



NYSERDA

Clean Energy Fund Quarterly Performance Report through September 30, 2017

Final Report

NYSERDA's Promise to New Yorkers:

NYSERDA provides resources, expertise, and objective information so New Yorkers can make confident, informed energy decisions.

Mission Statement:

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

Vision Statement:

Serve as a catalyst – advancing energy innovation, technology, and investment; transforming New York's economy; and empowering people to choose clean and efficient energy as part of their everyday lives.

**Clean Energy Fund
Quarterly Performance Report
through September 30, 2017**

Final Report

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1 Overview

The Clean Energy Fund (CEF) was designed to deliver on New York State's commitment to reduce ratepayer collections, drive economic development, and accelerate the use of clean energy and energy innovation.

The CEF supports Governor Andrew M. Cuomo's Clean Energy Standard mandate that requires 50% of the State's electricity to come from renewable energy sources by 2030, while reshaping energy efficiency, clean energy, and energy innovation programs.

The CEF offers solutions to:

- Reduce greenhouse gas emissions through increased efficiency and use of renewable energy.
- Make customer energy bills more affordable, delivering \$39 billion in customer bill savings over the life of the CEF.
- Accelerate growth of the State's clean energy economy.
- Mobilize private investment, leveraging \$29 billion over the life of the CEF.
- Provide more value to the customer while reducing ratepayer collections by \$1.5 billion by 2025.

The CEF Order was issued on January 21, 2016.¹ This order required quarterly reporting for the Market Development and Innovation and Research Portfolios to explain the following:

- Progress against the initiative-specific milestone.
- CEF goal metric schedules outlined in the Investment Plan Chapters.
- Tracking of expenditures and commitments against their prospective budgets.

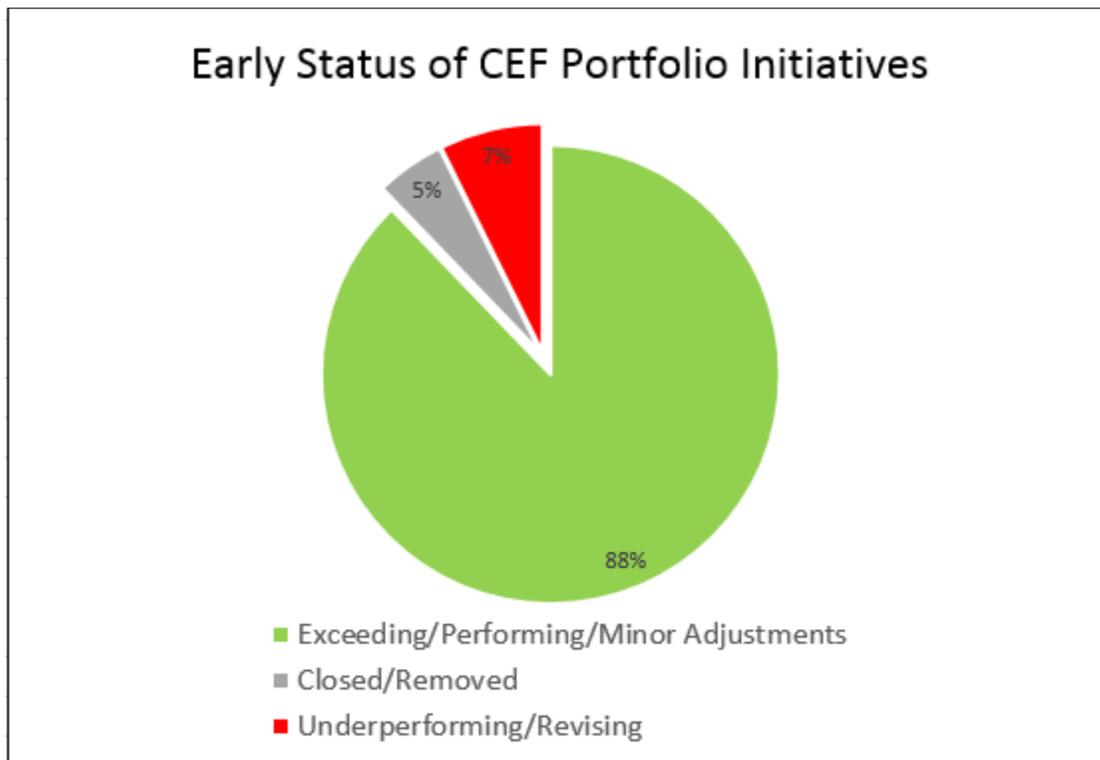
¹ Case 14-M-0094 – *Proceeding on Motion of the Commission to Consider a Clean Energy Fund*, Ordering Authorizing the Clean Energy Fund Framework. Issued and effective January 21, 2016.

This report represents quarterly and cumulative activity through September 30, 2017 and achievements of all programs approved prior to and during the reporting period. This includes the transition programs that were included in the Resource Acquisition Transition Chapter as well as new initiatives in the Market Development and Innovation and Research Chapters. See Appendix A for the Department of Public Service (DPS) case number/reference and effective date of these initiatives.

Through September 2017, 43 Market Development (MD) and Innovation and Research (I&R) initiatives were developed by NYSERDA and filed with the Commission, and 41 of these initiatives have launched in the market. In these portfolios, NYSERDA included the introduction of 29 new initiatives intended to drive greater impact. In the early years of the CEF, these new initiatives will operate alongside 12 Resource Acquisition Transition initiatives—a purposeful portfolio mix intended to introduce a greater proportion of market-enabling activities without disrupting existing market momentum that may be based on more traditional NYSERDA and utility approaches.

Figure 1 shows the majority (88%) of launched initiatives are progressing well and have either exceeded expectations, maintained their original plans or moved forward with minor changes. As information is gained, NYSERDA modified several of these largely-successful initiatives to optimally align them with market needs. A smaller percentage of initiatives are undergoing more substantial adjustment (7%) or have been closed/removed due to lack of performance (5%). Initiatives that have been closed generally experienced lower customer demand than expected and NYSERDA is redirecting funds to better meet market needs.

Figure 1: Early Status of CEF Portfolio Initiatives



The MD and I&R portfolios are strongly contributing toward realization of the total CEF 10-year minimum goals and deployment of funds is well aligned with progress at this time, as depicted in Figure 2². Where cumulative progress represents committed dollars and associated impact and expected benefits equals remaining “programmed” dollars and associated benefits. Specifically:

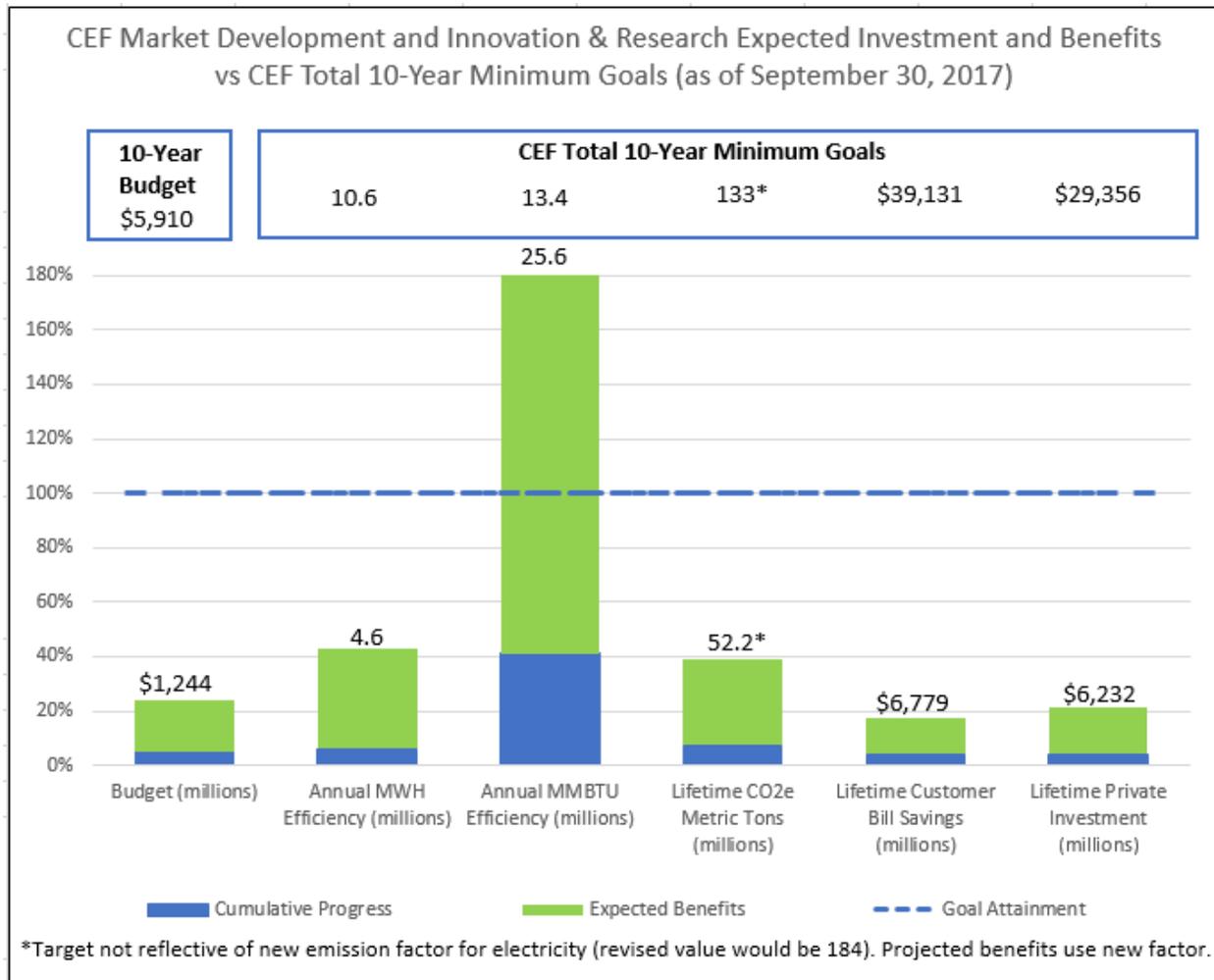
- Achievement of the energy efficiency MWh and MMBtu goals that are core to the MD portfolio and represent “no backsliding from EEPS” is on track. MMBtu expected benefits are already significantly greater than the minimum projected benefits due to the expansion into all fuels as the State Energy Plan goals require and the significant potential that exists in fuels, especially in the areas of industrial, low-income, and electric vehicles.
- Carbon dioxide equivalent (CO₂e) emission reduction progress is excellent at this time, and NYSERDA is well-positioned to meet the overall goal for the CEF. The CEF’s fuel-neutral approach is a large driver of success on the CO₂e metric.³

² The total CEF 10-year minimum goals will also be supported by achievement in the NY-Sun and NY Green Bank portfolios. The 88 million MWh renewable energy goal is not shown in Figure 2 as it is mainly supported by NY-Sun.

³ NYSERDA’s electricity emission reduction factor of 1,160 pounds CO₂e/MWh is derived using the marginal emission-rate analysis for CO₂ from “Appendix: The Benefits and Costs of Net Energy Metering in New York” Figure 28, and applying a line loss factor of 7.2%. <http://documents.dps.ny.gov/public/MatterManagement/CaseMaster.aspx?MatterSeq=49636&MNO=15-E-0703>

- Performance of the customer (participant) bill savings⁴ metric is somewhat low at this time, but is not yet inclusive of estimated indirect bill savings projected to result from the new MD initiatives, which will occur later in the 10-year time frame. NYSERDA’s current expectation is that this metric will be attained over the life of the fund.
- Lifetime private investment benefits are also on track at this time

Figure 2. CEF Expected Investment and Benefits vs. 10-Year Minimum Goals as of September 30, 2017 (millions)⁵



⁴ Customer Bill Savings are calculated as direct energy bill savings realized by customers participating in NYSERDA’s programs.

⁵ 10-year Budget and 10-year Minimum Goals in this figure are reflective of all four CEF portfolios – Market Development, Innovation and Research, NY-Sun and NY Green Bank. The 88 million MWh renewable energy goal is not depicted here as it is mainly supported by NY-Sun.

A high-level summary of the progress of each initiative and offerings within the initiatives as applicable is shown in Tables 1a-1c. These tables display key dates, assessment of benefits metrics progress against current targets and, as warranted, an explanation of progress towards benefit metrics and/or program implementation milestones.

Table 1a. Summary of Initiative/Offering Progress – Resource Acquisition Transition

Initiative: Offering (Tables)	Key Dates	Metrics Progress vs. Targets ¹	Explanation of Progress
Commercial Resource Acquisition Transition and FlexTech Initiative (Table 7)	Approval Date: February 29, 2016 Launch Date: March 1, 2016 Refiling Approval Date: July 17, 2017	Lagging	The Commercial Implementation Program closed at the end of April 2017. There were approximately 40 pending applications that formed the basis of targets for the new refiling. After review of those projects, only two will proceed and the targets set for this program component will not be met. NYSERDA is in the process of assessing whether the FlexTech component will attain the combined goal or if new forecasts will need to be developed.
Industrial Resource Acquisition Transition Initiative (Table 8)	Approval Date: February 29, 2016 Launch Date: March 1, 2016 Refiling Approval Date: July 17, 2017	Exceeding	
Agriculture Resource Acquisition Transition Initiative (Table 9)	Approval Date: February 29, 2016 Launch Date: March 1, 2016 Refiling Approval Date: July 17, 2017	Exceeding	
Multifamily Market-Rate Resource Acquisition Transition Initiative (Table 10)	Approval Date: February 29, 2016 Launch Date: May 19, 2016 Refiling Approval Date: July 17, 2017	Exceeding	The Targeted Option of the program was closed in August 2017, giving the market a 30-day notice period. The number of applications received during the notice period exceeded expectation, which explains why certain metrics exceed targets.
Single-Family Market-Rate Resource Acquisition Initiative (Table 11)	Approval Date: February 29, 2016 Launch Date: March 1, 2016 Refiling Approval Date: July 17, 2017	On Track	
Commercial New Construction Resource Acquisition Transition Initiative (Table 12)	Approval Date: February 29, 2016 Launch Date: March 1, 2016 Refiling Approval Date: July 17, 2017	Exceeding	
Low-Rise New Construction Resource Acquisition Transition Initiative: Market-Rate (Table 13)	Approval Date: February 29, 2016 Launch Date: March 1, 2016 Refiling Approval Date: July 17, 2017	Exceeding	

Table 1a continued

Initiative: Offering (Tables)	Key Dates	Metrics Progress vs. Targets ¹	Explanation of Progress
Low-Rise New Construction Resource Acquisition Transition Initiative: Low- to Moderate-Income (Table 14)	Approval Date: February 29, 2016 Launch Date: March 1, 2016 Refiling Approval Date: July 17, 2017	Exceeding	Project applications for low-rise LMI new construction are expected to level off through the end of 2017, resulting in closer alignment with initial targets, since NYS Housing and Community Renewal (HCR) Funding Awards typically drive higher levels of commitments in Q2 and Q3.
Multifamily New Construction Resource Acquisition Transition Initiative: Market-Rate (Table 15)	Approval Date: February 29, 2016 Launch Date: August 8, 2016 Refiling Approval Date: July 17, 2017	Lagging	Performance against metrics targets is lagging currently, but program participation in 2017 is expected to increase based on the reauthorization of the New York City Property Tax abatement. Market engagement indicates the modifications to program, which were approved in July 2017 should also lead to increased participation and closer alignment with targets by end of 2017, or first quarter of 2018.
Multifamily New Construction Resource Acquisition Transition Initiative: Low- to Moderate-Income (Table 16)	Approval Date: February 29, 2016 Launch Date: August 8, 2016 Refiling Approval Date: July 17, 2017	On Track	
Anaerobic Digesters Resource Acquisition Transition Initiative (Table 17)	Approval Date: February 29, 2016 Launch Date: July 8, 2016	Lagging	A delay in launching 2017 activities caused the lag in performance. Progress is expected to better align with expectations after proposals are accepted in early Q2 2018, and awards are then made in Q3 2018.
Fuel Cell Resource Acquisition Transition Initiative	Approval Date: February 29, 2016	n/a	NYSERDA did not move forward with the Fuel Cell Resource Acquisition Transition Program as originally planned. NYSERDA is currently working with stakeholders and equipment vendors and evaluating options for the fuel cell market and will reflect fuel cell activities in a future revision.
Small Wind Resource Acquisition Transition Initiative (Table 18)	Approval Date: February 29, 2016 Launch Date: March 1, 2016	Mixed	The program has not achieved some targets due to smaller sized projects and fewer developers than anticipated.

Table 1a continued

Initiative: Offering (Tables)	Key Dates	Metrics Progress vs. Targets¹	Explanation of Progress
Solar Thermal Resource Acquisition Transition Initiative (Table 19)	Approval Date: February 29, 2016 Launch Date: March 1, 2016 Refiling Approval Date: July 17, 2017	On Track	
Combined Heat and Power (CHP) Resource Acquisition Transition Initiative (Table 20)	Approval Date: February 29, 2016 Launch Date: March 1, 2016	On Track	
^{1.} Initiative progress indicator is takes into account current cumulative progress of all relevant metrics vs targets. Exceeding means all metrics (with the allowed exception of two) are >100% of progress vs target. On Track means all metrics (with the allowed exception of two) are >80% of progress vs target. Lagging means all metrics (with the allowed exception of two) are <80% of progress vs target. Mixed means more than two metrics are < 50% and > 100% of progress vs target. Where the same metric has both an annual and lifetime value, it is counted as one metric.			

Table 1b. Summary of Initiative/Offering Progress – Market Development

Initiative: Offering (Tables)	Key Dates	Metrics Progress vs. Targets¹	Explanation of Progress
Real Estate Tenant Initiative (Tables 22-23)	Approval Date: May 23, 2016 Launch Date: July 19, 2016 Refiling Approval Date: July 17, 2017	Lagging	Real Estate Tenant initiative metrics progress is lagging in comparison to targets. The initiative was revised in Q3 2017 and preliminary feedback from market is positive, with a growing pipeline of projects. NYSERDA anticipates participation rates will increase in Q4 2017 and Q1 2018. The initiative is making progress toward its multi-year implementation milestones.
Real-Time Energy Management (RTEM) Initiative (Table 24-25)	Approval Date: May 23, 2016 Launch Date: June 20, 2016 Refiling Approval Date: July 17, 2017	On Track	All current milestones have been met and the program is fully on track.
Reforming the Energy Vision (REV) Campus Challenge Initiative (Tables 26-27)	Approval Date: May 23, 2016 Launch Date: December 21, 2016 Refiling Approval Date: July 17, 2017	Lagging	The REV Campus Challenge initiative is exceeding its targeted membership goal (88 out of projected 78), but is lagging its energy savings targets (56%). NYSERDA is reviewing available data on REV Campus Challenge member activity to more accurately and completely account for energy savings. The initiative is making progress toward its multi-year implementation milestones.

Table 1b continued

Initiative: Offering (Tables)	Key Dates	Metrics Progress vs. Targets ¹	Explanation of Progress
Continuous Energy Improvement Initiative: On-Site Energy Manger (Tables 28-29)	Approval Date: May 23, 2016 Launch Date: September 12, 2016 Refiling Approval Date: July 17, 2017	Exceeding	Initial energy savings projections at pilot facilities are exceeding expectations. The initiative is making progress toward its multi-year implementation milestones.
Continuous Energy Improvement Initiative: Strategic Energy Management (Tables 30-31)	Approval Date: May 23, 2016 Launch Date: November 22, 2016 Refiling Approval Date: July 17, 2017	On Track	The initiative is making progress toward its multi-year implementation milestones.
Continuous Energy Improvement Initiative: Energy Management Information Systems (Tables 32-33)	Approval Date: June 23, 2017 Anticipated Launch Date: Q4 2017	n/a	New initiative, not yet launched.
Clean Energy Communities Initiative (Tables 34-35)	Approval Date: May 23, 2016 Launch Date: August 3, 2016 Refiling Approval Date: July 17, 2017	Lagging	The lag in metrics progress vs. targets is primarily due to timing of contracting with designated communities. The initiative has made good progress against its current implementation milestones.
Community Energy Engagement Initiative (Tables 36-37)	Approval Date: March 27, 2017 Launch Date: October 10, 2017	n/a	The initiative made good progress against its current implementation milestones. Some contracts from first solicitation have been executed and trainings scheduled. Remaining contracts will be executed and proposals from second solicitation will be selected in Q4 2017.
Offshore Wind Master Plan Initiative (Tables 38-39)	Approval Date: May 23, 2016 Launch Date: September 15, 2016	n/a	The initiative made good progress against its current implementation milestones.
Offshore Wind Pre-Development Initiative (Tables 40-41)	Approval Date: May 23, 2016 Launch Date: December 12, 2016	n/a	The initiative made good progress against its current implementation milestones.
Offshore Wind Pre-Development Initiative (Tables 40-41)	Approval Date: May 23, 2016 Launch Date: December 12, 2016	n/a	The initiative made good progress against its current implementation milestones.

Table 1b continued

Initiative: Offering (Tables)	Key Dates	Metrics Progress vs. Targets¹	Explanation of Progress
REV Connect Initiative (Tables 42-43)	Approval Date: May 23, 2016 Launch Date: August 9, 2016 Refiling Approval Date: July 17, 2017	Lagging	The initiative made good progress against its current implementation milestones, but metrics progress is behind target for the program's singular metric of private investment. Private investment is defined as financial support from utilities and private sector companies for REV Connect functions. As users of the REV Connect platform identify which functions create greatest value for their organization, this may prompt additional private investment to support high-value functions.
Reducing Barriers to Energy Storage Deployment Initiative (Tables 44-45)	Approval Date: August 17, 2016 Launch Date: November 7, 2016 Refiling Approval Date: July 17, 2017	On Track	The initiative has made good progress against its current implementation milestones.
Electric Vehicles Initiative: EV Rebate (Tables 46-47)	Approval Date: August 17, 2016 Launch Date: March 21, 2017 Refiling Approval Date: July 17, 2017	Lagging	All current milestones have been met. Lag in metrics progress is due to greater than anticipated EV purchases that are occurring without leveraging the available rebate.
Greenhouse Lighting and Systems Engineering (GLASE) Initiative (Tables 48-49)	Approval Date: September 15, 2016 Launch Date: January 1, 2017	On Track	The initiative made good progress against its current implementation milestones and is on track regarding metrics performance.
RetrofitNY Initiative (Tables 50-51)	Approval Date: August 31, 2016 Launch Date: April 4, 2017	n/a	The initiative made good progress against its current implementation milestones. Solicitation is anticipated to launch in Q4 2017.
REVitalize Initiative (Tables 52-53)	Approval Date: August 31, 2016 Launch Date: June 27, 2017	n/a	The initiative made good progress against its current implementation milestones. Four proposals have been selected and funding packages are being developed for Greenlight Review.
Low-Income Forum on Energy Initiative (Tables 54-55)	Approval Date: August 31, 2016 Launch Date: August 31, 2017	Exceeding	All current milestones have been met and the program is exceeding its metrics targets.
Healthy Homes Feasibility Study Initiative (Table 56)	Approval Date: August 31, 2016 Launch Date: January 20, 2017	n/a	The initiative is making good progress on its implementation milestones. Feasibility study is currently in progress. A draft report is under review, along with interim quantitative analysis to be used to engage partner agencies.
Low- to Moderate-Income Single-Family Initiative: Low-Income (Tables 57,59)	Approval Date: February 29, 2016 Launch Date: March 1, 2016 Refiling Approval Date: July 17, 2017	On Track	The initiative was redesigned and relaunched in July 2017. The initiative made good progress against its current implementation milestones.

Table 1b continued

Initiative: Offering (Tables)	Key Dates	Metrics Progress vs. Targets¹	Explanation of Progress
Low- to Moderate-Income Single-Family Initiative: Moderate-Income (Tables 58-59)	Approval Date: February 29, 2016 Launch Date: March 1, 2016 Refiling Approval Date: July 17, 2017	On Track	The initiative was redesigned and relaunched in July 2017. The initiative made good progress against its current implementation milestones.
Low- to Moderate-Income Multifamily Initiative (Tables 60-61)	Approval Date: February 29, 2016 Launch Date: May 19, 2016 Refiling Approval Date: July 17, 2017	Lagging	The initiative made good progress against its current implementation milestones. The program was updated in July 2017 based on market feedback. Energy efficiency providers have confirmed strong interest and are working actively to bring new projects into the program, which is expected to improve metrics progress. Provider Summit organization is in progress with strong attendance is anticipated.
Industry Partnerships Initiative (Tables 62-63)	Approval Date: September 15, 2016 Launch Date: January 13, 2017 Refiling Approval Date: July 17, 2017	Exceeding	The initiative made good progress against its multi-year implementation milestones.
Heat Pumps and Solar Thermal Initiative (Tables 64-65)	Approval Date: May 16, 2017 Launch Date: May 30, 2017	Exceeding	The initiative made good progress against its current implementation milestones. Contractor Solicitation under development. RFQ for mentors expected to be issued Q4 2017.
Renewable Heat NY Initiative (Tables 66-67)	Approval Date: May 16, 2017 Launch Date: May 9, 2017	Mixed	RHNY initially launched in 2014 utilizing RGGI funding and was later transferred to CEF in Q2 2017. However, CEF funding was not utilized for direct incentives until the start of Q3 2017. This resulted in a lag in performance against certain Q3 2017 project metrics. The initiative has made good progress against its current implementation milestones.
Underutilized Products Support Initiative (Tables 68-69)	Approval Date: May 16, 2017 Launch Date: August 17, 2017	Lagging	The lag in metrics progress vs. targets is primarily due to a later than expected launch of the Air-Source Heat Pump (ASHP) portion of the initiative. The initiative has made good progress against its current implementation milestones.
EE Soft Cost Challenge Initiative (Tables 70-71)	Approval Date: July 19, 2017 Anticipated Launch Date: Q1 2018	n/a	Anticipated launch Q1 2018.
¹ Initiative progress indicator is takes into account current cumulative progress of all relevant metrics vs targets. Exceeding means all metrics (with the allowed exception of two) are >100% of progress vs target. On Track means all metrics (with the allowed exception of two) are >80% of progress vs target. Lagging means all metrics (with the allowed exception of two) are <80% of progress vs target. Mixed means more than two metrics are < 50% and > 100% of progress vs target Where the same metric has both an annual and lifetime value, it is counted as one metric.			

Table 1c. Summary of Initiative/Offering Progress – Innovation and Research

Initiative: Offering (Tables)	Key Dates	Metrics Progress vs. Targets¹	Explanation of Progress
Distributed Energy Resource (DER) Interconnection Initiative (Tables 73-74)	Approval Date: May 23, 2016 Launch Date: October 20, 2016	Exceeding	The initiative made good progress against its current implementation milestones and is exceeding its metrics targets.
High-Performing Grid Modernization Initiative (Tables 75-76)	Approval Date: May 23, 2016 Launch Date: September 16, 2016 Refiling Approval Date: July 17, 2017	Exceeding	The initiative made good progress against its current implementation milestones. The Grid Modernization Roadmap in progress and expected to be completed in August 2017. The solicitation will be developed by Q4 2017.
Power Electronics Manufacturing Initiative (Tables 77-78)	Approval Date: July 19, 2017 Anticipated Launch Date: Q4 2017	n/a	The initiative made good progress against its current implementation milestones. Contracting is in progress.
Cleantech Startup Growth Initiative (Tables 79-82)	Approval Date: May 23, 2016 Launch Date: October 12, 2016	On Track	The initiative made good progress toward current implementation milestones. Networking events and entrepreneur boot camps occurred as planned in 2017. Expected to launch competitive solicitation and establish investment committee for ignition grants by end of 2017. Expected to establish entrepreneurship training programs for geographic coverage in 2018.
Manufacturing Corps Initiative (Tables 83-84)	Approval Date: February 13, 2017 Launch Date: June 29, 2017	n/a	Pilot-site solicitation award(s) are expected to be contracted in Q1 2018. The initiative has made good progress against its current implementation milestones.
NextGen HVAC Initiative (Tables 85-86)	Approval Date: August 17, 2016 Launch Date: June 28, 2017	n/a	Projects for first technology challenge will be contracted in Q1 2018. The initiative has made good progress against its current implementation milestones.
Electric Vehicles Initiative: EV Innovation (Tables 87-88)	Approval Date: August 17, 2016 Launch Date: September 15, 2017	Lagging	Solicitation to be released Q4 2017 and metrics progress will improve after projects are contracted in late 2017. The initiative has made good progress against its current implementation milestones.

