

Building a partnership for better buildings

FORTISBC AND UBC'S OKANAGAN CAMPUS TEAM UP FOR ENERGY EFFICIENCY

FortisBC and the University of British Columbia's Okanagan campus are working together on a partnership developed by the Okanagan Sustainability Office and Facilities Management to conserve energy and reduce carbon emissions from legacy campus buildings.

"The Building Optimization program fits into our objective to reduce campus energy use and meet our carbon emission reduction targets," says Jackie Podger, associate vice president of Administration and Finance. "Our partnership with FortisBC will help achieve those goals."

Carol Suhan, manager, FortisBC PowerSense Services, says the Building Optimization Program is a three-year program that will help the university reduce its consumption of both electricity and natural gas.

In the first phase of the three-year project, FortisBC will install software in most of the original campus buildings, which were constructed in the early 1990s. Taking into account weather and occupancy variability, the software will monitor real-time energy use and identify anomalies so building control changes

can be made. An in-depth custom engineering study will also determine where and how energy is used. This will result in recommendations on how best to reduce energy use.

"Roger Bizzotto, director of Facilities Management, and his team of experts are deeply committed to the project," says Leanne Bilodeau, director of Sustainability Operations, adding the program would not be possible without the support and leadership of Bizzotto and his team.

"The engineering study will come up with recommendations for potential energy savings," states Bilodeau, adding that through Kara Serenius, FortisBC PowerSense engineer, Fortis BC is financing the software and engineering study, while UBC will fund the implementation of recommendations for projects on the phase-one buildings that will net a payback period of two years or less.

"These are usually identifying operational improvements and investing in smaller energy saving measures like sensors and controls," says Bilodeau. "They are smaller things that can add up to fairly substantial energy and utility cost savings."

For example, the installation of something as simple as occupancy sensors in the Science building can result in an approximate annual predicted savings of 6,000 gigajoules, and 300 tonnes of carbon emissions, all within a payback period of 1.3 years.

"The Building Optimization Program provides us with the framework to implement these types of projects and calculate actual energy, utility cost and carbon savings," she says.

Suhan, Serenius, Bilodeau and Bizzotto project a five per cent reduction on gas and electrical use in the original campus buildings, but are hoping to achieve 10 per cent.

While those numbers may not seem high, considering the size of the buildings being optimized, energy savings are projected to be substantial.

Together UBC and FortisBC will work toward energy savings measures that will help achieve greater energy efficiency and building operational savings -- all while contributing to reducing UBC's environmental footprint and meeting the institution's ambitious carbon emission reduction targets. ●





From left: Leanne Bilodeau, director of Sustainability Operations; Kara Serenius, FortisBC PowerSense engineer; and Jackie Podger, AVP Administration and Finance.

FACING PAGE: Carol Suhan, manager, FortisBC PowerSense Services.