Business Energy Efficiency
Implementing Successful Projects
Saving Energy – The Potential

You’ve heard it before ...

BIG
The Continuum

Know how you use energy
Get an energy analysis done

Do the easy things now
Low- and no-cost actions

Identify opportunities
Energy Star’s Portfolio Manager

Develop a plan
Energy Star’s Portfolio Manager

Make the financial case
Crunch the $’s to show investment potential
Know How You Use Energy

- Pay attention to energy bills
  - Chart for a year or more & look for anomalies
  - Determine energy use index (EUI)
  - Look for opportunities to reduce usage at charge points (peak demand, etc.)

- Use energy analysis programs
  - Online energy audit
  - On-site energy audit
The 7 Steps of an Energy Management Plan

Step 1: Make a commitment
Step 2: Assess performance
Step 3: Set goals
Step 4: Create action plan
Step 5: Implement action plan
Step 6: Evaluate progress
Step 7: Recognize Achievements

Source: http://www.energystar.gov/index.cfm?c=guidelines.guidelines_index
Case Study
Auto Dealer – LED Lighting Project

Total Project Cost: $45,194

Total Utility Rebates: $22,304

Estimate Annual Energy Savings: $14,206

Payback term: 1.61 years
Planning for Upgrade
Planning for Upgrade

Analyze Energy Use

Identify Opportunities

Getting Bids
Vetting Contractors

Ask the right questions
- What % of work includes EE specs?
- Are they up-to-speed on product energy efficiency standards?
- Do they know utility rebates well?
- Will they complete rebate paperwork?

Set Expectations
- Bids with qualifying efficiency standard
- Life expectancy of equipment provided
- Provide expected utility rebate as part of bid
- Provide 3 references for like EE upgrades
Making the Financial Case
Simple Payback

1.61 years
Return on Investment

\[
ROI = \frac{(Savings - Investment)}{Investment}
\]

\[
= \frac{($142,060 - $22,890)}{$22,890}
\]

\[
ROI = 520\%
\]

Is this a good investment?

Rate of Return = 62.5%
Finding the Money
Financial Incentives

Types of Financial Incentives

- Utility Rebates
- Government Grants
- Low-Interest Loans
- Non-profit Grants
- Federal Tax Deductions
- Other Opportunities
Electric Utility Rebates

- Cooling
- Lighting
- Compressed Air
- Motors
- Process Efficiency
- Recommissioning
- Energy Analysis
- Efficiency Controls
- Saver’s Switch

- Energy Design Assistance
- Efficiency Proposal
- Electric Rate Savings
- Energy Efficient Building
- Data Center Efficiency
Natural Gas Utility Rebates

Commercial Heating
Commercial Real Estate
Custom
Energy Analysis
Efficiency Controls
Natural Gas Rate Savings
Process Efficiency
Recommissioning

Energy Design Assistance
Efficiency Proposal
Energy Efficient Buildings
Other Opportunities

- City or County grants & loans
- Regional EDA Opportunities
- State Grants
- Federal Grants
PACE

Property Assessed Clean Energy

Any city, county, township, Economic Development Authority or Housing and Redevelopment Authority can start up and implements a PACE program.
Where to Turn for Help
### Useful Resources in Minnesota

<table>
<thead>
<tr>
<th>Resource</th>
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<tbody>
<tr>
<td>Energy Smart</td>
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<td>Center for Energy and Environment (CEE)</td>
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<tr>
<td>Minnesota Technical Assistance Program (MnTAP)</td>
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<td>Retired Engineers Technical Assistance Program (RETAP)</td>
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<td>Clean Energy Resource Teams (CERTs)</td>
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<tr>
<td>Eureka Recycling</td>
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<tr>
<td>Minnesota Division of Energy Resources</td>
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<tr>
<td>Your energy utilities</td>
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<tr>
<td>Your city economic development department</td>
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<tr>
<td>Your county or regional economic development programs</td>
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## Useful Resources (Nationwide)

<table>
<thead>
<tr>
<th>Resource</th>
<th>Details</th>
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<tbody>
<tr>
<td>U.S. EPA Energy Star Program</td>
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<td>U.S. DOE -- Energy Efficiency &amp; Renewable Energy</td>
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<td>U.S. DOE -- Industrial Technologies Program</td>
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<tr>
<td>Rocky Mountain Institute (CO)</td>
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<td>Focus on Energy (WI)</td>
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<td>Flex Your Power (CA)</td>
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<td>Alliance to Save Energy (Washington, D.C.)</td>
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<td>ASHRAE</td>
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<tr>
<td>Building Owners and Managers Association (BOMA)</td>
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Questions?
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