

Efficiency
Vermont

NOVEMBER 15, 2016

Continuous Energy Improvement



GE Aviation

KEURIG
GREEN MOUNTAIN



Agri-Mark
FAMILY DAIRY FARMS

WEIDMANN

HUSKY

Keeping our customers in the lead



Energizer
Household Products
Keep Challenging
Keep Growing



THE
University of Vermont
HEALTH NETWORK

Central Vermont Medical Center

vermont
creamery



- Why was your program attracted to SEM?

Redefining relationships

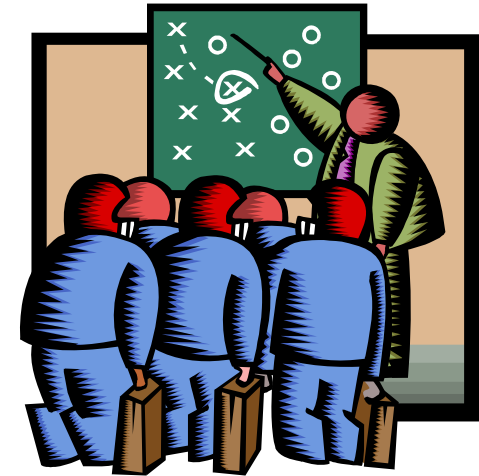
- ✓ Non-incentive, non-project **value-add**
- ✓ Holistic approach to managing energy
- ✓ Barriers to energy management
- ✓ Energy use **visible** to everyone in the company, from top management down.
- ✓ Energy as a **standard operating procedure**, similar to Safety, Quality and Production.



- What delivery models do you use/plan to use? What are the specific mechanics of this model?

Efficiency Vermont's CEI Program

- ✓ Large C&I customers
- ✓ Cohort Engagement – Peer to Peer
- ✓ Promoting energy management
 - Customer commitment
 - Energy Management Planning & Implementation
 - System for Monitoring, Tracking & Reporting Performance



CEI – Pieces and Parts

Continuous Energy Improvement (CEI) MEMORANDUM OF UNDERSTANDING AND COLLABORATION AGREEMENT



Efficiency Vermont commends _____ (The Customer) for its commitment to Continuous Energy Improvement (CEI), a comprehensive approach to energy management.

By signing this agreement, the Customer agrees to work with Efficiency Vermont towards persistent and sustained cost reductions in accordance with the criteria listed below. In return, Efficiency Vermont will provide technical assistance and necessary resources to support implementation. We recognize the commitment and the time and resources they will devote.

With the support of Efficiency Vermont, the Customer agrees to:

- Prioritize energy management within its business
 - Assigning a corporate sponsor
 - Creating an energy team responsible for maintaining visibility and metrics
 - Communicating goals and priorities to staff
 - Promoting energy awareness among employees
- Establish energy management processes and plans
 - Assessing energy management practices toward continued improvement
 - Setting goals with annual performance reviews and updates
 - Identifying additional opportunities for development of an annual implementation plan
- Collect and track energy performance with respect to goals and metrics
 - Measuring key factors that influence energy use
 - Collecting data and providing it to Efficiency Vermont
 - Analyzing data to support effective decision-making

TERM
This Agreement shall begin upon the date both parties sign the Agreement and shall be reviewed annually by Efficiency Vermont and the company's energy team.

