

# Energy Efficiency & Behind-the-Meter Generation: A Summary

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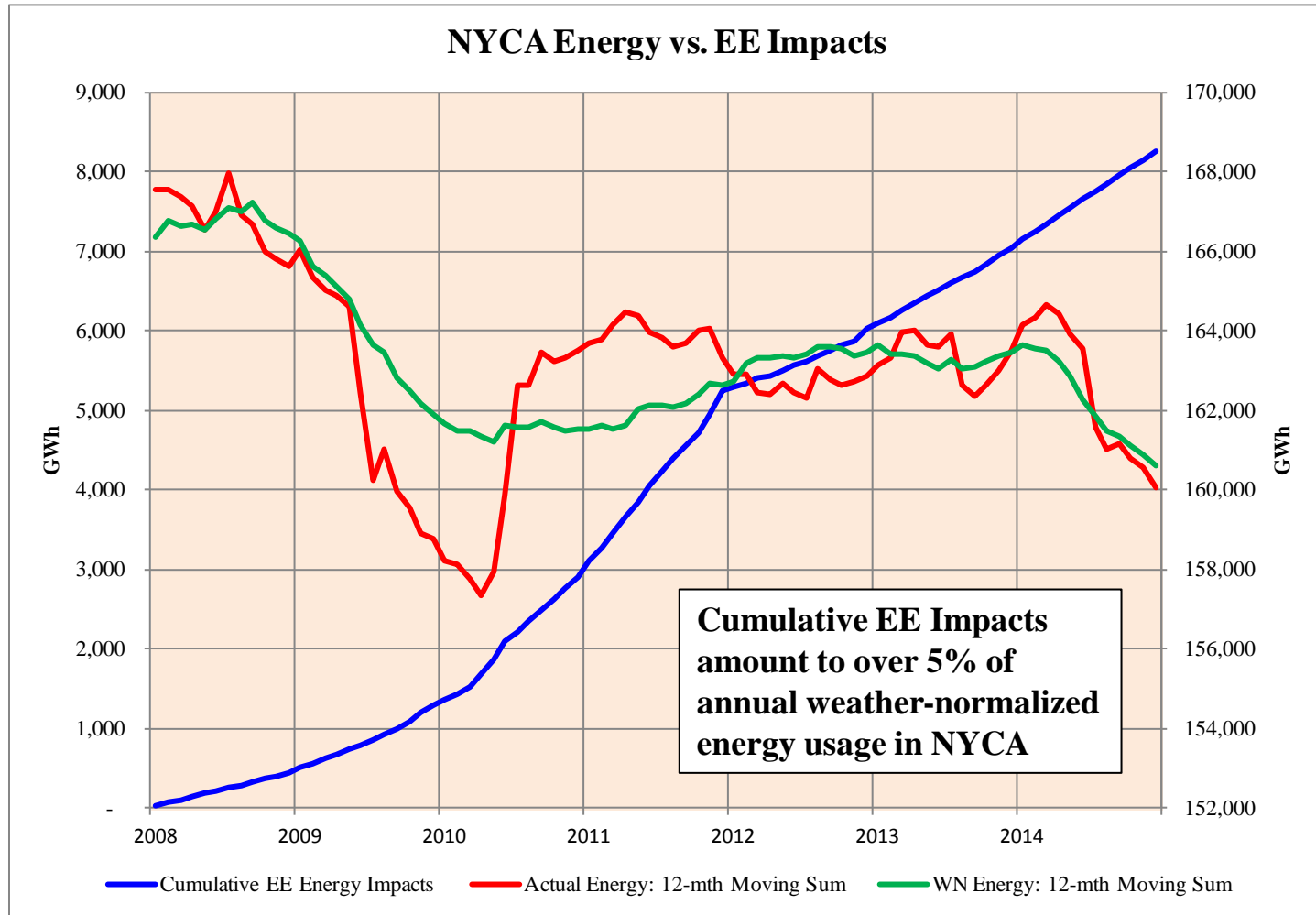
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**ESPWG**

