



NYSERDA

Multifamily Performance Program

LIFE Statewide Conference

May 26, 2016

**Ed Morrison II
Senior Project Manager
Multifamily Existing Buildings
NYSERDA**

Agenda

1 – **MPP** Targeted Option

2 – **MPP** Comprehensive Option

3 – **MPP** High Performance Offering

4 – Energy Use Snapshot

Reforming the Energy Vision (REV)

Governor Cuomo's strategy to build a clean, resilient and affordable energy system for all New Yorkers.

Clean Energy Fund (CEF)

- 10-year, \$5 billion State funding commitment that supports REV
- Reshapes New York's energy efficiency, clean energy and energy innovation programs
- Reduced cost of clean energy
- Accelerates adoption of energy efficiency to reduce load
- Increases renewable energy to meet demand
- Mobilizes private investment in clean energy

Targeted Option

Focused support for flexibility

Multifamily Performance Program

Targeted Option

Comprehensive Option

High Performance
Offering

Targeted Option - Overview

Before you do anything, check the website!

- If your utility provides an incentive for the improvement you want to do, you must apply to them.
- Most utilities require you to apply BEFORE you install the improvement.
- You submit the NYSERDA application AFTER you install the improvement.

Targeted Option – Role of Incentives

Existing
Condition
Energy Use

Federal Minimum
Standard Use

High
Efficiency
Option

*Some savings may be
gained just by installing
minimum standard.*

*NYSERDA Incentive
is based on the
extra kwh or
MMBTU saved by
taking this step*

Targeted Option – Incentives

Affordable	
\$ per MMBTU	\$ per kWh
\$5.00	\$0.05
Market Rate	
\$ per MMBTU	\$ per kWh
\$3.00	\$0.03

Annual Incentive Caps*
 \$150/unit (affordable)
 \$100/unit (market rate)
 per year maximum

**12-month period starting on the installation date of the first work for which incentives were received.*

Targeted Option – Upgrades

Different measures offered in each utility territory.

	Upgrade Name
APPLIANCE	ENERGY STAR Clothes Washers (In-Unit)
	ENERGY STAR Dishwashers (In-Unit)
	ENERGY STAR Refrigerators
BUILDING SHELL	AC Cover
	Air Leakage Sealing
	Insulation - Roof
	Insulation - Wall
	Pipe Insulation - DHW
	Pipe Insulation - Heating
	Window Replacement
COOLING	A/C & Heat Pump - Refrigerant Charge Correction
	Air Conditioner - Unitary
	Air Conditioner - Central
	Air Conditioner - Room
	Chiller - Air & Water Cooled
	Chiller - Cooling Tower
	Economizer - Air Side w/ Dual Enthalpy Control
HVAC CONTROL	Submetering
	Thermostat - Programmable Setback
MOTORS & DRIVES	Electronically Commutated (EC) Motors
	NEMA Premium Motors
	Variable Frequency Drive (VFD) Motors

	Upgrade Name
DOMESTIC HOT WATER	DHW Tank Blanket
	Low Flow Faucet Aerators
	Low Flow Showerheads
	Thermostatic Shower Restriction Valve
	Water Heater - Heat Pump
	Water Heater - Indirect
	Water Heater - Instantaneous
Water Heater - Storage	
HEATING	Boiler
	Boiler Reset Control
	Burner Replacement
	Duct Sealing & Insulation
	Furnace
	Furnace Tune Up
	Heat Pump - Air Source (ASHP)
	Heat Pump - Packaged Terminal (PTHP)

Targeted Option – Process



You do not need to use a Multifamily Building Solutions Provider to use the Targeted Option.

Targeted Option – NYSERDA website

NYSERDA
Business & Industry
Communities & Governments
Residents & Homeowners
Partners & Investors
Cleantech & Innovation

EMAIL PRINT FACEBOOK TWITTER
Programs & Services
Find a Contractor
About NYSERDA
Contact Us

Existing Buildings

Multifamily Financing

Submetering for Multifamily Buildings

Comprehensive Option

Targeted Option

Targeted Option for Multifamily Buildings

Both NYSERDA and local utilities offer incentives for specific building upgrades, including energy-efficient appliances, building shell, cooling systems, heating and controls, domestic hot water, and motors and devices. The first step to understand your options is to [find out if NYSERDA or your utility company offers an incentive for your planned energy efficiency upgrade](#). Buildings that use oil for heat are eligible for heating and hot water system upgrades through NYSERDA.

