Statewide Low- to Moderate-Income Portfolio Implementation Plan

Version 3

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Accelerated Energy Efficiency Targets and
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Electrification Portfolios Through 2025

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Version History and Description of Revisions: New York LMI Portfolio Implementation Plan

Date Filed	Version	Topic	Description of Change	Section/ Page in Implementation Plan
7/24/2020	1	Not applicable (NA) as first Implementation Plan	NA	NA
4/29/2022	2	New York policy context for LMI Portfolio	Updates to policy context in New York for LMI Portfolio, including regarding Disadvantaged Communities, the Two Million Homes Action Plan	Throughout Implementation Plan
4/29/2022	2	Achievements since 2020 Implementation Plan	Describes key achievements in advancing Statewide LMI Portfolio since 2020 Implementation Plan	Executive Summary, Throughout Implementation Plan
4/29/2022	2	Coordination Points	Updates on addressing key Coordination Points (data sharing between the Utilities and NYSERDA; Evaluation, Measurement, and Verification; Implementation Contractor procurement; Marketing; and Statewide Application	Section 2.3.1, Throughout Implementation Plan
4/29/2022	2	LMI Joint Management Committee and Executive Council	Update to Joint Management Committee Process, including establishment of LMI JMC Executive Council	Sections 2.4.2, 2.4.2
4/29/2022	2	Stakeholder Engagement	Updated description of Portfolio stakeholder engagement activities	Section 2.4.3, Throughout Implementation Plan
4/29/2022	2	Performance Metrics	Updated information on performance metrics, including status of providing data	Section 2.5, Throughout Implementation Plan

4/29/2022	2	Eligibility Criteria	Update of Portfolio Eligibility Criteria, including geographic eligibility	Section 2.6, Throughout Implementation Plan
4/29/2022	2	Budget and Target Updates	Updates to Budgets and Targets, including (1) to reflect performance since 2020 Implementation Plan; (2) key drivers of cost trends; (3) identification of costs efficiencies achieved and being pursued; (4) updated Portfolio and Program Administrator budgets and target information	Section 3, Throughout Implementation Plan, Appendices A-D
4/29/2022	2	1-4 Family Homes Initiatives	Updates include: planning to combine EmPower NY Low-income program and Assisted Home Performance with Energy Star moderate-income program into EmPower+ Program, to be launched in 2023; changes to programs including streamlined EmPower application; coordination between NYSERDA and the Utilities, including data sharing and referrals	
4/29/2022	2	Milestones	Updated current and future milestones for the Portfolio and new appendix mapping 2020 and 2022 Implementation Plan milestones	Sections 4-8, Appendix F.
4/29/2022	2	Existing Affordable Multifamily Buildings	Updates include: development and launch of new statewide Affordable Multifamily Energy Efficiency Program (AMEEP) with focus on comprehensive measures and projects; transition of prior Program Administrator	Section 4.2.1

			multifamily programs to AMEEP	
4/29/2022	2	Technical Assistance for Affordable Multifamily Buildings	Updates on NYSERDA FlexTech program, including integration into AMEEP	Section 4.2.2
4/29/2022	2	Template Presentation for Sections	Numerous sections have been reformatted to follow a consistent template	Sections 4.6., 5.1, 5.2, 5.3, 8.
4/29/2022	2	RetrofitNY	Updates include added description and detail on program to advance deep energy retrofits	Section 4.2.3
4/29/2022	2	Affordable New Construction	Updates include added description and detail on NYSERDA affordable new construction initiatives	Section 4.3
4/29/2022	2	Pilots and Demonstrations	Updates include added description and detail regarding NYSERDA LMI pilots and demonstrations	Section 4.4
4/29/2022	2	Beneficial Electrification	Added description and detail regarding pilots, research, and other work to advance the inclusion of heat pump and other beneficial electrification measures in affordable multifamily buildings	Section 4.5
4/29/2022	2	Additional LMI Initiatives	Updates including added description and detail on the New York State Healthy Homes Value-Based Payment Pilot	Section 4.6
4/29/2022	2	Customer Awareness, Outreach & Engagement	Section 5. Customer Awareness, Outreach & Engagement has been restructured for consistency and clarity	Section 5
4/29/2022	2	LMI Portfolio Marketing	Additional information on LMI Portfolio marketing efforts including: statewide branding, the NY Energy advisor	Section 5.1

			1 1 1 1	
			website; hard copy customer education collateral and multilingual communications; community based marketing and paid advertising	
4/29/2022	2	Community- Based Outreach and Education	Information and detail on shift in NYSERDA programs from Community Energy Engagement Program (CEEP) to Regional Clean Energy Hubs	Section 5.2
4/29/2022	2	Community Based Customer Engagement	Updated information on: Utility partnerships with LMI community organizations focusing on measure distribution and education; and neighborhood engagement initiatives	Section 5.3
4/29/2022	2	Coordination with External Program Administrators and Other Organizations	Title change to indicate coordination with organizations other than external program administrators; inclusion of Long Island Power Authority	Section 6
4/29/2022	2	Benefit Cost Analysis	Description and results of revised Benefit Cost Analysis for LMI Portfolio	Section 7, Appendix E
4/29/2022	2	Evaluation, Measurement, and Verification (EM&V)	Description of EM&V activities since 2020 Implementation Plan, including development initial and revised Verified Gross Savings Specifications; added description on EM&V activity related to assessment of performance metrics	Section 8
5/31/2022	2	Budget and Target Updates	Updates to Budgets and Targets, including restated Portfolio and Program Administrator	Section 3, Throughout Implementation

			budgets and target information for 2020 and 2021, and updated projections for 2022- 2025	Plan, Appendices A-D
8/15/2022	2	Scorecard Program Mapping to Implementation Plan Statewide Categories	Addition of Appendix G tables, which map individual LMI programs as identified in Program Administrators' quarterly scorecard reporting to Implementation Plan Statewide Categories and Sub-Initiatives	Appendix G
8/15/2022	2	Budget and Target Updates	Updates to Budgets and Targets, including restated Portfolio and NYSERDA budgets and target information for 2020 and 2021, and updated projections for 2022-2025	Section 3, Throughout Implementation Plan, Appendices A-D
11/1/22	3	Market Conditions	Updated description of market conditions impacting LMI Portfolio, in particular regarding timing and costs.	Executive Summary, Sections 3, 4.1, and 4.2
11/1/22	3	1-4 Family Program	Updates to 1-4 Family program redesign progress and updates to moderate income program project caps.	Section 4.1
11/1/22	3	Multifamily Program	Updates regarding AMEEP stakeholder engagement webinars	Section 4.2
11/1/22	3	Federal Funding	Reference to seeking federal funding to support LMI Portfolio, including Inflation Reduction Act.	Section 4.1
11/1/22	3	VGS Specifications	Updates regarding VGS Specifications, including to address completed evaluation of 1-4 Family program.	Section 8, 1-4 Family and Other LMI Initiatives Specifications
11/1/22	3	Budgets and Targets Updates	Updated budget and target information,	Executive Summary,

			including Program	Sections 1, 3,
			Administrator-specific	Appendices A-D
			context regarding	
			budgets and targets	
11/1/22	3	Milestones	Updates to LMI Portfolio	Sections 4.1, 4.2,
			Milestones, including	4.5, 4.6,
			status.	Appendix F.
11/22/22	3	Budget and	Updates to Budgets and	Section 3,
		Target Updates	Targets, including	Throughout
			restated Portfolio and	Implementation
			Program Administrator	Plan, Appendices
			budgets and target	A-D
			information for 2020 and	
			2021, and updated target	
			projections for 2022-	
			2025	

Executive Summary

Implementation Plan for Statewide LMI Portfolio

The New York Utilities¹ and the New York State Energy Research and Development Authority ("NYSERDA") (together, "Program Administrators") jointly file this updated 2022 Implementation Plan ("Implementation Plan" or "Plan") for the statewide portfolio of energy efficiency programs and initiatives for low- to moderate-income ("LMI") customers and communities in New York. The portfolio of programs and offerings outlined in this Plan (the "Statewide LMI Portfolio" or the "Portfolio") is designed to create a holistic and coordinated approach to deliver energy efficiency to LMI customers and communities in New York and also to: (1) improve the experience of, and ultimate benefit for, LMI customers seeking to access clean energy services; (2) reduce administrative costs and increase the impact of ratepayer funding; and (3) provide more consistent and streamlined participation for service providers.

This Plan represents an update to prior versions of the Implementation Plan for the Statewide LMI Portfolio, which was first filed in July 2020 ("2020 Implementation Plan" or "2020 Plan"), with additional prior updates in 2022.² This Plan generally reflects the same broader context, goals, and approaches that informed and comprised prior versions of the Plan, and provides updates describing progress on numerous elements of the 2020 Plan since its filing (*i.e.*, through October 2022), as well as modifications to the 2020 Plan. This Plan also describes the current state of the Portfolio's development and implementation and provides revised next steps, plans, and milestones going forward.

Implementation Plan Context and Goals

The goal of this Plan is to advance energy affordability and access to energy efficiency for New York's LMI residents and communities, while supporting New York State's nation-leading climate policy to transition to carbon-free electricity systems and dramatically reduce greenhouse gas emissions. The Plan contributes to achieving key goals from the Climate Leadership and Community Protection Act³ ("Climate Act"), including the requirement that disadvantaged communities receive no less than 35% (with a goal of 40%) of the overall benefits of spending on clean energy programs, by focusing on the

¹ Central Hudson Gas & Electric Corporation ("Central Hudson"); Consolidated Edison Company of New York, Inc. ("Con Edison"); KeySpan Gas East Corporation d/b/a National Grid ("KEDLI"), The Brooklyn Union Gas Company d/b/a National Grid NY ("KEDNY"), NMPC Power Corporation d/b/a National Grid ("NMPC")(collectively "National Grid"); National Fuel Gas Distribution Corporation ("NFGDC"), New York State Electric & Gas Corporation ("NYSEG"); Orange and Rockland Utilities, Inc. ("Orange & Rockland"); and Rochester Gas and Electric Corporation ("RG&E"), (collectively, "Utilities").

² Case 18-M-0084, *In the Matter of a Comprehensive Energy Efficiency Initiative* ("NE: NY Proceeding"), Statewide Low- to Moderate-Income Portfolio Implementation Plan (filed July 24, 2020), and Statewide Low- to Moderate-Income Portfolio Implementation Plan, Version 2 (filed April 29, 2022), First Update (filed May 31, 2022), Second Update (filed August 15, 2022). This Plan supersedes previous versions.

³ Chapter 106 of the Laws of 2019. The Climate Act is available at https://legislation.nysenate.gov/pdf/bills/2019/S6599.

equity issues that can be most directly addressed by clean energy programs, such as energy affordability, reduced fossil fuel combustion to advance environmental justice, and enhanced community engagement. The Statewide LMI Portfolio will also advance Governor Hochul's 2022 State of the State commitment to the Two Million Homes Action Plan to achieve two million climate-friendly homes -- one million efficient and electrified homes and one million electrification-ready homes -- by 2030, with at least 800,000 of the homes being LMI households ("Two Million Homes Action Plan").⁴ The initiative calls on NYSERDA, New York State Homes and Community Renewal ("NYS HCR"), New York State Department of Public Service ("DPS"), and Department of State to produce an executable plan and funding proposal by end of 2022 to guide achievement of this goal.

This Implementation Plan includes a budget of \$999 million in new funding allocations across all of the Program Administrators from 2020-2025, with estimated lifetime electric savings of 10,580,839 megawatt hours ("MWh"), gas savings of 247,956,924 million British Thermal Units ("MMBtu"), and greenhouse gas emissions reductions of 20,573,600 carbon dioxide equivalent ("CO2e") metric tons, while serving an estimated 1.8 million participants.⁵ The Plan is consistent with directives from the New York Public Service Commission ("Commission"), including the Accelerated Efficiency Order⁶ from December 2018 and the 2020 NE: NY Order⁷ from January 2020, which specify spending 20% of incremental energy efficiency funding on LMI customers with 40% of that spending allocated to affordable multifamily buildings.

The Plan also outlines major advances in the planning and delivery of energy efficiency initiatives for LMI New Yorkers. Whereas historically the Utilities and NYSERDA have separately run different LMI programs and offered different services across the state, this Plan reflects a more consistent and accessible program framework whereby the Program Administrators jointly design, implement, maintain, and improve a single Statewide LMI Portfolio of programs. Benefits of this approach include enhanced and more consistent services and offerings across the state; increased efficiencies and associated cost reductions, including in Portfolio implementation, administration, marketing, and evaluation; and coordinated efforts to continually improve and enhance the Portfolio. LMI customers, contractors, and other market actors and stakeholders also benefit from increased alignment of initiatives, incentive structures, marketing, and other Portfolio elements.

⁴ <u>Governor Hochul Announces Plan to Achieve 2 Million Climate-Friendly Homes by 2030 | Governor Kathy</u> Hochul (ny.gov)

⁵ Includes NYSERDA indirect savings.

⁶ NE: NY Proceeding, Order Authorizing Accelerated Energy Efficiency Targets (issued December 13, 2018) ("Accelerated Efficiency Order").

⁷ NE: NY Proceeding, Order Authorizing Utility Energy Efficiency and Building Electrification Portfolios Through 2025 (issued January 16, 2020) ("2020 NE: NY Order").

To date, the Program Administrators have implemented some impactful and significant achievements under the Portfolio framework. These achievements include:

- Designing and launching of the statewide Utility-administered Affordable Multifamily Energy Efficiency Program ("AMEEP") on November 3, 2021, concurrent and coordinated with the phase out of NYSERDA's Multifamily Performance Program ("MPP");
- Developing and launching transformative partnerships between NYSERDA and
 affordable housing agencies to integrate technical assistance and efficiency and
 electrification incentive funding directly into affordable housing finance
 applications with NYS HCR and New York City Department of Housing
 Preservation and Development ("NYC HPD"), positioning the housing agencies to
 require high-performance all-electric design for affordable housing new
 construction and preservation projects ahead of anticipated mandates and
 regulatory requirements;
- Launching the Clean Heat for All Challenge, a partnership between NYSERDA, New York City Housing Authority ("NYCHA") and New York Power Authority ("NYPA") to spur heating and cooling equipment manufacturers to develop a packaged, window-mounted cold climate heat pump that can be easily installed and maintained, providing efficient, reliable heating and cooling to NYCHA residents (the partnership leverages Regional Greenhouse Gas Initiative ("RGGI") funding and technical assistance from NYSERDA, NYCHA's portfolio size and commitment to electrification, and NYPA's procurement vehicle and project management);
- Selecting the first round of partners, including two affordable housing developers, under the Empire Building Challenge demonstration program and completing analyses to map out high-efficiency electrification retrofit strategies for high-rise multifamily buildings;
- Developing a combined application for 1-4 Family LMI programs and creating an online version, which includes geographic eligibility for households in low-income census tracts;
- Improving the low-income referral process, increasing awareness of and participation in cost-saving energy programs;
- Developing and launching the NY Energy Advisor for Income Eligible Energy Efficiency Programs website ("NY Energy Advisor")⁸, a one-stop centralized customer-awareness website providing information on statewide energy efficiency and clean energy offerings and connecting eligible New Yorkers to energy programs, resources and assistance;
- Allocating \$10 million through NYSERDA's Heat Pump Demonstration Study pilot to fund electrification as part of comprehensive energy efficiency upgrades for

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⁸ https://energyadvisor.ny.gov/

- LMI households and affordable multifamily buildings and assess real-world barriers and solutions to make heat pumps more accessible and affordable for LMI customers;
- Developing and executing agreements with NYSERDA to administer funding through NYSERDA's EmPower New York program ("EmPower NY" or "EmPower") and to develop and implement the NY Energy Advisor website;
- Engaging with stakeholders through biannual statewide LMI Portfolio webinars, completing co-design phase of Regional Clean Energy Hubs initiative, engaging with AMEEP contractors and energy service providers through an affordable multifamily Participating Contractors and Industry Partners ("PC&IP") webinar series, as well as periodic meetings with multifamily stakeholders and the Strategic Advisory Group ("SAG"), a stakeholder group convened by the DPS Staff ("Staff") as part of its Performance Management and Improvement Process ("PM&IP") regarding the Statewide LMI portfolio⁹;
- Developing and filing the Statewide LMI Joint Management Committee (the "JMC" or the "Committee") Manual ("JMC Manual"), which describes the forum of the Program Administrators to meet, discuss, implement, and calibrate the execution of the Implementation Plan, as well as the establishment of a new LMI JMC Executive Council ("Executive Council") that provides oversight and guidance to the JMC (filed December 22, 2021);¹⁰
- Ongoing coordination around Evaluation, Measurement, and Verification
 ("EM&V") issues for the Portfolio, including developing and filing the Statewide
 LMI Verified Gross Savings ("VGS") Specifications for the Statewide LMI Portfolio
 ("LMI VGS Specifications");¹¹ developing standardized survey questions for
 statewide use when conducting process evaluation research; identifying key
 measures for further research to develop statewide and regional average existing
 condition baselines; coordinating on development of statewide EM&V scopes;
 and
- Developing a framework for combining and streamlining the EmPower NY program with Assisted Home Performance with ENERGY STAR (R) ("AHP") into a single LMI program called EmPower+, informed by extensive stakeholder input, including developing program management software for EmPower+, with anticipated launch in spring 2023.

 ⁹ See, NE: NY Proceeding, Commencement of Energy Efficiency & Building Electrification Performance Management & Improvement Process, (filed May 29, 2020.) See also, 2020 NE: NY Order, p. 60-61.
 ¹⁰ NE: NY Proceeding, "Statewide Low- to Moderate-Income Joint Management Committee Manual, Version 2" (Filed: December 22, 2021). The initial JMC Manual was filed on October 14, 2020.
 ¹¹ NE: NY Proceeding, Consolidated LMI Verified Gross Savings Specifications (filed Dec. 14, 2020). Revised VGS Specifications are to be filed in Q2 2022.

As is described herein, the Program Administrators will continue to identify, assess, and implement the steps necessary to complete this shift to a Statewide LMI Portfolio and achieve the associated benefits over the period of the Plan, which began in 2020 and continues through 2025. These efforts are coordinated under the LMI JMC and LMI Executive Council, 12 and reflect ongoing engagement with and input from stakeholders, including members of the public, affordability advocates, and service providers. Given the breadth and rigor associated with implementing all aspects of the LMI Portfolio, the JMC will work with the Executive Council and stakeholders to align on top priorities for the period ahead. These may include: 1) ensuring achievement of LMI Portfolio targets, including addressing and resolving target shortfalls, 2) assessing, identifying, and implementing LMI program design changes and integrating with the New York State Clean Heat Program ("NYS Clean Heat") to increase gas efficiency savings and incorporate electrification incentives, with appropriate affordability protections, and 3) managing and optimizing overall effectiveness at reaching and serving more LMI customers through multi-pronged efforts to actively engage stakeholders and implement feedback, continuously improve EmPower NY referrals, the NY Energy Advisor website and awareness campaign, and increase outreach through the forthcoming Regional Clean Energy Hubs and utility outreach partnerships.

The design, development, and implementation of new statewide programs in 2020-2021 has allowed the Program Administrators to reflect on lessons learned throughout the process that can be applied going forward in the continued implementation and operation of the Statewide LMI Portfolio. An example of this includes the importance of understanding the different challenges faced specific to certain regions of New York, and solving for them in the format of a statewide program. The JMC structure has allowed the Program Administrators to surface and address these issues in a holistic way. Additionally, the Program Administrators found feedback from stakeholders invaluable in designing the programs. As the Statewide LMI Portfolio continues to grow, and programs continue to be implemented and scaled, the JMC will continue to seek feedback from participants and other stakeholders to improve the programs, so that participation increases and as many LMI customers are comprehensively served as possible.

Supply chain issues, labor and material shortages, and inflationary effects have increased project costs for both 1-4 family and multifamily markets. Many of these market challenges became visible in late 2020, increased in 2021 and 2022, and have impacted construction and new project development timelines. Program Administrators continue to work with stakeholders and program participants to understand and adapt to these

¹² The Order Approving Clean Energy Fund Modifications ("CEF Modifications Order") issued September 9, 2021, ordered the formation of an Executive Level Council ("Executive Council") to provide oversight and guidance to the LMI JMC.

market challenges to facilitate timely and cost-effective delivery of energy savings and other benefits to LMI customers while meeting portfolio objectives.

The Program Administrators look forward to the NE: NY Interim Review and CEF Review process, initiated by Commission Order on September 15, 2022, with expected Commission action in 2023 to assess the LMI Portfolio and make adjustments as necessary.¹³ The Interim Review will assess program design and administration, innovative practices, governance and oversight mechanisms, and targets and budgets required to support the Climate Act and other State goals and efforts. The Program Administrators will work closely with DPS Staff and key stakeholders to support the Review and implement directives following Commission Orders.

Summary of Plan

The Plan is comprised of the following eight sections:

Section 1. Introduction describes the context for the Statewide LMI Portfolio and the breadth of the New York State policy landscape that this Plan is instrumental in advancing, including the Affordability Policy, the NYSERDA-administered Clean Energy Fund ("CEF")¹⁴, the Climate Act and the Two Million Homes Action Plan. Consistent with the Climate Act, the Plan reflects the importance of increasing access to clean energy and efficiency programs for disadvantaged communities ("DACs"), which the Act defines as "communities that bear burdens of negative public health effects, environmental pollution, impacts of climate change, and possess certain socioeconomic criteria, or comprise high-concentrations of low- and moderate-income households".¹⁵

Section 2. Statewide LMI Portfolio describes the overall approach to leverage the respective strengths of each of the Program Administrators in developing and implementing the Statewide LMI Portfolio. This section identifies objectives for the Plan, which complement objectives laid out in the Accelerated Efficiency Order, and which are linked to performance metrics that will measure and assess the Portfolio. This section also describes the approach to implementing, updating, and reporting on the Portfolio, including outlining the core functions of the LMI JMC, the LMI Executive Council, and stakeholder engagement. In addition, Section 2 describes the approach to maintaining the Portfolio, recognizing program evolution from its Status Prior to New Statewide LMI Portfolio Offering, to a Transitional Phase, to Full Implementation of the statewide approach. Section 2 also provides updates regarding several complex coordination and administrative elements that were identified in the 2020 Plan after its filing as needing to

¹³ NE: NY Proceeding and Case 14-M-0094, *Proceeding on Motion of the Commission to Consider a Clean Energy Fund* ("CEF Proceeding"), Order Initiating the New Efficiency: New York Interim Review and Clean Energy Fund Review ("Interim Review") (Issued and effective: September 15, 2022). See also, NE: NY Proceeding, 2020 NE: NY Order, p. 59-60.

¹⁴ CEF Proceeding, Order Authorizing the Clean Energy Fund Framework (issued January 21, 2016).

¹⁵ 2019 Climate Leadership and Community Protection Act. https://legislation.nysenate.gov/pdf/bills/2019/s6599

be addressed to fully achieve that Plan's objectives. Finally, this section describes the eligibility thresholds for qualification in the Portfolio, including the assessment of innovative approaches.

<u>Section 3. Budgets, Targets, and Other Impacts</u> presents the Portfolio budgets and targets for 2020-2025, both by year and by Program Administrator. Portfolio-level performance metrics by year are also provided. These Portfolio-level performance metrics are quantified and reported quarterly and can be viewed on the Clean Energy Dashboard. Additional detail on budgets, targets, and metrics is provided in the appendices.

This Plan includes revisions to projected budgets and targets from the 2020 Plan based on updated information and analysis of the estimated costs of the statewide LMI initiatives. For several Program Administrators, the targets described in this Plan differ materially from those in the 2020 Plan and are currently projected to fall short by up to 2% relative to the Accelerated Efficiency Order and 2020 NE: NY Order. To Section 3 summarizes key cost impacts which contribute to this including inflation and COVID-19-related supply chain issues, leading to discrepancies between Ordered and actual or projected program run rates.

In the administration of the Portfolio, the Program Administrators are preserving flexibility with annual budgets and production projections to provide for the ability to respond to increased demand and serve more households or buildings, as necessary. Where necessary and feasible (*i.e.*, given regulatory requirements), Program Administrators either have spent and/or will spend budgets from future years to meet program demand or have spent and/or will spend budgets from earlier years in later years for the same reason. Any such reallocations are reflected in this Implementation Plan, including in tables throughout the Plan.¹⁸

The Program Administrators remain committed to achieving cost efficiencies as the new initiatives being developed under the Portfolio reach maturity, and a wide array of options are being explored to achieve those goals, as described in Section 4. The Program Administrators will continue to assess actual cost data to project future budgets and targets as accurately as possible. The need to identify and achieve cost efficiencies and accurately project impact in service of increasing the impact of ratepayer investments and reaching more LMI customers with the benefits of energy efficiency further underscores the importance of the Program Administrators efficiently working together under the LMI JMC structure. Cost efficiencies identified and achieved or planned for by

¹⁶ See, https://rev.ny.gov/cleanenergydashboard

¹⁷ NFGDC additional LIURP funding and associated targets removed from calculation.

¹⁸ See, NE: NY Proceeding, 2020 NE: NY Order, p. 69-70.

the Program Administrators are enumerated in Section 3 and discussed in detail throughout this Plan.

<u>Section 4. Statewide LMI Portfolio Initiatives</u> describes the initiatives by sector, including:

- Existing 1-4 Family Homes
- Existing Affordable Multifamily Buildings
- Affordable New Construction
- Pilots and Demonstrations
- Beneficial Electrification
- Additional LMI Initiatives funded through CEF, including New York State Healthy Homes and Solar for All

The Existing 1-4 Family Homes and Existing Affordable Multifamily Buildings Initiatives represent the bulk of the Statewide LMI Portfolio budget. Approximately 30% of the total statewide Portfolio budget, including CEF investment, is allocated to Existing 1-4 Family Homes initiatives. 53% of the total Portfolio budget, including CEF investment, is allocated to Existing Affordable Multifamily initiatives. 68% of incremental Utility funding is allocated to Existing Affordable Multifamily initiatives as well.

Subsections for the Existing 1-4 Family Homes, Existing Affordable Multifamily Buildings, and Affordable New Construction sectors provide detail on the sector Initiatives and Services, Objectives, Status Prior to New Statewide LMI Portfolio Offering, Transitional Phase, and Full Implementation. These subsections also provide detail regarding the Target Market and Delivery Method, Eligible Measures and Incentive Structure, and Stakeholder/Market Engagement, which includes identifying Key Partners and Additional Considerations specific to that sector such as Additional Funding Sources, and outlines Implementation Milestones for the next several years under the Plan (*i.e.*, through 2024). This updated Plan provides significant new information for the multifamily initiatives and 1-4 Family Homes initiatives, reflecting significant assessment, stakeholder engagement, and redesign efforts from the Program Administrators since the filing of the 2020 Plan.

Pilots and demonstrations are a key element of the Plan, as opportunities for increasing access to energy efficiency solutions and improving energy affordability are everevolving, with new technologies, applications, business and delivery models, and opportunities for cross-sector coordination emerging on a regular basis. To continuously improve the programs and offerings under the LMI Portfolio, the Program Administrators will continue to incorporate the piloting and demonstration of new technologies and approaches for serving LMI customers and communities. The Program Administrators fund LMI pilots and demonstrations through the CEF, with the expectation that learnings will be communicated and deployed at a larger scale.

The Statewide LMI Portfolio includes investments in the LMI market segment in beneficial electrification, *i.e.*, transitioning to electricity from other fuel sources to reduce emissions of greenhouse gases and other pollutants. Portfolio investments in beneficial electrification seek to improve energy affordability and health outcomes, while maintaining consumer protection and increasing access to heat pump solutions for LMI communities, households, and building owners.

Additional LMI Initiatives funded through CEF were initially filed as part of the LMI Chapter of the CEF, and with the transition of the LMI elements of the CEF to this Implementation Plan, are presented in the Plan.

<u>Section 5. Customer Awareness, Outreach & Engagement</u> describes how customer awareness and education initiatives play a crucial role in creating lasting effects from energy efficiency for LMI customers. The success of the Portfolio relies on meaningful engagement with customers, contractors, and community partners through an effective customer awareness, outreach, and engagement campaign.

Within this section, objectives related to Customer Awareness, Outreach & Engagement are identified. Through multiple delivery channels, the Program Administrators will continue to deliver initiatives that will address the overall strategic development and coordination of these efforts. The initiatives build on existing program experience and provide a comprehensive and integrated statewide approach that Program Administrators expect will include the following key elements:

1. LMI Portfolio Marketing, including:

- Statewide branding
- NY Energy Advisor providing online information about energy efficiency and clean energy as well as a one-stop shop to learn about and participate in the statewide Portfolio offerings
- Branded hard-copy program outreach and informational collateral to complement the online NY Energy Advisor website
- Delivery of community-based marketing and paid advertising

2. Community-Based Outreach Education and Engagement Partnerships

 Regional Clean Energy Hubs that serve as trusted local resources for community members to learn more about energy-related programs and services, and that foster development of outreach strategies to increase awareness and elevate the needs of communities and residents

3. Community-Based Customer Engagement Initiatives

- Delivery of community-based partnerships that combine distribution of low-cost EE measures with education about energy efficiency and clean energy and information on how to participate in other Portfolio programs
- Neighborhood-based delivery model

This section describes several updates and modifications on these elements from the 2020 Plan.

Section 6. Coordination with External Program Administrators and Other Organizations reflects that, in addition to coordination amongst the Program Administrators, there are additional opportunities to work with programs administered by New York State agencies, local government, and community-based organizations to reduce redundancy and to increase synchronization, effectiveness, and overall impact for customers. Section 6 identifies these organizations and describes the nature of coordination with each, including through the LMI Joint Management Committee.

