Making Utility Data Accessible: Proactively Manage Energy

David Arkell, President & CEO 360 Energy

Mike Cadesky, Corporate Procurement Specialist, Samuel, Son & Co., Limited
Making Utility Data Accessible

- The Problem
- Energy Management Process
- Role of Utility Billing Data
- Customer Challenges to Implementing
- Utility Bill Data Accessibility Working Group (UBDAWG)
- National Energy Strategy
- Summary
360 Energy – Customer Performance

- **Level 1**: Awareness & compliance (90%)
- **Level 2**: Beyond the basics
- **Level 3**: Comprehensive energy/carbon management (Top 4%)
- **Level 4**: Competitive advantage from energy/carbon management (Top 1%)
CRISIS IN CANADA
The Problem

- Energy costs are not controllable
- Technology/capital expenditures seen as the fix
- Incentive mentality
- No management processes applied to energy

A disciplined approach to energy management is required
The Energy Management Process

- Information Gathering
- Assessment
- Building a Program
- Mandate
- Implementation
- Monitoring & Feedback
Information Sharing – The Role of Utility Billing Data

INTERNALLY & EXTERNALLY

Gas Utility
Engineering
Finance
Purchasing
HR
IT
Admin.
Operations
Marketing
Electric Utility
Software Developer
Industry Associations
Utility Bill Complexity.....

Details about your new gas charges

<table>
<thead>
<tr>
<th>Description</th>
<th>Volume (GJ)</th>
<th>Price ($/GJ)</th>
<th>Gas Cost ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer Charge</td>
<td>587.37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contract Demand Charge</td>
<td>1,924.44</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8,400 m3</td>
<td>451.68</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delivery to you</td>
<td>147.83</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Load Balancing Charge</td>
<td>24.31</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost Adjustment</td>
<td>75.42</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Commodity Charges

- GAE Fixed Price Purchases: 2,689.55 GJ @ $3.67/GJ = $10,406.84
- GAE Daily Index Purchases: 3,198.74 GJ @ $3.78/GJ = $12,096.62
- ATCO OPR Fee: 5,888.29 GJ @ $0.06/GJ = $352.74
- Management Fee: 5,888.29 GJ @ $0.09/GJ = $529.95
- Gas Cost Billing Adjustment: 5,888.29 GJ @ $0.01/GJ = $58.88

Total Gas Cost: $19,419.30

Energy Management (Usage/Day)

- Electricity (kWh) * 100
- Water (m³) * 10

360 Energy
Your Energy Network

Samuel
Multi Site Customer Challenges

Question: How long and how much does it cost to manually collect data from a utility bill?

Example:

Â 695 accounts for hydro, gas and electricity for all locations

Â Approximately 8400 bills received per year

Â Time required 0.5 FTE

= approx. $20,000 annually just to capture data!
A Solution

Utility Bill Data Accessibility Working Group (UBDAWG)
Potential Solutions

- On-line billing information (Utility websites)
- Green Button
- QR Code
- Electronic billing
- Electronic Data Interchange (EDI)

Recommendations to be made by end of 2015
Universal & Open Protocol

Open Protocol

Barcode on bill

Multiple Commercial System(s)
Processes for adding barcode to bill

MULTILITIES

MULTIPLE COMMERCIAL SYSTEM(S)
Processes for reading barcode and analysing data

CUSTOMERS
Canadian Energy Strategy

GOAL AND ACTIONS

GOAL 3.1
Improve quality of energy data across Canada.

Action 3.1.1
Collaborate with stakeholders in the energy sector to identify possible improvements to the identification, collection, and management of energy data, including greenhouse gas emissions in Canada.

GOAL 3.2
Increase awareness and understanding of energy in Canada.

Action 3.2.1
Encourage interested sectors and stakeholders to take a leadership role to improve access, encourage understanding, and use innovative methods to present and disseminate energy data, including greenhouse gas emissions and information to all users.

10% Canada’s Gross Domestic Product
Almost ten per cent of Canada’s Gross Domestic Product (GDP) is from the energy sector.

Hundreds of thousands of Canadians are indirectly employed in industries that support the energy sector, such as financial services, engineering services, construction and equipment manufacturing.

WORKING IN PARTNERSHIPS TO IMPROVE ENERGY INFORMATION IN CANADA
Reliable and credible information sources currently exist. Improving access, awareness, and understanding of energy must extend beyond information provided by government.

INITIATIVE:
Improve the availability of reliable and credible energy information, including utilities data, and explore consistent approaches to energy data collection and management across Canada by working in partnership with energy stakeholders, industry, and other sectors.
Summary

✓ Increase energy literacy throughout your organization

✓ Make energy usage and pricing transparent throughout your organization

✓ Have your organization fully utilize monthly utility billing in managing energy

✓ Maintain a focus in your organization on managing energy
Thank you!

For further information, please contact me at:

david.arkell@360energy.net
1-877-431-0332 ext. 221

www.udbca.org