

Clean Energy Fund Quarterly Performance Report through March 31, 2022

Final Report | May 2022



NYSERDA

NYSERDA's Promise to New Yorkers:

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

Our Vision:

New York is a global climate leader building a healthier future with thriving communities; homes and businesses powered by clean energy; and economic opportunities accessible to all New Yorkers.

Our Mission:

Advance clean energy innovation and investments to combat climate change, improving the health, resiliency, and prosperity of New Yorkers and delivering benefits equitably to all.

NYSERDA Record of Revision

Clean Energy Fund Quarterly Performance Report through March 31, 2022

	Description of Changes	Revision on Page(s)
May 31, 2022	Original Issue	

Clean Energy Fund Quarterly Performance Report through March 31, 2022

Final Report

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About This Report

The Clean Energy Fund (CEF), approved by the Public Service Commission (PSC) Order on January 21, 2016¹ and later modified on September 9, 2021,² was established as a commitment to clean energy and efficiency measures, recognizing that deploying programs at scale has potential to address the pressing environmental and energy challenges, while providing enormous economic opportunity for New York. The CEF is comprised of four distinct portfolios (CEF Portfolio):

- Market Development (MD)
- Innovation and Research (I&R)
- NY-Sun
- NY Green Bank

This report provides a collective view of progress for all four portfolios against CEF targets (Figures 1 and 2) and further details quarterly and cumulative activity for the MD and I&R portfolios through March 31, 2022 (figure 3). The September 9, 2021, PSC Order requires quarterly reporting for the MD and I&R portfolios which continue to include the following:

- Progress toward cumulative and annually prorated incremental targets and budgets.
- Progress toward the CEF's contribution to New Efficiency: New York targets.
- A performance summary discussion of key CEF initiatives.
- A summary of benefits acquired and projected benefits committed, compared to investment plan projections.

To meet these reporting requirements, this report document is accompanied by a scorecard (spreadsheet) that contains all plan and progress information related to CEF activity, also filed quarterly. This New York State Energy Research and Development Authority (NYSERDA) scorecard is consolidated with each State utility scorecard to publish data on [Open NY](#), where it is available to all stakeholders. Finally, the publishing of these data sets coincide with a similar update to the [Clean Energy Dashboard \(CED\)](#), an interactive and dynamic tool first published in 2019 to improve accessibility and transparency of ratepayer-funded clean energy program reporting statewide.

NY-Sun reports progress quarterly within the NYSERDA scorecard and CED and, as noted in section 3 of this report, is expected to commence reporting summarized quarterly metrics in Q2 2022. Quarterly reporting for NY Green Bank is similarly provided within NYSERDA's quarterly scorecard and the CED, but also within a separately filed report.³

Table of Contents

NYSERDA Record of Revision	i
About This Report	iii
List of Figures	iv
List of Tables	iv
1 Clean Energy Fund Performance Overview	1
1.1 Progress Toward Aggregate Clean Energy Fund Goals	1
2 Market Development and Innovation and Research Performance	6
2.1 Top Energy Impact Initiative Performance Summary	7
2.2 Quarterly Benefits Progress Versus Plan	10
2.3 Quarterly Budgets Progress Versus Plan	12
3 NY-Sun Performance	16
4 Evaluation, Measurement, and Verification Summary	17
Endnotes	EN-1

List of Figures

Figure 1. Clean Energy Fund Portfolio Expected Investment versus Targets	2
Figure 2. Clean Energy Fund Portfolio Expected Benefits Versus Targets	3
Figure 3. Market Development / Innovation & Research Progress and Performance	7

List of Tables

Table 1. Other Anticipated Benefits Through 2025 and 2030	5
Table 2. Performance Summary for Market Development’s Top Energy Impact Initiatives	8
Table 3. Market Development and Innovation and Research Portfolio—Annual Direct Benefits	10
Table 4. Market Development and Innovation and Research Portfolio—Annual Indirect Benefits	11
Table 5. Market Development Initiatives by Focus Area—Budgets and Spending	12
Table 6. Innovation and Research Initiatives by Focus Area—Budgets and Spending	15

1 Clean Energy Fund Performance Overview

The Clean Energy Fund (CEF) supports New York State’s advancement of clean energy and climate goals along with a more affordable and resilient energy system. Energy efficiency is a cornerstone of the State’s strategy to promote clean energy solutions for consumers while addressing climate change. The New Efficiency New York recommendations, as advanced in the white paper issued by the Department of Public Service (DPS) and New York State Energy Research and Development Authority (NYSERDA or the Authority) on April 26, 2018, and as adopted by the Public Service Commission in its December 13, 2019 order, establishes a new 2025 energy efficiency target of 185 trillion British thermal units (TBtu) of cumulative annual site energy savings.⁴ The Climate Leadership and Community Protection Act (Climate Act), signed July 2019 and effective January 1, 2020, adopted this energy efficiency target and puts the State on a path to complete carbon-neutrality across all sectors of the economy, including power generation, transportation, buildings, industry, and agriculture. In April 2022, the PSC approved an expansion to the NY-Sun program to further support efforts meeting the State’s clean electricity goals. The Climate Act mandates the following:

- 85% Reduction in GHG Emissions by 2050
- 100% Zero-emission Electricity by 2040
- 70% Renewable Energy by 2030
- 9,000 MW of Offshore Wind by 2035
- 3,000 MW of Energy Storage by 2030⁵
- 6,000 MW of Solar by 2025
- 10,000 MW of Solar by 2030
- 22 Million Tons of Carbon Reduction through Energy Efficiency and Electrification
- Minimum 35 percent of the benefits of clean energy investments are directed to disadvantaged communities

With these goals, New York State is undertaking one of the most aggressive clean energy agendas in the nation. Through the CEF and its other portfolios, NYSERDA works to foster the transformation of markets, pushing them to accurately value clean energy, energy efficiency, and resiliency, while encouraging competition and innovation that delivers value to consumers.

1.1 Progress Toward Aggregate Clean Energy Fund Goals

Figures 1 and 2 present a comprehensive picture of progress against the CEF authorized budget and associated benefit targets reflecting all four CEF Portfolios (MD, I&R, NY-Sun, and NY Green Bank). Progress shown against each key performance metric represents results through March 31, 2022, and nets out overlap across portfolios where it is known to occur.

Figure 1 captures the status of CEF funding while Figure 2 depicts progress of the combined portfolios against the latest CEF ordered benefit targets. The summary of benefit progress reflects evaluated totals, incorporating verified gross acquired savings where evaluations have been completed and reflects gross savings values elsewhere. Indirect benefits from market transformation are included in acquired totals where they have been quantified through evaluation. Indirect benefits are also included in remaining plans, discounted by 50 percent, consistent with other plan filings to account for uncertainty in timing and potential overlap across the portfolio that has yet to be fully evaluated. Both figures should be viewed together to properly relate investments to results. In each of these visuals, combining expended/acquired with committed results demonstrates NYSERDA's progress towards CEF Targets, while adding in the remaining expected (planned) values serves to illustrate the full potential in NYSERDA's programmed portfolios.

