February 25.**

Apply here:

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

To learn more about the program here:

<https://sustain.ubc.ca/ubc-sustainability-scholars-program>

Read the application guidelines to confirm your eligibility to participate in the program here:

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

Contact Karen Taylor at [sustainability.scholars@ubc.ca](mailto:sustainability.scholars@ubc.ca) if you have questions.