

Emerging Technologies & Accelerated Commercialization (ETAC-CI) Program

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*“Advancing innovative energy solutions in ways that
improve New York’s economy and environment.”*

**ETAC-CI
Informational Webinar
May 19, 2014**



Why ETAC?

Challenge:

- Emerging technologies and strategies provide expanded opportunities for electric and gas energy efficiency and load management but face barriers to widespread market adoption
- **Reasons include:**
 - Lack of track record of performance in New York
 - Lack of independent data on potential energy and energy cost savings
 - Customers unaware of technology
 - Requires change to standard practices (e.g., construction or maintenance practices, procurement channels, etc.)
 - Regulatory or permitting challenges

Why ETAC?

Solution:

- Accelerate market introduction of commercially available, yet under-used energy-saving and load-reduction technologies or strategies through:
 - multi-site and high visibility demonstration projects
 - performance validation, including measurement and verification (M&V) of energy savings
 - outreach to showcase project findings and results

NYSERDA's ETAC Program

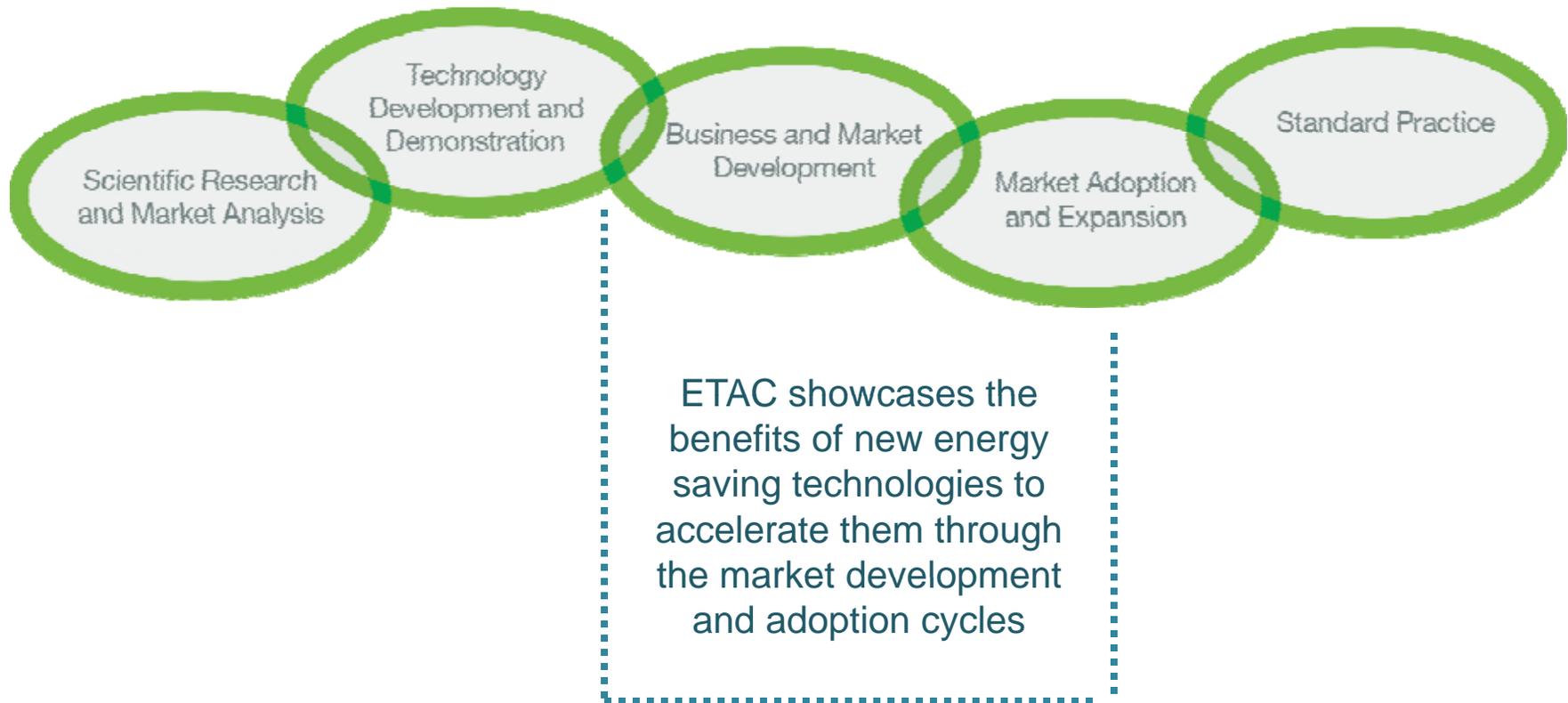
- \$30 M budget – 2012-16; delivered by sector
- Residential, Multifamily programs
 - About \$5 M each
 - First rounds closed, 2nd solicitations expected 2Q 2014
- Commercial/Institutional
 - About \$19 M
 - Open enrollment program through 2016
 - Competitive solicitation 2Q 2014, two due dates anticipated

What is an ET?

