EfficiencyOne
Fostering Organizational Energy Management in Industry
Efficiency Nova Scotia’s Insights and Results
About EfficiencyOne

- Independent from government and electric utility; 3rd party, non-profit administrator of energy efficiency

- Canada’s first energy efficiency utility as franchise holder of Efficiency Nova Scotia

- Sells cost-effective “saved energy” to electric utility in competition with other energy sources (wind, hydro, biomass, etc.)

- Led by independent Board of Directors; regulated by UARB (Utility and Review Board)
Our Story

2009
Efficiency Nova Scotia Corporation Act
Creates non-profit, independent administrator for energy efficiency and conservation

2014
Electricity Efficiency and Conservation Restructuring Act
Creates Canada’s first energy efficiency utility

2015
EfficiencyOne
Efficiency Nova Scotia is a franchise operated by EfficiencyOne, official Licensee of the Province of Nova Scotia.

efficiencyns.ca
Continuous Energy Management

- Strategic Energy Management ("SEM")

- Energy Management Information Systems ("EMIS")
# Energy Management Information Systems

<table>
<thead>
<tr>
<th>ORGANIZATION TYPE</th>
<th>YTD SAVINGS GOALS (kWh)</th>
<th>YTD SAVINGS (kWh)</th>
<th>SAVINGS ($)</th>
<th>ACTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>LARGE INDUSTRIAL MOLDED PAPER</td>
<td>2,060,772</td>
<td>5,305,031</td>
<td>$477,450</td>
<td>SETTING ALARMS BASED ON ENERGY PERFORMANCE OF SUB-SYSTEMS/ PROCESSES</td>
</tr>
<tr>
<td>LARGE INDUSTRIAL FOOD PROCESSING</td>
<td>464,688</td>
<td>1,117,999</td>
<td>$99,500</td>
<td>TURNING OFF NON-ESSENTIAL LOADS DURING DIFFERENT MODES OF OPERATION</td>
</tr>
<tr>
<td>MEDIUM INDUSTRIAL AEROSPACE</td>
<td>284,321</td>
<td>104,696</td>
<td>$11,000</td>
<td>OPERATIONAL CONTROL AND MORE INFORMED SHUT DOWN PROCEDURES</td>
</tr>
</tbody>
</table>

*Above savings $ do not account for the savings experienced from peak control*
# Strategic Energy Management (SEM)

**June 2014 - May 2015**

- $359,139 OPERATIONAL & MAINTENANCE SAVINGS
- 3,711,217 KWH SAVINGS
- 6% KWH SAVINGS

<table>
<thead>
<tr>
<th>Company</th>
<th>Savings Goal (%)</th>
<th>Actual Savings (%)</th>
<th>Actual Savings (kWh)</th>
<th>Electricity Savings ($)</th>
<th>Other Fuel Savings ($)</th>
<th>Key Initiatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intertape Polymer Group</td>
<td>4</td>
<td>6</td>
<td>1,878,097</td>
<td>$173,079</td>
<td>$91,376</td>
<td>INTEGRATED SEM IN LEAN MANUFACTURING INITIATIVE</td>
</tr>
<tr>
<td>Northeast Nutrition</td>
<td>5</td>
<td>7</td>
<td>358,125</td>
<td>$37,900</td>
<td></td>
<td>EMPLOYEE SHUT IT OFF CAMPAIGN DRIVES SAVINGS</td>
</tr>
<tr>
<td>Pratt &amp; Whitney</td>
<td>3</td>
<td>2</td>
<td>310,822</td>
<td>$27,539</td>
<td>$5,677</td>
<td>INTEGRATED SEM INTO SUSTAINABILITY INITIATIVE</td>
</tr>
<tr>
<td>Shaw Brick</td>
<td>5</td>
<td>19</td>
<td>472,028</td>
<td>$49,954</td>
<td></td>
<td>ENERGY TEAM DRIVES SAVINGS</td>
</tr>
<tr>
<td>Tandus Centiva</td>
<td>3</td>
<td>11</td>
<td>692,145</td>
<td>$70,668</td>
<td>$302,892</td>
<td>EMPLOYEE ENGAGEMENT DRIVES SAVINGS</td>
</tr>
</tbody>
</table>
Multiple Benefits of Energy Management

• Maintain/Gain business in more competitive markets
• Help in achieving corporate sustainability goals
• Identification of unique energy efficiency projects to drive further financial benefit
Lessons Learned

• Customize communications
• Leverage existing practices
• Structure the approach
• Engage the organization
• Program adaptability
• On-Going support and engagement
Customer Feedback

• “EMIS is a structured approach to energy management that will be used as the main tool to establish energy efficiency culture” – COO

• “EMIS represents a culture shift into organizational energy management” – Process Engineer

• “Energy management is a big commitment, it takes everybody…Funny as it may sound, it’s a morale booster” – Production Manager
EfficiencyOne

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