Figure 1. Clean Energy Fund Portfolio Expected Investment versus Targets

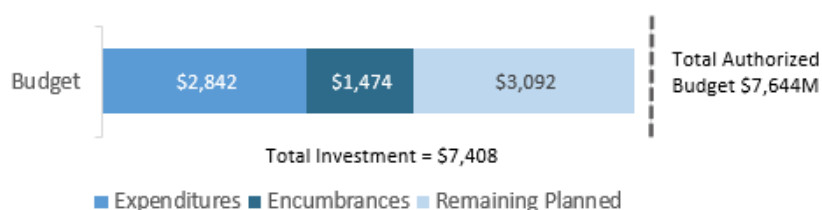


Figure 1 Supporting data		Total Authorized Budget	Budget Approved		Expended Funds		Encumbered Funds		Remaining Planned		Funding Not Yet Approved
			Current Total	% of Authorized	Current Total	% of Authorized	Current Total	% of Authorized	Total Balance	% of Authorized	
Market Development (MD)	Program Funds	\$ 2,399.7 M	\$ 2,315.7 M	98%	\$ 825.5 M	35%	\$ 585.5 M	24%	\$ 904.7 M	38%	\$ 57.0 M
	NYS Cost Recovery Fee		\$ 27.0 M		\$ 10.9 M		\$ 0.0 M		\$ 16.1 M		
Innovation & Research (IR)	Program Funds	\$ 631.7 M	\$ 504.3 M	81%	\$ 160.4 M	26%	\$ 158.4 M	25%	\$ 185.5 M	30%	\$ 121.6 M
	NYS Cost Recovery Fee		\$ 5.7 M		\$ 1.9 M		\$ 0.0 M		\$ 3.8 M		
MD and IR combined	Administration	\$ 274.4 M	\$ 255.5 M	93%	\$ 145.2 M	53%	\$ 0.0 M	0%	\$ 110.2 M	40%	\$ 18.9 M
	Evaluation	\$ 124.2 M	\$ 85.5 M	69%	\$ 18.2 M	15%	\$ 20.6 M	17%	\$ 46.7 M	38%	\$ 38.7 M
	MD and IR Total	\$ 3,430.0 M	\$ 3,193.7 M	93%	\$ 1,162.3 M	34%	\$ 764.5 M	22%	\$ 1,266.9 M	40%	\$ 236.3 M
NY-Sun	Program Funds	\$ 3,162.8 M	\$ 3,162.8 M	100%	\$ 707.0 M	22%	\$ 707.7 M	22%	\$ 1,748.0 M	55%	\$ 0.0 M
	NYS Cost Recovery Fee	\$ 41.8 M	\$ 41.8 M	100%	\$ 6.6 M	16%	\$ 0.0 M	0%	\$ 35.2 M	84%	\$ 0.0 M
	Administration	\$ 58.8 M	\$ 58.8 M	100%	\$ 18.6 M	32%	\$ 0.2 M	0%	\$ 40.0 M	68%	\$ 0.0 M
	Evaluation	\$ 3.5 M	\$ 3.5 M	100%	\$ 0.4 M	12%	\$ 1.6 M	45%	\$ 1.5 M	43%	\$ 0.0 M
NY-Sun Total	\$ 3,266.8 M	\$ 3,266.8 M	100%	\$ 732.6 M	22%	\$ 709.5 M	22%	\$ 1,824.8 M	56%	\$ 0.0 M	
NY Green Bank	Total	\$ 947.1 M	\$ 947.1 M	100%	\$ 947.1 M	100%	\$ 0.0 M	-	\$ 0.0 M	-	-
CEF Total		\$ 7,643.9 M	\$ 7,407.6 M	97%	\$ 2,842.0 M	37%	\$ 1,474.0 M	19%	\$ 3,091.7 M	40%	\$ 236.3 M

- Authorized Funding per F Approving Clean Energy Fund Modifications, issued and effective September 9, 2021 and inclusive of the approved of 10GW Distributed Solar Roadmap in April 2022.
- NY Sun totals exclude \$637 million in non-CEF NYSERDA funded solar projects.

Figure 2. Clean Energy Fund Portfolio Expected Benefits versus Targets

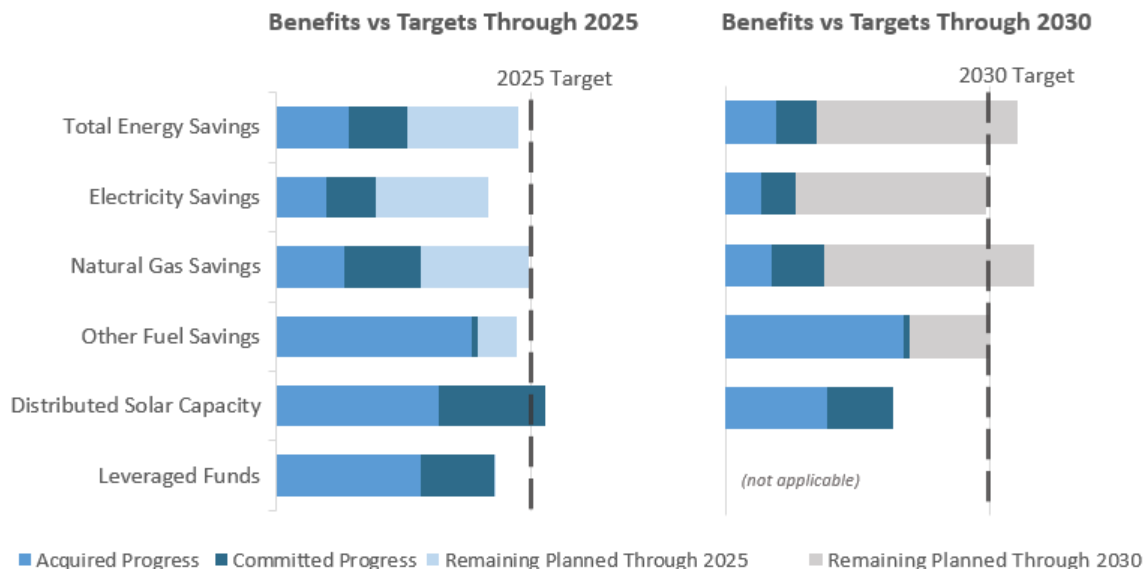


Figure 2 Supporting Data	Acquired Progress	Committed Progress	Remaining Planned Through 2025	Total Expected Through 2025	2025 Order Target	Remaining Planned Through 2030	Total Expected Through 2030	2030 Order Target
Total Energy Savings (MMBtu equivalent, millions)	15.1	12.2	23.0	50.3	53.0	60.1	87.5	79.0
Electricity Savings (MWh, millions)	1.3	1.3	2.9	5.6	6.7	7.2	9.9	10.0
Natural Gas Savings (MMBtu, millions)	6.7	7.5	10.6	24.8	25.0	30.3	44.5	38.0
Other Fuels Savings (MMBtu, millions)	11.5	0.4	2.3	14.129	15.0	5.2	17.1	17.0
Distributed Solar Capacity (Renewable MW)	3,843	2,478	-	6,321	6,000	-	6,321	10,000
Leveraged Funds (\$ millions)	\$ 11,379	\$ 5,770	\$ 82	\$ 17,231	\$ 20,000	\$ 1,969	\$ 19,118	n/a

Benefits Metrics Progress as Percent of Totals	Acquired + Committed (values summed from above)	➔	Acquired + Committed as a Percentage of the Expectations / Targets			
			Total Expected Through 2025	2025 Order Target	Total Expected Through 2030	2030 Order Target
Total Energy Savings (MMBtu equivalent, millions)	27.3		54%	52%	31%	35%
Electricity Savings (MWh, millions)	2.6		47%	39%	27%	26%
Natural Gas Savings (MMBtu, millions)	14.1		57%	57%	32%	37%
Other Fuels Savings (MMBtu, millions)	11.8		84%	79%	69%	70%
Distributed Solar Capacity (Renewable MW)	6,321		100%	105%	100%	63%
Leveraged Funds (\$ millions)	\$17,149		100%	86%	90%	n/a