Section 7. Benefit Cost Analysis presents the summary results of the updated Benefit Cost Analysis ("BCA") for the Statewide LMI Portfolio of initiatives, with additional detail provided in Appendix E. As noted in the 2020 Implementation Plan, the BCA results will continue to be refined as the Portfolio initiatives are further developed, and will be updated as future iterations of the Implementation Plan are filed. Program Administrators note that there are many additional non-energy benefits not included in the calculation of the BCA that aid LMI customers.

<u>Section 8. Evaluation, Measurement, & Verification Approach</u> describes the coordinated approach that the Program Administrators take in estimating savings and evaluating LMI initiatives. This includes approaches to standardized statewide savings estimation, collaborative evaluation activities, and continuous monitoring of and feedback on performance metrics. Specific program-level savings estimation approaches and evaluation schedules are detailed in the VGS Specifications, which are filed along with this Plan. Section 8 provides a brief summary of these updated specifications.

1. Introduction

Pursuant to the 2020 NE: NY Order, NYSERDA and the New York Utilities (*i.e.*, the Program Administrators) jointly file this updated Implementation Plan describing the statewide¹⁹ portfolio of energy efficiency programs and initiatives for LMI customers and communities.²⁰ This Plan reflects the Program Administrators' coordinated approach to advance energy affordability and access to energy efficiency for New York's LMI residents and communities. The statewide portfolio approach described in this Plan utilizes the Program Administrators' investments in a complementary manner that better serves the LMI market segment, further expands the reach of energy efficiency initiatives, and increases the impact of ratepayer funding. The portfolio of programs and offerings outlined in this Plan provides a more holistic and coordinated approach to delivering energy efficiency to LMI customers and communities in New York and also: (1) improves the experience of and ultimate benefit for LMI customers seeking to access clean energy services; (2) reduces administrative costs and increases the impact of ratepayer funding; and (3) provides more consistent and streamlined participation for service providers.

The investments outlined in this Plan seek to address the equity issues outlined in the Climate Act that can be most directly addressed by clean energy programs, such as energy affordability, reduced fossil fuel combustion through efficiency and electrification, and enhanced community engagement. The Climate Act requires that disadvantaged communities shall receive no less than 35% (with a goal of 40%) of the overall benefits of spending on clean energy and energy efficiency programs, and the Program Administrators continue to adapt the LMI investments to meet this and other requirements as the work of the Climate Action Council and Climate Justice Working Group ("CJWG") advances.²¹ In December 2021, the CJWG decided on draft criteria for identifying DACs. In March 2022, the draft DAC criteria were released for public comment. The Program Administrators will look to apply the final DAC criteria to

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¹⁹ For the purpose of the Statewide LMI Portfolio, these initiatives serve customers located in the territories of the Utilities defined and do not serve customers in other utility territories across the state, unless otherwise noted. NYSERDA and the Utilities coordinate and share information on initiatives with utilities not outlined in this Plan, to ensure alignment and advancement of energy efficiency initiatives across the State.

²⁰ This Plan is an update to the initial 2020 Implementation Plan and subsequent Plan revisions. This Plan primarily reflects updates and modifications to the 2020 Plan, in the two years (approximately) since the original filing, with some additional modifications from prior versions of the Implementation Plan filed earlier in 2022. See footnote 2, above.

²¹ The Climate Justice Working Group is responsible for identifying disadvantaged communities, pursuant to the Climate Act, and it is expected that criteria for disadvantaged communities will be finalized in 2022. In addition, the Climate Action Council is responsible for developing a Scoping Plan to achieve the State's bold clean energy and climate agenda, which is expected in 2022. *See*, https://climate.ny.gov/Climate-Justice-Working-Group

program strategy, eligibility, and implementation to benefit these communities, and, until that time, consider interim approaches to reach disadvantaged communities.

1.1 LMI Market Segment: Context for Statewide LMI Portfolio

New York State's LMI customer market is broad and diverse, with more than 3.5 million households (40% of the State's households) qualifying as LMI.²² Low-income households, which comprise about 2.3 million households in the state, are defined as those with annual incomes at or below 60% of the State Median Income. Moderate-income households, which comprise about 1.2 million households in the state, are defined as those with annual incomes between 60% and 80% of the State Median Income or the Area Median Income (whichever is greater).²³

LMI households spend a disproportionate share of their annual income on energy bills²⁴ relative to other households in New York. In addition, LMI households often lack the time, financial resources, and information necessary to invest in or gain access to energy efficiency upgrades, even though they may benefit greatly from these improvements. LMI residents and communities also face challenges associated with quality-of-life issues, including health impacts associated with inefficient and deteriorating building stock due to lack of resources for regular maintenance and improvement.

Affordable housing providers, community organizations, and other market actors associated with affordable housing activities face similar obstacles. For instance, affordable housing owners and developers may lack the capital to invest in high-performance or clean energy improvements to their buildings. They also may not have access to resources and the technical expertise necessary to develop solutions for addressing the energy affordability issues faced by their residents.

More than 40% of New York's LMI population lives in affordable multifamily housing exceeding five or more units per building. Those who rent apartments in these buildings often do not have the ability to make their own energy efficiency upgrades, and those who own apartments are often restricted from making improvements by complex cooperative or condominium rules. Decisions to undertake energy efficiency investments in these circumstances often reflect a "split incentive" problem. For example, in buildings where tenants pay their own energy bills, there is little incentive for building owners to undertake such investments. Likewise, tenants who are likely to move in the near term

²² 2019 American Community Survey: https://www.census.gov/programs-surveys/acs

²³ The impacts of the COVID-19 pandemic on household income are not yet fully captured in economic data. The number of households qualifying as LMI in New York is generally expected to increase as a result of higher unemployment and reduced economic activity caused by the pandemic.

²⁴ According to 2020 Home Energy Affordability Gap data prepared by Fisher, Sheehan, and Colton and published in April 2021, energy burdens can exceed 30% of annual income for many low-income New Yorkers compared to 6% or less for higher-income New Yorkers: http://www.homeenergyaffordabilitygap.com/

²⁵ 2019 American Community Survey: https://www.census.gov/programs-surveys/acs

have no incentive to pursue such investments as they would not be able to reap the benefits over time.

The Statewide LMI Portfolio described in this Plan is intended to address the barriers that LMI customers can face in realizing the benefits of energy efficiency. These barriers faced by customers and challenges that the Program Administrators seek to overcome include:

- Limited LMI customer access to capital and financing;
- Limited awareness of energy efficiency programs and resources;
- Split incentives for affordable housing owners to make investments that improve tenant space;
- Administrative challenges in identifying and reaching LMI customers;
- Health and safety or structural deficiencies that impede progress on energy efficiency work; and
- Limited technical and engineering assistance for building owners.

Disadvantaged communities, which the Climate Act defines as "communities that bear burdens of negative public health effects, environmental pollution, impacts of climate change, and possess certain socioeconomic criteria, or comprise high-concentrations of low- and moderate-income households" also face greater challenges to accessing clean energy solutions.²⁶ Through the Statewide LMI Portfolio, the Program Administrators aim to increase access to energy efficiency and other clean energy solutions through direct investment in programs that can reduce energy burden for residents and communities, increase participation in eligible programs, and expand awareness of available resources and assistance. These solutions include offering home energy retrofits, improving the energy performance and overall quality of affordable housing, and increasing energy awareness among and engagement with residents and communities. The challenges that disadvantaged communities face are complex and, in some cases, broader than can be addressed through the Statewide LMI Portfolio alone. The Program Administrators continue to coordinate with State, local, and community-based organizations to identify opportunities for improving the impact of the Portfolio among disadvantaged communities.

1.2 Policy and Regulatory Landscape

The Statewide LMI Portfolio proposed herein will contribute to the advancement of the goals laid out in various New York State energy and climate policy matters including New Efficiency: New York ("NE: NY"), the Clean Energy Fund, and the Climate Act.

²⁶ Chapter 106 of the Laws of 2019. The Climate Act is available at https://legislation.nysenate.gov/pdf/bills/2019/S6599.

The Affordability Policy,²⁷ which seeks to address energy affordability for low-income households, provides direct bill relief in the form of utility bill discounts for low-income customers, totaling approximately \$250 million annually. The Affordability Policy will work in tandem with the suite of clean energy programs discussed in this Implementation Plan to improve energy affordability for low-income New Yorkers.

The NYSERDA-administered CEF, instituted in 2016, seeks to improve energy affordability and access to clean energy for LMI households. In compliance with the 2020 NE: NY Order, all CEF investments in LMI households are incorporated into this Implementation Plan to provide a holistic view of all energy efficiency, building electrification, and renewable energy initiatives serving LMI households.

The NE: NY whitepaper ("NE: NY Whitepaper"), filed by DPS and NYSERDA in April 2018,²⁸ outlines a plan for substantially increasing the adoption of energy efficiency initiatives across all sectors of New York State's economy. The NE: NY Whitepaper concludes that increasing the adoption of energy efficiency initiatives in the LMI customer market segment will provide multiple benefits not only in the form of energy and emissions reductions, but also through the delivery of more sustainable impacts for households and building owners as part of a comprehensive approach to addressing energy affordability. Given the size of the LMI market segment and the unique barriers faced by LMI households and building owners, the NE: NY Whitepaper outlines a number of policy, programmatic, and funding considerations for increasing adoption of these initiatives.²⁹ The PSC adopted many elements of this proposal into its Accelerated Efficiency Order, issued in December 2018.³⁰

Signed into law in July 2019, the Climate Act outlines an ambitious climate and equity agenda for New York State that includes requirements for investing resources to benefit disadvantaged communities, requirements for the PSC to create programs to benefit LMI and disadvantaged communities, and requirements for mechanisms to track the adoption of clean energy solutions in the LMI customer market segment.³¹ New York has

²⁷ Case 14-M-0565, *Proceeding on Motion of the Commission to Examine Programs to Address Energy Affordability for Low Income Utility Customers* ("Affordability Policy Proceeding"), Order Adopting Low Income Program Modification and Directing Utility Filings, (issued May 20, 2016). In the Affordability Policy Proceeding, the Public Service Commission developed a regulatory policy framework for addressing the energy affordability needs of low-income customers and established an energy burden target of 6% for all low-income customers.

²⁸ NE: NY Proceeding, New Efficiency: New York report (filed April 26, 2018).

²⁹ The NE: NY Whitepaper includes several recommendations for improving the adoption of energy efficiency in the LMI market segment, including the development of a comprehensive and effective approach to energy efficiency for LMI residents, and the allocation of at least 20% of any new energy efficiency funds to the LMI market segment.

³⁰ NE: NY Proceeding, Order Adopting Accelerated Energy Efficiency Targets (issued December 13, 2018) ("Accelerated Efficiency Order").

³¹ Chapter 106 of the Laws of 2019. The Climate Act is available at https://legislation.nysenate.gov/pdf/bills/2019/S6599.

made significant progress in implementing the Climate Act, including the publication of the Draft Scoping Plan, which serves as an initial framework for how the State will reduce greenhouse gas emissions and achieve net-zero emissions, increase renewable energy usage, and ensure climate justice. The Program Administrators will monitor developments and incorporate requirements related to the Climate Act, including directing clean energy program spending and benefits to disadvantaged communities in accordance with the finalized DAC criteria, once available, and the recommendations in the forthcoming Final Scoping Plan, as part of the implementation of the Statewide LMI Portfolio.

In addition to the energy and environmental policies that shape this Portfolio, New York State also has an ambitious agenda to advance the affordability and sustainability of housing across the state. In 2022, Governor Hochul announced the Two Million Homes Action Plan, a plan to achieve Two Million Climate-Friendly Homes – 1 million electrified, 1 million electrification-ready, and a minimum of 800,000 serving LMI households – by 2030.³² In furtherance of this goal and advancing energy and housing affordability, New York's FY2023 Executive Budget adopted Governor Hochul's proposed \$25 billion 5-year plan for NYS HCR to create or preserve 100,000 units of affordable housing, including a new \$250 Million building electrification fund. In addition, in 2017, the City of New York advanced the Housing New York 2.0 plan, with goals to build or preserve 300,000 homes.³³ Further, in 2021, New York City passed a landmark law to phase out combustion of fossil fuels in new construction by 2027.³⁴ Affordable housing agencies have embraced a leadership role in developing and preserving affordable housing that is also highly efficient and electrified, which in turn can provide important co-benefits such as improved health outcomes and comfort of tenants and reduced operating costs for building owners.

2. Statewide LMI Portfolio

The Implementation Plan (both this version and the 2020 Plan) establishes the statewide portfolio of energy efficiency programs for LMI customers that allows the Program Administrators to address energy affordability in a holistic, coordinated manner. This portfolio approach also: (1) improves the experience of and ultimate impact for LMI customers seeking to access clean energy services; (2) reduces administrative costs; and (3) provides more consistent and streamlined participation for service providers.

https://www.governor.ny.gov/news/governor-hochul-announces-plan-achieve-2-million-climate-friendly-homes-2030

³³ https://www1.nyc.gov/assets/hpd/downloads/pdfs/about/housing-new-york-2-0.pdf.

³⁴ https://www1.nyc.gov/office-of-the-mayor/news/852-21/mayor-de-blasio-signs-landmark-bill-bancombustion-fossil-fuels-new-buildings

The Statewide LMI Portfolio aligns LMI investments that NYSERDA is making through the CEF and investments that the Utilities will make under the 2020 NE: NY Order and the Accelerated Efficiency Order. Through 2025, the Program Administrators are committing approximately \$999 million³⁵ in clean energy investments through the Statewide LMI Portfolio. Beyond the Portfolio, NYSERDA and the Utilities are advancing initiatives that benefit disadvantaged communities through the CEF and the Utility System Energy Efficiency Plans ("SEEP"), including initiatives that contribute to the reduction of fossilfuel combustion in facilities located in EJ areas or disadvantaged communities, workforce training and development focusing on priority populations, and improving access to solar for LMI or otherwise disadvantaged communities and affordable housing.³⁶

2.1 Statewide LMI Portfolio and Program Administration

The Program Administrators will continue to leverage their respective strengths in the ongoing development and implementation of the Statewide LMI Portfolio. The blending of the statewide reach and market development components of NYSERDA's CEF with existing Utility resource acquisition and customer relationship expertise, as well as increased LMI funding, enables the Portfolio to better address the barriers and challenges to expanding the reach of energy efficiency initiatives across the LMI customer market segment holistically. Section 4 of this Plan, Statewide LMI Portfolio Initiatives, provides more detail about the working relationship among the Program Administrators.

2.2 Statewide LMI Portfolio Objectives

The Accelerated Efficiency Order provides a list of broad and wide-reaching objectives for the Statewide LMI Portfolio.³⁷ In developing the Plan, the Program Administrators used the guidance provided by the Accelerated Efficiency Order to establish clear objectives for the Portfolio, which can be effectively measured and assessed by the Program Administrators, the Commission, and other stakeholders, including through the tracking of Performance Metrics, which are described below. Specifically, the Portfolio establishes the following key objectives:

- Achieve savings goals within budget;
- Increase the number of customers served annually;

 $^{^{35}}$ \$639.4 million in funding from the CEF and \$359.3 million in Utility funding.

³⁶ Through the CEF, NYSERDA has invested \$108 million to provide access to workforce training and development opportunities, with a focus on priority populations including residents of LMI communities and underrepresented populations including women and people of color, and disconnected youth. In June 2020, NYSERDA filed the 2020-2025 Operating Plan for NY-Sun, which outlines \$200 million of investments to increase access to solar for LMI households, disadvantaged and EJ communities, and affordable housing. In April 2022, the Commission approved the 10 Gigawatt Framework for Distributed Solar, which includes investments in rooftop and community solar for low-income and disadvantaged communities. Beyond workforce development and LMI programs, the utilities and NYSERDA administer programs that provide incentives to improve energy efficiency and reduce fossil fuel combustion in commercial, industrial, and institutional buildings.

³⁷ NE: NY Proceeding, Accelerated Efficiency Order, p. 53.

- Encourage customer adoption of comprehensive efficiency projects;
- Encourage new affordable housing to adopt more energy efficient profiles;
- Increase LMI customer and affordable housing owner awareness of the Portfolio's energy efficiency programs and offerings;
- Achieve high customer satisfaction;
- Improve energy affordability for LMI customers; and
- Increase administrative efficiencies.

2.3 Implementation Plan Development and Maintenance

In many cases, the implementation of the Portfolio requires consideration of the alignment of initiatives and investments that the Program Administrators already have in place, such as implementation contracts. The 2020 NE: NY Order directed the Program Administrators to implement new initiatives as soon as possible but acknowledged that it takes time to do so.³⁸ As such, the 2020 Implementation Plan described a transition period in which existing initiatives continued and/or were transitioned, alignment between existing initiatives and investments would take place, and new or modified initiatives would be developed to launch beginning in 2021. The 2020 Plan differentiated these transitional milestones using the following framing:

- Current Status outlined what initiatives were being offered in each sector in 2020³⁹
- Transitional Phase outlined the transitional elements that would be developed for each initiative and identified the remaining decisions and directions to be developed prior to full implementation
- Full Implementation outlined the launch of modified or new initiatives. It is important to note that this is not the final state and as these initiatives evolve over time they will continue to be re-evaluated for improvements.

Since the July filing of the 2020 Implementation Plan, the Program Administrators have made significant progress from the 2020 Current Status to the Transitional Phase and Full Implementation. Accordingly, for this Implementation Plan, "Current Status" has been replaced by "Status Prior to new LMI Portfolio Statewide Offering."

This Implementation Plan reflects that progress to date in 2022. It outlines the ongoing transition from what is offered today to a modified and new set of initiatives. The Program Administrators have continued to develop and plan the implementation for

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³⁸ NE: NY Proceeding, 2020 NE: NY Order, p. 101.

³⁹ The Plan replaces the term "Current Status" with the term "Status Prior to new Statewide LMI Portfolio Offering."

each sector in the Statewide LMI Portfolio, as is described in the <u>Statewide LMI Portfolio</u> <u>Initiatives Section</u>.

In accordance with the 2020 NE: NY Order, the Implementation Plan is jointly updated and filed when substantive modifications to the Portfolio are made based on Portfolio performance, input from stakeholders, and discussion amongst the LMI JMC. Additionally, annually, the Program Administrators file a Statewide LMI Program Annual Report detailing the Portfolio's performance through the previous calendar year, any substantive findings, and planned areas for future improvement.

2.3.1 Coordination Points

In the 2020 Plan, the Program Administrators identified several complex coordination and administration elements that needed to be addressed after that filing to fully achieve the Plan's objectives, such as administrative efficiencies and reaching more LMI households. The Program Administrators filed a Statewide Low- to Moderate-Income Joint Management Committee Coordination Plan ("Coordination Plan") on November 13, 2020, which detailed progress on and plans for addressing these topics; the Program Administrators provided additional updates on the topics in the 2020 and 2021 Annual Reports. This list of topics includes the following: (1) data sharing between the Utilities and NYSERDA; (2) issues related to evaluation, measurement, and verification ("EM&V"); (3) implementation contractor ("Implementation Contractor") procurement; (4) marketing; and (5) statewide application. A summary of the status of each these points is provided below.

Data Sharing Between the Program Administrators

The Coordination Plan noted that an important component of achieving the goals and objectives described in the Implementation Plan is the efficient sharing of data between the Utilities and NYSERDA. As noted in the 2020 Annual Report, such sharing must, however, balance the improved customer experience and streamlined administration of programs, with the need for diligence in rules, processes, and systems that protect customer privacy and security consistent with Commission and Program Administrator policies, laws, and regulations. The Program Administrators developed the following approach:

- Identify the data sharing needs for the Portfolio to streamline customer access to all eligible programs and minimize administrative friction;
- Develop a comprehensive understanding of the existing data sharing framework in place;

⁴⁰ NE: NY Proceeding, "Statewide Low- to Moderate-Income Joint Management Committee Coordination Plan" (Filed November 13, 2020). NE: NY Proceeding, 2020 Annual Report (filed April 1, 2021), pp. 6-8; 2021 Annual Report (filed April 1, 2022), pp., 12-16.

- Determine whether any gaps exist between data needs for the Portfolio and the existing data sharing framework; and
- Identify and implement solutions to address any gaps that are identified.

The Program Administrators have made significant progress regarding data sharing, including the following in AMEEP and EmPower NY:

AMEEP

- NYSERDA and the Utilities co-developed and now administer a lead intake form for AMEEP. This provides a uniform intake experience for customers statewide and efficiently channels customers to the appropriate utility service territory and associated Implementation Contractor.
- NYSERDA updated terms in its Flexible Technical Assistance ("FlexTech") program for customer consent authorizing NYSERDA to share FlexTech study information with the Utilities.
- Utilities aligned on and incorporated terms in the program application for customer consent authorizing the Utilities to share relevant application information with NYSERDA for coordination of technical assistance.⁴¹
- The Utilities are coordinating projects in overlapping service territories, which
 has required new and/or amended agreements and/or processes among the
 utilities and Implementation Contractors to enable the new customer experience
 and implement data sharing protocols to protect customer information, as well
 as updated program materials. The utilities are actively working to refine these
 efforts.

EmPower NY

- For EmPower NY, there is enhanced bidirectional data sharing in place. The
 Utilities provide customer referrals to NYSERDA on a periodic basis, which
 Program Administrators described in detail in Empower NY Referral Process
 filings submitted by each of the Utilities on October 25, 2021.⁴² NYSERDA shares
 individual and aggregate referral status information with each Utility via an
 interactive dashboard.
- The Program Administrators developed and executed agreements to allow for centralized program delivery and additional utility funding through EmPower to serve more customers and improve coordination for the benefit of customers and service providers.

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⁴¹ Usage data is not included in the application and is therefore not shared as part of this process.

⁴² CEF Proceeding.

• The Program Administrators approved revised attestation language for EmPower NY in February 2022 to enable ongoing sharing of customer data and a single access point to the program.

The Program Administrators continue to coordinate to expand the existing consent language across programs, which customers sign to participate, to enable ongoing sharing of customer data so that a customer would only need to provide their information once to gain access to a range of programs for which they are eligible. In 2022, the Program Administrators will develop a method for sharing AMEEP program data as well as portfolio level data amongst themselves to track program and portfolio performance and identify areas for improvement. As the Portfolio evolves, the Program Administrators will continue to assess data sharing needs, including identifying any additional high-impact data-sharing use cases to prioritize in 2022 and beyond.

Evaluation, Measurement, & Verification ("EM&V) EM&V is addressed in detail in Section 8.

Implementation Contractor Models and Procurement

The Program Administrators recognize the central function of Implementation Contractors in the Portfolio, noting that a more integrated set of initiatives between the Utilities and NYSERDA provides the potential to assess the role of Implementation Contractors to achieve economies of scale and reduce overall administrative costs within the Statewide LMI Portfolio.⁴³ The Coordination Plan identified and discussed a range of possible topics and solutions, including contracting timelines, Implementation Contractor functions, cost issues, and streamlining of different Implementation Contractor models among Program Administrators.

In developing the new statewide LMI multifamily program, the Program Administrators focused on the approach to procuring and contracting with Implementation Contractors. The Program Administrators assessed alternative Implementation Contractor⁴⁴ structures, and then selected and implemented a structure that enabled the expeditious and effective launch and implementation of the new Statewide program, currently using two Implementation Contractors for AMEEP, one covering Con Edison, Central Hudson, Orange & Rockland and National Grid's KEDLI and KEDNY service territories, and one covering NFGDC, NYSEG, RG&E, and National Grid's NMPC service territory.

For 1-4 Family Homes programs, a single Implementation Contractor model is used to deliver the LMI 1-4 Family Homes residential programs Statewide. NYSERDA administers the programs for the vast majority of the state, including municipal electric territories,

⁴³ NE: NY Proceeding and CEF Proceeding, Statewide Low- to Moderate-Income Joint Management Committee Coordination Plan (filed November 13, 2020).

⁴⁴ See, NE: NY Proceeding, Statewide Low- to Moderate-Income Portfolio 2021 Annual Report ("2021 Annual Report") (filed April 1, 2022), p. 15.

where supplemental energy efficiency incentive funding is provided through the RGGI Annual Operating Plan⁴⁵, with implementation support provided by a third-party Implementation Contractor. In areas of the state where electric service is not provided by one of the Utilities, close coordination is occurring between the relevant electric providers (*i.e.*, on Long Island, and between NYSERDA and National Grid for the Home Energy Affordability Team ("HEAT") Program).

In 2022 the Program Administrators will, in consultation with Staff, continue to identify opportunities for achieving further cost efficiencies and improvements in Implementation Contractor structures.

Marketing

The Program Administrators developed and executed agreements to allow for centralized development and implementation of the NY Energy Advisor website and a statewide marketing campaign. Additional marketing details are provided in <u>Section 5</u>.

Development and Use of Single Applications Across Program Administrators

In the Coordination Plan, the Program Administrators identified the importance of assessing the program application process for participants. Feedback from customers, market actors, and other stakeholders confirmed the need to simplify and streamline the application process. The Program Administrators identified solutions to achieve these goals.

NYSERDA consulted with the LMI JMC on the design of a single statewide electronic application for the EmPower NY and AHP programs. The application portal was launched in 2021 and is working to expand access to information on these programs for customers in National Grid's KEDLI service territory. Similarly, the Program Administrators developed and implemented a single statewide application and intake form for AMEEP. Links to both program pages can be found on the NY Energy Advisor website, ⁴⁶ and the AMEEP application can be found on the Statewide AMEEP documents page.⁴⁷

2.4 Portfolio Planning and Calibration

The development and calibration of the Statewide LMI Portfolio is informed through various inputs, including program performance and market insight from stakeholders, and is overseen by the LMI JMC and LMI Executive Council. Stakeholder engagement is a critical element to the success of the Statewide LMI Portfolio, and the Program

⁴⁵ RGGI Meeting and Planning Documents website https://www.nyserda.ny.gov/Researchers-and-Policymakers/Regional-Greenhouse-Gas-Initiative/Useful-Documents

⁴⁶ https://energyadvisor.ny.gov/

⁴⁷ https://www.nyserda.ny.gov/All-Programs/Low-to-moderate-Income-Programs/LMI-Stakeholder-Resources-New-Efficiency-New-York/NYS-Affordable-Multifamily-Energy-Efficiency-Program

Administrators use multiple avenues for engaging with stakeholders to receive feedback on current programs and identify opportunities for future initiatives.

The Program Administrators note the significant impact that the COVID-19 pandemic has had on LMI communities and on the execution of clean energy programs across the state, including on material availability, cost increases, and workforce impacts. The Program Administrators will continue to work with stakeholders, external administrators of energy efficiency programs, and communities to adapt initiatives in light of the COVID-19 pandemic and the resulting economic conditions.

2.4.1 LMI Joint Management Committee

As described in the Statewide Low- to Moderate-Income Joint Management Committee Manual,⁴⁸ the LMI JMC provides a forum for the Program Administrators to jointly develop and coordinate new market offerings and assess and refine ongoing programmatic activity, in accordance with the Implementation Plan. The LMI JMC consists of representatives from each of the Utilities and NYSERDA, including a lead representative from each organization who serves as the point of contact for Committee-related communications and administrative matters. The DPS Staff provides an oversight and consultative role for the JMC.

2.4.2 LMI Executive Council

On September 9, 2021, in the Order Approving Clean Energy Fund Modifications ("CEF Modifications Order"), the Commission ordered the formation of an Executive Level Council to provide oversight and guidance to the LMI JMC.⁴⁹ The Program Administrators' JMC Manual Version 2, filed in December 2021, describes the purpose, membership, and core functions of the Executive Council, including communications with the LMI JMC.

In December 2021, the LMI JMC briefed the Executive Council on the status of Statewide LMI Portfolio milestones to guide priorities and workflow through 2022. Going forward into 2022 and beyond, the Committee will continue to engage with the Executive Council to accelerate the development of LMI Portfolio offerings.

2.4.3 Stakeholder Engagement

The effectiveness of the Portfolio largely depends on how well the initiatives and services function for customers and communities. Residents, communities, service providers, and other stakeholders provide beneficial insight that may otherwise not be readily and universally apparent. In combination with EM&V activities and Performance Metrics

⁴⁸ NE: NY Proceeding, "Statewide Low- to Moderate-Income Joint Management Committee Manual, Version 2" (Filed December 22, 2021).

⁴⁹ NE: NY Proceeding, Order Approving Clean Energy Fund Modifications (Issued and Effective September 9, 2021), pp. 61-62, and Ordering Clause No. 9, p. 95. On December 22, 2021, the Program Administrators filed the updated Statewide Low- to Moderate-Income Joint Management Committee Manual Version 2, which describes the purpose, membership, and core functions of the Executive Council, including communications with the Committee.

results, stakeholder engagement and feedback contribute to providing the Committee with a holistic view of the Statewide LMI Portfolio. This wider view allows for improvement efforts and adjustments in alignment with market conditions. To inform the continued development and evolution of the Statewide LMI Portfolio and the ongoing operations of programs, the Program Administrators seek regular opportunities to engage with market partners and communities.

The Committee conducts two stakeholder engagement input sessions per year to review initiatives and services and Portfolio performance and discuss input with stakeholders comprised of staff from Community Based Organizations ("CBOs"), government, utilities, and other market partners. In addition, the Program Administrators conduct focused discussions with stakeholders through one-on-one and small group discussions to obtain input on proposed initiatives and services.

Details on each of the two annual stakeholder input engagement sessions, including meeting logistics, presentations, and a summary document reflecting key issues discussed, questions and answers received, and responses given during each stakeholder input engagement session are posted on the DPS Document and Matter Management website ("DMM").⁵⁰ Further, materials are posted on the LMI Stakeholder Resources webpage, which was specifically designed to give stakeholders easy access to documents related to stakeholder engagement.⁵¹

In addition, the Program Administrators engage stakeholders as appropriate in additional forums to get input. For example, as described further in Section 4.2.1, the Program Administrators engaged with stakeholders during the development of AMEEP in order to inform the design of the new program. As another example, in 2021, NYSERDA brought to completion a co-design process, jointly undertaken with over 30 stakeholder organizations, to develop the Regional Clean Energy Hubs initiative and the \$53M Regional Energy Hubs RFP, as described further in Section 5.2.

