

New York State Energy Research & Development Authority Energy Efficiency Incentive Programs

ASHRAE Bi-state Chapter – November Meeting

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Overview



- NYSERDA Structure & Mission
- Incentive Development
- Energy Efficiency Incentives

NYSERDA Corporate Structure

- Public Benefit Corporation
- Established by the New York State Legislature in 1975
- Approximate annual budget: \$700 million
- ~350 Staff



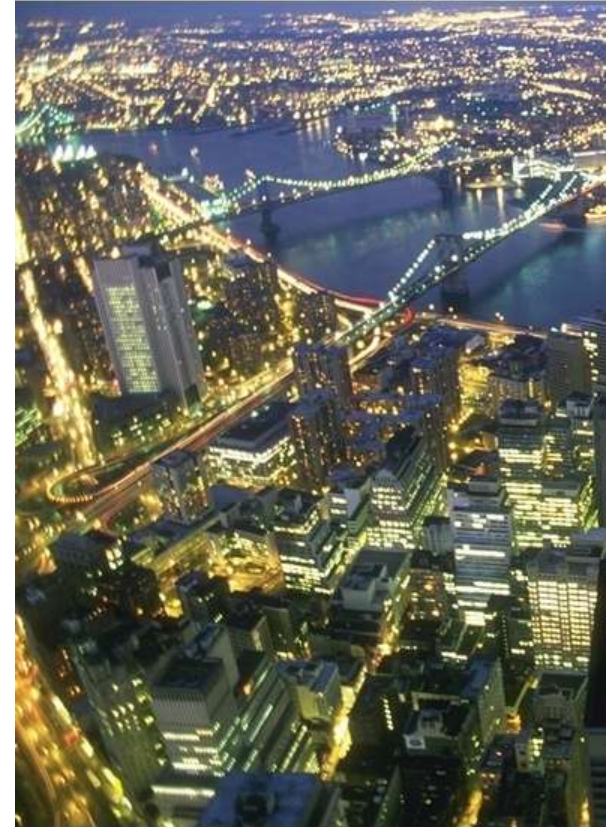
Funding Sources: utility ratepayer surcharges (60%), proceeds from GHG auction (8%), state funds (6%), federal grants (20%), interest earnings and other (6%)

Incentives for end-use EE

NYSERDA's EE Funding: **RATEPAYERS!**

- System Benefit Charge (SBC)
- Energy Efficiency/Renewable Portfolio Standard (EEPS/RPS)

*Programs change regularly –
stay tuned for new
NYSERDA and utility
(ConED) opportunities.*



Mission

Advance innovative energy solutions in ways that improve New York's economy and environment.

State Policy Statements

"By 2015, New York will meet 45 percent of its electricity needs through improved energy efficiency and clean renewable energy. We call this our '45 by 15' program."

"Increasing the State's capacity for innovation will be a crucial factor in future economic growth."

"It shall be the goal of the State of New York to reduce current greenhouse gas emissions from all sources within the State 80 % below levels emitted in the year 1990 by the year 2050."

Mission Goals / Outcomes

Efficient Use of Energy

NYSERDA provides energy solutions that reduce the energy consumption and increase the energy efficiency of New York's residents and businesses.

Renewable & Diverse Energy Supplies

NYSERDA diversifies New York's portfolio of energy resources by growing renewable and distributed generation resources and reducing petroleum use.

Clean Energy Economy

NYSERDA catalyzes economic growth by supporting technology and business innovation and by developing a skilled clean energy workforce.

A Cleaner Environment

NYSERDA reduces the environmental impact of energy production and use.

Incentive Development

- Stakeholder Demand
 - Building Owners/Managers
 - Consultants
 - Mid-stream vendors
 - Building Operators
- Geographic Need
- Technology Adoption
- Avoided Generation/Grid Infrastructure Investment
- Measurable & Verifiable
- Measure Life
- Persistence
- Incremental Cost
- MWh/therm Reduction Potential

Cost Effectiveness: Total Resource Cost Test

Commercial & Industrial Programs

Existing Buildings

- FlexTech Program
- Existing Facilities Program

New Buildings

- *New Construction Program*



Commercial & Industrial Programs

Existing Buildings Programs Structure

Project
Identification/
Energy Study



Project
Implementation

Phase 1: Energy Studies

- Identifying energy & cost saving opportunities
 - FlexTech Program (& *FT Energy Audit*)

Phase 2: Implementation Incentives

- Installation/retrofit/replacement projects
 - Existing Facilities Program

FlexTech

50% cost share with NYSERDA consultant or customer's consultant
Up to \$1,000,000/project

- Commissioning / Retro-commissioning
- Energy audits / feasibility studies
- Long term energy management



- Cx new systems & equipment
- Central plant feasibility studies: chillers, boilers, CHP...
- Energy advisor consulting, master plans, procurement

Existing Facilities Program (EFP)

- Incremental cost coverage through rebates & performance-based incentives
 - High efficiency motors, lighting, controls, chillers, boilers
- ‘Traditional’ EE performance investments: incentives @ \$0.16/kWh (Con Edison territory)



