GREENTECH
Energy Services
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CASE STUDY: Hartnell College

GreenTech designed and installed an energy conservation project at Hartnell College, where lighting was upgraded on two campuses, including the gym complex, visual arts and theater arts buildings, and the garage. All T12 fluorescent lights were re-lamped with T8's. Existing F32 T8 fluorescents were re-lamped with more energy efficient F25 T8s. In the gym, 1000 watt metal halide high bays were replaced with new T5 high-output 47-watt fixtures. In the exterior pool area, 250-watt metal halide wall-packs were replaced with 80-watt induction lights. In the garage, 175 watt metal halides were replaced with new F25 T8s. And throughout all facilities, sensors were installed to assure that lights are turned off in unoccupied areas. A rebate from the utility company ***offset 50% of the cost of this project.***

Energy & Cost Savings:

- Program Cost……$476,287
- ETAP Rebate……$32,100
- PG&E Partnership Rebate…. $189,682
- Payback Period……2.1
- KW Saved……140
- KWH Saved…… 790,340
- Energy Cost Savings……$105,460
- Operational Savings ……$14,289
- Total Savings……$119,748

The main reason Hartnell launched this project was to reduce operational costs as it continues to lose state funding, explains Joseph Reyes, Hartnell's Director of Facilities. The college could have launched a renewable energy project that would have showcased its sustainability program, but the payback would have been too long. The payback on lighting is only about 2 years, after which it provides a potential savings of $100,000 a year after the payback period. "As caretakers of the taxpayers' money, we felt it was the right thing to do," says Reyes.

From an aesthetic viewpoint, feedback from faculty and administration has been positive. "They complained about the old lighting being harsh and causing eye fatigue," says Reyes. "The new lights provide a more natural light."

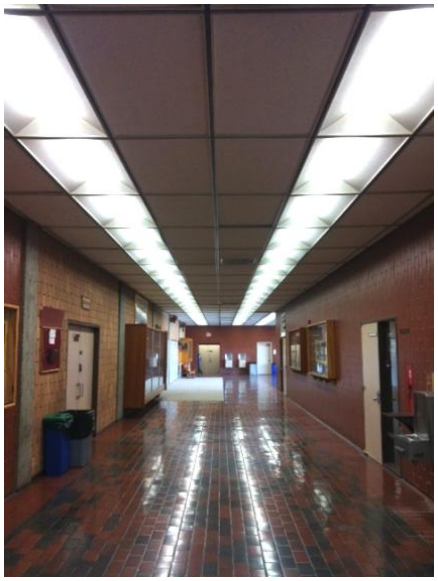
Environmental impact:

- Reduction in Carbon Dioxide (pounds)….. 1,142,454
- Reduction in Sulfur Dioxide (grams)……. 4,265,163
- Reduction in Nitrogen Oxide (grams)…….. 1,904,091

BEFORE:

AFTER:

BEFORE



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