If NYSERDA offers an incentive for the upgrade as part of the Targeted Option for Multifamily Buildings, the incentive amount for each energy efficiency upgrade will be based on how much energy you will save as determined by NYSERDA's [Savings and Incentive Calculator](#) [XLSM].

<http://www.nyserdera.ny.gov/All-Programs/Programs/MPP-Existing-Buildings/MPP-Targeted>



NYSERDA

Comprehensive Option

A whole-building approach

Multifamily Performance Program

Targeted Option

Comprehensive Option

High Performance Offering

Comprehensive Option - Overview

- Find a Multifamily Building Solutions Provider.
- Only available to eligible affordable buildings:
 - Existing buildings
 - 5+ residential units
 - Pay into electric Systems Benefits Charge
 - At least 50% residential space
 - Meets Low-to-Moderate Income definition
- Work with Provider to identify a minimum 25% projected energy savings.

Comprehensive Option – Affordability

- Minimum of 25% of the units are occupied by households earning not more than 80% of the area or state median income, whichever is higher.
- All other properties are considered market rate and ineligible for the Comprehensive Option.

Forms of Proof:

- Proxy Program (HUD, WAP, NYSHCR, NYCHPD)
- Rent Roll
- Resident Income

Comprehensive Option – Incentives

Projected Energy Savings Target	Base Incentive* (per unit)	Performance Payment (per unit)	Total Incentive
25% - 30%	\$150	\$75	\$225
31% - 35%	\$300	\$175	\$475
36% +	\$500	\$325	\$825

*Base incentive is typically paid out at 100% construction completion. Projects that use a construction manager to oversee the project, however, may qualify for a payment of ½ of the base incentive at 50% completion.