At LMI JMC meetings and applicable working groups, the Program Administrators regularly share, discuss, and integrate stakeholder input. Further, the Program Administrators are regularly engaging with stakeholders through the administration of current programs; feedback received during such engagement is raised and discussed at the LMI JMC and/or appropriate working groups. Annual Reports provide additional detail on stakeholder engagement each year.⁵²

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⁵⁰ NE: NY Proceeding, Statewide Low- to Moderate-Income Portfolio Stakeholder Webinar July 14, 2021 - Summary Report, (filed August 3, 2021); Statewide Low- to Moderate-Income Portfolio Stakeholder Webinar, November 17, 2021 - Summary Report, (filed December 10, 2021).

⁵¹ See, https://www.nyserda.ny.gov/All-Programs/Low-to-moderate-Income-Programs/LMI-Stakeholder-Resources-New-Efficiency-New-York.

⁵² See, *e.g.*, 2021 Annual Report, Section 4, pp. 16-18.

2.5 Statewide LMI Portfolio Performance Metrics

The Program Administrators will continue to measure the success of the Statewide LMI Portfolio in meeting the objectives identified above by tracking the Performance Metrics shown in Table 1. Performance Metrics are foundational to assessing the Statewide LMI Portfolio's success and identifying areas for improvement. The Performance Metrics provide a roadmap for future Portfolio evaluation, guiding the investigation of and informing the basis for measuring performance. The objectives and corresponding Performance Metrics will be reviewed on a periodic basis and updated as appropriate to reflect Portfolio maturity. The list of objectives in Table 1 are not the only key objectives of this Portfolio but have been identified as those that should be tracked to report performance. The Program Administrators track and report the Performance Metrics related to savings and spending in Table 1 quarterly for the Clean Energy Dashboard ("CED"), as well as each Annual Report. Appendix D describes how the remaining Performance Metrics will be assessed and reported. The Program Administrators will be looking to set targets for and report on these remaining metrics (i.e., related to customer experience and efficiencies), in the future as well. The Program Administrators will survey stakeholders and customers periodically to gauge their awareness of and satisfaction with the program offerings over time. The third column in this table, "Status," addresses the current ability of the Program Administrators to assess each of the Performance Metrics. Challenging market conditions that began in 2020 have continued through 2022. These have led to material and labor shortages, delays and longer construction timelines, as well as increased material costs and labor rates.

Table 1: Portfolio Objectives and Performance Metrics

Portfolio Objective	Performance Metrics	Status		
	Portfolio Savings & Spend			
	MWh annual and lifetime savings achievements	Currently provided in CED and Annual Report		
	MMBtu annual and lifetime savings achievements	Currently provided in CED and Annual Report		
Achieve Portfolio-wide savings goals within budget	CO2e Emission Reduction (metric tons) annual and lifetime savings achievements	Currently provided in CED and Annual Report		
	Budget spent	Currently provided in CED and Annual Report		
Portfolio Participation				
Increase the number of customers served annually	Number of participants ⁵³ served	Currently provided in Annual Report		

⁵³ For the purposes of this Plan, starting in 2022, "participant" is defined as dwelling units served in statewide programs. Dwelling units that receive both electric and gas measures are counted in both the

Portfolio Objective	Performance Metrics	Status
Adopt comprehensive ⁵⁴	Energy savings acquired from	To be provided in the 2022
efficiency projects	comprehensive projects	Annual Report
Po	ortfolio Customer Experience	
Increase customer Portfolio awareness Achieve high customer	Percentage of LMI customers that learn about Portfolio initiatives from various sources (e.g., NY Energy Advisor website, Utility or NYSERDA outreach materials, contractors, etc.) Participation satisfaction	Program Administrators, including EM&V teams, are currently discussing approaches for assessing, including survey instruments, to be coordinated with
satisfaction	rating	evaluation contractors
Advance energy affordability for	Participant bill savings,	Currently provided in
LMI customers	annual and lifetime	Annual Report
	Portfolio Efficiencies	
Increase efficiencies of Portfolio investments ⁵⁵	Cost associated with all Portfolio investments	To be provided in the 2022 Annual Report comparing year over year spend and unit costs (\$/MMBtu)

2.6 Eligibility Thresholds

For the purposes of establishing categorical eligibility and creating consistency in the market where possible, the income thresholds used to determine eligibility for LMI initiatives are aligned with other state and federal energy and housing programs. The definition of "low-income" is a household income that is at or below 60% of the State Median Income and is consistent with income eligibility criteria used by the Home Energy Assistance Program ("HEAP")⁵⁶ and the Weatherization Assistance Program ("WAP"). This establishes the receipt of HEAP or WAP as an income eligibility proxy rather than relying

electric and gas category by utility but will only be counted once at the state level. Prior to 2022, the definition of participants depended on the initiative type, and may have referred to households, multifamily buildings, tenants, and/or accounts.

⁵⁴ NE: NY Proceeding, Accelerated Efficiency Order, p. 36. The Accelerated Efficiency Order states "Comprehensive programs that combine lower cost-effective measures with higher cost-effective measures can optimize the total reduction that can be attained through a single customer transaction. Further, comprehensive building efficiency improvements often result in the installation of measures with longer effective useful lives (EUL), resulting in savings that persist well into the future."

⁵⁵ Such efficiencies are described in <u>Section 3</u>, and may apply to categories including, but not limited to, administration, implementation, marketing, incentives, and EM&V.

⁵⁶ Federal Low-Income HEAP regulations establish the maximum income level allowed at 150% of the poverty level, except where 60% of SMI is higher. New York State has adopted the higher of 60% SMI or 150% Federal Poverty Level as the maximum income level allowed. Information on HEAP to be found at: https://otda.ny.gov/programs/heap/.

on determinations from NYSERDA and the Utilities. The definition of "moderate-income" is a household income that is below 80% of the Area Median Income or State Median Income, whichever is greater, and aligns with federal Housing and Urban Development ("HUD") definitions for eligibility for affordable housing.

For the purpose of establishing categorical eligibility for affordable multifamily initiatives, affordable housing is defined as buildings that have regulatory agreements with a housing agency or in which at least 25% of the units are, or are expected to be, occupied by households earning not more than 80% of Area Median Income or State Median Income, whichever is greater. ⁵⁷

Where categorical eligibility cannot be established for programs, income screening may be conducted on an individual customer or building basis. Consistent with the 2020 NE: NY Order, the Utilities and NYSERDA will continue to develop necessary processes and agreements for NYSERDA to conduct income verification for participation in LMI initiatives, where necessary. In addition to applying traditional income eligibility criteria, the Program Administrators will continue to incorporate alternate methods of determining eligibility for programs, such as geographic eligibility, census-tract, demographic or other means of categorical eligibility. This is expected to become increasingly important as the state seeks to invest more in disadvantaged communities per the Climate Act, and as Program Administrators seek more community-based and streamlined ways of delivering services.

With the launch of the combined program application, the EmPower program was able to add geographic eligibility as a method of determining program eligibility. Working with a subset of data used to inform draft DAC criteria development, the program identified census tracts where 50% or more of the residents were at or below 150% of the federal poverty line. All the residents of these areas are categorically eligible for EmPower and are not required to provide income documentation. Since the launch of this feature 17% of the applications to the program have come from these communities. Adding this method of determining program eligibility helps to reduce administrative costs, increase the number of customers served and improves customers' experience accessing the program. The Program Administrators will look to adopt the final DAC criteria, upon its approval, as a means to increase participation by residents of disadvantaged communities.

⁵⁷ Buildings that do not pay into the System Benefits Charge are not eligible for services through the Statewide LMI Portfolio of initiatives. However, NYSERDA administers Regional Greenhouse Gas Initiative (RGGI) funding, which can be used in some cases to fund projects located in municipal utility territory. The Program Administrators will coordinate with PSEG-Long Island to coordinate where necessary to ensure consistency in program offerings for income-eligible customers across the state.

⁵⁸ Examples include customer participation in housing or social service programs.

3. Budgets, Targets, and Other Impacts

The Statewide LMI Portfolio consolidates the initiatives and associated budgets and targets of the CEF and the Utilities. The 2020 NE: NY Order and Accelerated Efficiency Order combined approved a minimum of approximately \$308.3 million in statewide Utility incremental budgets for LMI gas and electric programs through 2025. As defined below, an additional \$51 million in other utility funding will be allocated to this Portfolio. Through the CEF, NYSERDA is incorporating \$639.4 million into the Portfolio to fund LMI clean energy initiatives over the same time period.^{59,60} Combined, the Statewide LMI Portfolio will invest approximately \$999 million in LMI clean energy initiatives, with total annual savings targets of 15,084,522 MMBtu and 667,437 MWh.61 Additionally, in their Long Island territory (KEDLI), National Grid is investing additional funding approved in their most recent rate case⁶² to support the HEAT program. Furthermore, NFGDC's preexisting LMI funding and performance targets that were approved in its February 2019 Energy Efficiency Transition Implementation Plan/System Energy Efficiency Plan ("ETIP/SEEP") filing to support its Low Income Usage Reduction Program ("LIURP") are also incorporated into the present Statewide LMI Portfolio, and will continue to be included in Statewide LMI Portfolio in the future. Likewise, NYSEG RG&E plans to invest additional funds from market rate budgets in LMI supplemental programs as part of their Customer Awareness, Outreach, and Engagement initiatives for the years 2022-2025, to balance out costs per savings across programs.⁶³ In an effort to maximize participation in AMEEP, Central Hudson is currently planning to exceed its cumulative gas LMI portfolio budget through a corresponding underspend of the cumulative authorized budgets for electric LMI, electric non-LMI, and/or gas non-LMI programs.⁶⁴ Initiatives funded through

The \$639.4 million in CEF funding builds on the \$255 million that was already committed in the LMI Chapter of the CEF in 2020, which outlined the investments that have been made to advance energy affordability and access to clean energy solutions through the CEF. With the filing of the 2020 Implementation Plan, NYSERDA closed out the LMI Chapter of the CEF and included all future investments in clean energy in the LMI market segment in this Implementation Plan.

⁶⁰ Some NYSERDA investments have longer project timelines than through 2025, such as incentives for affordable new construction. While all funding will be committed by 2025, it may require an additional 5 years for all funds to be expended. This dynamic is reflected in budget and target tables in this Plan.

⁶¹ Includes NYSERDA indirect annual savings.

⁶² Case 19-G-0310 et al – Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulation of KeySpan Gas East Corporation d/b/a National Grid for Gas Service, *Order Approving Joint Proposal, as Modified, and Imposing Additional Requirements (issued August 12, 2021)*, p. 164.

⁶³ See Appendix A Table 4.

⁶⁴ Central Hudson is currently planning to exceed the minimum cumulative gas LMI portfolio spending of \$2,124,356 established within the 2020 NE: NY Order by \$581,452. Utilizing the flexibility provided within the 2020 NE: NY Order, this expenditure will be addressed through a corresponding underspend in electric LMI, electric non-LMI, and/or gas non-LMI programs. Total expenditures across all portfolios are forecasted to meet the total authorized amount in the 2020 NE: NY Order.

the Portfolio include a combination of statewide initiatives, initiatives tailored to local needs, coordinated outreach and education, and market development⁶⁵ activities.

The budgets and targets presented below reflect revisions to projections from the 2020 Plan and prior 2022 Implementation Plan revision filings⁶⁶ based on updated information and analysis regarding the estimated costs and savings for the statewide LMI initiatives. For several Program Administrators in particular, the targets described in this Plan differ materially from those in the 2020 Implementation Plan and the 2020 NE: NY Order, with the result being a decrease in the projected level of targeted savings.

A key factor behind this difference is that the budgets and targets from the 2020 Implementation Plan, the Accelerated Efficiency Order (issued December 2018) and the 2020 NE: NY Order (issued January 2020) were based on historic data (which predated those documents). Due to an array of market challenges, including inflation, COVID-19 pandemic-related costs, increased material costs, labor shortages, increased borrowing costs, and global supply chain issues, the unit cost data from that time period varies compared to actual unit costs seen in 2021. These market challenges have contributed to project delays and new project shortfalls. Generally, the historic data that underpins the ordered budgets and targets contained more projects that were completed at lower costs, with less effort and in shorter time spans than is expected to be seen in the future from this Portfolio, which is comprised of programs that encourage deeper and more comprehensive projects.

The Program Administrators note a greater discrepancy between the 2020 NE: NY Order and 2022 Plan run rates for the 1-4 Family Programs as compared to multifamily programs. Accordingly, the impact on utility targets is most pronounced for those utilities whose budget allocation leans most toward the 1-4 Family Homes sector, as opposed to multifamily. Similarly, utility gas programs show a greater discrepancy in run rates in current performance and future projections as compared to the 2020 NE: NY Order and 2020 Plan.

Program Administrator detail is included prior to the Program Administrator-specific budget and target tables in <u>Appendix B</u>. In summary:

⁶⁵As part of the Portfolio, the Program Administrators fund activities intended to increase market uptake of energy efficiency solutions by providing technical assistance to building owners, builders, developers, and housing agencies, and conducting pilots and demonstrations to test and validate new technologies and approaches for delivering energy efficiency services in the LMI market segment.

⁶⁶ NE: NY Proceeding, Statewide Low- to Moderate-Income Portfolio Implementation Plan, Version 2 (filed April 29, 2022), First Update (filed May 31, 2022), Second Update (filed August 15, 2022)

Targets

- Projected achievement of electric Utility Program Administrator targets varies from overachievement, to alignment, to underachievement relative to 2020 NE: NY Order and 2020 Implementation Plan targets.
- Some utilities will meet or overachieve on ordered targets, though several gas
 Utility Program Administrators project to underachieve targets relative to the
 2020 NE: NY Order and 2020 Implementation Plan to a greater extent than
 electric.
- NYSERDA's funding is on a fuel neutral basis and aligns with the 2020 NE: NY
 Order and 2020 Implementation Plan budgets. NYSERDA projection regarding
 electric targets is aligned; NYSERDA projection regarding gas targets is aligned.

Budgets:

- Utilities plan to spend their total ordered electric and gas budgets through 2025 but may shift funds between commodities and years to optimize the ability to achieve targets.
- Some Program Administrators plan to allocate funds beyond the LMI funds authorized in the 2020 NE: NY Order, either from unspent funds from a prior year (within the NE: NY timeframe) from market rate energy efficiency programs, or from funding approved in Program Administrators' rate cases.

The Program Administrators acknowledge the challenge in providing highly accurate projections given that the initiatives going forward are generally different than what the Program Administrators have run in the past. This is exemplified by the Program Administrators' new multifamily statewide offering, AMEEP, launched in November 2021, and the planned launch of EmPower+ in spring 2023. Further, aggregate cost data that is available frequently reflects significant variance and unpredictability. The Program Administrators also note significant variance in costs at the project level due to a variety of factors from geographic availability of contractors, materials and labor costs, and existing condition of the home. Likewise, due to AMEEP recently launching and EmPower+ launching in the future, energy savings were forecasted conservatively due to uncertainty of program realization rates and may vary based on actual project performance.

The Program Administrators remain committed to achieving cost efficiencies to reduce overall costs. The Program Administrators are pursuing several initiatives in this effort, including:

- Aligning multifamily Implementation Contractor structures regionally, and continuing to explore potential efficiencies as the program scales to achieve lower costs;
- Improving the referrals, lead generation, and customer access for the 1-4 Family LMI Homes sector;
- Having a single application intake process for multifamily and 1-4 family programs, with a single lead intake form for multifamily to avoid administrative costs of passing information back and forth between Program Administrators;
- Pre- and post-project inspections have been streamlined to have a single inspection for all program purposes, avoiding the costs and inconvenience of numerous inspections;
- Efficiencies in program administration in areas of overlapping electric and gas utilities;
- Program Administrators working together on a single NY Energy Advisor site and a statewide marketing campaign;
- NYSEG and National Grid working together on a direct-to-customer lighting program; and
- Combining and streamlining the EmPower and AHP programs into one new program, EmPower+, that will serve the 1-4 Family LMI sector beginning in spring 2023 with the aim of achieving administrative cost efficiencies.

Similarly, the Program Administrators have worked to forecast as accurately as possible and will continue to assess actual program cost data to advance the accuracy of budget and target projections. The need to identify and achieve cost efficiencies and to advance the accuracy of future projections further underscores the importance of the Program Administrators' ongoing work together under the LMI JMC structure.

Based on Portfolio performance at the time of the Interim Review, the LMI JMC and Program Administrators individually may seek to address any discrepancies with the budgets and targets.

3.1 Portfolio-Level Budgets

This section addresses the Program Administrators' go-forward plans to fund the Statewide LMI Portfolio through 2025. The information provided in this section may differ from the budgets listed in the 2020 NE: NY Order and the 2020 Implementation Plan and may change in future years due to the flexibility of budgets over years and between gas and electric initiatives, if applicable. For some Program Administrators, the budgets approved in the 2020 NE: NY Order and Accelerated Efficiency Order provide for the full recovery of all Portfolio costs, whereas for other Program Administrators, funding sources beyond those approved in the 2020 NE: NY Order are needed to fund the

Portfolio costs and are being brought in from other areas.⁶⁷ The full breakdown of budget elements by market segment and Program Administrator is included in <u>Appendix B</u>.

⁶⁷ NE: NY Proceeding, 2020 NE: NY Order, pp. 65-69.

Table 2: Portfolio Electric Budgets (\$000)^{68 69}

Program Administrator	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Total
Central Hudson	-	-	123	173	213	329						838
Con Edison	6,373	3,737	6,328	7,704	9,932	9,308						43,382
National Grid (NMPC)	-	-	1,500	1,996	2,275	3,130						8,900
NYSEG	880	498	1,020	2,312	2,416	3,202						10,328
Orange & Rockland	-	-	751	702	708	161						2,322
RG&E	504	383	627	1,001	1,109	1,418						5,043
NYSERDA ⁷⁰	63,959	87,334	98,791	63,508	82,781	95,948	78,804	47,946	19,315	1,100		639,486
Total	71,716	91,952	109,140	77,396	99,433	113,496	78,804	47,946	19,315	1,100	-	710,299

Table 3: Portfolio Natural Gas Budgets (\$000)

Program Administrator	2020 Spend	2021	2022	2023	2024	2025	Total
Central Hudson	-	-	374	604	735	993	2,706
Con Edison	5,001	14,780	24,963	26,848	35,459	27,247	134,299
National Fuel Gas	4,563	3,936	11,847	6,743	6,619	6,732	40,441
Distribution Company							
National Grid (KEDLI)	1,559	1,410	4,340	6,607	7,546	8,640	30,101
National Grid (KEDNY)	-	=	4,589	5,546	6,475	7,786	24,396
	-	-	2,058	4,656	6,029	8,023	20,767
National Grid (NMPC)							
NYSEG	78	786	1,597	5,204	6,147	8,091	21,902
Orange & Rockland	-	-	1,564	1,500	416	233	3,712
RG&E	52	525	1,142	2,259	2,764	3,484	10,227
Total	11,254	21,437	52,475	59,966	72,190	71,229	288,551

⁶⁸ Expenditures in years 2026-2030 reflect projected NYSERDA investments that have longer project timelines, such as incentives for affordable new construction, as noted above. While all funding will be committed by 2025, it may require an additional 5 years for all funds to be expended.

⁶⁹ Budgets and targets presented in this Implementation Plan for 2020 and 2021 represent actual budget spend in those years.

⁷⁰ NYSERDA budgets are based on electric collections, and are presented in the electric budget table, however the funds are administered on a fuel neutral basis.

3.2 Portfolio-Level Targets⁷¹

This section outlines the Utilities' and NYSERDA's Portfolio savings targets from 2020-2025. The savings targets reflect planned achievements based on available budgets. Timelines of projected targets may slightly shift year to year within the broader goal of meeting the total MWh and MMBtu targets by 2025. The full breakdown of targets by market segment and Program Administrator is included in Appendix B.

Table 4: Portfolio Electric Targets (Annual MWh)

Program Administrator	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Total
Central Hudson	-	-	559	394	424	499						1,877
Con Edison	38,544	13,363	16,006	13,121	13,682	12,218						106,935
National Grid (NMPC)	-	-	5,347	3,251	1,507	2,129						12,234
New York State Electric & Gas	1,266	268	2,917	4,285	2,694	3,682						15,112
Orange & Rockland	-	-	2,017	627	637	344						3,625
Rochester Gas & Electric	846	287	1,606	1,684	1,409	1,827						7,658
NYSERDA (direct)	7,694	19,334	16,044	8,943	22,761	38,814	32,789	23,357	14,475	3,857	1,929	189,997
NYSERDA (indirect) ⁷²	7,166	2,594	5,069	10,790	11,145	14,803	27,206	37,904	41,515	54,101	117,707	330,000
Total	55,516	35,846	49,564	43,094	54,260	74,316	59,995	61,261	55,990	57,958	119,636	667,437

⁷¹ Achievement throughout this Implementation Plan includes VGS impacts, *i.e.*, realization rate applied for evaluated savings and a placeholder adjustment factor applied for unevaluated programs.

 $^{^{72}}$ NYSERDA indirect savings reported as plans throughout this Implementation Plan.

Table 5: Portfolio Natural Gas Targets (Annual MMBtu)

Program Administrator	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Total
Central Hudson	-	-	820	2,654	3,332	4,568						11,374
Con Edison	94,722	202,544	240,922	230,807	276,892	177,542						1,223,429
National Fuel Gas	16,334	15,465	41,348	23,181	23,127	23,640						143,095
National Grid (KEDLI)	3,763	9,427	23,569	35,920	41,316	47,727						161,722
National Grid (KEDNY)	-	-	24,720	43,926	51,968	62,022						182,636
National Grid (NMPC)	-	-	6,459	26,577	33,820	46,371						113,227
New York State Electric & Gas	796	2,644	4,398	50,898	52,894	61,577						173,208
Orange & Rockland	-	-	7,547	8,966	5,742	5,221						27,476
Rochester Gas & Electric	855	1,569	6,204	22,144	24,642	30,274						85,688
NYSERDA (direct) ⁷³	171,866	246,979	286,568	274,448	416,521	812,116	562,455	456,788	73,250	20,357	10,179	3,331,527
NYSERDA (indirect)	53,329	14,392	94,032	265,098	334,189	456,980	628,796	791,117	732,599	902,923	2,427,485	6,700,940
Total	341,666	493,020	736,587	984,619	1,264,444	1,728,039	1,191,251	1,247,905	805,849	923,280	2,437,664	12,154,322

⁷³ While NYSERDA does not administer natural gas budgets, NYSERDA does project MMBtu savings due to the fuel neutral nature of the CEF funds. MMBtu savings from fuels other than natural gas are presented below in Table 5.1.

Table 5.1: Portfolio Other Fuels Targets (Annual MMBtu)

Program Administrator	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Total
NYSERDA (direct)	55,641	81,281	84,886	84,568	116,416	244,864	187,620	167,409	2,750	1,071	536	1,027,042
NYSERDA (indirect)	3,817	758	20,101	76,238	93,511	152,740	194,088	234,668	220,037	262,619	644,581	1,903,158
Total	59,458	82,039	104,987	160,806	209,927	397,604	381,708	402,077	222,787	263,690	645,117	2,930,200

3.3 Portfolio-Level Impacts

Table 6 provides a collective view on Portfolio-level metrics that are quantified and reported quarterly and can be viewed on the Clean Energy Dashboard. The Portfolio-level performance metrics are planned achievements based on annual budgets and targets. A breakdown of performance metrics by sector is included in Appendix C.

Table 6: Portfolio-Level Performance Metrics

Performance Metric	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Total
Direct Annual	343,978	559,909	727,441	804,089	1,046,671	1,515,923	750,075	624,197	76,000	21,428	10,715	6,480,424
MMBtu Savings ⁷⁴												
Direct Lifetime	6,914,138	10,770,760	12,932,485	11,974,711	15,975,643	23,513,413	12,279,625	10,247,235	1,900,000	535,700	267,875	107,311,584
MMBtu Savings												
Indirect Annual	57,146	15,150	114,133	341,336	427,700	609,720	822,884	1,025,785	952,636	1,165,542	3,072,066	8,604,098
MMBtu Savings												
Indirect Lifetime	1,396,650	378,750	1,886,985	5,295,030	6,590,490	9,320,790	12,518,250	16,369,765	14,464,530	17,658,120	54,765,980	140,645,340
MMBtu Savings												
Direct Annual	48,350	33,252	44,495	32,304	43,115	59,513	32,789	23,357	14,475	3,857	1,929	337,437
MWh Savings												
Direct Lifetime	507,377	459,752	606,465	439,364	679,024	979,191	640,335	493,675	361,875	96,425	48,225	5,311,709
MWh Savings												
Indirect Annual	7,166	2,594	5,069	10,790	11,145	14,803	27,206	37,904	41,515	54,101	117,707	330,000
MWh Savings												
Indirect Lifetime	177,038	64,850	107,085	192,900	198,225	253,095	439,140	594,752	653,775	842,565	1,745,705	5,269,130
MWh Savings												
Direct CO2e	42,304	45,566	63,334	60,558	79,689	117,023	63,179	51,026	11,383	3,108	1,554	538,724
Emission												
Reduction												
(metric tons)												
Annual												

 $^{^{74}}$ MMBtu savings include NYSERDA savings from fuels other than electric and gas.

Performance Metric	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Total
Direct CO2e Emission Reduction (metric tons)	611,747	788,271	1,027,049	827,626	1,210,488	1,820,524	1,083,631	886,636	284,585	77,706	38,861	8,657,124
Indirect CO2e Emission Reduction (metric tons) Annual	6,763	2,131	9,342	26,348	31,752	45,436	64,495	82,125	79,506	98,687	245,910	692,495
Indirect CO2e Emission Reduction (metric tons) Lifetime	166,096	53,277	165,527	355,462	436,526	659,123	1,005,559	1,377,478	1,373,547	1,763,945	4,559,936	11,916,476
Annual participant bill savings ⁷⁵ (\$000)	2,356	3,924	6,420	6,869	8,804	11,298	4,778	3,880	623	173	87	49,212
Lifetime participant bill savings (\$000)	44,671	72,428	107,298	100,399	132,204	174,933	80,148	65,421	15,573	4,328	2,164	799,567
Leveraged funds ⁷⁶ (\$000)	42,711	76,044	46,196	296,250	415,822	436,248	417,497	176,822	10,929			1,918,518
Annual Participants ^{77,78}	523,224	96,931	354,808	296,940	284,486	245,705	17,221	7,659	5,175	1,429	714	1,834,292

⁷⁵ Participant bill savings are calculated following guidelines described in Case 16-01008 MTPA Phase 1 Report July 17, 2017.

⁷⁶ Defined as the direct private investment from incentives and service initiatives which includes co-funding of pilots or projects at specific locations, including hard costs for efficiency/renewable/distributed generation, hard costs for metering and monitoring equipment like EMS/BMS, and soft costs of systems that occur during the time frame of program administrator engagement on the pilot or project.

⁷⁷ "Annual Participants" includes Customer Awareness, Outreach, and Engagement initiatives (see, <u>Section 5</u>, below) that tend to reach a large number of customers. A detailed breakout by sector is included in <u>Appendix C</u>.

 $^{^{78}}$ The definition of "participant" was standardized to "dwelling unit" for statewide programs starting in 2022.

3.4 Budgets for Affordable Multifamily Buildings

The Accelerated Efficiency Order directed that at a minimum, 40% of the collective incremental LMI funding be committed to serving affordable multifamily buildings. ⁷⁹ As outlined in this plan, 68% of incremental energy efficiency budgets and 53% of total Portfolio budgets have been allocated to the affordable multifamily market segment. Budget flexibility across the Portfolio will need to be maintained to cumulatively meet the 40% threshold. Appendix A outlines the investments by sector and the percentage of incremental funding and of all funding that is planned to be spent on affordable multifamily initiatives.

4. Statewide LMI Portfolio Initiatives

The following sections provide an overview of the initiatives and investments that the Program Administrators are undertaking to address the barriers to adoption and increase access to energy efficiency solutions across the LMI market segment. The Portfolio includes initiatives serving existing 1-4 family homes, existing affordable multifamily buildings, affordable new construction, beneficial electrification, as well as funding for customer engagement and pilots with new approaches for adoption of energy efficiency for LMI residents and communities. The initiatives reflect changes implemented in achieving the Portfolio to date and highlight the work that will continue to be undertaken to transition from the prior set of programs and investments to the more cohesive Portfolio that is jointly administered by the Program Administrators. Beyond the transition of the initiatives, the Portfolio is expected to evolve over time, as outlined in Section 2.4: Portfolio Planning and Calibration.

4.1 Existing 1-4 Family Homes

The Program Administrators have worked to improve overall energy affordability for LMI households living in 1-4 family homes by providing no-cost or subsidized energy efficiency upgrades and energy education for both renters and homeowners through the EmPower NY⁸⁰ program. Low-income households are eligible for no-cost energy efficiency improvements through the EmPower NY program, while moderate-income households are eligible for incentives of 50% of the cost of the energy efficiency upgrades through AHP. Those customers may also be eligible for no-cost energy audits and for low-cost financing of energy upgrades through the Green Jobs – Green New York ("GJGNY") Program.

⁷⁹ NE: NY Proceeding, Accelerated Efficiency Order, p. 55.

⁸⁰ For the purposes of this Implementation Plan, the Program Administrators continue to use "EmPower NY" as the brand for the Existing 1-4 Family Homes sector.

