



# Energy Savings For Small Business

Presented to Key Accounts

*March 19, 2008*

Mark Aalfs, Energy Services

- Conservation benefits
- 937 – activity ramp-up
- Current energy conservation services
- Recent success stories
- Proposed energy conservation programs
- Feedback and questions

- Lower utility bills
- Less wear and longer life for mechanical and other equipment
- Increased comfort, better lighting, higher productivity
- Need for new power production postponed
- Climate and environmental benefits

- Conservation goals will increase
- New conservation programs are being developed
- These new programs will be launched in 2008 and 2009
- More types of energy conservation measures will be eligible for funding
- Incentive budgets will increase

- Bright Rebates Program
- Compressed Air Efficiency Program
- LED Traffic Signal and Sign Program
- Energy Bill Profiler – analysis of your electric usage trends
- Zero Interest Loan Program
- On site walk thru energy audits
- New Construction Technical Assistance
- Cool Rebates

## Bright Rebates Lighting



- Atlas Castings
- City of Tacoma Fleet Building
- Filtrona Extrusion
- Fircrest Recreation Center
- GP Gypsum
- Milgard Manufacturing
- Milgard Tempering
- Northwest Door
- Pierce College
- Pierce County Fire Station #31
- Rainier Veneer
- Schnitzer Steel Industries
- Tacoma Paperboard
- YMCA Market Street
- YMCA Pearl Street

# Milgard Manufacturing Lighting Project



## Project Summary

**Owner:** Milgard Manufacturing

**Project Description:** New Overhead Lighting

**Location:** Fife, WA

**Annual Savings:** \$35,232

**Annual Energy Savings:** 830,128 kWh

**Monthly Demand Reduction:** 123 kW

**Project Cost:** \$182,876

**Tacoma Power Incentive:** \$59,610

**Simple Payback Period:** 3.5 Years



Ken Kurtz (left) of Tacoma Power with Les Mael of Milgard.

# Milgard Lighting Project



The new lighting has improved quality control and increased production.



# Completed Key Account Projects



## Compressed Air Efficiency Program

- Atlas Castings
- Buffelen
- Captive Plastics
- Concrete Technology
- Dynea Overlays
- GP Gypsum
- Graymont Western
- James Hardie
- Manke Lumber
- McFarland Cascade
- Pabco Roofing
- Pony Lumber
- Portac
- Trident Seafood



# Manke Lumber Compressed Air Project



- Completed demand-side assessment and repaired major air leaks.
- New equipment installed:
  - 300hp fixed-speed compressor
  - 350hp compressor with variable-speed drive
  - Controls on existing 300hp compressor
  - Two after coolers with moisture separator and auto condensation trap, with variable speed fan control
  - New multiplex cycling dryer
  - Two 2,560-gallon air receiver storage tanks
  - Distribution pipe modifications
- Four Manke employees participated in the Compressed Air training conducted by Tacoma Power

# Manke Lumber Compressed Air Project



## Results

Total Project Cost:	\$ 313,348
Energy Cost Savings:	\$ 38,244 per yr
Energy Savings:	923,536 kWh per yr
Tacoma Power Incentive:	\$ 110,824
Simple payback period:	5.3 years



## Summary of Commercial & Industrial Electricity Savings

January 2006 – October 2007

Annual kWh Savings	Annual Cost Savings	Lifetime Savings (2007 \$)	Lifetime CO2 Reduction (tons)
12,538,444	\$ 509,681	\$ 5,429,092	54,916

- 58 completed major projects
- 3 additional programs
  - Cool Rebates, Spray Nozzles, Energy Star Transformers
- CO2 Reduction of 900 lbs. per MWhr

- Expanded Bright Rebates Program (lighting)
- Energy Smart Grocer Program
- Efficiency Options Program (custom projects)
- Fort Lewis & McChord Conservation Project
- Equipment Rebates Program (VFDs, motors, HVAC)
- New Construction Program
- Building Retro-Commissioning Program
- Resource Conservation Manager Program

# New Shops Building is LEED Certified



- Energy efficient, 55,000-square-foot building provides a comfortable and efficient work space
- Utility's craft shops for transformers, welding, carpentry, painting and other necessities.
- Uses at least 40 percent less electricity than if built to code
- Efficient lighting combining skylights, efficient fluorescent lamps and controls
- Materials meet LEED thresholds for recycled content and local production
- 97 percent of the construction waste was recycled instead of going to a landfill.
- Building has facilities for recycling paper, cardboard, glass, plastics and metals
- Ozone-friendly refrigerants for the cooling system and adhesives, sealants and paints with low emissions.



# Thanks

Comments or questions?

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