- Energy savings values are annual; Total Energy Savings measures the combined Electricity and Fuel savings net of usage; therefore, values will not sum to the total of individual electric and fuel savings values.
- CEF initiatives not dedicated to building energy efficiency (Electric Vehicles - Rebate, Combined Heat and Power, and Fuel Cells) have been excluded from progress and plans toward the first four energy saving targets shown above.
- Since the CEF launched in 2016 NYSERDA has maintained a single MMBtu Fuel Savings plan to forecast and measure performance for all fuel types. With the September 2021 CEF Order revision, NYSERDA is now required to break out reporting (and subsequently planning) of fuel savings for both natural gas and all other fuels (grouped). Until this planning can be fully implemented in each individual plan through NYSERDA’s annual reforecast process that culminates in a filing of the Combined Investment Plans, November 1, 2022, NYSERDA will estimate the plans for these two distinct fuel groups at the portfolio level for performance management and reporting purposes.

Table notes continued on the next page.

- Distributed Solar Capacity includes 1,129 MW of non-NYSERDA installations taken from the Statewide Solar Projects dashboard, which is populated with data from utility interconnection inventories. This dataset includes all distributed solar interconnected in NYS, including hundreds of MWs which did not receive NYSEERDA funding. Committed project data is maintained by NYSEERDA independently of interconnection data. Since the two datasets define project completion date differently, some projects reported as committed may also be included as acquired under the “Non-NYSEERDA Statewide Installations” (interconnection balance) figure. As the pipeline of NYSEERDA commitments are drawn down over time (projects are considered acquired in both data sources), this overlap is eliminated.
- Leveraged funds Total Expected benefits values do not currently include any anticipated indirect impacts.
- Neither Distributed Solar or Leveraged Funds Total Expected Through 2025 and 2030 values include forward-looking estimates from NY Sun or NY Green Bank portfolios at this time.
- Benefits metrics that have not been given 2030 Targets in the Order are shown as “not applicable.”

As Figures 1 and 2 illustrate, the sum of expended, committed, and remaining planned funding across the CEF totals 97 percent of Authorized Funding while the total projections for benefit outcomes range between 83 and 105 percent for the near-term 2025 target timeframe. With the adoption of the Compiled Investment Plan (CIP) which provides an updated forecast for all initiatives, the CEF portfolio is adjusting expected acquisition of some portfolio benefits beyond the 2025 timeframe as noted below. An explanation of progress and the current portfolio mix is as follows:

- Total Energy Savings (MMBtu equivalent) is a measure of NYSEERDA effectiveness in building and delivering site energy efficiency savings, primarily through the combined MD/I&R portfolios, to meet the expected contribution toward overall NE:NY goals. Unlike the individual energy savings goals, this metric accounts for both savings and usage in the overall pursuit for net impact. NYSEERDA maintains confidence in the ability of the CEF portfolio of initiatives to deliver the overall impact outlined by CEF 2030 Targets, however the updated forecast of all MD/I&R initiatives illustrates NYSEERDA’s expectation that the delivery of benefits will continue to be impacted by current challenges facing the clean energy market today, specifically challenges with supply chain, skilled labor availability, and rising construction costs, all of which are delaying or slowing projects and contributing to NYSEERDA’s lower outlook for the 2025 timeframe. NYSEERDA will continue to counter-balance this outcome with active and adaptive portfolio management, as well as new evaluations to quantify expected large amounts of indirect benefits that may not have been fully accounted for in its investment plans.
- Electricity savings MWh acquired and committed total has lagged the pace of fuel savings, but is still expected to reach the threshold established for 2030.
- With the recently revised plans, Fuel Savings continues to show strong momentum to deliver on both 2025 and 2030 targets, which significant savings already considered acquired in the portfolio.
- Renewable energy capacity MW is dominated by NY-Sun contributions, which began in 2014 and is performing exceedingly well against the 2025 target, on a trajectory to achieve the target early.
- Leveraged funding acquired and committed progress is outpacing other metrics, showing strong realization relative MD/I&R investments through Q1 of 2022. The longer-term outlook for leveraged funding planned is expected to improve further over time as indirect impacts are better understood and incorporated.

The September 2021 CEF Order also included a target regarding equity for disadvantaged communities, specifically that 40 percent of the benefits of CEF investments would accrue to disadvantaged communities. At this time, NYSERDA is working along with other State agencies and stakeholders, including the Climate Justice Working Group, to establish a benefits/metrics framework and reporting system for the Climate Act disadvantaged community mandate. NYSERDA will follow and maintain consistency with this State-level framework for its reporting on the status of CEF investments, and will begin including information on this CEF target as soon as the framework is finalized and State-level reporting begins, which is expected to be later in 2022.

Additionally, NYSERDA is required to track and report other reference metrics as outlined in Appendix C of the CEF Order. Carbon emissions reductions and bill savings metrics are presented below for the combined CEF portfolios.

Table 1. Other Anticipated Benefits through 2025 and 2030

Annual Benefits Metrics ** Direct + Indirect Benefits ** Overlap Accounted	Acquired Progress	Committed Progress	Total Progress as of Current Reporting Period	2025 Order Expectation (Anticipated Benefit)	2030 Order Expectation (Anticipated Benefit)
Emissions Reductions (CO2e Metric Tons, millions)	4.2	2.7	6.9	9.0	14.0
Participant Bill Savings (\$ millions)	\$ 900	\$ 677	\$ 1,577	n/a	n/a

- Overlap perceived between the four CEF portfolios and their reported benefits have been removed from these totals consistent with all other aggregate views of CEF reported progress in Figures 1 and 2.

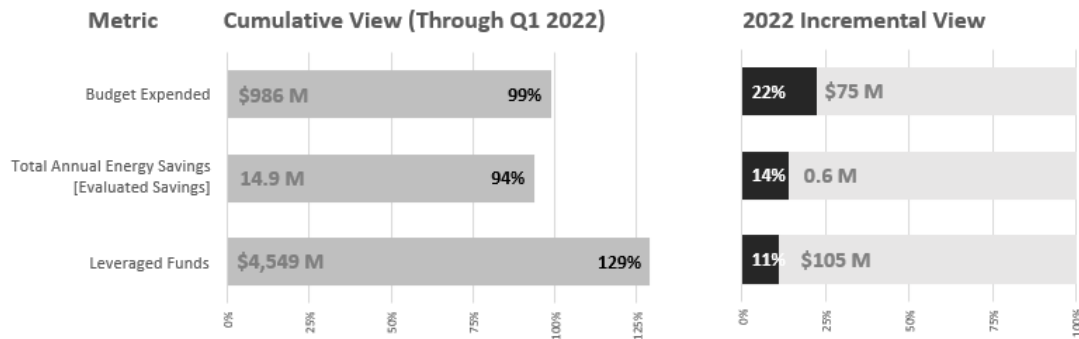
2 Market Development and Innovation and Research Performance

Each fall NYSERDA completes its annual update to forecasts for all CEF initiatives, which incorporates reported historical progress and revises forward looking plans to account for that history as well as to learn from the market. Cumulative performance against these latest filed plans is the ultimate measure of success for delivering on the CEF benefits targets; however, NYSERDA also monitors incremental progress toward the current year goal to provide another viewpoint from which to assess performance, including how quickly funds are put to work in the market based on near-term expectations. Both cumulative and incremental values can be reviewed in granular detail for the portfolio and for each program and metric within the [Clean Energy Dashboard](#). On May 20, 2022 NYSERDA filed a comprehensive update to all MD and IR portfolio plans in the first edition of the Compiled Investment Plans, as prescribed in the CEF Order. This update was a combination of the reforecast described above, an update to NYSERDA's contributing initiatives for the Statewide LMI Implementation Plan, and few other recent updates to MD/I&R initiative plans.