Table 1c continued

Initiative: Offering (Tables)	Key Dates	Metrics Progress vs. Targets ¹	Explanation of Progress
Energy Related Environmental Research Initiative (Tables 89-90)	Approval Date: February 13, 2017 Launch Date: February 15, 2017	Lagging	Metrics progress will improve after projects are contracted in Q4 2017. The initiative has made good progress against its current implementation milestones. A scoping session to update Environmental Research Plan for Air Quality and Health Effects will be held November 1, 2017.
Renewables Optimization Initiative (Tables 91-92)	Approval Date: March 27, 2017 Launch Date: June 21, 2017	n/a	The initiative made good progress against its current implementation milestones. PON 3585 Energy Storage Technology and Product Development was issued on June 21, 2017. First round concept papers have been received, reviewed and proposal invitations have been issued for submission by September 28, 2017.
¹ . Initiative progress indicator is takes into account current cumulative progress of all relevant metrics vs targets. Exceeding means all metrics (with the allowed exception of one) are >100% of progress vs target. On Track means all metrics (with the allowed exception of one) are >80% of progress vs target. Lagging means all metrics (with the allowed exception of one) are <80% of progress vs target. Mixed means more than one metric is < 50% and > 100% of progress vs target. Where the same metric has both an annual and lifetime value, it is counted as one metric.			

Table 2 shows the CEF cumulative progress (committed benefits) to date against the 10-year minimum projected goals of the entire CEF, inclusive of all four portfolios. The CEF MD and I&R portfolios will contribute significantly to these minimum projected goals, as will the NY-Sun and NY Green Bank portfolios, for which progress is presented in separate filings.

This report reflects direct benefits from participation in NYSERDA’s programs, as shown in all of the tables that follow. Indirect benefits are not yet reflected because it will take time for these benefits to be realized.

Table 2. CEF Minimum Projected Goals 2016–2025 and Progress to Date, Commitment Basis^{6,7,8,9}

		Cumulative Annual Benefits		Lifetime Benefits	
		Cumulative Progress through September 30, 2017	Minimum Projected Goals 2016-2025	Cumulative Progress through September 30, 2017	Minimum Projected Goals 2016-2025
Energy Efficiency	MWh	666,262	10,600,000	9,519,372	*
	MMBtu	5,527,673	13,400,000	86,095,867	*
	MW	52	*	52	*
Renewable Energy	MWh	15,248	*	198,232	88,000,000
	MW	6	*	6	*
CO2 Emission Reductions (metric tons)		656,463	*	9,776,618	133,000,000
Customer Bill Savings (\$ million)		\$112.02	*	\$1,662.44	\$39,131
Private Investment (\$ million)		\$1,176.91	*	\$1,176.91	\$29,356

* Metric to be tracked and reported, though specific target was not ordered.

⁶ The Private Investment, Customer Bill Savings and CO₂ Emission Reduction targets includes estimated benefits from NY-Sun and NY Green Bank. This information will be reported on an annual basis.

⁷ Bill savings represent savings for participants of NYSERDA programs.

⁸ This report reflects direct benefits from programs. Indirect benefits are not reflected, as it will take time for the benefits to be realized.

⁹ Beginning with Q4 2016, NYSERDA updated emission factors for natural gas, #2 oil, #6 oil, kerosene, propane, wood, and steam to be consistent with emission factors used in the updated NYS Greenhouse Gas Inventory (nyserdera.ny.gov/About/Publications/EA-Reports-and-Studies/Energy-Statistics). These factors are derived from EPA’s February 2016 State Inventory Tool release (<https://www.epa.gov/statelocalclimate/state-inventory-and-projection-tool>). Steam emission factors have been updated to be consistent with New York City’s updated Greenhouse Gas Inventory (http://www1.nyc.gov/assets/sustainability/downloads/pdf/publications/NYC_GHG_Inventory_2014.pdf).

Table 3. Market Development and Innovation and Research Portfolio Level Budgets and Spending¹⁰

Initiative	PSC Ordered Program Budget Funds ^a	Budget Approved as of September 30, 2017 ^b	% of Ordered Budget Funds Approved ^c	Expended Funds ^d	Open Encumbrances ^e	Contract Pre-Encumbrances ^f	Committed Funds ^g	% of Approved Budget Committed ^h	Budget Approved Remaining Balance ⁱ
Market Development									
Program Funds									
NYS Cost Recovery Fee	\$2,386,760,624	\$914,757,968	38%	\$80,461,297	\$67,750,450	\$76,049,291	\$224,261,038	25%	\$690,496,929
Innovation & Research									
Program Funds									
NYS Cost Recovery Fee	\$629,833,404	\$261,029,608	41%	\$1,342,286	\$14,317,890	\$27,579,413	\$43,239,589	17%	\$217,790,019
Administration	\$273,601,311	\$105,213,354	38%	\$32,117,376	\$465,677	\$20,183	\$32,603,235	31%	\$72,610,119
Evaluation	\$130,200,000	\$34,166,137	26%	\$841,102	\$2,769,256	-	\$3,610,357	11%	\$30,555,780
Total	\$3,420,395,339	\$1,315,167,067	38%	\$114,762,061	\$85,303,272	\$103,648,887	\$303,714,220	23%	\$1,011,452,846

- ^a CEF Order authorized CEF funding.
- ^b Funds approved by DPS as of September 30, 2017.
- ^c Percentage of the approved budget.
- ^d Invoices processed for payment by NYSERDA.
- ^e Remaining funding obligated under a contract, purchase order or incentive award.
- ^f Planned funding for contracts awarded and under negotiation.
- ^g Sum of Expended Funds, Open Encumbrances, and Contract Pre-Encumbrances.
- ^h Percentage of the committed budget.
- ⁱ Difference between Budget Approved Funds and Committed Funds.

¹⁰ NYSERDA pre-encumbered an additional \$31.4 million to solicitations with upcoming due dates that are not shown in Table 3. When including these funds, NYSERDA committed 26% of the total approved total budget to date. Committed benefits presented in this report do not include benefits associated with awards made as a result of these solicitations.

Table 4. Market Development, Innovation, and Research Portfolio Committed Benefits Progress to Date - Annual^{11,12,13,14}

Initiative	Completed Projects through June 30, 2017 with Adjustments	Completed Projects through 7/1/17-9/30/17	Total Completed Projects through September 30, 2017	Current Pipeline Through September 30, 2017 (Committed but not complete)	Grand Total Completed Projects + Pipeline	Cumulative Current Annual Target Through Q3 2017	% of Cumulative Annual Target Through Q3 2017	Total Cumulative Annual Target through 2025	% of Total Cumulative Annual Target through 2025
Market Development									
Energy Efficiency (MWh)	30,117	9,276	39,392	626,869	666,262	735,100	91%	2,523,000	26%
Energy Efficiency (MMBtu)	452,810	158,647	611,457	4,916,216	5,527,673	4,365,000	127%	18,470,000	30%
Energy Efficiency (MW)	0.2	0	0.6	51	52	*	-	*	-
Renewable Energy (MWh)	4,751	1,680	6,431	8,817	15,248	*	-	*	-
Renewable Energy (MW)	3	1.3	4	2	6	*	-	*	-
CO2e Reductions (metric tons)	42,160	13,396	55,556	600,907	656,463	*	-	*	-
Customer Bill Savings (\$ million)	\$10.49	\$3.95	\$14.44	\$97.58	\$112.02	*	-	*	-
Private Investment (\$ million)	\$96.20	\$54.90	\$151.10	\$793.17	\$944.27	*	-	*	-
Innovation and Research									
Energy Efficiency (MWh)	-	-	-	-	-	*	-	*	-
Energy Efficiency (MMBtu)	-	-	-	-	-	*	-	*	-
Energy Efficiency (MW)	-	-	-	-	-	*	-	*	-
Renewable Energy (MWh)	-	-	-	-	-	*	-	*	-
Renewable Energy (MW)	-	-	-	-	-	*	-	*	-
CO2e Reductions (metric tons)	-	-	-	-	-	*	-	*	-
Customer Bill Savings (\$ million)	-	-	-	-	-	*	-	*	-
Private Investment (\$ million)	-	-	-	\$232.64	\$232.64	*	-	*	-
Total Energy Efficiency (MWh)	30,117	9,276	39,392	626,869	666,262				
Total Energy Efficiency (MMBtu)	452,810	158,647	611,457	4,916,216	5,527,673				
Total Energy Efficiency (MW)	0.2	0.4	0.6	51	52				
Total Renewable Energy (MWh)	4,751	1,680	6,431	8,817	15,248				
Total Renewable Energy (MW)	3.13	1.3	4.4	2	6				
Total CO2e Reductions (metric tons)	42,160	13,396	55,556	600,907	656,463				
Total Customer Bill Savings (\$ million)	\$10.49	\$3.95	\$14.44	\$97.58	\$112.02				
Total Private Investment (\$ million)	\$96.20	\$54.90	\$151.10	\$1,025.81	\$1,176.91				

* Metric to be tracked and reported, though specific target was not ordered.

¹¹ Targets and benefits include initiatives filed and approved through September 30, 2017.

¹² This report reflects direct benefits from programs. Indirect benefits are not reflected, as it will take time for the benefits to be realized.

¹³ Completed projects through June 30, 2017 contains adjustments from programs due to lagged data and QA/QC.

¹⁴ Cumulative Current Target through Q3 2017 represents 100% of the 2016 annual target plus 75% of the 2017 annual target. Actual progress may not be equal each quarter of a calendar year.

Table 5. Market Development and Innovation and Research Portfolio Committed Benefits Progress to Date – Lifetime ^{15, 16, 17, 18}

Initiative	Completed Projects through June 30, 2017 with Adjustments	Completed Projects through 7/1/17-9/30/17	Total Completed Projects through September 30, 2017	Current Pipeline Through September 30, 2017 (Committed but not complete)	Grand Total Completed Projects + Pipeline	Cumulative Current Lifetime Target Through Q3 2017	% of Cumulative Lifetime Target Through Q3 2017	Total Cumulative Lifetime Target through 2025	% of Total Cumulative Lifetime Target through 2025
Market Development									
Energy Efficiency (MWh)	459,413	143,242	602,655	8,916,717	9,519,372	*	-	*	-
Energy Efficiency (MMBtu)	9,693,545	2,599,892	12,293,437	73,802,430	86,095,867	*	-	*	-
Renewable Energy (MWh)	74,541	25,334	99,876	98,356	198,232	577,550	34%	2,578,000	8%
CO2e Reductions (metric tons)	807,920	222,151	1,030,070	8,746,548	9,776,618	9,728,750	100%	35,110,000	28%
Customer Bill Savings (\$ million)	\$193.46	\$59.92	\$253.38	\$1,409.05	\$1,662.44	\$1,766.20	94%	\$6,779.00	25%
Private Investment (\$ million)	\$96.20	\$54.90	\$151.10	\$793.17	\$944.27	\$1,040.35	91%	\$5,231.00	18%
Innovation and Research									
Energy Efficiency (MWh)	-	-	-	-	-	*	-	*	-
Energy Efficiency (MMBtu)	-	-	-	-	-	*	-	*	-
Renewable Energy (MWh)	-	-	-	-	-	*	-	*	-
CO2e Reductions (metric tons)	-	-	-	-	-	*	-	*	-
Customer Bill Savings (\$ million)	-	-	-	-	-	*	-	*	-
Private Investment (\$ million)	-	-	-	\$232.64	\$232.64	\$274.35	85%	\$1,001.00	23%
Total Energy Efficiency (MWh)	459,413	143,242	602,655	8,916,717	9,519,372	-	-	-	-
Total Energy Efficiency (MMBtu)	9,693,545	2,599,892	12,293,437	73,802,430	86,095,867	-	-	-	-
Total Renewable Energy (MWh)	74,541	25,334	99,876	98,356	198,232	-	-	-	-
Total CO2e Reductions (metric tons)	807,920	222,151	1,030,070	8,746,548	9,776,618	-	-	-	-
Total Customer Bill Savings (\$ million)	\$193.46	\$59.92	\$253.38	\$1,409.05	\$1,662.44	-	-	-	-
Total Private Investment (\$ million)	\$96.20	\$54.90	\$151.10	\$1,025.81	\$1,176.91	-	-	-	-

* Metric to be tracked and reported, though specific target was not ordered.

¹⁵ Targets and benefits include initiatives filed and approved through September 30, 2017.

¹⁶ This report reflects direct benefits from programs. Indirect benefits are not reflected, as it will take time for the benefits to be realized.

¹⁷ Completed projects through June 30, 2017 contain adjustments from programs due to lagged data and QA/QC.

¹⁸ Cumulative Current Target through Q3 2017 represents 100% of the 2016 annual target plus 75% of the 2017 annual target. Actual progress may not be equal each quarter of a calendar year.

2 Resource Acquisition Transition Initiative Specific Results

Table 6. Resource Acquisition Transition Initiative Level Budgets and Spending¹⁹

Initiative	Budget Approved as of September 30, 2017 ^a	Expended Funds ^b	Open Encumbrances ^c	Contract Pre-Encumbrances ^d	Committed Funds ^e	% of Approved Budget Committed ^f	Budget Approved Remaining Balance ^g
Resource Acquisition Transition Chapter							
Commercial	\$26,392,500	\$968,626	\$2,792,511	\$1,445,626	\$5,206,763	20%	\$21,185,737
Industrial	\$69,562,932	\$2,942,814	\$11,389,842	\$10,355,218	\$24,687,874	35%	\$44,875,058
Agriculture	\$3,600,000	\$1,760,953	\$659,279	\$5,000	\$2,425,232	67%	\$1,174,768
Multifamily Market Rate	\$156,628	\$106,955	\$49,331	\$342	\$156,628	100%	-
Single Family Market Rate	\$22,024,680	\$9,206,996	\$807,919	\$3,615,502	\$13,630,417	62%	\$8,394,263
Commercial New Construction	\$30,684,000	\$833,472	\$1,289,261	\$19,753,424	\$21,876,157	71%	\$8,807,843
Low Rise New Construction	\$13,324,000	\$1,274,967	\$3,499,627	\$624,101	\$5,398,695	41%	\$7,925,305
Multifamily New Construction	\$13,613,000	\$695,931	\$4,192,362	\$2,139,500	\$7,027,793	52%	\$6,585,207
Anaerobic Digesters	\$12,150,000	\$21,000	\$2,079,000	\$2,000,000	\$4,100,000	34%	\$8,050,000
Small Wind	\$6,090,000	\$1,576,025	\$979,899	-	\$2,555,924	42%	\$3,534,076
Solar Thermal	\$399,000	\$117,407	\$256,222	\$6,500	\$380,129	95%	\$18,871
Combined Heat & Power	\$48,550,000	\$1,868,661	\$9,026,127	\$9,109,926	\$20,004,715	41%	\$28,545,285
TOTAL	\$246,546,740	\$21,373,808	\$37,021,380	\$49,055,140	\$107,450,328	44%	\$139,096,412

Table notes are on the next page.

¹⁹ NYSERDA committed an additional \$638,340 to solicitations with upcoming due dates not shown in Table 6. When including these funds, NYSERDA committed 44% of the approved budget to date for the Resource Acquisition Transition Chapter. Committed benefits presented in this report do not include benefits associated with awards made as a result of these solicitations.

- a Funds approved by the DPS as of September 30, 2017.
- b Invoices processed for payment by NYSERDA.
- c Remaining funding obligated under a contract, purchase order or incentive award.
- d Planned funding for contracts awarded and under negotiation.
- e Sum of Expended Funds, Open Encumbrances, and Contract Pre-Encumbrances.
- f Percentage of the committed budget.
- g Difference between Budget Approved Funds and Committed Funds.

Table 7. Commercial Resource Acquisition Transition and FlexTech Initiative Results^{20,21,22}

Approval Date: February 29, 2016

Launch Date: March 1, 2016

Resource Acquisition Transition Initiative	Units	Completed Projects through June 30, 2017 with Adjustments	Completed Projects through 7/1/17-9/30/17	Total Completed Projects through September 30, 2017	Current Pipeline Through September 30, 2017 (Committed but not complete)	Grand Total Completed Projects + Pipeline	Cumulative Current Target Through Q3 2017	% of Cumulative Current Target Through Q3 2017	Total Target through Initiative Completion (2019)	% of Total Target through Initiative Completion (2019)
Energy Efficiency	MWh Annual	-	-	-	14,842	14,842	35,325	42%	109,600	14%
	MWh Lifetime	-	-	-	244,894	244,894	583,000	42%	1,809,000	14%
	MMBtu Annual	-	-	-	109,597	109,597	315,250	35%	980,000	11%
	MMBtu Lifetime	-	-	-	1,808,350	1,808,350	5,192,500	35%	16,170,000	11%
	MW	-	-	-	1	1	*	-	*	-
Renewable Energy	MWh Annual	-	-	-	-	-	*	-	*	-
	MWh Lifetime	-	-	-	-	-	*	-	*	-
	MW	-	-	-	-	-	*	-	*	-
CO2e Emission Reduction (metric tons)	Annual Tons	-	-	-	13,636	13,636	36,710	37%	114,200	12%
	Lifetime Tons	-	-	-	224,989	224,989	608,250	37%	1,891,000	12%
Customer Bill Savings (millions)	Annual Dollars	-	-	-	\$2.62	\$2.62	\$7.93	33%	\$24.63	11%
	Lifetime Dollars	-	-	-	\$43.23	\$43.23	\$131.00	33%	\$406.80	11%
Private Investment (millions)	Dollars	-	-	-	\$3.86	\$3.86	\$34.50	11%	\$92.00	4%
Implementation Assistance	Participants	-	-	-	9	9	15	60%	20	45%
Technical Assistance		-	-	-	110	110	103	107%	320	34%

* Metric to be tracked and reported, though specific target was not ordered.

²⁰ Technical Assistance includes 15 CHP studies in the participant count; however, the impact of these projects (in terms of energy and dollar metrics) is included in the Combined Heat and Power table (Table 20).

²¹ This report reflects direct benefits from programs. Indirect benefits are not reflected because it will take time for the benefits to be realized.

²² Cumulative Current Target through Q3 2017 represents 100% of the 2016 annual target plus 75% of the 2017 annual target. Actual progress may not be equal each quarter of a calendar year.

Table 8. Industrial Resource Acquisition Transition Initiative Results^{23,24,25}

Approval Date: February 29, 2016

Launch Date: March 1, 2016

Resource Acquisition Transition Initiative	Units	Completed Projects through June 30, 2017 with Adjustments	Completed Projects through 7/1/17-9/30/17	Total Completed Projects through September 30, 2017	Current Pipeline Through September 30, 2017 (Committed but not complete)	Grand Total Completed Projects + Pipeline	Cumulative Current Target Through Q3 2017	% of Cumulative Current Target Through Q3 2017	Total Target through Initiative Completion (2019)	% of Total Target through Initiative Completion (2019)
Energy Efficiency	MWh Annual	3,794	4,240	8,034	187,076	195,110	222,300	88%	421,700	46%
	MWh Lifetime	56,909	63,602	120,510	2,806,138	2,926,649	3,342,500	88%	6,325,000	46%
	MMBtu Annual	30,869	43,179	74,048	3,230,447	3,304,495	2,157,500	153%	3,586,000	92%
	MMBtu Lifetime	463,034	647,685	1,110,719	48,456,698	49,567,418	32,325,000	153%	53,790,000	92%
Renewable Energy	MW	-	-	-	-	-	*	-	*	-
	MWh Annual	-	-	-	-	-	*	-	*	-
	MWh Lifetime	-	-	-	-	-	*	-	*	-
CO2e Emission Reduction (metric tons)	MW	-	-	-	-	-	*	-	*	-
	Annual Tons	3,599	4,474	8,073	335,949	344,022	313,250	110%	521,400	66%
Customer Bill Savings (millions)	Lifetime Tons	53,992	67,104	121,095	5,039,237	5,160,332	4,700,000	110%	7,821,000	66%
	Annual Dollars	\$0.63	\$0.78	\$1.41	\$36.35	\$37.76	\$35.70	106%	\$64.12	59%
Private Investment (millions)	Lifetime Dollars	\$9.46	\$11.70	\$21.16	\$545.20	\$566.36	\$534.00	106%	\$961.80	59%
	Dollars	\$7.00	\$2.33	\$9.34	\$472.63	\$481.97	\$289.00	167%	\$761.10	63%
IPE	Participants	11	11	22	102	124	135	92%	298	42%
Technical Assistance		-	-	-	31	31	35	89%	80	39%

* Metric to be tracked and reported, though specific target was not ordered.

²³ This report reflects direct benefits from programs. Indirect benefits are not reflected, as it will take time for the benefits to be realized.

²⁴ Cumulative Current Target through Q3 2017 represents 100% of the 2016 annual target plus 75% of the 2017 annual target. However, actual progress may not be equal each quarter of a calendar year.

²⁵ Completed projects through June 30, 2017 contain adjustments due to lagged data and QA/QC.

Table 9. Agriculture Resource Acquisition Transition Initiative Results^{26,27,28,29}

Approval Date: February 29, 2016

Launch Date: March 1, 2016

Resource Acquisition Transition Initiative	Units	Completed Projects through June 30, 2017 with Adjustments	Completed Projects through 7/1/17-9/30/17	Total Completed Projects through September 30, 2017	Current Pipeline Through September 30, 2017 (Committed but not complete)	Grand Total Completed Projects + Pipeline	Cumulative Current Target Through Q3 2017	% of Cumulative Current Target Through Q3 2017	Total Target through Initiative Completion (2018)	% of Total Target through Initiative Completion (2018)
Energy Efficiency	MWh Annual	5,987	1,493	7,479	2,693	10,172	7,750	131%	14,000	73%
	MWh Lifetime	89,800	22,390	112,190	40,393	152,583	116,250	131%	210,000	73%
	MMBtu Annual	15,654	1,457	17,111	567	17,678	3,250	544%	7,000	253%
	MMBtu Lifetime	234,810	21,852	256,662	8,503	265,165	48,750	544%	105,000	253%
	MW	-	-	-	-	-	*	-	*	-
Renewable Energy	MWh Annual	672	162	834	-	834	*	-	*	-
	MWh Lifetime	10,086	2,426	12,512	-	12,512	*	-	*	-
	MW	-	-	-	-	-	*	-	*	-
CO2e Emission Reduction (metric tons)	Annual Tons	3,504	870	4,374	1,417	5,791	4,250	136%	8,000	72%
	Lifetime Tons	52,557	13,057	65,614	21,254	86,868	63,750	136%	120,000	72%
Customer Bill Savings (millions)	Annual Dollars	\$1.15	\$0.29	\$1.44	\$0.47	\$1.90	\$1.15	166%	\$2.09	91%
	Lifetime Dollars	\$17.28	\$4.29	\$21.57	\$6.99	\$28.56	\$17.30	165%	\$31.35	91%
Private Investment (millions)	Dollars	\$7.90	\$1.42	\$9.32	-	\$9.32	\$6.91	135%	\$12.24	76%
Participants	Participants	284	115	399	136	535	432	124%	765	70%

* Metric to be tracked and reported, though specific target was not ordered.

²⁶ This report reflects direct benefits from programs. Indirect benefits are not reflected because it will take time for the benefits to be realized.

²⁷ Completed projects through June 30, 2017 contain adjustments due to lagged data and QA/QC.

²⁸ Consistent with the filed investment plan, the committed and completed projects savings and private investment are based upon a 47% adoption rate. This adoption rate will be evaluated and is subject to change as more data is gathered.

²⁹ Cumulative Current Target through Q3 2017 represents 100% of the 2016 annual target plus 75% of the 2017 annual target. However, actual progress may not be equal each quarter of a calendar year.

Table 10. Multifamily Market-Rate Resource Acquisition Transition Initiative Results^{30,31,32}

Approval Date: February 29, 2016

Launch Date: May 19, 2016

Resource Acquisition Transition Initiative	Units	Completed Projects through June 30, 2017 with Adjustments	Completed Projects through 7/1/17-9/30/17	Total Completed Projects through September 30, 2017	Current Pipeline Through September 30, 2017 (Committed but not complete)	Grand Total Completed Projects + Pipeline	Cumulative Current Target Through Q3 2017	% of Cumulative Current Target Through Q3 2017	Total Target through Initiative Completion (2018)	% of Total Target through Initiative Completion (2018)
Energy Efficiency	MWh Annual	-	-	-	29	29	31	93%	41	70%
	MWh Lifetime	-	-	-	428	428	463	93%	617	69%
	MMBtu Annual	36	-	36	18,010	18,046	7,403	244%	9,871	183%
	MMBtu Lifetime	546	-	546	270,150	270,696	111,000	244%	148,100	183%
Renewable Energy	MW	-	-	-	-	-	*	-	*	-
	MWh Annual	-	-	-	-	-	*	-	*	-
	MWh Lifetime	-	-	-	-	-	*	-	*	-
CO2e Emission Reduction (metric tons)	MW	-	-	-	-	-	*	-	*	-
	Annual Tons	2	-	2	972	974	449	217%	598	163%
Customer Bill Savings (millions)	Lifetime Tons	29	-	29	14,587	14,616	6,728	217%	8,967	163%
	Annual Dollars	\$0.00	-	\$0.00	\$0.08	\$0.08	\$0.08	104%	\$0.11	78%
Private Investment (millions)	Lifetime Dollars	\$0.00	-	\$0.00	\$1.27	\$1.27	\$1.22	104%	\$1.63	78%
	Dollars	\$0.07	-	\$0.07	-	\$0.07	\$0.31	22%	\$0.42	17%
Participants	Participants	18	-	18	1,353	1,371	140	979%	186	737%

* Metric to be tracked and reported, though specific target was not ordered.

³⁰ This report reflects direct benefits from programs. Indirect benefits are not reflected because it will take time for the benefits to be realized.

³¹ Cumulative Current Target through Q3 2017 represents 100% of the 2016 annual target plus 75% of the 2017 annual target. actual progress may not be equal each quarter of a calendar year.

³² The Targeted Option of the program was closed in August 2017, giving the market a 30-day notice period. The number of applications received during the notice period exceeded expectation, which explains why certain metrics exceed targets.

Table 11. Single-Family Market-Rate Resource Acquisition Transition Initiative Results^{33,34,35}

Approval Date: February 29, 2016

Launch Date: March 1, 2016

Resource Acquisition Transition Initiative	Units	Completed Projects through June 30, 2017 with Adjustments	Completed Projects through 7/1/17-9/30/17	Total Completed Projects through September 30, 2017	Current Pipeline Through September 30, 2017 (Committed but not complete)	Grand Total Completed Projects + Pipeline	Cumulative Current Target Through Q3 2017	% of Cumulative Current Target Through Q3 2017	Total Target through Initiative Completion (2018)	% of Total Target through Initiative Completion (2018)
Energy Efficiency	MWh Annual	1,580	289	1,869	98	1,967	2,123	93%	3,504	56%
	MWh Lifetime	23,705	4,337	28,041	1,463	29,504	31,750	93%	52,550	56%
	MMBtu Annual	85,976	10,215	96,191	7,200	103,391	128,450	80%	230,700	45%
	MMBtu Lifetime	2,149,405	255,367	2,404,772	180,000	2,584,772	3,210,000	81%	5,766,000	45%
Renewable Energy	MW	-	-	-	-	-	*	-	*	-
	MWh Annual	-	-	-	-	-	*	-	*	-
	MWh Lifetime	-	-	-	-	-	*	-	*	-
CO2e Emission Reduction (metric tons)	MW	-	-	-	-	-	*	-	*	-
	Annual Tons	6,091	835	6,927	492	7,418	8,895	83%	15,820	47%
Customer Bill Savings (millions)	Lifetime Tons	143,967	19,359	163,326	11,776	175,102	208,500	84%	371,900	47%
	Annual Dollars	\$1.52	\$0.24	\$1.76	\$0.13	\$1.89	\$2.28	83%	\$4.07	46%
Private Investment (millions)	Lifetime Dollars	\$35.82	\$5.67	\$41.49	\$3.07	\$44.55	\$53.60	83%	\$95.71	47%
	Dollars	\$25.56	\$4.95	\$30.51	\$2.03	\$32.54	\$41.10	79%	\$77.23	42%
Participants	Participants	3,402	730	4,132	300	4,432	5,040	88%	9,300	48%

* Metric to be tracked and reported, though specific target was not ordered.

³³ This report reflects direct benefits from programs. Indirect benefits are not reflected because it will take time for the benefits to be realized.

³⁴ Cumulative Current Target through Q3 2017 and Total Target through Initiative Completion (2019) include discounts based on historical performance; however, current benefits have not been discounted. Future impact evaluations will inform the level of realized savings.

³⁵ Cumulative Current Target through Q3 2017 represents 100% of the 2016 annual target plus 75% of the 2017 annual target. Actual progress may not be equal each quarter of a calendar year.

