UBC SUSTAINABILITY SCHOLARS PROGRAM
Campus Energy Infrastructure Study (UBC Vancouver Campus)

Research project title
Campus Energy Infrastructure Study (UBC Vancouver)

Goal or Operations Plan objective
The Urban Innovation Research group within the UBC Sustainability Initiative (USI) develops and manages interdisciplinary research and educational programs associated with sustainable development and the future of cities. The group works in collaboration with academic researchers, university staff and external partners, using innovative campus-as-a-living lab projects as learning opportunities to advance sustainable practices and policies.

As a rapidly growing and research-intensive campus, UBC is finding innovative ways to advance energy use and emissions reduction strategies to help achieve its campus sustainability targets. These initiatives have resulted in a 34% reduction in greenhouse gas emissions below 2007 levels and meeting UBC's aggressive Climate Action Plan target.

This research project is focused on understanding the evolution of the UBC Vancouver campus energy systems and infrastructure, including the planning and decision-making processes, challenges and key enablers for innovation. The study will use UBC as a case example to learn from its accomplishments and its unique ability to use the campus as a testing bed to demonstrate innovative sustainability solutions. The final project deliverables will inform the development of future publications, and educational and outreach materials for academic, professional and government audiences. It may also help inform future policies, development, and research at UBC.

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

- The scholar will review project documentation and conduct open-ended interviews with key planning and operational staff, and academic researchers from various faculties to understand UBC's motivations and transition process towards clean energy supply systems and infrastructure. Infrastructure under consideration includes (but is not limited to) the Academic District Energy System, the Bio-energy Research and Demonstration Facility, the Campus Energy Centre, and the Building Tune-Up Program.
- Project research will also include reviewing the university's plans to achieve the 2020 and 2050 UBC Climate Action Plan targets.
- Through these research activities, the scholar will identify and analyze challenges, solutions, results, and lessons learned, as well as future opportunities related to the campus energy infrastructure transition.
- Time permitting, the scholar will contribute to a report that will identify the enabling factors required to replicate what UBC has done with its clean energy technologies in other city and community contexts.

Deliverables
- A final report containing a summary of the conducted interviews, research, results and recommendations (depending on the information collected, this may be for internal use only).
- A final presentation to key staff from UBC Campus + Community Planning, Energy & Water Services and other relevant departments on the Vancouver campus.
- Executive Summary for the UBC Sustainability Scholars online project library.

Submit applications here: http://bit.ly/2DC2jpP

UBC SUSTAINABILITY SCHOLARS PROGRAM
Campus Energy Infrastructure Study (UBC Vancouver Campus)

Time Commitment

- We expect that the scholar will complete the **250** hours between **April 30 and August 10, 2018.**
- The scholar is expected to work approximately **20** hours per week during standard business hours, (between 8:30 am and 4:30 pm from Monday to Friday). It is preferred that most work hours take place on campus, in the Sustainability Initiative offices, however arrangements can be made for working offsite for a portion of the hours.

Skill set/background required/preferred

☒ A background in Civil Engineering, Environmental Engineering, Energy Engineering or Science is preferred
☒ Knowledge of and interest in clean and innovative energy infrastructure and technologies
☒ Experience conducting research studies in energy and/or infrastructure-related topics
☒ Experience conducting interviews is an asset
☒ Excellent research and verbal communication skills
☒ Strong analytical and technical writing skills
☒ Ability to work independently
☒ Deadline oriented
☒ Attention to detail

Submit applications here: http://bit.ly/2DC2jpP