

Reducing GHG Emissions

as a

Sustainable Business Practice



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What is Sustainability Anyway?

Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their needs.

World Commission on Environment and Development, or Brundtland Report, 1987



Treating the Earth as though we intend to stay.

*- Gummer, 1990
(Wales)*

What is Sustainability Anyway?

“In every deliberation we must consider the impact on the seventh generation... even if it requires having skin as thick as the bark of a pine.”

Great Binding Law of the Iroquois

What is Sustainability Anyway?

Operating your business so resources are used in an efficient manner and liabilities are managed.

What is Sustainability Anyway?

- Dow Jones has a Sustainability Index of companies. *Participation by invitation only.*
- Warren Buffet only invests in companies which demonstrate a Sustainable Competitive Advantage.

Why Pursue GHG Emission Reductions

- Information provided by EPA this morning
- Enhanced regulatory compliance
- Energy conservation
- Greater operating efficiencies

Why Pursue GHG Emission Reductions

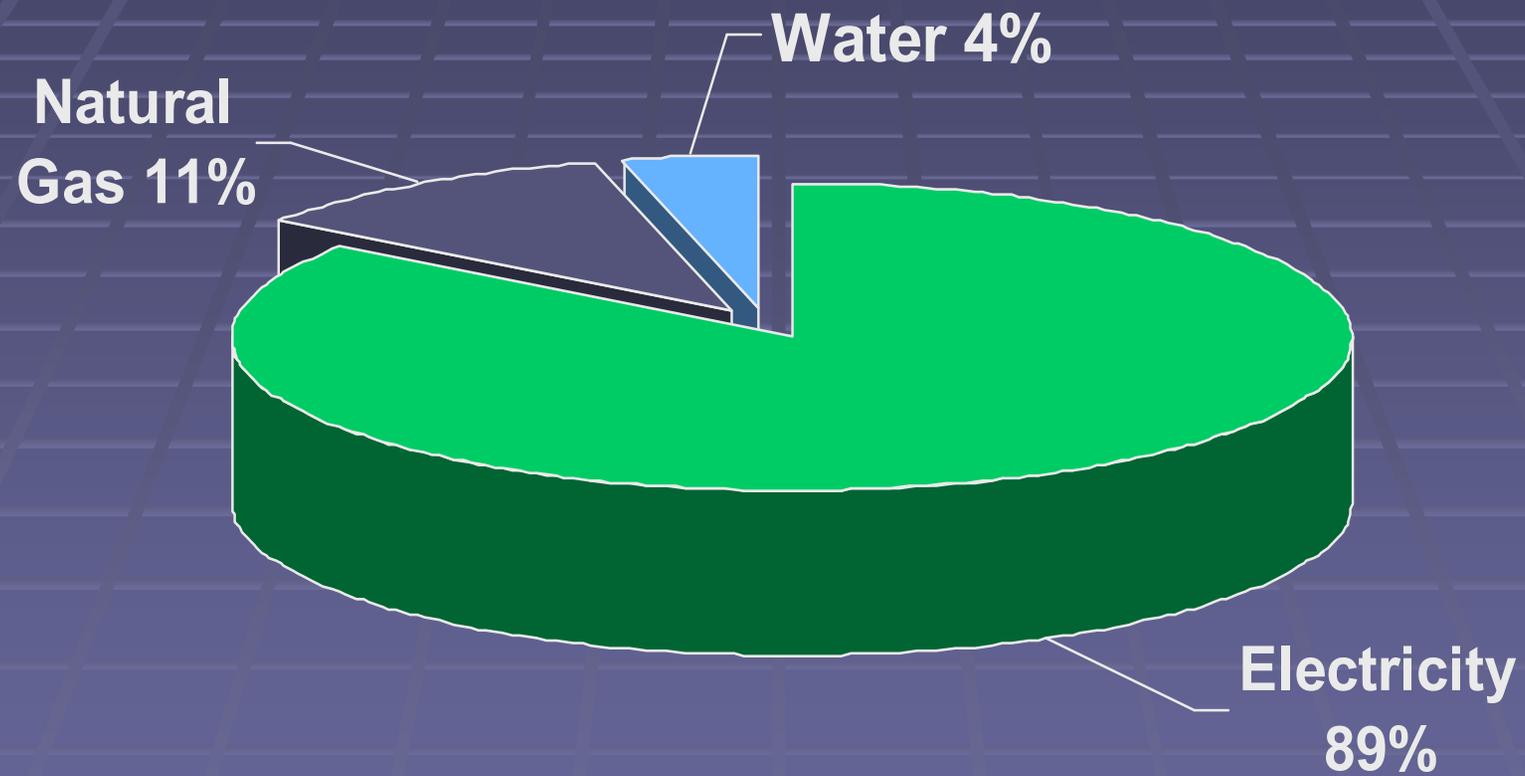
- Optimal GHG emission reductions come from a reduction in energy usage.
- Don't forget alternative transportation and working options
- Waste reduction can also equate to emission reductions
- Provides positive information to share with employees, customers and shareholders