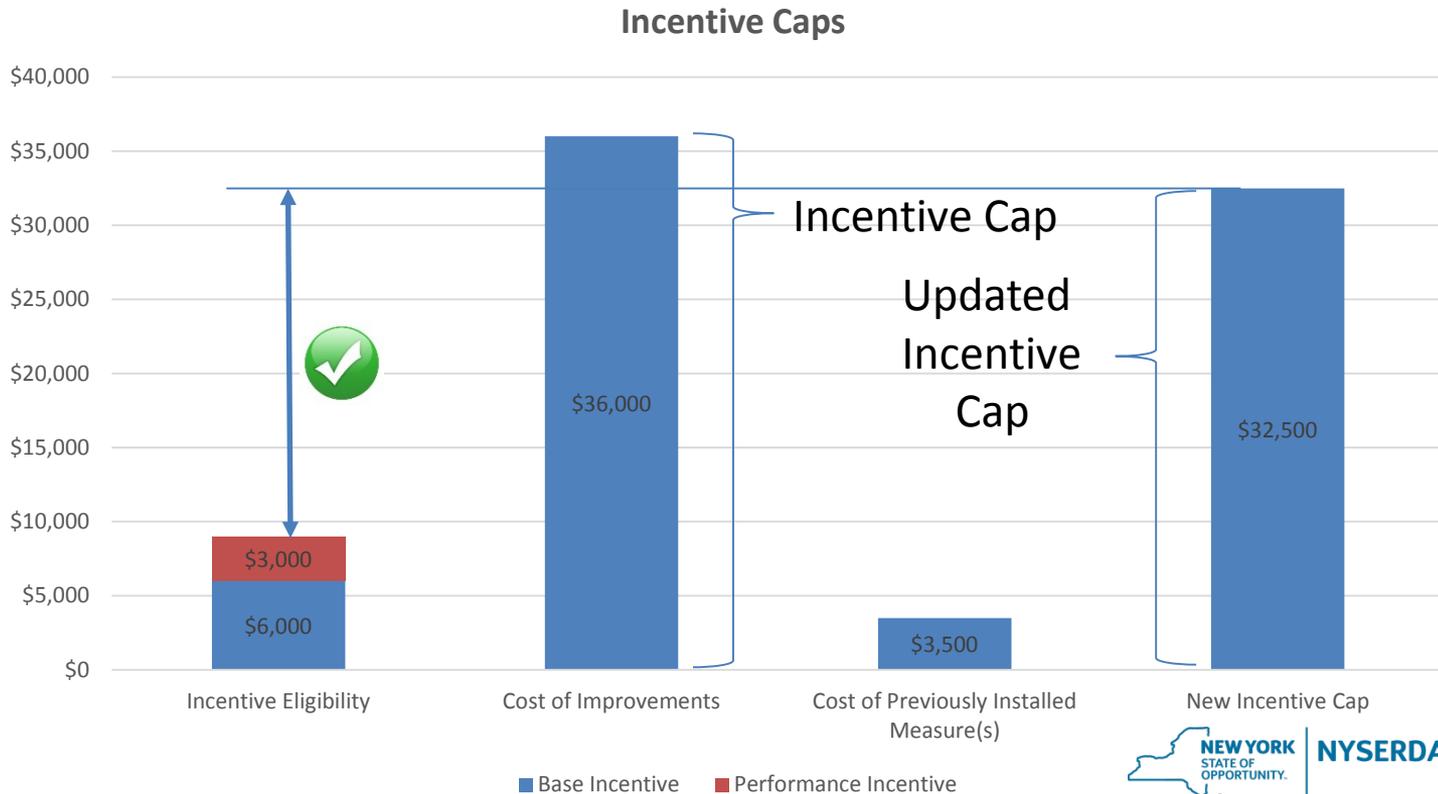
Comprehensive Option – Incentive Cap

- NYSERDA incentives will not exceed 100% of the total costs of eligible measures.
- Total project costs includes the cost of improvements in the proposed scope of work.
 - SAV-IT tool
- The following are not included in the total project costs for the purposes of calculating the incentive cap:
 - Cost of previously installed measures
 - Provider fees and Construction management fees

