

Commercial/Institutional Emerging Technologies and Accelerated Commercialization (ETAC)

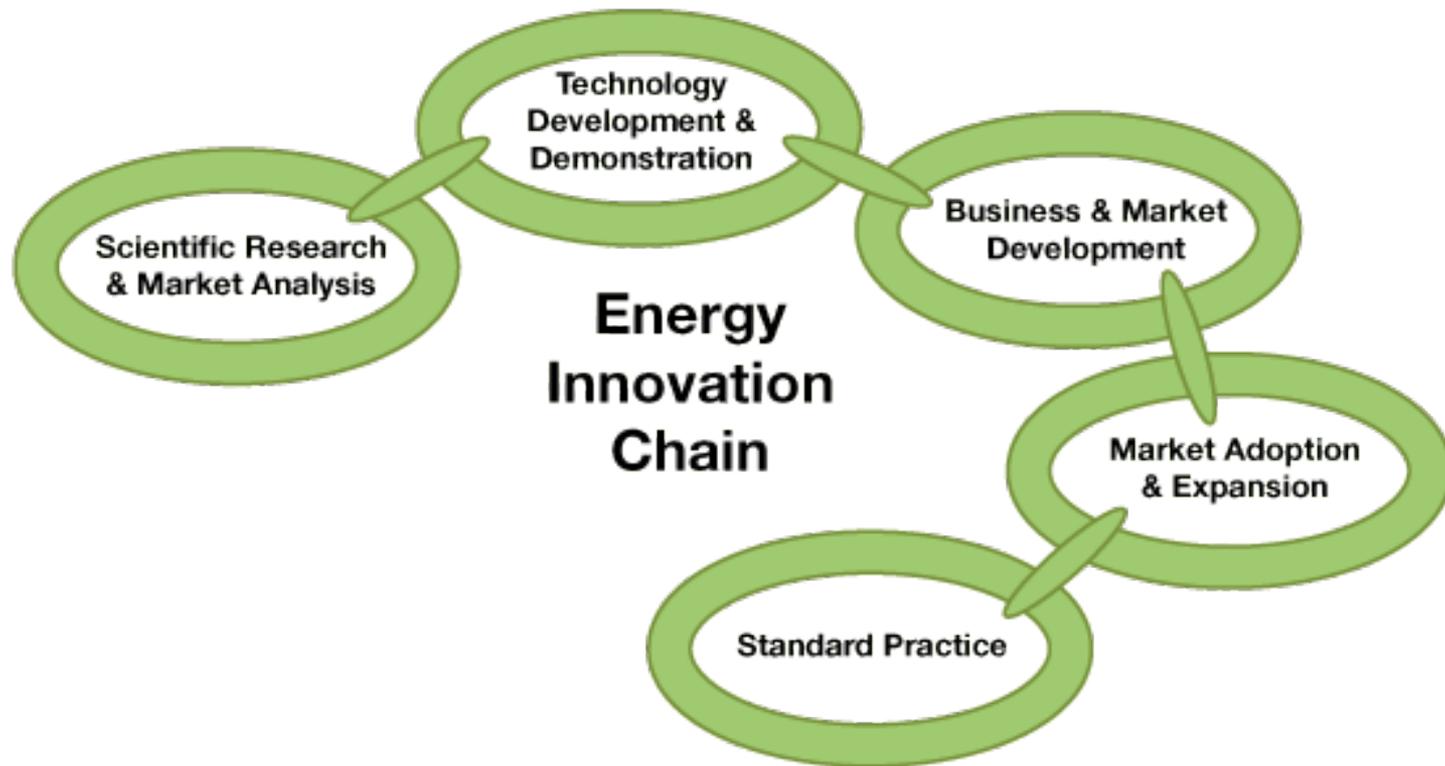
Advisory Group Meeting
October 1, 2012
Albany, NY

Commercial/Institutional ETAC

Overview and Background

- Component of NYSERDA's Technology & Market Development Program - Advanced Buildings initiative
- Goal: accelerate the adoption of commercially available yet underutilized energy-saving technologies and approaches in commercial and institutional settings

Energy Innovation Chain



Commercial/Institutional ETAC

Program Scope

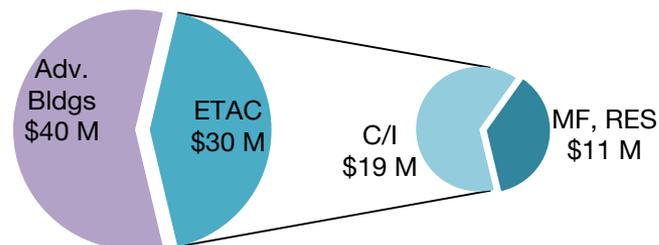
Elements: market research, demonstrations, and information sharing