Case Study:

Energy Conservation in the Grocery Industry



Utility breakdown by type

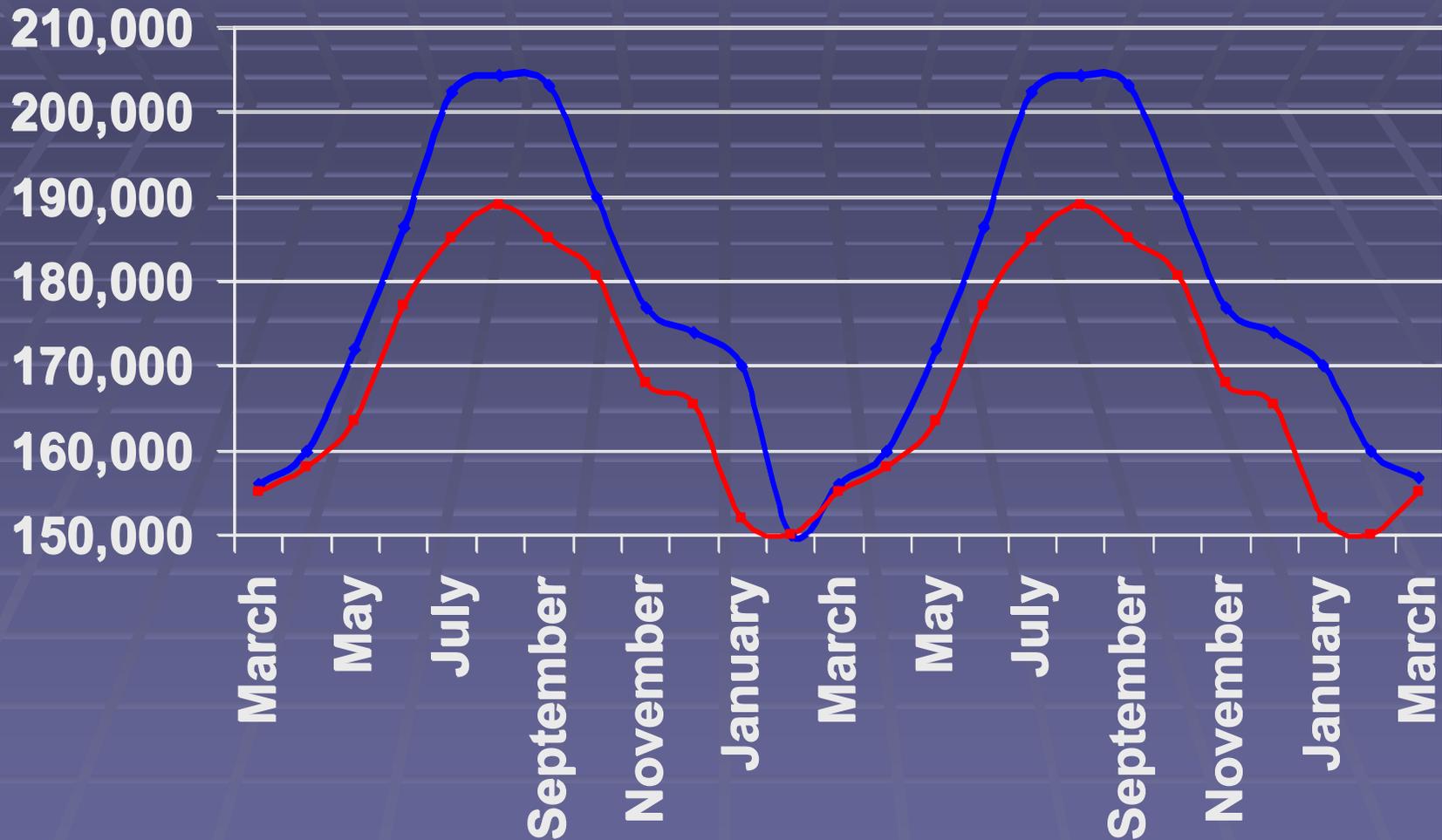


Electric Usage

- **Electricity is the largest component of utility spend.**
- **Largest electrical drivers are refrigeration (49%) and lighting (~25%)**
- **An average food store uses about 2.2 million kilowatt hours (KWh) of electricity annually (or ~6,000 KWh / day). At an average rate of 8.5 cents per KWh, this equates to \$187,000 per store each year.**

Electric Demand

Typical trend (blue) & target (red)