Table 12. Commercial New Construction Resource Acquisition Transition Initiative Results^{36, 37, 38, 39}

Approval Date: February 29, 2016

Launch Date: March 1, 2016

Resource Acquisition Transition Initiative	Units	Completed Projects through June 30, 2017 with Adjustments	Completed Projects through 7/1/17-9/30/17	Total Completed Projects through September 30, 2017	Current Pipeline Through September 30, 2017 (Committed but not complete)	Grand Total Completed Projects + Pipeline	Cumulative Current Target Through Q3 2017	% of Cumulative Current Target Through Q3 2017	Total Target through Initiative Completion (2018)	% of Total Target through Initiative Completion (2018)
Energy Efficiency	MWh Annual	-	441	441	47,979	48,420	33,400	145%	66,200	73%
	MWh Lifetime	-	8,820	8,820	959,576	968,396	668,000	145%	1,324,000	73%
	MMBtu Annual	-	(248)	(248)	55,643	55,395	46,700	119%	105,100	53%
	MMBtu Lifetime	-	(4,960)	(4,960)	1,112,858	1,107,898	934,750	119%	2,105,000	53%
	MW	-	0.1	0.1	12	12	*	-	*	-
Renewable Energy	MWh Annual	-	-	-	-	-	*	-	*	-
	MWh Lifetime	-	-	-	-	-	*	-	*	-
	MW	-	-	-	-	-	*	-	*	-
CO2e Emission Reduction (metric tons)	Annual Tons	-	219	219	28,203	28,422	20,000	142%	40,300	71%
	Lifetime Tons	-	4,377	4,377	564,059	568,436	401,000	142%	808,000	70%
Customer Bill Savings (millions)	Annual Dollars	-	\$0.05	\$0.05	\$7.66	\$7.71	\$4.72	163%	\$9.41	82%
	Lifetime Dollars	-	\$1.06	\$1.06	\$153.11	\$154.16	\$94.50	163%	\$188.30	82%
Private Investment (millions)	Dollars	-	\$0.19	\$0.19	\$1.80	\$1.99	\$32.40	6%	\$42.07	5%
Participants	Participants	-	1	1	77	78	87	90%	147	53%

* Metric to be tracked and reported, though specific target was not ordered.

³⁶ The pipeline savings projection for Commercial New Construction is based on current approved applications and does not include any discount for expected future attrition. The Resource Acquisition Transition Chapter annual savings targets assumed an attrition rate of approximately 50%, based on historic program data. Actual attrition will be reflected in the reported values as it occurs.

³⁷ This report reflects direct benefits from programs. Indirect benefits are not reflected because it will take time for the benefits to be realized.

³⁸ Cumulative Current Target through Q3 2017 represents 100% of the 2016 annual target plus 75% of the 2017 annual target. actual progress may not be equal each quarter of a calendar year.

³⁹ Private investment is only reported for pipeline projects at the encumbered stage or later.

Table 13. Low-Rise New Construction Resource Acquisition Transition Initiative: Market-Rate Results ^{40,41}

Approval Date: February 29, 2016

Launch Date: March 1, 2016

Resource Acquisition Transition Initiative	Units	Completed Projects through June 30, 2017 with Adjustments	Completed Projects through 7/1/17-9/30/17	Total Completed Projects through September 30, 2017	Current Pipeline Through September 30, 2017 (Committed but not complete)	Grand Total Completed Projects + Pipeline	Cumulative Current Target Through Q3 2017	% of Cumulative Current Target Through Q3 2017	Total Target through Initiative Completion (2018)	% of Total Target through Initiative Completion (2018)
Energy Efficiency	MWh Annual	1,524	432	1,955	2,460	4,415	3,688	120%	7,010	63%
	MWh Lifetime	30,475	8,632	39,107	49,200	88,307	73,925	119%	140,300	63%
	MMBtu Annual	41,994	5,827	47,822	13,763	61,585	41,925	147%	78,900	78%
	MMBtu Lifetime	839,887	116,547	956,435	275,256	1,231,691	837,750	147%	1,577,000	78%
Renewable Energy	MW	-	-	-	-	-	*	-	*	-
	MWh Annual	-	-	-	-	-	*	-	*	-
	MWh Lifetime	-	-	-	-	-	*	-	*	-
	MW	-	-	-	-	-	*	-	*	-
CO2e Emission Reduction (metric tons)	Annual Tons	3,055	538	3,593	2,026	5,619	4,165	135%	7,870	71%
	Lifetime Tons	61,097	10,767	71,865	40,521	112,385	83,325	135%	157,400	71%
Customer Bill Savings (millions)	Annual Dollars	\$0.56	\$0.10	\$0.66	\$0.52	\$1.18	\$0.98	120%	\$1.86	63%
	Lifetime Dollars	\$11.30	\$1.91	\$13.21	\$10.41	\$23.62	\$19.60	121%	\$37.20	64%
Private Investment (millions)	Dollars	\$2.56	\$0.67	\$3.24	\$2.29	\$5.52	\$8.91	62%	\$17.73	31%
Participants	Participants	497	144	641	520	1,161	1,468	79%	2,926	40%

* Metric to be tracked and reported, though specific target was not ordered.

⁴⁰ This report reflects direct benefits from programs. Indirect benefits are not reflected because it will take time for the benefits to be realized.

⁴¹ Cumulative Current Target through Q3 2017 represents 100% of the 2016 annual target plus 75% of the 2017 annual target. Actual progress may not be equal each quarter of a calendar year.

Table 14. Low-Rise New Construction Resource Acquisition Transition Initiative: Low- to Moderate-Income Results^{42,43}

Approval Date: February 29, 2016

Launch Date: March 1, 2016

Resource Acquisition Transition Initiative	Units	Completed Projects through June 30, 2017 with Adjustments	Completed Projects through 7/1/17-9/30/17	Total Completed Projects through September 30, 2017	Current Pipeline Through September 30, 2017 (Committed but not complete)	Grand Total Completed Projects + Pipeline	Cumulative Current Target Through Q3 2017	% of Cumulative Current Target Through Q3 2017	Total Target through Initiative Completion (2018)	% of Total Target through Initiative Completion (2018)
Energy Efficiency	MWh Annual	9	14	23	3,820	3,843	3,453	111%	7,770	49%
	MWh Lifetime	179	280	459	76,394	76,853	68,875	112%	155,200	50%
	MMBtu Annual	232	353	585	37,950	38,535	31,775	121%	66,900	58%
	MMBtu Lifetime	4,632	7,058	11,690	759,001	770,691	633,750	122%	1,336,000	58%
Renewable Energy	MW	-	-	-	-	-	*	-	*	-
	MWh Annual	-	-	-	-	-	*	-	*	-
	MWh Lifetime	-	-	-	-	-	*	-	*	-
	MW	-	-	-	-	-	*	-	*	-
CO2e Emission Reduction (metric tons)	Annual Tons	17	26	43	4,035	4,078	3,495	117%	7,630	53%
	Lifetime Tons	340	523	863	80,699	81,562	69,875	117%	152,600	53%
Customer Bill Savings (millions)	Annual Dollars	\$0.00	\$0.00	\$0.01	\$0.99	\$0.99	\$0.85	117%	\$1.86	53%
	Lifetime Dollars	\$0.05	\$0.08	\$0.13	\$19.74	\$19.87	\$16.90	118%	\$37.25	53%
Private Investment (millions)	Dollars	\$0.03	\$0.19	\$0.22	\$10.42	\$10.64	\$12.30	86%	\$25.73	41%
Participants	Participants	5	43	48	2,461	2,509	2,650	95%	5,329	47%

* Metric to be tracked and reported, though specific target was not ordered.

⁴² This report reflects direct benefits from programs. Indirect benefits are not reflected because it will take time for the benefits to be realized.

⁴³ Cumulative Current Target through Q3 2017 represents 100% of the 2016 annual target plus 75% of the 2017 annual target. Actual progress may not be equal each quarter of a calendar year.

Table 15. Multifamily New Construction Resource Acquisition Transition Initiative: Market-Rate Results ^{44,45}

Approval Date: February 29, 2016

Launch Date: August 8, 2016

Resource Acquisition Transition Initiative	Units	Completed Projects through June 30, 2017 with Adjustments	Completed Projects through 7/1/17-9/30/17	Total Completed Projects through September 30, 2017	Current Pipeline Through September 30, 2017 (Committed but not complete)	Grand Total Completed Projects + Pipeline	Cumulative Current Target Through Q3 2017	% of Cumulative Current Target Through Q3 2017	Total Target through Initiative Completion (2018)	% of Total Target through Initiative Completion (2018)
Energy Efficiency	MWh Annual	-	-	-	1,322	1,322	2,041	65%	5,271	25%
	MWh Lifetime	-	-	-	26,438	26,438	40,875	65%	105,600	25%
	MMBtu Annual	-	-	-	7,853	7,853	10,463	75%	28,490	28%
	MMBtu Lifetime	-	-	-	157,064	157,064	209,000	75%	569,500	28%
Renewable Energy	MW	-	-	-	-	-	*	-	*	-
	MWh Annual	-	-	-	-	-	*	-	*	-
	MWh Lifetime	-	-	-	-	-	*	-	*	-
CO2e Emission Reduction (metric tons)	MW	-	-	-	-	-	*	-	*	-
	Annual Tons	-	-	-	1,113	1,113	1,634	68%	4,291	26%
Customer Bill Savings (millions)	Lifetime Tons	-	-	-	22,261	22,261	32,575	68%	85,700	26%
	Annual Dollars	-	-	-	\$0.25	\$0.25	\$0.33	77%	\$0.86	30%
Private Investment (millions)	Lifetime Dollars	-	-	-	\$5.09	\$5.09	\$6.60	77%	\$17.19	30%
	Dollars	-	-	-	\$4.29	\$4.29	\$8.34	51%	\$20.82	21%
Participants	Participants	-	-	-	726	726	1,039	70%	2,689	27%

* Metric to be tracked and reported, though specific target was not ordered.

⁴⁴ This report reflects direct benefits from programs. Indirect benefits are not reflected because it will take time for the benefits to be realized.

⁴⁵ Cumulative Current Target through Q3 2017 represents 100% of the 2016 annual target plus 75% of the 2017 annual target. Actual progress may not be equal each quarter of a calendar year.

Table 16. Multifamily New Construction Resource Acquisition Transition Initiative: Low- to Moderate-Income Results^{46,47}

Approval Date: February 29, 2016

Launch Date: August 8, 2016

Resource Acquisition Transition Initiative	Units	Completed Projects through June 30, 2017 with Adjustments	Completed Projects through 7/1/17-9/30/17	Total Completed Projects through September 30, 2017	Current Pipeline Through September 30, 2017 (Committed but not complete)	Grand Total Completed Projects + Pipeline	Cumulative Current Target Through Q3 2017	% of Cumulative Current Target Through Q3 2017	Total Target through Initiative Completion (2018)	% of Total Target through Initiative Completion (2018)
Energy Efficiency	MWh Annual	-	-	-	7,443	7,443	8,803	85%	15,520	48%
	MWh Lifetime	-	-	-	148,863	148,863	175,650	85%	310,200	48%
	MMBtu Annual	-	-	-	33,610	33,610	43,925	77%	81,100	41%
	MMBtu Lifetime	-	-	-	672,208	672,208	878,500	77%	1,622,000	41%
Renewable Energy	MW	-	-	-	-	-	*	-	*	-
	MWh Annual	-	-	-	-	-	*	-	*	-
	MWh Lifetime	-	-	-	-	-	*	-	*	-
CO2e Emission Reduction (metric tons)	MW	-	-	-	-	-	*	-	*	-
	Annual Tons	-	-	-	5,703	5,703	6,950	82%	12,450	46%
Customer Bill Savings (millions)	Lifetime Tons	-	-	-	114,062	114,062	139,175	82%	249,300	46%
	Annual Dollars	-	-	-	\$1.40	\$1.40	\$1.41	99%	\$2.51	56%
Private Investment (millions)	Lifetime Dollars	-	-	-	\$27.99	\$27.99	\$28.20	99%	\$50.20	56%
	Dollars	-	-	-	\$26.62	\$26.62	\$36.60	73%	\$62.40	43%
Participants	Participants	-	-	-	3,804	3,804	4,432	86%	7,857	48%

* Metric to be tracked and reported, though specific target was not ordered.

⁴⁶ This report reflects direct benefits from programs. Indirect benefits are not reflected because it will take time for the benefits to be realized.

⁴⁷ Cumulative Current Target through Q3 2017 represents 100% of the 2016 annual target plus 75% of the 2017 annual target. Actual progress may not be equal each quarter of a calendar year.

Table 17. Anaerobic Digesters Resource Acquisition Transition Initiative Results^{48,49,50}

Approval Date: February 29, 2016

Launch Date: July 8, 2016

Resource Acquisition Transition Initiative	Units	Completed Projects through June 30, 2017 with Adjustments	Completed Projects through 7/1/17-9/30/17	Total Completed Projects through September 30, 2017	Current Pipeline Through September 30, 2017 (Committed but not complete)	Grand Total Completed Projects + Pipeline	Cumulative Current Target Through Q3 2017	% of Cumulative Current Target Through Q3 2017	Total Target through Initiative Completion (2018)	% of Total Target through Initiative Completion (2018)
Energy Efficiency	MWh Annual	-	-	-	-	-	*	-	*	-
	MWh Lifetime	-	-	-	-	-	*	-	*	-
	MMBtu Annual	-	-	-	-	-	*	-	*	-
	MMBtu Lifetime	-	-	-	-	-	*	-	*	-
	MW	-	-	-	-	-	*	-	*	-
Renewable Energy	MWh Annual	-	-	-	7,444	7,444	18,690	40%	37,440	20%
	MWh Lifetime	-	-	-	74,440	74,440	186,900	40%	374,400	20%
	MW	-	-	-	1	1	1	113%	1	113%
CO2e Emission Reduction (metric tons)	Annual Tons	-	-	-	3,917	3,917	9,920	39%	19,920	20%
	Lifetime Tons	-	-	-	39,168	39,168	99,200	39%	199,200	20%
Customer Bill Savings (millions)	Annual Dollars	-	-	-	\$1.29	\$1.29	\$2.49	52%	\$4.99	26%
	Lifetime Dollars	-	-	-	\$12.88	\$12.88	\$25.00	52%	\$49.99	26%
Private Investment (millions)	Dollars	-	-	-	\$8.00	\$8.00	\$49.00	16%	\$99.00	8%
Participants	Participants	-	-	-	2	2	5	40%	10	20%

* Metric to be tracked and reported, though specific target was not ordered.

⁴⁸ This report reflects direct benefits from programs. Indirect benefits are not reflected because it will take time for the benefits to be realized.

⁴⁹ Cumulative Current Target through Q3 2017 represents 100% of the 2016 annual target plus 75% of the 2017 annual target. Actual progress may not be equal each quarter of a calendar year.

⁵⁰ NYSERDA makes no claim to the environmental attributes or any NYGATS certificates that may be associated with these projects.

Table 18. Small Wind Resource Acquisition Transition Initiative Results^{51,52,53}

Approval Date: February 29, 2016

Launch Date: March 1, 2016

Resource Acquisition Transition Initiative	Units	Completed Projects through June 30, 2017 with Adjustments	Completed Projects through 7/1/17-9/30/17	Total Completed Projects through September 30, 2017	Current Pipeline Through September 30, 2017 (Committed but not complete)	Grand Total Completed Projects + Pipeline	Cumulative Current Target Through Q3 2017	% of Cumulative Current Target Through Q3 2017	Total Target through Initiative Completion (2018)	% of Total Target through Initiative Completion (2018)
Energy Efficiency	MWh Annual	-	-	-	-	-	*	-	*	-
	MWh Lifetime	-	-	-	-	-	*	-	*	-
	MMBtu Annual	-	-	-	-	-	*	-	*	-
	MMBtu Lifetime	-	-	-	-	-	*	-	*	-
	MW	-	-	-	-	-	*	-	*	-
Renewable Energy	MWh Annual	655	26	682	666	1,348	2,500	54%	5,000	27%
	MWh Lifetime	13,109	530	13,639	13,312	26,951	42,000	64%	82,000	33%
	MW	0.3	0.02	0.3	0.4	1	1	79%	2	41%
CO2e Emission Reduction (metric tons)	Annual Tons	345	14	359	350	709	1,750	41%	3,000	24%
	Lifetime Tons	6,898	279	7,177	7,004	14,181	22,750	62%	44,000	32%
Customer Bill Savings (millions)	Annual Dollars	\$0.09	\$0.00	\$0.10	\$0.09	\$0.19	\$0.37	50%	\$0.72	26%
	Lifetime Dollars	\$1.88	\$0.06	\$1.94	\$1.77	\$3.71	\$7.40	50%	\$14.40	26%
Private Investment (millions)	Dollars	\$1.31	\$0.12	\$1.43	\$2.32	\$3.75	\$3.70	101%	\$7.20	52%
Participants	Participants	18	2	20	36	56	67	84%	129	43%

* Metric to be tracked and reported, though specific target was not ordered.

⁵¹ This report reflects direct benefits from programs. Indirect benefits are not reflected because it will take time for the benefits to be realized.

⁵² Cumulative Current Target through Q3 2017 represents 100% of the 2016 annual target plus 75% of the 2017 annual target. Actual progress may not be equal each quarter of a calendar year.

⁵³ NYSERDA makes no claim to the environmental attributes or any NYGATS certificates that may be associated with these projects.

Table 19. Solar Thermal Resource Acquisition Transition Initiative Results^{54,55}

Approval Date: February 29, 2016

Launch Date: March 1, 2016

Resource Acquisition Transition Initiative	Units	Completed Projects through June 30, 2017 with Adjustments	Completed Projects through 7/1/17-9/30/17	Total Completed Projects through September 30, 2017	Current Pipeline Through September 30, 2017 (Committed but not complete)	Grand Total Completed Projects + Pipeline	Cumulative Current Target Through Q3 2017	% of Cumulative Current Target Through Q3 2017	Total Target through Initiative Completion (2016)	% of Total Target through Initiative Completion (2016)
Energy Efficiency	MWh Annual	-	-	-	-	-	*	-	*	-
	MWh Lifetime	-	-	-	-	-	*	-	*	-
	MMBtu Annual	-	-	-	-	-	*	-	*	-
	MMBtu Lifetime	-	-	-	-	-	*	-	*	-
	MW	-	-	-	-	-	*	-	*	-
Renewable Energy	MWh Annual	123	-	123	707	830	830	100%	830	100%
	MWh Lifetime	1,849	-	1,849	10,604	12,453	12,500	100%	12,500	100%
	MW	-	-	-	-	-	*	-	*	-
CO2e Emission Reduction (metric tons)	Annual Tons	65	-	65	372	437	437	100%	437	100%
	Lifetime Tons	973	-	973	5,580	6,552	6,550	100%	6,550	100%
Customer Bill Savings (millions)	Annual Dollars	\$0.02	-	\$0.02	\$0.09	\$0.11	\$0.11	96%	\$0.11	96%
	Lifetime Dollars	\$0.24	-	\$0.24	\$1.35	\$1.59	\$1.66	96%	\$1.66	96%
Private Investment (millions)	Dollars	\$0.08	-	\$0.08	\$0.74	\$0.82	\$0.82	100%	\$0.82	100%
Participants	Participants	8	-	8	34	42	42	100%	42	100%
Eligible Installers		5	-	-	-	5	20	25%	20	25%

* Metric to be tracked and reported, though specific target was not ordered.

⁵⁴ This report reflects direct benefits from programs. Indirect benefits are not reflected because it will take time for the benefits to be realized.

⁵⁵ Cumulative Current Target through Q3 2017 represents 100% of the 2016 annual target plus 75% of the 2017 annual target. Actual progress may not be equal each quarter of a calendar year.

Table 20. Combined Heat and Power Resource Acquisition Transition Initiative Results^{56,57,58,59,60,61,62}

Approval Date: February 29, 2016

Launch Date: March 1, 2016

Resource Acquisition Transition Initiative	Units	Completed Projects through June 30, 2017 with Adjustments	Completed Projects through 7/1/17-9/30/17	Total Completed Projects through September 30, 2017	Current Pipeline Through September 30, 2017 (Committed but not complete)	Grand Total Completed Projects + Pipeline	Cumulative Current Target Through Q3 2017	% of Cumulative Current Target Through Q3 2017	Total Target through Initiative Completion (2018)	% of Total Target through Initiative Completion (2018)
Energy Efficiency	MWh Annual	1,067	158	1,225	191,444	192,669	214,000	90%	287,000	67%
	MWh Lifetime	16,005	2,365	18,370	2,871,661	2,890,031	3,165,000	91%	4,230,000	68%
	MMBtu Annual	-	-	-	-	-	*	-	*	-
	MMBtu Lifetime	-	-	-	-	-	*	-	*	-
Renewable Energy	MW	0.2	0.0	0.2	36	36	38	95%	51	71%
	MWh Annual	-	-	-	-	-	*	-	*	-
	MWh Lifetime	-	-	-	-	-	*	-	*	-
CO2e Emission Reduction (metric tons)	MW	-	-	-	-	-	*	-	*	-
	Annual Tons	220	32	253	40,700	40,953	48,175	85%	64,800	63%
Customer Bill Savings (millions)	Lifetime Tons	3,305	483	3,788	610,503	614,290	723,500	85%	973,000	63%
	Annual Dollars	\$0.14	\$0.02	\$0.16	\$17.30	\$17.46	\$21.70	80%	\$29.19	60%
Private Investment (millions)	Lifetime Dollars	\$2.07	\$0.33	\$2.40	\$259.56	\$261.96	\$326.00	80%	\$437.70	60%
	Dollars	\$6.57	\$1.40	\$7.97	\$172.11	\$180.08	\$196.00	92%	\$230.00	78%
Participants	Participants	17	2	19	61	80	64	125%	86	93%
MT Marketplace		-	-	8	-	8	8	100%	24	100%

* Metric to be tracked and reported, though specific target was not ordered.

⁵⁶ Technical assistance energy savings and dollars metrics included for 14 CHP studies.

⁵⁷ Cumulative Current Target (2016) and Total Target through Initiative Completion (2018) contain metrics from the Market Transformation of Marketplace table in the Resource Acquisition Chapter, which could be considered indirect benefit targets. Indirect benefits are not reflected because it will take time for the benefits to be realized.

⁵⁸ Committed benefits include three large projects in the early stages of NYSERDA review (with a combined capacity of 27.7 MW) to which refinements will be made in future reports, as needed.

⁵⁹ CHP targets and reporting methods associated with fuel used to run the CHP systems are being examined and may be adjusted in future reports.

⁶⁰ Energy Efficiency values represent MWh savings from the use of CHP systems; natural gas required to run CHP systems is 1,146,064 MMBtu cumulative annual and 17,190,963 MMBtu lifetime. Expected emission reductions and customer bill savings are net, including both MWh that add to the benefits and additional natural gas required to run CHP systems that subtract from the benefits.

⁶¹ Cumulative Current Target through Q3 2017 represents 100% of the 2016 annual target plus 75% of the 2017 annual target. actual progress may not be equal each quarter of a calendar year.

⁶² Completed projects through June 30, 2017 contain adjustments due to lagged data and QA/QC.

3 Market Development Initiative Specific Results

Table 21. Market Development Initiative Budgets and Spending ^{63,64}

Initiative	Budget Approved as of September 30, 2017 ^a	Expended Funds ^b	Open Encumbrances ^c	Contract Pre-Encumbrances ^d	Committed Funds ^e	% of Approved Budget Committed ^f	Budget Approved Remaining Balance ^g
Market Characterization & Design Chapter	\$11,500,000	\$1,139,195	\$1,398,227	-	\$2,537,422	22%	\$8,962,578
Commercial Chapter							
Real Estate Tenant	\$25,499,999	\$422,885	\$1,483,514	\$24,989	\$1,931,388	8%	\$23,568,611
Real Time Energy Management	\$59,805,000	\$483,830	\$3,578,411	\$2,366,773	\$6,429,013	11%	\$53,375,987
REV Campus Challenge	\$21,650,002	\$183,345	\$1,137,214	\$1,336,647	\$2,657,206	12%	\$18,992,796
Commercial Chapter Total	\$106,955,001	\$1,090,060	\$6,199,139	\$3,728,409	\$11,017,607	10%	\$95,937,394
Industrial Chapter							
Continuous Energy Improvement	\$17,539,000	\$568,564	\$2,367,473	-	\$2,936,037	17%	\$14,602,963
Industrial Chapter Total	\$17,539,000	\$568,564	\$2,367,473	-	\$2,936,037	17%	\$14,602,963
Communities Chapter							
Clean Energy Communities	\$14,218,527	\$270,497	\$558,968	-	\$829,465	6%	\$13,389,062
Community Energy Engagement	\$4,409,882	-	-	\$3,509,970	\$3,509,970	80%	\$899,912
Communities Chapter Total	\$18,628,409	\$270,497	\$558,968	\$3,509,970	\$4,339,435	23%	\$14,288,974
Large-Scale Renewables Chapter							
Offshore Wind Master Plan	\$5,000,000	\$984,968	\$504,977	-	\$1,489,945	30%	\$3,510,055
Offshore Wind Pre-Development Activities	\$10,000,000	\$2,475,945	\$1,210,494	\$791,455	\$4,477,894	45%	\$5,522,106
Large-Scale Renewables Chapter Total	\$15,000,000	\$3,460,913	\$1,715,471	\$791,455	\$5,967,839	40%	\$9,032,161
REV Technical Assistance Chapter							
REV Connect	\$2,500,000	\$788,144	\$1,567,000	-	\$2,355,144	94%	\$144,856
REV Technical Assistance Chapter Total	\$2,500,000	\$788,144	\$1,567,000	-	\$2,355,144	94%	\$144,856
Energy Storage Chapter							
Reducing Barriers to Distributed Deployment	\$24,450,000	\$105,181	\$1,930,902	\$440,410	\$2,476,493	10%	\$21,973,507
Energy Storage Chapter Total	\$24,450,000	\$105,181	\$1,930,902	\$440,410	\$2,476,493	10%	\$21,973,507
Clean Transportation Chapter							
Electric Vehicles	\$39,500,000	\$2,635,000	-	-	\$2,635,000	7%	\$36,865,000
Clean Transportation Chapter Total	\$39,500,000	\$2,635,000	-	-	\$2,635,000	7%	\$36,865,000
Agriculture Chapter							
2030 GLASE	\$5,000,000	\$148,574	\$4,851,426	-	\$5,000,000	100%	-
Agriculture Chapter Total	\$5,000,000	\$148,574	\$4,851,426	-	\$5,000,000	100%	-

⁶³ NYSERDA committed an additional \$23,056,166 to solicitations with upcoming due dates not included in the above table. When including these funds, NYSERDA committed 21% of the approved budget to date for the Market Development Chapter. Committed benefits presented in this report does not include benefits associated with awards made because of these solicitations.

⁶⁴ The Market Characterization and Design Chapter line item includes funds to support overarching, non-initiative-specific evaluation studies.

Table 21 continued

Low- to Moderate-Income Chapter							
RetrofitNY	\$30,503,500	\$127,011	\$350,114	-	\$477,125	2%	\$30,026,375
REVitalize	\$725,000	\$18,248	\$29,752	-	\$48,000	7%	\$677,000
Low-Income Forum on Energy	\$1,300,000	\$41,078	\$174,482	\$2,000	\$217,560	17%	\$1,082,440
Healthy Homes Feasibility Study	\$215,000	\$36,479	\$175,668	-	\$212,147	99%	\$2,853
Single Family LMI Residential	\$229,261,861	\$45,657,338	\$1,535,695	\$11,555,521	\$58,748,554	26%	\$170,513,307
LMI Multifamily	\$50,189,418	\$534,373	\$2,367,941	\$2,967,225	\$5,869,540	12%	\$44,319,878
Low- to Moderate-Income Chapter Total	\$312,194,779	\$46,414,529	\$4,633,652	\$14,524,746	\$65,572,926	21%	\$246,621,853
Workforce Development and Training Chapter							
Industry Partnerships	\$6,845,000	\$31,204	\$190,796	\$3,914,576	\$4,136,576	60%	\$2,708,424
Workforce Development and Training Chapter Total	\$6,845,000	\$31,204	\$190,796	\$3,914,576	\$4,136,576	60%	\$2,708,424
Renewable Heating and Cooling							
Heat Pumps and Solar Thermal	\$33,211,843	\$308,796	\$4,586,672	\$59,085	\$4,954,553	15%	\$28,257,290
Renewable Heat NY	\$13,487,000	\$404,422	\$163,541	\$25,500	\$593,463	4%	\$12,893,538
Renewable Heating and Cooling Total	\$46,698,843	\$713,218	\$4,750,213	\$84,585	\$5,548,015	12%	\$41,150,827
Clean Energy Products Chapter							
Underutilized Product Support	\$28,896,000	\$101,145	\$565,803	\$1	\$666,949	2%	\$28,229,051
Clean Energy Products Chapter Total	\$28,896,000	\$101,145	\$565,803	\$1	\$666,949	2%	\$28,229,051
Multi-Sector Solutions Chapter							
Soft Cost Challenge	\$10,000,000	-	-	-	-	-	\$10,000,000
Multi-Sector Solutions Chapter Total	\$10,000,000	-	-	-	-	-	\$10,000,000
NYS Cost Recovery Fee	\$22,504,196	\$1,621,267	-	-	\$1,621,267	7%	\$20,882,929
Total Market Development	\$668,211,228	\$59,087,489	\$30,729,070	\$26,994,151	\$116,810,711	17%	\$551,400,517

- a Funds approved by the DPS as of September 30, 2017.
- b Invoices processed for payment by NYSERDA.
- c Remaining funding obligated under a contract, purchase order, or incentive award.
- d Planned funding for contracts awarded and under negotiation.
- e Sum of Expended Funds, Open Encumbrances, and Contract Pre-Encumbrances.
- f Percentage of the budget that has been committed.
- g Difference between Budget Approved Funds and Committed Funds.

