

# Energy Management & Funding Sources at Water Infrastructure Facilities October 6, 2010 at SUNY-ESF

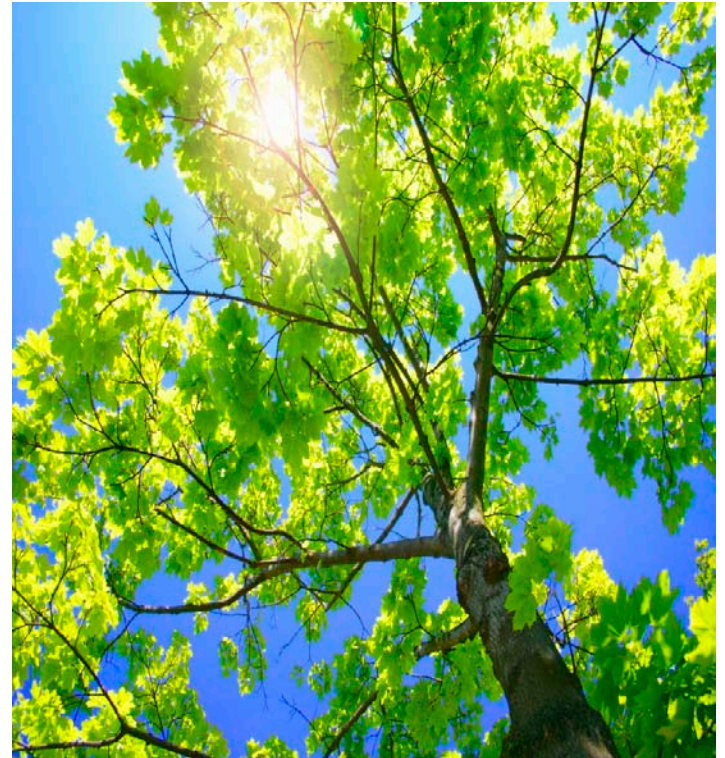


Mark Decker  
Associate Project Manager

# What is NYSERDA?

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- ❖ **Public benefit corporation established in 1975**
- ❖ **Advancing energy innovation and technology**
- ❖ **Transforming New York's economy**
- ❖ **Empowering people to choose clean and efficient energy**



# Funding

Systems Benefit Charge (SBC)  
Energy Efficiency Portfolio Standard (EEPS)



Central Hudson Gas & Electric

Con Edison

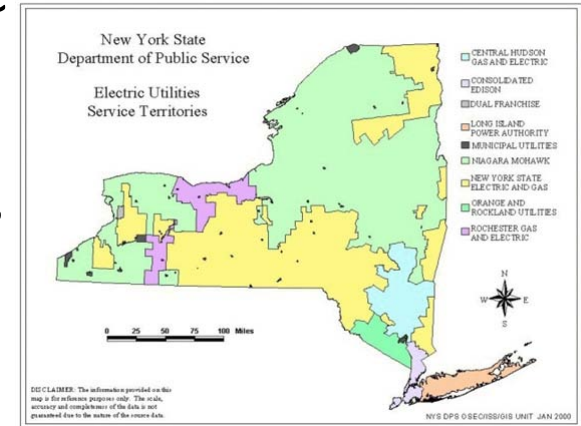
New York State Electric & Gas

National Grid

Orange and Rockland

Rochester Gas and Electric

New Gas SBC



# NYSERDA & Water and Wastewater

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# NYSERDA & Water and Wastewater

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## Focus on Municipal Water & Wastewater

Program Focused on the over 2,700 Municipal Water Facilities and 700+ Wastewater Facilities in New York State

Provides Outreach, Education and Marketing for energy efficiency awareness



# Resources for Municipal Water and Wastewater Facilities

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Focus on Water and Wastewater

<http://water.nyserda.org>

**Bench Marking  
Tools**

**Water and  
Wastewater  
Energy  
Management  
Best Practices  
Handbook**

**Self Assessment  
Check List**

**Pay Back  
Analysis  
Tool**

**Case Studies  
&  
Reports**

# Services for Municipal Water and Wastewater

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Technical Assistance  
Ask the  
Expert

Presentations

Operator Training

[water@nyserderda.org](mailto:water@nyserderda.org)

Application Assistance  
for NYSERDA programs

# WWW.NYSERDA.ORG

The screenshot shows the NYSEERDA website in a Windows Internet Explorer browser window. The address bar contains the URL <http://www.nyserda.org/>. A red arrow points to the address bar. The website layout includes a navigation menu with 'Residential' and 'Research and Development' buttons. Below this is a grid of five columns: 'STATEWIDE INITIATIVES', 'WHERE CAN I FIND...?', 'INCENTIVES FOR...', 'PROGRAMS', and 'OTHER NYSEERDA SITES'. The 'STATEWIDE INITIATIVES' column lists various programs and includes a 'Straight Talk from the Taxpayer' graphic. The 'WHERE CAN I FIND...?' column lists categories like Energy Prices, State Energy Planning, and Publications. The 'INCENTIVES FOR...' column lists sectors like Agricultural, Commercial/Industrial, and Residential. The 'PROGRAMS' column lists initiatives like Business Partners and Energy Analysis. The 'OTHER NYSEERDA SITES' column lists external resources like GetEnergySmart.org and Low-Income Forum on Energy (LIFE). A red arrow points to a taskbar button labeled 'New York State Ener...'. The Windows taskbar at the bottom shows the Start button, several open applications, and the system tray with the time 9:37 AM.