Comprehensive Option – Incentive Cap



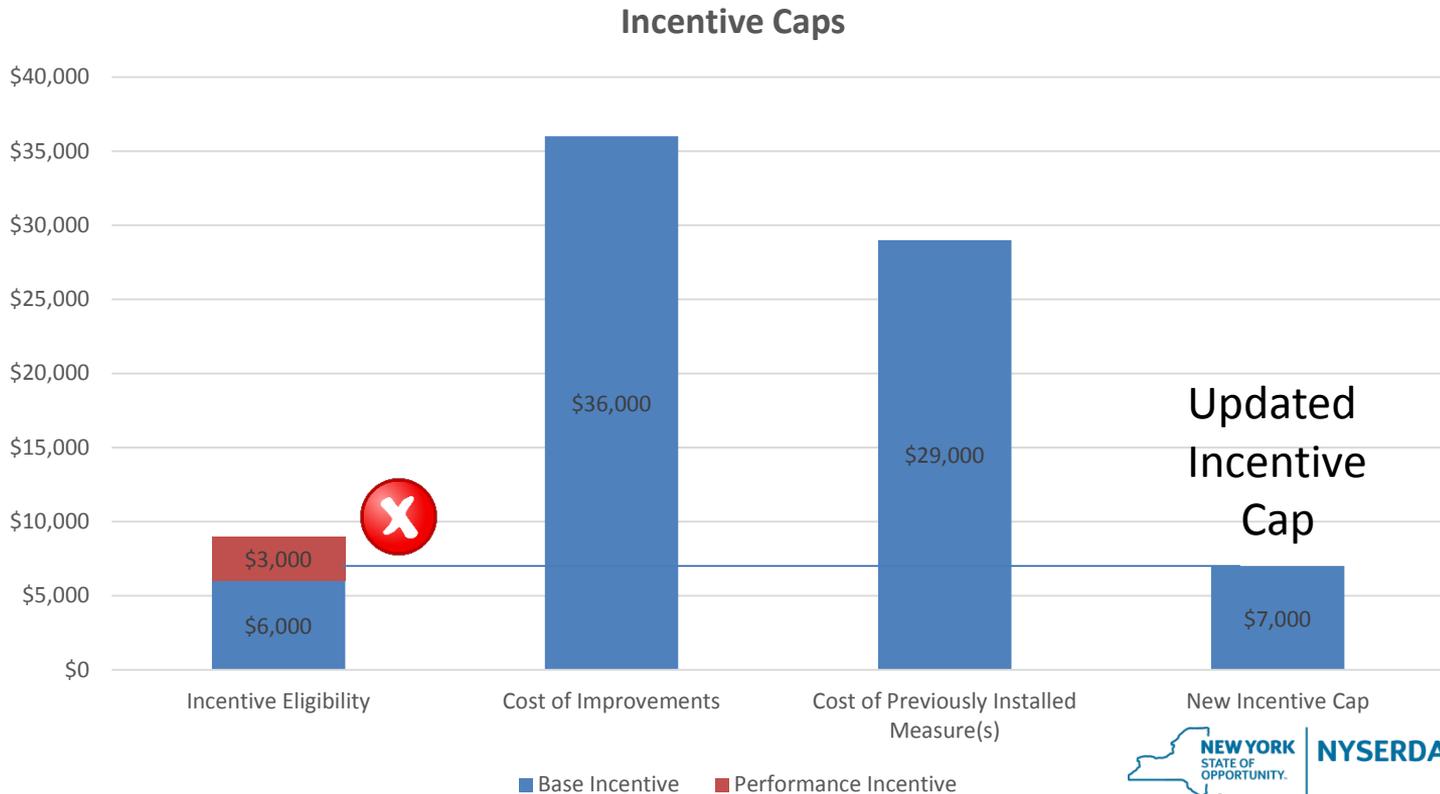
40-unit
building
projecting
28%
energy
savings



Comprehensive Option – Incentive Cap



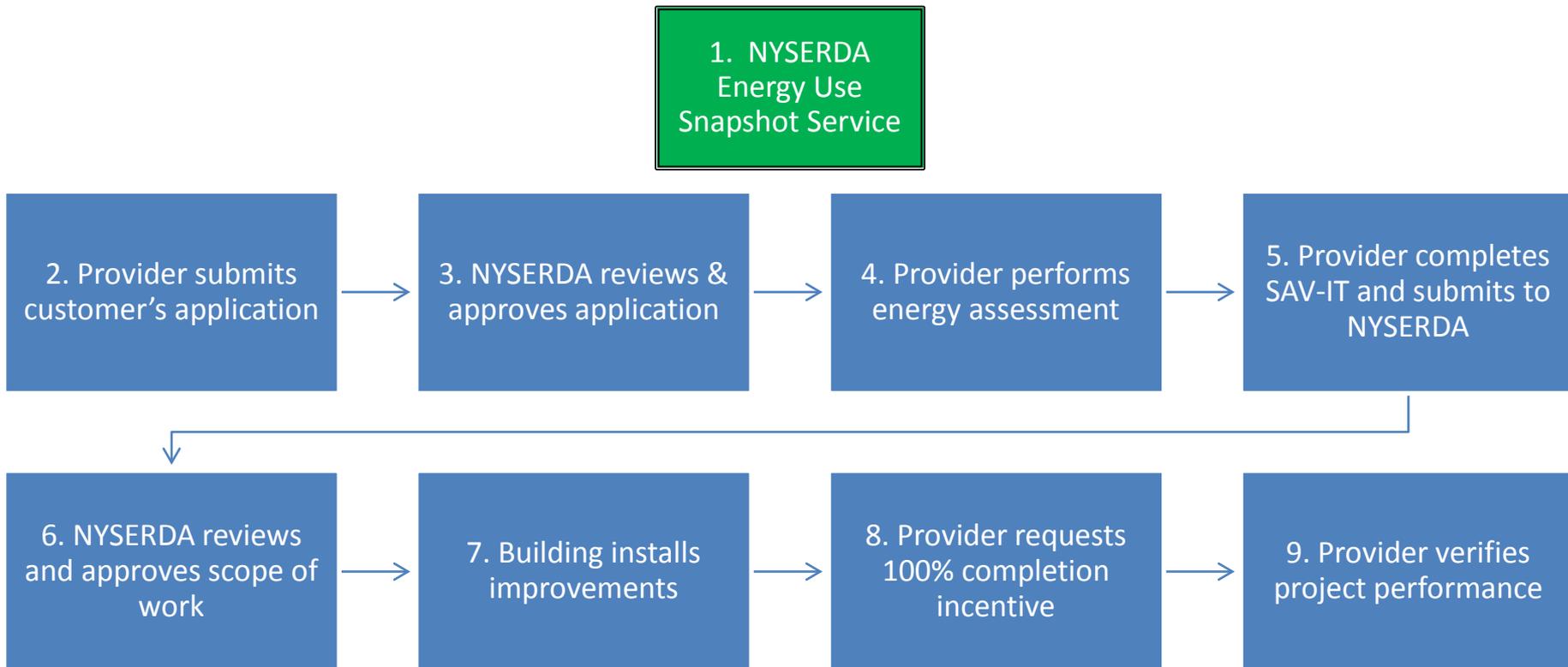
40-unit
building
projecting
28%
energy
savings