Table 22. Real Estate Tenant Initiative Results^{65,66}

Approval Date: May 23, 2016

Launch Date: July 19, 2016

Market Development Initiative	Units	Completed Projects through June 30, 2017 with Adjustments	Completed Projects through 7/1/17-9/30/17	Total Completed Projects through September 30, 2017	Current Pipeline Through September 30, 2017 (Committed but not complete)	Grand Total Completed Projects + Pipeline	Cumulative Current Target Through Q3 2017	% of Cumulative Current Target Through Q3 2017	Total Target through Initiative Completion (2024)	% of Total Target through Initiative Completion (2024)
Energy Efficiency	MWh Annual	-	-	-	1,246	1,246	9,946	13%	124,900	1%
	MWh Lifetime	-	-	-	9,966	9,966	79,718	13%	999,200	1%
	MMBtu Annual	-	-	-	1,318	1,318	10,478	13%	131,800	1%
	MMBtu Lifetime	-	-	-	10,546	10,546	83,520	13%	1,054,000	1%
Renewable Energy	MW	-	-	-	-	-	*	-	*	-
	MWh Annual	-	-	-	-	-	*	-	*	-
	MWh Lifetime	-	-	-	-	-	*	-	*	-
CO2e Emission Reduction (metric tons)	MW	-	-	-	-	-	*	-	*	-
	Annual Tons	-	-	-	726	726	5,785	13%	72,700	1%
Customer Bill Savings (millions)	Lifetime Tons	-	-	-	5,809	5,809	46,314	13%	581,600	1%
	Annual Dollars	-	-	-	\$0.22	\$0.22	\$1.38	16%	\$17.34	1%
Private Investment (millions)	Lifetime Dollars	-	-	-	\$1.74	\$1.74	\$11.00	16%	\$138.70	1%
	Dollars	-	-	-	\$0.10	\$0.10	\$0.96	10%	\$12.15	1%
Participants	Participants	-	-	-	7	7	107	7%	1,349	0.5%

* Metric to be tracked and reported, though specific target was not ordered.

⁶⁵ This report reflects direct benefits from programs. Indirect benefits are not reflected because it will take time for the benefits to be realized.

⁶⁶ Cumulative Current Target through Q3 2017 represents 100% of the 2016 annual target plus 75% of the 2017 annual target. Actual progress may not be equal each quarter of a calendar year.

Table 23. Key Milestones for Real Estate Tenant

Complete ✓	Time Frame	Milestone	Explanation of Progress
	2016–2020	Tenants will incorporate energy efficiency measures from tenant-specific packages into their designs. Observed gains from the National Resource Defense Council (NRDC), were 25–40% of energy saved above the 2007 code; NYSERDA is projecting gains of 15–20% against the 2010 and 2012 code. The actual savings will be identified through measurement and verification (M&V).	NYSERDA launched modeling/package program that will recommend energy efficiency measures in July 2016. Ten applications have been received to date, but the "unofficial" program pipeline is growing, and key stakeholders have expressed interest in participating. Initial uptake will be slow, as service providers set up the appropriate internal business process necessary to allocate staff time and resources to Commercial Tenant Program; once those processes are set up, applications will come in at a faster rate. The program is currently planned to remain open until July 31, 2019. Progress on adoption of the packages will be reported annually.
	2018–2024	Building specific packages demonstrate replicability of tenant-specific model to the whole building for development of building-specific packages.	
	2018–2024	Engagement with stakeholders involves all identified market actors.	
	2018–2024	Secure commitments from building owners and managers and brokers to provide building-specific packages to new tenants with leasing materials.	
	2018–2024	New tenants use building-specific energy efficiency packages (actual participation identified from results reported by building owner).	
	2018–2024	Projects demonstrate that building-specific packages can be used within the normal timeframe of the tenant fit-out process and do not slow down the process.	
	2018–2024	NYSERDA validates energy models, energy savings, incremental cost, and return on investment for tenant projects.	
	2018–2024	NYSERDA confirms economic savings/value while presenting soft cost (i.e., productivity) opportunities as additional benefits to the market.	
	2018–2024	NYSERDA gathers data on tenant productivity, satisfaction, and wellness through surveys created with each tenant's Corporate Social Responsibility and Human Resource teams.	

Table 23 continued

Complete ✓	Time Frame	Milestone	Explanation of Progress
	2018–2024	For buildings that offer tenant efficiency packages, 30% of new tenants use the package to implement energy efficiency measures that go above code.	
	2020–2025	Market actors seek to develop tenant and/or building-specific packages for new participating buildings, initially with cost share.	
	2020–2025	Tenants and architects and engineers realize the value of energy modeling and packages in the design process (measured by participation in the intervention and training initiatives).	
	2020–2025	Building owners and managers, architects and engineers, and brokers incorporate package development into their existing business models.	
	2020–2025	Tenants inquire about and demand energy efficiency in prospective spaces.	
	2020–2025	Standardized packages developed for tenant office spaces, if significant commonalities are identified among building-specific packages.	
	2020–2025	Building owners and managers attain lower operating costs and greater asset value.	

Table 24. Real-Time Energy Management Initiative Results^{67,68}

Approval Date: May 23, 2016

Launch Date: June 20, 2016

Market Development Initiative	Units	Completed Projects through June 30, 2017 with Adjustments	Completed Projects through 7/1/17-9/30/17	Total Completed Projects through September 30, 2017	Current Pipeline Through September 30, 2017 (Committed but not complete)	Grand Total Completed Projects + Pipeline	Cumulative Current Target Through Q3 2017	% of Cumulative Current Target Through Q3 2017	Total Target through Initiative Completion (2024)	% of Total Target through Initiative Completion (2024)
Energy Efficiency	MWh Annual	-	-	-	43,183	43,183	44,525	97%	444,300	10%
	MWh Lifetime	-	-	-	345,468	345,468	357,100	97%	3,554,000	10%
	MMBtu Annual	-	-	-	19,255	19,255	20,700	93%	184,200	10%
	MMBtu Lifetime	-	-	-	154,040	154,040	165,300	93%	1,474,000	10%
Renewable Energy	MW	-	-	-	-	-	*	-	*	-
	MWh Annual	-	-	-	-	-	*	-	*	-
	MWh Lifetime	-	-	-	-	-	*	-	*	-
CO2e Emission Reduction (metric tons)	MW	-	-	-	-	-	*	-	*	-
	Annual Tons	-	-	-	23,745	23,745	24,575	97%	243,400	10%
Customer Bill Savings (millions)	Lifetime Tons	-	-	-	189,963	189,963	195,700	97%	1,948,000	10%
	Annual Dollars	-	-	-	\$6.69	\$6.69	\$6.04	111%	\$60.11	11%
Private Investment (millions)	Lifetime Dollars	-	-	-	\$53.51	\$53.51	\$48.30	111%	\$480.90	11%
	Dollars	-	-	-	\$5.50	\$5.50	\$17.80	31%	\$357.80	2%
Participants	Participants	-	-	-	63	63	71	89%	1,462	4%

* Metric to be tracked and reported, though specific target was not ordered.

⁶⁷ This report reflects direct benefits from programs. Indirect benefits are not reflected because it will take time for the benefits to be realized.

⁶⁸ Cumulative Current Target through Q3 2017 represents 100% of the 2016 annual target plus 75% of the 2017 annual target. Actual progress may not be equal each quarter of a calendar year.

Table 25. Key Milestones for Real-Time Energy Management

Complete ✓	Time Frame	Milestone	Explanation of Progress
✓	2016	Secure RTEM Advisor and begin development of market standards.	RTEM Advisor is secure and actively participating in the vendor qualification process.
✓	2016	Create and grow a list of qualified RTEM vendors.	The RTEM Request for Qualification (RFQ) was launched in mid-April 2016. There has been a steady in-flow of applications. The RTEM RFQ has received 100 applications and 50 vendors are currently approved. RFQ open until April 2021 so the number of vendors will continue to grow.
✓	2016	Stimulate interest and market activity with an open enrollment incentive offering.	The RTEM Program Opportunity Notice was launched June 20, 2016. Application submittals are in process and interest is expected to grow as more learn about the magnitude of the program and RTEM vendors are qualified. A substantial number of vendors are now qualified, and 114 project applications are in process with more expected. The PON is open through June 30, 2021.
✓	2016	The program's criteria for qualification of vendors, hardware, and software is introduced to the market and used as a road map for new vendors with the goal of becoming the industry standard.	The application process to become a qualified vendor has led to interactive conversations that allow firms to clearly identify areas of opportunity to expand their services and abilities. The program's criteria are causing these opportunities to be adopted sooner than would have occurred without the program.
	2017–2020	Incentives, Qualified Vendor Listing, and Independent RTEM advisor services help convert prospective customers into committed and installed RTEM projects.	There are 114 project applications in process—41 approved and 73 pipeline projects. Projects can take a year to install and then proceed for one to five years during which time the program collects data on recommended and installed energy efficiency measures. Finding should begin being reported in 2020.
	2017–2020	NYSERDA market support and approach attract new RTEM vendors to the New York State market and increase business development investment of all RTEM vendors.	Due to the RTEM program, vendors are looking to initiate new business in NYS. Furthermore, due to the program structure of the program, vendors that are looking to enter the NYS market can partner with vendors that already have business in NYS, and thus can leverage existing relationships to expedite business development opportunities.
	2017–2020	Secure REM Advisor and begin development of market standards.	A technical reviewer/REM adviser has been identified and are working on defining their scope of work within the REM Program.

Table 25 continued

Complete ✓	Time Frame	Milestone	Explanation of Progress
	2017–2020	Create and grow a list of qualified REM vendors.	The REM RFP solicitation to identify qualified vendors is currently in the final stages of internal NEIS approval and is scheduled to launch early September 2017.
	2017–2020	Stimulate interest and market activity with an open enrollment incentive offering for REM.	A solicitation is in process to select vendors that will provide services for the Remote Energy Management Program. The RFP is currently in the final stages of internal NEIS approval and is scheduled to launch early September 2017.
	2017–2020	EM Advisors support gaps in market confidence and identify market approaches to eliminating gaps.	Work on this will begin once RTEM projects begin to be installed and reporting savings.
	2017–2020	Peer-to-peer exchanges and EM Advisors transfer learnings across the projects supported by NYSERDA and enhance success.	During the early RTEM project installations, discussions of best practices, client communications, and lessons learned have been reported to the RTEM Advisor.
	2017–2020	RTEM Technical Guidance Document is drafted and tested.	RTEM technical guidance document is outlined and first sections are in draft form. The team is working with key stakeholders to review both outline and initial drafts. Publish date is set for 2018.
	2017–2020	RTEM Technical Guidance Document is published.	RTEM technical guidance document is outlined and first sections are in draft form. Team is working with key stakeholders to review both outline and initial drafts. Publish date is set for 2018.
	2017–2020	NYSERDA in coordination with industry partners standardizes methodologies for calculating/analyzing costs and savings data.	Working with CUNY Building Performance Lab (BPL) to help RTEM vendors participate in focus groups to develop a minimum standard of care (MSoC). The MSoC will serve as a customer buying guide that will highlight the fundamental RTEM System/Service capabilities and benefits.
	2018–2021	NYSERDA direct supports are ratcheted downward as industry standardization is adopted and results of pilots/studies are shared, broadly increasing customer confidence in the benefits and returns of RTEM.	
	2018–2021	Methods for capturing the potential benefits of RTEM for operations and maintenance of buildings are standardized and widely available.	

Table 25 continued

Complete ✓	Time Frame	Milestone	Explanation of Progress
	2018–2021	Aggregated data sets and applications of RTEM data are robust enough to enable quick and proper evaluation of energy savings projects, thus removing the need for detailed, building specific energy audits to identify potential energy savings, thereby reducing customer acquisition and project costs.	
	2018–2021	NYSERDA explores the utilization of its RTEM data set to advance efforts at demand reduction and peak-load shaping, as well as its use in predicting and optimizing investments in energy efficiency.	
	2018–2021	Training platform for facility owners/operators is designed. Training platform is available and used by facility owners/operators.	
	2018–2021	Market penetration of REM insights increases as commercial customers gain awareness of and confidence in remote audit technology for energy efficiency projects and the usage becomes more widespread. Regularly engage with REM vendors to understand changing technology and market landscape.	
	2022 and beyond	RTEM is the standard for quality energy metrics, efficient building operations, and accessing behind-the-meter data.	
	2022 and beyond	Qualified list and NYSERDA's continued support is rendered obsolete due to market standardization and acceptance.	
	2022 and beyond	RTEM is integrated into standard Building Management Systems (BMS) offerings and widely applied in buildings without BMS.	

Table 26. Reforming the Energy Vision (REV) Campus Challenge Initiative Results^{69,70}

Approval Date: May 23, 2016

Launch Date: December 21, 2016

Market Development Initiative	Units	Completed Projects through June 30, 2017 with Adjustments	Completed Projects through 7/1/17-9/30/17	Total Completed Projects through September 30, 2017	Current Pipeline Through September 30, 2017 (Committed but not complete)	Grand Total Completed Projects + Pipeline	Cumulative Current Target Through Q3 2017	% of Cumulative Current Target Through Q3 2017	Total Target through Initiative Completion (2025)	% of Total Target through Initiative Completion (2025)
Energy Efficiency	MWh Annual	-	-	-	9,859	9,859	17,400	57%	108,100	9%
	MWh Lifetime	-	-	-	147,891	147,891	260,250	57%	1,621,000	9%
	MMBtu Annual	-	-	-	60,734	60,734	108,000	56%	670,000	9%
	MMBtu Lifetime	-	-	-	911,011	911,011	1,612,500	56%	10,050,000	9%
Renewable Energy	MW	-	-	-	-	-	*	-	*	-
	MWh Annual	-	-	-	-	-	1,103	-	8,804	-
	MWh Lifetime	-	-	-	-	-	16,500	-	132,100	-
CO2e Emission Reduction (metric tons)	MW	-	-	-	-	-	1	-	8	-
	Annual Tons	-	-	-	8,416	8,416	15,450	54%	97,030	9%
Customer Bill Savings (millions)	Lifetime Tons	-	-	-	126,246	126,246	231,750	54%	1,455,000	9%
	Annual Dollars	-	-	-	\$1.62	\$1.62	\$2.90	56%	\$18.07	9%
Private Investment (millions)	Lifetime Dollars	-	-	-	\$24.27	\$24.27	\$43.60	56%	\$271.10	9%
	Dollars	-	-	-	\$0.69	\$0.69	\$9.98	7%	\$71.20	1%
Participants	Participants	-	-	-	88	88	78	113%	150	59%

* Metric to be tracked and reported, though specific target was not ordered.

⁶⁹ This report reflects direct benefits from programs. Indirect benefits are not reflected because it will take time for the benefits to be realized.

⁷⁰ Cumulative Current Target through Q3 2017 represents 100% of the 2016 annual target plus 75% of the 2017 annual target. Actual progress may not be equal each quarter of a calendar year.

Table 27. Key Milestones for REV Campus Challenge

Complete ✓	Time Frame	Milestone	Explanation of Progress
	2016–2019	120 out of 250 institutions sign up to be REV Campus Challenge Members.	The REV Campus Challenge has 88 institutions signed up as of the close of Q3 2017.
	2016–2019	Members make progress and receive recognition as demonstrated by new and revised planning, new commitments to sustainability goals and clean energy projects started and completed.	In April 2016, NYSERDA recognized 46 REV Campus Challenge members as part of a "First Movers" announcement during Earth Week to highlight those institutions that took the initiative to join early and demonstrate their commitment to integrating clean energy into their campus, classroom, and community activities. Member progress and opportunities for recognition are being collected as part of an annual member survey, responses to which will be received and analyzed in Q4 2017.
	2020–2022	140 out of 250 institutions sign up to be REV Campus Challenge Members.	
	2020–2022	Members continue to make progress and receive recognition as demonstrated by new and revised planning, new commitments to sustainability goals and clean energy projects started and completed.	
	2020–2022	15% more NYS institutions participate in clean energy commitment opportunities, conferences/events, peer groups, etc., building a strong support network.	
	2020–2022	Annual/semiannual survey of member institutions provides feedback on clean energy progress and changes in overall campus, student, and community mindset.	
	2022–2025	Members continue to make progress and receive recognition as demonstrated by new and revised planning, new commitments to sustainability goals and clean energy projects started and completed.	
	2022–2025	25% more NYS institutions participate in clean energy commitment opportunities, conferences/events, peer groups, etc., building a strong support network.	
	2022–2025	Annual/semiannual survey of all institutions statewide provides feedback on clean energy progress and changes in overall campus, student, and community mindset.	

Table 28. Continuous Energy Improvement Initiative: On-Site Energy Manager Results^{71,72,73}

Approval Date: May 23, 2016

Launch Date: September 12, 2016

Market Development Initiative	Units	Completed Projects through June 30, 2017 with Adjustments	Completed Projects through 7/1/17-9/30/17	Total Completed Projects through September 30, 2017	Current Pipeline Through September 30, 2017 (Committed but not complete)	Grand Total Completed Projects + Pipeline	Cumulative Current Target Through Q3 2017	% of Cumulative Current Target Through Q3 2017	Total Target through Initiative Completion (2019)	% of Total Target through Initiative Completion (2019)
Energy Efficiency	MWh Annual	-	-	-	24,825	24,825	11,250	221%	42,000	59%
	MWh Lifetime	-	-	-	372,375	372,375	168,750	221%	630,000	59%
	MMBtu Annual	-	-	-	430,635	430,635	131,250	328%	500,000	86%
	MMBtu Lifetime	-	-	-	6,459,525	6,459,525	1,972,500	327%	7,500,000	86%
Renewable Energy	MW	-	-	-	-	-	*	-	*	-
	MWh Annual	-	-	-	-	-	*	-	*	-
	MWh Lifetime	-	-	-	-	-	*	-	*	-
CO2e Emission Reduction (metric tons)	MW	-	-	-	-	-	*	-	*	-
	Annual Tons	-	-	-	35,428	35,428	13,350	265%	50,400	70%
Customer Bill Savings (millions)	Lifetime Tons	-	-	-	531,416	531,416	200,250	265%	755,000	70%
	Annual Dollars	-	-	-	\$4.56	\$4.56	\$2.07	221%	\$7.80	59%
Private Investment (millions)	Lifetime Dollars	-	-	-	\$68.47	\$68.47	\$31.00	221%	\$117.00	59%
	Dollars	-	-	-	\$8.15	\$8.15	\$15.20	54%	\$55.80	15%
Participants	Participants	-	-	-	6	6	12	50%	40	15%

* Metric to be tracked and reported, though specific target was not ordered.

⁷¹ This report reflects direct benefits from programs. Indirect benefits are not reflected because it will take time for the benefits to be realized.

⁷² Cumulative Current Target through Q3 2017 represents 100% of the 2016 annual target plus 75% of the 2017 annual target. actual progress may not be equal each quarter of a calendar year.

⁷³ Program received preliminary project specific estimates for a small subset of projects that is significantly higher than the project specific estimates applied to develop these targets.

Table 29. Key Milestones for Continuous Energy Improvement: On-Site Energy Manager

Complete ✓	Time Frame	Milestone	Explanation of Progress
	2017	List of qualified energy-focused process consultants from which On-site Energy Management expertise can be sought and/or matched with industrial facilities.	Approximately 27 FlexTech Providers indicate experience or aptitude in energy management. Since in September 2016, seven applications were approved including four technical consultants. NYSERDA will provide a detailed listing of those consultants who are a part of the first pilot to the marketplace.
	2017	C-suite executive buy-in and engagement that provides momentum for energy planning and management activities at industrial sites.	The solicitation released in September 2016 approved seven applications. The roll-out of a second pilot solicitation is progressing.
	2017	Industrial end-user commitment to energy goal creation and realization is key to successful On-site Energy Manager engagements.	Seven applications were approved since the solicitation release in September 2016. A second pilot solicitation is progressing.
	2017	Robust tracking and reporting of energy and nonenergy benefits of the On-site Energy Manager role.	Seven applications were received prior to closing on 3/31/17 with six active projects that are developing reports to show and track benefits. Activity indicates 5-10 Industrial facilities with strong interest in second pilot (target Oct. 2017).
	2017 and 2018	A credible business case that proves the benefits of on-site energy management in industrial facilities. Large sites will save at least 1,200 MWh and 15,000 MMBtu annually. Medium sites will save at least 500 MWh and 5,000 MMBtu annually.	Six On-site Energy Manager engagements are underway (different start/end dates). Completion of business case targeted for Q3 2018.
	2017 and 2018	Business case content for consultant marketing plans, which address this need in the industrial market.	Six On-site Energy Manager engagements are underway (different start/end dates). Completion of business case targeted for Q3 2018.
	2018	Long-term energy resource(s) dedicated to energy management, without NYSERDA support (e.g., manufacturer hires energy manager in-house; continues with On-Site Energy Manager consultant; or with a new consultant).	
	2018	Transition of knowledge and tools from pilot On-site Energy Managers to long-term energy resource.	
	2018	Successful dissemination of training, road maps, case studies, and vetted consultant lists creates both supply for On-site Energy Manager by qualified technical consultants and demand for the role at industrial sites.	

Table 30. Continuous Energy Improvement Initiative: Strategic Energy Management Results^{74,75,76}

Approval Date: May 23, 2016

Launch Date: November 22, 2016

Market Development Initiative	Units	Completed Projects through June 30, 2017 with Adjustments	Completed Projects through 7/1/17-9/30/17	Total Completed Projects through September 30, 2017	Current Pipeline Through September 30, 2017 (Committed but not complete)	Grand Total Completed Projects + Pipeline	Cumulative Current Target Through Q3 2017	% of Cumulative Current Target Through Q3 2017	Total Target through Initiative Completion (2019)	% of Total Target through Initiative Completion (2019)
Energy Efficiency	MWh Annual	-	-	-	34,500	34,500	39,375	88%	52,500	66%
	MWh Lifetime	-	-	-	345,000	345,000	393,750	88%	525,000	66%
	MMBtu Annual	-	-	-	267,000	267,000	304,500	88%	406,000	66%
	MMBtu Lifetime	-	-	-	2,670,000	2,670,000	3,045,000	88%	4,060,000	66%
Renewable Energy	MW	-	-	-	-	-	*	-	*	-
	MWh Annual	-	-	-	-	-	*	-	*	-
	MWh Lifetime	-	-	-	-	-	*	-	*	-
CO2e Emission Reduction (metric tons)	MW	-	-	-	-	-	*	-	*	-
	Annual Tons	-	-	-	32,020	32,020	37,950	84%	50,600	63%
Customer Bill Savings (millions)	Lifetime Tons	-	-	-	320,198	320,198	379,500	84%	506,000	63%
	Annual Dollars	-	-	-	\$4.37	\$4.37	\$5.91	74%	\$7.88	55%
Private Investment (millions)	Lifetime Dollars	-	-	-	\$43.69	\$43.69	\$59.10	74%	\$78.80	55%
	Dollars	-	-	-	\$54.62	\$54.62	\$63.00	87%	\$84.00	65%
Participants	Participants	-	-	-	8	8	15	53%	40	20%

* Metric to be tracked and reported, though specific target was not ordered.

⁷⁴ This report reflects direct benefits from programs. Indirect benefits are not reflected because it will take time for the benefits to be realized.

⁷⁵ Cumulative Current Target through Q3 2017 represents 100% of the 2016 annual target plus 75% of the 2017 annual target. Actual progress may not be equal each quarter of a calendar year.

⁷⁶ Program received preliminary project specific estimates for a small subset of projects that are significantly higher than the project specific estimates applied to develop these targets.

Table 31. Key Milestones for Continuous Energy Improvement: Strategic Energy Management

Complete ✓	Time Frame	Milestone	Explanation of Progress
	2016 and 2017	<p>Facilities understand how energy intensity is embedded in their process and have integrated energy management into their organizational culture.</p> <p>Facilities possess knowledge of Strategic Energy Management (have an energy map, identified goals and metrics, and have developed a project register identifying projects and an action plan for project implementation) and have a system for monitoring, tracking, and making decisions based on their energy use.</p>	<p>The Strategic Energy Management (SEM) solicitation was released in November 2016 and closed May 2017. Eight participants were selected to participate in the first cohort. The kick-off workshop to start SEM training for the first cohort was held in September 2017. The solicitation to seek second pilot participants is planned for release in Q4 2017.</p>
	2017 and beyond	<p>Facility executives value and adopt Strategic Energy Management due to organizational change and systematic energy management that enables them to identify attractive investments for their facility.</p> <p>Continuation of energy champion and team beyond the cohort (for participating facilities) or the adoption of an energy champion and/or team (for new facilities).</p> <p>Executive support to implement energy-related projects.</p>	<p>Training on Strategic Energy Management for the first eight industrial facilities started in September 2017 and these facilities will report progress throughout the year.</p>
	2018 and beyond	<p>Industrial facilities seek out developed information and standardized tools as well as contractor support to implement and adopt SEM.</p> <p>Tracked inquiries and dissemination of case studies, training, SEM resources, and vetted consultant list.</p>	
	2018 and beyond	<p>SEM replaces the ad hoc energy project approach resulting in deeper and continuous energy savings and energy decision-making at industrial facilities.</p> <p>Critical staff can express how the energy measures they've implemented have affected their bottom line.</p> <p>Facilities realize one to two percent reductions in their energy consumption annually.</p> <p>For large industrial facilities, this equates to approximately 150–300 MWh, 1,100–2,500 MMBtu Natural Gas, 75–160 MMBtu Oil, and \$100,000 in energy savings per participant in the first year.</p>	

Table 32. Continuous Energy Improvement Initiative: Energy Management Information System Results^{77,78}

Approval Date: June 23, 2017

Anticipated Launch Date: Q4 2017

Market Development Initiative	Units	Completed Projects through June 30, 2017 with Adjustments	Completed Projects through 7/1/17-9/30/17	Total Completed Projects through September 30, 2017	Current Pipeline Through September 30, 2017 (Committed but not complete)	Grand Total Completed Projects + Pipeline	Cumulative Current Target Through Q3 2017	% of Cumulative Current Target Through Q3 2017	Total Target through Initiative Completion (2022)	% of Total Target through Initiative Completion (2022)
Energy Efficiency	MWh Annual	-	-	-	-	-	-	-	67,050	-
	MWh Lifetime	-	-	-	-	-	-	-	670,500	-
	MMBtu Annual	-	-	-	-	-	-	-	992,500	-
	MMBtu Lifetime	-	-	-	-	-	-	-	9,925,000	-
Renewable Energy	MW	-	-	-	-	-	*	-	*	-
	MWh Annual	-	-	-	-	-	*	-	*	-
	MWh Lifetime	-	-	-	-	-	*	-	*	-
CO2e Emission Reduction (metric tons)	MW	-	-	-	-	-	*	-	*	-
	Annual Tons	-	-	-	-	-	-	-	91,380	-
Customer Bill Savings (millions)	Lifetime Tons	-	-	-	-	-	-	-	913,800	-
	Annual Dollars	-	-	-	-	-	-	-	\$14.12	-
Private Investment (millions)	Lifetime Dollars	-	-	-	-	-	-	-	\$141.21	-
	Dollars	-	-	-	-	-	-	-	\$3.19	-
Participants	Participants	-	-	-	-	-	-	-	79	-

⁷⁷ This report reflects direct benefits from programs. Indirect benefits are not reflected because it will take time for the benefits to be realized.

⁷⁸ Cumulative Current Target through Q3 2017 represents 100% of the 2016 annual target plus 75% of the 2017 annual target. However, actual progress may not be equal each quarter of a calendar year.