- Commercially available, underutilized technologies and approaches (e.g., technology bundles)
- Promising technologies with proven performance
- Barriers may be financial, or may require development of new business models or other approaches
- Could benefit from targeted larger-scale demonstrations

C/I ETAC Budget

- ETAC budget = \$30 M (2012-16)
 - C/I Budget = \$19 M
- Additional \$2.7 M for Deep Energy Savings initiative (2012-16)
- Residential, Multifamily, and Industry R&D programs also have ETAC components

Advanced Buildings Program



ETAC Advisory Group Members

- Role:
 - Represent stakeholders in the commercial/institutional energy field
 - Provide NYSERDA with input and guidance in the development of the program
- Advisory Group activities and discussions will be posted on NYSERDA website
- We welcome your participation and ongoing feedback and input!

Identifying Technologies and Approaches

- What is an emerging/under-utilized technology?
 - Products are tested, licensed, code compliant, UL listed, meet or exceed minimum standards
 - Performance data available
 - Commercially available but not widely used
 - Few or no large-scale demonstrations with meaningful validation in NYS or the region
- Novel approaches and strategies to be considered as well

Identifying and Overcoming Key Market Barriers

- Barriers other than first cost – e.g.:
 - perceived unproven savings
 - lack of awareness
 - disruption to usual business and/or purchasing practices
 - distribution channels and/or service network
 - Regulatory, legal, codes & standards challenges
 - Procurement rules/requirements/standards
 - finding first demonstration sites with access to data for validation
- Approaches may focus on developing new business models; novel bundling of technologies; behavior, training, and education

Identifying Technologies and Approaches

Market Research Activities to Date

- Review of other ET programs and promising technologies (KEMA-DNV)
- Deep energy savings and net-zero energy buildings (ERS, Viridian)
- Advanced thermostats (ERS)
- Others planned or under consideration

C/I ETAC Planned Initiatives

- Demonstrations
 - Streamlined
 - Large Projects
 - Energy Savings Validation
- Deep Energy Savings Pilot
 - Goal: To achieve “deep” savings in new construction and retrofit projects
 - Coordinating with New Construction and Existing Facilities program staff to develop pilot

Demonstration Projects

Streamlined

- Funding for % of installation
- Rolling application review
- limited to ~\$100-150K
- M&V provided by NYSERDA
- May limit eligibility to selected technology areas/approaches

Large Projects

- Funding for % of installation
- Competitively selected w/periodic due dates (likely)
- < ~\$100-150K
- M&V provided by NYSERDA

Energy Savings Validation

- Applicant (technology developer or site owner) funds installation
- Rolling application review
- M&V provided by NYSERDA

Program Facilitator, M&V Contractors

Project Elements

- ETAC projects will include
 - analysis and M&V of technologies and approaches/strategies to better understand performance or reduce barriers
 - detailed tracking of costs and benefits
 - dissemination of results, including agreements from developers and demonstration site hosts to participate in outreach (e.g., press events, tours)

Demonstrations

Proposal Requirements (Draft):

- Commercially available (technologies)
- Performance data available
- Avoids areas covered by other NYSERDA programs
 - e.g., no stand-alone renewables or technologies on EEPS prequalified list (Existing Facilities program)
- Includes at least two demonstration sites
- Includes plans for monitoring & validation (M&V)/measuring impact
- Includes dedicated strategies for dissemination of results

Project Selection Criteria

- Statewide impact (potential energy savings and size of market)
- Cost-effectiveness (ROI, lifecycle costs, simple payback; incremental cost; % of cost-share proposed)
- Probability of success (including disruption to customer, availability of performance data, assessment of market barriers, distribution and service channels)
- Others?

Focus on replicability and market uptake

Results and Outreach

- Measure and verify projects
 - International Performance Measurement & Verification Protocol (IPMVP)?
 - DOE Uniform Methods Project?
 - Other options/protocols?
- Disseminate results, with engagement from developers and sites, to include:
 - Case studies
 - Press events, press releases, articles
 - Tours
 - Presentations at seminars and conferences, webinars
 - NYSERDA website
 - Stakeholders
 - Others?

C/I ETAC Program Milestones

- Incorporate stakeholder input and market research
- Develop/design initiatives
- Launch program
- Screen and select projects
- Validate performance
- Disseminate findings

Program Launch – Next Steps

Phased Roll-out

- Website – sign up interested host sites and technology developers
- Program for Streamlined and Validation of Savings projects to be released first
 - Target: late 2012 – early 2013
- Solicitation for Large Demonstrations to follow

Open Discussion

- Questions?
- Suggestions?

Wrap Up

Advisory Group - Next Steps

- Promising technologies list
- Next advisory group meeting: January

Thank You!

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