Figure 3 provides a high-level view of NYSERDA's MD and I&R portfolio performance to plan, measuring progress toward recently updated expended funding and acquired direct benefit plans through Q1 2022. Key points to interpret this figure include:

- The Cumulative View (Q1 2022) represents years 2016–2021, plus one quarter of 2022; 100 percent in this view represents the cumulative *planned* amounts for that pro-rated timeframe.
- The 2022 Incremental View represents progress made in the current calendar year against the current calendar year plan, with an expectation that approximately 25 percent of the plan should be achieved at the end of the first quarter based on a simple assumption of linear progress during the year. There is no pro-rating by quarter in this view of performance.
- Total Annual Energy Savings is measured in MMBtu equivalents consistent with Figure 2
- For each of these metrics all CEF MD and I&R initiatives are included (no exclusions); however CEF Admin, Evaluation, and NYS Cost Recovery Fees are excluded from the budget.

Figure 3. Market Development/Innovation & Research Progress and Performance



It is noteworthy that while the incremental view of progress appears to lag behind the first quarter’s 25 percent reference gauge, the cumulative view of total progress illustrates that NYSERDA is tracking well against the pro-rated cumulative plan. This difference can be attributed to NYSERDA overperforming against the end-of-year estimates for 2021, giving the portfolios a boost from a cumulative perspective, with those higher 2021 values being expended/acquired ahead of the 2022 plan (and subsequently appearing as a lag to the 2022 plan). The first evaluation results from early CEF program years were also introduced to year-end reporting in 2021, with measurement and verification reducing the gross energy savings reported for the portfolio. However several of these studies have follow-on analysis for subsequent years (more mature CEF operations) and NYSERDA anticipates realization rates will improve and close the gap noted above. The general alignment between progress and plan shown in these metrics is as much a testament to NYSERDA’s improvements in forecasting as it is to executing the collective plans. As NYSERDA noted during the 2021 CEF review conducted by the PSC, strengthening the processes and tools used to effectively manage the portfolio has been a key focus of the organization. NYSERDA has taken steps to improve both process and tools, refining the focus of quarterly performance discussions and bolstering the annual planning process used to set expectations for the immediate year ahead as well as the longer-term view of individual initiative and collective portfolio goals. A more detailed assessment of the portfolio’s top programs with energy saving impact can be found in the following section.

2.1 Top Energy Impact Initiative Performance Summary

In NYSERDA’s MD portfolio, 15 key initiatives currently account for approximately 89 percent of the expected total energy saving benefits (represented by equivalent annual MMBtu) and 46 percent of the total approved budget. These initiatives warrant special attention due to the weight they carry in terms of the overall success of the CEF in delivering expected benefits and are characterized in greater detail in Table 2 that follows.

Table 2. Performance Summary for Market Development’s Top Energy Impact Initiatives

Cumulative progress to plan is measured on a prorated basis through Q1 as described in detail for Figure 3 above. Budget Performance here is progress against approved funding expenditure plans while Energy Performance is progress against the equivalent annual MMBtu acquired plan. Benefits analysis here is shown on gross direct savings values.

Initiative	MMBtu Impact Rank	Cumulative Progress: Budget Performance	Cumulative Progress: Energy Performance	Progress Narrative
Energy Management Technology	1	99%	87%	Progress of expenditures continues to align well with plan through the first quarter of 2022 and acquired savings progress is showing improvement. There is a strong pipeline of projects in development across multifamily, commercial office, and small-to-medium businesses due to a robust network of vendors utilizing this initiative to support their business development efforts in New York State.
Building Operations and Maintenance Partnerships	2	90%	125%	Progress of expenditures continues to align well with plan through Q1, though projects are continuing to experience COVID-related delays. Contracts for four proposals approved in past quarters were signed and those projects are underway. While no projects were completed in Q1, six projects are expected to be completed in the Q2 timeframe at which time NYSERDA will report acquired energy savings.
Product and Appliance Standards	3	74%	-	Funding and benefits performance remains dependent on legislation passing the NYS Assembly & Senate and being signed into law by the Governor. Within the recent filing of NYSERDA’s Compiled Investment Plans (CIP), funding was added to the initiative to extend work and coordination with the federal government and other states.
Electric Vehicles - Rebate	4	100%	100%	CEF funding for this initiative has been fully committed and all rebates have been paid out as of Q1 2021. EV sales were stronger in 2021 than in previous years, in part due to the groundwork provided by the Drive Clean Rebate, which continues, leveraging other funding sources. An evaluation study to quantify indirect benefits of this program, on additional EV sales, will be completed and reflected in NYSERDA reporting soon.
Technical Services	5	108%	153%	The program is performing well on both budget and energy benefits. NYSERDA continues to see strong participation from each commercial, industrial, multifamily, and agriculture sectors served.
LMI Multifamily	6	90%	81%	An updated Statewide LMI Implementation plan was filed with the PSC in April and included changes to the LMI Multifamily plan, expanding key Housing Agency partnerships to deliver benefits for low and moderate income population and disadvantaged communities. The program is showing improvements in performance early in 2022, although many of the market factors noted as barriers to progress in recent quarters persist, namely supply chain / labor issues and project attrition. Additionally, the Multifamily Performance Program closed to new applications on February 4, 2022 but will see projects in the pipeline through to completion. NYSERDA will continue to carefully monitor progress of this critical initiative.
Industrial Transition	7	97%	106%	The program is performing well on both budget and energy benefits, noting that NYSERDA anticipates some level of attrition over time as open projects move to closure - either completion or cancellation.

Table 2 continued

Initiative	MMBtu Impact Rank	Cumulative Progress: Budget Performance	Cumulative Progress: Energy Performance	Progress Narrative
Market Challenges	8	107%	0%	Progress of expenditures continues to perform well against the plan. To-date, all spending has been toward engineering studies, which do not claim energy benefits. Demonstration projects will soon be expending funds and acquiring benefits later this year. Funding was added to the Empire Building Challenge in the recent CIP filing which will support a broader set of market stakeholders who will replicate and build upon the retrofit strategies for large buildings that are emerging from the initiative.
Energy Management Practices	9	97%	114%	Progress of budget expenditures and energy benefits continues to perform well, now through Q1 of 2022. Evaluation results are expected to be completed and reflected in this reporting soon.
Clean Energy Communities	10	118%	137%	Progress of expenditures and energy metrics are trending favorably to plan through the first quarter of 2022.
New Construction - Market Rate	11	86%	99%	Funding and benefits progress trajectory is strong through the first quarter of 2022. Funding has been added to this initiative in the recent CIP filing, which is expected to support solicitations through 2025. The updated plan modifies the mix of services between single family, multi-family and commercial, as well as updates savings to better reflect results coming from fully electrified projects. The entire portfolio of new construction projects are advancing the State’s decarbonization goals and the 2 million climate-friendly households goals by advancing efficiency and electrification codes and requirements. Single-family evaluation results are expected to be published in the near future.
P-12 Schools	12	117%	104%	Progress of budget expenditures and energy benefits continues its favorable trajectory early in 2022. Evaluation results are expected later this year.
RetrofitNY - LMI	13	79%	0%	The RetrofitNY pipeline is once again progressing after experiencing delays in the project closings at the affordable housing agencies due to reshuffling of the pipeline due to COVID impacts. The first pilot from round 1 is anticipated to be complete by Q3 2022 with two other demonstration pilots from round 1 anticipating financing closings in the coming months. Round 2 of the program was launched late 2021 and the first NYC application was approved to enter the design phase in February. An additional 2-3 applications are expected in the coming months under round 2. The number of projects able to be piloted this round will depend on the current development costs, which have substantially increased post COVID.
Codes and Standards for Carbon Neutral Buildings	14	95%	Initiative plan and progress to date consist of indirect benefits only.	Progress of expenditures is well aligned with the plan. An evaluation study concluded in 2021 after which the first indirect benefits were reported for the initiative (planned impacts are 100% indirect). Early results have been strong and exceeding the plan for the years examined in the study. In NYSERDA’s recent filing of the CIP funding was added to the initiative to extend codes and standards work to future code cycles and address additional work identified by the Climate Action Council.
REV Campus Challenge	15	119%	98%	Progress of budget expenditures and energy benefits is trending favorably early in 2022.

