

SUSTAINABILITY SCHOLARS PROGRAM

Summer 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.

- Visit the [Sustainability Scholars Program website](#) to learn [how the program works](#) and to [apply](#).
- Be sure to review the [application guide](#) to confirm your eligibility before applying.
- **Applications close at midnight on Sunday February 2, 2020.**

Research project title: Strategy for transitioning the False Creek Neighbourhood Energy Utility to 100% renewable energy

Research supports the following policies

- Greenest City Action Plan/ Climate Emergency Response Plan
Specific goal area/ big move(s): Big move 4
- Renewable City Action Plan

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

The False Creek Neighbourhood Energy Utility (NEU) provides low-carbon heat and hot water to buildings in the False Creek area through the recycling of sewage waste heat and the use of renewable natural gas. This results in a substantial reduction of greenhouse gas emissions from the building sector compared with traditional methods for providing building heating and hot water.

The NEU currently operates with a target for 70% of its energy to be supplied from renewable sources. In alignment with the Climate Emergency Response report approved by Council in April 2019, the NEU will be transitioning to 100% renewable energy before 2030. This will allow the NEU to deliver zero emissions energy to all buildings served by the system.

The scope will be to identify, assess, and evaluate options for increasing the NEU's renewable energy supply to 100%. This will include:

- Performing a literature review of leading district energy systems and consolidating findings (technology, % renewable energy, cost, size, operating parameters)
- Interviewing operators, consultants, and industry leaders
- Identifying renewable energy options and strategies best suited for increasing the NEU's renewable energy target

- Performing a technical and economic evaluation of the options identified for achieving 100% renewable energy
- Preparing recommendations

Deliverables

- Literature review defining low carbon approaches used by other district energy systems
- Summary of technologies/strategies available for achieving 100% renewable energy
- Technical/economic evaluation ranking options/strategies
- A public facing final report (or executive summary) for the UBC USI website

Time Commitment

- This project will take **300** hours to complete.
- This project must be completed between **May 4 – August 17**
- The scholar is to complete hours between *M-F: 9am-5pm*, approximately **20** hours per week.
- If applicable, list dates of any mandatory meetings, etc.

Skill set/background required/preferred

- Excellent research and writing skills.
- Demonstrated interest in Renewable energy.
- Strong technical writing skills
- Strong analytical skills
- Ability to work independently
- Strong technical and drafting skills
- At least one year's experience (academic or working experience) in district energy is an asset
- Familiarity preparing feasibility studies

Applications close **midnight Sunday February 2, 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.

<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>

The Centre for Student Involvement & Careers will host a resume & cover letter webinar tailored for graduate students on Tuesday, January 21, 2020 from 12:00-1:30. Registration will open approximately two weeks before the webinar, and can be accessed at Careers Online.

