

Business and Energy Sustainability

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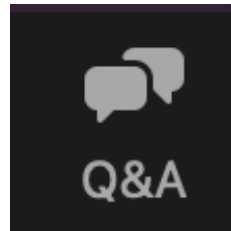


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We look forward to hearing from you

Please put all your questions into the questions section with this icon.





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Overview of Business and Energy Sustainability (BES)



Benefits of BES

(PRIME/EUA/RCx/SEM/O&M)

- BES programs integrate well with sustainability goals
- Provide unique support for manufacturing
- Includes cadre of approved contractors with strong expertise





**Process
Re-engineering for
Improved
Manufacturing
Efficiency (PRIME)**

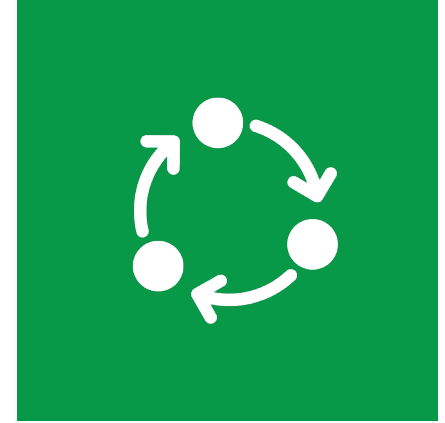
Process Re-engineering for Increased Manufacturing Efficiency



- Improve product quality
- Improve production efficiency
- Improve throughput



- Implement lean manufacturing techniques



- Attain measurable process improvements and waste reduction



PRIME Incentives

Events **one and two:**

- Paid 100% by the utility
- Capped at \$9,000

Events **three and four:**

- Paid 50% by the utility
- Capped at \$4,500



PRIME Eligibility for Small Manufacturers

- Manufacturing customers with demand <150 kW
- Same program offering
- Same incentive offerings
- Qualifying projects are <\$0.09/Lifetime kWh
- Ongoing evaluation of offering

Eversource Only

Approved PRIME Consultants

Eversource:

- CONNSTEP
- Daniel Penn Associates
- Leanovations
- New England Lean Consulting
- Sixth Floor Consulting Group

UI:

- Daniel Penn Associates



Energy Utilization Assessment (EUA)



Energy Utilization Assessment (EUA)

- The EUA is a process-focused comprehensive energy assessment for an industrial facility.
- The assessment will produce a detailed report for the customer
- The assessment is intended to move to project implementation



Energy Utilization Assessment (EUA)



Facility walk-through



Comprehensive facility assessment



Detailed assessment report

Energy Utilization Assessments Incentives

Eversource and UI will provide the following incentives for participating EUA customers:

- 50% of the study cost upon delivery of report (up to \$20K Utility co-pay)
- \$0.05/kWh and \$0.25/CCF per annual savings for measures implemented from the report – up to 50% of the remaining study cost





Energy Utilization Assessments Incentives for Small Manufacturers

Eversource is expanding eligibility for EUA participation for customers between 500,000 kWh and 1.5 m kWh annual consumption

- Eversource provides a co-pay up to \$5,000 for qualifying participants
- Customers can earn back their co-pay based on implemented savings

Eversource Only

Approved EUA Consultants

Eversource:

- Loureiro Engineering
- QGM Consulting
- Cascade Energy

UI:

- TRC Engineers
- Loureiro Engineering
- JK Muir
- DNV Energy Insights (ERS)





Retro-Commissioning (RCx) and Virtual Commissioning

Retro-Commissioning (RCx)

Retro-commissioning helps your facility reduce waste energy with a study that identifies operation and maintenance and equipment control strategies.

The ultimate goal of the RCx program is to enhance control strategies to improve building energy performance.



