

# Generation Green Program

## What about LEED?

The Generation Green Commercial Building Program also works with LEED (Leadership in Energy and Environmental Design) certification programs. Any projects that receive Silver LEED certification are eligible for a 20% reduction in building permit fees; any Gold or Platinum certified buildings are eligible for a 25% reduction in building permit fees. LEED certified projects are not required to complete Stages 1 or 2 of Generation Green to qualify for fee reduction.

Any Questions?

Call the City of Oakdale

Building Inspections Department

Bill Schmitt, Building Official

(651) 739-5150

Bill.Schmitt@ci.oakdale.mn.us



# Proven \$\$\$ Savings

A High Performance Building uses careful, climate-responsive building design, energy efficient envelope design, daylighting, passive solar heating, cooling-load reduction strategies, high-performance glazings, high-efficiency lighting and HVAC equipment. A construction cost for this sort of package in 2008 would be \$170,000 with an annual energy savings totaling \$38,000—a return-on-investment of 22%.

These buildings also increase employee productivity due to a pleasant working environment. It is documented that every 1% increase in productivity, employers save \$600 to \$700 per worker per year. On average employers find that productivity increases by 15% annually after a green retrofit.

Alliance for Sustainable Colorado exchanged the building's T-12 fluorescent lights for more energy-efficient T-8 fluorescent lamps and installed daylight sensors to regulate the amount of electricity used for lighting based on the amount of sunlight coming through the windows. To make the HVAC system more efficient, they digitized the controls and made them remotely accessible through the Internet. To cut water use, toilets and water fixtures with low-flow fixtures were installed.

The results? The energy retrofit is cutting Alliance for Sustainable Colorado's power bill 8% annually. At a cost of \$30,000, the project will pay itself back in five and a half years. The organization's \$20,000 water retrofit has reduced water use by 90% a year and will pay itself back in four years. Finally, the \$17,000 lighting retrofit is expected to break even in just 2 1/2 years.  
-Kelsey Abbott 10/01/08



# You are Losing Money

*if you aren't building Green...*

# GENERATION GREEN

For buildings that are environmentally responsible AND economically feasible.



City of Oakdale  
Building Department  
1584 Hadley Avenue N.  
Oakdale, MN 55128



# Generation Green

Oakdale’s Generation Green program is a promise to our next generation to conserve energy and natural resources in our community. It reflects the City’s long-term vision of development that is both environmentally and economically sustainable.

Generation Green is a comprehensive program that focuses on reducing energy consumption and greenhouse gas emissions in the residential, commercial and governmental sectors of Oakdale.

## How to Participate in the Generation Green Commercial Building Program:

**It’s Simple.** Applicants are eligible for expedited plan review, and must submit evidence of completing Stage I & II to the City of Oakdale’s Building Official with their plans. Once information has been verified, the project will be eligible for a 15% reduction in building permit fees, as well as promotion from the City of Oakdale.

### STAGE I: Complete both # 1 & 2

- 1) Exceed the Minnesota Energy Code standard by 20%.
- 2) Perform a free Energy Design Assistance by Xcel Energy “ConservationWise” (a 1-10 day process) by calling an Xcel Energy’s Business Solution Center at 1-800-481-4700 or go online to:  
[xcelenergy.com/businessnewconstruction](http://xcelenergy.com/businessnewconstruction).



### STAGE II: High Performance Strategies

Submit plans for documented high performance strategies that will be implemented in the project. **New Construction:** Must implement six high performance and efficiency strategies.

**Major Expansion/Renovations:** Must implement five high performance and efficiency strategies.

The following list of High Performance Strategies are suggestions. However, the City of Oakdale will accept other feasible High Performance, LID, and/or Greening strategies to complete Stage II in the Generation Green application.

#### CONSERVATION SYSTEMS

- ☉ Heat Recovery or VAV systems; supply air temperature reset.
- ☉ Indirect Evaporative Cooling system or Night venting protocols
- ☉ Roof monitor/lightwell and baffling assemblies
- ☉ Thermosiphon and/or Heating and/or cooling floor systems
- ☉ Passive solar power system using trombe walls.
- ☉ Rainwater Harvesting- Rain Gardens, Install rain barrel catchments, Pump water from pond or other approved water source for the lawn sprinkler system.
- ☉ Solar Energy: Photovoltaic (PV) and/or solar cells
- ☉ Wind Turbines
- ☉ Commercial Solar Agreement
- ☉ Geothermal Heat Pumps

#### SITE DESIGN/IMPROVEMENTS

- ☉ Install Roof monitors and clerestories and/or design eaves into the building
- ☉ Installation of a “white roof” or “Green roof” on the building

- ☉ Consider the use of earth berms to minimize heat loss and gain.
- ☉ Zoned irrigation & water sensors
- ☉ Plant conifer trees and shrubs to block or divert cold winter winds.
- ☉ Plant deciduous trees to shade south glass in summer and allow solar heat gain in winter.
- ☉ Native or drought resistant plants. Group plants according to their water needs.
- ☉ Install Bike Racks

- ☉ Install shower facilities

#### MATERIALS

- ☉ Certified: Salvaged and/or Engineered Wood used
- ☉ Ecology block, High Performance concrete
- ☉ 50% or more recycled materials in the acoustical ceiling tile, vinyl flooring, vinyl wall covering, porcelain tile, carpet and carpet pad
- ☉ Composite decking made from recycled materials

#### WATER CONSERVATION

- ☉ Grey Water Re-use Management.
- ☉ Photoelectric faucets in the restrooms. Install low flow showerheads & faucets
- ☉ High-Efficiency Toilets (HET) consider low-flow or dual-flush toilets and Zero Water Use Urinals. High-Efficiency Clothes Washers

- ☉ Water heaters: within 20’ of pt of use, tankless water heater

#### ENERGY EFFICIENCY

- ☉ Use of High-efficacy lamps: Compact Fluorescent (27-40W), Halide, Sodium Lights, and Leds. LED Exit Lights.
- ☉ Electronic Ballasts and incorporate well-designed troffers.