Leveraging the existing statewide 1-4 Family Homes framework of EmPower NY and AHP to reach more households and achieve economies of scale, EmPower+ has been designed and will be launched in spring 2023. The redesign of this initiative will:

- Align with HEAT and PSEG LI programs
- Improve identification and referral of customers by utilities
- Support more streamlined deployment models including pre-approved packages of measures
- Improve customer referral and enrollment by utilities
- Expand on direct install for moderate-income households
- Align measures, documentation, and processes
- Include geographic eligibility for disadvantaged communities
- Support community campaigns and other approaches to aggregate demand for energy upgrades and reduce per-home costs

Utilities will continue to prioritize the enrollment of low-income households with high energy consumption into the EmPower NY program to help reduce energy use and deliver long-term energy burden relief. The Utilities are working closely with NYSERDA to improve referrals of customers to the EmPower NY program to increase customer participation and lower acquisition costs.

Since late 2020, existing building projects have faced challenging market conditions due to supply chain delays, labor shortages, increased materials costs and increased borrowing costs. These market conditions have contributed to construction delays and pauses on new project development. Program Administrators are working with stakeholders to better understand these market challenges and may consider adjustments to programs to facilitate project development and meet program objectives.

Objectives:

- Reduce energy consumption and provide more sustainable energy burden relief for income-eligible households through in-home energy education and energy efficiency improvements
- Identify and address energy-related health and safety issues in homes
- Expand the impact and reach of energy efficiency investments through program coordination
- Engage and educate LMI customers on available programs and improve access to the benefits of clean energy
- Improve the referral of low-income households with high energy consumption to reduce energy burden

 Commence shifting toward decarbonization, in alignment with the Climate Act, through a stepwise approach to electrification and phase-out out of fossil fuel use for home heating and hot water, starting with those use cases where electrification will provide both decarbonization and affordability benefits for the customer

Overview

Status Prior to
new Statewide
LMI Portfolio
Offering

In 2020, 2021, and 2022 up to the time of the filing of the Implementation Plan, the 1-4 family homes LMI customer market segment has been served by several programs including EmPower NY and AHP administered by NYSERDA statewide, the LIURP in NFGDC territory, and the HEAT program in the National Grid-Long Island territory. National Grid administered the EmPower Replacement Program in their Long Island territory, marketed under the brand name "Home Energy Affordability Team" (HEAT) program. It was designed to closely align with the EmPower NY program. The HEAT program provides gas energy efficiency and health, safety and resiliency measures to customers. The EmPower NY, LIURP, and HEAT programs have been available to low-income households and provided no-cost energy services, while the AHP program has been available to both low and moderate-income households, providing a 50% cost share towards the cost of an energy efficiency work scope. Utilities have been referring and continue to refer customers to EmPower NY.

The EmPower NY program uses funding from multiple sources including CEF, NE: NY, RGGI and HEAP to increase the reach of the program across the state. In addition, the program closely coordinates with WAP and HEAP.

Transitional Phase

Through 2020, 2021, and 2022 up to the time of the filing of this Implementation Plan, the Program Administrators continued to offer the programs as they are currently designed, while programs and funding are transitioned into a cohesive statewide approach. The Program Administrators are working to combine LMI programs to: provide a more streamlined process for service providers and customers; develop enhancements to the incentive structure to include incorporation of a graduated incentive schedule; develop a no-cost direct install component available to moderate-income customers; align eligible measures; and streamline and improve the application and intake process, which includes strengthening the identification and referral of eligible customers from the Utilities to NYSERDA.

In July of 2021 the EmPower NY and AHP programs launched a streamlined online and paper application for both programs that includes geographic eligibility for certain low-income areas. In the Fall of 2021 agreements between NYSERDA and the Utilities were executed that enable the Utilities to provide supplemental funding to the EmPower program to increase participation in each service territory.

	During the program design activities, the Program Administrators have engaged with service providers, customers, and other stakeholders to obtain feedback and insights to inform the final program design. NYSERDA and the Utilities worked closely to develop a framework for EmPower+ which will lead to a unified program that is streamlined to create easier access for LMI customers, one access point for contractors seeking
	incentives, and a robust design to lead the state towards beneficial electrification. This will create cost efficiencies through reduced administrative costs and encourage increased customer participation.
	In March of 2022, the statewide program instituted many of the planned efficiencies the JMC has worked on including unified measures, forms, and modeling tools across income tiers, alignment with the TRM, and expanding direct install to moderate income customers.
Full Implementation	The merged, streamlined, EmPower+ program workflow will launch in 2023. This program will be administered statewide in close coordination with PSEG-LI and the WAP, HEAP, and local housing programs to optimize the deployment of clean energy investments in the program.
	In 2022, the HEAT program will expand program eligibility to moderate income customers and test aspects of the EmPower+ incentive structure design to provide learning and refine the program design prior to statewide launch.

Target Market and Delivery Method

Market	Low-income homeowners and renters in 1-4 family homes who meet
Segment	income eligibility thresholds.
Addressed	In instances where a tenant in a multifamily building is referred for program services, the tenant will be eligible for electrical reduction measures. The building owner will also be encouraged to conduct a more comprehensive upgrade of the building.
Delivery	EmPower NY is delivered through a network of approximately 200
Method	weatherization and home performance contractors across New York State, except for Long Island, where HEAT is delivered through several home performance contractor partners.
	Low-income households may be directly referred into EmPower NY or HEAT by Utilities, community-based organizations, human service providers, and local government.

Where possible, low-income projects will be coordinated with WAP by participating contractors that are also WAP subgrantees.

Outreach for LMI households will be conducted through statewide and local marketing efforts, the NY Energy Advisor website's marketing campaign, community-based partners, and participating contractors.

Eligible Measures and Incentive Structure

Eligible Comprehensive home audit Measures In-home energy education Building shell improvements (i.e., insulation, blower-door assisted air sealing, weather stripping) Electric load reduction (e.g., refrigerator, freezer, high-efficiency lighting) Heating, Ventilation, and Air Conditioning ("HVAC") and mechanical system repairs, tune-ups and replacements. Domestic Hot Water ("DHW") improvements and replacements Controls Minor health and safety improvements (i.e., gas leak repairs, smoke and carbon monoxide ("CO") detectors, combustion safety, venting) Low-flow water devices The HEAT program does not provide any electric saving measures as it is a gas only program but coordinates closely with PSEG-LI's LMI program. Incentive Low-income (statewide other than for HEAT program): 100% subsidy for all Structure measures up to project cap as outlined in the program guidelines.⁸¹ The HEAT program also pays 100% subsidy for all measures and aims to review projects and utilize other funding resources once they exceed project cap. Moderate-income: currently customers statewide, other than the HEAT program, are eligible for a 50% subsidy up to program caps on eligible measures/work scopes. KEDLI HEAT offers all moderate-income customers a no cost home energy assessment and direct install measures with a 75% subsidy for customers within 61-70% AMI, a 50% subsidy for customers within 71-80% AMI, and a 25% subsidy for customers within 81-99% AMI. The Program Administrators, in consultation with stakeholders, customers, and contractors, are considering a more graduated incentives scale for the EmPower+ program, which will launch in 2023. LMI customers may be eligible for incentives according to a graduated incentive scale, based on

household income, with modifications to project cost caps. For all incomeeligible customers, direct install services will be provided. The HEAT program

⁸¹ https://www.nyserda.ny.gov/All-Programs/EmPower-New-York

will align incentives with the statewide program and will test aspects of it during the 2022 program year prior to full statewide launch in 2023.

Stakeholder / Market Engagement

Key Partners	 NYS Office of Temporary and Disability Assistance – coordinate outreach and funding to HEAP recipients to reduce utility bills
	NYS HCR - Combined project with WAP subgrantees and coordinate
	beneficial electrification strategies for 1-4 family homes.
	Departments of Social Services- perform outreach and application intake
	Community-based organizations- Coordinate outreach, disaster response, program design
	NYS Office for the Aging

Additional Considerations

In addition to CEF and NE: NY funds, NYSERDA also incorporates funding
from RGGI and HEAP as well as federal funding, where available, to increase
the number of households served.
NFGDC will bring in additional LMI funding from their SEEP portfolio to
support this program.
National Grid (KEDLI) will bring in additional funding approved in their most
recent rate case for the HEAT program.
No-cost energy audits and low-interest financing are made available under
the provisions of the Green Jobs – Green NY Act of 2009. The Program
Administrators will coordinate the availability of these services with program
incentives to provide customers with the ability to enhance energy upgrades
available through the program.

Implementation Milestones (2022-2024)

Implementation milestones will be further developed as the Program Administrators evaluate the current set of initiatives. The Program Administrators note that any continuing effects of the COVID-19 pandemic may modify implementation milestones.

Year	Milestone	Status
2022	 Improve coordination with other programs (e.g., HEAP and WAP) Enhance effectiveness of the EmPower referral process and improve customer conversion rate by conforming to consistent data file submission to NYSERDA Identify ways to enhance or add measures to the existing EmPower 	In Progress
	offerings, particularly for gas savings • Contract for new program workflow software and implementation support	
	 Increase awareness, community outreach and education through coordination with the new Clean Energy Hubs and existing utility outreach programs 	
	 Work with NYS Clean Heat JMC to streamline customer access to both NYS Clean Heat and EmPower with appropriate affordability protections Outline and seek input on a plan to phase out support for fossil fuel fired equipped in GJGNY audits, financing, and LMI programs to align with Climate Act while preserving energy affordability. 	Planning
2023	Launch the combined, streamlined LMI program- EmPower+	In Progress
	 Increase DAC access to Empower+ by incorporating DAC geographic eligibility and coordinating with regional Clean Energy Hubs on targeted outreach to DACs Integrate Empower+ and NYS Clean Heat offerings to increase access to incentives for electrification 	Planning
	Pursue opportunities to obtain and incorporate funding from the Inflation Reduction Act into LMI programs	
2024	 Evaluate program performance and optimize design to serve more homes and encourage more contractors to offer efficiency and electrification services through the program Increase contractor base and expand offerings to meet increased climate goals 	Planning

Budgets, Targets and Performance Metrics

The annual budgets, targets and performance metrics for this initiative are included in Appendices B and C.

4.2 Existing Affordable Multifamily Buildings

Affordable multifamily housing is a key component of the Statewide LMI Portfolio, as a large proportion of LMI customers in New York State live in multifamily buildings. Improving the performance and sustainability of affordable multifamily housing will benefit disadvantaged communities, as required by the Climate Act. As directed in the

2020 NE: NY Order, at least 40% of the portfolio's incremental energy efficiency funds must be directed to affordable multifamily initiatives through 2025.

The Program Administrators are administering a set of initiatives to increase the performance of existing affordable multifamily buildings through comprehensive energy efficiency upgrades and technical support to address the challenges and barriers of adoption for this sector. These initiatives were designed through the collaboration of the Utilities, NYSERDA, and affordable housing agencies. These initiatives were strategically developed to leverage existing programs. For example, FlexTech was leveraged to provide technical assistance for the newly launched AMEEP, and expanded to enable deeper decarbonization measures through, for example, NYSERDA providing additional funds and technical assistance for NYC HPD and NYS HCR preservation programs.

All the initiatives in this section are administered in a complementary approach to ensure multifamily buildings are able to receive services in a holistic manner. In order to promote comprehensive upgrades, it is essential that the Program Administrators design and implement programs to enable buildings to undertake multiple upgrades and understand the initiatives offered to them. This requires close coordination of the Program Administrators to implement.

On November 3, 2021, the Program Administrators launched AMEEP, a new, coordinated statewide program to meet the State's and the Program Administrators' objectives for energy efficiency in this important sector. AMEEP includes a technical assistance offering, which helps building owners inform capital planning to achieve greater energy efficiency savings. AMEEP's design reflects key Portfolio objectives of helping affordable multifamily buildings reduce energy use and costs, increasing operating efficiency and tenant comfort, and contributing to the State's carbon reduction and climate goals.

In addition, the Program Administrators worked closely with affordable housing agencies. The Program Administrators consulted with housing agencies and their developers on the design of AMEEP. In addition, NYSERDA announced creation of multi-year partnerships with NYS HCR and NYC HPD to integrate decarbonization technical assistance support and incentives directly into the housing finance process, while supporting the development of more aggressive sustainability guidelines, new energy savings underwriting guidelines, and training among housing agency staff to position the agencies as leaders in making efficient, electrified housing their standard practice.

Since late 2020, existing building projects have faced challenging market conditions due to supply chain delays, labor shortages, increased materials costs and increased borrowing costs. These market conditions have contributed to construction delays and pauses on new project development. Program Administrators are working with stakeholders to better understand these market challenges and may consider adjustments to programs to facilitate project development and meet program objectives.

Objectives:

- Address cost barriers experienced by owners of affordable multifamily properties
- Integrate energy efficiency into the regular investment and financing cycle of affordable multifamily properties
- Improve awareness and access to energy efficient solutions for tenants and building owners of affordable housing
- Provide a simplified experience for owners of affordable multifamily properties that are navigating multiple ratepayer-supported programs
- Deliver benefits to tenants, while improving the overall efficiency of the building
- Address the barrier of split incentives between owner and tenant
- Build capacity among housing agencies to incorporate energy efficiency into affordable multifamily buildings
- Direct at least 40% of the Statewide LMI Portfolio's incremental energy efficiency funds to affordable multifamily initiatives

4.2.1 Statewide Existing Affordable Multifamily Programs

Affordable Multifamily Energy Efficiency Program

The new Statewide existing affordable multifamily program, AMEEP, provides a consistent framework across the State such that all existing affordable multifamily building owners, developers, and their representatives have access to financial incentives to plan and make energy efficiency upgrades to their buildings. A key focus of AMEEP is to encourage comprehensive upgrades to achieve deeper savings, while taking advantage of opportunities to reduce administrative costs.

Multi-Year Affordable Housing Partnerships

As a complement to AMEEP, Program Administrators have formed multi-year partnerships with state and local affordable housing agencies and public housing authorities, who in turn continue to demonstrate vital leadership on climate action and building decarbonization, in both existing and new construction building stock. NYSERDA and NYS HCR recently announced a transformative partnership called the Clean Energy Initiative ("CEI"), providing CEF funding to support state-of-the-art all-electric affordable

homes and streamline access to technical assistance and electrification funding by integrating these resources directly into NYS HCR's affordable housing finance applications. Ultimately, NYSERDA will provide \$100M in funding through 2025 to support NYS HCR to advance efficient all-electric new construction and retrofits in affordable housing ahead of proposed code changes and mandates.

In a similar effort, NYSERDA partnered with NYC HPD to create the Retrofit Electrification Pilot, with NYSERDA providing funding to support space heating and cooling and/or domestic hot water electrification for existing multifamily building rehabilitation projects in NYC HPD's preservation programs and bring the comfort and health benefits of electrification to LMI residents. These partnerships demonstrate scalable models for integrating efficiency and electrification technical assistance and incentives into affordable housing refinancing by giving owners direct access to decarbonization resources and funding as part of their refinancing process.

In 2021, NYSERDA also joined forces with the NYCHA -- the largest public housing authority in the country and the largest landlord in New York City — and NYPA to create the Clean Heat for All Challenge, a heating and cooling industry competition to create a packaged, cold climate heat pump that can be mounted in a window opening and provide comfortable efficient heating and cooling to NYCHA residents on a room-by-room basis. The partnership leverages RGGI funding and technical assistance from NYSERDA, NYPA's procurement vehicle and project management, and NYCHA's portfolio size and funding commitment to invest \$250M in a proven solution to advance their electrification agenda.

Overview

Status Prior to new Statewide LMI Portfolio Offering

Until the launch of AMEEP in November 2021, existing affordable multifamily buildings were served through utility administered initiatives and NYSERDA administered initiatives. Through the CEF, NYSERDA administered the Multifamily Performance Program ("MPP"), RetrofitNY and Real Time Energy Manager ("RTEM") throughout the State including territories that have a utility administered multifamily program. MPP offered an energy audit and incentives to assist in the development of a scope of work that would achieve at least 15% projected energy savings. Buildings received a construction completion incentive that was calculated per dwelling unit, and performance incentives were available to projects achieving a minimum of 15% of energy savings. Through MPP, NYSERDA also supported the adoption of Integrated Physical Needs Assessments ("IPNAs") by supporting housing agencies in their development of IPNAs.

Con Edison and National Grid (KEDLI, KEDNY, and NMPC) each offered financial incentives for approved equipment upgrades by measure for affordable multifamily buildings. 82 NYSEG/RG&E introduced an LMI multifamily program mid-year 2020, which was an extension of its existing market rate program, offering free energy audits and low-to nocost equipment upgrades. In this program, buildings received one incentive at the time of construction completion and the incentive was calculated per equipment installed. Each of these utility programs differed slightly in measures offered and incentive structure. For example, Con Edison implemented an affordable multifamily program for several years, which offered increased incentives over market rate incentives for eligible affordable multifamily buildings. National Grid and NYSEG/RG&E also offered measure-specific incentives for energy efficiency upgrades in multifamily buildings. In addition, the aforementioned utilities offered a Direct Install Program that offered multifamily buildings no-cost installation of easy to install measures in tenant units and common areas.

There were strengths and weaknesses to this pre-AMEEP state of the affordable multifamily programs across the State. The utilities that had existing affordable multifamily programs had successful relationships within their market and achieved increasing energy savings year over year. There are significant regional differences, however, in the population of affordable multifamily buildings across the State, which was reflected in these prior utilities' programs. This also informed the development of AMEEP, which is a statewide framework with some specific elements reflecting regional differences.

Transitional Phase

For this sector, a significant portion of the Transitional Phase has been the transition from the prior Program Administrator administered existing multifamily building programs to AMEEP. The Program Administrators began developing the framework for the new statewide multifamily program in Fall 2020 and focused on the development of AMEEP in 2021, culminating in its market launch in November 2021. The Program Administrators collaborated extensively on the design of AMEEP. This collaboration included reviewing and assessing their separate, existing multifamily LMI programs, and ultimately adopting numerous best practices and optimal elements from these. The Program Administrators similarly assessed possible changes and improvements, opportunities for achieving cost efficiencies, and incorporating key innovations into program design.

As the various design possibilities were suggested and considered within Program Administrator discussions, the Program Administrators iteratively solicited input from stakeholders. In 2021, the Program Administrators: held two public stakeholder engagement sessions at

 $^{^{82}}$ For National Grid, incentives were part of a market-rate program that was also available to LMI customers.

which the LMI multifamily program was a key focus; met several times with the SAG, a stakeholder group convened by DPS Staff as part of the PM&IP regarding the Statewide LMI portfolio⁸³; and engaged in one-onone interviews with additional stakeholders, including housing agencies, building owners, and energy efficiency providers with significant expertise and experience in multifamily energy efficiency programs in New York State. The Program Administrators carefully reviewed the feedback, key themes of which include that the new program should:

- Be easy to sell and understand;
- Provide incentive clarity;
- Have a design that allows for broad participation and flexibility in work scopes;
- Drive quality, deep work scopes; and
- Eliminate possible barriers for customers

The time, effort, and insight offered by stakeholders was instrumental in developing and iteratively refining AMEEP's design (as described below and detailed in the AMEEP Program Manual⁸⁴).

In developing AMEEP, program design focused on the following key design elements:

- Measures offered
- Incentive structure
 - Emphasis on creation of an incentive structure that encourages buildings to complete comprehensive upgrades, with flexibility for prescriptive approaches
- Application process
- Contractor network
- Lead intake and sharing
- Opportunities to leverage external program administrators, as discussed in <u>Section 6</u> below, and the investments that are already being conducted for affordable multifamily buildings
- Utility coordination in overlapping territories
- Structure of Direct Install
- Increasing the adoption of IPNAs
- Coordination of the incentive-based program with technical assistance offerings. Require building owners to complete energy studies and move forward with making equipment upgrades

In launching AMEEP, the Utilities and NYSERDA coordinated on a statewide transition of programs in the market. As MPP wound down,

⁸³ See, NE: NY Proceeding, Commencement of Energy Efficiency & Building Electrification Performance Management & Improvement Process, (filed May 29, 2020.) See also, 2020 NE: NY Order, pp. 60-61.

⁸⁴ *See*, https://cdnc-dcxprod2-sitecore.azureedge.net/-/media/files/coned/documents/save-energy-money/rebates-incentives-for-multifamily-customers/nys-affordable-building/program-

manual.pdf?rev=9a1cad1ee94d44e0b08b48fa75c8ee0c&hash=95B37418F77EEF76652B8886CF5F74B7

NYSERDA and the Utilities organized a strategic overlap period of three months in which both MPP and AMEEP were operational, allowing the market sufficient time to submit final MPP project applications and adjust to the new AMEEP structure.

In addition, the Program Administrators have worked with affordable housing agencies and stakeholders to ensure AMEEP was accessible to regulated affordable properties.

NYSERDA partnered with the housing agencies to develop an approach to directly integrate efficiency program incentives as part of the financing process. This resulted in the launch of the NYSERDA- HPD Retrofit Electrification Pilot to provide owners receiving NYC HPD financing with additional funding to undertake deep efficiency and electrification upgrades as part of their rehabilitation projects. NYSERDA is providing \$24M to support space heating and cooling and/or domestic hot water electrification for existing multifamily building rehabilitation projects in NYC HPD's preservation programs to bring the comfort and health benefits of electrification to roughly 1,200 LMI households.

NYSERDA and NYS HCR announced a partnership called the Clean Energy Initiative ("CEI"), creating a one-stop process for developers to access technical assistance, direct integration of efficiency and electrification funding, and affordable financing, serving both affordable housing new construction and preservation. Since 2021, NYSERDA has allocated \$32.5M to HCR to disperse to affordable housing finance applicants that implement efficient, all-electric new construction and retrofits.

In 2021, NYSERDA announced a partnership with the NYCHA – the largest public housing authority in the country and the largest landlord in New York City – and the NYPA to create the Clean Heat for All Challenge, a heating and cooling industry competition to create a packaged, cold climate heat pump that can be mounted in a window opening and provide comfortable efficient heating and cooling to NYCHA residents on a room-by-room basis. The partnership leverages RGGI funding and technical assistance from NYSERDA, NYPA's procurement vehicle and project management, and NYCHA's portfolio size and funding commitment to invest \$250M in a proven solution to advance their electrification agenda.

In 2021, Con Edison also leveraged and fostered several working relationships to support energy efficiency in multifamily buildings. Con Edison has been meeting regularly with NYCHA to provide additional support for their multifamily projects, and coordinated on work with the New York City Mayor's Office of Climate and Environmental Justice and NYC HPD. Con Edison launched a Local Law 97 limited offering in partnership with NYC HPD and New York City Accelerator, aimed at helping certain buildings comply with the law by implementing the

necessary prescriptive energy conservation measures. As part of this offering, Con Edison and NYC HPD developed a prescriptive measure package for NYC HPD asset managed buildings greater than 25,000 square feet in size. Incentives for these packages are provided on a dollar per dwelling unit basis based on building vintage. NYC Accelerator is conducting outreach on behalf of this offering. They have developed materials to engage building owners that highlight energy savings and available incentives. Further, Con Edison began partnering with NYC HPD and NYSERDA on the Retrofit Electrification Pilot, helping to coordinate program incentives to fill funding gaps in these projects.

Full Implementation

To a significant degree, the launch of AMEEP into market reflects Full Implementation status for this sector. AMEEP is a single Statewide program that provides a streamlined customer experience throughout the State, with each Utility offering the same program structure. Leads and inquiries are directed to each utility through a common web intake portal, and all the Utilities use the same customer application. Additionally, the participating contractor network requirements and application are the same at each utility. Buildings that fall in overlapping utility service territories only need to submit one application, work with one utility Implementation Contractor as their main point of contact during the project process, and any inspections are performed by a single party. Streamlining administration of the program in this manner has the potential to create cost efficiencies.

In addition to coordination among Utilities, the Utilities are coordinating with NYSERDA on technical assistance for AMEEP participants. Customers have the ability to perform a whole-building energy retrofit through AMEEP's "Comprehensive Pathway." This pathway requires that the project work scope be guided by an energy audit, which can be completed through Utility coordination with NYSERDA's FlexTech program, as described in Section 4.2.2. Alternatively, customers may choose to perform single measure upgrades through AMEEP's "Non-Comprehensive Pathway." The AMEEP incentive structure is described in more detail in the Eligible Measures and Incentive Structure table, below.

While the launch of AMEEP into market reflects Full Implementation status for this sector to a large degree, the Program Administrators are continuing to enhance elements of the program. For example, AMEEP and NYS Clean Heat have been coordinating in an effort to enable complementary incentives between both programs. Further, the Program Administrators are continuing to refine the AMEEP offering based on operational experience and stakeholder feedback, and will continue to work with external agencies that serve affordable multifamily buildings and stakeholders.

To achieve full implementation with the housing agencies, NYSERDA will continue to expand its direct funding partnerships with state and local housing agencies to serve more units with efficiency and electrification

and build capacity among housing agencies and affordable housing development community to build or retrofit all-electric efficient buildings at low or no incremental cost; enhance underwriting practices to capture value of highly efficient, electrified buildings; to reach both new construction and preservation pipelines, and support development of sustainability guidelines that advance the affordability and sustainability goals of Governor Hochul's 5-year Affordable Housing Plan, and deliver on the State's climate goals by requiring high-performance all-electric retrofits by 2027.⁸⁵

Target Market and Delivery Method

Market	Affordable multifamily buildings, tenants living in affordable multifamily	
Segment	buildings, affordable multifamily building owners, housing agencies, service	
Addressed	providers, participating contractors, and other parties working with	
	affordable multifamily buildings and building owners.	
Delivery	The Utilities are the AMEEP Administrators, with NYSERDA providing energy	
Method	audits and market development elements. Energy audits are completed by	
	NYSERDA-approved energy providers in the FlexTech Consultant network	
	and Multifamily Building Solutions Network and are available statewide.	
	Two Implementation Contractors administer AMEEP, one for upstate	
	National Grid, NFGDC, and NYSEG and RG&E, and one for the other Utilities.	
	Eligible participating contractors complete installations of eligible measures.	
	Utilities coordinate in overlapping utility service territories, so that	
	customers work with only one implementation contractor in executing	
	projects. The Program Administrators continue to examine the current state	
	of implementation across the state to identify areas for improvement to	
	reduce administrative inefficiencies, increase enrollment, and promote	
	comprehensive upgrades. In addition, NYSERDA provides funding directly to	
	housing agencies (e.g., NYS HCR and NYC HPD) to serve affordable housing	
	developers as part of the financing process.	

Eligible Measures and Incentive Structure

Eligible	Measures include but are not limited to:
Measures	Lighting
	Building envelope
	HVAC
	Elevator modernization
	Variable frequency drive
	Blower fan
	Circulator pump
	Energy management systems

⁸⁵ https://hcr.ny.gov/sustainability-guidelines

Boiler

- Pipe insulation
- Water and space heating
- Steam traps
- Boiler clean and tune
- Light emitting diode ("LED") lighting measures
- Faucet aerator
- Showerhead

Incentive Structure

AMEEP is designed to maximize energy savings and lower costs to tenants and owners of affordable multifamily buildings by encouraging comprehensive building upgrades while providing project flexibility. AMEEP includes two program pathways: (1) a "Comprehensive Pathway," which encourages whole-building energy retrofits; and (2) a "Non-Comprehensive Pathway" for customers who are interested in smaller, measure-level upgrades.

Incentives for all Comprehensive Pathway projects are calculated using a "points" system, which allocates points to energy efficiency measures based on measure savings and policy objectives, and establishes points-achievement tiers that result in increased incentive rates. A minimum of 100 points needs to be met for a project to be classified as a Comprehensive project; a project is designated as Tier 1 – with the corresponding incentive level – if it achieves between 100 and 149 points. If a project reaches 150 or more points, it is categorized as a Tier 2 project and is eligible to receive a greater incentive. Comprehensive incentives are awarded on a dollar per dwelling unit basis. An energy audit is required as part of the Comprehensive Pathway to help identify the scope of work, and incentives are available to offset the cost of the audit through the FlexTech Program.

Customers opting for the Non-Comprehensive Pathway are able to perform measure-level energy efficiency upgrades. They may select to complete prescriptive and custom measures, and can participate in the in-unit direct install program, without undergoing an energy audit. Incentives in this pathway are awarded on a dollar per equipment or dollar per savings basis.

For affordable housing partnerships including Retrofit Electrification pilot with NYC HPD, and the Clean Energy Initiative with NYS HCR, NYSERDA is providing a per-dwelling unit incentive based on package of efficiency and/or electrification measures.

Stakeholder / Market Engagement

Key Partners	NYSERDA and Con Edison have worked with NYS HCR and NYC HPD to offer		
	complementary strategies to the market. This coordination will continue.		

Con Edison maintains ongoing monthly conversations with the NYC Mayor's Office of Climate and Environmental Justice (specifically, the NYC Accelerator staff) to coordinate on key energy efficiency topics and current program delivery methods.

Program Administrators will continue to work directly with housing agencies to incorporate funding into preservation projects to offset incremental costs associated with higher performance.

Con Edison is working with their local Public Housing Authorities (*i.e.*, New York City Housing Authority ("NYCHA"), Westchester County Housing Authority ("WCHA")) that are not covered under the System Benefit Charge ("SBC") to provide incentives for gas energy efficiency programs.

NYSERDA partnered with NYCHA and the NYPA to create the Clean Heat for All Challenge, a heating and cooling industry competition to create a packaged, cold climate heat pump that can be mounted in a window opening and provide comfortable efficient heating and cooling to NYCHA residents on a room-by-room basis. The partnership leverages RGGI funding and technical assistance from NYSERDA, NYPA's procurement vehicle and project management, and NYCHA's portfolio size and funding commitment to invest \$250M in a proven solution to advance their electrification agenda.