2.2 Quarterly Benefits Progress versus Plan

Table 3. Market Development and Innovation and Research Portfolio—Annual Direct Benefits

The table that follows represents the Market Development and Innovation and Research initiatives and their associated direct benefits. Progress reported here is a blend of verified gross and gross savings. Where evaluation studies have been completed and yield realization rates, verified gross acquired savings are reported. Where studies are not yet complete, those initiatives and/or time periods will continue reporting gross savings.

Annual Benefits Metrics	Evaluated Totals (verified gross where evaluated; gross where not)								
	Planned Incremental Acquired Benefits in Current Year	Current Year Acquired Benefits Through Current Quarter	Cumulative Acquired Benefits Through Current Quarter	Committed Benefits as of Current Quarter (Committed but not acquired)	Total Progress as of Current Quarter (Total Acquired + Committed)	Total Expected Benefits Through 2025	Total Progress as % of Total Expected Benefits Thru 2025	Total Expected Benefits Through 2030	Total Progress as % of Total Expected Benefits Thru 2030
Total Energy Savings (MMBtu)	4,608,104	648,611	14,856,650	11,367,910	26,224,560	34,387,666	76%	45,020,379	58%
Electricity Savings (MWh)	577,898	74,411	1,251,699	1,565,785	2,817,484	3,738,508	75%	4,519,668	62%
Total Fuel Savings (MMBtu)	3,580,814	426,282	19,383,567	7,847,978	27,231,545	32,166,070	85%	40,181,767	68%
Natural Gas Fuel Savings (MMBtu)	3,174,694	262,280	6,391,747	7,482,388	13,874,135	17,957,597	77%	25,135,691	55%
Other Fuel Savings (MMBtu)	406,120	164,002	12,991,820	365,590	13,357,410	14,208,472	94%	15,046,076	89%
Renewable Energy Generation (MWh)	208,738	3,161	300,023	64,160	364,183	1,269,573	29%	1,272,092	29%
Renewable Energy Capacity (MW)	113	1	504	2	506	1,047	48%	1,050	48%
Total Leveraged Funds (\$M)	\$937	\$105	\$4,549	\$3,014	\$7,563	\$7,646	99%	\$9,532	79%

- Verified savings as a percent of total reported savings varies by metric and includes electricity (37% verified), natural gas (32%), and other fuels (1%). The measurement and verification work to verify savings is done on a periodic basis, most commonly covering at least 1-2 years of program activity. This work can only begin once adequate post-installation operation has occurred. Additionally, methods and data availability vary significantly between electricity, natural gas and other fuels, which is one of the underlying causes of varying percentages of savings verified.
- Total Energy Savings measures the combined electricity and fuel savings net of usage; therefore, may not sum to the total of individual electric and fuel savings values.
- As noted earlier in the report, fuel savings are currently only planned at the total fuels level; NYSERDA will be implementing new CEF Order requirements to break out reporting of natural gas and other fuels in 2022 with the annual refiling of plans due November 1.
- NYSERDA makes no claim to the environmental attributes or any New York Generation Attribute Tracking System (NYGATS) certificates that may be associated with these projects.

Table 4. Market Development and Innovation and Research Portfolio—Annual Indirect Benefits

Indirect benefits are defined as long-term market effects from follow-on market activity not directly funded by NYSERDA. Progress is reported as market impacts are verified through the completion of market studies which will occur gradually and grow over time, depending upon the period of each study, which varies from one initiative to another. More information on the Evaluation, Measurement, and Verification can be found in section 4 of this report. Expected benefits shown through 2025 and 2030 are discounted by 50 percent to account for uncertainty in timing and potential overlap that has not yet been assessed across the portfolio.

Market Development ** Indirect Only **	Cumulative Indirect Benefits Evaluated Through Previous Period	Indirect Benefits Evaluated in Current Reporting Period	Total Indirect Benefits Evaluated Through Current Reporting Period	Total Indirect Benefits Expected Through 2025	Total Indirect Benefits Evaluated as % of Total Expected Through 2025	Total Indirect Benefits Expected Through 2030	Total Indirect Benefits Evaluated as % of Total Expected Through 2030
Total Energy Savings (MMBtu equivalent)	1,011,624	-	1,011,624	18,432,040	5%	48,631,955	2%
Electricity Savings (MWh)	212,749	-	212,749	2,216,883	10%	5,718,747	4%
Total Fuel Savings (MMBtu)	288,215	-	288,215	11,567,144	2%	30,694,228	1%
Natural Gas Fuel Savings (MMBtu)	274,818	-	274,818	6,794,577	4%	19,331,349	1%
Other Fuel Savings (MMBtu)	13,397	-	13,397	4,772,567	0%	11,362,879	0%
Renewable Energy Generation (MWh)	478,683	-	478,683	365,751	131%	497,806	96%
Renewable Energy Capacity (MW)	58	-	58	301	19%	406	14%

- Indirect benefits are reported for the initiatives and specific time periods for which studies have concluded; these impacts will be added over time as additional studies conclude, regularly growing these evaluated totals.
- Cumulative Indirect Benefits Evaluated through Previous Period reflects the total reported indirect benefits as of the period, but not necessarily all indirect savings anticipated through the reporting period, since additional studies will likely conclude for past periods and add to these overall figures. For the reporting period Q1 2022, no new studies concluded, therefore there are no new benefits reported.
- Indirect plans as represented in the “Total Expected” columns conservatively include only 50 percent of the estimated total indirect benefits from market transformation to avoid overlap in these values and to account for uncertainty associated with the forecasting and measurement of indirect benefits over time.
- Total Indirect Benefits Evaluated through Current Reporting Period, Total Energy Savings updated to include Energy Usage which is not presented as its own metric on this table. 730 MWh of reported Electricity Usage is netted in the Total Energy Savings calculation.
- Indirect leveraged funding will be captured with future assessments.