# Major Program Areas

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- **Energy Efficiency Services**
- Residential Energy Affordability
- Research and Development
- Marketing and Economic Development
- Energy Analysis
- West Valley Management

# Energy Efficiency Services

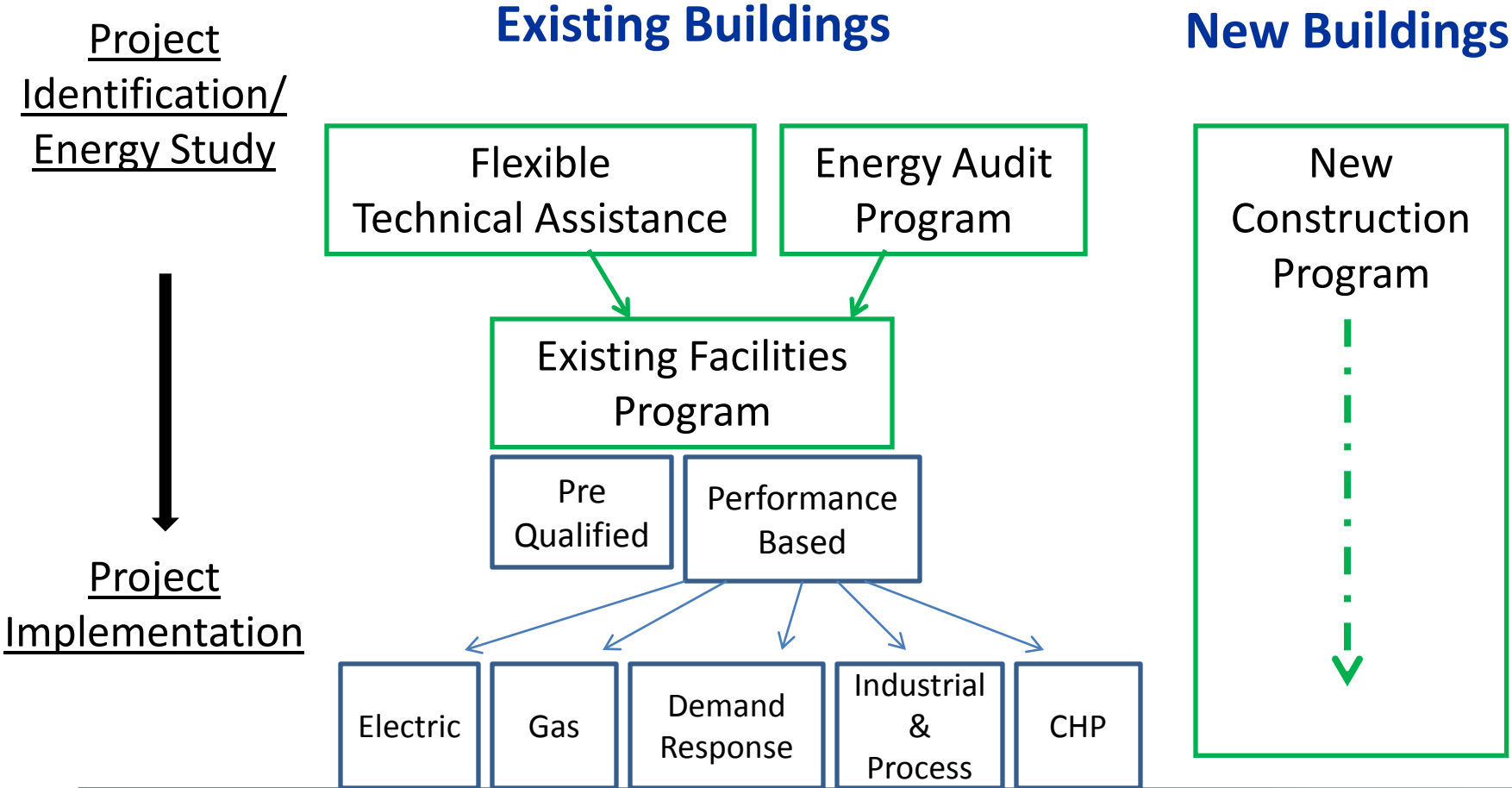
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Provides service to:

- Commercial, industrial, institutional, **municipalities**
- Colleges, universities, not for profits and K-12 schools



# Commercial & Industrial Programs



# Energy Studies and Audits

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## ❖ Flexible Technical Assistance

### FlexTech

- ❖ NYSERDA Consultant
- ❖ Independent Consultant

## ❖ Energy Audit Program

- ❖ Building Envelope

# NYSERDA Flexible Technical Assistance Program

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## Identification of Energy Efficient Opportunities

**Objective:** *Provide comprehensive, customized cost-shared energy studies*

NYSERDA will cost-share comprehensive **energy studies** on a **50:50 basis**.