What is an emerging technology or strategy?

- Commercially available energy-efficient and/or load-reducing technologies, systems, or approaches that have significant energy saving potential but are underused in New York State
- Products are tested, licensed, code-compliant, UL-listed, meet or exceed minimum standards
- For use in non-residential buildings; not process or manufacturing related, transportation, renewables, or biomass

Where does ETAC fit?



Commercial/Institutional ETAC

Open Enrollment Program Status (PON 2689):

- Launched May 2013
- Seven projects underway, more in development
- Fifty demonstration sites
- Wide variety of demonstrations
- About \$2.8 million available

ETAC-CI Projects

- Energy savings and/or load management benefits
- Replicability across New York State
- Performance data from previous projects
- Applicant must identify clear path to market
 - Understanding of key market or regulatory obstacles, and avenues to address/overcome them
 - Target market, best applications identified
 - Supply chain development planned or underway
 - Sales/marketing efforts planned or underway

Focused Demonstration Project

Advanced Lighting Demonstration

- Technology – advanced lighting integrating controls, daylighting, shading, task tuning
- Project lead –
Green Light New York
- Two high-rise office buildings in NYC (one floor each)
- Multiple combinations of lighting controls and shading technologies to be demonstrated at each site
- NYSERDA and DOE-funded project, LBNL conducting M&V



Focused Demonstration Project

Advanced Rooftop Unit Control Retrofit



- Technology –
Transformative Wave
Technologies, Inc.
“CATALYST” unit
- Project Lead – Sure Temp
Co., Inc.
- Five sites in central NY–
30 units

Energy Performance Validation Project

Steam/Hot Water Radiator Control Retrofit



- Technology – insulated radiator enclosure with thermostatically controlled fan
- Project Lead – Radiator Labs
- Two sites in NYC

ETAC-CI Program

PON 2689

Focused
Demonstrations

Energy Performance
Validation

Full Cost of
Performance
Validation Services
+
60% Cost Share of
Demonstration Costs
up to \$250,000 per
project

Full Cost of
Performance
Validation Services

Open Enrollment Program – Available Now
\$3.3 Million Available
Through 2016 (or until funds run out)

PON 2844

Large Scale Demonstrations

Under Development
*Focus on large-scale/high-visibility
demonstrations*
Larger per-project funding
*Two categories: technologies
(products) and strategies*

Competitive Project Selection –
expected 2Q 2014
~\$8.5 Million Available
Two Due Dates Expected

Focused Demo Targeted Categories

Currently three categories, focused on:

- Energy savings and load management (demand response, demand management, and/or energy storage) through automation, scheduling, and/or controls
- Data analytics and performance data, providing actionable information
- Deep energy savings approaches

May change over life of program

ETAC-CI Key Benefits

Performance Validation

- Goes beyond M&V of energy savings to include other performance factors
- Identifies non-energy considerations, including factors that may enhance or inhibit market adoption
- Provides independent validation of performance
- New York showcase – local results

ETAC-CI Key Benefits

Outreach

- Case studies developed and shared broadly
- Website, webinars, press releases, site tours and presentations provide exposure for both technology/strategy and host site
- Host sites demonstrate leadership in sustainability and have access to leading-edge energy-saving technologies

Who Can Apply?

- Any company, entity or team is invited to participate; teaming is encouraged
- Applicants may include, but are not limited to:
 - Developers, manufacturers or vendors of new technologies or approaches
 - Building owners
 - Trade or professional organizations or utilities
- Interested building owners can sign up to host a demonstration

Applicant Responsibilities

- Recruit 2+ project sites as Demonstration Host Sites
- After project is approved:
 - Develop and implement the project, including installation of the technology
 - Support M&V process; provide access to relevant data, staff, and equipment
 - Provide semi-annual and final project performance reports to share findings
 - Perform outreach activities such as webinars, site tours, and case studies

Building Owner Participation

Matching Process Available

- NYSERDA collects contact information from interested building owners and from project developers seeking additional demo sites
- NYSERDA shares project developer info with building owners, who can choose to contact the project developers they are interested in
- See website for more details:
nyserderda.ny.gov/etac-ci

ETAC-CI Website

A developing resource to include:

- Project briefs for ongoing projects
- Case studies at project close
- Primers on emerging topics, includes:
 - NZE Buildings
 - Advanced Thermostats
 - Energy Storage
- Links to other ET programs and resources

Stay tuned!

Thank you!

Questions?



Contacts

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