Coordination with Previously Installed Measures and Other Energy Efficiency Programs

	Measure savings may be used to reach Performance Target	Measure costs may be included in Incentive Cap	Incentive Adjustments
Previously Installed Measures	Yes	No	N/A
Utility Programs	Yes	Yes	Utility incentives deducted from eligible MPP Incentive
Other NYSERDA Programs (renewables, Targeted Option)	Yes	Yes	Other Program incentives deducted from eligible MPP Incentive

Comprehensive Option – Process



Comprehensive Option – NYSERDA website

The screenshot shows the NYSERDA website header with navigation links: Business & Industry, Communities & Governments, Residents & Homeowners, Partners & Investors, and Cleantech & Innovation. Below the header is a secondary navigation bar with links for EMAIL, PRINT, FACEBOOK, TWITTER, Programs & Services, Find a Contractor, About NYSERDA, and Contact Us. The main content area features a sidebar on the left with links for Existing Buildings, Multifamily Financing, Submetering for Multifamily Buildings, Comprehensive Option (highlighted with a green underline), and Targeted Option. The main content area displays the title 'Comprehensive Option for Multifamily Affordable Buildings' and a paragraph of text: 'The Comprehensive Option provides support to help you upgrade your entire building's energy performance. A Multifamily Building Solutions Provider will work with you to evaluate your building's systems holistically, creating a customized plan aimed at giving you a minimum of 25% energy savings along with reduced energy bills. As a result, you'll experience higher operational efficiency, greater property value, lower energy bills, and more satisfied tenants.'

<http://www.nyserra.ny.gov/All-Programs/Programs/MPP-Existing-Buildings/Comprehensive-Option>



NYSERDA

High Performance Offering

The next generation of deep energy savings

Multifamily Performance Program

Targeted Option

Comprehensive Option

High Performance Offering

High Performance Offering – Overview

- Proposals to achieve significant energy savings (Passive House or other standard, TBD)
- Incentives of \$2,500/unit for market rate projects and \$3,500/unit for affordable projects
- Competitive Request for Proposals released late in 2016



Energy Use Snapshot



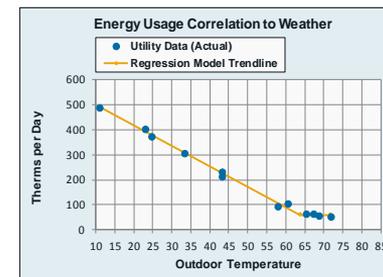
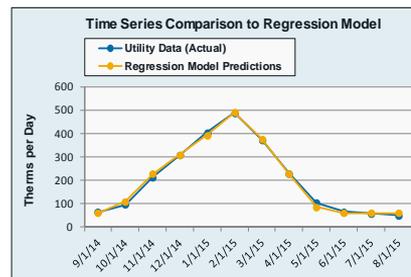
Energy Use Snapshot – Overview

