

## 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.**

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**Research project title:** Supporting the transition to low carbon commercial kitchens (induction cooking business case and transition strategy)

**Supports the following Greenest City, Renewable City, Green Operations, or Healthy City priority:**

*Renewable City Strategy*

2050 Target: 100% renewable energy use; new construction required to achieve zero emissions by 2030

**Outline scope of project and why it is of value to City and describe how and when the scholar's work will be actionable**

*Background*

To achieve the GCAP and [Renewable City Strategy](#) Green Buildings targets, in July 2016 City Council approved the [Zero Emissions Buildings Plan](#), setting specific limits for carbon emissions in new buildings. This is part of the long term goal of shifting all energy use in the city to renewable sources, which includes shifting from natural gas for space heat and hot water to renewable electricity and electrically driven appliances. Initial regulatory measures introduced to implement the Zero Emissions Building Plan encountered the most significant concerns and resistance from the restaurant industry who are not familiar with approaches to low carbon kitchen that are used in other jurisdictions that maintain high quality and diversity in the food industry.

As part of this work, the rise and interest of induction cooktops presents an opportunity for further encouraging this switch to electrical appliances. Tourism Vancouver has shown interest in having some research and engagement with its industry members, especially those with culinary services, to discuss a pathway to transitioning to induction cooking.

*Scope of Work*

**Objective:**

Develop a business case for the transition of gas cooking appliances to induction cooktops and gauge interest in this transition within key culinary schools in Vancouver. In particular, research, document and

engage the culinary and restaurant industry in better understanding the challenges, benefits and potential pathways to adoption of induction cooking.

The deliverable may contain the following type of information:

- Document GHG and Indoor Air quality benefits of induction cooking (high level summary of why this is important)
- Document culinary and restaurant operational benefits and constraints (interview local restaurants and chefs to identify drivers/benefits/constraints for this choice and summarize additional global best practice or case studies)
- Document best practices or case studies in transitioning to induction cooking in other regions of the world
- Interview local culinary arts schools to explore and document interest, constraints, and support required to introduce induction cooking to their programing
- Undertake initial high-level costing for an example Culinary Art school retrofit (induction cooking equipment cost, reorg of kitchen space, new pans and ancillary equipment, and curriculum development/integration)
- Document business case and make recommendations on next steps

The document that is developed by the Scholar is intended to help support a strategy and identify initial resourcing required for the City of Vancouver and Tourism Vancouver to support and encourage the transition to induction cooking.

#### **Tasks:**

Specific tasks the scholar will undertake to complete the project include:

- Work with Tourism Vancouver to coordinate access to restaurants and others in the industry with culinary activities.
- Research additional jurisdictions or global best practices
- Prepare interview questions
- Conduct interviews to gather information and data
- Identify costs/benefits/drivers as per above section
- Document potential strategies/actions
- Recommend next steps
- Create final report

#### **Deliverables**

- A business case report comprised of the summarized issues and best practices for transitioning the culinary industry to induction cooktops.
- Final report for the UBC Sustainability Scholars online project library

#### **Time Commitment**

- This project will take **250** hours to complete.
- This project must be completed between **May 1 and August 11**
- The scholar is to complete hours between **8:30 AM – 5:30 PM**, Monday to Friday, approximately **16** hours per week.

### **Skill set/background required/preferred**

- Excellent interpersonal and writing skills
- Experience conducting interviews
- Familiarity with urban design basics
- Familiarity with heat pumps and mechanical systems in new buildings
- A willingness to explore complex issues and trade-offs in the urban environment
- A potential good fit for students in Engineering, Masters Program in Clean Energy Engineering, Masters of Public Policy, Architecture and Planning, Geography, etc.

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.