Table 33. Key Milestones for Continuous Energy Improvement Initiative: Energy Management Information Systems

Complete ✓	Time Frame	Milestone	Explanation of Progress
	2017	Develop and release RFP for qualified EMIS vendors.	Solicitation is in development.
	2017	Solicit and contract with EMIS assessment provider(s).	Dialogue ongoing with technical reviewer contractors to determine the statement of work for service.
	2017	Develop solicitation for participants.	Solicitation is in development.
	2017	Develop and disseminate a matrix or list of qualified EMIS vendors.	A list of vendors to be supplied upon receipt and review of qualification applications after solicitation release in Q4 2017.
	2019	Distribute list of qualified EMIS vendors.	
	2019	Initiate development and dissemination of EMIS case studies, webinars, and knowledge transfer sessions in a variety of media/forums.	
	2021	Refine and continue the dissemination of EMIS case studies, webinars, and knowledge transfer sessions in a variety of media/forums.	

Table 34. Clean Energy Communities Initiative Results^{79,80,81,82}

Approval Date: May 23, 2016

Launch Date: August 3, 2016

Market Development Initiative	Units	Completed Projects through June 30, 2017 with Adjustments	Completed Projects through 7/1/17-9/30/17	Total Completed Projects through September 30, 2017	Current Pipeline Through September 30, 2017 (Committed but not complete)	Grand Total Completed Projects + Pipeline	Cumulative Current Target Through Q3 2017	% of Cumulative Current Target Through Q3 2017	Total Target through Initiative Completion (2018)	% of Total Target through Initiative Completion (2018)
Energy Efficiency	MWh Annual	9,693	624	10,317	-	10,317	18,450	56%	118,600	9%
	MWh Lifetime	145,395	9,359	154,753	-	154,753	276,000	56%	1,780,000	9%
	MMBtu Annual	34,624	-	34,624	-	34,624	103,500	33%	667,500	5%
	MMBtu Lifetime	519,362	-	519,362	-	519,362	1,552,500	33%	9,990,000	5%
	MW	-	-	-	-	-	*	-	*	-
Renewable Energy	MWh Annual	3,300	1,492	4,792	-	4,792	19,575	24%	126,000	4%
	MWh Lifetime	49,497	22,379	71,876	-	71,876	293,250	25%	1,889,000	4%
	MW	3	1.3	4	-	4	17	24%	107	4%
CO2e Emission Reduction (metric tons)	Annual Tons	8,816	1,094	9,910	-	9,910	25,875	38%	166,700	6%
	Lifetime Tons	132,233	16,411	148,644	-	148,644	388,500	38%	2,502,000	6%
Customer Bill Savings (millions)	Annual Dollars	\$2.05	\$0.27	\$2.32	-	\$2.32	\$6.02	39%	\$38.74	6%
	Lifetime Dollars	\$30.80	\$4.00	\$34.79	-	\$34.79	\$90.00	39%	\$580.30	6%
Private Investment (millions)	Dollars	\$3.10	\$0.91	\$4.00	-	\$4.00	\$12.50	32%	\$80.73	5%
Participants	Participants	13	7	20	-	20	30	67%	171	12%

* Metric to be tracked and reported, though specific target was not ordered.

⁷⁹ This report reflects direct benefits from programs. Indirect benefits are not reflected because it will take time for the benefits to be realized.

⁸⁰ Due to the split-funded nature of this program, NYSERDA is also tracking and reporting savings associated with completed High-Impact Actions in the Regional Greenhouse Gas Initiative (RGGI) report according to the percentage of RGGI funding currently committed for the Clean Energy Communities Program.

⁸¹ Cumulative Current Target through Q3 2017 represents 100% of the 2016 annual target plus 75% of the 2017 annual target. Actual progress may not be equal each quarter of a calendar year.

⁸² NYSERDA makes no claim to the environmental attributes or any NYGATS certificates that may be associated with these projects.

Table 35. Key Milestones for Clean Energy Communities

Complete ✓	Time Frame	Milestone	Explanation of Progress
✓	2016–2019	Eighty communities complete and demonstrate replicability of four out of ten High-Impact Actions and submit successful grant applications to the Clean Energy Communities Program to complete innovative clean energy projects.	<p>Outreach contractors are actively engaging communities. Many local governments are working to complete High-Impact Actions. As of 9/30/17, 100 communities completed at least four actions and are officially designated Clean Energy Communities. In total, 241 Communities completed 647 High-Impact Actions, 503 of which were completed after program launch ('new').</p> <p>Anticipated savings from the 503 'new' completed High-Impact Actions (when combined with savings reported in RGGI reporting), include:</p> <ul style="list-style-type: none"> • 121,387 MWh Efficiency Savings • 56,604 MWh Renewable Generation • 48.22 MW Renewable Generation • 331,491 MMBtu Natural Gas Savings • 2,673 MMBtu Gasoline Savings • 74,844 MMBtu Distillate Fuel Savings
✓	2016–2019	After realizing the benefits associated with completing High-Impact Actions, many communities go on to pursue the more rigorous Climate Smart Communities (CSC) Certification. The number of Certified CSCs doubles, from six currently certified to 12 certified.	There are now 15 Certified Climate Smart Communities, eight of which achieved Certification after CEC program launch.
	2016–2019	NYSERDA conducted market research on impact of initial uptake of High-Impact Actions and has adjusted the Clean Energy Communities Program accordingly. NYSERDA will continuously compile feedback from communities on High-Impact Actions and associated tools and resources, and adjust accordingly.	NYSERDA recently released minor revisions to the Clean Energy Communities program to better accommodate the needs of communities and to clarify program requirements.

Table 36. Community Energy Engagement Initiative Results^{83,84}

Approval Date: March 27, 2017

Launch Date: October 10, 2017

Market Development Initiative	Units	Completed Projects through June 30, 2017 with Adjustments	Completed Projects through 7/1/17-9/30/17	Total Completed Projects through September 30, 2017	Current Pipeline Through September 30, 2017 (Committed but not complete)	Grand Total Completed Projects + Pipeline	Cumulative Current Target Through Q3 2017	% of Cumulative Current Target Through Q3 2017	Total Target through Initiative Completion (2021)	% of Total Target through Initiative Completion (2021)
Energy Efficiency	MWh Annual	-	-	-	-	-	*	-	*	-
	MWh Lifetime	-	-	-	-	-	*	-	*	-
	MMBtu Annual	-	-	-	-	-	*	-	*	-
	MMBtu Lifetime	-	-	-	-	-	*	-	*	-
Renewable Energy	MW	-	-	-	-	-	*	-	*	-
	MWh Annual	-	-	-	-	-	*	-	*	-
	MWh Lifetime	-	-	-	-	-	*	-	*	-
CO2e Emission Reduction (metric tons)	MW	-	-	-	-	-	*	-	*	-
	Annual Tons	-	-	-	-	-	*	-	*	-
Customer Bill Savings (millions)	Lifetime Tons	-	-	-	-	-	*	-	*	-
	Annual Dollars	-	-	-	-	-	*	-	*	-
Private Investment (millions)	Lifetime Dollars	-	-	-	-	-	*	-	*	-
	Dollars	-	-	-	-	-	\$1.30	-	\$1.73	-
Participants	Participants	-	-	-	-	-	2,517	-	3,355	-

* Metric to be tracked and reported, though specific target was not ordered.

⁸³ This report reflects direct benefits from programs. Indirect benefits are not reflected because it will take time for the benefits to be realized.

⁸⁴ Cumulative Current Target through Q3 2017 represents 100% of the 2016 annual target plus 75% of the 2017 annual target. Actual progress may not be equal each quarter of a calendar year.

Table 37. Key Milestones Community Energy Engagement

Complete ✓	Time Frame	Milestone	Explanation of Progress
✓	2017	NYSERDA issues competitive “base-activities” solicitation.	The Community Energy Engagement Program solicitation (RFP 3588) was issued on May 2, 2017.
	2017	Awards from base-activity solicitation are contracted.	Some contracts through the first release of the solicitation are completely executed and the remaining will be executed in October. Proposals for the second release of the solicitation are due October 10, 2017 and anticipated to be awarded November 2017.
	2017	Commencement of local outreach and support to households and communities (with the focus on LMI).	Some organizations are now under contract and NYSERDA is scheduling trainings throughout the rest of the month. Proposals for the second release of the base activities solicitation are due October 10 and NYSERDA anticipates full launch of the program November 2017 for all 10 regions.
	2018	NYSERDA initiates awards proposals for regional-specific pilot projects.	
	2018–2020	NYSERDA develops one or more case studies on regional-specific pilot projects and other support provided through the base activities.	
	2019	Conduct surveys of customers assisted by Local Based Organizations (LBO) to assess performance.	

Table 38. Offshore Wind Master Plan Initiative Results^{85,86}

Approval Date: May 23, 2016

Launch Date: September 15, 2016

Market Development Initiative Specific Results	Market Development Initiative	Completed Projects through March 31, 2017 with Adjustments	Completed Projects through June 30, 2017 with Adjustments	Total Completed Projects through June 30, 2017	Current Pipeline Through June 30, 2017 (Committed but not complete)	Grand Total Completed Projects + Pipeline	Cumulative Current Target Through Q2 2017	% of Cumulative Current Target Through Q2 2017	Total Target through Initiative Completion (2019)	% of Total Target through Initiative Completion (2019)
Energy Efficiency	MWh Annual	-	-	-	-	-	*	-	*	-
	MWh Lifetime	-	-	-	-	-	*	-	*	-
	MMBtu Annual	-	-	-	-	-	*	-	*	-
	MMBtu Lifetime	-	-	-	-	-	*	-	*	-
Renewable Energy	MW	-	-	-	-	-	*	-	*	-
	MWh Annual	-	-	-	-	-	*	-	*	-
	MWh Lifetime	-	-	-	-	-	*	-	*	-
CO2e Emission Reduction (metric tons)	MW	-	-	-	-	-	*	-	*	-
	Annual Tons	-	-	-	-	-	*	-	*	-
Customer Bill Savings (millions)	Lifetime Tons	-	-	-	-	-	*	-	*	-
	Annual Dollars	-	-	-	-	-	*	-	*	-
Private Investment (millions)	Lifetime Dollars	-	-	-	-	-	*	-	*	-
	Dollars	-	-	-	-	-	*	-	*	-
Participants	Participants	-	-	-	-	-	*	-	*	-

* Metric to be tracked and reported, though specific target was not ordered.

⁸⁵ This report reflects direct benefits from programs. Indirect benefits are not reflected because it will take time for the benefits to be realized.

⁸⁶ Cumulative Current Target through Q3 2017 represents 100% of the 2016 annual target plus 75% of the 2017 annual target. Actual progress may not be equal each quarter of a calendar year.

Table 39. Key Milestones for Offshore Wind Master Plan

Complete ✓	Time Frame	Milestone	Explanation of Progress
✓	2016	Publish an Offshore Wind Master Plan Blueprint to facilitate discussion and stakeholder engagement in the summer of 2016.	Blueprint completed. Blueprint published on 9/15/16.
	2016–2017	Engage stakeholders in multiple meetings in 2016 and 2017 to review Offshore Wind Master Plan Blueprint and receive input for the Offshore Wind Master Plan.	<p>First public Offshore Wind meeting held on 6/29/16. Met with environmental groups on 11/9/16. Met with fishing industry on 11/15/16 (Marine Resources Advisory Council), 12/2/16 (Long Island Traditions), 12/12/16 (Mid-Atlantic Fishery Management Council) and 1/17/17 (Marine Resources Advisory Council). Scheduled meeting with environmental groups for 2/23/17 to review environmental data and gap analysis.</p> <p>Six public meetings were held July-August 2017 in Melville, Long Beach, Southampton, Rockaway Beach, Staten Island, and Brooklyn. Additional meetings were held during this time with the fishing, maritime, environmental, labor and offshore wind communities as well as elected officials and State and federal agencies.</p>
	2016–2017	Publish the final Offshore Wind Master Plan, after completion of studies and no later than end of 2017.	Expected completion is December 2017.

Table 40. Offshore Wind Pre-Development Activities Initiative Results^{87,88}

Approval Date: May 23, 2016

Launch Date: December 12, 2016

Market Development Initiative Specific Results	Market Development Initiative	Completed Projects through March 31, 2017 with Adjustments	Completed Projects through June 30, 2017 with Adjustments	Total Completed Projects through June 30, 2017	Current Pipeline Through June 30, 2017 (Committed but not complete)	Grand Total Completed Projects + Pipeline	Cumulative Current Target Through Q2 2017	% of Cumulative Current Target Through Q2 2017	Total Target through Initiative Completion (2019)	% of Total Target through Initiative Completion (2019)
Energy Efficiency	MWh Annual	-	-	-	-	-	*	-	*	-
	MWh Lifetime	-	-	-	-	-	*	-	*	-
	MMBtu Annual	-	-	-	-	-	*	-	*	-
	MMBtu Lifetime	-	-	-	-	-	*	-	*	-
Renewable Energy	MW	-	-	-	-	-	*	-	*	-
	MWh Annual	-	-	-	-	-	*	-	*	-
	MWh Lifetime	-	-	-	-	-	*	-	*	-
CO2e Emission Reduction (metric tons)	MW	-	-	-	-	-	*	-	*	-
	Annual Tons	-	-	-	-	-	*	-	*	-
Customer Bill Savings (millions)	Lifetime Tons	-	-	-	-	-	*	-	*	-
	Annual Dollars	-	-	-	-	-	*	-	*	-
Private Investment (millions)	Lifetime Dollars	-	-	-	-	-	*	-	*	-
	Dollars	-	-	-	-	-	*	-	*	-
Participants	Participants	-	-	-	-	-	*	-	*	-

* Metric to be tracked and reported, though specific target was not ordered.

⁸⁷ This report reflects direct benefits from programs. Indirect benefits are not reflected because it will take time for the benefits to be realized.

⁸⁸ Cumulative Current Target through Q3 2017 represents 100% of the 2016 annual target plus 75% of the 2017 annual target. Actual progress may not be equal each quarter of a calendar year.

Table 41. Key Milestones for Offshore Wind Pre-Development Activities

Complete ✓	Time Frame	Milestone	Explanation of Progress
		Reports resulting from predevelopment work validating New York State Offshore Wind resource and proposing potential additional wind energy areas for development.	<p>Planning started for environmental and other studies and surveys. Solicitation issued for offshore wind technical assistance in December 2016.</p> <p>Twenty environmental, social, regulatory, economic and regulatory reports in progress to be completed October–December 2017. Drafts of all 20 reports have been completed, sent to external reviewers and are now being updated and finalized based on reviewer input.</p> <p>New York State Area for Consideration for the Potential Locating of Offshore Wind Energy Areas in progress to be completed October 2017.</p>
		Reports providing site-specific data needed to support detailed siting, design, and permitting of offshore wind project(s).	<p>Planning and stakeholder outreach started for procurement and deploying of a buoy for measuring site-specific wind, wave, and other data. Contractor hired to assist in developing measurement campaign. Draft Metocean Plan published November 2016.</p> <p>Additional planning started in Q1 2017 for site-specific environmental, sea floor, and other studies and surveys.</p> <p>Multi-beam sonar and sediment profile imaging survey of sea floor undertaken in June–August 2017.</p>

Table 42. REV Connect Initiative Results^{89,90}

Approval Date: May 23, 2016

Launch Date: August 9, 2016

Market Development Initiative	Units	Completed Projects through June 30, 2017 with Adjustments	Completed Projects through 7/1/17-9/30/17	Total Completed Projects through September 30, 2017	Current Pipeline Through September 30, 2017 (Committed but not complete)	Grand Total Completed Projects + Pipeline	Cumulative Current Target Through Q3 2017	% of Cumulative Current Target Through Q3 2017	Total Target through Initiative Completion (2018)	% of Total Target through Initiative Completion (2018)
Energy Efficiency	MWh Annual	-	-	-	-	-	*	-	*	-
	MWh Lifetime	-	-	-	-	-	*	-	*	-
	MMBtu Annual	-	-	-	-	-	*	-	*	-
	MMBtu Lifetime	-	-	-	-	-	*	-	*	-
Renewable Energy	MW	-	-	-	-	-	*	-	*	-
	MWh Annual	-	-	-	-	-	*	-	*	-
	MWh Lifetime	-	-	-	-	-	*	-	*	-
CO2e Emission Reduction (metric tons)	MW	-	-	-	-	-	*	-	*	-
	Annual Tons	-	-	-	-	-	*	-	*	-
Customer Bill Savings (millions)	Lifetime Tons	-	-	-	-	-	*	-	*	-
	Annual Dollars	-	-	-	-	-	*	-	*	-
Private Investment (millions)	Lifetime Dollars	-	-	-	-	-	*	-	*	-
	Annual Dollars	-	\$0.05	\$0.05	-	\$0.05	\$0.19	28%	\$0.50	11%
Participants	Participants	-	-	-	-	-	*	-	*	-

* Metric to be tracked and reported, though specific target was not ordered.

⁸⁹ This report reflects direct benefits from programs. Indirect benefits are not reflected because it will take time for the benefits to be realized.

⁹⁰ Cumulative Current Target through Q3 2017 represents 100% of the 2016 annual target plus 75% of the 2017 annual target. Actual progress may not be equal each quarter of a calendar year.

Table 43. Key Milestones for REV Connect

Complete ✓	Time Frame	Milestone	Explanation of Progress
✓	Q3 2016	Execute contract with partner to operate REV Connect.	The REV Connect Contractor has been competitively selected and the contract executed.
✓	Q2 2017	Create information resources and summarize best practices.	Information resources are complete and posted to the nyrevconnect.com website and include focal innovation opportunities that NYS utilities are interested in, a profiled of each investor-owned utility in the State, and summaries of key REV orders.
✓	Q2 2017	Develop project evaluation criteria and process.	The REV Connect website launched on August 10, 2017, which publicly posts the project evaluation criteria and process.
✓	Q3 2017	Launch initial REV Connect platform to allow submission of project ideas.	The project evaluation criteria and process were tested with market participants in May 2017, completed in June 2017, and posted to the REV Connect website.
	Q4 2017	Draft Innovation Plan completed.	In July 2017, NYSERDA removed this task from the contractor's scope of work to shift resources into other project tasks. NYSERDA will revisit how to address this work.

Table 44. Reducing Barriers to Deploying Distributed Energy Storage Initiative Results^{91,92}

Approval Date: August 17, 2016

Launch Date: November 7, 2016 issued Request for Proposals (RFP) seeking technical assistance contractors.
April 19, 2017 issued value-stacking pilot competitive solicitation.

Market Development Initiative	Units	Completed Projects through June 30, 2017 with Adjustments	Completed Projects through 7/1/17-9/30/17	Total Completed Projects through September 30, 2017	Current Pipeline Through September 30, 2017 (Committed but not complete)	Grand Total Completed Projects + Pipeline	Cumulative Current Target Through Q3 2017	% of Cumulative Current Target Through Q3 2017	Total Target through Initiative Completion (2019)	% of Total Target through Initiative Completion (2019)
Energy Efficiency	MWh Annual	-	168	168	1,400	1,568	1,950	80%	13,800	11%
	MWh Lifetime	-	1,680	1,680	14,000	15,680	19,500	80%	138,000	11%
	MMBtu Annual	-	-	-	-	-	*	-	*	-
	MMBtu Lifetime	-	-	-	-	-	*	-	*	-
	MW	-	0.3	0.3	3	3	3	81%	25	11%
Renewable Energy	MWh Annual	-	-	-	-	-	*	-	*	-
	MWh Lifetime	-	-	-	-	-	*	-	*	-
	MW	-	-	-	-	-	*	-	*	-
CO2e Emission Reduction (metric tons)	Annual Tons	-	88	88	737	825	1,028	80%	7,260	11%
	Lifetime Tons	-	884	884	7,366	8,250	10,275	80%	72,600	11%
Customer Bill Savings (millions)	Annual Dollars	-	\$0.02	\$0.02	\$0.19	\$0.21	\$0.26	80%	\$1.84	11%
	Lifetime Dollars	-	\$0.22	\$0.22	\$1.86	\$2.09	\$2.60	80%	\$18.35	11%
Private Investment (millions)	Dollars	-	-	-	\$0.15	\$0.15	\$6.38	2%	\$30.00	1%
Number of customers engaged (sites for developments)	Participants	-	-	-	7	7	14	50%	45	16%
Number of vendors engaged	Participants	-	-	-	63	63	23	274%	120	53%

* Metric to be tracked and reported, though specific target was not ordered.

⁹¹ This report reflects direct benefits from programs. Indirect benefits are not reflected because it will take time for the benefits to be realized.

⁹² Cumulative Current Target through Q3 2017 represents 100% of the 2016 annual target plus 75% of the 2017 annual target. Actual progress may not be equal each quarter of a calendar year.

Table 45. Key Milestones for Reducing Barriers to Deploying Distributed Energy Storage

Complete ✓	Time Frame	Milestone	Explanation of Progress
✓	2016	Issue solicitation to competitively select technical consultants and organizations to assist with soft cost reduction strategies, quality assurance, and feasibility studies under value-stacking pilots.	Solicitation released in November 2016.
✓	2017	Lead acid, lithium-ion, and flow batteries are independently tested with results aggregated into first responder training materials for authorities having jurisdiction.	Independent burn testing report issued for chemistries seeking the Fire Department of New York (FDNY) permit; first responder training materials being completed.
✓	2017	Technical consultants or organizations to assist with soft cost reduction strategies, quality assurance, and feasibility studies are selected.	Four technical assistance contractors were selected under a competitive solicitation.
✓	2017	Launch a competitive program funding value-stacking pilots.	Solicitation released in April 2017.
	2017	Expand scope of battery testing lab for additional chemistries to be tested.	Engaging with National Fire Protection Association and Sandia National Lab to discuss possible larger scale safety testing. This could remove ambiguity preventing clear permitting requirements for lithium ion systems inside buildings in NYC (initially) with results and lessons disseminated to other Authorities Having Jurisdiction in NYS. Exterior siting requirements moving toward a set of guidelines or technical bulletin to be issued by the FDNY and/or the New York City Department of Buildings (DOB) later this year.
	2017	Model permitting guides are developed.	Consolidated guidelines for recommended permitting requirements being completed with FDNY and DOB; draft delivered and being revised. Weekly meetings have been held with FDNY and DOB, NYSERDA and subject matter experts from DNV GL and the City University of New York to review issues, conduct independent analysis to address questions, and recommend proposed solution to develop clear permitting guidelines for exterior advanced battery systems that can be promulgated as guidelines or a bulletin by FDNY/DOB in 2017.

Table 45 Continued

Complete ✓	Time Frame	Milestone	Explanation of Progress
	2017	Public platform is launched including use cases, system performance results, and fact sheets.	Coordination with DG integrated Data System is ongoing for performance data uploads, initial webinar on storage 101 and information on technology and business issues currently being released on storage web page and through email distribution lists. Coordinating with soft cost contractors, marketing team, and DG Portal developer where and how types of content are best held.
	2017	Customers with deployed energy storage systems begin engaging for post-installation quality assurance to validate savings.	The technical assistance contractor selected iterating M&V site plans with initial installations supported by NYSERDA and nearing agreement on the of performance monitoring requirements.
	2017	Safety testing is completed on additional emerging commercial chemistries.	Facilitated independent testing at company's expense for a new chemistry by UEP seeking permitting in NYC; specific plans for additional chemistries to be tested not to be finalized under permitting requirements.
	2017	Market segmentation for NYSERDA customer acquisition activities supported under this investment plan expands to non-interval metered customers.	Database creation with interval and non-interval-metered customers is underway. The technical assistance contractor is analyzing interval load data to determine customer characteristics more likely to be a good fit. In tandem with preexisting research, the implementation contractor will continue first-hand analysis, and determine technical and economical characteristics by analyzing interval data to target non-interval metered customers.
	2017	Increasing numbers of customers seek information on storage solutions to mitigate their peak demand and electricity requirements, as determined through vendor interviews and the number of permits submitted to authorities having jurisdiction, surveyed at least annually.	Year-long outreach campaign to begin October 1, 2017. The technical assistance contractor is finalizing the plan, gaining stakeholder feedback, and coordinating its outreach/training with ongoing marketing by behind-the-meter storage vendors.
	2017	Increasing numbers of energy storage vendors are engaged in New York State, as surveyed at least annually.	Vendor outreach underway starting September 1, 2017, including working group meetings, a webinar, fact sheets, conference, etc. Focusing on one-on-one guidance and training, with emphasis on the practical requirements to take advantage of current opportunities. Feedback is continually being collected from vendors.

Table 45 continued

Complete ✓	Time Frame	Milestone	Explanation of Progress
	2018	Safety testing is completed on additional emerging commercial chemistries.	
	2018	Model permitting guides are updated.	
	2018	Convincing use cases and best-fit customer characteristics and acquisition tools are publicized.	
	2018	Pilots convert prospective installations into installed energy storage projects that are used to provide customer benefit and address electric system needs.	
	2019	Independent validation assesses the ability of aggregated customer-sited storage systems to provide locational relief to the distribution utility or NYISO when called upon.	
	2019	During the pilot period, NYSERDA direct support for specific projects is reduced annually as installation cost decreases, revenue opportunities are better quantified, and results of pilots increase performance confidence.	

Table 46. Electric Vehicles Initiative: EV Rebate Results^{93,94,95}

Approval Date: August 17, 2016

Launch Date: March 21, 2017

Market Development Initiative	Units	Completed Projects through June 30, 2017 with Adjustments	Completed Projects through 7/1/17-9/30/17	Total Completed Projects through September 30, 2017	Current Pipeline Through September 30, 2017 (Committed but not complete)	Grand Total Completed Projects + Pipeline	Cumulative Current Target Through Q3 2017	% of Cumulative Current Target Through Q3 2017	Total Target through Initiative Completion (2020)	% of Total Target through Initiative Completion (2020)
Energy Efficiency	MWh Annual	-	-	-	-	-	*	-	*	-
	MWh Lifetime	-	-	-	-	-	*	-	*	-
	MMBtu Annual	40,250	56,302	96,552	-	96,552	187,500	51%	1,430,000	7%
	MMBtu Lifetime	402,498	563,022	965,519	-	965,519	1,875,000	51%	14,300,000	7%
Renewable Energy	MW	-	-	-	-	-	*	-	*	-
	MWh Annual	-	-	-	-	-	*	-	*	-
	MWh Lifetime	-	-	-	-	-	*	-	*	-
CO2e Emission Reduction (metric tons)	Annual Tons	1,641	2,106	3,748	-	3,748	10,050	37%	76,730	5%
	Lifetime Tons	16,415	21,062	37,477	-	37,477	100,500	37%	767,300	5%
Customer Bill Savings (millions)	Annual Dollars	\$1.02	\$1.41	\$2.42	-	\$2.42	*	-	*	-
	Lifetime Dollars	\$10.18	\$14.06	\$24.23	-	\$24.23	*	-	*	-
Private Investment (millions)	Dollars	\$28.81	\$39.73	\$68.53	-	\$68.53	\$135.00	51%	\$1,027.00	7%
Participants	Participants	823	1,135	1,958	-	1,958	3,844	51%	29,250	7%

* Metric to be tracked and reported, though specific target was not ordered.

⁹³ This report reflects direct benefits from programs. Indirect benefits are not reflected because it will take time for the benefits to be realized.

⁹⁴ Cumulative Current Target through Q3 2017 represents 100% of the 2016 annual target plus 75% of the 2017 annual target. Actual progress may not be equal each quarter of a calendar year.

⁹⁵ Energy Efficiency values represent MMBtu savings from the use of electric vehicles; the electricity required to charge the vehicle is 6,028 MWh cumulative annual and 60,285 MWh lifetime. Expected Emission reductions and customer bill savings are net, including both MMBtu that add to the benefits and the electricity required to charge the electric vehicles that subtract from the benefits.

Table 47. Key Milestones for Electric Vehicles Initiative: EV Rebate

Complete ✓	Time Frame	Milestone	Explanation of Progress
✓	2016	EV Rebate Program Launch.	The program launched March 21, 2017. As of September 30, 2017, CEF funding for rebates totaled \$2.7 million. Including CEF and non-CEF funding, 426 car dealers signed up for the program and have received applications for 2,953 rebates totaling \$3.9 million.