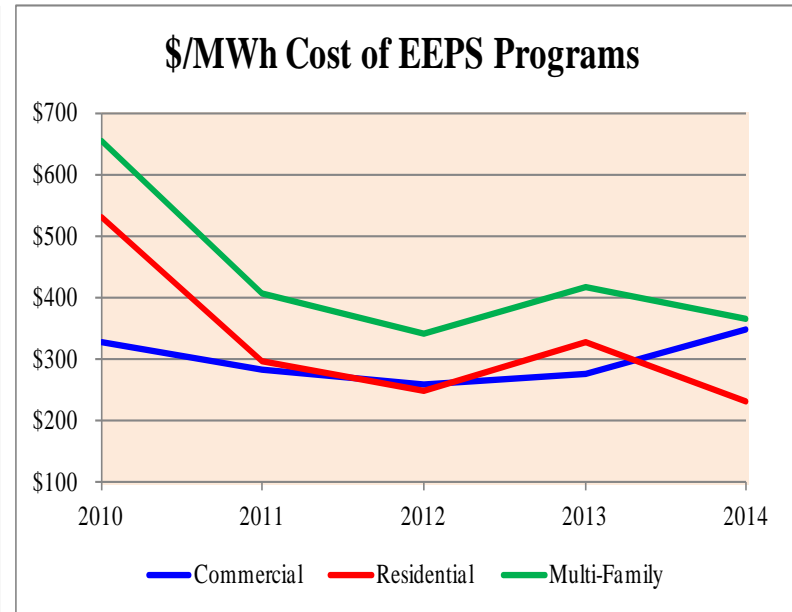
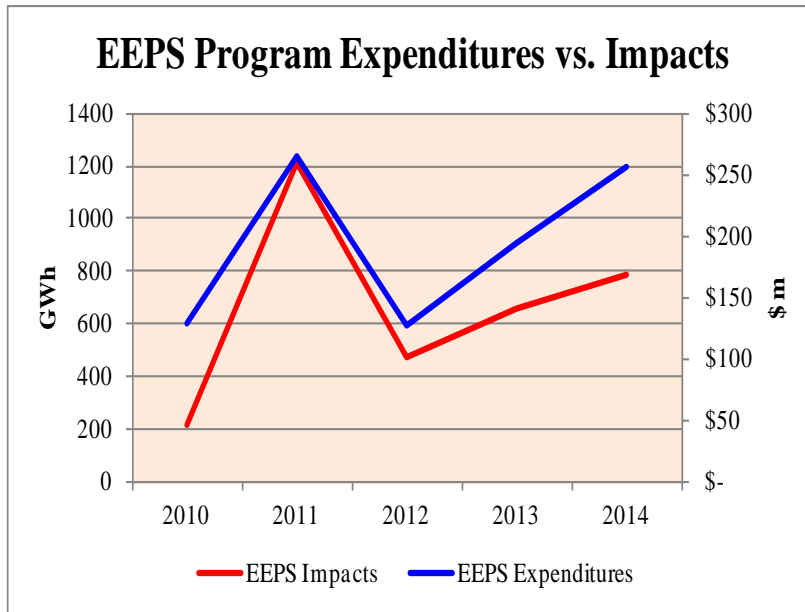
*February 3, 2015*