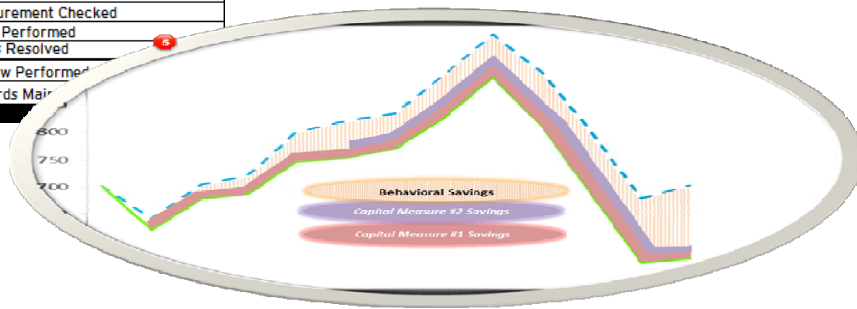
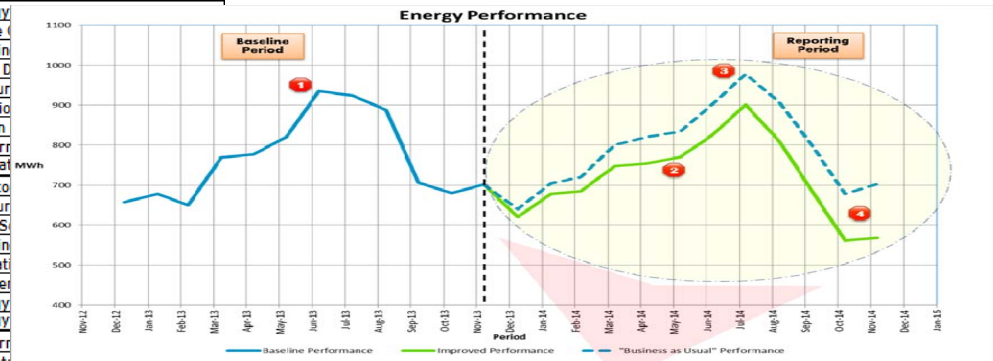
WE THE UNDERSIGNED AGREE TO THIS AGREEMENT.

EFFICIENCY VERMONT
Company: _____
Signature: _____
Printed Name: _____
Title: _____
Date: _____

Customer
Company: _____
Signature: _____
Printed Name: _____
Title: _____
Date: _____

This Agreement shall be signed by both parties upon the date both parties sign the Agreement and shall be reviewed annually by Efficiency Vermont and the company's energy team. The agreement shall remain in effect until terminated by either Efficiency Vermont or any of its employees, contractors, or agents. Notwithstanding to the extent of any other agreement, this agreement shall not be subject to the payment of any monies due from you to subcontractors, employees, agents, or other parties.

Process Step	Category	Milestone
Commitment	Senior Management	Corporate Sponsor Identified
		Energy Management Defined
		Resources Allocated
	Energy Policy	Culture Adopted
		Policy Written
		Procedures Defined
	Energy Champion & Energy Team	Commitments Designated
		Energy Champion Selected
		Authority Granted
Plan	Energy review	Reporting Executed
	Action plan	Energy Usage (Baseline)
Do	Implementation	EnPIs Defined
	Employee Engagement	Measurement
Check	Monitoring, measurement and analysis	Revisions
	Internal auditing	Action
Act	Management Review	Performance Evaluation



- How much savings can be expected from SEM offerings?