Additional stakeholder involvement occurred throughout 2020 and 2021, and continues to occur in 2022, as the Statewide Existing Affordable Multifamily framework is implemented. This stakeholder involvement takes place in biannual stakeholder sessions as well as targeted solicitation of feedback and input from stakeholders to guide continuing operation and calibration of AMEEP.

Implementation Milestones (2022-2024)

Implementation milestones will be further developed as the Program Administrators work towards Full Implementation of the new Statewide Existing Affordable Multifamily Program. The Program Administrators note that any continuing effects of the COVID-19 pandemic may modify implementation milestones.

Year	Milestone	Status
2022	Develop Program Administrator processes for statewide operations of AMEEP (e.g., document updates) and launch webinar series to engage Participating Contractors and Industry Partners by Q2	Complete
	Identify additional areas to streamline administration of program	In Progress

	 Coordinate AMEEP incentives with NYS Clean Heat and align release to market with NYS Clean Heat announcement cycles for program changes Along with NYCHA and NYPA, NYSERDA will select winning manufacturer(s) that responded to Clean Heat for All packaged window heat pump challenge RFP Provide technical assistance and staffing resources to assist with capacity-building at NYS HCR and NYC HPD 	
2023	 Organize stakeholder interviews on AMEEP design and operations based on the first full year of operation to get feedback to guide analysis and potential program changes, and adapt program eligibility to reflect final DAC criteria Review program objectives and operations to enable alignment with potential policy changes scheduled to take place in 2022 and 2023 (e.g., NE: NY Interim Review, Climate Act definition of providing benefits to DACs) Issue initial small purchase order for and install packaged window heat pumps in NYCHA properties as part of 'demonstration phase' of Clean Heat for All initiative 	Future
2024	 Study creation of measure packages for comprehensive retrofits by building typology based on data from AMEEP participants, and assess ability to offer packages as part of AMEEP Assess viability of packaged window heat pumps as an effective electrification approach/model for NYCHA housing and broader NY multifamily market Pending success of demonstration phase, initiate broader implementation phase of Clean Heat for All initiative and install additional packaged window heat pumps 	Future

Budgets, Targets and Performance Metrics

The annual budgets, targets and performance metrics for this initiative are included in Appendices B and C.

4.2.2 Technical Assistance for Affordable Multifamily Buildings

Increasing the performance of existing affordable multifamily buildings at scale requires support beyond direct incentives for building owners, as technical and information gaps can limit the ability for housing agencies, financiers, and other housing intermediaries from supporting energy efficiency upgrades. Technical support, in the form of engineering studies and IPNAs, can help building owners maximize available program incentives to inform capital planning and achieve greater energy savings. Housing

agencies often do not have in-house technical capacity or resources to drive increased energy performance of their portfolios, and access to performance data is key to advancing the underwriting of clean energy projects. This section highlights the various approaches to supporting the adoption of energy efficiency through the provision of technical support and resources to the affordable multifamily ecosystem.

Objectives:

- Conduct comprehensive energy audits for existing affordable and market rate multifamily housing utilizing vetted energy service providers
- Subsidize energy audit costs to incentivize market adoption of conducting such audits
- Develop report that covers: the relevant building information (*e.g.*, building's energy usage, annual energy costs by fuel type, rate tariff); evaluated measure findings, which includes but is not limited to a description of what was evaluated, analysis results, proposed conditions, and recommendations and reasons for recommendations; economic analysis of evaluated measures; and additional benefits, such as greenhouse gas reduction, Local Law compliance, and environmental benefits. The report is intended to inform decision makers on how to reduce energy costs and incorporate clean energy into their capital planning.
- Establish a scope of work that would qualify for the comprehensive pathway of AMEEP.
- Conduct assessment of electrification and electrification-ready opportunities.

Overview

Status Prior to new Statewide LMI Portfolio Offering	NYSERDA administered the FlexTech program which offers a cost share model for building owners to receive funding to conduct an energy study on their building. NYSERDA also offered energy studies and support to build capacity of housing agencies to perform IPNAs, as part of the MPP program. Utilities that offer multifamily programs do not have financial incentives for	
	technical assistance.	
Transitional	In the development of AMEEP, the Program Administrators assessed and	
Phase	sought feedback on the optimal approach and design elements for	
	technical assistance, with the focus on NYSERDA's existing offerings, such as FlexTech. Specific areas of design focus included:	
	 Providing buildings with a consistent, main point of contact for AMEEP when performing technical assistance and subsequently installing measures in the program 	
	 Leveraging NYSERDA-vetted energy service providers to conduct 	
	technical assistance to ensure quality of assessments	
	Partnering technical assistance with incentive program offerings; offer increased subsidies on technical assistance for Comprehensive.	
	offer increased subsidies on technical assistance for Comprehensive	

projects going through the utility administered affordable multifamily incentive programs

Con Edison, as part of its Rate Plan, 86 is required to offer technical assistance funding for affordable multifamily building owners. As part of AMEEP, Con Edison is working with the framework of FlexTech, which is leveraged for technical assistance statewide, to implement its Rate Plan requirements. As a transitional offering, while AMEEP was under development in 2021 and the coordination with FlexTech was not yet implemented, Con Edison implemented technical assistance for its customers in the form of gas facility surveys and full facility assessments. Through the gas facility survey, an audit was performed and a report was provided that evaluated gas opportunities. These included boilers, boiler clean & tune, EMS, pipe insulation, steam traps, and building envelope. Through the full facility assessments, a whole building facility audit was performed. A report was then provided that covered equipment details, occupancy, HVAC systems, air delivery systems, boiler systems, motors, pumps, ventilation systems, lighting, building management, and building envelope. The report also provided a list of suggested energy conservation measures (ECMs). Following these surveys and assessments, the customer was required to move forward with two of three free gas measures. This offering closed at the completion of 2021, as which point the launch of AMEEP enabled streamlined coordination of technical assistance for Con Edison customers via FlexTech.

Full Implementation

Funding for building energy audits that identify energy efficiency opportunities and develop an initial scope of work for Comprehensive projects are provided through NYSERDA's FlexTech program. NYSERDA manages payment for technical assistance energy audits. NYSERDA also oversees workforce development and the training of energy service providers through the FlexTech Consultant Network and the Multifamily Building Solutions Network.

AMEEP requires technical assistance in order to qualify for higher incentives available in the Comprehensive Pathway. Technical assistance helps building owners plan projects to achieve greater energy efficiency savings and simultaneously maximize program incentive opportunities. The audits completed should be ASHRAE Level I+ as defined by NYSERDA's FlexTech Program, or higher (e.g., ASHRAE Level II, IPNA).⁸⁷ Multifamily building owners and their representatives in need of a study can work with their utility point of contact, who will coordinate with NYSERDA to arrange

⁸⁶ Case No. 19-E-0065, *Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations of Consol. Edison Co. of New York, Inc. for Electric Serv., et al.,* Order Adopting Terms of Joint Proposal and Establishing Electric and Gas Rate Plan, (issued January 16, 2020). p. 77-78.

⁸⁷ See, https://cdnc-dcxprod2-sitecore.azureedge.net/-/media/files/coned/documents/save-energy-money/rebates-incentives-for-multifamily-customers/nys-affordable-building/program-

manual.pdf?rev=9a1cad1ee94d44e0b08b48fa75c8ee0c&hash=95B37418F77EEF76652B8886CF5F74B7

funding for the study. The owner and their representative will select a service provider from NYSERDA's FlexTech or Multifamily Building Solutions network of consultants to perform the audit, and to help in developing a project work scope. NYSERDA will provide a 50% subsidy for the study at completion of the audit, helping to ease the cost burden on the affordable buildings. Afterwards, the project will be executed under the utility-administered incentive program. When a Notice to Proceed has been issued for the building to begin construction under AMEEP, NYSERDA will subsidize an additional 25% of the study for an overall maximum cost share of 75%. This two-part subsidy structure is aimed at providing customers with an additional incentive to follow through on project construction.

Additionally, the Program Administrators will support housing agencies to provide support and capacity development to help increase building performance requirements for regulated properties and to assess results from IPNAs. NYSERDA will also work with housing agencies and financiers to identify gaps in available performance data and will invest in the development of data sets that can be used to aid in determinations on underwriting and build confidence among financiers and housing agencies. Additionally, NYSERDA will provide technical assistance and funding for NYC HPD and NYS HCR preservation programs to drive greater energy performance.

With NYC HPD, NYSERDA has developed a pilot to incentivize and scale energy efficiency and electrification retrofits. NYSERDA will provide gap funding to cover the incremental amount of funding needed for electrification over the standard NYC HPD energy performance improvement. The pilot will also include pre-defined scope and a dedicated Technical Assistance Provider to promote and enable electrification. Through this direct injection of incentives model, NYSERDA and NYC HPD are streamlining the incentive delivery process, will strengthen understanding and internal capabilities within NYC HPD and test replicability and scalability of this pilot.

With NYS HCR, NYSERDA is providing funds to support electrification and deep envelope improvements and providing housing developers with streamlined access to technical assistance and affordable housing incentive opportunities. The funding and pilot model creates a one-stop process for developers to access building decarbonization- focused incentives as part of NYS HCR's application for affordable housing development support.

With both NYS HCR and NYC HPD, NYSERDA is funding technical assistance contractors to work with the agencies to build internal capacity and assist owner teams.

Target Market and Delivery Method

Market Segment	Multifamily buildings with 5 or more dwelling units that meet the definition of affordability, where at least 25% of the households are at or below 80%
Addressed	of the State Median Income or Area Median Income, whichever is higher.
	Additionally, housing agencies (NYC HPD, New York City Housing
	Development Corporation ("HDC"), NYS HCR), energy service providers that specialize in multifamily housing, tenants living in affordable housing, and other parties working with affordable multifamily buildings and building
	owners.
Delivery	Utilize framework of NYSERDA consultants; coordination with housing
Method	agencies to provide necessary support

Eligible Measures and Incentive Structure

Eligible Study	Energy efficiency technical analyses
Areas	Investigations of an advanced technology or system
	Creation of a long-term energy plan
	Investigation of deep energy savings
	Investigation of Clean Heating and Cooling Systems including Air Source
	Heat Pumps, Ground Source Heat Pumps, Variable Refrigerant Flow, and
	Solar Heating and Cooling
Incentive	Cost-share up to 75% of cost of technical assistance services
Structure	

Stakeholder / Market Engagement

Key Partners	Housing agencies (e.g., NYS HCR, NYC HPD, Public Housing Authorities),
	service providers, and other housing intermediaries

Implementation Milestones (2022-2023)

Implementation milestones will be further developed as the Program Administrators evaluate the current set of initiatives. The Program Administrators note that any continuing effects of the COVID-19 pandemic may modify implementation milestones.

Year	Milestone	Status
2022	Engage with NYS HCR colleagues, affordable housing owners and developers to refine integration of technical assistance within housing financing application processes	In Progress

	Encourage energy service providers to include electrification and/or electrification-readiness as part of any subsidized technical assistance scopes to support long-term decarbonization efforts	
	Update program eligibility to increase access in disadvantaged communities	Planning
2023	Provide technical assistance resources to housing agencies to build in-house capacity to assess and support sustainability as part of core mission	In Progress
	Require consideration of electrification and/or electrification-readiness as part of any subsidized technical assistance to enable long-term building decarbonization efforts	Planning

Budgets, Targets and Performance Metrics

The annual budgets, targets and performance metrics for this initiative are included in Appendices B and C.

4.2.3 RetrofitNY88

New York State's existing affordable multifamily buildings offer great potential for energy savings and greenhouse gas emissions reductions. Traditional energy efficiency programs targeted at multifamily buildings typically reduce on-site energy consumption by up to 30%. Greater building performance, on the order of 70% of on-site energy consumption reductions, can be achieved by undertaking a deep energy retrofit, which consists of superinsulating the shell, installing HVAC equipment, and lighting, among other upgrades. Despite the significant benefits of conducting deep energy retrofits on multifamily buildings, there are several barriers to scaling deep energy retrofits in the affordable multifamily building market segment. The deep energy retrofits currently being done are complex, not replicable, and are not cost effective.

Many affordable building owners face capital constraints that result in tradeoffs between basic structural and operational improvements against improvements to energy performance, making it difficult to undertake significant energy efficiency improvements. In addition, deep energy retrofits can be highly disruptive for tenants, making it difficult for building owners to undertake such a project because most multifamily affordable

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⁸⁸ RetrofitNY was approved as part of the Clean Energy Fund LMI Chapter, and with the transition to the Statewide LMI Portfolio, is now included in this Implementation Plan.

housing units in the State are occupied. Retrofitting occupied buildings on a large scale requires innovative solutions that enable deep energy retrofits while the tenants remain in their apartments. However, cost effective solutions that can be implemented on a large scale currently do not exist in the United States.

Affordable multifamily housing is a logical starting point for the implementation of RetrofitNY because the regulated housing portfolio in New York State is large and provides for a natural aggregation of similarly constructed buildings, relative to market rate building stock, which tends to be more diverse. Approximately 660,000 affordable housing units in the state are either publicly owned or subsidized by regulatory or financing agencies, presenting a unique opportunity to create demand for retrofit solutions by aggregating a large number of units to be renovated.

Since its public launch in 2018, RetrofitNY has identified key barriers to scaling deep energy retrofits in New York State and beyond. Key major barriers include underinvestment, industry fragmentation, high customer acquisition costs, and misallocation of risks. These current market failures drive up costs and hamper rapid decarbonization in the building sector.

To achieve broad adoption of deep energy retrofits and address key barriers, RetrofitNY has two main program goals: (1) drive down the costs of installed solutions, and (2) lower building owner upfront capital needs.

Substantial cost reduction is a function of deliberate investment. RetrofitNY has identified the major barriers to investment in this space and is bringing solutions to the market to eliminate these barriers and facilitate the deployment of investment capital to support needed market development. Cost drivers targeted by RetrofitNY include:

- Transaction costs
- Business model and value chain costs
- Customer acquisition costs
- Installation costs
- Solution design
- Component fabrication costs
- Financing costs

Lowering building owner upfront costs will greatly increase adoption rates of deep energy retrofit solutions. Sizing the market opportunity and pricing the value of deep energy retrofits, which includes avoided costs, new sources of revenue, and reduced risk of the retrofit solution is key to reducing upfront capital requirements.

RetrofitNY market interventions to reduce upfront capital requirements focus on the following areas:

- Developing financial mechanisms that assign value to outcomes
- Reducing performance and technology risk for financial providers
- Lower nonpayment risk for financial providers
- Remove frictions for financial providers to enter this market
- Developing standard performance measurements for risk reduction, humidity levels, longevity, noise dampening, and air quality
- Developing markets for risk reduction, humidity levels, longevity, noise dampening, air quality, carbon savings

The RetrofitNY program will lead or support the following market interventions to realize an end-state solution and develop a retrofit value chain that is both time and resource efficient:

- Warranty for offsite manufactured whole building retrofit solutions
- Qualify retrofit companies capable of turnkey delivery of replicable solutions
- Marketplace and customer acquisition platform
- Support the development of financial products and market mechanisms that effectively value the outcomes of fully electrified buildings
- Loan loss reserve fund (or first loss reserve) for whole building retrofit solution ecosystem
- Product testing and tech transfer support
- Coordination on R&D investment areas
- Coordination on workforce development initiatives
- Reduce insurance costs for the construction and operation of carbon neutral buildings
- Engagement with investors
- Direct financial support for retrofit projects

Addressing the barriers and market development areas laid out above will result in a self-sustaining carbon neutral buildings retrofit market. The innovative market strategy under RetrofitNY is designed to achieve scale in the fastest time scale, which would take multiple decades under a business-as-usual approach.

Objectives:

- Develop simplified, scalable solutions for conducting deep energy retrofits in occupied multifamily units
- Create a self-sustaining market for deep-energy retrofits in New York State to
 ensure the mass implementation of deep-energy retrofit solutions that approach
 or achieve carbon neutrality across prevalent building types and different housing
 market segments
- Ensure that affordable housing is prioritized when it comes to developing solutions for enabling the adoption of whole building retrofit solutions

- Assist the architecture, engineering, technology, and construction industry in the development of innovative solutions to significantly improve energy performance
- Assist with the development of financing mechanisms and new business models enabling increased project feasibility and uptake by building owners.

Overview

Activities

To create a self-sustaining marketplace for the deep-energy retrofits of tenanted multifamily buildings in New York State, NYSERDA will:

- 1. Define the Criteria Needed for Retrofits
 - In cooperation with Affordable Housing and LMI stakeholders, NYSERDA will determine basic criteria to be met by retrofit packages to be created by the industry.
 - Criteria could include: very high level of building energy performance; enhanced health, comfort and building aesthetic; limited disruption to tenants during construction; cost effectiveness; guaranteed energy savings over a long period of time.
- 2. Create Demand by Aggregating a Large Number of Units to be Renovated
 - Through direct engagement of Public Housing Authorities and owners of large portfolios or affordable buildings, NYSERDA will create the demand side of the market by aggregating a large number of units, starting with the affordable housing sector where regulatory agencies can play a facilitating role, that will commit to implementing the solutions.
 - NYSERDA will work with NYS HCR, NYC HPD and HDC as well as other agencies, Public Housing Authorities, and private owners of large portfolio across the state to secure the appropriate demand.
- 3. Organize and Run a Design-Build Process
 - The potential for a large, new market will motivate the industry to answer competitive solicitations and engage in several rounds of a design-build and implementation process focused on predetermined buildings from affordable housing portfolios in New York.
 - The solutions will be selected and tested through implementation on the specified buildings. Initial demonstration projects will be implemented on building types that are highly representative of the affordable housing building stock (in terms of size, age, construction materials, etc.) located in the State.
 - NYSERDA will carefully monitor implementation and results in terms of energy savings, construction costs, comfort, and disruption to tenants during construction.
 - Using lessons learned from the prior round of installations,
 NYSERDA will organize subsequent funding rounds to improve the solutions until they meet all predefined criteria and adapt them to

- additional building types. The number of funding rounds will be based on the progress of the solution designs.
- NYSERDA will fund part of the incremental development costs for the selected solutions: Part of the typical capital improvements currently funded or financed by Affordable Housing agencies for the preservation of multifamily buildings very often include energy related improvements such as facade and roof repairs, as well as boiler and window replacement. The funds dedicated to these improvements can be reallocated to cover part of costs of the solutions designed through the design-build process. NYSERDA will also seek to utilize existing and new financing products to finance part of the incremental costs with the energy savings. NYSERDA will then fund the share of the incremental costs not covered by financing products available at the time of the retrofit. NYSERDA's financial contribution will decrease over time as the cost of the solutions is reduced and more financing products become available, until the market is self-sustaining.

In parallel to the development of technical solutions, NYSERDA will help create an enabling environment for large scale implementation of the designed solutions through activities 4, 5,6, 7 and 8.

- 4. Create a clear and transparent mechanism for stakeholders interested in developing and piloting retrofit solutions
 - NYSERDA will set up and administer a set of rolling Request for Qualifications ("RFQL") to target solution providers, component manufacturers and building owners
 - The RFQLs will be used to communicate market needs and assess viability of interested stakeholders
- 5. Support the development of solution providers that will serve to streamline the design and installation process acting as a turn-key entity to building owners
 - Due to market fragmentation, there are many drivers that contribute to inflated costs on projects. A turn-key provider will achieve cost compression by investing in technologies to drive down costs and develop long term relationships with supply chain partners and installer networks.
- 6. Develop Supply Chain of High Efficiency Components
 - Building components and systems required for a deep energy retrofit are not always readily available in New York and are often imported from Europe. NYSERDA will work with manufacturers and distributors of the components and systems used in the implemented deep energy retrofit solutions to ensure their availability in the New York market.

- NYSERDA will work with national partners, such as Dept of Energy, to support R&D efforts for needed technologies to scale deep energy retrofits.
- NYSERDA will assess and qualify major relevant building components, such as mechanical systems, panelized building envelope products and monitoring systems for use in whole building retrofit solutions.
- 7. Develop Financial Solutions to Finance the Retrofits
 - In conjunction with interested lenders, NYSERDA will collaborate with stakeholders from the financing industry to develop private sector financing products that can be integrated with the existing affordable housing financing programs to provide project level support.
- 8. Support Development of Insurance and or Warranty Products to Facilitate Market Scaling
 - To scale whole building retrofits, robust warranty products are needed to shift technology risks away from building owners to allow for rapid adoption and scale up.
 - NYSERDA will engage industry stakeholders to scope and support development of a warranty product that solution providers can issue to building owners that adopt these whole building retrofit solutions.
- 9. Work with national partners to drive market development of a regional collaborative for deep energy retrofit projects
 - NYSERDA will engage national partners, such as Dept. of Energy, National non-profits, and other interested states to disseminate the learnings of the program to support development of similar programs in other states.

Status Prior to new Statewide LMI Portfolio Offering

Traditional energy efficiency programs targeted at multifamily buildings typically reduce on-site energy consumption by up to 30%. Greater building performance, on the order of 70% of on-site energy consumption reductions, cannot be achieved in a cost-effective way. Integrated components, such as cost-effective panelized envelope solutions and multifunctional HVAC units, are needed for scale-up do not exist in the NYS market. There are several barriers to scaling deep energy retrofits in the affordable multifamily building market segment, such as high cost and difficulty of financing for building owners. The deep energy retrofits currently being done are complex, not replicable, and are not cost-effective.

Transitional Phase

To create a self-sustaining marketplace for the deep-energy retrofits of tenanted multifamily buildings in New York State, NYSERDA will:

- 1. Defined the Criteria Needed for Retrofits
 - In cooperation with Affordable Housing and LMI stakeholders, NYSERDA will determine basic criteria to be met by retrofit packages to be created by the industry.
 - Criteria could include: very high level of building energy performance; enhanced health, comfort and building aesthetic; limited disruption to tenants during construction; cost effectiveness; guaranteed energy savings over a long period of time.
- 2. Create Demand by Aggregating a Large Number of Units to be Renovated
 - Through direct engagement of Public Housing Authorities and owners of large portfolios or affordable buildings, NYSERDA will create the demand side of the market by aggregating a large number of units, starting with the affordable housing sector where regulatory agencies can play a facilitating role, that will commit to implementing the solutions.
 - NYSERDA will work with NYS HCR, NYC HPD and the HDC as well as other agencies, Public Housing Authorities, and private owners of large portfolio across the state to secure the appropriate demand.
- 3. Organize and Run a Design-Build Process
 - The potential for a large, new market will motivate the industry to answer competitive solicitations and engage in several rounds of a design-build and implementation process focused on predetermined buildings from affordable housing portfolios in New York.
 - The solutions will be selected and tested through implementation on the specified buildings. Initial demonstration projects will be implemented on building types that are highly representative of the affordable housing building stock (in terms of size, age, construction materials, etc.) located in the State.

- NYSERDA will carefully monitor implementation and results in terms of energy savings, construction costs, comfort, and disruption to tenants during construction.
- Using lessons learned from the prior round of installations, NYSERDA will organize subsequent funding rounds to improve the solutions until they meet all predefined criteria and adapt them to additional building types. The number of funding rounds will be based on the progress of the solution designs.
- NYSERDA will fund part of the incremental development costs for the selected solutions: Part of the typical capital improvements currently funded or financed by Affordable Housing agencies for the preservation of multifamily buildings very often include energy related improvements such as facade and roof repairs, as well as boiler and window replacement. The funds dedicated to these improvements can be reallocated to cover part of costs of the solutions designed through the design-build process. NYSERDA will also seek to utilize existing and new financing products to finance part of the incremental costs with the energy savings. NYSERDA will then fund the share of the incremental costs not covered by financing products available at the time of the retrofit. NYSERDA's financial contribution will decrease over time as the cost of the solutions is reduced and more financing products become available, until the market is self-sustaining.
- 4. Create a clear and transparent mechanism for stakeholders interested in developing and piloting retrofit solutions
 - NYSERDA will set up and administer a set of rolling RFQL to target solution providers, component manufacturers and building owners
 - The RFQLs will be used to communicate market needs and assess viability of interested stakeholders
- 5. Support the development of solution providers that will serve to streamline the design and installation process acting as a turn-key entity to building owners
 - Due to market fragmentation, there are many drivers that contribute to inflated costs on projects. A turn-key provider will achieve cost compression by investing in technologies to drive down costs and develop long term relationships with supply chain partners and installer networks.
- 6. Work with national partners to drive market development of a regional collaborative for deep energy retrofit projects
 - NYSERDA will engage national partners, such as Dept. of Energy, National non-profits, and other interested states to disseminate the learnings of the program to support development of similar programs in other states.

Full For an end market for deep energy retrofits to be viable, the following Implementation programmatic elements need to exist. 1. Develop Supply Chain of High Efficiency Components Building components and systems required for a deep energy retrofit are not always readily available in New York and are often imported from Europe. NYSERDA will work with manufacturers and distributors of the components and systems used in the implemented deep energy retrofit solutions to ensure their availability in the New York market. NYSERDA will work with national partners, such as Dept of Energy, to support R&D efforts for needed technologies to scale deep energy retrofits. NYSERDA will assess and qualify major relevant building components, such as mechanical systems, panelized building envelope products and monitoring systems for use in whole building retrofit solutions. 2. Develop Financial Solutions to Finance the Retrofits In conjunction with interested lenders, NYSERDA will collaborate with stakeholders from the financing industry to develop private sector financing products that can be integrated with the existing affordable housing financing programs to provide project level support. 3. Support Development of Insurance and or Warranty Products to Facilitate Market Scaling To scale whole building retrofits, robust warranty products are needed to shift technology risks away from building owners to allow for rapid adoption and scale up. NYSERDA will engage industry stakeholders to scope and support

Target Market and Delivery Method

solutions.

Market	Affordable housing buildings owned by Public Housing Authorities, and
Segment	privately owned multifamily affordable housing buildings regulated,
Addressed	financed or subsidized by affordable housing agencies or housing finance
	agencies such as NYS HCR, NYC HPD, the New York State Housing Finance
	Agency, and HDC. NYSERDA will subsequently expand its target market to
	other building sectors containing typologies that are a good fit for the
	solutions developed.
Delivery	The administration of RetrofitNY includes:
Method	

development of a warranty product that solution providers can issue to building owners that adopt these whole building retrofit

- The development of high-level criteria that the architecture, engineering, technology, and construction industry will need to meet to create the retrofit solutions.
- Creating the demand side of a new market for deep energy retrofits by aggregating a large number of units that will commit to implement the solutions to be designed.
- Qualifying solution providers, component manufacturers and building owners that would be eligible for demonstration pilots through periodic funding rounds.
- Organizing a design-build process to select and test the developed solutions through demonstration pilots. Using lessons learned from funding rounds, NYSERDA will organize subsequent rounds to improve the solutions until they meet all predefined criteria and adapt them to additional building types. To ensure replicability, scale and impact, NYSERDA is analyzing New York's affordable housing portfolios to identify the most prevalent building typologies in the state.
- Facilitating innovative financing by interested private sector lenders to leverage energy and operational savings to provide additional capital to buildings.
- Hosting investor groups to bring needed investment to companies with technologies that can drive cost compression of solutions and developing the New York supply chain for high efficiency building components.
- Promoting broad adoption of these deep-retrofit solutions as preservation strategies for the affordable housing stock and encourage their adoption across the multifamily housing market.

Stakeholder / Market Engagement

Key Partners

- Public Housing Authorities
- NYS Affordable Housing regulatory agencies including NYS HCR and NYC HPD
- Housing Finance Agencies including New York State Housing Finance Agency, and HDC
- Private building owners
- Builders, developers, architects, suppliers, engineers, building scientists, building technology firms and other service providers
- Private financing companies, insurance and re-insurance companies, and energy service companies
- Department of Energy
- Other regional entities interested in scaling deep energy retrofits

Implementation Milestones (2022-2025)

Year	Milestone	Status
2023	Integration of retrofit solutions in the public housing authorities' strategies	In Progress
2024	Integration of retrofit solutions into regulated affordable housing preservation strategies	Future
2025	 Deliver retrofit solutions that are cost effective such that NYSERDA subsidies are no longer necessary Develop a market for building components and systems required for deep energy retrofits are readily available in the New York market 	Future
	 Support creation of financing solutions to facilitate building owners' uptake of the retrofit these solutions at scale 	

Budgets, Targets and Performance Metrics

The annual budgets, targets and performance metrics for this initiative are included in Appendices B and C.

4.3 Affordable New Construction

High performance and carbon neutral new construction can significantly reduce the energy consumption and related costs in the residential sector than would otherwise be expected, delivering not just energy bill savings for residents and building owners, but also improving the health and comfort of residents and providing resilient and sustainable housing stock that delivers long term energy savings and carbon emission reductions. Despite the many benefits, only a small portion of residential new construction is achieving carbon neutral or net zero energy performance. This can be attributed to several market factors including constraints with current building and design practices, potential for higher incremental costs, and limited availability of performance data and off-the-shelf design and build specifications. There is also a general lack of awareness of the long term financial, health, and environmental benefits associated with these buildings. The Program Administrators recognize current market constraints and will continue to seek to scale the design and construction of new and substantial renovations in the affordable housing market by working with market partners and stakeholders within the new construction and affordable housing sector. This includes the network of housing agencies, builders and developers, architects, engineers, and financiers to address the market barriers associated with building to higher levels of energy efficiency. The Program Administrators have converted their

market engagement strategy to deliver incentives and services directly within the public housing agencies, and will likely limit, reduce, or even end other financial incentives or technical support in the market.