A free report and a complete and accurate snapshot of:

- Heating
- Cooling
- Baseload

Regression Model Results		
Winter (Heating) Slope	8.11	Therms/day per °F
Winter changepoint temp	63.8	°F
Summer (Cooling) Slope	0.00	Therms/day per °F
Summer changepoint temp	63.8	°F
Baseload	60.1	Therms/day
# of baseline data points (n)	12	
# of parameters (p)	3	
r-squared	1.00	
Coefficient of Variation	5.1%	

Source for Typical Weather Information	
Weather Station Locality	Weather File Publication Source
Syracuse	NOAA 1981-2010 Climate Normals



Utility Billing Data (Actual)				Actual Weather			
From	To	Days	Therms	Therms/Day	Average Temp (°F)	HDD ref 65°F	CDD ref 65°F
8/23/14	9/24/14	33	2,097.0	64	65.4	108	118
9/25/14	10/23/14	29	2,769.0	95	57.8	224	14
10/24/14	11/21/14	29	6,218.0	214	43.2	632	0
11/22/14	12/23/14	32	9,845.0	308	33.3	1,015	0
12/24/14	1/26/15	34	13,744.0	404	22.9	1,431	0
1/27/15	2/24/15	29	14,124.0	487	11.0	1,566	0
2/25/15	3/25/15	29	10,788.0	372	24.8	1,166	0
3/26/15	4/24/15	30	6,910.0	230	43.2	655	0
4/25/15	5/26/15	32	3,328.0	104	60.6	211	69
5/27/15	6/24/15	29	1,911.0	66	67.2	45	112
6/25/15	7/24/15	30	1,751.0	58	68.8	20	134
7/25/15	8/25/15	32	1,644.0	51	71.9	0	223
		Total Days	Total (Therms)			Total HDD	Total CDD
		368	75,129			7,074	670

Regression Model Projected to Actual Weather				
Heating (Therms)	Cooling (Therms)	Baseload (Therms)	Total (Therms)	Total Therms/Day
0	0	1,983	1,983	60
1,428	0	1,742	3,170	109
4,858	0	1,742	6,601	228
7,934	0	1,923	9,856	308
11,294	0	2,043	13,337	392
12,435	0	1,742	14,177	489
9,191	0	1,742	10,933	377
5,034	0	1,802	6,837	228
846	0	1,923	2,768	87
0	0	1,742	1,742	60
0	0	1,802	1,802	60
0	0	1,923	1,923	60
Heating (Therms)	Cooling (Therms)	Baseload (Therms)	Total (Therms)	
53,018	0	22,111	75,129	

These totals are not normalized to a typical weather year.

Energy Usage Normalized to a Typical Weather Year						
From	To	Days	Typical Average Temp (°F)	Typical HDD ref 65°F	Typical CDD ref 65°F	
1/1/10	1/31/10	31	26.0	1,209	0	0
2/1/10	2/28/10	28	25.4	1,110	0	0
3/1/10	3/31/10	31	37.4	860	6	6
4/1/10	4/30/10	30	47.9	518	6	6
5/1/10	5/31/10	31	59.9	191	32	32
6/1/10	6/30/10	30	66.4	66	112	112
7/1/10	7/31/10	31	71.8	4	213	213
8/1/10	8/31/10	31	68.0	31	123	123
9/1/10	9/30/10	30	60.7	181	53	53
10/1/10	10/31/10	31	49.5	481	0	0
11/1/10	11/30/10	30	40.9	723	0	0
12/1/10	12/31/10	31	27.7	1,155	0	0
		Total Days	Typical Average Temp	Total HDD	Total CDD	
		365	51.7	6,529	545	

Questions?

- Phone Inquiries
 - 1-866-NYSERDA
- Email Inquiries
 - Multifamilyprograms@nyserdera.ny.gov