

Sustainability Success Story

Exterior lighting change cuts electrical and maintenance costs \$4,400 a year

The Challenge

A number of locations on one of our campuses had incandescent lamps installed in fixtures over exterior doors and covered walkways connecting some of the buildings. These lights were not efficient (resulting in high utility costs), and since incandescent lights have a very short life, there were also high maintenance costs with frequent replacements.



Our Solution

A compact fluorescent bulb was selected that would fit into the existing light fixtures. A preliminary installation of 16 fixtures was operated for one year prior to retrofitting the entire stock to confirm the solution worked as planned.

The proposed project was forwarded to BC Hydro for approval from their Epoints funding. Once approval was granted, the project was implemented and entirely paid for by BC Hydro.

Project Cost, annual Savings and Other Benefits

<i>Project Cost</i>	\$10,000 (paid by our electrical utility, BC Hydro)
<i>Cost Savings</i>	\$1,400 per year (Electrical costs only; maintenance savings implicit but not calculated)
<i>Electricity Savings</i>	32,000 kWh (1% of our total consumption for this campus)
<i>Simple Payback (years) / Return on Investment (ROI)</i>	2 Years (with maintenance savings) / A Return on Investment of 50%
<i>Reduced Maintenance Costs</i>	Annual maintenance costs will be reduced by \$3,500
<i>Environmental Improvement - Greenhouse Gas Reduction</i>	Reduced emissions of 12 Tonnes of GHG
<i>Environmental Improvement – Other</i>	Reduced transportation & landfill footprint
<i>Reduced Environmental Mercury</i>	A kWh of coal-fired electricity puts substantial mercury in the atmosphere. More efficient products mean less kWh
<i>Other Benefits</i>	Longer lamp life means improved night safety