NYSERDA is also interested in Demand Response (\$200/kW), Thermal Storage (\$600/kW), MBCx (\$0.05/kWh)

Existing Facilities Program

Prequalified Incentives

An example:

Lighting Systems					
Measure Description and Eligibility Criteria	Measure Code	Eligible Installations	Count	Unit Incentive	Total Incentive
<p>Energy Star Exit Signs</p> <ul style="list-style-type: none">• Eligible units shall be ENERGY STAR registered exit signs• Entire sign must be new, replacing an existing sign• Exit sign retrofit kits are not eligible• New construction projects are not eligible	ES-1	New ENERGY STAR LED Exit Sign		Replacement \$10 per sign	



- Applicants receive \$/unit rebates: **\$30,000 max.**
- Easy process – Install then apply within 90 days
- Some pre-qualified Incentives categories:
Lighting, HVAC, Motors, Refrigeration & Freezers, VFDs, **Gas Efficiency***, Commercial Kitchen Equipment...etc.

*Gas incentives closed till refunded

Existing Facilities Program

Performance Incentives

- \$\$\$: Up to \$2 million per project (\$5 mil. for industrial)
 - Incentive is paid on the energy savings over 1 year
 - Caps: 1yr. payback & 50% project cost (75% w/ demand response)
- **TCs**: NYSERDA tools and **technical consultants** assist project w/ development of engineering analysis report
 - NYSERDA TC helps coordinate **pre** and post implementation site visits
- **M&V**: Large projects (greater than 500,000 kWh) may require measurement & verification – M&V is tailored to project needs and timeline
- **Bonuses** for super efficient and innovative equipment

<http://existingfacilities.nyserda.org>

EFP Performance Incentives

Program Component	Incentive (ConED)	Upstate
Electric Efficiency	\$0.16 / kWh	\$0.12 / kWh
Gas Efficiency*	\$20/MMBtu	\$15/MMBtu
Demand Response (NYISO &/or Con Edison)	\$200 / kW	\$100 / kW
Monitoring-Based CxA	\$0.05 / kWh	\$0.05 / kWh
Energy / Thermal Storage	\$600 / kW	\$300 / kW
Industrial and Process Eff.	\$0.16 / kWh	\$0.12 / kWh
Combined Heat and Power	\$0.10 / kWh + \$750 / kW	\$0.10 / kWh + \$600 / kW

\$ 2 million facility cap, \$5 million for IPE

***Gas incentives close til refunded**

New Construction Program (NCP)

Objective: *Transform the way buildings are designed and built*

- **Technical Assistance**
- **Green Building Services**
- **“Bonus” Incentives for LEED**
- **Capital Cost Incentives**

New Construction Program

NCP Technical Assistance

Energy Analysis

- **For greatest benefit** – submit an application before the schematic design phase is complete, select a TA
- EA conducted by a Technical Assistance (TA) provider
- Identifies energy saving opportunities
- **3 approaches**: whole building model, custom measure, prequalified

NYSERDA Cost-shares TA services

- NYSERDA pays first \$5,000
- Balance is shared 50/50
- Capped at \$75,000

New Construction Program

NCP - Green Building Services & LEED

Green Building Services

- TA helps identify green building opportunities
- For projects pursuing LEED, NYSERDA cost shares up to \$25,000 max or an amount equal to TA services.

LEED “Bonus” Incentives

- \$5,000 for projects < 50,000 sq ft
- \$10,000 for projects > 50,000 sq ft
- Capital cost incentive increased by 10% for projects with at least 3 EAc1 points (capped at \$50,000)

New Construction Program

NCP Capital Cost Incentives*

- **Prequalified**
- **Custom Measure**
 - \$0.10 per kWh saved + **\$1.03/therm gas (WB is also eligible)**
 - \$275 per summer peak kW saved
 - Each measure must exceed Energy Code by at least 3%
 - Capped at \$1,000,000

Whole Building Design (*LEED)

3%-9% above Code - \$0.11/kWh; \$300/kW (summer peak)

9.1%-16% above Code - \$0.12/kWh; \$310/kW (summer peak)

16.1%-23% above Code - \$0.13/kWh; \$320/kW (summer peak)

23.1%-30% above Code - \$0.14/kWh; \$330/kW (summer peak)

30.1% above Code - \$0.16/kWh; \$350/kW (summer peak)

- Capped at 60% of incremental cost (75% cap for LEED)
- Maximum cap \$1,500,000 (can be higher based on bonuses)

Info on Other Programs

New York State

State Agencies

Search all of NY.gov

nyserda
Energy. Innovation. Solutions.