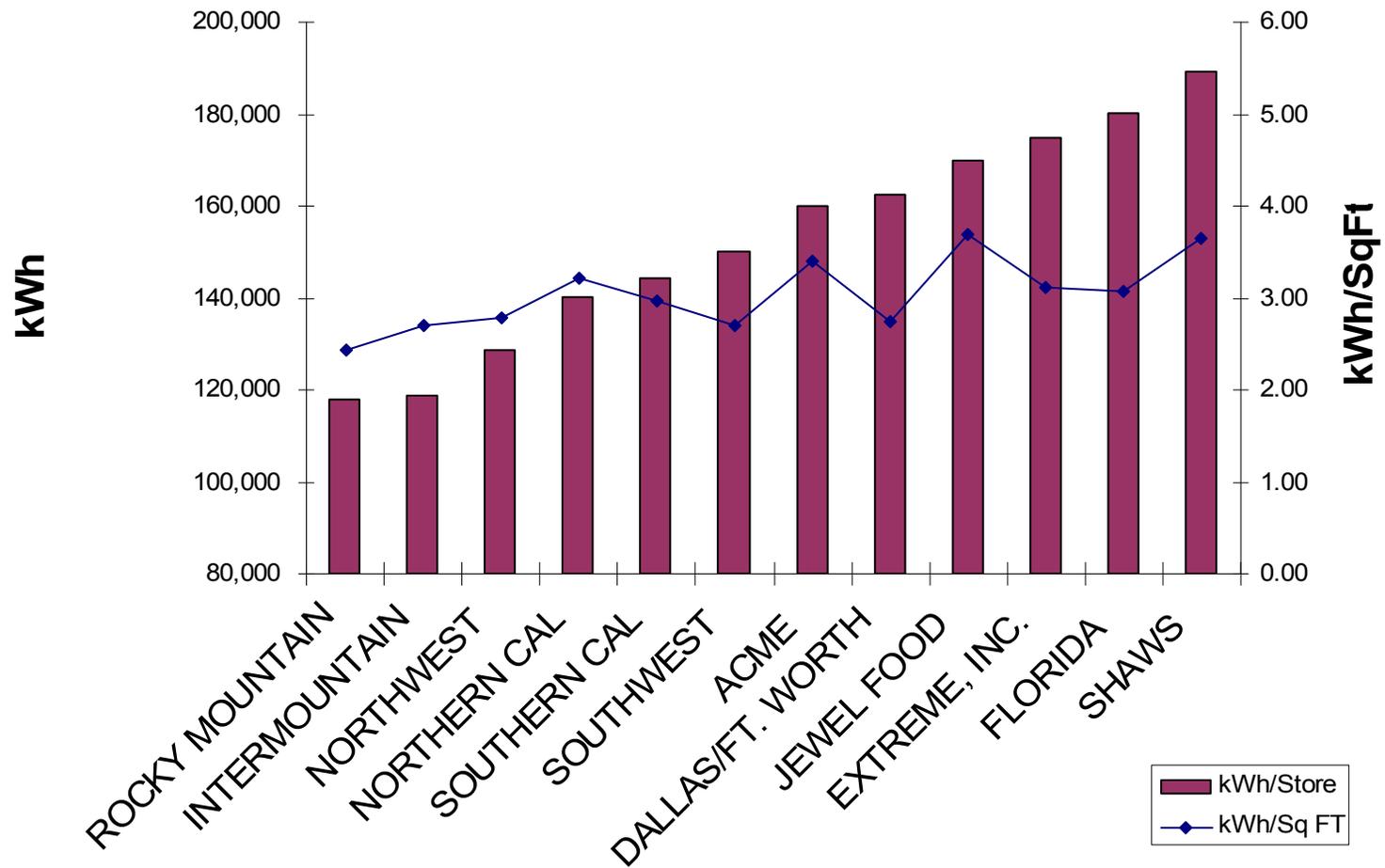


Achieved through:

- 1) Energy Conservation Initiatives
- 2) Energy Management Projects
- 3) Energy Monitoring & Reporting

Electrical Use Monitoring & Reporting

