

Building Efficiency:

# Commercial Lighting Retrofit

CASE STUDY

## New lights lower electric bill, look great

Last spring, building owner Jim Dias called the PUD inquiring about possible rebates and assistance on a lighting retrofit he was considering. Jim is part owner in a number of small office buildings in St. Helens and Scappoose. The offices, mostly built in the 70's, were in need of a lighting upgrade. The recessed fixtures, typical in many offices, had older magnetic ballasts that were reaching their end of life and were beginning to fail. Some of the fixture's prismatic lenses had yellowed and become dull



looking with age. A number of the four-foot fluorescent lamps had burned out and needed replacement.

Jim considered simply maintaining the existing system by continuing to replace ballasts and lamps as they burned out. But, all things considered, it just didn't seem cost effective. Plus, there was always the challenge of keeping up with failing equipment. As a building owner, Jim wanted his tenants' office environment as pleasant and professional as possible.

When Jim learned about the PUD's rebates for lighting retrofits and the Oregon Business Energy Tax Credit, he gave the green light to move ahead with a retrofit project.

Jim's new electronic ballasts are warranted for five years and the new lamps are warranted for thirty months. As an average, both are expected to last much longer than that. The new ballasts are more energy efficient, generate less heat, and are quieter than the old magnetic ballasts. The new higher quality fluorescent lights offer both savings and better light. Several incandescent light bulbs were replaced with quality compact fluorescent lights and the discolored lenses were replaced with new bright ones.

Jim's contractor, Christenson Electric, installed products that met the PUD's specifications. The PUD provided the rebate and assistance with applying for the Oregon Business Energy Tax Credit (a State income tax credit equaling 35% of the gross project cost). Jim and his tenants are very happy with how the project turned out.

### Project Summary

Measure Cost	\$7,280
PUD Rebate	\$(3,158)
Oregon Tax Credit	<u>\$(2,548)</u>
Net Cost	\$ 1,574
Annual Energy Cost Savings	\$ 1,155
Simple Payback	1.4 years

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