

# ACEEE

## Energy Efficiency as a Resource

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### NYSERDA's Commercial/Industrial Performance Program

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## New York State Energy Research and Development Authority (NYSERDA)

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- Established in 1975 by State Legislature
- Mission: To identify solutions to State's energy challenges in ways that benefit the State's economy and environment
- Forge public/private partnerships with businesses, municipalities, residents, and other energy stakeholders to accomplish this goal.

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## NYSERDA SBC Strategy

- PSC's Public Policy Goals
  - Improve system-wide reliability and peak reduction thru EE actions
  - Improve EE and access to energy options for underserved customers
  - Reduce environmental impacts of energy production and use
  - Facilitate competition to benefit end-users
- NYSERDA portfolio of +30 SBC Programs
- Significant Progress Towards Goals

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## SBC Program Benefits Since 1998

- \$900M in funds committed
- 1400 GWh in annual savings
- 860 MW peak demand savings  
(325 permanent-535 curtailable)
- 1 M tons Reduction CO<sub>2</sub>

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## New York State Energy Research and Development Authority (NYSERDA)

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- **New York Energy \$mart<sup>SM</sup>** programs goals:
- Improve system-wide reliability and peak reduction through end user efficiency actions.
- Three-year Goals: 2005-2008 Goal: Address Load Constraints through Energy Efficiency and Load Management.
- Reduce load in New York City by at least 150MW beyond current commitments.

## Commercial/Industrial Performance Program

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**Objectives:** Provides incentives to ESCOs to promote energy efficiency capital improvement projects.

- Contractor - Energy Service Company or ESCO
- Provides incentives to contractors that deliver verifiable electric energy savings
- Standard Performance Contract is between NYSERDA and contractor
- Contract between ESCO and Customer can be performance-based or fee-for-service

## Commercial/Industrial Performance Program

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### Performance-Based Incentives (Electrical Energy Savings)

- Lighting – \$0.05/kwh
- Motors, VSDs, EMS - \$0.10/kwh
- Chillers and Packaged A/C - \$0.20/kwh
- Incentives for Custom Measures determined on case-by-case basis
- M&V required

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## Commercial/Industrial Performance Program

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### Accomplishments: Inception 1999 to June 2005

#### Projected:

- 908 GWh Energy Savings
- 205 MW Demand Reduction
- \$105 million-Incentives

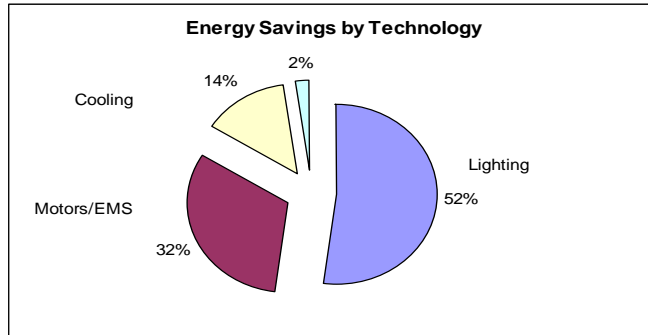
#### Installed:

- 557 GWh Energy Savings
- 127 MW Demand Reduction
- \$74 million-Incentives
- 175 Energy Services Companies/Contractors

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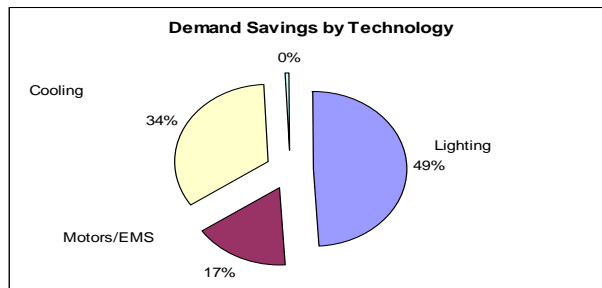
# Commercial/Industrial Performance Program

Accomplishments: Inception 1999 to June 2005



# Commercial/Industrial Performance Program

Accomplishments: Inception 1999 to June 2005



## Commercial/Industrial Performance Program

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### Estimated Target for Summer 2005:

- Statewide kW Reductions: 40,000 kW
- New York City: 15,000 kW

### Results:

- Statewide kW Reductions: 45,000 kW
- New York City: 16,000 kW

## Commercial/Industrial Performance Program

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### Comprehensive Energy Efficiency Projects:

ESCOs providing complete solution to the customer that produce savings on two fronts. Continuous year-round energy savings (lighting retrofit) whose load profile is also coincident with summer peak demand. Chiller replacement.

Variable speed drives replacement on air-handlers. Energy savings great but produce little if any summer peak demand savings.

## Commercial/Industrial Performance Program

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### Queens City Mall:

#### Comprehensive Energy Efficiency Retrofit:

650,000 square feet retail shopping mall

Lighting, Central chiller plant 2-1000 ton upgrade, Air handling system.

- Estimated savings 1.79 million kWh annually
- 800 kW Demand Savings
- \$410,000 annual savings
- Incentive \$860,000

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## Commercial/Industrial Performance Program

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- Customer/ESCOs Goal: High Reliability, Save energy and reduce demand
- Financial District in Manhattan-Data Center
- 69 tank ice storage system
- Estimated: 2.1 Million kWh, 900 kW
- Incentive: \$600,000

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