

Bellevue College Business Lighting Incentive Program



Deric Gruen, Sustainability Director, Bellevue College



The challenge

With a sprawling 100-acre campus, lighting consumed nearly a third of Bellevue College's energy use. There had to be a way to cut that down without compromising the safety and comfort of the students, faculty, and staff. Sustainability Director Deric Gruen approached PSE with a grant proposal to upgrade the campus's lighting, but PSE upped the ante, offering a higher incentive if the college made every cost-effective lighting upgrade possible.

The result

When PSE did a walk-through of the college's nearly 700,000 sq ft of buildings, overlooked energy-saving opportunities became apparent. Elevators in Building S, the college's newest, LEED Gold building, were lit with outdated fluorescent fixtures. Lights in restrooms, maintenance rooms, and electrical closets lacked occupancy sensors. Other buildings, including maintenance shops, sheds, and greenhouses, had outdated exterior lights and inefficient timers.

PSE projected that by including these and other missed opportunities in the upgrade, the college would reduce lighting energy consumption by over half, and its overall energy use by 17 percent. The Business Lighting Incentive program pays \$0.30 per kwh of annual energy savings, up to 70 percent of project cost.

Cumulative project savings: \$168,094



Bellevue College — King County

“By upgrading lighting and controls in every building on campus, we’ll save almost \$170,000 a year. We’re happy we didn’t do it halfway.”

— Deric Gruen
Sustainability Director,
Bellevue College

Project details

Sustainability Director Deric Gruen had already submitted a well thought out proposal for upgrading the campus’ lighting, but it didn’t address all areas of the campus and overlooked many smaller cost saving measures. PSE countered with even greater incentives if every lighting inefficiency was addressed. With at least 17,000 individual lamps, this was no small task. However, a PSE grant of \$524,671 would cover nearly half the cost of the expanded project making the effort achieve payback in only 3.3 years. How could the college say no?

All across campus, old fluorescent fixtures were replaced by more-efficient lamps and lower wattage bulbs were installed whenever possible. Even the assumed energy-efficient Building S was upgraded with more efficient elevator lighting and occupancy sensors in maintenance closets and restrooms. Outside, exterior wall and walkway lighting was converted from older HID fixtures to either fluorescent or LED technology. The four-floor parking garage was updated with new vapor-tight fixtures, including occupancy sensors.

Annual savings



Electrical energy savings:

1,992,451 kwh per year

17% reduction in overall energy use

Total annual energy cost savings:

\$168,094

Investment payback in 3.3 years

As a result of this lighting upgrade and other campus energy conservation efforts, Bellevue College received a coveted 2013 Second Nature Climate Leadership Award.

PSE’s Business Lighting Incentive program provides incentives and grants to PSE commercial customers converting older inefficient lighting to new efficient lighting. The Business Lighting Incentive program requires pre-approval by PSE before the retrofit is started.

For more information, call a PSE Energy Advisor at **1-800-562-1482**.