Objectives:

- Improve the building performance through reduction of site energy use of affordable new construction, with the goal of carbon neutral performance
- Support trades and developers to advance engineering, design, construction practices, and performance verification
- Identify and test replicable models for achieving high performance in new affordable housing
- Advance integrated design solutions that are replicable, with a focus on cost optimization
- Continue to support New York State and New York City housing agencies, funding authorities, and municipalities in their efforts to secure the most efficient, durable, resilient, and healthy housing, based on technical and economic feasibility, while striving to maximize effective use of the resources available to achieve those goals
- Increase information about, awareness of, and demand for deep energy savings and carbon neutral construction for new and gut rehab of single family and multifamily buildings

Overview

Current Status NYSERDA administered the Affordable New Construction Housing Program across the State, which provides: Technical and financial support to public housing agencies Technical assistance to projects seeking to achieve high performance energy efficiency buildings Incentives to housing developers and builders, with incentive levels based on the performance of the building • Quality Assurance ("QA") services through third parties such as Residential Energy Services Network ("RESNET")-accredited Rating Quality Assurance Providers, Multifamily Review Organizations ("MRO"), or qualified certifiers/verifiers to one of the Passive House standards In addition, NYSERDA administered the Buildings of Excellence competition, which seeks to identify replicable models for the design, construction, and renovation of affordable housing.

Transitional Phase	In 2022, the affordable new construction activities funded through the CEF (including Standard Offer and Buildings of Excellence) will be offered while incentive programs are fully transitioned to Housing Agencies to be provided within existing financing and capital stack offerings. In addition, the Program Administrators will explore the development of prescriptive packages of measures that can drive higher performance, <i>i.e.</i> , more energy efficiency and reduced energy use, in new and renovated affordable housing. Where the Utilities and NYSERDA will be offering incentives, the Program Administrators will coordinate to streamline program participation as necessary and ensure the greatest impact of ratepayer funding.
Full Implementation	 In 2022-2025, the affordable new construction offerings will include: Incentives for carbon neutral affordable new construction to increase the performance of residential buildings Market development support that includes integrated design and construction protocols, and the development of data and information resources to document success stories and lessons learned that can be used to provide cost/benefit justification will continue

Target Market and Delivery Method

Market	Builders, developers, owners, architects, engineers, energy modelers and
Segment	other construction entities for new buildings or substantial renovation of
Addressed	affordable single family or multifamily buildings
Delivery	Incentives will be provided to builders and developers. However, the
Method	Program Administrators will also seek opportunities to integrate incentives
	into the financing of affordable new construction by working with housing
	agencies. Technical assistance will be provided to housing agencies,
	architects, engineers, builders, and developers.

Eligible Measures and Incentive Structure

Eligible	The Affordable New Construction initiative assesses the performance of the
Measures	building. Envelope, decarbonized HVAC, appliances, and efficient lighting
	measures are all eligible for inclusion in incentivized projects.
Incentive	Incentives will be provided by NYSERDA to affordable new construction and
Structure	renovation projects based on the level of energy savings achieved, as
	outlined in the program documents. The Buildings of Excellence competition
	provides incentives for innovative design and construction of zero carbon
	emitting multifamily buildings. Housing Agencies will offer Clean Energy
	Incentives for new construction and renovation projects that meet efficiency
	and decarbonization performance criteria.

Stakeholder / Market Engagement

Key Partners

NYSERDA has worked with NYS HCR and NYC HPD to offer complementary strategies to the market. This coordination will continue.

Program Administrators will continue to work directly with housing agencies to incorporate funding into new construction projects to offset incremental costs associated with higher performance.

NYSERDA has developed channel partner relationships with organizations that deliver professional development and educational opportunities to the market to facilitate the dissemination of best practices and cost compression opportunities to builders, developers, energy modelers and consultants.

Additional stakeholder involvement occurred throughout 2020 and 2021, and continues to occur in 2022, with additional key partners including community development corporations ("CDCs"), developers, builders, architects, engineers, housing intermediaries, non-profit builders, Home Energy Rating System ("HERS") raters.

Implementation Milestones (2022-2025)

Implementation milestones will be further developed as the Program Administrators evaluate the current set of initiatives. The Program Administrators note that any continuing effects of the COVID-19 pandemic may modify implementation milestones.

Year	Milestone	Status
2022	 Launch of high-performance demonstrations and competitions Incorporation of lessons learned from previous demonstrations and competitions Launch of Round 3 of the Buildings of Excellence Multifamily Design Competition 	Complete
	Expand integrated funding with State and local affordable housing agencies	In Progress
2023	 Continue expanded integration with public housing agencies Utilize data and successful solution sets from decarbonization projects to deploy information through Channel Partners, conferences and other general awareness activities 	In Progress
2024	 Continue expanded integration with public housing agencies Utilize data and successful solution sets from decarbonization projects to deploy information through channel partners, conferences, and other general awareness activities 	Future
2025	 Continue expanded integration with public housing agencies Utilize data and successful solution sets from decarbonization projects to deploy information through channel partners, conferences, and other general awareness activities 	Future

Budgets, Targets and Performance Metrics

The annual budgets, targets and performance metrics for this initiative are included in Appendices B and C.

4.4 Pilots and Demonstrations⁸⁹

Opportunities for increasing access to energy efficiency solutions and improving energy affordability are ever-evolving, with new technologies, applications, business and delivery models, and opportunities for cross-sector coordination emerging on a regular basis. To continuously improve the programs and offerings under the Statewide LMI Portfolio, the Program Administrators will continue to incorporate the piloting and demonstration of new technologies and approaches for serving LMI customers and communities.

Through pilot activities, the Program administrators seek to:

- 1. Identify and test technologies and/or approaches for addressing the barriers to improving energy efficiency in the LMI market segment;
- 2. Test approaches that can scale the adoption of energy efficiency solutions in the LMI market segment;
- 3. Prove models for improving the delivery of energy efficiency solutions across the LMI market segment that can reduce administrative burden for customers and administrators; and
- 4. Determine innovative approaches for improving awareness and access to energy efficiency solutions for LMI or otherwise disadvantaged communities.

The Program Administrators fund LMI pilots and demonstrations through the CEF, with the expectation that learnings will be communicated and deployed at a larger scale. For instance, a novel approach for delivering energy efficiency services to customers may require testing before being broadly adopted. Through the CEF, this approach for service delivery can be tested and, if successful, be rolled out for deployment through the Utilities. To identify pilot opportunities, the Program Administrators will continue to leverage existing vehicles for discovering possible pilot concepts, such as REV Connect or through the issuance of solicitations seeking innovative solutions. Decisions on pilot priorities and the sharing of information between Program Administrators will occur within the LMI JMC. In addition, the Program Administrators will report annually on pilot activities, including results and planning. For example, the 2021 Annual Report noted achievements including the development of educational materials aimed at LMI customers and building owners who have recently installed heat pumps, to support behavioral change and proper system operations.

Ongoing work is continuing to evaluate lessons learned from research, analysis, pilots, and incentive offerings. The Program Administrators expect to develop and launch LMI-focused pilot activities during 2022.

⁸⁹ In general, the sections of this Implementation Plan use a similar template in presenting information. The content in certain sections does not readily conform to this template – notably <u>Section 4.4 Pilots and Demonstrations</u> and <u>Section 4.5 Beneficial Electrification in LMI Homes</u>; therefore, these sections use a more typical prose presentation.

Budgets, Targets and Performance Metrics

The annual budgets, targets and performance metrics for this initiative are included in Appendices B and C.

4.5 Beneficial Electrification in LMI Homes

Given that approximately 30% of the State's greenhouse gas emissions come from heating and cooling of buildings, the Climate Act's goal of a carbon neutral economy by 2050 requires a major investment and shift in focus to homes that are heated through energy efficient and electrically powered technologies. Such a transition is referred to as beneficial electrification, meaning that transitioning to electric will reduce emissions of greenhouse gases and other pollutants. Heat pumps represent the most efficient commercially available solution to electrify space heating, cooling, and domestic hot water heaters.

However, electrification in the LMI sector presents unique challenges and economic and institutional barriers. In markets where natural gas is much less expensive than electricity, for example, homes switching from gas-fired boilers or furnaces to heat pumps risk increasing utility bills for LMI customers. Tenants in rental housing face the potential for new monthly utility bills should a heat pump retrofit result in shifting costs from heating fuel (typically not paid by tenants) to electricity costs (typically paid by tenants). Heat pumps are not yet integrated into existing benefits programs providing energy-related support to income-qualified households, such as HEAP and WAP.

On the other hand, electrification offers potential health and other benefits to at-risk residents. Heat pumps can provide both heating and cooling services, presenting additional value to homes that previously had limited or no cooling systems. Through reductions in on-site combustion, electrification has been shown to reduce indoor pollutants that exacerbate respiratory illness. As such, investments in beneficial electrification in the LMI market segment as part of this Statewide LMI Portfolio seek to maintain energy affordability and consumer protections, while providing these benefits and increasing access to clean energy solutions for LMI communities, households, and building owners.

As articulated in the NYS Clean Heat filing in 2020,⁹¹ NYSERDA has allocated \$30 million⁹² of its \$250 million Clean Heating and Cooling Investment Plan for 2020-2025 to market

⁹⁰ https://www.raponline.org/wp-content/uploads/2018/06/6-19-2018-RAP-BE-Principles2.pdf.

⁹¹ See, NE: NY Proceeding, NYS Clean Heat: Statewide Heat Pump Program Implementation Plan (filed March 16, 2020 and updated May 29, 2020), Appendix A.

⁹² In addition to the \$30 million investment in beneficial electrification represented here, NYSERDA is investing an additional \$1 million as part of this work under the CEF.

interventions that provide clean heating and cooling solutions to the statewide LMI market segment, in four areas:

• Research and analysis:

Conduct market studies to inform NYSERDA and other market actors about barriers to electrification and ways to mitigate these with targeted solutions and best practices across various building types, as well as strategies to maintain affordability, all of which will inform pilot and demonstration efforts

• Pilots and demonstrations:

Identify and fund potentially replicable and scalable models for LMI heat pump adoption that reduce known market and institutional barriers in critical LMI segments and provide data and examples that boost investor confidence

• Short-term incentives:

Provide short-term statewide standard offer incentives that are combinable with other utility and government incentives to promote incorporation of heat pumps into low-income weatherization and affordable housing energy efficiency projects. These incentives will identify approximately 1,500 LMI homes and apartments that have undergone heat pump conversions, from which to collect data and other learnings.

• Consumer education:

Develop educational materials to help homeowners, building owners, and property managers operate and maintain heat pump systems optimally, in order to increase the impact and benefit of the heat pump installation

Of the above activities, NYSERDA has recently completed a research study characterizing the LMI housing market statewide, identifying promising market segments for targeted electrification efforts including recommendations for program and other interventions to support implementation. NYSERDA has also spent down its short-term incentives budget in the single-family sector, also known as the Heat Pump Demonstration Study, and expects to have all multifamily funding committed by the end of 2022. Residents and building owners of these projects are being provided educational materials developed under the \$30 million budget. Projects from both sectors will be included in an evaluation study that kicked off in early 2022. Early learnings from the evaluation will be incorporated into existing programs in coordination with DPS and the Utilities.

In 2022, Program Administrators will continue to coordinate on these efforts to advance beneficial electrification in the LMI market segment, with a particular focus on developing a cohesive framework for maintaining energy affordability while moving to electrification. This effort will continue to inform long term investments in beneficial electrification for LMI homeowners and tenants in affordable housing. To encourage

beneficial electrification specifically in existing affordable multifamily buildings, the Program Administrators have been and will continue to coordinate between AMEEP and NYS Clean Heat. See <u>Section 4.2.1</u> for more details.

As noted in the 2021 Annual Report, 2021 achievements include the design and launch of one-page brochures for both 1-4 family homes and multifamily buildings, providing operational guidance for heat pump end users and building owners. Brochures were provided to participants in the LMI Heat Pump Adder Pilot.

Implementation Milestones (2022-2024)

Implementation milestones will be further developed as the Program Administrators evaluate the current set of initiatives. The Program Administrators note that any continuing effects of the COVID-19 pandemic may modify implementation milestones.

Year	Milestone	Status
2022	 Launch evaluation and market insights study based on projects completed through short-term incentive offering incentive offerings Publish LMI chapter within Building Electrification Roadmap, outlining key policy approaches to scale LMI electrification through 2030 Partner with sister State agencies to aggressively shift existing benefit programs into alignment with the State's housing decarbonization targets, especially LIHEAP, WAP, and the State's Energy Affordability Policy and Utility Energy Assistance Programs Conduct research and analysis on electrification of affordable housing, to develop recommendations for protecting tenants from heating cost shifts 	In Progress
	 Continue programmatic support for LMI heat pump installations, with a focus on segments that present the least technical difficulty and/or the most favorable return on investment, including buildings using delivered fuels and electric resistance heat, buildings with inefficient gas furnaces or boilers, and multifamily buildings with steam distribution systems Design and launch a program offering supporting rapid response heat pump conversions in situations where existing fossil heating systems are at or near failure Launch additional program support for LMI multifamily building owners seeking to integrate electrification into their portfolio, by providing wraparound services for guidance on capital planning, identifying best-fit technology solutions, employee training, project scoping, how to overcome hurdles related to existing subsidy 	Planning

		,
	 agreements and tenant leases, and identifying incentives and other financial support for installing heat pumps Design pilot(s) supporting DHW electrification conversions for multifamily buildings Launch research focused on policy and regulatory initiatives that can further enable heat pump adoption in LMI housing Conduct stakeholder engagement to develop promising approaches for community- and place-based interventions supporting heat pump deployment in LMI and Disadvantaged Communities Develop and launch additional educational materials for LMI customers and building owners, including short how-to videos and other multimedia offerings In collaboration with DPS and the Utilities, identify the scope of and pathway to increased support for pre-electrification makeready work such as electrical panel upgrades 	
2023	 Publish interim learnings from the single family LMI heat pump demonstration study (short term incentives) Publish interim learnings from the multifamily LMI heat pump demonstrations study (short term incentives) Revise program rules to incorporate learnings from affordability and consumer protections research 	Future
2024	 Publish interim learnings from pilots and demonstrations Revise program rules to incorporate affordability and consumer protections learnings from research and evaluation of real-world projects 	Future

4.6 Additional LMI Initiatives

In addition to the Statewide LMI Portfolio initiatives, NYSERDA administers other initiatives to increase access to clean energy solutions and improve energy affordability for LMI residents and communities as part of the Clean Energy Fund Market Development Portfolio ("CEF Market Development Portfolio").

4.6.1 New York State Healthy Homes Value-Based Payment Pilot

The Healthy Homes Value-Based Payment ("VBP") Pilot seeks to develop a framework that allows New York's managed care organizations ("MCO") to fund residential healthy homes interventions⁹³ as part of their value-based payment arrangements with

⁹³ A residential healthy homes intervention combines energy efficiency and weatherization measures (*e.g.*, insulation and air sealing) with measures that address persistent respiratory health conditions such as

healthcare providers within the Medicaid Healthcare Delivery System. ⁹⁴ By validating impacts such as healthcare cost savings and benefits to residents, and by providing market development support, including specification of services and guidance related to VBP contracting, the Healthy Homes Pilot facilitates the adoption of healthy homes treatments by MCOs as part of their Medicaid VBP Arrangements that incorporate social determinants of health. Adopting this approach addresses avoidable medical costs associated with respiratory conditions such as asthma and also household injury, while encouraging third-party capital investment in residential energy efficiency through MCO adoption of healthy homes interventions within the VBP social determinants of health framework after the completion of the Pilot.

Approved in 2019, the Pilot is currently in the field, taking place during 2021-2024, with NYSERDA and NYS DOH collaborating to implement healthy homes interventions in 500 Medicaid member homes and jointly evaluating the associated reduction in Medicaid cost savings and benefits for residents. Responsibilities for each agency include:

NYSERDA

- Fund Pilot activities, advise intervention planning related to energy and housing measures, facilitate and manage energy/housing services included in the Pilot, and assume responsibility for data collection and evaluation activities related to energy measures/outcomes
- Provide market support intended to prepare the existing network of energy efficiency and residential improvement contractors to implement healthy homes interventions as well as provide guidance related to the VBP SDH contracting process
- NY State Department of Health ("DOH")
 - Office of Health Insurance Programs will secure MCO participation in the Pilot and oversee all VBP contracting activities.

asthma (e.g., ventilation, moisture/mold mitigation, carpet removal), and includes additional measures aimed at home injury prevention (smoke and CO alarms, stair repair, electrical outlet covers). When implemented together, these interventions can improve occupant health, reduce energy bills and healthcare costs, and improve the comfort and safety of a home.

⁹⁴ New York State Medicaid has transitioned the managed care healthcare delivery system from a fee-forservice to a VBP model that links healthcare provider performance and reimbursement through a predetermined set of value metrics. Under the VBP model, MCOs (*i.e.*, healthcare plans such as Empire Blue Cross Blue Shield) enter into arrangements with healthcare providers or provider networks. To support local investment in activities that address social determinants of health ("SDH"), two of three VBP arrangement levels require incorporation of a CBO engaging in work focused on SDH. Among the five social determinants of health categories established within the VBP system, the Neighborhoods and Environment category includes "substandard housing" as a determinant and includes funded interventions and standard metrics associated with healthy homes interventions within the established SDH Intervention Menu. The substandard housing determinant places energy efficiency and weatherization measures, when incorporated within a healthy homes intervention, within the DOH value-based payment model.

- Office of Public Health will advise Pilot intervention planning related to asthma trigger reduction measures and asthma care management services, facilitate and manage direct health services included in the Pilot, and assume responsibility for data collection and evaluation activities related to health measures/outcomes
- Center for Environmental Health will advise Pilot intervention planning and evaluation activities related to home injury prevention measures

NYSERDA and the NYS DOH targeted the Pilot launch for late 2020, but due to complications of the COVID-19 pandemic, field launch was delayed until 2021. The Pilot successfully launched in the field in Q1 2022 with Medicaid members being enrolled for healthy homes services. However, Pilot-participating managed care organizations, nursing and CHW service providers, and NYSERDA-participating contractors continue to manage challenges to enrolling eligible Medicaid members, obtaining full consent from interested eligible members, and maintaining engagement and continuity of services with those households who are fully consented, which has resulted in a longer than expected timeline for Pilot enrollment and field work. As of Q3 of 2022, NYSERDA and NYS DOH continue to address these complications and will modify Pilot parameters to facilitate Pilot benefits and learnings and to ensure appropriate stewardship of budgeted funds. Effective Q1 2023, NYSERDA and NYS DOH will expand Pilot eligibility to include Medicaid members who are not currently associated with Pilot VBP arrangements to increase the number of Medicaid member households that can be served over the next year. The Pilot schedule may need to be further amended due to current and potential future impacts of the COVID-19 pandemic. The budget and impacts for the NYS Healthy Homes VBP Pilot can be found in Appendix C.

Objectives:

- Develop a framework that allows New York's MCOs to fund residential healthy homes interventions in partnership with energy/residential improvement contractors as part of their value-based payment arrangements with healthcare providers within the Medicaid Healthcare Delivery System
- Validate healthcare cost savings and benefits to residents—including energy, health, and safety—through evaluation undertaken in partnership with NYS Department of Health
- Support residential market preparedness for incorporation of healthy homes interventions into the Medicaid Healthcare Delivery System standard business practice, including specification of services and guidance related to VBP contracting
- Encourage third-party capital investment in residential energy efficiency with MCO adoption of healthy homes interventions supportive of addressing social determinants of health through VBP beyond the Pilot

Overview

Overview	
Status Prior to new Statewide LMI Portfolio Offering	In New York State, the Medicaid transition to a VBP framework, along with an existing infrastructure to deliver healthy homes services, provides a window of opportunity for healthy homes interventions to be considered a fundable healthcare expense. To aid in the VBP transition, DOH is required to administer pilots in cooperation with MCOs to test VBP models incorporating work addressing social determinants of health such as substandard housing. There is a current network of over 200 energy efficiency contractors in New York State, including more than 50 weatherization sub-grantees, who meet the conditions necessary to provide Medicaid services under VBP Level 2 and 3 Arrangements.
	In 2019, NYSERDA conducted a feasibility study to explore the potential for developing an integrated energy, housing, and health service delivery model for LMI customers in New York. The feasibility study assesses the statewide infrastructure available to deliver an integrated approach, assesses available funding and identifies alternative sources of funding that can be used for integrated energy, housing, and health projects, and provides recommendations for how to quantify and validate the health benefits and healthcare cost savings associated with healthy homes interventions. Information from the feasibility outcomes informed the Pilot's partnership approach and design.
Transitional Phase	The Pilot's interim process learnings demonstrate a path for New York's MCOs to fund residential healthy homes interventions as part of their value-based payment arrangements with healthcare providers within the Medicaid Healthcare Delivery System. Interim Pilot outcomes confirm the benefits of MCO investment in the demonstrated approach. Market support guidance clarifies the partnerships and infrastructure needed to replicate the model.
Full Implementation	The Pilot demonstration, market support guidance, and associated evaluation activities, undertaken in partnership with NYS DOH, provide market actors with information intended to stimulate market uptake. Adopting the intervention approach addresses avoidable medical costs associated with respiratory conditions such as asthma and also household injury, while simultaneously facilitating third-party capital investment in residential energy efficiency. Validated healthcare cost savings, return on investment, and benefits to residents—including energy, health, and safety—encourages MCO adoption of healthy homes interventions within the VBP social determinants of health framework after the completion of the Pilot.

Target Market and Delivery Method

Market	Managed care organizations (i.e., health plans) operate within the	
	Medicaid Healthcare Delivery System, contracting with healthcare	
Segment	, ,	
Addressed	service providers within the value-based payment framework to	
	provide clinical care and other health-related services to Medicaid	
	members	
	Energy efficiency/weatherization contractors provide energy	
	efficiency and health and safety services and subcontract for	
	additional environmental trigger reduction services, as needed, in	
	residential dwellings within a given region	
	Health service provider networks (e.g., physicians, hospitals, nursing)	
	and community health worker agencies) operate within the Medicaid	
	Healthcare Delivery System to provide health services such as clinical	
	care, in-home education, and referrals to community-based resources	
	that address social determinants of health	
	Residents/customers (i.e., Pilot participants that are high Medicaid	
	utilizers) follow their clinical care plans and participate as necessary in	
	the coordination of health service and dwelling service interventions	
Delivery	NYSERDA implements the Pilot in cooperation with the NYS DOH	
Method	Office of Health Insurance Program, Office of Public Health, and	
IVICTIO		
	Center for Environmental Health according to the responsibilities outlined in the introduction of Section 4.6.1	
	Participating MCOs identify eligible members and conduct outreach to potential participant households	
	The Pilot intervention's dwelling-based services are provided by	
	NYSERDA-participating residential contractors qualified through a	
	NYSERDA Request for Qualifications	
	The Pilot intervention's health services are provided by registered	
	nurses and community health workers with specialized training who	
	are affiliated with agencies that are partnered with participating MCOs	
	through value-based payment arrangements	
	Program administration/implementation and technical assistance are	
	provided through existing NYSERDA and DOH program operations	
	infrastructure	

Eligible Measures and Incentive Structure

Eligible	Full intervention measures include:
Measures	Residential energy and environmental assessment
	• Energy efficiency measures (<i>e.g.,</i> envelope improvements, electric
	load reduction, heating system repair/replacement)
	Environmental trigger reduction measures (e.g., mold remediation,
	carpet removal, integrated pest management, ventilation)
	Household injury prevention measures (<i>e.g.,</i> smoke alarms, carbon
	monoxide detectors, stair/railing repair, bathtub safety bar
	installation)

	 Home skilled nursing visits and community health worker support (e.g., in-home education related to asthma self-management and medication adherence, supportive products, and coordination across providers) Resident education, guidance regarding community resources, and post-intervention follow-up
Incentive Structure	 All intervention services are provided at no cost to a Pilot-participating household. Intervention dwelling-based services utilize an incentive structure based on existing NYSERDA residential programs (e.g., EmPower NY) For planning purposes, average cost per project was estimated at approximately \$12,000, with flexibility in per-project cost determined according to scope of work evaluated by program staff Additional allergen reduction products provided to Pilot participating households are valued at approximately \$250 per household, facilitated through a contract with American Lung Association

Stakeholder / Market Engagement

Key Partners	 NYSERDA has worked closely with the NYS DOH Office of Health Insurance Programs (inclusive of Medicaid), Office of Public Health, and Center for Environmental Health to identify the Pilot opportunity and position it in the most beneficial way for both NYSERDA and DOH. In coordination with NYS DOH, NYSERDA has engaged with MCO executive staff who expressed interest in incorporating healthy homes interventions into their existing Value-Based Payment Arrangements or entering into new Arrangements based on the need for healthy homes services among their Medicaid members. NYSERDA engaged representatives of the residential energy efficiency industry—including private contractors and weatherization subgrantees, local housing organizations, community-based organizations, and philanthropy on this specific Pilot opportunity and have received universal support for this Pilot work. In coordination with New York State Department of Public Service, NYSERDA hosted seven stakeholder forums in 2018 to discuss barriers and opportunities to increase energy efficiency and access to clean energy solutions for LMI residents. The need for health and safety improvements was a primary barrier raised by stakeholders.
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Key Milestones (2022-2025)

Implementation milestones are noted below. The Program Administrators note that any continuing effects of the COVID-19 pandemic may modify implementation milestones.

Year	Milestone	Status
2022	Complete value-based payment participation toolkits for MCO/VBP providers and community-based organizations	In Progress
2023	Commence interim reporting on Year One intervention implementation process	Planning
2024	Complete draft of the full evaluation report	Planning

5. Customer Awareness, Outreach & Engagement

Awareness and education initiatives play a crucial role in creating lasting effects from energy efficiency and energy affordability programs among LMI customers. Historically, LMI customers have been understood to be hard to reach for a number of reasons, including cultural diversity, unwillingness of homeowners to participate in programs, lack of awareness of and importance attributed to energy efficiency and clean energy technologies, lack of access to capital to invest in projects, and the challenges in managing day-to-day expenses with limited resources. The success of the Statewide LMI Portfolio depends on a successful customer awareness, outreach and engagement campaign. To address this, the Program Administrators have and will continue to design and implement strategies to overcome the challenges of engaging LMI customers and affordable property owners.

Utilities continue to identify supplemental activities to support LMI initiatives. These include distribution activities through food banks and other LMI distribution activities that also cross-promote EmPower NY and AMEEP. These programs are shown in the Budgets and Targets Tables within the Customer Awareness, Outreach and Engagement Activities section and those that are active are defined in more detail in the Annual Report.

Customer Awareness, Outreach & Engagement initiatives seek to identify, address, and include solutions to overcoming barriers to engaging LMI customers and other stakeholders, which may have impeded customer participation in current and future initiatives. These engagement initiatives will seek to:

• Raise Customer Awareness About Portfolio Offerings In order for the Portfolio to be successful, LMI customers need to be made aware of the initiatives and services. The Program Administrators recognize the diversity

of LMI New Yorkers and are focused on establishing an outreach campaign that is inclusive. To achieve this, community partners will continue to be engaged to help assist in raising customer awareness of the benefits of participation.

Motivate Customers to Take Action

Once customers are made aware of initiatives and services for which they may qualify, the next step is to engage customers in taking action. Messaging has been designed to help customers understand the participation process and benefits of taking action.

Provide Easy Access to Participation

The initiatives will continue to be designed with ease of customer application and participation in mind. Contractor information will be made available quickly for those customers seeking assistance after an application is submitted for one or more initiatives.

Through multiple delivery channels, the Program Administrators continue to deliver initiatives that address the overall strategic development and coordination of Customer Awareness, Outreach and Engagement initiatives. These initiatives continue to build on existing program experience and provide a comprehensive and integrated statewide approach that includes the following key initiatives:

1. LMI Portfolio Marketing

- Statewide branding, including an initial marketing campaign launched in February
 2022
- Centralized NY Energy Advisor website providing online information on energy efficiency and clean energy, financial assistance, and information on how to learn about and participate in the Portfolio offerings
- Branded hard-copy program outreach and informational materials to complement the online NY Energy Advisor website
- Delivery of community-based marketing and paid advertising

2. Community-Based Outreach, Education, and Engagement Partnerships

- An enhanced network of statewide, community-based partners to leverage the customer outreach and engagement capabilities of LMI stakeholder organizations and contractors
- Community Energy Engagement Program ("CEEP") and Regional Clean Energy Hubs

3. <u>Community-Based Customer Engagement Initiatives</u>

- Delivery of community-based partnerships that combine distribution of low-cost energy efficiency measures with education about energy efficiency and clean energy and information on how to participate in other Portfolio programs
- Neighborhood-based delivery model

This comprehensive approach will continue to allow the Program Administrators to reach residents and communities with opportunities for improving energy affordability, accessing clean energy solutions, improving awareness and education of clean energy opportunities, connecting with essential services, 95 and otherwise accessing the full range of benefits of the clean energy economy.

The following sections provide further information on the featured elements listed above.

5.1 LMI Portfolio Marketing

Statewide LMI Portfolio marketing includes four broad elements: (1) statewide branding; (2) the NY Energy Advisor website; (3) branded hard-copy program outreach and informational materials to complement the online NY Energy Advisor website; and (4) delivery of community-based marketing and paid advertising.

Statewide Branding

Statewide branding for the Portfolio has been developed by the Program Administrators to provide a consistent foundation for marketing and engagement activities. Just as the evolution of appropriately harmonized statewide program design elements can increase effectiveness in program delivery by reducing confusion, statewide branding provides more consistent messaging and increased awareness of the Statewide LMI Portfolio. Statewide branding efforts leading customers and affordable housing owners to initiatives and services will contribute to the success of the Portfolio. Statewide branding will be used in conjunction with localized marketing implemented by the Utilities in their respective territories.

Key considerations in effective statewide branding include development of a clear, concise message as to what is being offered, where to find the offerings, who is offering them, who qualifies for the offerings, and the value of participation.