**KCC**



**EE Impacts include NYSERDA and utilities' programs, LIPA/PSEG, and projected NYPA figures.**

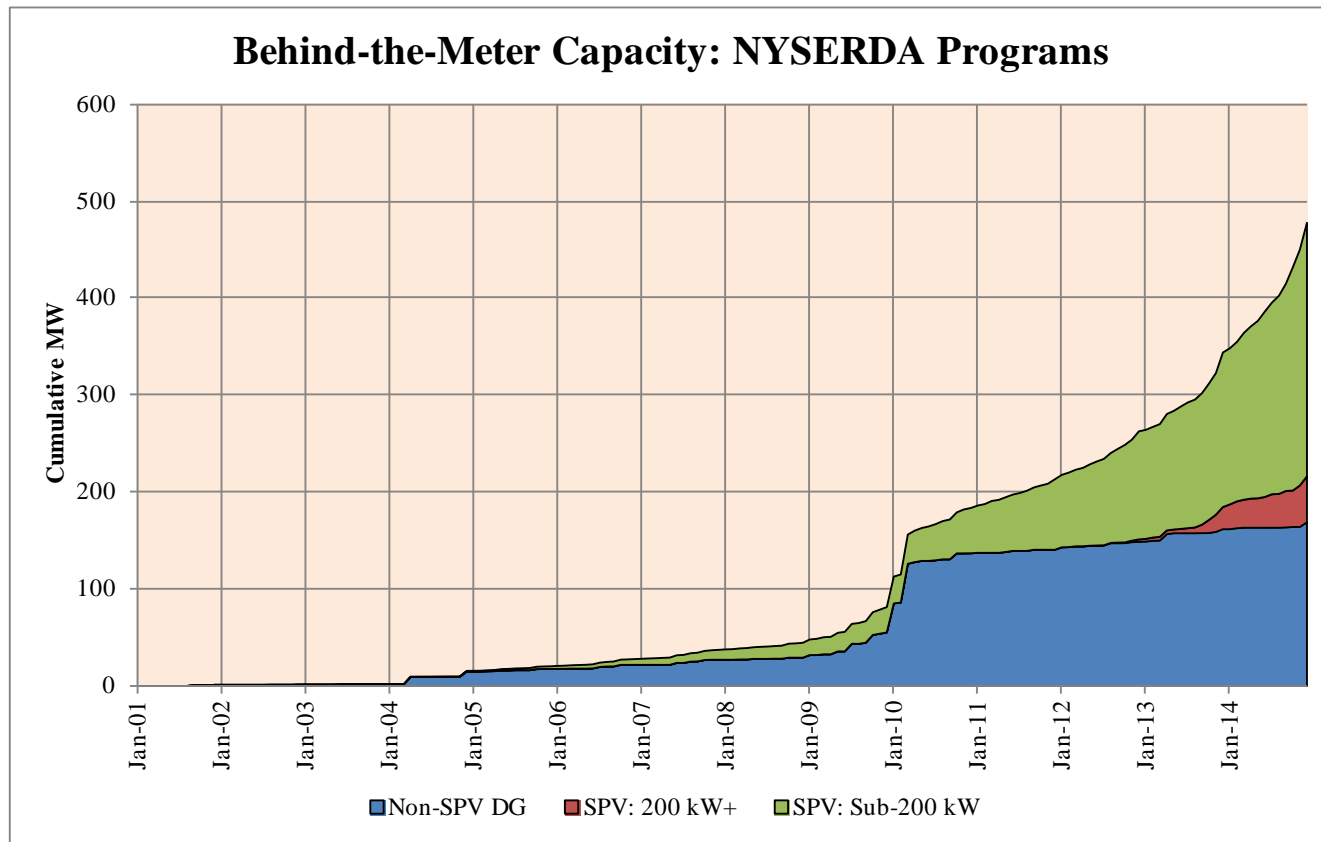
**Note: Energy efficiency impacts are estimates only, based upon information provided to the NYISO or to the NY DPS. Additional impacts due to 'free-riders' or 'spillover' are not included.**



These graphs exclude LIPA/PSEG and NYPA data.

- **EEPS program expenditures/incentives are the driver of energy-savings impacts. However, program expenditures have lagged budgetary outlays; e.g. as reported in EEPS scorecards, in 2014 expenditures were \$256m against a budget of \$361m.**
- **Program costs have remained relatively stable over the past few years. There is considerable disparity in per-MWh costs in each category across utilities. In general, Con Ed program costs are relatively higher.**

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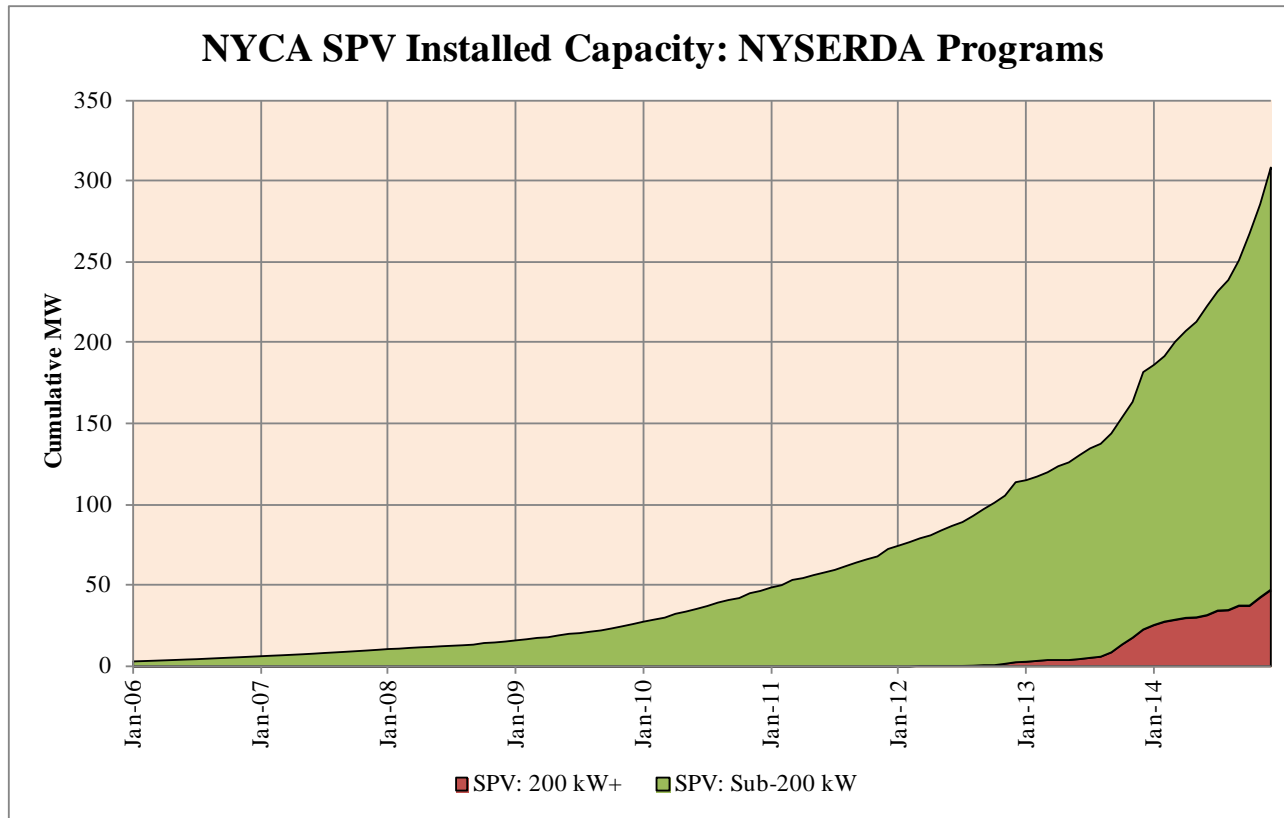
Source: NYSERDA Power Clerk and DG Integrated Data System, LIPA/PSEG