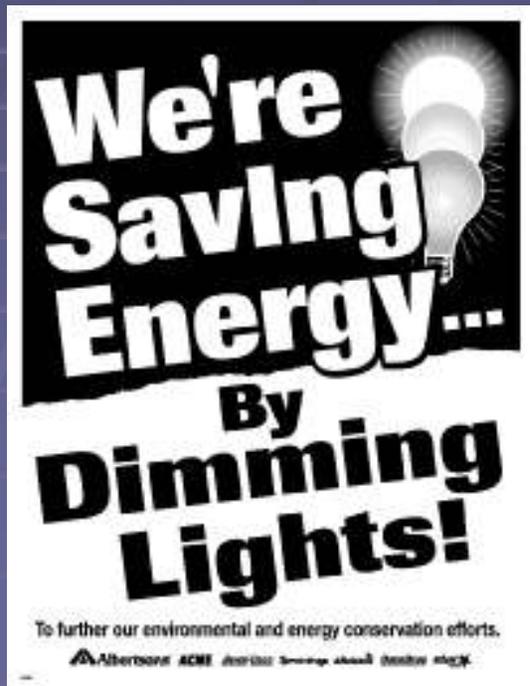
2006 Period 1 Electrical Energy Use per Store



Energy Conservation Initiatives (Fall 2005)



- ✓ Energy Captains
- ✓ Checklists
- ✓ Loss Prevention Audits
- ✓ Energy use scorecards