2.3 Quarterly Budgets Progress versus Plan

Table 5. Market Development Initiatives by Focus Area—Budgets and Spending

See endnote section for more information.^{6,7,8}

Market Development Focus Area Initiative	Current Year Expenditures Plan	Current Year Expenditures Through Current Quarter	Encumbrances as of Current Quarter	Total Progress as of Current Quarter (Expended + Encumbered)	Total Expected Expenditures Through 2025	Total Progress as % of Total Expenditures Through 2025	Total Expected Expenditures Through 2030	Total Progress as % of Total Expenditures Through 2030
Clean Heat & Cooling								
Heat Pumps Phase 1 (2017)	\$2,989,859	\$832,456	\$7,733,618	\$57,495,069	\$57,491,685	100%	\$57,491,685	100%
Heat Pumps Phase 2 (2020)	\$12,987,944	\$3,018,091	\$19,323,000	\$30,816,230	\$44,212,243	64%	\$56,985,000	49%
Renewable Heat NY - Clean and Efficient Biomass Heating	\$709,001	\$169,854	\$1,084,321	\$13,487,000	\$13,487,000	100%	\$13,487,000	100%
Solar Thermal Transition	-	-	-	\$287,513	\$287,513	100%	\$287,513	100%
Clean Heat & Cooling Total	\$16,686,804	\$4,020,401	\$28,140,939	\$102,085,812	\$115,478,441	88%	\$128,251,198	80%
Codes and Standards, & Other Multisector Initiatives								
Codes and Standards for Carbon Neutral Buildings	\$7,275,000	\$1,421,492	\$9,102,584	\$16,905,323	\$42,753,020	40%	\$57,000,000	30%
Information Products and Brokering	\$450,000	\$255,772	\$1,503,982	\$3,055,123	\$5,500,000	56%	\$5,500,000	56%
Market Characterization & Design Market Development	\$7,231,585	\$816,126	\$8,481,960	\$21,327,716	\$30,219,957	73%	\$30,452,510	72%
Product and Appliance Standards	\$2,500,000	\$381,824	\$920,512	\$2,081,035	\$16,798,730	12%	\$25,699,000	8%
REV Connect	\$1,497,500	\$75,928	\$3,316,737	\$7,373,587	\$13,000,000	57%	\$13,000,000	57%
Codes and Standards, & Other Multisector Initiatives Total	\$18,954,085	\$2,951,142	\$23,325,775	\$50,742,784	\$108,271,707	47%	\$131,651,510	39%
Commercial / Industrial / Agriculture								
Advancing Agricultural Energy Technologies	\$300,000	-	\$1,798,555	\$2,089,603	\$3,760,000	56%	\$3,760,000	56%
Agriculture Transition	-	-	-	\$3,598,821	\$3,598,821	100%	\$3,598,821	100%
Commercial Transition	\$1,027,668	\$232,456	\$1,816,711	\$12,534,447	\$12,559,148	100%	\$12,559,148	100%
Energy Management Practices	\$4,124,913	\$802,810	\$8,334,832	\$19,157,943	\$25,960,538	74%	\$28,876,778	66%
Energy Management Technology	\$9,811,639	\$4,100,836	\$40,269,554	\$75,729,868	\$95,875,191	79%	\$108,298,862	70%
Greenhouse Lighting and Systems Engineering	\$1,025,928	\$329,980	\$2,345,810	\$5,000,000	\$5,000,000	100%	\$5,000,000	100%
Industrial Transition	\$5,314,928	\$998,495	\$10,287,298	\$51,140,555	\$55,381,114	92%	\$55,381,114	92%
Market Challenges	\$6,071,725	\$636,785	\$40,563,629	\$51,070,868	\$79,318,814	64%	\$100,951,538	51%
P-12 Schools	\$2,737,914	\$415,636	\$6,134,498	\$11,348,007	\$23,659,997	48%	\$57,600,000	20%
Pay for Performance	\$1,100,000	\$83,851	\$9,001,017	\$10,513,124	\$18,053,771	58%	\$33,969,049	31%
Real Estate Tenant	\$750,000	\$441,860	\$3,489,968	\$15,657,666	\$15,798,390	99%	\$15,798,390	99%
REV Campus Challenge	\$2,550,000	\$1,175,243	\$6,963,881	\$17,143,571	\$18,891,070	91%	\$21,650,002	79%
Technical Services	\$10,506,840	\$2,266,024	\$38,921,133	\$56,487,432	\$52,530,609	108%	\$71,597,185	79%
Commercial / Industrial / Agriculture Total	\$45,321,555	\$11,483,976	\$169,926,886	\$331,471,905	\$410,387,463	81%	\$519,040,887	64%
Communities								
Clean Energy Communities	\$5,986,360	\$1,656,577	\$13,346,768	\$34,047,695	\$52,459,612	65%	\$81,271,963	42%
Community Energy Engagement	\$195,471	\$66,698	\$2,991	\$4,388,546	\$4,407,818	100%	\$4,407,818	100%
Communities Total	\$6,181,831	\$1,723,275	\$13,349,759	\$38,436,241	\$56,867,430	68%	\$85,679,781	45%

Table 5 continued

Market Development Focus Area Initiative	Current Year Expenditures Plan	Current Year Expenditures Through Current Quarter	Encumbrances as of Current Quarter	Total Progress as of Current Quarter (Expended + Encumbered)	Total Expected Expenditures Through 2025	Total Progress as % of Total Expenditures Through 2025	Total Expected Expenditures Through 2030	Total Progress as % of Total Expenditures Through 2030
Low-to-Moderate Income								
Healthy Homes Feasibility Study	\$35,021	-	\$35,021	\$212,147	\$212,147	100%	\$212,147	100%
Heat Pumps Phase 2 (2020)	\$3,868,000	\$971,552	\$5,550,462	\$10,379,639	\$27,198,889	38%	\$30,000,000	35%
LMI Multifamily	\$14,614,972	\$1,297,942	\$34,292,869	\$55,448,931	\$142,036,679	39%	\$164,190,126	34%
LMI Outreach & Engagement	\$1,984,526	\$549,811	\$1,084,480	\$2,841,638	\$7,506,130	38%	\$8,467,401	34%
LMI Pilots	\$213,166	\$213,166	\$639,499	\$852,665	\$1,648,099	52%	\$2,443,533	35%
Low Rise New Construction Transition - LMI	\$650,000	\$50,715	\$2,093,467	\$8,839,609	\$8,120,376	109%	\$8,120,376	109%
Multifamily New Construction Transition - LMI	\$1,604,821	\$184,130	\$4,949,269	\$9,146,893	\$9,070,981	101%	\$9,070,981	101%
New Construction - LMI	\$7,708,671	\$8,366,327	\$62,281,256	\$77,293,039	\$73,507,240	105%	\$123,831,362	62%
NYS Healthy Homes Value Based Payment Pilot	\$2,149,780	\$495,068	\$1,577,981	\$3,280,932	\$9,791,294	34%	\$9,791,294	34%
Regional Clean Energy Hubs	\$4,652,223	\$11,472	\$5,537	\$44,849	\$32,921,931	0%	\$42,000,000	0%
RetrofitNY - LMI	\$5,240,869	\$210,688	\$747,905	\$4,821,236	\$26,110,984	18%	\$30,503,499	16%
REVitalize	-	-	-	\$291,424	\$291,424	100%	\$291,424	100%
Single Family - Low Income	\$36,462,976	\$12,423,468	\$4,253,796	\$188,051,075	\$234,877,453	80%	\$235,627,453	80%
Single Family - Moderate Income	\$14,107,323	\$5,894,802	\$1,596,286	\$84,821,828	\$97,431,002	87%	\$97,751,836	87%
Solar for All	\$1,300,000	\$5,412	\$9,109,745	\$12,591,047	\$8,523,937	148%	\$13,011,046	97%
Low-to-Moderate Income Total	\$94,592,348	\$30,674,553	\$128,217,573	\$458,916,952	\$679,248,566	68%	\$775,312,478	59%
Multifamily Residential								
Energy Management Technology	\$1,500,000	\$273,209	\$3,192,446	\$8,506,416	\$13,283,522	64%	\$14,099,239	60%
Market Challenges	\$275,000	\$467,570	\$8,462,120	\$9,580,410	\$9,825,000	98%	\$10,000,000	96%
Multifamily Low Carbon Pathways	\$1,746,532	\$66,189	\$2,577,176	\$2,877,072	\$17,224,847	17%	\$24,638,016	12%
Multifamily Market Rate Transition	-	-	-	\$156,214	\$156,214	100%	\$156,214	100%
Technical Services	\$2,732,647	\$329,808	\$9,545,487	\$11,145,218	\$16,241,258	69%	\$25,749,999	43%
Multifamily Residential Total	\$6,254,179	\$1,136,776	\$23,777,229	\$32,265,330	\$56,730,841	57%	\$74,643,468	43%
New Construction								
Commercial New Construction Transition	\$1,710,000	\$171,114	\$7,229,654	\$15,379,955	\$14,536,566	106%	\$15,058,836	102%
Low Rise New Construction Transition - Market Rate	\$245,000	\$20,449	\$1,075,959	\$4,980,807	\$4,381,285	114%	\$4,381,285	114%
Multifamily New Construction Transition - Market Rate	\$145,800	\$92,019	\$384,049	\$1,662,510	\$1,626,873	102%	\$1,626,873	102%
New Construction - Market Rate	\$7,798,401	\$645,017	\$68,845,391	\$78,642,120	\$82,389,925	95%	\$142,150,505	55%
New Construction Total	\$9,899,201	\$928,599	\$77,535,053	\$100,665,392	\$102,934,649	98%	\$163,217,499	62%