•**Non-SPV Distributed Generation includes Anaerobic Digester Gas (ADG), CHP, and Fuel Cell systems. Put together, they have typical capacity factors around 55%.**

**Avg. Capacity Growth (Jul. 14 – Dec. 14) = 1 MW/month.**

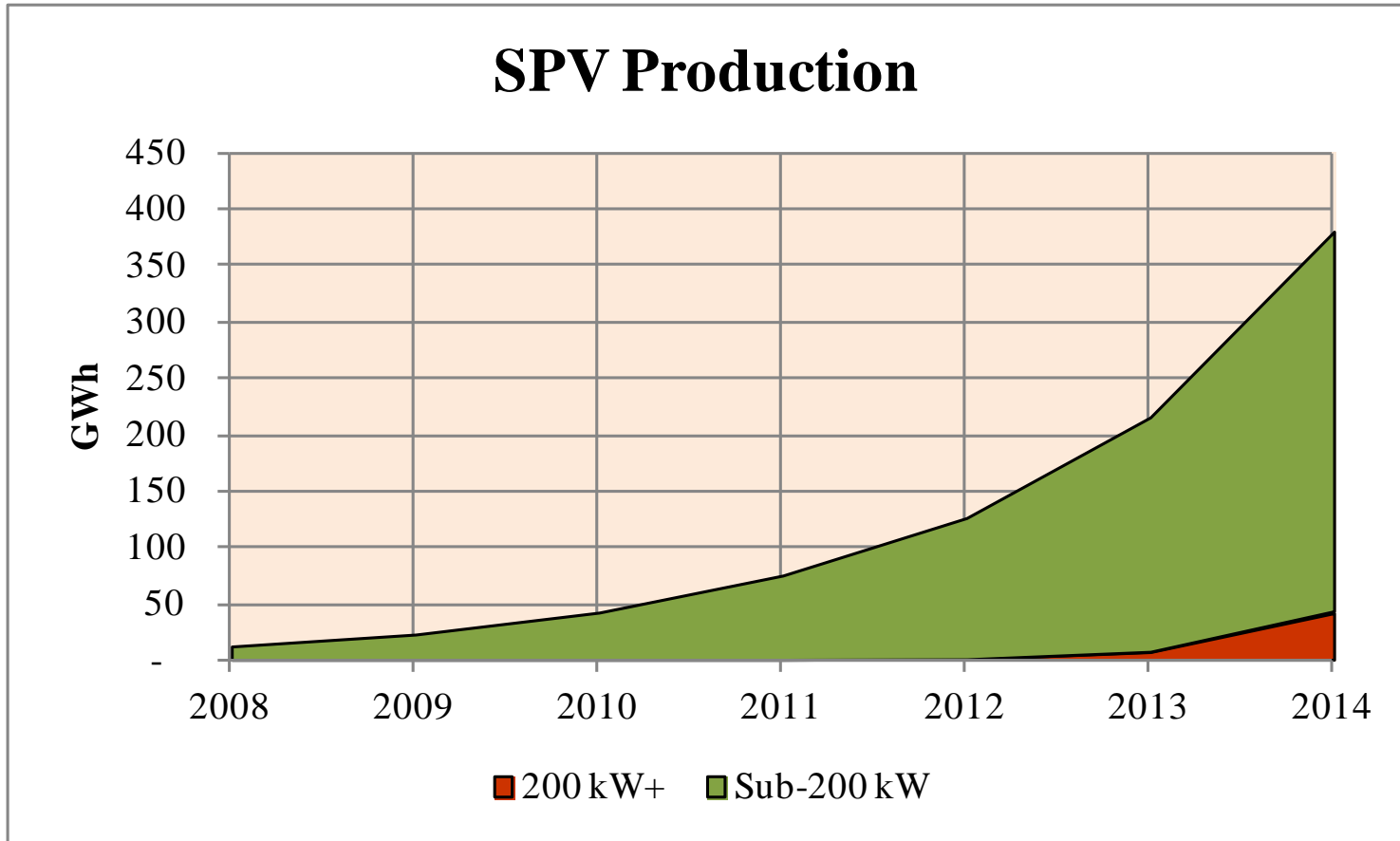
•**SPV capacity factors have pronounced seasonality over the course of a year, the highest levels being during summer months (around 20%) and about 11.5% on an annual basis.**