Energy Management Initiatives

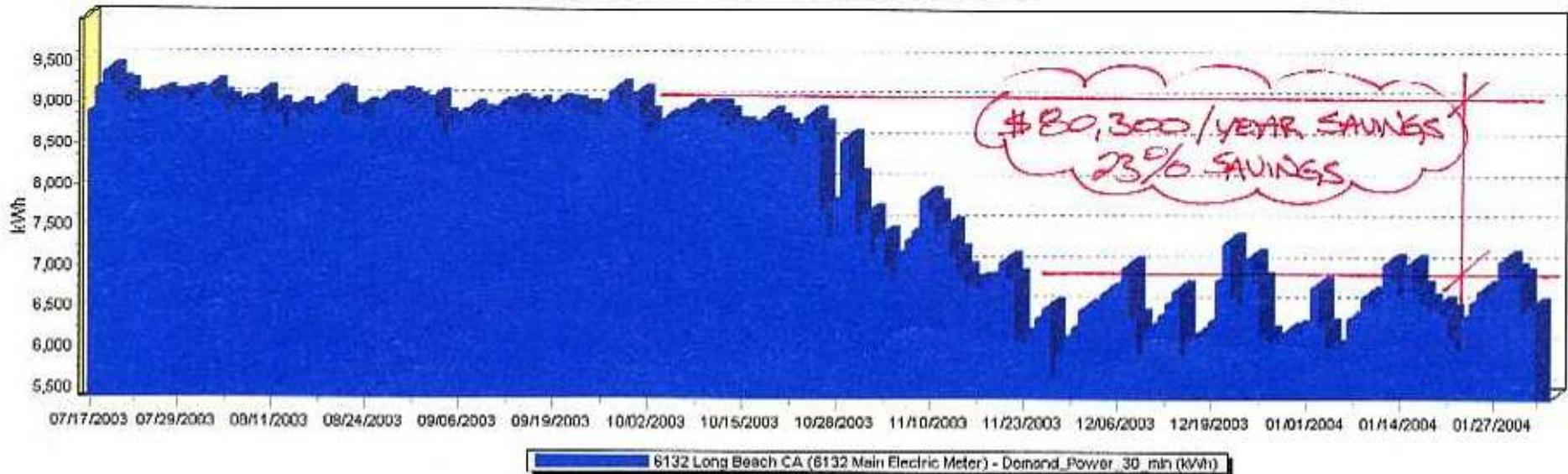
- Recommissioning
- Lighting Retrofits
- High Efficiency Motors
- EMS Retrofits

Since 2000, Albertsons has completed over 6,500 energy management projects estimated to have saved over 47 million KWh of electricity!

Before and After Recommissioning

Consumption Report

Daily Totals for 07/01/2003 through 02/01/2004



[View Tabular](#) [Download Data \(Excel\)](#) [Show Crosshair](#) [Show Line Graph](#) [Reset Chart](#)

Summary Values for 07/01/2003 through 02/01/2004

6132 Long Beach CA (6132 Main Electric Meter) Demand_Power_30_min ((GMT-08:00) Pacific Time (US & Canada); Tijuana)

| | | | | |
|-------------------|--|-----------------------|---|-------------|
| Total Consumption | Peak Interval | Avg Daily Consumption | Max Daily Consumption | Load Factor |
| 1,701,488.17 kWh | 435.60 kW @ Saturday, July 19, 2003 2:00:00 PM | 7,877.26 kWh | 9,361.50 kWh on Saturday, July 19, 2003 | 0.75 |

Display Options:

Year: 2003
Month: July
Day: 1

Start: 2003
End: 2004
Month: February
Day: 1

Show: Daily Totals

Show time-of-use breakdown

Maintain Between Start / End Dates

Set defaults for last: Day Week Month Quarter Year

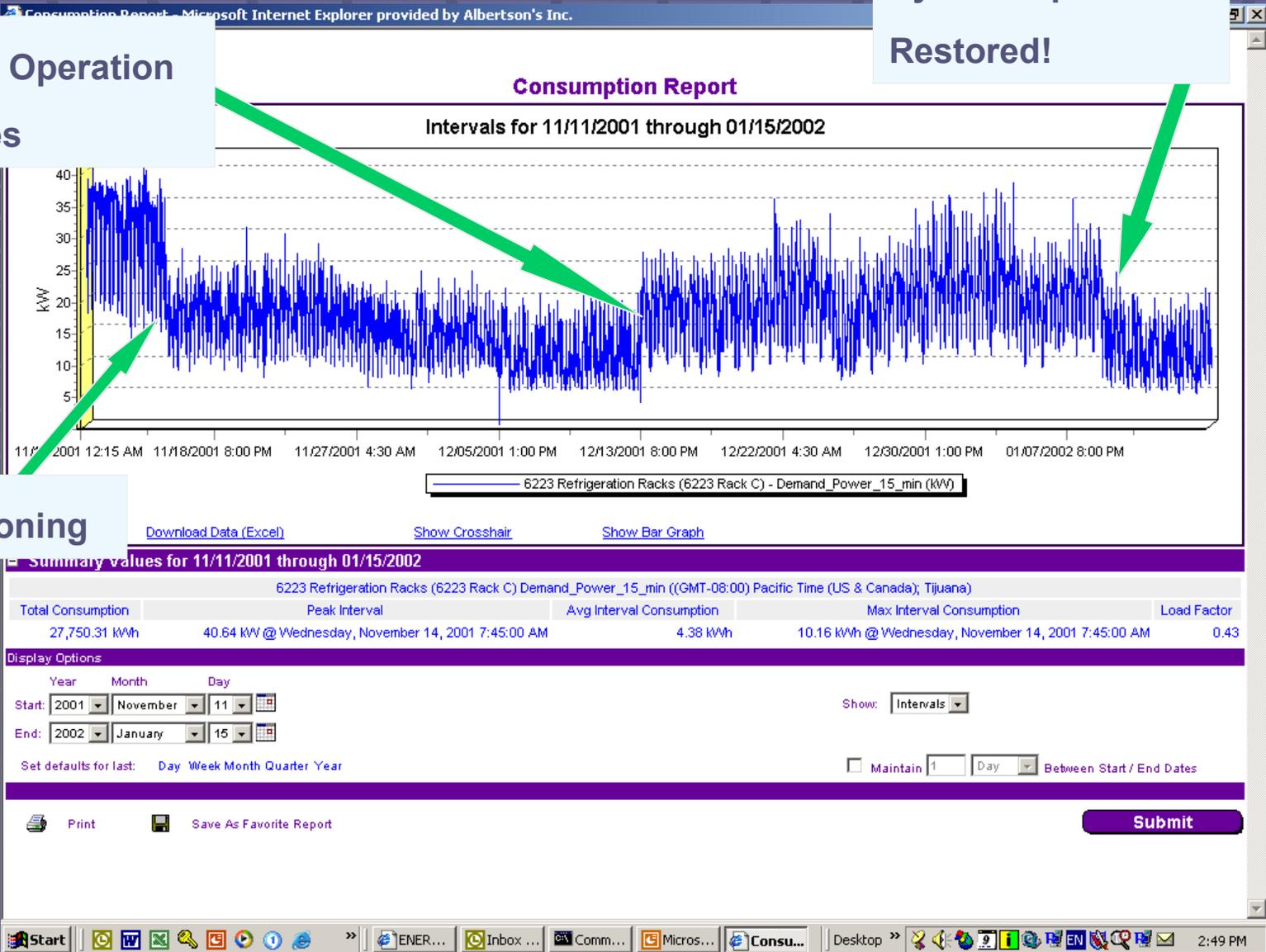
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Energy Monitoring