Table 48. 2030 Greenhouse Lighting and Systems Engineering (GLASE) Initiative Results^{96,97}

Approval Date: September 15, 2016

Launch Date: January 1, 2017

Market Development Initiative	Units	Completed Projects through June 30, 2017 with Adjustments	Completed Projects through 7/1/17-9/30/17	Total Completed Projects through September 30, 2017	Current Pipeline Through September 30, 2017 (Committed but not complete)	Grand Total Completed Projects + Pipeline	Cumulative Current Target Through Q3 2017	% of Cumulative Current Target Through Q3 2017	Total Target through Initiative Completion (2022)	% of Total Target through Initiative Completion (2022)
Energy Efficiency	MWh Annual	-	-	-	3,470	3,470	3,470	100%	3,470	100%
	MWh Lifetime	-	-	-	34,700	34,700	34,700	100%	34,700	100%
	MMBtu Annual	-	-	-	-	-	*	-	*	-
	MMBtu Lifetime	-	-	-	-	-	*	-	*	-
Renewable Energy	MW	-	-	-	-	-	*	-	*	-
	MWh Annual	-	-	-	-	-	*	-	*	-
	MWh Lifetime	-	-	-	-	-	*	-	*	-
CO2e Emission Reduction (metric tons)	MW	-	-	-	-	-	*	-	*	-
	Annual Tons	-	-	-	1,826	1,826	1,830	100%	1,830	100%
Customer Bill Savings (millions)	Lifetime Tons	-	-	-	18,258	18,258	18,300	100%	18,300	100%
	Annual Dollars	-	-	-	\$0.29	\$0.29	\$0.29	101%	\$0.29	101%
Private Investment (millions)	Lifetime Dollars	-	-	-	\$2.91	\$2.91	\$2.92	100%	\$2.92	100%
	Dollars	-	-	-	\$9.46	\$9.46	\$9.46	100%	\$9.46	100%
Participants	Participants	-	-	-	1	1	4	25%	25	4%

* Metric to be tracked and reported, though specific target was not ordered.

⁹⁶ This report reflects direct benefits from programs. Indirect benefits are not reflected because it will take time for the benefits to be realized.

⁹⁷ Cumulative Current Target through Q3 2017 represents 100% of the 2016 annual target plus 75% of the 2017 annual target. Actual progress may not be equal each quarter of a calendar year.

Table 49. Key Milestones for Greenhouse Lighting and Systems Engineering (GLASE)

Complete ✓	Time Frame	Milestone	Explanation of Progress
✓	2016	Contract with core Consortium members.	Contracts are fully executed.
✓	2016	Review and approve Scientific Advisory Panel structure.	Selection of members is completed. Contractual arrangements are also completed between members and universities regarding how they are reimbursed for participation.
	2017	Review and approve Consortium business plan to attain financial self-sustainability in 2023.	The executive director of GLASE is planning development of the business plan and is on track for on-time completion.
	2018	Monitor small (6,000 square feet) pilot demonstration of a basic light and shade control system.	The principal investigator at Cornell assessed and interviewed potential sites for the pilot. A candidate site has been chosen, and work is underway to formalize their mutual obligations.
	2018	Publish case study of demonstration.	
	2019	Monitor small (6,000 square feet) pilot demonstration of CO ₂ supplementation integrated with the light and shade control system.	
	2019	Monitor large (20,000 square feet) pilot demonstration of a basic light and shade control system.	The principal investigator at Cornell is in discussions with potential sites for the large demonstration.
	2019	Publish case study of demonstrations.	
	2020	Monitor small (6,000 square feet) pilot demonstration of efficient LED lights integrated with the CO ₂ supplementation and light and shade control system.	
	2020	Monitor large (20,000 square feet) pilot demonstration of CO ₂ supplementation integrated with the light and shade control system.	
	2020	Publish case study of demonstrations.	
	2021	Monitor large (20,000 square feet) pilot demonstration of efficient LED lights integrated with the CO ₂ supplementation and light and shade control system.	
	2021	Publish case study of demonstration.	
	2021	Formal training offered to service providers.	

Table 50. RetrofitNY Initiative Results^{98,99}

Approval Date: August 31, 2016

Launch Date: April 4, 2017

Market Development Initiative	Units	Completed Projects through June 30, 2017 with Adjustments	Completed Projects through 7/1/17-9/30/17	Total Completed Projects through September 30, 2017	Current Pipeline Through September 30, 2017 (Committed but not complete)	Grand Total Completed Projects + Pipeline	Cumulative Current Target Through Q3 2017	% of Cumulative Current Target Through Q3 2017	Total Target through Initiative Completion (2025)	% of Total Target through Initiative Completion (2025)
Energy Efficiency	MWh Annual	-	-	-	-	-	-	-	187,100	-
	MWh Lifetime	-	-	-	-	-	-	-	3,742,000	-
	MMBtu Annual	-	-	-	-	-	-	-	3,356,000	-
	MMBtu Lifetime	-	-	-	-	-	-	-	67,130,000	-
Renewable Energy	MW	-	-	-	-	-	*	-	*	-
	MWh Annual	-	-	-	-	-	*	-	*	-
	MWh Lifetime	-	-	-	-	-	*	-	*	-
CO2e Emission Reduction (metric tons)	MW	-	-	-	-	-	*	-	*	-
	Annual Tons	-	-	-	-	-	-	-	290,200	-
Customer Bill Savings (millions)	Lifetime Tons	-	-	-	-	-	-	-	5,804,000	-
	Annual Dollars	-	-	-	-	-	-	-	\$56.16	-
Private Investment (millions)	Lifetime Dollars	-	-	-	-	-	-	-	\$1,123	-
	Dollars	-	-	-	-	-	-	-	\$1,411	-
Participants	Participants	-	-	-	-	-	128	-	100,000	-

* Metric to be tracked and reported, though specific target was not ordered.

⁹⁸ This report reflects direct benefits from programs. Indirect benefits are not reflected because it will take time for the benefits to be realized.

⁹⁹ Cumulative Current Target through Q3 2017 represents 100% of the 2016 annual target plus 75% of the 2017 annual target. Actual progress may not be equal each quarter of a calendar year.

Table 51. Key Milestones for RetrofitNY

Complete ✓	Time Frame	Milestone	Explanation of Progress
✓	2016	Criteria to be met by technical solutions are defined.	Criteria finalized.
	2017	Sufficient potential demand for deep energy retrofits is aggregated.	Discussions with more than 50 building owners and Public Housing Authorities to identify pilot buildings, collect information, and identify the owners who indicated enough interest on the portfolios to launch the first round of designs. Discussion with 50+ industry players also indicates that enough of them are ready to form teams to start designing solutions.
	2017	Competitive solicitation for the first round of the design-build competition is released.	The solicitation is expected to be released Q4 2017.
	2018	One or more solutions are built and tested through the design-build competition.	NYSERDA identified target building typologies, and is in the process of identifying potential pilot buildings.
	2020	Solution(s) are adapted to additional building typologies.	
	2020	Financial products that are adapted to affordable housing entities' processes and are compatible with federal and State rules that apply to affordable housing are developed and made available.	
	2022	Retrofit solutions are integrated in the public housing authorities' and affordable housing regulators' preservation strategies.	
	2025	Retrofit solutions are cost effective and NYSERDA subsidies are no longer necessary.	
	2025	Building components and systems required for deep energy retrofits are readily available in the New York State market.	
	2025	Financing solutions exist for building owners to purchase these solutions with minimal upfront cost.	
	2025	Solutions are implemented on non-Affordable Housing buildings without subsidy.	

Table 52. REVitalize Initiative Results ^{100,101,102}

Approval Date: August 31, 2016

Launch Date: June 27, 2017

Market Development Initiative	Units	Completed Projects through June 30, 2017 with Adjustments	Completed Projects through 7/1/17-9/30/17	Total Completed Projects through September 30, 2017	Current Pipeline Through September 30, 2017 (Committed but not complete)	Grand Total Completed Projects + Pipeline	Cumulative Current Target Through Q3 2017	% of Cumulative Current Target Through Q3 2017	Total Target through Initiative Completion (2025)	% of Total Target through Initiative Completion (2025)
Energy Efficiency	MWh Annual	-	-	-	-	-	*	-	*	-
	MWh Lifetime	-	-	-	-	-	*	-	*	-
	MMBtu Annual	-	-	-	-	-	*	-	*	-
	MMBtu Lifetime	-	-	-	-	-	*	-	*	-
Renewable Energy	MW	-	-	-	-	-	*	-	*	-
	MWh Annual	-	-	-	-	-	1,320	-	2,994	-
	MWh Lifetime	-	-	-	-	-	26,400	-	59,880	-
CO2e Emission Reduction (metric tons)	MW	-	-	-	-	-	1	-	2	-
	Annual Tons	-	-	-	-	-	695	-	1,575	-
Customer Bill Savings (millions)	Lifetime Tons	-	-	-	-	-	13,875	-	31,500	-
	Annual Dollars	-	-	-	-	-	\$0.21	-	\$0.48	-
Private Investment (millions)	Lifetime Dollars	-	-	-	-	-	\$4.17	-	\$9.46	-
	Dollars	-	-	-	-	-	\$2.81	-	\$5.88	-
Participants	Participants	-	-	-	-	-	4	-	5	-

* Metric to be tracked and reported, though specific target was not ordered.

¹⁰⁰ This report reflects direct benefits from programs. Indirect benefits are not reflected because it will take time for the benefits to be realized.

¹⁰¹ Cumulative Current Target through Q3 2017 represents 100% of the 2016 annual target plus 75% of the 2017 annual target. actual progress may not be equal each quarter of a calendar year.

¹⁰² NYSERDA makes no claim to the environmental attributes or any NYGATS certificates that may be associated with these projects.

Table 53. Key Milestones for REVitalize

Complete ✓	Time Frame	Milestone	Explanation of Progress
✓	2017	Issue a competitive solicitation seeking proposals for a community energy planning effort that benefits low- to moderate-income (LMI) communities and residents.	Solicitation launched June 29, 2017. Proposals due September 11, 2017.
	2017	Selection of five communities to receive financial and technical support, contract development, and contract execution by Q4 2017.	The selection of communities will occur after the scoring committee is held on October 3, 2017.
	2017	Commencement of community planning activities, development of community plan, testing of the toolkit.	Marketing and Evaluation consultants are working with NYSERDA staff to develop baseline and research needs.
	2017	Community-scale clean energy project development and implementation started.	Project development and implementation will begin after proposals are selected at the scoring committee meeting to be held October 3, 2017.
	2018	NYSERDA receives feedback from community groups and on the toolkit.	
	2019	Completion of five community energy projects.	
	2019	NYSERDA refines toolkit and conducts technology transfer to communicate effective models of finance and ownership, as well as the toolkit.	

Table 54. Low-Income Forum on Energy Initiative Results ^{103,104}

Approval Date: August 31, 2016

Launch Date: August 31, 2016

Market Development Initiative	Units	Completed Projects through June 30, 2017 with Adjustments	Completed Projects through 7/1/17-9/30/17	Total Completed Projects through September 30, 2017	Current Pipeline Through September 30, 2017 (Committed but not complete)	Grand Total Completed Projects + Pipeline	Cumulative Current Target Through Q3 2017	% of Cumulative Current Target Through Q3 2017	Total Target through Initiative Completion (2025)	% of Total Target through Initiative Completion (2025)
Participants	Participants	941	130	1,071	-	1,071	759	141%	7,629	14%

¹⁰³ This report reflects direct benefits from programs. Indirect benefits are not reflected because it will take time for the benefits to be realized.

¹⁰⁴ Cumulative Current Target through Q3 2017 represents 100% of the 2016 annual target plus 75% of the 2017 annual target. actual progress may not be equal each quarter of a calendar year.

Table 55. Key Milestones for Low-Income Forum on Energy

Complete ✓	Time Frame	Milestone	Explanation of Progress
✓	2017	Issue a competitive solicitation for program support.	Solicitation issued with March 23, 2017 due date. Contractor agreement executed in September 28, 2017.
✓	2017	Implement a series of regional meetings across the State in Q2 of 2017.	A series of seven LIFE 2017 Regional Meetings was held throughout May 2017. The meeting series included each of the following NYS regions: New York City, Long Island, Western New York, Southern Tier, North Country, Hudson Valley, Capital Region. In total, there were 445 participants in attendance, representing 236 organizations.
	2018	Implement a statewide conference in Q2 of 2018.	Planning for the LIFE 2018 Statewide Conference, to be held in May 2018, began in Q3 2017. Agenda development is currently underway. A Planning Subcommittee comprised of LIFE Steering Committee members will be assembled in Q4 of 2017.
	2019	Issue a competitive solicitation for program support or issue a contract extension for existing implementation services.	
	2019	Implement a series of regional meetings across the State in Q2 of 2019.	
	2020	Implement a statewide conference in Q2 of 2020.	
	2021	Implement a series of regional meetings across the State in Q2 of 2021.	
	2022	Issue a competitive solicitation for program support or issue a contract extension for existing implementation services.	
	2022	Implement a statewide conference in Q2 of 2022.	
	2023	Implement a series of regional meetings across the State in Q2 of 2023.	
	2024	Issue a competitive solicitation for program support or issue a contract extension for existing implementation services.	
	2024	Implement a statewide conference in Q2 of 2024.	

Table 56. Key Milestones for Healthy Homes Feasibility Study

Approval Date: August 31, 2016

Launch Date: January 20, 2017

Complete ✓	Time Frame	Milestone	Explanation of Progress
	2017	Complete feasibility study and decide on whether to continue with the pilot design and implementation phase.	Feasibility study is currently in progress. A draft version of the report is being reviewed internally, along with interim quantitative analysis to be used to engaged partner agencies.
	2017	Begin the pilot design phase, if NYSERDA and NYS agency partners decide to go forward.	If a decision is made to move forward with pilot design, the design phase will begin in Q4 2017.
	2017	Pilot design is complete.	If pilot design is pursued, design completion is expected by Q4 2017.
	2017	Commencement of pilot activities.	If pilot implementation is pursued, it will begin in Q4 2017.
	2018	Preliminary determination of health benefits and healthcare cost savings.	
	2021	Dissemination of pilot results which may include peer-reviewed papers, presentations at conferences, and a white paper to share with potential long-term funders including Medicaid, HUD, Foundations, and others.	

Table 57. Low- to Moderate-Income Single-Family Initiative: Low-Income Results ^{105,106,107,108}

Approval Date: February 29, 2016

Launch Date: March 1, 2016

Market Development Initiative	Units	Completed Projects through June 30, 2017 with Adjustments	Completed Projects through 7/1/17-9/30/17	Total Completed Projects through September 30, 2017	Current Pipeline Through September 30, 2017 (Committed but not complete)	Grand Total Completed Projects + Pipeline	Cumulative Current Target Through Q3 2017	% of Cumulative Current Target Through Q3 2017	Total Target through Initiative Completion (2021)	% of Total Target through Initiative Completion (2021)
Energy Efficiency	MWh Annual	4,889	1,091	5,980	1,457	7,437	8,283	90%	29,620	25%
	MWh Lifetime	73,333	16,371	89,703	21,853	111,557	124,243	90%	444,500	25%
	MMBtu Annual	126,306	23,840	150,145	36,619	186,764	219,162	85%	729,000	26%
	MMBtu Lifetime	3,157,643	595,988	3,753,631	915,475	4,669,106	5,479,047	85%	14,970,000	31%
Renewable Energy	MW	-	-	-	-	-	*	-	*	-
	MWh Annual	-	-	-	-	-	*	-	*	-
	MWh Lifetime	-	-	-	-	-	*	-	*	-
CO2e Emission Reduction (metric tons)	MW	-	-	-	-	-	*	-	*	-
	Annual Tons	9,477	1,883	11,360	2,770	14,129	16,675	85%	56,750	25%
Customer Bill Savings (millions)	Lifetime Tons	211,190	41,335	252,524	61,579	314,103	374,250	84%	1,078,000	29%
	Annual Dollars	\$2.22	\$0.46	\$2.67	\$0.72	\$3.40	\$3.97	86%	\$13.55	25%
Private Investment (millions)	Lifetime Dollars	\$49.18	\$9.91	\$59.10	\$15.73	\$74.83	\$86.00	87%	\$251.50	30%
	Dollars	-	-	-	-	-	\$0.56	-	\$5.70	-
Participants	Participants	8,934	1,748	10,682	2,600	13,282	15,722	84%	53,948	25%

* Metric to be tracked and reported, though specific target was not ordered.

¹⁰⁵ This report reflects direct benefits from programs. Indirect benefits are not reflected because it will take time for the benefits to be realized.

¹⁰⁶ Completed projects through June 30, 2017 contains adjustments due to lagged data and QA/QC.

¹⁰⁷ Cumulative Current Target through Q3 2017 and Total Target through Initiative Completion (2019) included discounts based on historical performance; however, current benefits have not been discounted. Future impact evaluations will inform the level of realized savings.

¹⁰⁸ Cumulative Current Target through Q3 2017 represents 100% of the 2016 annual target plus 75% of the 2017 annual target. However, actual progress may not be equal each quarter of a calendar year.

Table 58. Low- to Moderate-Income Single-Family Initiative: Moderate-Income Results^{109,110,111}

Approval Date: February 29, 2016

Launch Date: March 1, 2016

Market Development Initiative	Units	Completed Projects through June 30, 2017 with Adjustments	Completed Projects through 7/1/17-9/30/17	Total Completed Projects through September 30, 2017	Current Pipeline Through September 30, 2017 (Committed but not complete)	Grand Total Completed Projects + Pipeline	Cumulative Current Target Through Q3 2017	% of Cumulative Current Target Through Q3 2017	Total Target through Initiative Completion (2021)	% of Total Target through Initiative Completion (2021)
Energy Efficiency	MWh Annual	1,574	240	1,814	124	1,939	1,778	109%	4,236	46%
	MWh Lifetime	23,613	3,603	27,216	1,862	29,079	26,660	109%	63,520	46%
	MMBtu Annual	76,869	12,037	88,907	9,168	98,075	101,113	97%	282,300	35%
	MMBtu Lifetime	1,921,728	300,934	2,222,663	229,200	2,451,863	2,537,829	97%	5,986,000	41%
Renewable Energy	MW	-	-	-	-	-	*	-	*	-
	MWh Annual	-	-	-	-	-	*	-	*	-
	MWh Lifetime	-	-	-	-	-	*	-	*	-
CO2e Emission Reduction (metric tons)	MW	-	-	-	-	-	*	-	*	-
	Annual Tons	5,328	826	6,154	603	6,757	6,661	101%	18,160	37%
Customer Bill Savings (millions)	Lifetime Tons	124,924	19,386	144,310	14,418	158,728	156,539	101%	368,400	43%
	Annual Dollars	\$1.08	\$0.18	\$1.26	\$0.14	\$1.40	\$1.51	93%	\$4.08	34%
Private Investment (millions)	Lifetime Dollars	\$25.20	\$4.10	\$29.29	\$3.32	\$32.61	\$30.00	109%	\$82.50	40%
	Dollars	\$13.22	\$2.33	\$15.55	\$1.99	\$17.54	\$20.00	88%	\$43.06	41%
Participants	Participants	2,697	447	3,144	382	3,526	3,706	95%	11,258	31%

* Metric to be tracked and reported, though specific target was not ordered.

¹⁰⁹ This report reflects direct benefits from programs. Indirect benefits are not reflected because it will take time for the benefits to be realized.

¹¹⁰ Cumulative Current Target through Q3 2017 and Total Target through Initiative Completion (2019) included discounts based on historical performance; however, current benefits have not been discounted. Future impact evaluations will inform the level of realized savings.

¹¹¹ Cumulative Current Target through Q3 2017 represents 100% of the 2016 annual target plus 75% of the 2017 annual target. However, actual progress may not be equal each quarter of a calendar year.

Table 59. Key Milestones for Low- to Moderate-Income Single-Family

Complete ✓	Time Frame	Milestone	Explanation of Progress
✓	2017	Host regional contractor meetings to gather stakeholder input.	Four regional contractor’s meetings were held in July in: Syracuse, Mt. Kisco, Batavia, and Latham with more than 250 attendees in total.
✓	2017	Competitive solicitation for technical implementation services.	The Technical Implementation Services RFP 3446 closed in late June 2017. Contract negotiations are completed, and the Agreement should be executed early in Q4 2017.
✓	2017	Deploy new low-income referral tracking database.	The EmPower NY referral tracking database was deployed in Salesforce in August and is now in use by referral entities and implementation staff.
	2017	Update policies and procedures manual.	NYSERDA is updating materials to reflect recent implementation shifts toward Shared Services and a new Technical Services implementation contractor. NYSERDA is also working on combining all forms and applications between Assisted Home Performance and EmPower NY for consistency.
	2018	Host regional contractor meetings to gather stakeholder input.	

Table 60. Low- to Moderate-Income Multifamily Initiative Results^{112,113}

Approval Date: February 29, 2016

Launch Date: May 19, 2016

Market Development Initiative	Units	Completed Projects through June 30, 2017 with Adjustments	Completed Projects through 7/1/17-9/30/17	Total Completed Projects through September 30, 2017	Current Pipeline Through September 30, 2017 (Committed but not complete)	Grand Total Completed Projects + Pipeline	Cumulative Current Target Through Q3 2017	% of Cumulative Current Target Through Q3 2017	Total Target through Initiative Completion (2021)	% of Total Target through Initiative Completion (2021)
Energy Efficiency	MWh Annual	-	-	-	2,479	2,479	4,105	60%	47,720	5%
	MWh Lifetime	-	-	-	37,181	37,181	61,575	60%	716,100	5%
	MMBtu Annual	-	-	-	45,449	45,449	55,975	81%	650,100	7%
	MMBtu Lifetime	-	-	-	681,735	681,735	840,250	81%	9,762,000	7%
Renewable Energy	MW	-	-	-	-	-	*	-	*	-
	MWh Annual	-	-	-	-	-	*	-	*	-
	MWh Lifetime	-	-	-	-	-	*	-	*	-
CO2e Emission Reduction (metric tons)	MW	-	-	-	-	-	*	-	*	-
	Annual Tons	-	-	-	3,720	3,720	5,423	69%	62,990	6%
Customer Bill Savings (millions)	Lifetime Tons	-	-	-	55,805	55,805	81,375	69%	945,900	6%
	Annual Dollars	-	-	-	\$0.60	\$0.60	\$1.14	53%	\$13.15	5%
Private Investment (millions)	Lifetime Dollars	-	-	-	\$9.05	\$9.05	\$16.90	54%	\$197.00	5%
	Dollars	-	-	-	-	-	\$17.70	-	\$175.54	-
Number of Units Served	Participants	-	-	-	2,404	2,404	3,273	73%	39,464	6%

* Metric to be tracked and reported, though specific target was not ordered.

¹¹² This report reflects direct benefits from programs. Indirect benefits are not reflected because it will take time for the benefits to be realized.

¹¹³ Cumulative Current Target through Q3 2017 represents 100% of the 2016 annual target plus 75% of the 2017 annual target. Actual progress may not be equal each quarter of a calendar year.

Table 61. Key Milestones for Low- to Moderate-Income Multifamily

Complete ✓	Time Frame	Milestone	Explanation of Progress
✓	2017	Increase incentive levels, and decrease minimum threshold.	Program has been updated, and marketing activities have been launched. NYSEDA expects first projects to come in soon and has been working with MPP Providers to confirm that the new offering will be successful.
	2017	Host annual Provider Summit understand market impacts and future needs.	Organization of the summit is progressing as planned. Schedule has been finalized and registration is already on par with 2015 Summit in the same location. We are expecting to see record attendance this year.
	2018–2021	Continue to evaluate market response to incentive levels and thresholds and adjust as needed.	

Table 62. Industry Partnerships Initiative Results^{114,115}

Approval Date: September 15, 2016

Launch Date: January 13, 2017

Market Development Initiative	Units	Completed Projects through June 30, 2017 with Adjustments	Completed Projects through 7/1/17-9/30/17	Total Completed Projects through September 30, 2017	Current Pipeline Through September 30, 2017 (Committed but not complete)	Grand Total Completed Projects + Pipeline	Cumulative Current Target Through Q3 2017	% of Cumulative Current Target Through Q3 2017	Total Target through Initiative Completion (2019)	% of Total Target through Initiative Completion (2019)
Energy Efficiency	MWh Annual	-	-	-	45,121	45,121	39,900	113%	147,400	31%
	MWh Lifetime	-	-	-	360,971	360,971	319,500	113%	1,179,000	31%
	MMBtu Annual	-	-	-	306,636	306,636	264,000	116%	975,800	31%
	MMBtu Lifetime	-	-	-	2,453,088	2,453,088	2,115,000	116%	7,806,000	31%
Renewable Energy	MW	-	-	-	-	-	*	-	*	-
	MWh Annual	-	-	-	-	-	*	-	*	-
	MWh Lifetime	-	-	-	-	-	*	-	*	-
CO2e Emission Reduction (metric tons)	MW	-	-	-	-	-	*	-	*	-
	Annual Tons	-	-	-	40,043	40,043	35,025	114%	129,300	31%
Customer Bill Savings (millions)	Lifetime Tons	-	-	-	320,340	320,340	280,500	114%	1,034,000	31%
	Annual Dollars	-	-	-	\$7.69	\$7.69	\$6.75	114%	\$24.99	31%
Private Investment (millions)	Lifetime Dollars	-	-	-	\$61.55	\$61.55	\$54.15	114%	\$199.90	31%
	Dollars	-	-	-	\$5.16	\$5.16	\$2.70	191%	\$9.95	52%
Participants	Participants	-	-	-	13	13	12	108%	42	31%

* Metric to be tracked and reported, though specific target was not ordered.

¹¹⁴ This report reflects direct benefits from programs. Indirect benefits are not reflected because it will take time for the benefits to be realized.

¹¹⁵ Cumulative Current Target through Q3 2017 represents 100% of the 2016 annual target plus 75% of the 2017 annual target. Actual progress may not be equal each quarter of a calendar year.

Table 63. Key Milestones for Industry Partnerships

Complete ✓	Time Frame	Milestone	Explanation of Progress
✓	2016	Convene industry partners for building operation and maintenance.	Building operations and maintenance (O&M) partners were convened and one-on-one discussions with industry partners will continue through 2017.
✓	2016	Identify employer champions, those who will help NYSERDA to lead the initiative, for building operations and maintenance.	Industry champions have been identified and are working with NYSERDA as well as with their peers to identify labor-related gaps and to inform intervention strategies.
✓	2016	Identify common labor-related barriers and potential training interventions.	Barriers have been identified, such as the lack of hands-on or on-site training after classroom training or need for culture change within organizations to establish self-sustaining change. PON 3442 closed in July 2017 and resulted in 13 approved applications for funding, which are currently under contract negotiation. NYSERDA will issue a second building O&M solicitation in Q4 2017 with plans to re-issue in 2018.
	2017	Data collected from demonstration sites to help demonstrate the business case for training.	Several opportunities for additional business case demonstrations are being investigated.
	2017-2018	Identify and implement up to six business demonstrations. Collect performance data from demonstration sites for case studies and sharing results.	NYSERDA continues to explore opportunities to develop industry partnerships, where appropriate and through a modification to the investment plan, in new areas which may include: clean energy talent pipeline, renewable thermal, storage, zero energy homes, renewables such as off-shore wind, high-efficiency HVAC technologies and systems, advanced residential clean energy technologies or smart grid technology applications.
	2017-2019	Issue a solicitation(s) to support the development of building operations and maintenance training initiatives that address skill gaps and facilitate career paths with multiple due dates as appropriate.	The first business case (demo), in partnership with the Archdiocese of NY and TRC solutions, began in Q4 2016 under which baseline data is being collected. A second demo is just underway with upstate high schools and training will begin fall 2017. Four additional demonstration projects are in various stages of development.
	2018	Identify and implement up to six business demonstrations. Collect performance data from demonstration sites for case studies and sharing results.	
	2018-2019	Develop and implement marketing plan to share results of business case demonstrations and building operations and maintenance project results. Share intervention templates with industry.	PON 3442 was issued on January 13, 2017 as planned. To date, 18 proposals have been received. 13 proposals were recommended for funding and are currently under contract negotiation. Another building O&M solicitation will be issued in Q4 2017 and with plans to re-issue again in 2018.

Table 64. Heat Pumps and Solar Thermal Initiative Results^{116,117,118}

Approval Date: May 16, 2017

Launch Date: May 30, 2017

Market Development Initiative	Units	Completed Projects through June 30, 2017 with Adjustments	Completed Projects through 7/1/17-9/30/17	Total Completed Projects through September 30, 2017	Current Pipeline Through September 30, 2017 (Committed but not complete)	Grand Total Completed Projects + Pipeline	Cumulative Current Target Through Q3 2017	% of Cumulative Current Target Through Q3 2017	Total Target through Initiative Completion (2021)	% of Total Target through Initiative Completion (2021)
Energy Efficiency	MWh Annual	-	16	16	-	16	*	-	*	-
	MWh Lifetime	-	403	403	-	403	*	-	*	-
	MMBtu Annual	-	1,040	1,040	224,498	225,538	57,150	395%	841,600	27%
	MMBtu Lifetime	-	26,006	26,006	5,612,438	5,638,444	1,432,500	394%	21,040,000	27%
Renewable Energy	MW	-	-	-	-	-	*	-	*	-
	MWh Annual	-	0.3	0.3	-	0.3	*	9%	*	0.3%
	MWh Lifetime	-	-	-	-	-	*	-	*	-
CO2e Emission Reduction (metric tons)	MW	-	-	-	-	-	*	-	*	-
	Annual Tons	-	43	43	11,935	11,978	2,543	471%	34,810	34%
Customer Bill Savings (millions)	Lifetime Tons	-	1,076	1,076	298,363	299,439	63,600	471%	870,300	34%
	Annual Dollars	-	\$0.01	\$0.01	\$1.24	\$1.25	\$0.43	292%	\$5.63	22%
Private Investment (millions)	Lifetime Dollars	-	\$0.31	\$0.31	\$30.98	\$31.29	\$10.70	292%	\$140.80	22%
	Dollars	-	-	-	-	-	-	-	-	-
Participants	Participants	-	16	16	-	16	116	14%	3,487	0.5%

* Metric to be tracked and reported, though specific target was not ordered.