Retro-Commissioning (RCx) Eligibility/Process

- Customer facilities over 100,000 square feet
- Requires DDC based EMS with trending capabilities
- Requires ENERGY STAR Benchmark
- Customer to submit RCx Application available on www.energizect.com
- **No-cost survey** provides scoping of opportunities
- Investigation (with customer co-pay) provides more detailed review of opportunities and savings
- Implementation of Identified measures



Retro-Commissioning Incentives



- RCx incentives offerings are as follows:
 - 50% of the investigation paid
 - Capped at \$20,000
- Co-pay refunded if 50% of high-impacted measures are implemented
- Incentives for implementation of RCx Measures:
 - Greater of \$.50/kWh or \$1000/kW and \$5/ccf
 - Implementation incentive capped at 50% of installed costs

Retro-Commissioning Approved Vendors

Eversource:

- Burton Energy
- Colliers International
- DNV
- Resource Innovations
- Sustainable Engineering Solutions
- The Stonehouse Group
- Wendel Energy Services
- Environmental Health and Engineering

UI:

- DNV Energy Insights (ERS)
- Rethinking Power Management (RPM)





Virtual Commissioning (VCx)

UI Customers Only

Virtual- Commissioning (VCx)

This is a unique, no-cost program that takes an innovative approach to finding Operational & Maintenance energy savings.

Done completely virtually, the vendor will analyze your AMI meter data related to weather, facility type, and other operational details to discover unseen energy savings opportunities.



UI Customers Only



Strategic Energy Management (SEM)

Strategic Energy Management (SEM)

Strategic Energy Management is a continuous process of planning, implementation, and monitoring energy consumption and operational practices to provide a path for achieving energy-savings goals