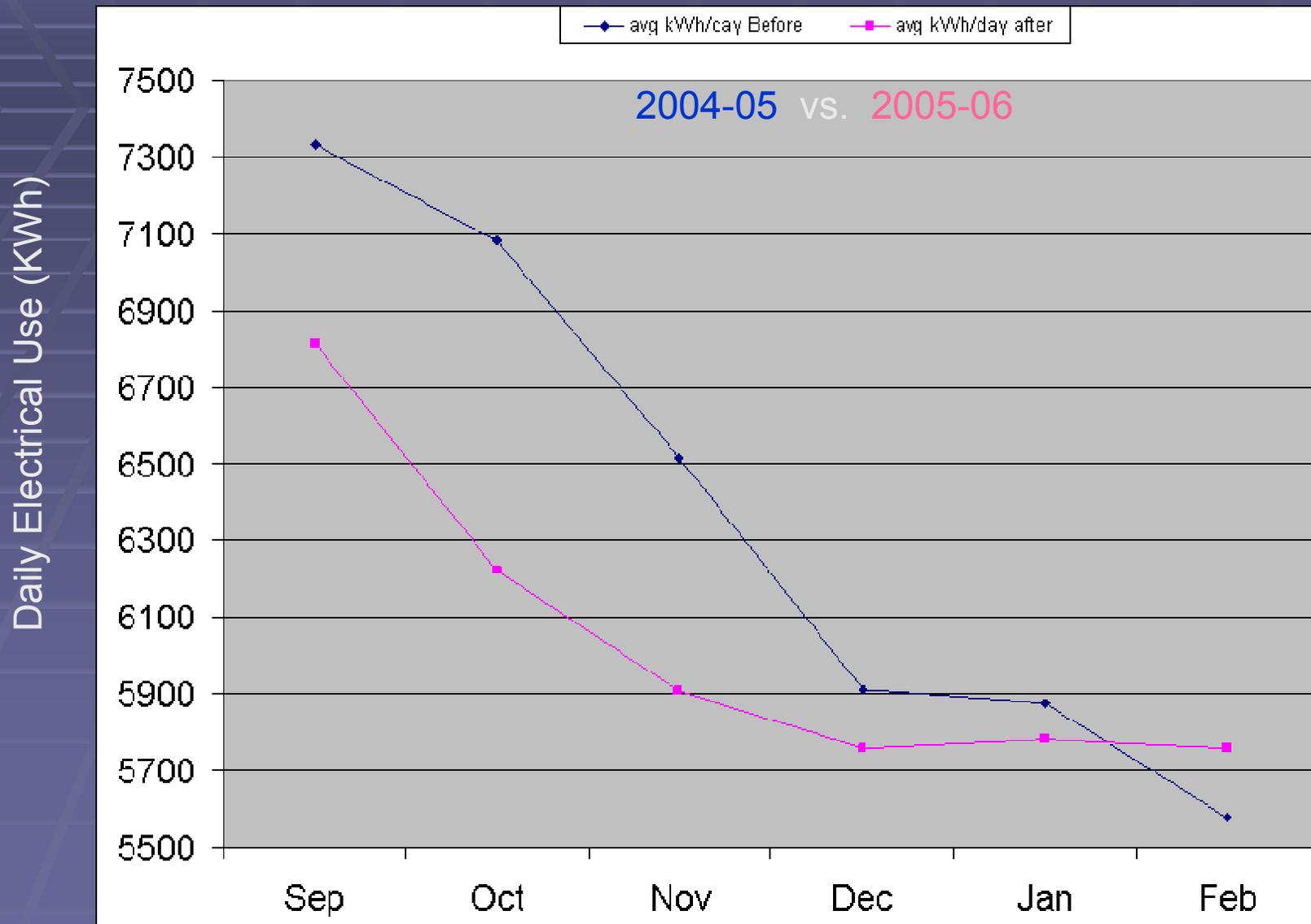
System Operation
Restored!

System Operation
Changes



Recommissioning

Energy Reduction Program Results (year over year)



N=597 food stores Company wide (excluding Shaws)

Emission Reduction Credits

- Lay claim to CO₂ not emitted by utility
- Use an Engineering firm to document kWh savings and convert to tons of CO₂
- Compile and market CO₂ ERCs
- Buyer is based in Canada – a signatory of the Kyoto Protocol
- Revenue used to cover added costs for LEED certification of new stores

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**Sustainable
Innovations LLC**

Additional Opportunities

- Choosing to purchase or produce renewable energy
- Buying Green Power
- Work with your supply chain to explore opportunities
- Consider carbon sequestration activities