



Project Summary

Pasadena City College in Pasadena, CA, a leader in environmental initiatives, was eager to replace their more than 34,000 fluorescent tubes with high-efficiency, long-lasting LED tubes. The project achieved two main objectives: reduce energy costs and carbon footprint as well as further the college’s reputation as a leader in sustainability.

End User: Pasadena City College, Pasadena, California

Application: Conversion of all fluorescent tube lighting in classrooms, offices, stairwells, parking structures, gymnasium, and mechanical rooms of 26 buildings

Products: ■ RVL LED Tube

- Benefits:**
- \$600,000 to \$750,000 per year savings in energy costs (55%)
 - 3.5 million per year savings in kilowatt hours
 - Reduction of college’s carbon footprint reduced by over 5.6 million pounds per year

Project Overview



Using the California Multiple Award Schedules (CMAS) Contract #4-11-56-0041A, the Pasadena City College’s massive lighting retrofit project was designed to further the college’s position as a global leader in sustainability, while allowing large levels of savings

in the areas of energy cost, manufacturing resources, and disposal cost and impact.



Tons of Coal Saved @ 0.08 lbs. per kWh	202,531 lbs.
Gallons of Oil Saved @ 0.07 gallons per kWh	177,215 gals
Pounds of Carbon Dioxides Saved @ 1.95 lbs. per kWh	4,936,698 lbs.
Pounds of Sulfur Dioxides Saved @ 0.008477 lbs. per kWh	21,461 lbs.
Pounds of Nitrogen Oxides Saved @ 0.004092 lbs. per kWh	10,359 lbs.

Project Overview (con't)

As stated by Dr. Richard van Pelt, CFO and Assistant Vice President of the college at the time of the project installation, *"We start saving money on the first day the LEDs are installed, so the payback is instantaneous!"*



Cost Analysis

Annual LED Life-Cycle Cost Analysis

Existing Fixtures

Fixture	Number	Energy Use (kWh)	Cost/Unit	Total Cost
4' Fluorescent Tubes	34,000	4,765,440	\$ 0.13	\$ 619,507
Maintenance	34,000	-	\$63	408,000
Total Costs for Period				\$ 1,027,507

RVLt LED Tubes

Fixture	Number	Energy Use (kWh)	Cost/Unit	Total Cost
RVLt 4' LED Tubes	34,000	2,233,800	\$ 0.13	\$ 290,394
Maintenance	-	-	-	0
Total Costs for Period				\$ 290,394

Savings

	Savings
Energy Savings	\$ 329,113
Maintenance Savings (est.)	408,000
Total Savings LED Fixtures	\$ 737,113

Using the RVLt LED tubes results in an overall savings estimated at more than \$600,000-750,000. With a 55% savings in energy costs and additional maintenance savings the project will have an estimated simple payback of 5.6 years.

Visit www.rvlti.com for more information.

Numbers are calculated at the time of installation and may not reflect current upgrades to lighting fixture components.