

Summer 2022 Sustainability Scholars Program Internship Opportunity

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 January 30, 2022.

Project title: Analysis of community energy and emissions data to understand progress toward reaching targets, successes & challenges

Project Background & Overview:

Little work has been done to collectively track local climate action progress in BC. Yet, and perhaps unique in North America or even the world, energy, emissions and solid waste data is available for each individual BC community from 2007 to the present.

Over 100 BC communities, small & large, have had community greenhouse gas emission reduction targets in place and been conducting actions for more than 10 years already; however, the community-level data has not been used to comprehensively track local climate action progress, successes & challenges. This massive and surprising gap is what this student project will fill, with support from CEA staff.

It is important to do this analysis because it will help communities understand where the most effective actions have been to date. It is useful because this analysis will help maximise the effectiveness of GHG-reducing actions in communities going forwards, and to track their progress.

Project description

The purpose of this project is to:

1. Assess how communities in BC have been progressing in energy use and emissions reductions versus their targets
2. Identify trends in communities on energy and emissions and between communities, and see how these have been helping or hindering progress toward reaching targets
3. Identify factors that contribute to these trends, and hence to the success or failure of communities in meeting emissions reduction targets
4. Look at the actions communities have been taking (e.g., home energy retrofit initiatives, electric vehicle charging initiatives) and see if the results of the actions can be identified in the data
5. Strengthen the ability of local governments and supporting organisations to effectively model energy & emissions
6. Strengthen the ability of communities to meet GHG reduction targets, e.g., by focussing on the most effective actions
7. Inform ongoing tracking and reporting processes that will feed into future data collection, including identifying supporting progress indicators

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This project will be incorporated into CEA's BC Hydro funded local government implementation tracker as the project proceeds, and/or immediately after its completion.

CEA will also use this work to help us focus communities on actions that are most effective.

Project scope

The student should look at the following for a selection of communities (suggestion for minimum of 10 but expandable based on available time):

- GHG emissions reduction targets from Official Community Plans / Regional Growth Strategies / Community Energy & Emissions Plans etc.
- Actions that these communities have taken according to their Community Energy & Emissions Plans, Climate Action Revenue Incentive Program reports, and other public information
- Available data on energy consumption and emissions from the Province of BC, and other sources (CEA can provide guidance on publicly available data)
- Develop a framework or methodology to aggregate / analyse the data and prioritise the different metrics to benchmark and analyse (guidance from CEA is available on this)
- Aggregate the data and analyse trends in a few key areas (expandable based on available time). Analysis would be based on the data and comparison to the information found in the policy review noted above.
- Do a deeper analysis of a few key categories, time permitting

Many potential questions can be investigated. CEA's top few questions are as follows:

- Have any communities in BC hit, or come close to hitting their GHG emission reduction targets? What sectors / fuels are helping, and what sectors / fuels are hindering?
- What trends are in the data?
- What noticeable impact or lack of impact have specific actions or programs had in specific communities / regions? E.g. home energy efficiency retrofit campaigns, and the installation of EV charging networks.
- What recommendations are there to help guide communities towards the most impactful actions?
- What recommendations are there to help communities with tracking the progress of their climate actions?

Deliverables

- A final report containing a summary of the work completed
- A final report for the online public-facing Scholars Project Library.
- A comprehensive spreadsheet with data, analysis, trends, and charts

Time Commitment

- This project will take 250 hours to complete.
- This project must be completed between May 2 and August 12.
- Work hours are flexible work hours as long as the Scholar is available for occasional virtual meetings during regular work hours (9 to 5 Monday to Friday), approximately 17 hours per week.

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Required/preferred Skills and Background

- Excellent research and writing skills
- Demonstrated interest in sustainability
- Statistical analysis
- Strong analytical skills
- Ability to work independently
- Knowledge of energy and emissions calculations
- Experience in Excel or a similar program, or a very strong desire to learn. Candidate must be interested in working with large amounts of data to identify trends.

Applications close **midnight Sunday January 30, 2022**

Apply here: [Click here to apply](#)

Contact Karen Taylor at sustainability.scholars@ubc.ca if you have questions

Useful Resources

We are holding a special **resume preparation workshop for prospective Scholars** on January 19. [Click here for details and to register.](#)

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>