Facility Must Pay  
Systems Benefit Charge

**Gas Studies  
Now Available**



# Flexible Technical Assistance Program

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## Flexible

- Feasibility Studies
- CHP/Renewables
- Load Curtailment
- Retro commissioning
- Energy Procurement
- Energy Master Plans
- Energy Advisor Consulting

## PON 1746

### Eligibility:

>\$75,000 in Annual ELECTRIC Bills

### Cost Share

50/50 – on energy related measures

### Incentive Cap

\$1,000,000 per Project  
10% total annual energy  
costs

# Flexible Technical Assistance (FlexTech)

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1. Customer chooses from FlexTech Consultant list or uses their own service provider (Independent Consultant)
2. NYSERDA Project Manager & Consultant site visit
3. Create site-specific, customized proposal (scope of work)
4. Consultant performs the Study
5. NYSERDA Final Report close out meeting

# Flexible Technical Assistance Program

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## HOW TO APPLY

- Visit <http://www.nyserda.org/funding/1746pon.asp>
- Download the application PDF.
- Fill out the application with basic contact and utility information.
- E-mail completed form to NYSERDA
- Assistance available at [water@nyserda.org](mailto:water@nyserda.org)



# NYSERDA Existing Facilities Implementation Incentives

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## Implementation of Energy Efficiency Projects

### Program



**Pre-Qualified Incentives:** Incentives for the purchase and installation of pre-qualified electric and gas energy efficiency measures/equipment.



**Performance-Based Incentives:** Incentives for energy efficiency improvements based upon a technical engineering analysis. Certain projects will require measurement and verification of savings.

# Existing Facilities Programs

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- ❖ Pre-Qualified Incentives
  - “Rebates” for energy efficient equipment
- ❖ Performance Based Incentives
  - Electric Efficiency
  - Gas Efficiency
  - Energy Storage
  - Demand Response
  - Combined Heat and Power (CHP)
  - Data Center Efficiency (also available for New Construction)
  - **Process and Industrial Efficiency**



# Existing Facilities Program

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## Pre-Qualified Incentives

### Rebate Type Program

- Applicants can receive incentives (\$/unit) for pre-qualified energy-efficient measures.
- Projects can receive up to **\$30,000** through pre-qualified incentives.
- Pre-qualified Incentives are available for:
  - Lighting
  - HVAC
  - Chillers
  - Motors
  - Refrigeration
  - Interval Meters
  - Variable Frequency Drives (VFDs)
  - Commercial Kitchen Equipment and Washers



# Existing Facilities Program

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## Performance Based Incentives

- Incentive is paid based on the annual energy savings
- \$.12 per kWh saved
- Larger energy efficiency projects
  - Must qualify for at least \$10,000 in incentives(83,333kWh/yr)
- Cap:
  - 50% of project cost,
  - \$5 million per site (Water Wastewater)
- All projects will include a detailed engineering analysis to determine savings

[http://www.nyserda.org/programs/Existing\\_Facilities/default.html](http://www.nyserda.org/programs/Existing_Facilities/default.html)

# Existing Facilities Programs

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## HOW TO APPLY

- Visit [http://www.nyserda.org/Programs/Existing\\_Facilities/default.asp](http://www.nyserda.org/Programs/Existing_Facilities/default.asp)
- Download the Pre Qualified or Performance Based application PDF.
- Fill out the application with basic contact and utility information.
- E-mail completed form to NYSERDA
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# New Construction Program

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- New Buildings
- Substantial Renovations

# New Construction Program

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## Objective

*Transform the way buildings  
are designed and built.*

## Services

- Energy Modeling
- Capital Cost Incentives
- Commissioning
- Green Building Planning Assistance
- “Bonus” Incentives for LEED Certification
- Data Center Efficiency

**\*\*\*Apply Early in Process\*\*\***

*Design Intent is **Ideal***



# New Construction Program

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## HOW TO APPLY

- Visit [http://www.nyserda.org/Programs/New\\_Construction/default.asp](http://www.nyserda.org/Programs/New_Construction/default.asp)
- Download the Pre Qualified or Performance Based application PDF.
- Fill out the application with basic contact and utility information.
- E-mail completed form to NYSERDA
- Assistance available at [water@nyserda.org](mailto:water@nyserda.org)



# NYSERDA & Water and Wastewater

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## Programs

**FlexTech**

**Existing Facilities**

Pre Qualified      Performance

[www.nyserda.org](http://www.nyserda.org)

**Water Focused  
Resources**

Best Practices Handbook  
Benchmarking

**Focus On Water**

[water@nyserda.org](mailto:water@nyserda.org)

**Water Focused  
Services**

Ask the Expert  
Application Assistance



**Mark Decker**  
**Phone: (518) 862-1090 ext. 3494**  
**Email: [md3@nyserda.org](mailto:md3@nyserda.org)**