Evaluation – CEI Pilot Successes

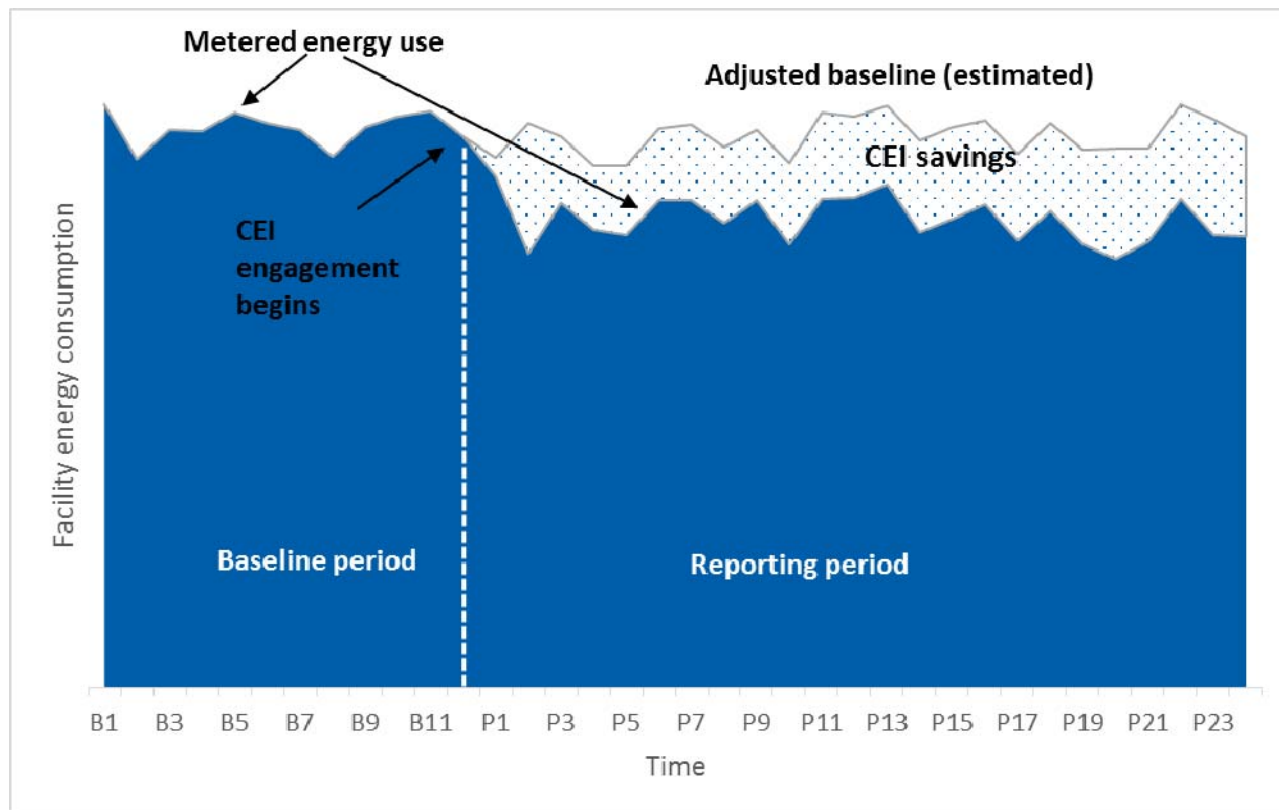
- Most valued program element - **Peer-to-Peer Interaction**
- Success with implementing **CEE minimum elements**
 - ✓ Customer commitment
 - ✓ Planning and implementation
 - ✓ Systems for measuring and reporting
- Communication and **partnership with EVT**

Evaluation – CEI Pilot Challenges

- **Finding time**—both as energy champion and in engaging employees
- Creating and **maintaining cross-functional team**; agreeing on priorities across departments
- Gaining and maintaining corporate level **commitment**
- Time and **distance required for workshop** attendance
- Making business case for sub-metering, **competing priorities**, identifying appropriate variables