Andrew M. Cuomo, Governor
Francis J. Murray, Jr., NYSEERDA President and CEO

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CLEAN TECH THRIVES IN NEW YORK

1 2 3 4

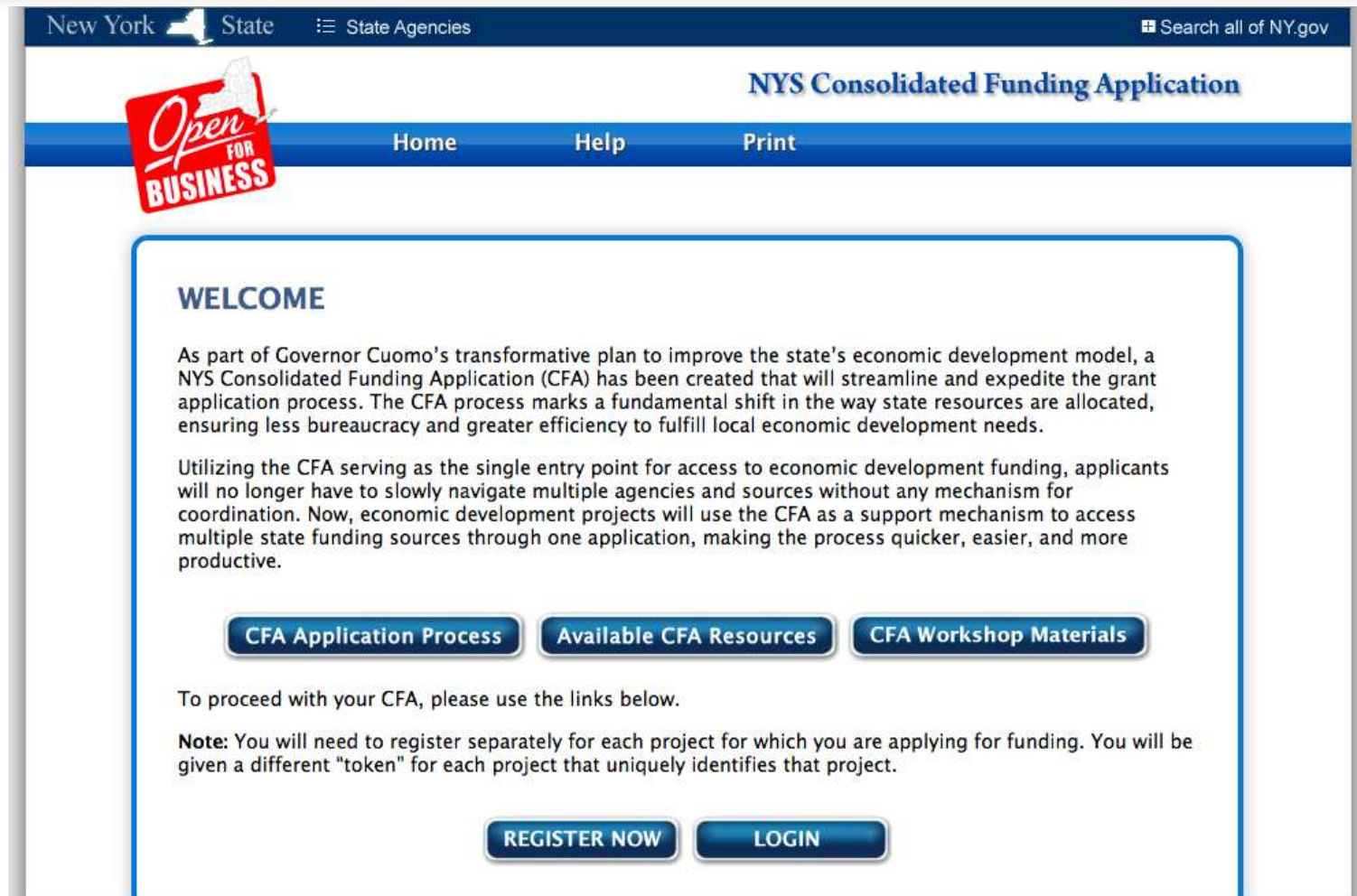
Statewide Initiatives | Careers and Training | Clean Energy Business Growth | **NYS CFA Announcements and Workshops**

New website & address

www.nyserda.ny.gov

nyserda
Energy. Innovation. Solutions.

Apply Online w/ the NYS CFA



New York State State Agencies Search all of NY.gov

Open FOR BUSINESS

NYS Consolidated Funding Application

Home Help Print

WELCOME

As part of Governor Cuomo's transformative plan to improve the state's economic development model, a NYS Consolidated Funding Application (CFA) has been created that will streamline and expedite the grant application process. The CFA process marks a fundamental shift in the way state resources are allocated, ensuring less bureaucracy and greater efficiency to fulfill local economic development needs.

Utilizing the CFA serving as the single entry point for access to economic development funding, applicants will no longer have to slowly navigate multiple agencies and sources without any mechanism for coordination. Now, economic development projects will use the CFA as a support mechanism to access multiple state funding sources through one application, making the process quicker, easier, and more productive.

[CFA Application Process](#) [Available CFA Resources](#) [CFA Workshop Materials](#)

To proceed with your CFA, please use the links below.

Note: You will need to register separately for each project for which you are applying for funding. You will be given a different "token" for each project that uniquely identifies that project.

[REGISTER NOW](#) [LOGIN](#)

CFA website & address

<https://apps.cio.ny.gov/apps/cfa>

?’s & More NYSERDA NYC Assistance

Questions?

General program information:

1-866-NYSERDA (697-3732)

In NYC (212) 971-5342

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