**Avg. Capacity Growth (Jul. 14 – Dec. 14) = 10 MW/month.**



## 2014 SPV Capacity Snapshot

	A	B	C	D	E	F	G	H	I	J	K	NYCA
Sub-200 kW	14.9	4.5	15.5	1.2	10.2	47.8	33.3	4.5	7.6	28.0	94.0	261.4
200 kW +	10.4	4.4	11.1	0.0	6.0	3.7	6.5	0.0	0.0	5.5	0.0	47.7
<b>Total</b>	<b>25.3</b>	<b>8.8</b>	<b>26.6</b>	<b>1.2</b>	<b>16.2</b>	<b>51.5</b>	<b>39.9</b>	<b>4.5</b>	<b>7.6</b>	<b>33.4</b>	<b>94.0</b>	<b>309.0</b>



Source: NYSERDA Power Clerk and DG Integrated Data System

## Existing and Proposed State Funding for Energy Saving Programs

### Existing EEPS Budgets (\$ million)

	2012	2013	2014	2015
NYSERDA EEPS	\$ 157.6	\$ 177.0	\$ 180.6	\$ 178.2
Utilities EEPS	\$ 186.5	\$ 189.3	\$ 188.0	\$ 187.3
<b>Total</b>	<b>\$ 344.1</b>	<b>\$ 366.2</b>	<b>\$ 368.6</b>	<b>\$ 365.5</b>

### Clean Energy Fund (CEF) Projected Annual Program Expenditures (\$ million)

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2016-25
Existing Programs*	\$ 574.4	\$ 448.0	\$ 168.0	\$ 111.0	\$ 91.0	\$ 79.0	\$ 65.5	\$ 47.0	\$ 34.0	\$ 28.0	<b>\$1,645.9</b>
Solar PV	\$ 121.0	\$ 149.0	\$ 149.0	\$ 150.0	\$ 139.0	\$ 99.0	\$ 61.0	\$ 33.0	\$ -	\$ -	<b>\$ 901.0</b>
Mkt. Dev. + Innovation	\$ 43.0	\$ 195.0	\$ 275.0	\$ 333.0	\$ 333.0	\$ 331.5	\$ 317.5	\$ 312.5	\$ 307.0	\$ 307.0	<b>\$2,754.5</b>
NYGB	\$ 195.3	\$ 195.3	\$ 195.3	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	<b>\$ 585.9</b>
<b>Total</b>	<b>\$ 933.7</b>	<b>\$ 987.3</b>	<b>\$ 787.3</b>	<b>\$ 594.0</b>	<b>\$ 563.0</b>	<b>\$ 509.5</b>	<b>\$ 444.0</b>	<b>\$ 392.5</b>	<b>\$ 341.0</b>	<b>\$ 335.0</b>	<b>\$5,887.3</b>

Source: Clean Energy Fund Proposal, NYSERDA, Sep. 23, 2014, p.47.

\* The majority of these programs is accounted for by existing EEPS programs. It also includes funding for DG systems.

The New York Independent System Operator (NYISO) is a not-for-profit corporation responsible for operating the state's bulk electricity grid, administering New York's competitive wholesale electricity markets, conducting comprehensive long-term planning for the state's electric power system, and advancing the technological infrastructure of the electric system serving the Empire State.



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