Table 5 continued

Market Development Focus Area Initiative	Current Year Expenditures Plan	Current Year Expenditures Through Current Quarter	Encumbrances as of Current Quarter	Total Progress as of Current Quarter (Expended + Encumbered)	Total Expected Expenditures Through 2025	Total Progress as % of Total Expenditures Through 2025	Total Expected Expenditures Through 2030	Total Progress as % of Total Expenditures Through 2030
Renewables / Distributed Energy Resources (DER)								
Anaerobic Digesters Transition	\$2,490,347	\$147,194	\$9,365,531	\$13,705,779	\$9,489,197	144%	\$13,634,032	101%
Clean Energy Siting and Soft Cost Reduction	\$877,461	\$69,085	\$1,296,940	\$2,671,168	\$6,598,269	40%	\$8,795,000	30%
Combined Heat & Power Transition	\$13,543,017	\$1,841,697	\$25,002,234	\$58,060,258	\$59,485,543	98%	\$59,485,543	98%
Fuel Cells	\$2,691,556	\$5	\$4,412,500	\$7,199,144	\$8,310,030	87%	\$8,310,030	87%
Offshore Wind Master Plan	-	\$10,227	\$24,168	\$4,990,051	\$4,965,882	100%	\$4,965,882	100%
Offshore Wind Pre-Development Activities	\$930,000	\$379,671	\$706,267	\$9,789,462	\$9,865,411	99%	\$9,865,411	99%
ORES Support	\$3,700,000	\$125,819	\$2,782,509	\$4,805,381	\$9,000,000	53%	\$9,000,000	53%
Reducing Barriers to Distributed Deployment	\$1,050,000	\$90,860	\$3,496,423	\$12,703,162	\$14,148,714	90%	\$15,450,000	82%
Small Wind Transition	\$491,098	\$230,404	\$249,233	\$3,572,906	\$3,569,207	100%	\$3,569,207	100%
Solar Plus Energy Storage	\$30,114,500	\$2,562,500	\$32,833,771	\$36,820,771	\$40,000,000	92%	\$40,000,000	92%
Renewables / Distributed Energy Resources (DER) Total	\$55,887,979	\$5,457,462	\$80,169,576	\$154,318,082	\$165,432,253	93%	\$173,075,105	89%
Single Family Residential								
Consumer Awareness	\$866,454	\$151,522	\$766,243	\$2,803,610	\$2,803,610	100%	\$2,803,610	100%
Heat Pumps Phase 2 (2020)	\$1,865,000	\$157,215	\$1,471,720	\$2,242,717	\$11,183,096	20%	\$12,000,000	19%
Pay for Performance	\$1,360,000	\$38,878	\$7,755,362	\$8,428,303	\$11,950,313	71%	\$21,787,660	39%
Residential	\$8,786,009	\$1,173,091	\$4,641,737	\$12,903,748	\$47,713,945	27%	\$49,641,366	26%
Single Family Market Rate Transition	-	\$4,269	-	\$23,520,339	\$23,532,771	100%	\$23,532,771	100%
Single Family Residential Total	\$12,877,463	\$1,524,975	\$14,635,062	\$49,898,717	\$97,183,735	51%	\$109,765,407	45%
Transportation								
Electric Vehicles - Rebate	\$435,000	-	\$318,037	\$39,500,000	\$7,200,000	100%	\$7,200,000	100%
EV Charging and Engagement	\$326,299	-	-	-	\$39,500,000	0%	\$39,500,000	0%
Transportation Total	\$761,299	-	\$318,037	\$39,500,000	\$46,700,000	85%	\$46,700,000	85%
Workforce Development								
Building Operations and Maintenance Partnerships	\$3,777,416	\$325,909	\$9,606,476	\$17,998,119	\$24,026,886	75%	\$33,345,000	54%
Talent Pipeline	\$10,281,906	\$2,671,233	\$16,484,492	\$34,730,287	\$69,077,358	50%	\$75,000,000	46%
Workforce Development Total	\$14,059,322	\$2,997,142	\$26,090,968	\$52,728,406	\$93,104,244	57%	\$108,345,000	49%
NYS Cost Recovery Fee Market Development	\$3,142,708	\$757,577	-	\$10,904,667	\$22,937,748	48%	\$27,006,438	41%
Total Market Development	\$284,618,774	\$63,655,878	\$585,486,857	\$1,421,934,288	\$1,955,277,077	73%	\$2,342,688,771	61%

