

nature is in session

Media Release | November 28, 2017

BCIT Students Bring Energy to Cabin Project

British Columbia Institute of Technology (BCIT) Building Science Master students are getting a taste of what it's like to work on a well-loved Outdoor School landmark, as a result of a collaboration between Cheakamus Centre and BCIT's School of Construction and the Environment.

For the next 8 weeks, Abbas Rangwala and John Cheng Law will explore options for energy efficiency upgrades to one of the original Pan-Abode sleeping cabins at Cheakamus Centre. This feasibility study will determine an energy baseline and identify design options to improve energy efficiency and indoor environment quality. The study will inform design decisions for the first of ten cabins slated for upgrades this spring.

On November 24th, the student team installed energy and air quality monitors in the pilot cabin to measure electricity consumption, indoor temperature, and humidity in real time. Once the data is collected, students will perform energy modelling, and make recommendations to improve energy performance and student comfort. The students are tasked with developing a cost estimate that takes into consideration a tight budget, while ensuring the cabin's character and sense of history are retained – an important goal of the project.

The collaboration between BCIT and Cheakamus Centre is a natural fit. Both organizations have a keen interest in the natural and built environments and the relationship between them, and providing opportunities for students to apply skills and knowledge in meaningful ways. The integration of sustainable features in this project aligns well with each institutions' respective educational missions. Additional learning outcomes will include measuring and reporting on the energy performance of the cabin before and after the project, and documenting the process with an educational video.

"The momentum for the adoption, construction, and renewal of zero emissions buildings is growing rapidly, and it is exciting to be contributing to this positive movement with Cheakamus Centre," said Alexandre Hebert, the manager of zero emissions buildings at BCIT's School of Construction and the Environment.

Luke Smeaton, manager of sustainability, energy and environmental planning at the North Vancouver School District, and Joe English, managing director at West Coast Innovations Lab are also providing advice and guidance to the student team. "We are very excited to be involved in this innovative project," English said. "This is a great opportunity to link a facility upgrade with environmental education, and we are pleased to be collaborating with BCIT," added Smeaton.

The cabin upgrades are part of a larger, multi-phased campus renewal to breathe new life into Cheakamus Centre facilities that have supported critical environmental education to thousands of learners for nearly five decades. This important project will build on this history and further the vision to become a centre of excellence for environmental and indigenous cultural education, and a welcoming place for learning, gathering and sharing in nature. Learn more about the project, and how to get involved at: www.cheakamuscentre.ca