



New York State Energy Research and Development Authority

Industrial Energy Programs Breakfast Meeting

March 13, 2018

Goals- Industrial

Linking energy efficiency and clean energy to core business processes connects the facilities' energy use to their bottom line and provides a holistic approach to energy management

- IPE & FlexTech: 421,700 MWh; 3,586,000 MMBtu
- Strategic Energy Management Pilots: 52,500 MWh- 406,000 MMBTu
- On Site Energy Manager Pilots: 42,000 MWh- 500,000 MMBTu
- Real Time Energy Management: 67,050 MWh- 992,500 MMBtu

Resource Acquisition Programs Extended

- FlexTech
 - Technical Assistance (PON 1746) through 12/31/19
 - Consultant Statewide Services (RFP 3628) through 6/30/26
- Industrial and Process Efficiency (IPE)
 - Incentives (PON 2456) through 12/31/19
 - Focusing on process efficiency
 - No longer incentivizing lighting and/or non-process related space conditioning

FlexTech Program

- Cost-shared technical services to help businesses make intelligent energy decisions
- Identify and prioritize energy-saving opportunities through energy studies
- Provide unbiased information and objective insights to help you make informed decisions about potential energy projects
- NYSERDA will cost-share up to 50%; capped at \$500,000 on eligible studies

- General Feasibility Studies
- Energy Master Planning
- Industrial and Process Efficiency Analysis
- Data Center Efficiency
- Combined Heat and Power

Facilities must pay into the electric System Benefits Charge (SBC)

Industrial and Process Efficiency Program

Offers performance-based incentives to offset the cost of energy efficiency projects at manufacturers and data centers

- Industrial Manufacturing Improvements – produce faster, better and at a lower energy-per-unit cost
 - Throughput increases
 - Scrap reduction
 - Quality improvements
 - Controls optimization
 - Yield improvements
 - Support system upgrades
- Data Center Improvements – optimize IT and facility infrastructure to improve energy per unit of computing
 - Server upgrades
 - Server virtualization
 - Storage consolidation
 - Airflow management
 - UPS upgrades
 - Cooling system upgrades

Clean Energy Fund (CEF) Industrial Strategies

- Engineer on Demand
- On-site Energy Manager
- Strategic Energy Management
- Real Time Energy Management

- Started 2016
- Tackles soft costs and barriers
- Market-driven, flexible strategies that respond to market needs
- *Goals of CEF:*
 - GHG emissions reductions*
 - Customer bill savings*
 - Energy efficiency and clean energy generation*
 - Mobilization of private sector capital*

“TEST – MEASURE – ADJUST”

Engineer on Demand

Engineer on Demand is a technical assistance offering that helps integrate energy efficiency into current lean approaches

- Up to 50% cost share, capped at \$500,000
- Two options:
 1. Participation and engagement in on-site, multi-day, continuous improvement events to help quantify the energy benefits of your continuous improvement activities
 2. Comprehensive on-site assessment to identify and quantify specific lean and energy efficiency opportunities

On-site Energy Manager (OsEM) PON 3701



- Builds on previous Industrial OsEM pilot (PON 3334)
 - 6 Industrial OsEM engagements are underway; preliminary estimates from site targets suggest potentially significant
 - Continues 75% cost share
 - Adds bonus to encourage continuation of role and energy savings
- Offers flexible participation:
 - Open enrollment solicitation through December 2019
 - Commercial & Industrial sites are eligible
 - Full or part time OsEM; can be new hire, contracted staff, or hybrid of supplementing permanent staff with contract staff
 - Agreement (Purchase Order) is with applicant (C&I customer)

<https://www.nyserda.ny.gov/osem>

Energy Manager Testimonials

- Shared early successes at OsEM NYSERDA webinar for Pilot 2
 - Berry Global - 24x7 manufacturing, Macedon, NY
 - Corning Diesel Manufacturing plant, Painted Post, NY
- Corning Global Energy Management web article:
 - <https://www.corning.com/worldwide/en/sustainability/articles/preservation/global-energy-management/corning-plant-working-with-energy-manager-through-NYSERDA-program.html>
- **The Bottom Line on Energy Management**, Independent Electricity System Operator (IESO), Ontario
 - <https://saveonenergy.ca/Business/Program-Overviews/Energy-Managers/Ask-the-Experts.aspx>
 - <https://saveonenergy.ca/CMSPages/GetFile.aspx?nodeguid=a2aad9cd-9b46-44f6-a2ab-8540d77b7b7d>

Strategic Energy Management (SEM)

Linking energy efficiency and clean energy to core business processes connects the facilities' energy use to their bottom line and provides a holistic approach to energy management

- 2017 SEM Cohort:
 - Cohort of 8 industrial manufacturers is underway
 - Preliminary energy models are completed for all participants; kick-off, workshops, and Treasure Hunts to identify quick wins and savings opportunities have been held
 - Workshops include: Establishing an SEM Program, Saving Energy, Tracking Energy Performance, Engaging Employees, Making it Stick, Celebrating Accomplishments

- **Applications to next Cohort due April 11, 2018**

<https://www.nyserderda.ny.gov/SEM>



Real Time Energy Management (RTEM)

Real Time Energy Management allows firms to gain deeper insight into energy usage characteristics. The availability of high-frequency data collection and analysis enables both immediate corrective action and more robust long-term strategic planning.

- 30% cost-share for EMIS and analytical services
 - Vendors will need to be NYSERDA qualified
 - Covers associated implementation costs (e.g. metering/sub-metering, IT, etc.)
 - \$155,000 available per site

<https://www.nyserdera.ny.gov/RTEM>



Questions

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