Table 6. Innovation and Research Initiatives by Focus Area—Budgets and Spending

See endnote section for more information.^{9,10}

Innovation & Research Focus Area Initiative	Current Year Expenditures Plan	Current Year Expenditures Through Current Quarter	Encumbrances as of Current Quarter	Total Progress as of Current Quarter (Expended + Encumbered)	Total Expected Expenditures Through 2025	Total Progress as % of Total Expenditures Through 2025	Total Expected Expenditures Through 2030	Total Progress as % of Total Expenditures Through 2030
Buildings Innovation								
ClimateTech Commercialization Support	\$766,666	-	-	-	\$10,000,000	0%	\$10,000,000	0%
NextGen Buildings	\$6,491,894	\$731,285	\$13,677,096	\$20,519,323	\$41,811,724	49%	\$50,000,000	41%
Buildings Innovation Chapter Total	\$7,258,560	\$731,285	\$13,677,096	\$20,519,323	\$51,811,724	40%	\$60,000,000	34%
Clean Transportation Innovation								
Electric Vehicle Innovation	\$2,620,000	\$197,523	\$4,270,850	\$9,678,402	\$27,846,503	50%	\$31,850,000	49%
Public Transportation and Electrified Rail	\$2,700,000	\$731,664	\$6,394,925	\$10,485,061	\$15,215,890	69%	\$18,500,000	57%
Clean Transportation Innovation Total	\$5,320,000	\$929,187	\$10,665,775	\$20,163,463	\$43,062,393	47%	\$50,350,000	40%
Climate Resilience Innovation								
Market Characterization & Design Innovation & Research	\$525,815	\$25,363	\$81,013	\$582,727	\$1,750,653	33%	\$1,750,653	33%
Climate Resilience Innovation Total	\$525,815	\$25,363	\$81,013	\$582,727	\$1,750,653	33%	\$1,750,653	33%
Energy Focused Environmental Research								
Energy-Related Environmental Research	\$6,200,000	\$1,076,895	\$12,207,737	\$31,242,506	\$39,806,740	78%	\$47,800,000	65%
Energy Focused Environmental Research Total	\$6,200,000	\$1,076,895	\$12,207,737	\$31,242,506	\$39,806,740	78%	\$47,800,000	65%
Grid Modernization								
Future Grid Performance Challenge	\$1,350,000	-	-	-	\$29,425,000	0%	\$43,000,000	0%
Grid ClimateTech Ready Capital	\$140,000	-	-	-	\$6,540,000	0%	\$9,000,000	0%
High Performing Electric Grid	\$7,139,000	\$3,171,150	\$33,223,295	\$66,368,642	\$64,800,000	102%	\$64,800,000	102%
Power Electronics Manufacturing Consortium	-	-	-	\$16,694,490	\$16,694,490	100%	\$16,694,490	100%
Grid Modernization Chapter Total	\$8,629,000	\$3,171,150	\$33,223,295	\$83,063,132	\$117,459,490	71%	\$133,494,490	62%
Negative Emissions Technologies								
CarbonTech Development	\$128,495	-	\$4,875,000	\$5,000,000	\$5,113,980	98%	\$5,113,980	98%
Natural Carbon Solutions	\$2,875,000	-	-	-	\$11,457,500	0%	\$12,500,000	0%
Negative Emissions Technologies Total	\$3,003,495	-	\$4,875,000	\$5,000,000	\$16,571,480	30%	\$17,613,980	28%
Renewables Optimization								
Energy Storage Technology and Product Development	\$2,046,752	\$540,084	\$21,130,906	\$28,570,332	\$33,071,597	86%	\$39,500,000	72%
National Offshore Wind Research & Development Consortium	\$3,179,988	\$1,391,794	\$12,193,838	\$20,045,984	\$22,500,000	89%	\$22,500,000	89%
Renewables Optimization Total	\$5,226,740	\$1,931,878	\$33,324,744	\$48,616,316	\$55,571,597	87%	\$62,000,000	78%
Technology to Market								
CarbonTech Development	\$2,054,005	\$275,000	\$13,696,000	\$14,146,000	\$14,362,020	98%	\$14,362,020	98%
Catalytic Capital for ClimateTech	\$4,659,439	\$1,672,783	\$3,884,929	\$18,445,453	\$19,360,229	94%	\$19,360,229	94%
ClimateTech Commercialization Support	\$6,654,253	\$1,031,421	\$27,057,500	\$50,603,670	\$55,106,761	99%	\$55,106,761	99%
ClimateTech Expertise & Talent	\$2,500,374	\$608,839	\$2,377,089	\$7,527,555	\$12,049,276	62%	\$12,049,276	62%
Manufacturing Corps	\$1,515,000	\$759,647	\$1,133,901	\$11,996,872	\$17,000,000	71%	\$17,000,000	71%
Novel Business Models and Offerings	\$1,590,777	\$373,611	\$2,200,336	\$6,924,817	\$13,442,354	49%	\$13,442,354	43%
Technology to Market Total	\$18,973,848	\$4,721,301	\$50,349,755	\$109,644,367	\$131,320,640	83%	\$131,320,640	83%
NYS Cost Recovery Fee Innovation & Research	\$624,878	\$137,493	-	\$1,935,123	\$5,220,322	38%	\$5,717,956	35%
Total Innovation and Research	\$55,762,336	\$12,724,552	\$158,404,415	\$320,766,957	\$462,575,039	69%	\$510,047,719	63%

3 NY-Sun Performance

NYSERDA expects to commence quarterly NY-Sun reporting per DPS Reporting Guidance in the second quarter of 2022. NY-Sun will continue reporting progress within each quarterly CEF scorecard filed which can ultimately be assessed in the [Clean Energy Dashboard \(CED\)](#) and associated Open NY datasets.

4 Evaluation, Measurement, and Verification Summary

In accordance with CE-05: Evaluation, Measurement, & Verification (EM&V) Guidance, NYSERDA is required to file all final EM&V Reports in the Document Matter Management system. This section will include a compilation of the high-level summaries of the EM&V Reports filed within the reporting period.

For the 2022 Q1 reporting period, there were no studies completed to convey in this report. For more information on the schedule of studies as they pertain to NYSERDA's Market Development and Innovation and Research initiatives, please reference the Compiled Investment Plan or view reporting for historical periods to see past summaries both on NYSERDA's website.

The latest Compiled Investment Plans:

<https://www.nysesda.ny.gov/About/Funding/Clean-Energy-Fund/>

Clean Energy Fund Reports:

<https://www.nysesda.ny.gov/About/Publications/Program-Planning-Status-and-Evaluation-Reports/Clean-Energy-Fund-Reports>

Note that NYSERDA began providing these summaries with the 2021 Annual CEF Performance Report.

Endnotes

- 1 Order Authorizing the Clean Energy Fund Framework, issued and effective January 21, 2016.
<https://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId=%7bB23BE6D8-412E-4C82-BC58-9888D496D216%7d>
- 2 Order Approving Clean Energy Fund Modifications, issued and effective September 9, 2021.
[<https://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId=%7bD9BA5CDD-5DC3-45B7-B4AA-C9C78A98B9FD%7d>]
- 3 <https://greenbank.ny.gov/Resources/Public-Filings> [NY Green Bank Public Filings]
- 4 <http://documents.dps.ny.gov/public/MatterManagement/CaseMaster.aspx?Mattercaseno=18-M-0084>
[NYS Department of Public Service Commission Files]
Governor Hochul proposes expansion of distributed solar target (10GW by 2030) and energy storage target (6GW by 2030), both of which can be referenced in the 2022 State of the State Book <https://www.governor.ny.gov/sites/default/files/2022-01/2022StateoftheStateBook.pdf>
- 6 If solicitations with upcoming due dates were factored into the total NYSEDA commitments in the Market Development Budgets and Spending table, an additional \$46,430,131 or 62.9% of the total approved budget to date, would be included with total NYSEDA commitments.
- 7 The Market Characterization and Design initiative includes funds to support overarching, non-initiative-specific evaluation studies.
- 8 Initiative commitments that are in excess of their total budgets are in anticipation of program attrition. No initiative will have total expenditures in excess of that initiative's total budget at the close of the program.
- 9 If solicitations with upcoming due dates were factored into the total NYSEDA commitments in the Innovation and Research Budget and Spending table, an additional \$39,072,270 or 71.0% of the total approved budget to date, would be included with total NYSEDA commitments.
- 10 The Market Characterization and Design initiative includes funds to support overarching, non-initiative-specific evaluation studies.

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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