The Program Administrators launched the initial full paid marketing campaign for the NY Energy Advisor in early 2022. 2022 will be used as a benchmark year to set measurable metrics for future years. The marketing campaign will be calibrated, when necessary, based on results from metric evaluation. Materials will be adjusted and updated based

⁹⁵ These are services outside of the LMI initiative that facilitate participation in the initiative, which may be referred to as "wraparound." For example, a customer may need a new roof in order to qualify for attic insulation under the EmPower NY initiative and receives the new roof from a community program that funds such repairs.

on evaluating paid media, stakeholder, and customer feedback. By coordinating on statewide branding and marketing campaigns, the Program Administrators have created cost efficiencies in increasing awareness of the Portfolio.

NY Energy Advisor

In 2021, the Program Administrators developed and launched a web-based customer hub platform, called NY Energy Advisor, to provide streamlined, easy access to information about LMI initiatives and services for LMI customers, affordable multifamily property owners and managers, contractors, and stakeholders throughout the state. The NY Energy Advisor is designed to provide clear, consistent, and easy-to-find information on relevant LMI programs and services, including energy efficiency, renewable energy, and energy education materials. This is expected to reduce customer, contractor, and stakeholder confusion. The NY Energy Advisor website will continue to evolve over time into an effective and trusted source for those who use it. This will ideally improve customer satisfaction, Portfolio awareness, and program participation.

The costs for marketing, advertising, consumer perception/awareness surveys, and maintenance of the NY Energy Advisor are shared by the Program Administrators. The cofunding agreement to pay for these costs was based on the approved cost sharing method used by the Technical Resource Manual ("TRM") Committee. ⁹⁶ As NYSERDA is not included in the TRM cost sharing agreement, NYSERDA's share will be based on its percent of the Implementation Plan budget. The Utilities' cost share will be the remaining amount prorated among the Utilities as outlined in the TRM Management Plan.

An agreement was developed and executed between NYSERDA and each of the Utilities that delineated the process for reviewing details related to the marketing and maintenance of NY Energy Advisor. NYSERDA will continue to take the lead with marketing and maintenance, engaging a contractor to provide the necessary work. The agreement set in place cost sharing responsibilities, a process to review details of the campaign, costs associated, and how and when reimbursements to NYSERDA will be made.

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⁹⁶ See, Technical Resource Manual Management Plan filed August 15, 2018 in Cases 14-M-0101, 15-M-0252 and Matter 15-01319. Cost share percentages were informed by EM&V work previously completed under the directives and guidance provided in Case 07-M-0548, *Proceeding on Motion of the Commission Regarding an Energy Efficiency Portfolio Standard* ("EEPS"). The cost share percentages outlined in this document are derived from contract negotiations amongst the TRM MC member companies, which occurred as part of bringing the TRM Administrative Vendor on board.

Hard Copy Customer Education Collateral and Multilingual Communications

While the online NY Energy Advisor is a critical resource for providing information to LMI customers, approximately 7% of adults nationwide, of which 25% are aged 65 and older, 97 do not have access to a computer or mobile device in their home. To address this fact, the Program Administrators will complement the NY Energy Advisor website with written materials that provide similar branded messaging about Portfolio offerings. These materials will be distributed for use by contractors and community-based partners to hand out to their clients. The focus of these materials will be to provide initiative information and encouragement for customers to take action by calling their utility, NYSERDA's customer service center, or a community-based partner organization to receive assistance in applying for participation. Currently, collateral is available in several languages (to date, English, Chinese, Russian, and Spanish).

Community-Based Marketing and Paid Advertising

To complement the NY Energy Advisor and the community-based outreach and education elements described above, the Program Administrators may conduct multilingual marketing through local media, with an emphasis on marketing delivered through local news outlets and community officials and opinion leaders. The Program Administrators may look to leverage their community-based partners' relationships with local media and ability to garner earned media to promote programs.

Additional local marketing may include paid advertising to raise awareness about the LMI programs. Examples of paid advertising that may be considered are:

- Public transportation posters and billboards
- Google searches
- Social media
- Local electronic and print media
- Direct mail/email campaigns tailored to LMI customers who have been identified as categorically eligible based on geographic eligibility guidelines, or who are identified in utility customer databases as being eligible for HEAP or low-income rate discounts

Objectives:

Provide consistent messaging statewide

Develop clear, concise messaging as to what is being offered, where to find the
offerings, who is offering them, who qualifies for the offerings, and the value of
participation

 $^{^{97}}$ Pew Research Center – April 2,2021 "7% of Americans don't use the internet and who they are"

- Provide streamlined, easy access to LMI initiatives and services for LMI customers, affordable multifamily property owners and managers, contractors, and stakeholders throughout the state
- Complement the NY Energy Advisor website with written materials that provide similar branded messaging about Portfolio offerings
- Identify and develop solutions to overcome barriers of engaging LMI customers and other stakeholders
- Raise LMI customer awareness about Portfolio initiatives and services
- Establish inclusive outreach campaign that reflects the diversity of LMI New Yorkers

Overview

Status Prior to New Statewide LMI Portfolio Offering

Statewide Branding

NYSERDA managed statewide branding efforts for a range of programs, including primarily EmPower, AHP, MPP, and FlexTech. The Utilities did not have statewide branding prior to the new Statewide LMI Portfolio Offering, given that any Utility-specific programs and initiatives did not extend beyond their own service territory. A statewide branding approach therefore represented a significant opportunity in the transition to the Statewide LMI Portfolio.

NY Energy Advisor

Prior to launch of the NY Energy Advisor, there was no equivalent one-stop customer website for LMI programs statewide. NYSERDA and each of the Utilities had websites with appropriate information and links for the particular programs they offered.

Hard Copy Customer Education Collateral and Multilingual Communications

The Program Administrators separately developed and distributed hard copy customer education collateral. The Program Administrators generally provided such material in several languages.

Community-Based Marketing and Paid Advertising

Each of the Program Administrators engaged in separate local community-based marketing and paid advertising.

Transitional Phase

Statewide Branding

In the 2020 Implementation Plan, the Program Administrators identified the development of a statewide brand for the LMI Portfolio as an objective. In the continuing development since the filing of the 2020 Plan, the Program Administrators have shifted focus from developing a single brand for the whole Statewide LMI Portfolio to the topic of statewide branding by program. The following programs currently use statewide branding: EmPower, AHP, AMEEP, and FlexTech. NY Energy Advisor and its marketing campaign represents an additional statewide branding effort and name.

NY Energy Advisor

The full New York Energy Advisor website was developed and launched in 2021, replacing the interim website. This is a platform that offers streamlined access to initiatives and services for LMI customers, affordable multifamily property owners and managers, contractors, and stakeholders throughout the state. The NY Energy Advisor is designed to provide clear, consistent, and easy-to-find information on all relevant LMI initiatives and services, including energy efficiency, renewable energy, and energy education materials. This website is expected to

reduce customer, contractor, and stakeholder confusion and the need to search for assistance on multiple websites.

Hard Copy Customer Education Collateral and Multilingual Communications

In addition, collateral materials will be developed and made available for community and utility advocates. Material is provided in several languages (to date, English, Chinese, Russian, and Spanish).

Community-Based Marketing and Paid Advertising

Individual Program Administrators are continuing to develop and implement community-based marketing and paid advertising efforts.

Full Implementation

Statewide Branding

Some statewide branding that is currently in market is planned to continue in market in the Full Implementation Phase, e.g., AMEEP, FlexTech, and NY Energy Advisor. One major statewide branding update will be the transition of the current EmPower and AHP brands into the new, combined EmPower+ brand, slated for launch in 2023.

A key focus of statewide branding is to effectively complement individual Utility and more localized marketing efforts.

NY Energy Advisor

The NY Energy Advisor website has been launched and is currently serving the market. The site provides:

- Information on the Portfolio offerings
- Links to program intake forms
- Contact information on how to access community outreach representatives (see <u>Section 5.3</u>, below)
- Links to other programs and resources, as appropriate for the audience
- Access to information in multiple languages

A tool kit containing resources for stakeholders is located on the LMI Resource Page. 98 The toolkit includes downloadable fact sheets, posters, and social media information all to be used by stakeholders to promote the NY Energy Advisor and in turn, programs and services for LMI customers and affordable property owners. A tutorial video

⁹⁸ https://www.nyserda.ny.gov/All-Programs/Low-to-moderate-Income-Programs/LMI-Stakeholder-Resources-New-Efficiency-New-York

demonstrating how to use the NY Energy Advisor website was launched and is available for use.⁹⁹

In the future, the Program Administrators will aim to increase market awareness and use of NY Energy Advisor. The site will also be adjusted and updated based on evaluation of paid media, stakeholder, and customer feedback.

Hard Copy Customer Education Collateral and Multilingual Communications

Program Administrators will work to provide consistent hard copy customer education collateral, and multilingual communications to reach identified customer demographic groups.

Community-Based Marketing and Paid Advertising

Program Administrators will continue to develop and deploy community-based marketing and paid advertising as effective complements to other marketing and engagement efforts.

Target Market and Delivery Method

Market	LMI customers, affordable multifamily property owners and managers,
Segment	contractors, and stakeholders throughout the state
Addressed	
Delivery	NY Energy Advisor website, hard copy collateral, paid advertising,
,	
Method	community engagement

Stakeholder / Market Engagement

Key Partners	Community-based organizations

⁹⁹ Stakeholders, regulators, and others may review the tutorial to understand how the NY Energy Advisor works or to help answer questions a customer might have, including in response to call center inquiries.

Key Milestones (2022-2024)

Year	Milestone	Status
2022	NY Energy Advisor: • Launch a marketing campaign for the NY Energy Advisor in Q1 2022 that will continue through 2025	In Progress
	 Hard Copy Customer Education Collateral and Multilingual Communications: Develop and distribute to stakeholders hard copy customer collateral beginning in Q1 2022 in parallel with operation of the online NY Energy Advisor, to ensure consistent messaging and calls to action and to streamline development costs. Materials available in multiple languages include posters and fact sheets. 	
	 Community-Based Marketing and Paid Advertising: Specific media and paid advertising approaches will be developed and coordinated with the statewide campaign and as initiatives are added/changed in the Portfolio. 	
2023	 NY Energy Advisor: Review NY Energy Advisor analytics determining effectiveness of marketing campaigns Make adjustment to paid media campaigns if needed Continue to support the Program Administrators and stakeholders' efforts to obtain earned media 	Future
2024	 NY Energy Advisor: Continue to analyze NY Energy Advisor marketing campaigns. Make adjustments to the campaign. 	Future

5.2 Community-Based Outreach, Education, and Engagement Partnerships

Access to clean energy programs and resources and the broader set of benefits they bring can be more difficult for LMI households and disadvantaged communities, due to the various economic and institutional barriers present in the LMI customer segment. To increase adoption of energy efficiency and realize the benefits of clean energy, it is therefore important for Program Administrators to work with CBOs, who are trusted resources in the community, to connect residents with program opportunities, increase awareness and education of clean energy issues, educate residents on ways to reduce energy consumption and bills, leverage workforce development opportunities, and identify services necessary to undertake energy efficiency projects.

Expansion of Existing LMI Community Partnerships

NYSERDA will establish Regional Clean Energy Hubs ("Hubs"), one in each of the ten economic development regions across the state, with the exception of the New York City region where up to three hubs will be established, to assist communities and residents with accessing clean energy programs and solutions. Investment in the establishment of Hubs is intended to build capacity at the local level and position disadvantaged communities to participate in and benefit from the clean energy economy.

Objectives:

- Increase awareness of and access to clean energy solutions and opportunities
- Increase consumer uptake of clean energy projects, with support for accessing wraparound (non-energy) services and resources
- Advance local capacity to engage with community members about clean energy policy, technologies, and opportunities
- Increase public participation in energy planning and program coordination activities
- Increase partnerships with clean energy partners, affordable housing providers, non-energy partners, third-party funding providers, philanthropic organizations, etc. that result in scalable activities and projects
- Increase the diversity of participating contractors in the clean energy sector
- Support career pathways for individuals currently residing in disadvantaged communities or from priority populations, through partnerships with training, education, and clean energy businesses for employment opportunities in the clean energy workforce

Overview

Status Prior to new Statewide LMI Portfolio Offering NYSERDA administers the Community Energy Engagement Program (CEEP), launched in 2017 across New York State, which provides resources for Community Energy Advisors to:

- Enable participants to make informed energy decisions
- Inform participants of financing options for energy efficiency and renewable energy projects and products
- Guide participants through the process of implementing a clean energy project
- Connect participants with the right energy contractors who can implement clean energy projects

Through the CEEP, NYSERDA awarded approximately \$5.5 million to deploy Community Energy Advisors ("CEA") to conduct outreach and engagement activities to residents, small businesses, and multifamily building owners, with an emphasis on LMI households and communities.

	CEEP expanded the reach of NYSERDA programs throughout the entire State to incorporate a regional approach, thus providing geographic alignment with other State efforts and full statewide coverage. Ten (10) locally based and constituency-based organizations were deployed statewide.
Transitional Phase	NYSERDA conducted a co-design process with 30 community partners in 2020 to get input and improve outreach and engagement within disadvantaged communities. To support a teaming arrangement and to facilitate partnerships in the delivery of the Hub services, a web-based Clearinghouse was made
	available in 2021 on NYSERDA's website for organizations to express their interest.
	Current CEEP contracts extended to June 30, 2022 to provide continuity and avoid interruptions in outreach and engagement services until the Regional Clean Energy Hubs initiative launches. The Regional Clean Energy Hubs RFP 4630, which builds on previous community-based outreach and engagement efforts, commences in Q3 2022.
Full	The Regional Clean Energy Hubs will:
Implementation	 Act as a trusted local resource for community members to learn more about the energy-related programs and services available to them Increase awareness of these programs and services by leveraging the expertise and trust of local community organizations - particularly those with a proven track record of engaging disadvantaged communities Develop outreach and engagement strategies to elevate the needs of communities and residents into program and policy development Address gaps in and advancing diversity of the clean energy workforce by connecting residents with educational, training, and job opportunities and small businesses with resources to support economic development
	'

Target Market and Delivery Method

Market	Homeowners, renters, contractors/builders, affordable property owners,
Segment	small commercial entities and nonprofits with an emphasis on
Addressed	disadvantaged communities
Delivery	Hubs will deploy Energy Advisors within each region to connect
Method	community members to clean energy and related programs and
	resources
	Hubs will Implement community campaigns and local projects and pilots

Stakeholder / Market Engagement

Voy Dartners	Voy community based partners will play an important role with the Degional
Key Partners	Key community-based partners will play an important role with the Regional
	Clean Energy Hubs and generally include:
	on o
	• CBOs
	Local, state, and federal agencies
	Regional Economic Development Councils ("REDCs")
	Ecumenical organizations and communities
	Philanthropic organizations
	Low-income and affordable housing advocacy groups
	Community coalitions and associations
	Homeowner and tenant associations
	Educational institutions
	Corporations and trusts
	Banks and financial institutions, particularly community development
	financial institutions ("CDFIs")
	• Environmental, health, and energy efficiency advocacy groups (national,
	statewide, and local)
	Skilled trade groups, unions, and engineering societies
	Retailers and installation contractors
	Community event organizers (fairs, home shows, etc.)
	Small businesses and Business Improvement Districts ("BIDs")
	• Utilities

Implementation Milestones (2022-2024)

Year	Milestone	Status
2022	Regional Clean Energy Hub network will be launched in Q3 2022 incorporating input from the co-design process with community partners in 2020 to improve the reach and impact of outreach and engagement within disadvantaged communities	In Progress
2023	Hubs fully onboarded in the market and working with local communities to support and streamline program engagement	Future
2024	Hubs to begin launching community campaigns and local pilot programs	Future

Budgets, Targets and Performance Metrics

The annual budgets, targets and performance metrics for this initiative are included in Appendices B and C.

5.3 Community-Based Customer Engagement Initiatives

Utilities will continue to seek partnerships with organizations who directly or indirectly serve or advocate on behalf of the LMI community. Utilities will continue to engage eligible LMI customers through customized educational efforts and the distribution of free or discounted direct install measures directly or through trusted local organizations. These engagement initiatives provide customers with easy access to energy efficiency information, promote proven technology (e.g., installation of LED lighting measures), and increase awareness of other efficiency programs offered in the Portfolio, including direct install measures, behavioral action recommendations, and general efficiency education.

Utility sponsors of such programs partner with organizations that provide LMI customers with the opportunity to opt in to receive free or heavily discounted efficiency measures and/or customized behavioral recommendations to reduce their energy consumption. Types of initiatives include:

- Working with local food banks to distribute LEDs to low-income customers
- Distributing energy efficiency kits to customers participating in Utility low-income bill discount programs
- Working with measure vendors, local community-based organizations, and public agencies to provide free or heavily discounted energy efficiency measures to LMI customers
- Distributing HERs to LMI customers with customized energy efficiency recommendations

As part of the LMI JMC, the Program Administrators share experiences and lessons learned from offering these initiatives with each other. Currently, utilities are in different stages of design and implementation of these programs. Some utilities are currently running these programs and will continue to do so. Utilities that are in the process of developing such programs will continue the development process and launch new programs. Other utilities will begin strategy and design work to develop an offering. Throughout 2022, the Program Administrators will work together to share insights into these different programs and explore further coordination on similar initiatives.

Neighborhood-Based Delivery Model

Several of the Program Administrators have tested a neighborhood-based delivery model to improve energy affordability and increase access to clean energy solutions, energy education, and energy management tools for LMI customers. This was accomplished by providing no-cost services to all residential members of a defined geographic region and

 $^{^{100}}$ Sponsoring utilities will avoid distribution of unsolicited measures, which can lead to low installation rates and customer complaints.

providing outreach and engagement through a fair-like event designed to bring together neighbors in a community to learn how to take action to become energy efficient and enroll in available programs. The pilot aimed to determine if this model reduces administrative costs associated with program implementation and income verification. This pilot is being evaluated to determine if this is an effective model for delivering LMI and energy efficiency services to customers.

Upon a positive evaluation, the Program Administrators will aim to expand the reach of this pilot throughout the State and use the neighborhood-based delivery model as a mechanism to reach LMI customers in their communities, reduce administrative costs, create a holistic one-stop shop for customers and increase LMI customer access to LMI and energy efficiency programs.

The expected outcome is that this model will allow programs to reach, engage, enroll, and serve more LMI customers more cost-effectively, increase trust in the programs and in Program Administrators by reaching customers through trusted community leaders, and connect customers with other LMI social services.

Objectives:

- Increase LMI customer awareness of the financial, comfort, health & safety and environmental benefits of energy efficiency and clean energy
- Promote participation in deeper LMI efficiency programs
- Capture direct savings from the installation of no- or low-cost energy efficiency measures (e.g., LED bulbs, showerheads, faucet aerators, advanced power strips) to LMI customers through trusted community partners
- Provide behavioral recommendations to improve LMI customer home comfort and efficiency
- Build customer trust in and appreciation of participating organizations and sponsoring utilities, leading to greater willingness to participate in other LMI programs
- Build relationships with participating community-based partners, leading to their participation in promoting other Statewide LMI Portfolio programs

Overview

Status Prior to new Statewide LMI Portfolio Offering

Community-Based Customer Engagement Initiatives

Prior to the new Statewide LMI Portfolio offerings, several utilities had community-based customer engagement initiatives.

In 2020, Con Edison distributed energy efficiency kits to customers participating in Con Edison's Low Income Discount Program, which provides bill assistance. Kits contained LED lightbulbs, two faucet aerators, and a low-flow showerhead. Con Edison also collaborated with food pantries and Techniart to distribute LEDs to low-income customers. Further, Con Edison distributed home energy reports ("HERs") to LMI customers, providing education on energy usage in the home and tips for reducing consumption. Con Edison also created an advertisement on Fresh EBT, a free app that recipients of the Supplemental Nutrition Assistance Program ("SNAP") can use to help manage their benefits, to increase energy efficiency awareness.

Since 2016, Central Hudson's Community Lighting program has partnered with support agencies throughout its service territory including local United Way chapters, food banks, food pantries and departments of social services to provide ENERGY STAR certified LED bulbs to Central Hudson qualified, limited-income families at no cost. Over 30 organizations distributed 35,000 LED bulbs to low-to-moderate income community members through 2020.

In 2020, Orange & Rockland partnered with food banks to distribute 7,704 LED light bulb kits. The kits included messaging to educate customers about energy efficiency and included a link to Orange & Rockland's EmPower webpage to drive awareness of the program. While this program benefited LMI customers, the savings and budgets related to this effort were reported under Orange & Rockland's electric portfolio.

Neighborhood-Based Delivery Model

In 2019, National Grid and NYSERDA partnered to implement a project to test a neighborhood-based delivery model for energy efficiency services. The Watertown Energy Fair was hosted by National Grid and NYSERDA in 2019 in Watertown, NY as a one-day event held in the community that aimed to provide a holistic experience for customers to access clean energy and energy affordability solutions.

In 2019, Orange & Rockland and NYSERDA partnered to test a neighborhood-based delivery model for energy efficiency services. Orange & Rockland and NYSERDA hosted two events at the YMCA Center for Youth Programs in Middletown, NY. The first event, the Halloween Middletown Festival, was held in October 2019 and was used to pre-register eligible customers for EmPower and invite them to

the second event, the Middletown Energy Fair. The Middletown Energy Fair provided an additional opportunity to reach a targeted number of income-eligible customers while also providing various energy savings opportunities and educational materials to the community at large. These events were strategically offered in areas that had a significant number of income-eligible customers, and enabled direct engagement opportunities with customers.

Transitional Phase

Community-Based Customer Engagement Initiatives

In 2021, Con Edison distributed kits to customers participating in Con Edison's Energy Affordability Program (formerly the Low Income Discount Program). This program was transitioned be opt-in for customers, and was re-launched in September 2021, with an online portal where eligible customers were able to claim a kit. Con Edison also collaborated with food pantries to distribute LEDs to low-income customers.

In 2021, Central Hudson transitioned the Community Lighting program from their market rate portfolio under the Statewide Low-to Moderate-Income Portfolio. Due to the ongoing pandemic, we were unable to distribute LEDs throughout 2021. Since Central Hudson was unable to distribute LEDs in 2021, efforts were directed towards adding additional partners to the distribution network and designing packaging materials to include with the LEDs. A printed sleeve was added to the packaging, highlighting the ENERGY STAR LED contents and providing guidance on payment assistance programs such as EmPower NY, HEAP and other Low-Income Bill Discount programs offered.

In 2021, NFGDC provided 10,000 weatherization kits to area block clubs, community-based organizations, and area non-profits. Although this program benefited LMI customers, the funding related to this effort came from non-LMI sources, so associated savings and participant numbers are not included in this Plan. The pandemic created a need to promote greater awareness of newly implemented payment assistance programs, the HEAP Residential Supplement Plan and the NYS Emergency Rental Assistance Program. NFGDC created a slip sheet that was placed into a door hanger for customer homes to alert customers of the various assistance programs that are available and urging a phone call if anyone was struggling to pay their bill.

In 2021, National Grid launched its Food Bank LED program to increase awareness of programs and services available to its customers and to encourage customers to utilize them. National Grid developed a partnership with the local Buffalo area food bank as well as NYSEG to distribute LED lightbulbs and brochures that contained information on energy efficiency and payment assistance programs such as EmPower NY, HEAP, National Grid's Energy Affordability Program ("EAP") and assistance provided by National Grid's Consumer Advocates. National

Grid and NYSEG partnered in this location due to their overlapping service territory to utilize resources most efficiently, create cost efficiencies and ensure there was no redundancy.

In 2021, Orange & Rockland partnered with food banks to distribute 13,392 LED light bulb kits. The kits included messaging to educate customers about energy efficiency and included a link to Orange & Rockland's EmPower Webpage to drive awareness of the program. While this program benefited LMI customers, the savings and budgets related to this effort were reported under Orange & Rockland's electric portfolio.

Neighborhood-Based Delivery Model

NYSERDA completed an evaluation on the pilot in 2021 to determine the effectiveness of a neighborhood-based delivery model in reaching LMI customers, increasing participation and adoption rates. An analysis of this evaluation will occur in 2022 and findings and lessons learned will be used to inform future neighborhood-based delivery models and events to serve as a means of reaching LMI customers and easily getting them connected to energy efficiency and other social services. The planning of another in-person energy fair was de-prioritized in 2020 and 2021 due to the pandemic, but will be revisited in 2022 with the analysis of the evaluation results.

Full Implementation

Community-Based Customer Engagement Initiatives

Utilities plan to provide continued implementation of their initiatives going forward, allowing for regular and consistent engagement with the market. Further coordination and sharing of lessons learned by Program Administrators offering the same or similar initiatives will take place as all offerings reach their full implementation phase. Program Administrators will plan provide offerings as follows:

- Con Edison will continue to offer the opt-in kits offering and work with food pantries to distribute energy efficiency measures to customers.
- Central Hudson will continue to offer the Community Lighting
 program and distribute LED bulbs at no cost through
 partnerships with local not-for-profit organizations that serve
 low-income customers. This initiative will continue to target
 customers utilizing services from organizations such as the
 United Way and Food Panties. Additional information will
 continue to be provided with the LEDs to educate customers
 about energy savings, payment assistance programs, and the NY
 Energy Advisor.
- National Grid will continue to work with foodbanks in its upstate NY territory to distribute LED lightbulbs and brochures containing information about energy efficiency and payment assistance programs and services. National Grid seeks to continue close coordination with utilities overlapping with its service territory.

•	NFGDC will continue to provide weatherization kits to area block
	clubs, community-based organizations, and area non-profits.
•	Orange and Rockland will expand their food bank kit offering

 Orange and Rockland will expand their food bank kit offering and provide energy efficiency kits via an opt-in approach to customers participating in the Company's Energy Affordability Program. Additionally, O&R will expand the existing MY ORU Store ecommerce platform to include additional functionality that offer new tools, products, and additional rebates that will engage and guide LMI customers to make energy wise decisions for their home.

Neighborhood-Based Delivery Model

Depending on the analysis of current pilot efforts, may make develop and offer initiatives using the neighborhood-based delivery model.

Target Market and Delivery Method

Market	LMI customers
Segment	
Addressed	
Delivery Method	Information and measures distributed through community-focused methods and community organizations that are trusted and frequented by LMI customers. Measures may also be distributed directly from the utilities through program vendors.

Eligible Measures and Incentive Structure

Eligible Measures	Programs may include LED lightbulbs, energy efficiency kits (which may contain measures such as LED lightbulbs, low-flow showerheads, and faucet aerators), and other low-cost measures
Incentive Structure	Varies, but generally no cost to customers

Stakeholder / Market Engagement

Key Partners	Key partners include:
	 Food banks School districts Non-profits Local community organizations Local public agencies
	Local public agencies

Key Milestones (2022)

Year	Milestone	Status
2022	 Community-Based Customer Engagement Initiatives: Central Hudson plans to continue their Community Lighting program and will distribute LEDs through Food Banks and the United Way starting again in 2022. Con Edison will continue to offer energy efficiency kits via an opt-in approach to customers participating in Con Edison's Energy Affordability Program (formerly called the Low Income Discount Program) and to collaborate with food pantries to distribute LED lightbulbs. National Grid will expand their LED Food Bank program to the Albany and Syracuse area and increase frequency to twice per year with continued collaboration with NYSEG/RGE. Orange & Rockland will expand their food bank kit offering and provide energy efficiency kits via an opt-in approach to customers participating in the Company's Energy Affordability Program. Additionally, O&R will expand the existing MY ORU Store to present specific LMI customers with additional rebates for energy efficient products.	In Progress
	 Neighborhood-Based Delivery Model: During the balance of 2022, the Program Administrators will assess evaluation results from the existing pilots and determine effectiveness of the neighborhood-based delivery model. If warranted, the Program Administrators will develop a replicable event/implementation plan, including consideration of remote webinar-based 	

platforms as an alternative delivery mechanism to minimize risks associated with large, in-person events. This event/outreach strategy would be incorporated beginning in 2022 after final evaluation results are
determined.

6. Coordination with External Program Administrators and Other Organizations

In addition to coordination across the Program Administrators, there are additional opportunities to work with programs administered by New York State agencies, local government, and CBOs to reduce redundancy and to increase coordination, effectiveness, and impact for the customer.

Table 7: Summary of Statewide Coordination Efforts

Organizations	Nature of Coordination			
New York State Department of Environmental Conservation	 Explore opportunities to improve energy and health outcomes in environmental justice and disadvantaged communities Support operationalization of Climate Act investment requirements 			
DOH	 Develop an approach to quantify the health outcomes and healthcare cost reductions associated with energy efficiency improvements Explore opportunities for developing a programmatic approach for addressing energy efficiency and healthy homes improvements for low-income customers 			
NYS HCR	 Support the development of technical capacity and access to performance data (e.g., benchmarking) Explore systematic improvements to policies and processes so that the benefits of clean energy are embedded upstream of tenants and building owners, such as: Exploring opportunities to increase energy performance requirements associated with the Low-Income Housing Tax Credit and the Qualified Allocation Plan; 			

NYS Office of Temporary and Disability Assistance	 Advancing adoption of an IPNA, in coordination with other key stakeholders including housing authorities; Exploring the development of underwriting criteria for high performance new construction and preservation projects, based on reduced operational costs; and Piloting model-based utility allowances in New York, in coordination with other key stakeholders. Alignment between WAP and EmPower NY to reduce overlap and administrative burden for the agencies, service providers, and customers Support mobilization of New York's \$289 million WAP funding allocation under the Bipartisan Infrastructure Law of 2021 Maximize the reach of HEAP funds through increased consumer education and targeted
Low-Income Energy Program Interagency Task Force ¹⁰¹	Development of a cohesive approach to serve low-income energy customers across the programs administered by New York State agencies to reduce redundancy and increase coordination, effectiveness and impact for the customer.
PSEG Long Island	 Coordination between KEDLI's HEAT Program and PSEG Long Island's REAP program, where the Program Administrators exchange leads so customers can participate in both gas and electric energy efficiency programs Explore opportunities to more closely coordinate the AMEEP program with multifamily programs offered by PSEG Long Island
Long Island Power Authority	Coordination with LIPA through programming such as EmPower and HEAT to leverage statewide models

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¹⁰¹ The Low-Income Energy Program Task Force was formed by the Office of the Governor in May 2016 to bring together the New York State agencies responsible for administering low-income energy programs for developing a cohesive strategy for serving LMI energy customers, increasing coordination and sharing information.