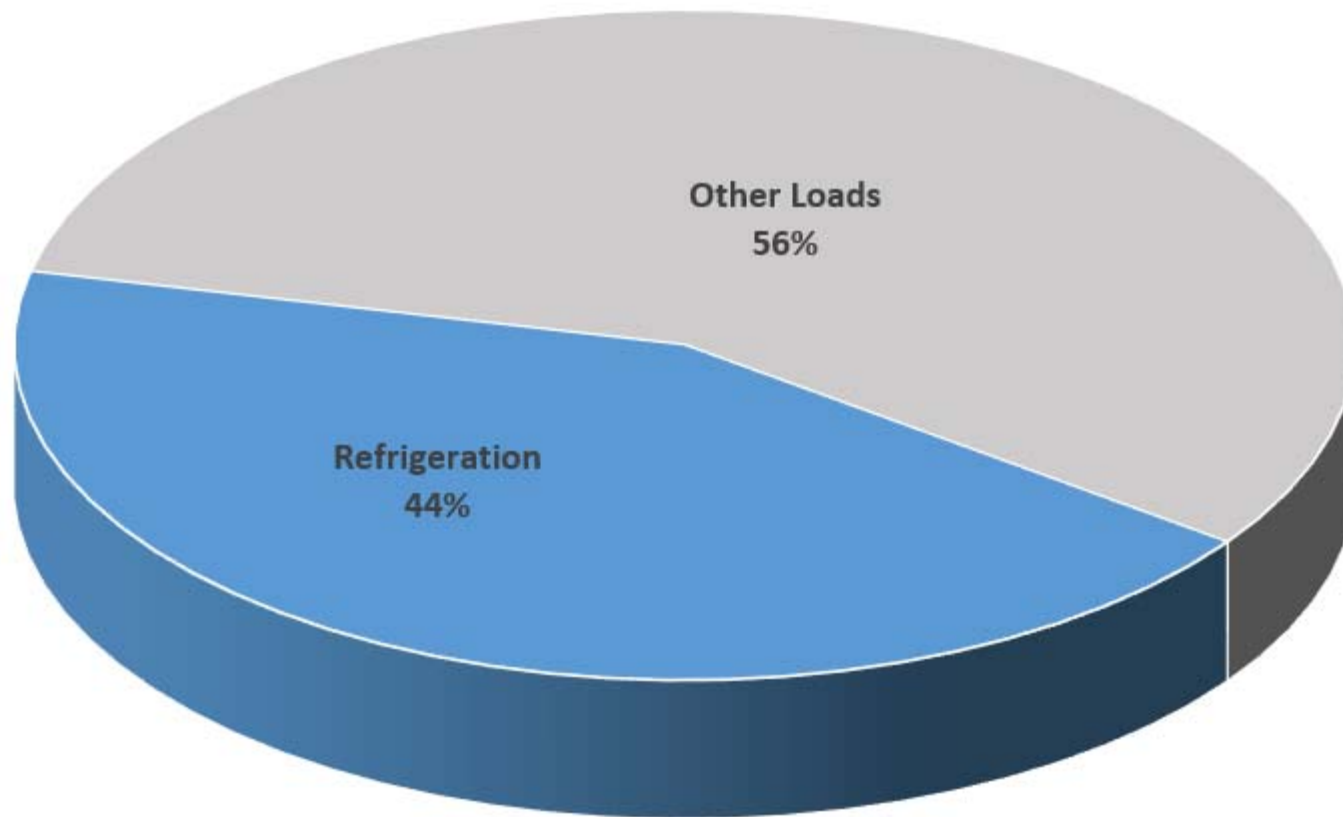
Evaluation Results

- ✓ CEI Savings = 3% *(captured via regression analysis)*
- ✓ Pilot proved cost-effective for measure life ≥ 3 years



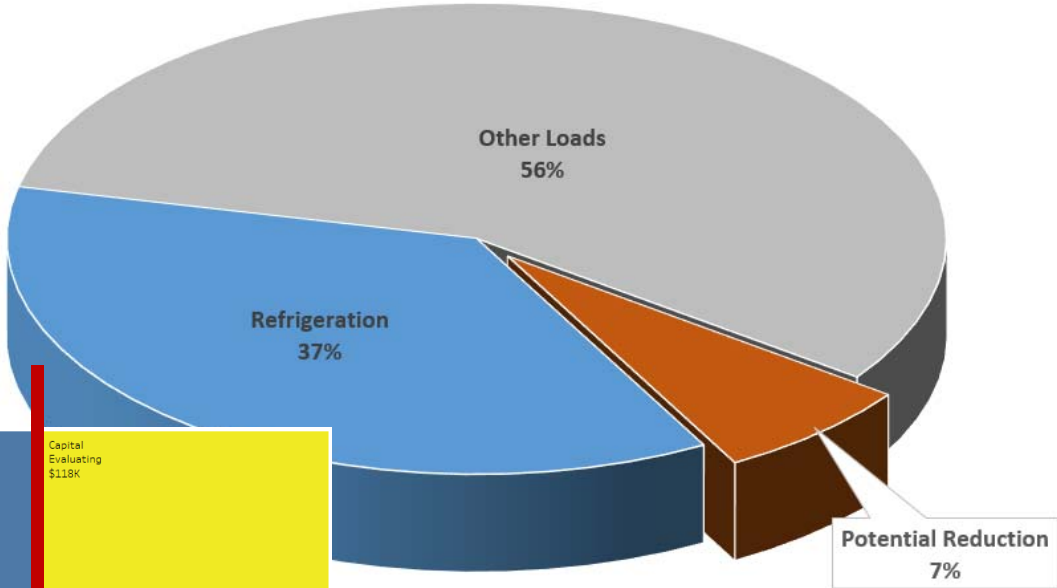
- How have programs evolved/blended their current industrial offerings with SEM programs?

Cohort 2: CEI with a focus



Cohort 2 – Identified Savings

Site	% Total
A	3.3%
B	8.1%
C	16.1%
D	11.4%
E	5.4%
F	6.0%
G	5.4%
Average	7.0%



Low Cost Opportunities