¹¹⁶ This report reflects direct benefits from programs. Indirect benefits are not reflected because it will take time for the benefits to be realized.

¹¹⁷ Cumulative Current Target through Q3 2017 represents 100% of the 2016 annual target plus 75% of the 2017 annual target. Actual progress may not be equal each quarter of a calendar year.

¹¹⁸ Energy Efficiency values represent MMBtu savings from the use of renewable heating and cooling technologies; electricity required to utilize the RH&C technology is 46 MWh annual and 1,150 lifetime. Expected emission reductions and customer bill savings are net, including both MMBtu's that add to the benefits and additional electricity required to run the system that subtract from the benefits.

Table 65. Key Milestones Heat Pumps and Solar Thermal

Complete ✓	Time Frame	Milestone	Explanation of Progress
	2017	Solicit for and contract with technical support contractor for community campaigns	Solicitation in development with expected release in November 2017.
	2017	Launch GSHP contractor mentoring program.	Request for Qualifications for mentors is currently being drafted and is expected to be issued Q4 2017.
	2017	Release competitive solicitation to select community campaigns (repeat annually).	Final solicitation is under review with expected release date in November 2017.
✓	2017	Release open enrollment solicitation for GSHP incentive.	The Ground Source Heat Pump (GSHP) Rebate (PON 3620) was released on May 30, 2017
✓	2017	Provide list of qualified GSHP designers, installers, and drillers to market.	As of September 30, 2017, 48 qualified GSHP designers, installers and drillers were listed on NYSERDA's website.
✓	2017	Contract with consultants to perform QA and design review for GSHP incentive projects.	Contracts executed on July 28, 2017.
	2018	Provide marketing toolkit and installer selection model solicitations to pilot community campaigns.	
	2018	Launch community campaigns (repeat annually).	
	2018	Contract with consultants to perform screening assessments and schematic designs for college and university campuses and State and local buildings.	NYPA has entered into contract with ICF to perform screening and design and engineering services.
	2018	Provide standardized contracts and best practices manual to market.	"Lessons Learned" and "Best Practices" documents relating to Geothermal Campus Challenge are part of scope of work of contractor (ICF).
	2018	Complete assessment of M&V methodologies for system performance and share with market participants.	
	2019	Disseminate RH&C case studies and design and installation best practices to the market.	
	2019	Develop aggregated procurement for colleges and universities and State and local buildings.	
	2024	Complete commissioning and M&V on large commercial, campus, and State and local building projects.	

Table 66. Renewable Heat NY Initiative Results ^{119,120}

Approval Date: May 16, 2017

Launch Date: May 9, 2017

Market Development Initiative	Units	Completed Projects through June 30, 2017 with Adjustments	Completed Projects through 7/1/17-9/30/17	Total Completed Projects through September 30, 2017	Current Pipeline Through September 30, 2017 (Committed but not complete)	Grand Total Completed Projects + Pipeline	Cumulative Current Target Through Q3 2017	% of Cumulative Current Target Through Q3 2017	Total Target through Initiative Completion (2021)	% of Total Target through Initiative Completion (2021)
Energy Efficiency	MWh Annual	-	70	70	-	70	*	-	*	-
	MWh Lifetime	-	1,401	1,401	-	1,401	*	-	*	-
	MMBtu Annual	-	143	143	264	407	2,595	16%	17,640	2%
	MMBtu Lifetime	-	2,861	2,861	5,284	8,145	51,975	16%	352,900	2%
Renewable Energy	MW	-	-	-	-	-	*	-	*	-
	MWh Annual	-	-	-	-	-	*	-	*	-
	MWh Lifetime	-	-	-	-	-	*	-	*	-
CO2e Emission Reduction (metric tons)	Annual Tons	-	171	171	54	225	191	118%	1,296	17%
	Lifetime Tons	-	3,420	3,420	1,087	4,507	3,818	118%	25,920	17%
Customer Bill Savings (millions)	Annual Dollars	-	\$0.06	\$0.06	\$0.02	\$0.07	\$0.07	103%	\$0.45	16%
	Lifetime Dollars	-	\$1.12	\$1.12	\$0.32	\$1.44	\$1.33	108%	\$9.03	16%
Private Investment (millions)	Dollars	-	\$0.13	\$0.13	\$0.23	\$0.36	\$1.91	19%	\$15.36	2%
Participants	Participants	-	41	41	12	53	278	19%	1,629	3%

* Metric to be tracked and reported, though specific target was not ordered.

¹¹⁹ This report reflects direct benefits from programs. Indirect benefits are not reflected because it will take time for the benefits to be realized.

¹²⁰ Cumulative Current Target through Q3 2017 represents 100% of the 2016 annual target plus 75% of the 2017 annual target. However, actual progress may not be equal each quarter of a calendar year.

Table 67. Key Milestones Renewable Heat NY

Complete ✓	Time Frame	Milestone	Explanation of Progress
	2017	Modify incentives to reflect current market conditions and re-issue open enrollment solicitation.	The pellet stove program requirements have been updated to include minimum 70% efficiency requirement and we are in the process of modifying other incentives.
	2017	Contract with Alliance for Green Heat to provide funding to Wood Stove Design Challenge on an annual basis through 2019.	Planning for the 2018 Wood Stove Design Challenge by the Alliance for Green Heat is underway. This competition will focus on automated wood stoves and be held on the National Mall in Washington D.C. on November 9-14, 2018. http://forgreenheat.org/2018-stovedesign/stovedesign.html
	2017	Launch marketing campaign.	The marketing campaign is under development with an expected launch date of Q1 2018.
	2018	Contract with research partners to provide studies on wood smoke and public health.	
	2018	Launch community sponsored purchasing campaigns.	
	2018	Contract with manufacturers selected under competitive solicitation.	
	2019	Issue competitive solicitation to seek proposals from advanced biomass heating equipment manufacturers on technology improvements.	
	2019	Reissue workforce development program based on market feedback.	

Table 68. Underutilized Product Support^{121,122,123}

Approval Date: May 16, 2017

Anticipated Launch Date: Q3 2017

Market Development Initiative	Units	Completed Projects through June 30, 2017 with Adjustments	Completed Projects through 7/1/17-9/30/17	Total Completed Projects through September 30, 2017	Current Pipeline Through September 30, 2017 (Committed but not complete)	Grand Total Completed Projects + Pipeline	Cumulative Current Target Through Q3 2017	% of Cumulative Current Target Through Q3 2017	Total Target through Initiative Completion (2020)	% of Total Target through Initiative Completion (2020)
Energy Efficiency	MWh Annual	-	-	-	-	-	1,725	-	89,790	-
	MWh Lifetime	-	-	-	-	-	22,425	-	1,167,000	-
	MMBtu Annual	-	4,502	4,502	-	4,502	13,050	34%	399,000	1%
	MMBtu Lifetime	-	67,532	67,532	-	67,532	196,500	34%	5,985,000	1%
Renewable Energy	MW	-	-	-	-	-	*	-	*	-
	MWh Annual	-	-	-	-	-	*	-	*	-
	MWh Lifetime	-	-	-	-	-	*	-	*	-
CO2e Emission Reduction (metric tons)	MW	-	-	-	-	-	*	-	*	-
	Annual Tons	-	175	175	-	175	1,410	12%	62,610	0.3%
Customer Bill Savings (millions)	Lifetime Tons	-	2,629	2,629	-	2,629	19,350	14%	844,600	0.3%
	Annual Dollars	-	\$0.08	\$0.08	-	\$0.08	\$0.43	18%	\$17.96	0.4%
Private Investment (millions)	Lifetime Dollars	-	\$1.13	\$1.13	-	\$1.13	\$5.95	19%	\$245.50	0.5%
	Dollars	-	\$0.49	\$0.49	-	\$0.49	\$4.34	11%	\$161.30	0.3%
Air Source Heat Pumps	Participants	-	129	129	-	129	375	34%	11,430	1%
Advanced Rooftop Units		-	-	-	-	-	38	-	2,190	-

* Metric to be tracked and reported, though specific target was not ordered.

¹²¹ This report reflects direct benefits from programs. Indirect benefits are not reflected because it will take time for the benefits to be realized.

¹²² Cumulative Current Target through Q3 2017 represents 100% of the 2016 annual target plus 75% of the 2017 annual target. Actual progress may not be equal each quarter of a calendar year.

¹²³ Energy Efficiency values represent MMBTU savings from ASHPs; the electricity required to utilize the RH&C technology is 299 MWh annual and 4,487 lifetime. Expected emission reductions and customer bill savings are net, including both the MMBtu's that add to the benefits and addition MWh's required to run the system that subtract from the benefits.

Table 69. Key Milestones Underutilized Product Support¹²⁴

Complete ✓	Time Frame	Milestone	Explanation of Progress
	2017	Launch open enrollment incentive program for Advanced Rooftop Units (ARTU).	ARTU program on hold pending additional research and market engagement. The initiative was intended to promote the stocking and sales of the most efficient and controllable RTUs on the market, but the planned technology performance levels are not readily available in the supply chain at this point. Alternate structures and technologies are being evaluated to address commercial HVAC, including advanced controls retrofits and variable refrigerant flow systems. This milestone will need to be revised with a goal of launching in mid-2018.
	2017	Release solicitation for shared awareness and education campaigns, as well as customer targeting and acquisition.	This will be split into two solicitations, one focused on co-op marketing and one focused on processing data to enable more effective customer targeting. The solicitation for co-op marketing is under development now and will be released in November. The customer targeting solicitation is in the research and development phase.
	2017	HVAC trainings assessed and compiled to facilitate increased contractor participation.	HVAC trainings are offered by manufacturers and distributors for their associated contractors. ASHP trainings have been assessed and there looks to be sufficient diversity and supply to meet current, expected demand. A portal for contractors will be offered to learn about available trainings in the State that will be updated in an ongoing manner by manufacturers and distributors. Trainings for ARTUs are offered on a much more limited basis and generally are not requested by contractors. After launching a commercial HVAC offering, available trainings will be compiled.
	2017	Case studies developed and deployed in the market, along with current resources from regional and national organizations.	Best practice resources are being deployed for contractors from the Northeast Energy Efficiency Partnership. For case studies, much more information is available for ARTUs than for ASHPs, so the development time will push this into 2018.
✓	2017	Issue competitive solicitation for technical analysis related to product and appliance standards.	Solicitation for technical analysis of potential product standards was released in August and the work was contracted in September. The goal is to complete this assessment by the end of October to inform potential legislative actions in 2018.
	2018	Efficiency and cost calculator released in the market.	

¹²⁴ The launch dates for the ASHP and ARTU are not in alignment with what was presented in the investment plan. NYSERDA will correct these launch dates in a future filing based on guidance from the Department of Public Service.

Table 69 continued

Complete ✓	Time Frame	Milestone	Explanation of Progress
	2018	Mapping tool for Air-Source Heat Pumps (ASHP) potential released in the market.	
✓	2018	Launch open enrollment incentive program for ASHPs.	ASHP program was launched in August.
	2018	Issue competitive solicitation to identify and test alternative business models.	
	2018	Issue competitive solicitation for pilots to identify and deploy solutions for the integration of traditional and advanced systems, such as ASHPs.	<p>Initial conversations have taken place with manufacturers, northeast program administrators, and other stakeholders on this topic. There is a tremendous amount of interest in addressing this challenge, and a wide belief that current technology can be applied to this challenge. A small test is underway in Maine that will inform our solicitation, and we are working with NEEP to find other states/programs that might be interested in offering a joint solicitation.</p> <p>In addition, the recent Next Generation HVAC Technology Challenge (PON 3519) may receive some submissions that could address this problem. We will work closely with that team to monitor projects.</p>
	2019	Issue open solicitation to expand alternative business models based on results from competitive solicitation in 2018.	

Table 70. Energy Efficiency Soft Cost Challenge ^{125,126,127}

Approval Date: July 19, 2017

Anticipated Launch Date: Q1 2018

Innovation and Research Initiative	Units	Completed Projects through June 30, 2017 with Adjustments	Completed Projects through 7/1/17-9/30/17	Total Completed Projects through September 30, 2017	Current Pipeline Through September 30, 2017 (Committed but not complete)	Grand Total Completed Projects + Pipeline	Cumulative Current Target Through Q3 2017	% of Cumulative Current Target Through Q3 2017	Total Target through Initiative Completion (2025)	% of Total Target through Initiative Completion (2025)
Energy Efficiency	MWh Annual	-	-	-	-	-	-	-	17,720	-
	MWh Lifetime	-	-	-	-	-	-	-	177,200	-
	MMBtu Annual	-	-	-	-	-	-	-	590,600	-
	MMBtu Lifetime	-	-	-	-	-	-	-	5,906,000	-
Renewable Energy	MW	-	-	-	-	-	-	-	-	-
	MWh Annual	-	-	-	-	-	-	-	-	-
	MWh Lifetime	-	-	-	-	-	-	-	-	-
CO2e Emission Reduction (metric tons)	MW	-	-	-	-	-	-	-	-	-
	Annual Tons	-	-	-	-	-	-	-	46,570	-
Customer Bill Savings (millions)	Lifetime Tons	-	-	-	-	-	-	-	465,700	-
	Annual Dollars	-	-	-	-	-	-	-	11	-
Private Investment (millions)	Lifetime Dollars	-	-	-	-	-	-	-	111	-
	Dollars	-	-	-	-	-	-	-	7	-
Participants	Participants	-	-	-	-	-	8	-	20	-

¹²⁵ This report reflects direct benefits from programs. Indirect benefits are not reflected because it will take time for the benefits to be realized.

¹²⁶ Cumulative Current Target through Q3 2017 represents 100% of the 2016 annual target plus 75% of the 2017 annual target. Actual progress may not be equal each quarter of a calendar year.

¹²⁷ Energy Efficiency values represent MWh savings from ARTUs and MMBTU savings from ASHPs; the electricity required to utilize the RH&C technology is netted out of the emission reduction and customer bill savings values shown in this table.

Table 71. Key Milestones for Energy Efficiency Soft Cost Challenge

Complete ✓	Time Frame	Milestone	Explanation of Progress
	2017	Issue competitive solicitation for first round of the challenge	Draft of solicitation in process.
✓	2017	Select an implementation consultant	An implementation consultant has been selected.
	2017	Hold bidder's presentation to answer questions on the challenge.	The bidder's presentation will be held after the solicitation has been issued.
	2017	Select preliminary winners.	Preliminary winner will be selected after the solicitation has been issued and proposals received.
	2018	Contract projects with 10 preliminary winners. Monitor and provide assistance and resources to preliminary winners.	
	2018	Hold business plan presentations to a panel of judges.	
	2018	Select up to five grand prize winners.	
	2018	Contract projects with first round grand prize winners.	
	2018	Issue competitive solicitation for second round of the challenge.	
	2018	Hold bidder's presentation to answer questions on the challenge.	
	2018	Select preliminary winners.	
	2019	Contract projects with 10 preliminary winners. Monitor and provide assistance and resources to preliminary winners.	
	2019	Hold business plan presentations to a panel of judges.	
	2019	Select up to five grand prize winners.	
	2019	Contract projects with second round grand prize winners.	

4 Innovation and Research Initiative Specific Results

Table 72. Innovation and Research Initiative Budgets and Spending ^{128, 129, 130}

Initiative	Budget Approved as of September 30, 2017 ^a	Expended Funds ^b	Open Encumbrances ^c	Contract Pre-Encumbrances ^d	Committed Funds ^e	% of Approved Budget Committed ^f	Budget Approved Remaining Balance ^g
Market Characterization & Design Chapter	\$250,000	-	-	-	-	-	\$250,000
Grid Modernization Chapter							
DER Interconnection	\$6,300,000	\$699,112	\$1,946,069	\$93,088	\$2,738,269	43%	\$3,561,732
High Performing Grid	\$110,500,000	\$453,447	\$3,114,711	\$7,970,408	\$11,538,566	10%	\$98,961,434
Next Generation Power Electronics	\$16,700,000	-	-	\$16,700,000	\$16,700,000	100%	
Grid Modernization Chapter Total	\$133,500,000	\$1,152,559	\$5,060,780	\$24,763,496	\$30,976,835	23%	\$102,523,165
Innovation Capacity and Business Development Chapter							
CleanTech Startup Growth	\$19,000,000	-	\$8,300,000	\$67,056	\$8,367,056	44%	\$10,632,944
Manufacturing Corps	\$12,000,000	-	-	\$49,000	\$49,000	0.4%	\$11,951,000
Innovation Capacity and Business Development Chapter	\$31,000,000	-	\$8,300,000	\$116,056	\$8,416,056	27%	\$22,583,944
Building Innovation Chapter							
NextGen HVAC	\$15,000,000	\$35,000	\$189,588	\$50,000	\$274,588	1.8%	\$14,725,412
Building Innovation Chapter Total	\$15,000,000	\$35,000	\$189,588	\$50,000	\$274,588	1.8%	\$14,725,412
Clean Transportation Chapter							
Electric Vehicles	\$11,850,000	\$111,192	\$50,000	\$150,000	\$311,192	3%	\$11,538,808
Clean Transportation Chapter Total	\$11,850,000	\$111,192	\$50,000	\$150,000	\$311,192	3%	\$11,538,808
Energy-Related Environmental Research Chapter							
Environmental Research	\$30,000,000	\$19,482	\$717,522	\$2,499,861	\$3,236,865	11%	\$26,763,135
Energy-Related Environmental Research Chapter Total	\$30,000,000	\$19,482	\$717,522	\$2,499,861	\$3,236,865	11%	\$26,763,135
Renewables Optimization Chapter			\$1,435,044				
Energy Storage Innovations	\$33,000,000	-	-	-	-	-	\$33,000,000
Renewables Optimization Chapter Total	\$33,000,000	-	-	-	-	-	\$33,000,000
NYS Cost Recovery Fee	\$6,429,608	\$24,053	-	-	\$24,053	0.4%	\$6,405,555
Innovation Capacity and Bus. Dev. Chapter Total	\$261,029,608	\$1,342,286	\$14,317,890	\$27,579,413	\$43,239,589	17%	\$217,790,019

¹²⁸ This report reflects direct benefits from programs. Indirect benefits are not reflected because it will take time for the benefits to be realized.

Table notes are on the next page.

- a Funds approved by DPS as of June 30, 2017.
- b Invoices processed for payment by NYSERDA.
- c Remaining funding obligated under a contract, purchase order or incentive award.
- d Planned funding for contracts awarded and under negotiation.
- e Sum of Expended Funds, Open Encumbrances, and Contract Pre-Encumbrances.
- f Percentage of the budget that has been committed.
- g Difference between Budget Approved Funds and Committed Funds.

¹²⁹ NYSERDA committed an additional \$7,712,088 to solicitations with upcoming due dates not included in the table above. When including these funds, NYSERDA committed 20% of the approved budget to date for the Innovation and Research Chapter. Committed benefits presented in this report do not include benefits associated with awards made as a result of these solicitations.

¹³⁰ The Market Characterization and Design Chapter line item includes funds to support overarching, non-initiative-specific evaluation studies.

Table 73. Distributed Energy Resource Interconnection Initiative Results ^{131,132}

Approval Date: May 23, 2016

Launch Date: October 20, 2016

Innovation and Research Initiative	Units	Completed Projects through June 30, 2017 with Adjustments	Completed Projects through 7/1/17-9/30/17	Total Completed Projects through September 30, 2017	Current Pipeline Through September 30, 2017 (Committed but not complete)	Grand Total Completed Projects + Pipeline	Cumulative Current Target Through Q3 2017	% of Cumulative Current Target Through Q3 2017	Total Target through Initiative Completion (2019)	% of Total Target through Initiative Completion (2019)
Energy Efficiency	MWh Annual	-	-	-	-	-	*	-	*	-
	MWh Lifetime	-	-	-	-	-	*	-	*	-
	MMBtu Annual	-	-	-	-	-	*	-	*	-
	MMBtu Lifetime	-	-	-	-	-	*	-	*	-
Renewable Energy	MW	-	-	-	-	-	*	-	*	-
	MWh Annual	-	-	-	-	-	*	-	*	-
	MWh Lifetime	-	-	-	-	-	*	-	*	-
CO2e Emission Reduction (metric tons)	MW	-	-	-	-	-	*	-	*	-
	Annual Tons	-	-	-	-	-	*	-	*	-
Customer Bill Savings (millions)	Lifetime Tons	-	-	-	-	-	*	-	*	-
	Annual Dollars	-	-	-	-	-	*	-	*	-
Private Investment (millions)	Lifetime Dollars	-	-	-	-	-	*	-	*	-
	Dollars	-	-	-	\$3.61	\$3.61	\$5.21	69%	\$5.83	62%
Participants	Participants	-	-	-	9	9	7	129%	13	69%

* Metric to be tracked and reported, though specific target was not ordered.

¹³¹ This report reflects direct benefits from programs. Indirect benefits are not reflected because it will take time for the benefits to be realized.

¹³² Cumulative Current Target through Q3 2017 represents 100% of the 2016 annual target plus 50% of the 2017 annual target. However, actual progress may not be equal each quarter of a calendar year.

Table 74. Key Milestones for Distributed Energy Resource Interconnection

Complete ✓	Time Frame	Milestone	Explanation of Progress
✓	Q3 2016	Contract with a consultant to conduct a comprehensive analysis of technology gaps and create a road map for advancement of the technology and tools necessary to support an advanced, integrated, high-performing grid in New York.	Consulting contract established.
✓	Q3 2016	Contract with one or more research/consulting organizations to provide technical knowledge and support for DER interconnection improvements in New York.	Contracts in place with three research/consulting organizations
✓	Q3 2016	Launch a competitive program funding opportunity focused on innovation to reduce DER interconnection burdens in New York State.	Competitive funding program opportunity launched in October 2016.
✓	Q3 2016	Implement a model for collaboration between NYSERDA, NYPA, DPS, NY utilities, and grid tech companies to ensure the grid modernization road mapping work is compatible with and complimentary to the development of DSIPs consistent with PSC rules.	Collaboration model framework established via the NY Grid Modernization Advisory Committee.
✓	Q1 2017	Contract with awardees selected under the funding opportunity focused on innovation to reduce DER interconnection burdens in New York State.	The Investment Evaluation Panel for PON 3404 took place on January 25, 2017. Contracts have been established with proposals selected for award.
	Q2 2017	Grid Modernization Roadmap complete.	A draft of the NY Grid Modernization Roadmap is undergoing final review as of September 30, 2017.

Table 75. High-Performing Grid Initiative Results ^{133,134}

Approval Date: May 23, 2016

Launch Date: September 16, 2016

Innovation and Research Initiative	Units	Completed Projects through June 30, 2017 with Adjustments	Completed Projects through 7/1/17-9/30/17	Total Completed Projects through September 30, 2017	Current Pipeline Through September 30, 2017 (Committed but not complete)	Grand Total Completed Projects + Pipeline	Cumulative Current Target Through Q3 2017	% of Cumulative Current Target Through Q3 2017	Total Target through Initiative Completion (2022)	% of Total Target through Initiative Completion (2022)
Energy Efficiency	MWh Annual	-	-	-	-	-	*	-	*	-
	MWh Lifetime	-	-	-	-	-	*	-	*	-
	MMBtu Annual	-	-	-	-	-	*	-	*	-
	MMBtu Lifetime	-	-	-	-	-	*	-	*	-
Renewable Energy	MW	-	-	-	-	-	*	-	*	-
	MWh Annual	-	-	-	-	-	*	-	*	-
	MWh Lifetime	-	-	-	-	-	*	-	*	-
CO2e Emission Reduction (metric tons)	MW	-	-	-	-	-	*	-	*	-
	Annual Tons	-	-	-	-	-	*	-	*	-
Customer Bill Savings (millions)	Lifetime Tons	-	-	-	-	-	*	-	*	-
	Annual Dollars	-	-	-	-	-	*	-	*	-
Private Investment (millions)	Lifetime Dollars	-	-	-	-	-	*	-	*	-
	Dollars	-	-	-	\$22.47	\$22.47	\$52.80	43%	\$309.00	7%
Participants	Participants	-	-	-	27	27	13	208%	64	42%

* Metric to be tracked and reported, though specific target was not ordered.

¹³³ This report reflects direct benefits from programs. Indirect benefits are not reflected because it will take time for the benefits to be realized.

¹³⁴ Cumulative Current Target through Q3 2017 represents 100% of the 2016 annual target plus 50% of the 2017 annual target. However, actual progress may not be equal each quarter of a calendar year.

Table 76. Key Milestones for High-Performing Grid

Complete ✓	Time Frame	Milestone	Explanation of Progress
✓	2017	Issue broad competitive solicitation #1, guided by utility Distributed System Implementation Plan (DSIP) baseline filings and completed stakeholder market research (e.g., demonstrations, product development, engineering analyses and studies) in technology, tools, and methods aimed at dynamic management of the electric grid.	Program Opportunity Notice 3397 released in October 2016 with a due date of January 11, 2017(Round#1); June 28, 2017 (Round#2).
✓	2017	Enter into contracts for projects awarded under the broad competitive solicitation #1.	PON 3397 round 1 closed on January 11, 2017. Approval to contract with awardees under Round # 1 granted April 2017.
	2017	Identify near-term opportunities for applied research that are aligned with utility supplemental DSIPs and the NY Grid Modernization Roadmap.	Initial and Supplemental DSIP filings have been thoroughly reviewed. The NY Grid Modernization Roadmap is in progress with an anticipated completion of Q4 2017.
	2017	Issue targeted competitive solicitation #2, guided by utility supplemental DSIPs and the NY Grid Modernization Roadmap.	Grid Modernization Roadmap in progress with an anticipated completion of Q4 2017. Solicitation to be developed in Q1 2018.
	2017	Enter into contracts for projects awarded under the targeted competitive solicitation #2.	Ten proposals are in the process of being contracted under solicitation #2.
	2018	Identify technology gaps necessary to support community grid operation based on completed NY Prize Stage 2 evaluations.	
	2018	Issue broad competitive solicitation #3.	
	2018	Enter into contracts for projects awarded under the broad competitive solicitation #3.	
	2018	Issue targeted competitive solicitation #4.	
	2019	Enter into contracts for projects awarded under the targeted competitive solicitation #4.	
	2019	Issue broad competitive solicitation #5.	
	2019	Enter into contracts for projects awarded under the broad competitive solicitation #5.	
	2020	Issue targeted competitive solicitation #6.	
	2020	Enter into contracts for projects awarded under the targeted competitive solicitation #6.	
	2020	Issue broad competitive solicitation #7.	
	2021	Enter into contracts for projects awarded under the broad competitive solicitation #7.	

Table 76 continued

Complete ✓	Time Frame	Milestone	Explanation of Progress
	2021	Issue targeted competitive solicitation #8.	
	2021	Enter into contracts for projects awarded under the targeted competitive solicitation #8.	
	2021	Issue broad competitive solicitation #9.	
	2022	Enter into contracts for projects awarded under the broad competitive solicitation #9.	

Table 77. Power Electronics Manufacturing Consortium Initiative Results^{135,136}

Approval Date: July 19, 2017

Anticipated Launch Date: Q4 2017

Innovation and Research Initiative	Units	Completed Projects through June 30, 2017 with Adjustments	Completed Projects through 7/1/17-9/30/17	Total Completed Projects through September 30, 2017	Current Pipeline Through September 30, 2017 (Committed but not complete)	Grand Total Completed Projects + Pipeline	Cumulative Current Target Through Q3 2017	% of Cumulative Current Target Through Q3 2017	Total Target through Initiative Completion (2019)	% of Total Target through Initiative Completion (2019)
Energy Efficiency	MWh Annual	-	-	-	-	-	*	-	*	-
	MWh Lifetime	-	-	-	-	-	*	-	*	-
	MMBtu Annual	-	-	-	-	-	*	-	*	-
	MMBtu Lifetime	-	-	-	-	-	*	-	*	-
	MW	-	-	-	-	-	*	-	*	-
Renewable Energy	MWh Annual	-	-	-	-	-	*	-	*	-
	MWh Lifetime	-	-	-	-	-	*	-	*	-
	MW	-	-	-	-	-	*	-	*	-
CO2e Emission Reduction (metric tons)	Annual Tons	-	-	-	-	-	*	-	*	-
	Lifetime Tons	-	-	-	-	-	*	-	*	-
Customer Bill Savings (millions)	Annual Dollars	-	-	-	-	-	*	-	*	-
	Lifetime Dollars	-	-	-	-	-	*	-	*	-
Private Investment (millions)	Dollars	-	-	-	\$80.00	\$80.00	\$35.30	227%	\$80.00	100%
Participants	Participants	-	-	-	12	12	3	400%	12	100%

* Metric to be tracked and reported, though specific target was not ordered.

