



CASE STUDY

California Redwood Company Korbel, California

GreenTech Energy Services was hired by California Redwood Company, a lumber manufacturer based in Korbel, California, to reduce energy usage and improve the overall environmental conditions of its buildings. GreenTech was introduced by a third party group that promoted utility rebates in the area. GreenTech's analysis showed that light levels in various buildings were inadequate and that energy consumption was excessive. California Redwood hired GreenTech to retrofit the system. The analysis indicated that the program would provide a one-year payback.



Throughout the buildings, which included warehouses, offices, machine shops and shipping areas, all incandescent lamps and metal halide high bay lamps were replaced with fluorescent fixtures. T12 lamps were replaced by T8's. Low-wattage electronic ballasts were installed to maximize energy savings and maintain or increase light levels according to state codes. Reflector lenses were also used to increase light levels, provide energy savings and improve aesthetics. Fixtures were equipped with sensors that turn lights off when rooms are unoccupied. The new lighting system has already generated energy savings of \$159,730, in addition to improving the overall quantity and quality of light.

Energy & Cost Savings:

- Total Cost of the Energy Efficient Lighting Project = \$325,220
- Utility Rebate = \$163,175
- Payback = 1 year
- KW Saved = 208
- KWH Saved = 1,813,059
- Annual Energy Savings = \$159,730
- Operational Savings = \$9,757
- Total Annual Energy Savings = \$169,487

Environmental Impact:

- Reduction in Carbon Dioxide = 2,719,588 pounds
- Reduction in Sulfur Dioxide = 10,153,129 grams
- Reduction in Nitrogen Oxide = 4,532,647 grams



"Our energy consumption has dropped over a megawatt per month since the completion of this project."

**Larry Dugger,
Business Analyst,
California Redwood
Company**

GreenTech Energy Services, 122 East Kings Highway, Suite 503, Maple Shade, NJ 08052
Phone: 800-690-0420 Fax: 856-778-1668 www.greentechenergy.com

©2007 GreenTech Energy Services, Inc.