Ad hoc Approach to Energy Management

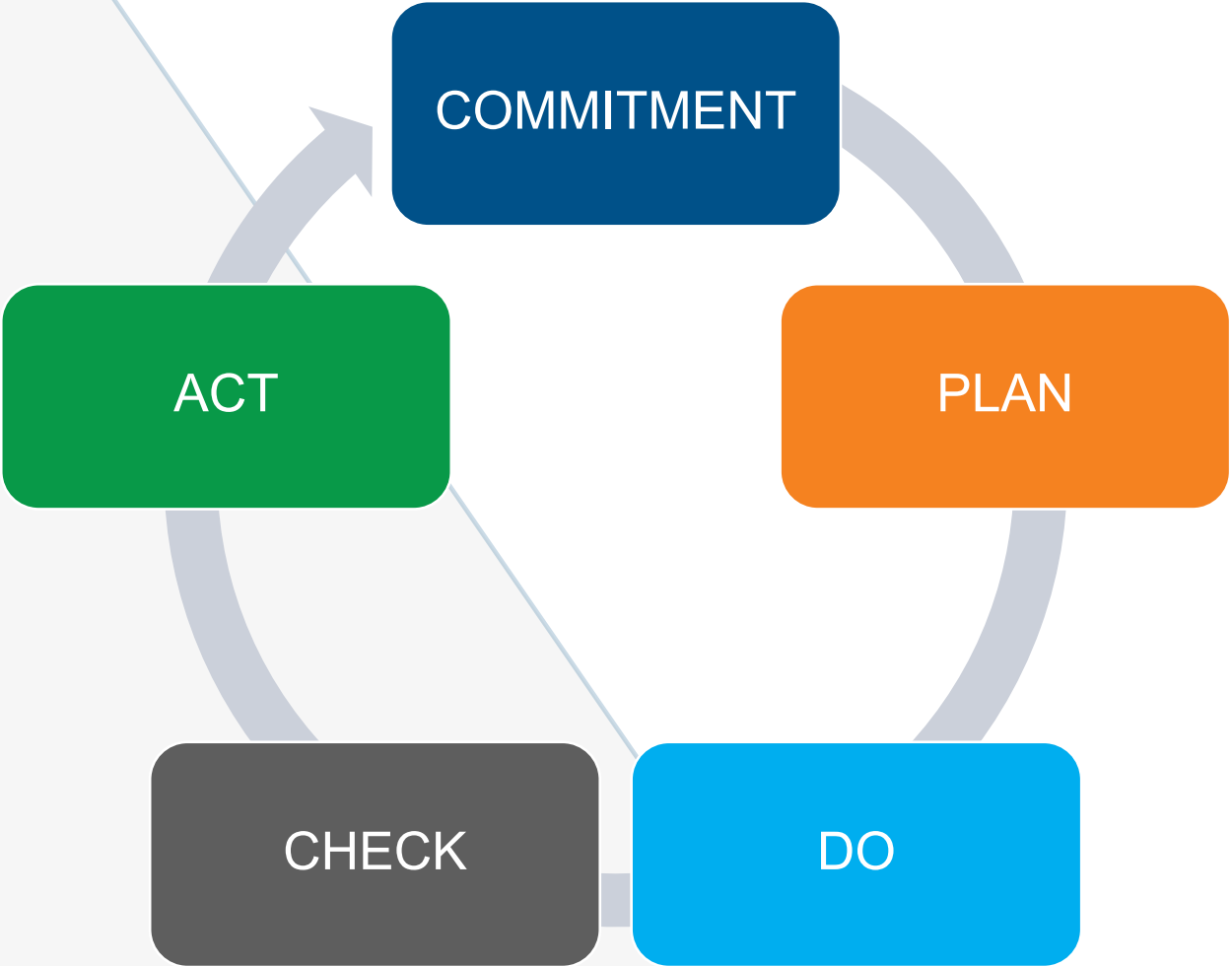


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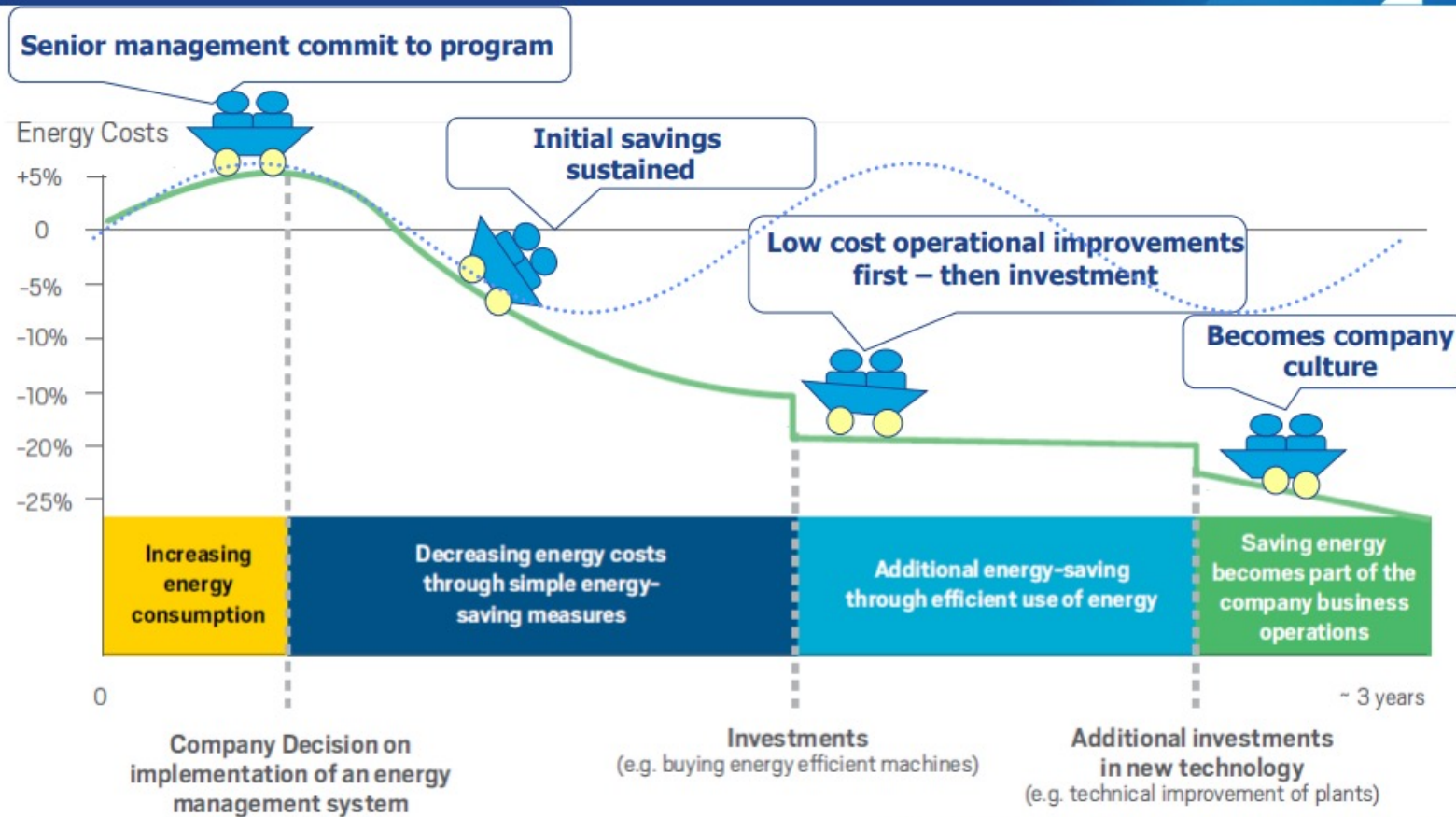
Source: UNIDO 2010



