

Strategic Energy Management Cohort Program

Custom Energy Solutions

Implementor: CLEAResult

2018/2019

Strategic Energy Management offers technical assistance, information and incentives to eligible industrial, institutional and commercial participants operating within the province of Alberta, with a GHG emissions profile above 5,000t (tCO₂e), to identify and implement energy efficient measures.



Energy
Efficiency
Alberta

Large Brewing Company Strategic Energy Management Case Study



Leading brewery saves millions with no capital investment

In January 2013, this leading brewery joined Strategic Energy Management (SEM), along with 12 other large industrial sites with the goal to identify and implement low/no cost electrical energy saving opportunities. Through SEM practices, the brewery achieved significant reductions in electricity usage.

The Opportunity

The 13,000 sq. ft. plant was experiencing a gap between target and actual energy reduction. A task force was organized to close the gap. The team, along with the active support of the plant manager, eagerly joined the SEM program to help close their performance gap. They were intrigued, but also skeptical about the SEM approach of finding opportunities to save energy without having to spend capital dollars.

The Solution

The brewery's energy task force was highly proactive and effective in adopting SEM employee engagement practices. They developed an energy awareness and training presentation for all employees that included tips on how to spot low/no cost opportunities. Through internal audits and employee suggestions, the team quickly developed a list of energy saving ideas such as shutting down empty conveyors and packaging equipment during non-production times.

The energy task team took advantage of SEM program technical resources to review their refrigeration and compressed air systems. These reviews resulted in identifying energy-saving set point and control settings adjustments and maintenance practices.

SEM gave this brewery the tools, including a model to track energy intensity, to continue their energy saving efforts over the long term.

SEM Savings at a Glance

3,072 tonnes
Year 1 SEM Savings

3,161 tonnes
Year 2 SEM Savings

+5%
Emissions Reduction

SEM Incentives



Operational & Maintenance Savings

Period	Unit	Rate
Year 1 Cohort	Tonne	\$ 40.00*
Year 2 Alumni Cohort	Tonne	\$ 40.00*

There is a cap of \$50,000 per participant per Cohort year.

*Year 2 Alumni Year O&M savings incentive is subject to change.

Milestone Payments



Period	Quantity	Rate
Year 1 Cohort	5/participant	\$500 each
Year 2 Alumni Cohort	3/participant	\$500 each

Milestone payments are paid at the end of Year 1 and end of Year 2 respectively.

Custom Energy Solutions Program Incentives

All SEM Cohort Participants will have full access to all CES incentives and offerings for each year they are in the SEM Cohort Program.



CES Incentive Details

- Scoping Audits (**up to 100% cost or \$8,000**)
- Engineering studies (**up to 100% cost or \$40,000**)
- Retro- and Re-Commissioning Investigations (**up to 100% or \$60,000**)
- Custom Project (**up to \$1 Million/project or \$2 Million/company**)

Estimate Annual Hours

This table shows the annual estimated number of hours by SEM activity and team role.

	Attend Sessions	Energy Team Meetings	Energy Tracking (M&V)	Employee Involvement Activities	Energy Project Work	TOTAL HOURS	% of year
Executive Sponsor	7	12	2	8	-	29	1%
Energy Champion	35	60	15	30	60	200	10%
Backup Energy Champion	8	30	-	40	40	118	6%
Energy Team Member	12	48	6	40	80	186	9%
Data Specialist	8	24	48	4	-	84	4%
Engineer	-	2	-	4	40	46	2%
Per Maintenance Tech.	-	-	-	4	40	44	2%
Per Supervisor	-	2	-	8	8	18	1%
Per Person – Gen. Workforce	-	-	-	4	-	4	0.2%

SEM Team Roles and Responsibilities

Executive Sponsor

- Communicates the policy
- Creates a sense of purpose
- Sets clear expectations
- Provides direction
- Provides necessary resources
- Engages supervisors
- Communicates success
- Recognizes, rewards

Energy Champion

- Assists team communications
- Drives activities
- Owns the opportunity register
- Creates a sense of urgency
- Creates enthusiasm
- Engages others - spreads responsibility
- Prepares and conducts effective meetings
- Keeps executive management engaged

Team Member

- Interfaces with their departments & work areas
- Identifies energy saving opportunities
- Offers subject matter expert advice
- Prioritizes energy saving opportunities
- Manages projects and initiatives
- Quantifies cost and savings
- Utilizes external and internal resources