¹³⁵ This report reflects direct benefits from programs. Indirect benefits are not reflected because it will take time for the benefits to be realized.

¹³⁶ Cumulative Current Target through Q3 2017 represents 100% of the 2016 annual target plus 75% of the 2017 annual target. Actual progress may not be equal each quarter of a calendar year.

Table 78. Key Milestones for Power Electronics Manufacturing Consortium

Complete ✓	Time Frame	Milestone	Explanation of Progress
	2017	Business plan completed and submitted to NYSERDA for review.	Contract sign-off is in process
	2017	Consortium expanded to include at least 4 partner companies/customers.	Contract sign-off is in process
	2018	Contract with SUNY Research Foundation for the PEMC.	
	2018	Production capacity fab infrastructure complete.	
	2018	Three successive batches of SiC MOSFET wafers fabricated.	
	2018	Quality management system implemented.	
	2018	ISO-9001 certification complete.	
	2018	AEC-Q101 qualification complete.	
	2018	Consortium expanded to include at least 8 partner companies/customers.	
	2019	Consortium expanded to include at least 12 partner companies/customers.	

Table 79. Cleantech Start-up Growth Initiative Results ^{137, 138}

Approval Date: May 23, 2016

Launch Date: October 12, 2016

Innovation and Research Initiative	Units	Completed Projects through June 30, 2017 with Adjustments	Completed Projects through 7/1/17-9/30/17	Total Completed Projects through September 30, 2017	Current Pipeline Through September 30, 2017 (Committed but not complete)	Grand Total Completed Projects + Pipeline	Cumulative Current Target Through Q3 2017	% of Cumulative Current Target Through Q3 2017	Total Target through Initiative Completion (2019)	% of Total Target through Initiative Completion (2019)
Energy Efficiency	MWh Annual	-	-	-	-	-	*	-	*	-
	MWh Lifetime	-	-	-	-	-	*	-	*	-
	MMBtu Annual	-	-	-	-	-	*	-	*	-
	MMBtu Lifetime	-	-	-	-	-	*	-	*	-
Renewable Energy	MW	-	-	-	-	-	*	-	*	-
	MWh Annual	-	-	-	-	-	*	-	*	-
	MWh Lifetime	-	-	-	-	-	*	-	*	-
CO2e Emission Reduction (metric tons)	MW	-	-	-	-	-	*	-	*	-
	Annual Tons	-	-	-	-	-	*	-	*	-
Customer Bill Savings (millions)	Lifetime Tons	-	-	-	-	-	*	-	*	-
	Annual Dollars	-	-	-	-	-	*	-	*	-
Private Investment (millions)	Lifetime Dollars	-	-	-	-	-	*	-	*	-
	Annual Dollars	-	-	-	\$124.50	\$124.50	\$137.00	91%	\$225.00	55%
Participants	Participants	-	-	-	-	-	101	-	191	-

* Metric to be tracked and reported, though specific target was not ordered.

¹³⁷ This report reflects direct benefits from programs. Indirect benefits are not reflected because it will take time for the benefits to be realized.

¹³⁸ Cumulative Current Target through Q3 2017 represents 100% of the 2016 annual target plus 75% of the 2017 annual target. Actual progress may not be equal each quarter of a calendar year.

Table 80. Key Milestones for Cleantech Start-up Growth Incubators

Complete ✓	Time Frame	Milestone	Explanation of Progress
✓	2016	First competitive solicitation launched.	Solicitation released on October 12, 2016. Round 1 due date December 1, 2016. Round 2 opens October 2, 2017 and closes November 29, 2017.
✓	2017	Awards from first solicitation are contracted.	Scoring Committee for Round 1 held January 11, 2017. Four awarded contracts fully executed by August 31, 2017.
✓	2017	Second competitive solicitation launched.	Announced as part of Round 1. Round 2 opened October 2, 2017 and closes November 29, 2017.
✓	Starting 2017	Networking event held.	Networking events are held as part of the routine operation of the incubator. Networking events have been held as planned throughout 2017.
✓	Starting 2017	Entrepreneur boot camp held.	Entrepreneurial-type of boot camps/workshops are held throughout the operation of the incubator. Entrepreneur boot camps have been held as planned throughout 2017.
	2018	Awards from second solicitation are contracted.	Round 2 closes November 29, 2017. Planning to hold Scoring Committee by January 15, 2018.

Table 81. Key Milestones for Cleantech Start-up Growth Ignition Grants

Complete ✓	Time Frame	Milestone	Explanation of Progress
✓	2017	Formal Voice of Customer exercise is completed.	Voice of Customer exercise has been initiated and will ramp up after awards are announced and contracts are fully executed for incubators funded in Round 1. Companies working with Incubators awarded in Rounds 1 and 2 will be eligible for Ignition Grants.
	2017	Solicitation launched.	Best procurement process has been determined internally based on program goals. Planning to launch competitive solicitation by December 31, 2017.
	2017	Establish investment committee.	Working with program staff to finalize and establish Investment Commitment by December 31, 2017.
	Starting 2017	Investment committee meetings held.	Investment committee meetings will be held once the investment committee is fully established and the solicitation is launched, which is expected to be in Q1 2018.
	Starting 2017	Launch ignition grants solicitation and issue awards on ongoing basis.	Ignition grants solicitation is expected to launch in Q1 2018.

Table 82. Key Milestones for Cleantech Start-up Growth Geographic Coverage

Complete ✓	Time Frame	Milestone	Explanation of Progress
✓	2016	Competitive solicitation launched.	Solicitation released on October 12, 2016. Round 1 due date December 1, 2016.
✓	2017	Awards from solicitation are contracted.	Scoring Committee for Round 1 held on January 11, 2017. Presented Scoring Committee results and Team recommendations at Greenlight on February 14, 2017. The one award under this milestone was fully executed by August 31, 2017.
✓	2017	Inventory of entrepreneurial assets in Southern Tier is completed.	An inventory of assets was completed during the initiation phase of 76West (RFQL 3101). Following selection of Cornell to operate the competition, we have relied on Cornell to maintain many of the relationships with these assets and to add others to the inventory.
	2017	Establish entrepreneurship training programs.	Two entities, Cornell and CUNY, were qualified under RFQL3101 to deliver entrepreneurship training. Task work order agreements with both have been executed.
	Starting 2017	Networking events held.	Ongoing networking events have already been held and more are planned for future dates. Networking events have been held as planned throughout 2017.

Table 83. Manufacturing Corps Initiative Results ^{139, 140}

Approval Date: February 14, 2017

Launch Date: June 29, 2017

Innovation and Research Initiative	Units	Completed Projects through June 30, 2017 with Adjustments	Completed Projects through 7/1/17-9/30/17	Total Completed Projects through September 30, 2017	Current Pipeline Through September 30, 2017 (Committed but not complete)	Grand Total Completed Projects + Pipeline	Cumulative Current Target Through Q3 2017	% of Cumulative Current Target Through Q3 2017	Total Target through Initiative Completion (2019)	% of Total Target through Initiative Completion (2019)
Energy Efficiency	MWh Annual	-	-	-	-	-	*	-	*	-
	MWh Lifetime	-	-	-	-	-	*	-	*	-
	MMBtu Annual	-	-	-	-	-	*	-	*	-
	MMBtu Lifetime	-	-	-	-	-	*	-	*	-
Renewable Energy	MW	-	-	-	-	-	*	-	*	-
	MWh Annual	-	-	-	-	-	*	-	*	-
	MWh Lifetime	-	-	-	-	-	*	-	*	-
CO2e Emission Reduction (metric tons)	MW	-	-	-	-	-	*	-	*	-
	Annual Tons	-	-	-	-	-	*	-	*	-
Customer Bill Savings (millions)	Lifetime Tons	-	-	-	-	-	*	-	*	-
	Annual Dollars	-	-	-	-	-	*	-	*	-
Private Investment (millions)	Lifetime Dollars	-	-	-	-	-	*	-	*	-
	Dollars	-	-	-	-	-	\$15.00	-	\$60.00	-
Participants	Participants	-	-	-	-	-	75	-	450	-

* Metric to be tracked and reported, though specific target was not ordered.

¹³⁹ This report reflects direct benefits from programs. Indirect benefits are not reflected because it will take time for the benefits to be realized.

¹⁴⁰ Cumulative Current Target through Q3 2017 represents 100% of the 2016 annual target plus 75% of the 2017 annual target. Actual progress may not be equal each quarter of a calendar year.

Table 84. Key Milestones for Manufacturing Corps

Complete ✓	Time Frame	Milestone	Explanation of Progress
	2017	RFQ launched to identify manufacturing experts.	This milestone will be addressed after the Manufacturing Corps Pilot Program solicitation proposals are evaluated in Q4 2017.
✓	2017	Competitive solicitation launched for pilot sites.	Solicitation launched on June 29, 2017. Proposals due September 14, 2017.
	2017	Awards from RFQ are contracted.	Contracting will commence after proposals are evaluates in Q4 2017.
	2017	Awards from pilot-site solicitation are contracted. Pilot program launched.	Proposals due September 14, 2017. Pilot-site solicitation award(s) expected to be contracted in Q1 2018.
	2018	Pilot program ends. Metrics reviewed based on pilot program performance and adjustments identified to implement in statewide solicitation.	
	2019	Statewide competitive solicitation based on pilot program launched.	
	2019	Awards from statewide solicitation are contracted. Statewide program launched.	
	2021	NYSERDA investment in statewide program ends. Metrics reviewed based on statewide program performance.	

Table 85. NextGen HVAC Initiative Results ^{141,142}

Approval Date: August 17, 2016

Launch Date: June 28, 2017

Innovation and Research Initiative	Units	Completed Projects through June 30, 2017 with Adjustments	Completed Projects through 7/1/17-9/30/17	Total Completed Projects through September 30, 2017	Current Pipeline Through September 30, 2017 (Committed but not complete)	Grand Total Completed Projects + Pipeline	Cumulative Current Target Through Q3 2017	% of Cumulative Current Target Through Q3 2017	Total Target through Initiative Completion (2019)	% of Total Target through Initiative Completion (2019)
Energy Efficiency	MWh Annual	-	-	-	-	-	*	-	*	-
	MWh Lifetime	-	-	-	-	-	*	-	*	-
	MMBtu Annual	-	-	-	-	-	*	-	*	-
	MMBtu Lifetime	-	-	-	-	-	*	-	*	-
Renewable Energy	MW	-	-	-	-	-	*	-	*	-
	MWh Annual	-	-	-	-	-	*	-	*	-
	MWh Lifetime	-	-	-	-	-	*	-	*	-
CO2e Emission Reduction (metric tons)	MW	-	-	-	-	-	*	-	*	-
	Annual Tons	-	-	-	-	-	*	-	*	-
Customer Bill Savings (millions)	Lifetime Tons	-	-	-	-	-	*	-	*	-
	Annual Dollars	-	-	-	-	-	*	-	*	-
Private Investment (millions)	Lifetime Dollars	-	-	-	-	-	*	-	*	-
	Dollars	-	-	-	-	-	\$15.00	-	\$75.00	-
Participants	Participants	-	-	-	-	-	4	-	25	-

* Metric to be tracked and reported, though specific target was not ordered.

¹⁴¹ This report reflects direct benefits from programs. Indirect benefits are not reflected because it will take time for the benefits to be realized.

¹⁴² Cumulative Current Target through Q3 2017 represents 100% of the 2016 annual target plus 75% of the 2017 annual target. Actual progress may not be equal each quarter of a calendar year.

Table 86. Key Milestones for NextGen HVAC

Complete ✓	Time Frame	Milestone	Explanation of Progress
✓	2016	Issue RFI to evaluate and establish technology challenge areas and targets.	RFI issued January 2017. Informational Webinar held on Feb. 1, 2017 (60+ attendees). RFI submissions received on Feb 22, 2017 (32 submissions).
✓	2016	Issue first technology challenge.	NextGen HVAC Technology Challenge (PON 3517) developed and entered into collaboration on 2/28/2017. PON 3517 issued on June 28, 2017 with four identified challenges: Air Source Heat Pumps, Advanced HVAC Controls, Compressorless Cooling, and Ground Heat Exchanger. Informational webinar held on July 24, 2017 with 99 unique attendees, including a viewing group organized by the Syracuse CoE. On August 3, 2017, 66 concept papers were received of which four were deemed late for a total of 62. Scoring committees are scheduled with the evaluation of concept papers to be completed 9/22/2017.
	2017	Contract projects from first technology challenge.	Concept paper review completed 9/22/2017 with projects to be contracted in Q1 2018.
	2017	Review portfolio of activities, solicit market input, and reassess technology challenges areas and targets.	Milestone to be completed in Q12018 after award notifications from Round 1 made and the second scheduled technology announcement scheduled for March 2018.
	2017	Issue second technology challenge.	The second of four challenges are scheduled to be announced on March 22, 2018.
	2018	Contract projects from second technology challenge.	
	2018	Review portfolio of activities, benefits to date, solicit market input and reassess technology challenges areas and targets.	
	2018	Issue third technology challenge.	
	2019	Contract projects from third technology challenge.	

Table 87. Electric Vehicles Initiative: EV Innovation Results^{143,144}

Approval Date: August 17, 2016

Launch Date: September 15, 2017

Innovation and Research Initiative	Units	Completed Projects through June 30, 2017 with Adjustments	Completed Projects through 7/1/17-9/30/17	Total Completed Projects through September 30, 2017	Current Pipeline Through September 30, 2017 (Committed but not complete)	Grand Total Completed Projects + Pipeline	Cumulative Current Target Through Q3 2017	% of Cumulative Current Target Through Q3 2017	Total Target through Initiative Completion (2021)	% of Total Target through Initiative Completion (2021)
Energy Efficiency	MWh Annual	-	-	-	-	-	*	-	*	-
	MWh Lifetime	-	-	-	-	-	*	-	*	-
	MMBtu Annual	-	-	-	-	-	*	-	*	-
	MMBtu Lifetime	-	-	-	-	-	*	-	*	-
Renewable Energy	MW	-	-	-	-	-	*	-	*	-
	MWh Annual	-	-	-	-	-	*	-	*	-
	MWh Lifetime	-	-	-	-	-	*	-	*	-
CO2e Emission Reduction (metric tons)	MW	-	-	-	-	-	*	-	*	-
	Annual Tons	-	-	-	-	-	*	-	*	-
Customer Bill Savings (millions)	Lifetime Tons	-	-	-	-	-	*	-	*	-
	Annual Dollars	-	-	-	-	-	*	-	*	-
Private Investment (millions)	Lifetime Dollars	-	-	-	-	-	*	-	*	-
	Dollars	-	-	-	\$0.53	\$0.53	\$5.40	10%	\$31.70	2%
Participants	Participants	-	1	1	1	2	6	33%	33	6%

* Metric to be tracked and reported, though specific target was not ordered.

¹⁴³ This report reflects direct benefits from programs. Indirect benefits are not reflected because it will take time for the benefits to be realized.

¹⁴⁴ Cumulative Current Target through Q3 2017 represents 100% of the 2016 annual target plus 75% of the 2017 annual target. Actual progress may not be equal each quarter of a calendar year.

Table 88. Key Milestones for Electric Vehicles Initiative: EV Innovation

Complete ✓	Time Frame	Milestone	Explanation of Progress
	2017	Support the launch of new business offerings for charging station leasing.	NYSERDA is currently finalizing an Memorandum of Understanding (MOU) with the New York Power Authority (NYPA) to have them offer on-bill financing of EV charging stations to their Recharge NY customers (private sector companies). NYSERDA has been talking to private charging station providers about providing leasing options, but they believe current business conditions make these models less attractive than straight ownership models.
	2017	Issue first competitive solicitation for the development and demonstration of EV-enabling technologies.	Development of this solicitation, which will include product development, is nearing completion and is expected to be released Q4 2017.
	2017	Contract with projects awarded in first competitive solicitation for the development and demonstration of EV-enabling technologies.	This will begin once proposals are received and awards made for upcoming solicitation. Delayed due to delay in releasing PON.
✓	2017	Initiate aggregation pilots for EVs and EV charging stations, which will begin engaging customers and facilitating initial bulk purchases.	NYSERDA's contractor worked on an aggregate EV purchase for individuals in Q1 and Q2 2017, facilitating over 100 purchases to date. The Department of Environmental Conservation has led aggregate purchases of EVs for public sector fleets, including one expected in Q4 2017. For charging stations, NYSERDA's MOU with NYPA will take advantage of aggregate purchase pricing for its private sector Recharge NY customers.
	2018	Complete bench-scale prototypes of economically viable technologies that enable smart charging.	
	2018	Issue second competitive solicitation for the development and demonstration of EV-enabling technologies.	
	2018	Contract with projects awarded in second competitive solicitation for the development and demonstration of EV-enabling technologies.	
	2018	Contract with projects awarded in third competitive solicitation for the development and demonstration of EV-enabling technologies.	

Table 88 continued

Complete ✓	Time Frame	Milestone	Explanation of Progress
	2018	Fast-charging station network expanded to 30 locations statewide along major interstate corridors.	NYSERDA is developing programs to expand NYS's fast-charging network. The Transportation and Climate Initiative (TCI) is conducting a geographical analysis for DC fast chargers that helps to prioritize where to install fast chargers along major travel corridors in the Northeast.
✓	2018	Completion of first collaborative consumer awareness activities.	<p>Consumer awareness activities are underway. Initial collaborative partnerships underway and showing success in the Hudson Valley (through Sustainable Hudson Valley - completed), Syracuse (through Clean Cities), and Rochester (through Energetics and the Electrification Coalition).</p> <p>NYSERDA worked with NESCAUM, the other seven Zero-Emission Vehicle (ZEV) MOU states, and the major automakers to develop a plan for a multi-state collaborative consumer awareness campaign, with plans to launch the campaign in 2018.</p>
	2019	Issue third competitive solicitation for the development and demonstration of EV-enabling technologies.	

Table 89. Energy Related Environmental Research ^{145, 146}

Approval Date: February 14, 2017

Launch Date: February 15, 2017

Innovation and Research Initiative	Units	Completed Projects through June 30, 2017 with Adjustments	Completed Projects through 7/1/17-9/30/17	Total Completed Projects through September 30, 2017	Current Pipeline Through September 30, 2017 (Committed but not complete)	Grand Total Completed Projects + Pipeline	Cumulative Current Target Through Q3 2017	% of Cumulative Current Target Through Q3 2017	Total Target through Initiative Completion (2021)	% of Total Target through Initiative Completion (2021)
Energy Efficiency	MWh Annual	-	-	-	-	-	*	-	*	-
	MWh Lifetime	-	-	-	-	-	*	-	*	-
	MMBtu Annual	-	-	-	-	-	*	-	*	-
	MMBtu Lifetime	-	-	-	-	-	*	-	*	-
Renewable Energy	MW	-	-	-	-	-	*	-	*	-
	MWh Annual	-	-	-	-	-	*	-	*	-
	MWh Lifetime	-	-	-	-	-	*	-	*	-
CO2e Emission Reduction (metric tons)	MW	-	-	-	-	-	*	-	*	-
	Annual Tons	-	-	-	-	-	*	-	*	-
Customer Bill Savings (millions)	Lifetime Tons	-	-	-	-	-	*	-	*	-
	Annual Dollars	-	-	-	-	-	*	-	*	-
Private Investment (millions)	Lifetime Dollars	-	-	-	-	-	*	-	*	-
	Dollars	-	-	-	\$1.53	\$1.53	\$1.99	77%	\$7.50	20%
Participants	Participants	1	2	3	12	15	27	56%	100	15%

* Metric to be tracked and reported, though specific target was not ordered.

¹⁴⁵ This report reflects direct benefits from programs. Indirect benefits are not reflected because it will take time for the benefits to be realized.

¹⁴⁶ Cumulative Current Target through Q3 2017 represents 100% of the 2016 annual target plus 75% of the 2017 annual target. Actual progress may not be equal each quarter of a calendar year.

Table 90. Key Milestones for Energy Related Environmental Research

Complete ✓	Time Frame	Milestone	Explanation of Progress
✓	2017	Solicitations issued for research projects consistent with the research plan.	Two solicitations were issued in Q3 2017. Contracting of projects and research planning is ongoing. Development of a \$2.4M single-source agreement for a long-term monitoring project continues.
	2017	Projects contracted from solicitations.	Contracting from the Q3 2017 solicitations is anticipated to be complete in Q4 2017.
	2017	Outreach, technology transfer, and briefings to share research findings.	A scoping session to update the Environmental Research Plan for Air Quality and Health Effects will be held November 1, 2017. Additionally, outreach supported with other funding sources continues.
	2018	Solicitations issued for research projects consistent with the research plan.	
	2018	Projects contracted from solicitations.	
	2018	Outreach, technology transfer, and briefings to share research findings.	
	2019	Solicitations issued for research projects consistent with the research plan.	
	2019	Projects contracted from solicitations.	
	2019	Outreach, technology transfer, and briefings to share research findings.	
	2020	Solicitations issued for research projects consistent with the research plan.	
	2020	Projects contracted from solicitations.	
	2020	Outreach, technology transfer, and briefings to share research findings.	
	2021	Solicitations issued for research projects consistent with the research plan.	
	2021	Projects contracted from solicitations.	
	2021	Outreach, technology transfer, and briefings to share research findings.	

Table 91. Renewables Optimization^{147, 148}

Approval Date: March 27, 2017

Launch Date: June 21, 2017

Innovation and Research Initiative	Units	Completed Projects through June 30, 2017 with Adjustments	Completed Projects through 7/1/17-9/30/17	Total Completed Projects through September 30, 2017	Current Pipeline Through September 30, 2017 (Committed but not complete)	Grand Total Completed Projects + Pipeline	Cumulative Current Target Through Q3 2017	% of Cumulative Current Target Through Q3 2017	Total Target through Initiative Completion (2025)	% of Total Target through Initiative Completion (2025)
Energy Efficiency	MWh Annual	-	-	-	-	-	*	-	*	-
	MWh Lifetime	-	-	-	-	-	*	-	*	-
	MMBtu Annual	-	-	-	-	-	*	-	*	-
	MMBtu Lifetime	-	-	-	-	-	*	-	*	-
Renewable Energy	MW	-	-	-	-	-	*	-	*	-
	MWh Annual	-	-	-	-	-	*	-	*	-
	MWh Lifetime	-	-	-	-	-	*	-	*	-
CO2e Emission Reduction (metric tons)	MW	-	-	-	-	-	*	-	*	-
	Annual Tons	-	-	-	-	-	*	-	*	-
Customer Bill Savings (millions)	Lifetime Tons	-	-	-	-	-	*	-	*	-
	Annual Dollars	-	-	-	-	-	*	-	*	-
Private Investment (millions)	Lifetime Dollars	-	-	-	-	-	*	-	*	-
	Dollars	-	-	-	-	-	\$6.83	-	\$165.00	-
Participants	Participants	-	-	-	-	-	6	-	118	-

* Metric to be tracked and reported, though specific target was not ordered.

¹⁴⁷ This report reflects direct benefits from programs. Indirect benefits are not reflected because it will take time for the benefits to be realized.

¹⁴⁸ Cumulative Current Target through Q3 2017 represents 100% of the 2016 annual target plus 75% of the 2017 annual target. Actual progress may not be equal each quarter of a calendar year.

Table 92. Key Milestones for Renewables Optimization

Complete ✓	Time Frame	Milestone	Explanation of Progress
✓	2017	Issue first competitive solicitation.	PON 3585 - Energy Storage Technology and Product Development, was issued on June 21, 2017. First round of concept papers has been received, reviewed and proposal invitations have been issued for submission by September 28, 2017. PON has been expanded from 2 to 4 rounds.
	2017	Contract projects from first competitive solicitation.	Proposals from round 1 of PON 3585 - Energy Storage Technology and Product Development were received September 28, 2017. Project awards for round 1 are expected in Q4 2017. Added 2 additional rounds to PON in the first half of 2018: Round 3 concept papers are due February 8, 2018; and Round 4 concept papers are due April 12, 2018. All awards are expected to be complete by Q3 2018.
	2017	Review portfolio of activities, solicit market input, and reassess technology challenge areas and targets.	PON 3585 - Energy Storage Technology and Product Development round 1 concept papers and market input are informing the design of the 2nd Competitive Solicitation for this plan. Rounds 2 and 3 of PON 3585 will continue to inform the technology challenge areas and targets for this portfolio of activities.
	2017	Issue second competitive solicitation.	PON 3585 - Energy Storage Technology and Product Development (1st Competitive Solicitation) proposal invitations for round 1 was lower than expected (5 vs. expectation of 10+). Two additional rounds in 2018 have been added to meet target of 26 projects awarded by the end of 2018. 2nd Competitive Solicitation will be delayed till Q2 2018.
	2018	Contract projects from second competitive solicitation.	
	2018	Review portfolio of activities, solicit market input, and reassess technology challenge areas and targets.	
	2018	Issue third competitive solicitation.	
	2019	Contract projects from third competitive solicitation.	
	2019	Review portfolio of activities, solicit market input, and reassess technology challenge areas and targets.	
	2019	Issue fourth competitive solicitation.	

Appendix A: Table of Investment Plan Approvals¹⁴⁹

	Case Number/Reference	Effective Date
Commercial Resource Acquisition Transition and Flextech Industrial Resource Acquisition Transition Agriculture Resource Acquisition Transition Multifamily Market-Rate Resource Acquisition Transition Multifamily LMI Resource Acquisition Transition Single-Family Market-Rate Resource Acquisition Transition Single-Family LMI Resource Acquisition Transition Commercial New Construction Resource Acquisition Transition Low-Rise New Construction Market-Rate Resource Acquisition Transition Low-Rise New Construction LMI Resource Acquisition Transition Multifamily New Construction Market-Rate Resource Acquisition Transition Multifamily New Construction LMI Resource Acquisition Transition Anaerobic Digesters Resource Acquisition Transition Fuel Cells Resource Acquisition Transition Small Wind Resource Acquisition Transition Solar Thermal Resource Acquisition Transition Combined Heat and Power Resource Acquisition Transition	Case 14-M-0094 -Resource Acquisition Approval Letter	February 29, 2016

¹⁴⁹ This report contains only the progress of initiatives approved as of September 30, 2017.

Table A-1 continued

	Case Number/Reference	Effective Date
Real Estate Tenant Real-Time Energy Management Reforming the Energy Vision Campus Challenge Continuous Energy Improvement Clean Energy Communities Offshore Wind Master Plan Offshore Wind Pre-Development Activities REV Connect Distributed Energy Resource Interconnection Cleantech Startup Growth	Case 14-M-0094 - DPS Approval of NYSERDA's CEF Investment Plan Chapters	May 23, 2016
High-Performing Grid Reducing Barriers to Energy Storage Deployment Electric Vehicles Rebate NextGen HVAC Electric Vehicle Innovation	Matter 16-00681 - DPS Approval of NYSERDA's CEF Investment Plan Chapters	August 17, 2016
Retrofit NY REVitalize Low-Income Forum on Energy Healthy Homes Feasibility Study	Matter 16-00681 - DPS Approval of NYSERDA's CEF Investment Plan Chapters	August 31, 2016
Greenhouse Lighting and Systems Engineering Industry Partnerships	Matter 16-00681 - DPS Approval of NYSERDA's CEF Investment Plan Chapters	September 15, 2016
Manufacturing Corps Energy Related Environmental Research	Matter 16-00681 - DPS Approval of NYSERDA's CEF Investment Plan Chapters	February 13, 2017
Community Energy Engagement Energy Storage Technology and Product Development	Matter 16-00681 - DPS Approval of NYSERDA's CEF Investment Plan Chapters	March 27, 2017
Underutilized Products Support Renewable Heat NY Heat Pumps and Solar Thermal	Matter 16-00681 - DPS Approval of NYSERDA's CEF Investment Plan Chapters	May 16, 2017
Energy Efficiency Soft Cost Challenge Power Electronics Manufacturing Consortium	Matter 16-00681 - DPS Approval of NYSERDA's CEF Investment Plan Chapters	July 19, 2017

NYSERDA, a public benefit corporation, offers objective information and analysis, innovative programs, technical expertise, and support to help New Yorkers increase energy efficiency, save money, use renewable energy, and reduce reliance on fossil fuels. NYSERDA professionals work to protect the environment and create clean-energy jobs. NYSERDA has been developing partnerships to advance innovative energy solutions in New York State since 1975.

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