SEM- Structured Approach to Energy Management



Structured Approach to Energy Management



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Source: Kahlenborn et al. (2012), based on Lackner & Holanek (2007)



What are the key benefits of SEM?



Reduced Energy Costs



Customer Recognition



Reduced Carbon Footprint



Potential for Utility Rebates



Improved Operations



Collaboration with Experienced Coaches

Eversource SEM Incentives

Incentives currently provide fixed incentives for SEM Measures implemented

- \$1,000 for 1 or 2 low/no-cost SEM measures
- \$2,500 for 3-5 low/no-cost SEM Measures
- \$5,000 for >5 low/no-cost SEM Measures



UI SEM Incentives

UI incentives for verified SEM energy savings are currently:

- \$0.02/kWh
- \$0.10/CCF



SEM Approved Providers

Eversource:

- Cascade Energy
- Energy350

UI:

- CLEARResult Consulting





Operations & Maintenance

Operations & Maintenance Program Details

- All commercial, industrial, or municipal customers of any size.
- Customers who need to identify energy inefficiencies and opportunities with their HVAC and industrial production systems may participate.
- This program is not intended for normal preventive maintenance and repetitive procedures or to subsidize major equipment purchases.
- Eversource and UI customers on a commercial or industrial rate can participate in electric energy efficiency measures. CNG, SCG or Eversource customers on a firm commercial or industrial rate can participate in natural gas energy-saving measures.

O&M Program Incentives for Air Leak and Steam Trap Repairs

Avangrid O&M Incentives

- Air Leak and Steam Trap Studies:
50% up to \$5,000 once repairs are completed
- Air Leak Repairs:
Lessor of 40% of cost or \$.40 kWh/Saved
- Steam Trap Repairs:
Lessor of 40% of cost or \$4.00 CCF/Saved

Eversource O&M Incentives

- Air Leak and Steam Trap Studies:
50% capped at \$20K
- Opportunity for customer to earn back their co-pay for air leak studies
- Steam Trap Survey customer co-pay returned if all traps repaired
- Air Leak Repairs:
Lessor of 40% of cost or \$.40 kWh/Saved
- Steam Trap Repairs: Lessor of 40% of cost or \$4.00 CCF/Saved



Questions

Thank you

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