SEM Executive Sponsorship Roadmap

	Action	Timing	Hours	Comments	Sem Coach / EnergyChampion – Support Tasks
1	Choose and commission an energy champion. Communicate role and expectations.	Prior to program start	1.0		SEM Energy Coach will provide outline for role and expectations.
2	Attend Workshop # 1 - Kick off / Building a Foundation.	Month 1	4.0	Attend meeting at offsite location.	
3	Review and sign off on Energy Policy/Charter.	Month 2	0.5	Options: E-mail, company newsletter or during existing company meeting(s). Meeting preferred.	Prepare final version of SEM Charter/Energy Policy and submit to Executive Sponsor.
4	Make SEM company-wide announcement, communicate energy charter and introduce energy champion & team.	by end of Month 2	0.5	Options: E-mail, company newsletter or during existing company meeting(s). Meeting preferred.	Prepare SEM program announcement (Refer to SEM Charter/Energy Policy).
5	Attend report out of SEM Plan from the opportunity register	Month 3/4	1.0	Meeting with SEM Energy Coach, Energy Champion and team.	SEM Energy Coach to provide opportunity register explanation and SEM Plan creation assistance
6	Support Employee Engagement Activity(s) by attending event(s) and providing feedback.	by Month 5	1.0	Example: Attend energy scan results presentation, sit in on employee training, etc.	Provide advanced notice for scheduling.
7	Mid-Year Executive Sponsor Update Meeting with Energy Team and CLEARResult	by end of Month 6	2.0	Review SEM Plan, energy model performance, discuss future O&M and capital measures	Prepare SEM status report #1.
8	Provide support to overcome resistance to change and to help implement energy saving initiatives.	As needed	3.0	Meet with site leader and personnel. Discuss initiatives at company operations and planning meetings.	Discuss obstacles and challenges with Executive Sponsor.
9	Review energy savings graphs and general project status.	by end of Month 7	1.0	Meeting with SEM Energy Coach, Energy Champion and team.	SEM Energy Coach will provide baseline and energy savings "CUSUM" report and charts.
10	Attend Energy Management Assessment and Planning Q&A session. Review & approve energy management plan.	by end of Month 8	2.0	Meeting with SEM Energy Coach, Energy Champion and team.	Schedule attendance. Finalize energy management plan.
11	Conduct a SEM project status review. Read SEM report and provide feedback.	by end of Month 9	1.0	Options: E-mail or meeting with energy champion. Meeting preferred.	Prepare SEM status report #2.
12	Attend final SEM workshop report out & celebration.	Month 12	4.0	Attend meeting at offsite location.	Prepare final report and presentation. Send a copy to the Executive Sponsor for review and ask for input.

Additional Recommended Activities

- Attend energy team meetings
- Attend additional SEM workshops
- Participate in data collection
- Hold monthly energy champion review meetings

Strategic Energy Management - Year 1 Workshop Schedule

Workshop #	Workshop Title	Delivery Format	Timing
Workshop 1	Cohort Kick-off	Group Workshop -1/2 Day	Month 1
Workshop 2	Site Review and Opportunity Assessment.	One-on-one Event - 1 Day	Months 2/3
Workshop 3	Review and Prioritize Opportunities - SEM Plan Creation	One-on-one Event - 1/2 Day	Month 3/4
Workshop 4	Measuring Energy and Modeling Energy Performance	Group Workshop -1/2 Day	Month 4/5
Workshop 5	Engaging Your Organization in Saving Energy	Group Workshop -1/2 Day	Month 5/6
Workshop 6	Mid-Year Executive Sponsor Update	One-on-one Event - 2 Hours	Months 5-7
Workshop 7	Implementation Follow Up & Capital planning	One-on-one Event - 2 Hours	Months 8-10
Workshop 8	Energy Management Assessment	One-on-one Event - 2 Hours	Months 9-11
Workshop 9	Sustaining Energy Savings / Report Out	Group Workshop -1/2 Day	Month 12

Strategic Energy Management - Year 2 Workshop Schedule

Workshop #	Workshop Title	Delivery Format	Timing
Workshop 1	Check delivery & Annual Planning	Group Workshop -1/2 Day	Month 2
Workshop 2	Topics TBD	One-on-one Event - 1/2 Day	Month 6
Workshop 3	Check delivery & Coaching	Group Workshop -1/2 Day	Month 8
Workshop 4	Progress Report: Topics TBD	One-on-one Event - 1/2 Day	Month 12

Contact Us

Contact us at customsolutions@efficiencyalberta.ca or call (403) 800-8947 for enrolment details.