The Joint LMI Management Committee will continue to examine and address the coordination of work with external program administrators to see that the Statewide LMI Portfolio effectively delivers clean energy solutions to LMI customers and communities.

7. Benefit Cost Analysis

This section presents the results of the Benefit Cost Analysis (BCA) for the Statewide LMI Portfolio of initiatives. 102

The Program Administrators calculated the BCA following the NYS BCA Framework 103 and subsequent DPS guidance. 104 A common approach was used to calculate the Portfolio BCA found in <u>Table 8</u> and Program Administrator-specific assumptions were used according to utility BCA handbooks.

The BCA results reflected in Table 8 will be refined as the initiatives are further developed. The BCA results for the Societal Cost Test ("SCT") include the benefits associated with reduced carbon emissions, calculated in line with the most recently updated values promulgated by the New York DPS in December 2021. The carbon emission benefits included in the 2022 BCA were updated using the most recent inputs for calculation of carbon impacts based on communication with, and at the direction of, DPS Staff. Additionally, revisions to program design as well as the inclusion of new programs and measures also generated changes between the 2020 and 2022 BCAs. Portfolio BCA results are largely comparable for the Utility Cost Test ("UCT"), though there are changes for individual Program Administrators, and SCT results in 2022 are approximately 67% higher than those reported in 2020, which is largely driven by the updated carbon emission benefits inputs.

Portfolio-level BCA results are shown in Table 8.

¹⁰² While the Program Administrators provided an updated BCA in 2022 (*i.e.*,NE: NY Proceeding, Statewide Low- to Moderate-Income Portfolio Implementation Plan, Version 2 (filed April 29, 2022)), a new BCA was not conducted for the Nov. 1, 2022 filing. A new BCA will be conducted in conjunction with the revised Implementation Plan in 2023.

¹⁰³ Case 14-M-0101, *Proceeding on Motion of the Commission in Regard to Reforming the Energy Vision*, Order Establishing the Benefit Cost Analysis Framework, (issued January 21, 2016).

¹⁰⁴ Clean Energy Guidance CE-07: *Utility-Administered Energy Efficiency Utility Filing Requirement Guidance* (issued May 14, 2018).

¹⁰⁵ https://www.dec.ny.gov/docs/administration_pdf/vocapp22.pdf

Table 8. Statewide LMI Portfolio BCA Results

	Socie	etal Cost Test (S	CT)	Utility Cost Test (UCT)			
			Benefit			Benefit	
	Benefits	Benefits Costs		Benefits	Costs	Cost Ratio	
2022	\$215,029,797	\$258,279,575	0.83	\$111,311,285	\$152,296,309	0.73	
2023	\$295,895,465	\$261,521,182	1.13	\$160,304,929	\$152,967,685	1.05	
2024	\$334,613,039	\$285,663,034	1.17	\$183,749,880	\$166,157,984	1.11	
2025	\$386,988,833	\$299,315,515	1.29	\$215,211,746	\$146,146,108	1.47	
2026	\$155,304,952	\$137,101,783	1.13	\$89,752,333	\$48,146,083	1.86	
2027	\$45,406,627	\$98,047,352	0.46	\$25,954,905	\$17,777,508	1.46	
2028	\$13,661,876	\$9,450,895	1.45	\$7,927,563	\$6,613,693	1.20	
2029	\$4,930,952	\$2,515,370	1.96	\$2,882,858	\$2,515,370	1.15	

8. Evaluation, Measurement, & Verification Approach

As described below, the Program Administrators take a coordinated approach to estimating savings and evaluating LMI initiatives. This includes standardized statewide savings estimation approaches, collaborative evaluation activities, and continuous monitoring of and feedback on Performance Metrics. Specific program-level savings estimation approaches and evaluation schedules are detailed in the VGS Specifications, which are coordinated across the Program Administrators and are jointly filed. ¹⁰⁶

8.1 Savings Estimation

In general, the Program Administrators will continue to rely on the TRM and best practices to estimate savings and achieve VGS goals. Given that LMI customers often have older and less efficient equipment than their market-rate peers, and given the need to fully account for LMI customer savings, an existing baseline approach will be employed where possible. To minimize administrative challenges that could result from using different baseline assumptions for different customer segments, particularly within a program that concurrently serves both LMI and non-LMI customers, the following overarching savings estimation approaches will continue to be used:

Prescriptive

For prescriptive measures, details of existing conditions in LMI customer residences may be substituted for parameters in the TRM to calculate savings. ¹⁰⁷ The TRM currently

¹⁰⁶ The initial VGS Specifications were filed in December 2020. NE: NY Proceeding, Consolidated LMI VGS Specifications (Filed December 14, 2020). Updated VGS Specifications are being filed concurrently with this Implementation Plan.

https://www.nyserda.ny.gov/All-Programs/Low-to-moderate-Income-Programs/LMI-Stakeholder-Resources-New-Efficiency-New-York/NYS-Affordable-Multifamily-Energy-Efficiency-Program.

contains language describing this methodology. ¹⁰⁸ Further, program manuals such as the AMEEP Program Manual contain guidance for providing information about existing conditions to be used in savings calculations. Additionally, baseline studies or other evaluation materials will be leveraged, where available, to calculate an average existing condition baseline that approximates the type and age of equipment currently installed by LMI customers. This will allow for a uniform deemed savings approach for common prescriptive measures within the Statewide LMI Portfolio, either at a statewide or more granular level depending on availability of data and measure-specific characteristics. ¹⁰⁹ Using evaluation and other research data to determine these average baseline values will promote coordination of evaluation methodologies amongst Program Administrators (discussed in further detail below), and will allow for increased savings accuracy while minimizing the burden of customer data collection. This average baseline approach will also preserve implementation efficiencies by streamlining application processing and savings calculations.

If, for a particular measure, baseline studies or other supporting evaluation material is not available for determining an average existing condition baseline, standard TRM assumptions are to be used until new information becomes available through evaluation activities or through other pertinent research facilitated by the TRM Management Committee ("MC"). Evaluation activities that will contribute to improving LMI-specific baseline assumptions will be detailed as part of established ETIP/SEEP and VGS Specification processes. ¹¹⁰ As baseline assumptions become available, they will be documented in VGS Specifications, incorporated into programs, and, through coordination with the TRM MC, documented in the TRM.

Custom

For custom measures, project-specific existing condition baselines are used. Analyses of current custom calculation tools, such as EmPCalc,¹¹¹ are ongoing, and updates will be made to align savings methodologies in these tools with the TRM and an existing condition approach, as necessary.

¹⁰⁸ Technical Resource Manual, Version 9 - Filed October 27, 2021 (effective January 1, 2022), p. 5, "Application of Methods for Low- and Moderate-Income (LMI) Residential." https://www3.dps.ny.gov/W/PSCWeb.nsf/96f0fec0b45a3c6485257688006a701a/72c23decff52920a85257f1100671bdd/\$FILE/NYS TRM V9.pdf

¹⁰⁹ For example, a granular approach may be warranted for certain HVAC measures to distinguish the prevalence of steam heating in downstate multifamily buildings. Where granular data is not available, a statewide average should be used.

 $^{^{110}}$ For each program a Program Administrator administers, the Program Administrator will submit a VGS Spec. Where there are coordinated programmatic and/or evaluation activities, VGS Specifications will be coordinated as well.

¹¹¹ EmpCalc is a custom modeling tool used by NYSERDA.

8.2 Performance Metrics Planning

In <u>Section 2.5</u>, above, the Plan addresses Performance Metrics for the Statewide LMI Portfolio, including <u>Table 1</u>: <u>Portfolio Objectives and Performance Metrics</u>. As noted in Table 1, for certain of the metrics, EM&V is a key component, including the below:

Portfolio Customer Experience						
Increase customer Portfolio awareness	Percentage of LMI customers that learn about Portfolio initiatives from various sources (e.g., NY Energy Advisor website, Utility or NYSERDA outreach materials, contractors, etc.)					
Achieve high customer satisfaction	Participation satisfaction rating					
Advance energy affordability for LMI customers	Participant bill savings, annual and lifetime					

As such, a key component of EM&V-related planning will be addressing these (and possibly other) performance metrics.

Program Administrator EM&V team activity to research and evaluate performance for these metrics may include the following:

- Surveys
- Coordination with EM&V contractors to study and determine outputs for the factors
- For the three Portfolio Customer Experience performance metrics, the third-party evaluator chosen for the statewide evaluation will determine the methods for calculating the metrics in coordination with the Program Administrators.

8.3 VGS Specifications

The Program Administrators have continued to undertake VGS activities since the 2020 Implementation Plan filing, including continued development and revisions of the VGS Specifications. The VGS Specifications for the Statewide LMI Portfolio are organized into four sections: Existing 1-4 Family Homes; Existing Affordable Multifamily Buildings, Affordable New Construction, and Additional LMI Initiatives. Key activity and issues for each of these categories is described in the Overview table below; additional information and detail is provided in the VGS Specifications.

8.4 General Approach to Evaluation of Initiatives

Evaluation activities for the Statewide LMI Portfolio are and will continue to be coordinated among the Program Administrators where possible and will be designed to provide insight into Performance Metrics tied to savings, participation, customer

experience, and Portfolio efficiencies. These activities will also continue to be incorporated into the PM&IP.

It is important to note that statewide evaluations may be difficult to implement for all programs given that each Program Administrator may have a unique Portfolio mix, and that Utilities have different rate case periods that inform evaluation cycles. Additionally, individual Program Administrators may have recently evaluated, or are currently evaluating, certain programs that include LMI customers. These factors will continue to inform each Program Administrator's evaluation priorities and schedule of activities. Given this, the Program Administrators will continue work on non-program specific activities that will be able to provide meaningful insights across the State. As discussed earlier, this may include coordinated baseline studies, with longitudinal updates. This may also include research to assist in identification of LMI buildings and customers to better serve these customers and communities, research around non-energy benefits, such as household safety and comfort, and other process evaluation activities.

VGS-compliant impact evaluation activities for programs that span all or many Program Administrators will also continue to be prioritized in the short term. Where one Program Administrator is implementing a program on behalf of other Program Administrators, as in the case of EmPower NY, the implementing Program Administrator will take primary ownership of evaluation activities, including the development process for VGS Specifications, and results from the administrator's evaluation will continue to be used in the reporting of savings achieved. In the case of AMEEP, where Program Administrators are jointly operating the program using a statewide framework, the Program Administrators will collaborate to perform a statewide evaluation. This coordination will continue to be conducted as part of larger implementation arrangements at a program level and will be refined throughout 2022.

Collectively, these activities will continue to provide important insight needed in the short term to optimize Portfolio offerings and increase the number of households served annually, while allowing the Program Administrators to work through data sharing, evaluation funding, evaluation timing, and other complexities.

To facilitate future coordinated evaluation activities, the Program Administrators will continue to identify specific opportunities for collaboration, focusing on activities where Program Administrators share customers and/or Implementation Contractors, or otherwise overlap. The Program Administrators will also continue to collaborate on data

¹¹² Further discussion of programmatic evaluation frequency can be found in Clean Energy Guidance CE:08, *Gross Savings Verification Guidance* ("CE-08"). This guidance provides options for scheduling evaluation (Gross Savings Analysis) work, and states that "a PA may use evaluation results conducted on a program's performance within the preceding five-year period, if the program has not significantly changed and the evaluation results calculated a realization rate consistent with this guidance." CE-08, p. 9.

collection tools and practices to streamline statewide evaluation and will embed LMI data collection into existing program evaluation when LMI customers are being served.

Overview

Status Prior to new Statewide LMI Portfolio Offering Prior to the new Statewide LMI Portfolio offerings, each Program Administrator that had an existing LMI program has planned, conducted, and used results from program-specific EM&V studies, including realization rates. Reflecting ongoing operation of utility- and NYSERDA-administered programs and their associated evaluation efforts, program-specific realization rates will be used, where available, until an evaluation of the new statewide offerings can be completed.

1-4 Family Homes: Prior to the new Statewide LMI offering, the 1-4 family homes LMI customer market segment was served by several programs across the state, with each Program Administrator running VGS activity independently for their program. Energy savings for EmPower NY and AHP were estimated from program-supported modeling tools used by contractors when conducting home energy audits. For custom measures, project-specific existing condition baselines were used.

Due to recent and ongoing evaluation efforts, each utility- and NYSERDA-administered program is using program-specific realization rates for the 2020-2021 program years where available, as described in the VGS specs, until the launch and evaluation of the statewide initiatives.

In addition to Program Administrator-specific evaluation activities, the Program Administrators together have been:

- Working to develop a standardized series of survey questions for statewide use when conducting process evaluation research with LMI customers in 1-4 family homes by Q3 2022
- Collaborating to develop statewide and regional average existing condition baselines, where appropriate, as facilitated through the TRM Management Committee. In Q3 2021, key 1-4 family home LMI measures were identified for further research.

Multifamily: Each Program Administrator has planned, conducted, and used results from program-specific EM&V studies, including realization rates. Reflecting recent and ongoing evaluation efforts, each utility- and NYSERDA-administered program will be using program-specific realization rates, where available, for the 2020-2021 program years and until an appropriate time after the launch of the statewide LMI Multifamily Portfolio offering (AMEEP).

New Construction: Among the Program Administrators, only NYSERDA administered a new construction program across the State, *i.e.*, the Affordable New Construction program.

Additional LMI Initiatives: EM&V for the programs addressed in this specification is conducted separately by the Program Administrator. NYSERDA administers Healthy Homes and the Solar for All programs. Central Hudson's Community Lighting program provides LED bulbs to customers that utilize services from organizations such as United Way. Con Edison offers additional programming to its LMI customers through Food Bank Bulb Distribution ("Food Bank") as part of its Retail Lighting program. Similarly, National Grid offers a Food Bank LED Light Bulb Giveaway in their Niagara Mohawk Service Territory.

Con Edison offers an Efficiency Starter program, which provides free kits of low-cost energy savings measures to LMI customers within their respective service territories. Since 2020, Con Edison has been sending focused messaging to LMI customers via Home Energy Reports (HERs).

Transitional Phase

With the transition to the Statewide LMI Portfolio, in December 2020 the Program Administrators developed and filed the four VGS Specifications for the Statewide LMI Portfolio. Since then, the Program Administrators have continued to coordinate closely regarding the application of results from recent EM&V activity to initiatives, to determine application to new statewide offerings. Program Administrators are continuing to coordinate on EM&V activities in order to achieve program and cost efficiencies.

As the new Statewide LMI Portfolio offerings were being developed and implemented, the Program Administrators continued to conduct evaluations on their own programs that were already operational in the market. Given recent and ongoing evaluation efforts, each utility- and NYSERDA-administered program will use program-specific realization rates, where available, during the years they were operational.

In 2021, Program Administrators developed approaches for statewide evaluation of statewide programs, such as EmPower, EmPower+, and AMEEP, as described in the VGS Specifications. Until sufficient data becomes available to conduct these evaluations, Program Administrators have continued to work on activities that could provide statewide insights through evaluation. For example, the Program Administrators compiled survey questions for process evaluation research and have been standardizing the survey questions so they can be more comparable. The Program administrators will continue to refine those questions in 2022. Additionally, Program Administrators will work collaboratively to prepare workplans for these evaluations until there is sufficient data to conduct the evaluations.

In 2021, language was added to the TRM to specify that existing condition baseline parameters may be substituted for TRM baseline inputs when calculating savings for LMI residences. In addition to this alignment of prescriptive TRM calculations with LMI existing conditions, project-specific existing condition parameters can be used in custom savings calculations. Additional guidance on use of existing condition baselines in AMEEP is outlined in the AMEEP Program Manual.

1-4 Family Homes: For the EmPower NY program, the Program Administrators' EM&V teams have aligned on which evaluation results would be applied to each program year. NYSERDA recently completed a 2017-Q1 2019 Gross Savings Analysis evaluation, which will serve as the initial VGS RR. Results shall be applied retrospectively starting in 2017 and will remain in place until a subsequent Gross Savings Analysis, as needed. With the anticipated launch of EmPower+ in 2023, a Gross Savings Analysis will be undertaken in 2024 and results will apply to the program from EmPower+ launch onwards. Until completion of this EmPower+ evaluation, the Program Administrators will use 62% for electric programs and 73% for gas programs as placeholder "adjustment factors" for internal statewide planning and forecasting purposes only. These adjustment factors reflect the results of the recently completed 2017-Q1 2019 evaluation, and are to be used for these planning and forecasting purposes as they reflect the optimal available information.

Multifamily: The Program Administrators revised the VGS Specification for the multifamily sector to align with the development of the new Statewide multifamily program launched in November 2021 (AMEEP).

The Program Administrators have decided to evaluate AMEEP with a joint statewide evaluation, beginning with an evaluation of the 2022 program year in 2023. Upon completion of the AMEEP evaluation, those results will be retroactively applied beginning January 1, 2022. Until completion of this evaluation, the Program Administrators will use a 70% placeholder "adjustment factor" for internal statewide planning and forecasting purposes only. The Program Administrators will use company-specific evaluation results for multifamily programs run prior to AMEEP in 2020 and 2021.

New Construction: Program areas offering incentives are undergoing Gross Savings Analysis for the program period 2017-2020. A contractor was procured by NYSERDA in Q1 2021 to perform this analysis. Details related to the Gross Savings Analysis methodology were submitted in an EM&V Plan in Q1 2021. The estimated completion of the Gross Savings Analysis report is Q1 2024.

Additional LMI Initiatives: An impact evaluation for Con Edison's Efficiency Starter program is forthcoming, with an expected evaluation plan

submission of Q3 2022. The final results are anticipated to be published by Q4 2023. Orange and Rockland's Efficiency Starter program will start in 2022.

An initial impact evaluation was performed for Central Hudson's **Community Lighting** program for the 2018-2019 program year by Demand Side Analytics. The final Report was filed on July 1, 2021.

Full Implementation

Full implementation of EM&V will entail a fully coordinated Statewide EM&V approach, with a focus on achieving cost efficiencies and optimally leveraging information across Program Administrators. A foundational element of this statewide EM&V approach is the establishment of VGS Specifications that cover the EM&V activity and applications for all Program Administrators Statewide. Such specifications were developed and then initially filed in December 2020, and since that time, the Program Administrators have continued EM&V coordination and progress towards full implementation (including filing of updated specifications concurrently with this Plan).

Per the VGS Specifications, in the case where one Program Administrator is implementing a program on behalf of other Program Administrators, as in the case of EmPower NY, the implementing Program Administrator will take primary ownership of evaluation activities. In the case of AMEEP, where Program Administrators are jointly operating the program using a statewide framework, Program Administrators will collaborate to perform a statewide evaluation.

Program Administrators plan to develop average existing condition baselines, facilitated through the TRM Management Committee, to allow for a uniform deemed savings approach for common prescriptive measures within the Statewide LMI Portfolio, either at a statewide or more granular level depending on availability of data and measure-specific characteristics.

1-4 Family Homes: As the 1-4 Family Homes programs are shifted from separate Empower NY and AHP programs to the combined Empower+ program, the Program Administrators will update the VGS activities and the VGS Specification to reflect this shift.

Multifamily: AMEEP was launched Statewide in November 2021. The Program Administrators will evaluate AMEEP with a joint statewide evaluation, with the aim of beginning an evaluation of the 2022 program year in 2023 if there is sufficient data. Evaluation efforts will continue to assess needs as the program evolves, such as any coordination between AMEEP and NYS Clean Heat.

New Construction: As additional New Construction initiatives are developed and implemented, necessary evaluation activities will be undertaken.

Additional LMI Initiatives: As Additional LMI Initiatives are developed and implemented, necessary evaluation activities will be undertaken.

Implementation Milestones (2022-2023)

Year	Milestone	Status
2022	 Continued ongoing meetings between Program Administrator VGS teams Refine and finalize standardized survey questions to be used when conducting process evaluation research Complete 2017-Q1 2019 evaluation of EmPower NY Program, on target to be finished by NYSERDA in Q2 2022 Begin to develop and implement average existing condition baselines, facilitated through the TRM Management Committee, and identify key LMI measures for further research 	In Progress
	 Select EM&V vendor for AMEEP evaluations to be undertaken in 2023 Assess impact of NYS Clean Heat coordination with AMEEP and any resulting evaluation needs 	Planning
2023	 Begin EmPower+ evaluation process Develop the workplan and conduct statewide evaluation for AMEEP, as operated in 2022 	Future

Appendix A: Budgets by Sector¹¹³

A.1 Portfolio-Level Budgets by Sector (\$000)

Initiative	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Total
Existing 1-4 Family	53,895	73,887	91,651	37,526	25,207	26,368						308,534
Homes												
Existing Affordable	17,732	24,818	39,737	61,707	96,053	101,195	30,411	23,369	600			395,623
Multifamily Programs												
Affordable New	5,034	6,617	11,395	6,570	18,000	25,738	31,270	23,080	17,615			145,319
Construction												
Customer Awareness,												
Outreach &	3,225	1,029	8,463	14,760	14,109	13,887	10,126					65,600
Engagement												
Pilots and			213	639	398	398	398	398				2,444
Demonstrations												
Beneficial	13	3,845	2,280	4,580	5,637	8,233	5,412					30,000
Electrification												
LMI Solar	1,283	895	1,300	1,300	1,248	1,200	1,187	1,100	1,100	1,100		11,713
Healthy Homes Pilot	921	285	624	3,813	3,591	591						9,825
Portfolio	359	1,344	4,351	4,416	5,027	5,001						20,497
Administration												
Portfolio EM&V	509	669	1,600	2,051	2,353	2,114						9,296
Total	82,969	113,389	161,615	137,363	171,623	184,725	78,804	47,946	19,315	1,100	-	998,850

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¹¹³ In general, marketing costs are included in the Portfolio Administration category of budgets in this Plan. For NYSEG RG&E, marketing costs are included in program implementation costs.

A.2 Portfolio Budgets Summary by Sector (\$000)

	Total	Percentage of Portfolio
Existing 1-4 Family Homes	\$ 308,534	31%
Existing Affordable Multifamily Programs (Including	·	
Multifamily-related Affordable New Construction)	\$ 526,411	53%
Affordable New Construction (non-Multifamily)	\$ 14,532	1%
Customer Awareness, Outreach & Engagement	\$ 65,600	7%
Pilots and Demonstrations	\$ 2,444	0%
Beneficial Electrification	\$ 30,000	3%
Additional LMI Initiatives	\$ 11,713	1%
Healthy Homes Pilot	\$ 9,825	1%
Portfolio Administration	\$ 20,497	2%
Portfolio EM&V	\$ 9,296	1%
Total	\$ 998,850	

A.3 Utility Incremental NE: NY Funding

	2020 - 2025
Incremental funding allocated to Affordable Multifamily	\$ 209,323,121
Total incremental funding	\$ 308,287,072
Percentage of incremental funding allocated to Affordable	
Multifamily ¹¹⁴	68%

The Accelerated Efficiency Order directed that at a minimum, 40% of the collective incremental LMI funding be committed to serving affordable multifamily buildings. The funding in this table represents the allocated utility incremental LMI funding from the Accelerated Efficiency Order and the 2020 NE: NY Order. This funding does not include additional utility funding that will be transferred into the Statewide LMI Portfolio from Central Hudson, NFGDC, National Grid (KEDLI), NYSEG, and RG&E (refer to Section 3 for details on additional funding).

A.4 Additional or Redirected Funds

Program Administrator ¹¹⁵	Amount (2020-2025)	Description
Central Hudson	\$581,452	Expenditure will be offset by a corresponding underspend of the cumulative authorized budgets for non-LMI Energy Efficiency programs
Con Edison	\$18,268,048	LMI NE: NY electric funds transferred to gas target achievement due to planned early achievement of electric targets
National Fuel Gas Distribution Company	\$36,685,075	LIURP funds directed to LMI 1-4 Family Homes, Multifamily, and Customer Awareness, Outreach & Engagement initiatives
National Grid (KEDLI)	\$10,000,000	Deferral and rate case funding has been designated to support the KEDLI HEAT program in the 1-4 Family Homes portfolio in 2020-2023
NYSEG	\$3,038,133	Market-rate NE: NY funds transferred to supplement Customer Awareness, Outreach & Engagement initiatives
RG&E	\$772,570	Market-rate NE: NY funds transferred to supplement LMI Customer Awareness, Outreach & Engagement initiatives

¹¹⁵ KEDNY, NMPC, NYSERDA, and Orange & Rockland do not plan to incorporate additional funding or shift funds between electric and gas over the course of the portfolio.

Appendix B: Budgets and Targets by Program Administrator B.1 Central Hudson

In an effort to maximize participation in AMEEP, Central Hudson is currently planning to exceed the minimum cumulative gas LMI portfolio spending of \$2,124,356 established within the 2020 NE: NY Order by \$581,452. Utilizing the flexibility provided within the 2020 NE: NY Order, this additional expenditure will be offset by a corresponding underspend in electric LMI, electric non-LMI, and/or gas non-LMI programs. Total expenditures across all portfolios are forecasted to come in at the total amount authorized in the 2020 NE: NY Order. Refer to Appendix A in the Statewide LMI Program 2021 Annual Report for additional details regarding Central Hudson's 2021 budgets and targets.

Electric Budget Distribution (\$)							
	2020	2021	2022	2023	2024	2025	Total
Existing 1-4 Family Homes							
Incentives & Services			81,321	80,403	98,686	172,598	433,008
Program Implementation			10,426	10,308	12,652	22,128	55,514
Total Budget			91,747	90,711	111,338	194,726	488,522
Existing Affordable Multifamily							
Buildings							
Incentives & Services				43,178	56,338	72,599	172,115
Program Implementation				11,829	15,435	19,890	47,154
Total Budget				55,007	71,773	92,489	219,269
Affordable New Construction							
Incentives & Services							
Program Implementation							
Total Budget							
Customer Awareness, Outreach							
& Engagement							
Incentives & Services			1,735	1,735	1,735	1,735	6,940
Program Implementation							
Total Budget			1,735	1,735	1,735	1,735	6,940
Portfolio Administration			22,009	16,493	17,335	24,835	80,672
Portfolio EM&V			7,819	8,825	10,812	15,328	42,785
Total Portfolio Budget	-	-	123,310	172,772	212,993	329,114	838,188

Gas Budget Distribution (\$)							
	2020	2021	2022	2023	2024	2025	Total
Existing 1-4 Family Homes							
Incentives & Services			272,862	184,660	215,922	286,278	959,722
Program Implementation			34,983	23,674	27,682	36,702	123,042
Total Budget			307,845	208,335	243,604	322,980	1,082,764
Existing Affordable Multifamily							
Buildings							
Incentives & Services				299,637	376,515	518,976	1,195,128
Program Implementation				46,610	58,569	80,730	185,909
Total Budget				346,247	435,084	599,706	1,381,037
Affordable New Construction							
Incentives & Services							
Program Implementation							
Total Budget							
Customer Awareness, Outreach							
& Engagement							
Incentives & Services							
Program Implementation							
Total Budget							
Portfolio Administration			44,109	28,523	30,862	37,952	141,446
Portfolio EM&V			21,584	20,884	25,534	32,558	100,561
Total Portfolio Budget	-	-	373,538	603,989	735,084	993,197	2,705,808

Electric Target Distribution (MWh)							
	2020	2021	2022	2023	2024	2025	Total
Existing 1-4 Family Homes			51	49	61	106	266
Existing Affordable Multifamily				71	90	120	281
Buildings							
Affordable New Construction							
Customer Awareness, Outreach			509	273	273	273	1,329
& Engagement							
Total	-	-	559	394	424	499	1,877

Gas Target Distribution (MMBtu)							
	2020	2021	2022	2023	2024	2025	Total
Existing 1-4 Family Homes			820	631	738	979	3,168
Existing Affordable Multifamily				2,023	2,594	3,589	8,206
Buildings							
Affordable New Construction							
Customer Awareness, Outreach							
& Engagement							
Total	-	-	820	2,654	3,332	4,568	11,374

B.2 Con Edison

Con Edison's forecast is based on the goals of meeting or exceeding the targets outlined in the NE: NY order as well as the desire not to turn any qualifying projects away based on the current incentive design. The current design provides a larger incentive for LMI customers, which is necessary for them to be able to participate in the program compared to non-LMI participants. Con Edison projects to overachieve on ordered total savings targets by 10% at the end of the 2020–2025 period. Gas is projected to exceed ordered targets by 14%, and electric is projected to meet targets.

The forecast reflects a shifting in the Company's focus from behavioral programs and lighting programs towards more substantial and expensive measures such as improving building envelopes. While the company expects that the unit cost for multifamily will increase over time as it focuses on achieving deep energy retrofit savings, projected unit costs for implementing the LMI portfolio will come in 9% lower than ordered unit costs.¹¹⁶

Con Edison saw a particular growth in market demand for multifamily gas program incentives in early 2022, as exemplified by the spike in multifamily gas savings in 2022. This spike was caused by lowering non-comprehensive incentives at the beginning of 2022 to accommodate enhanced incentive levels for the new comprehensive offering. The market received notice of the incentive decrease with the launch of AMEEP and was given a two-month transition period, which led to an influx of applications for non-comprehensive gas projects prior to the official incentive change in 2022.

The Company expects that same demand to increase further in 2023 and 2024. To meet this demand, Con Edison plans to pull funds forward from 2025 into earlier years. Additionally, once electric targets have been achieved, Con Edison plans to shift remaining electric funds over to gas to support the overachievement in savings for that commodity. While this will allow the Company to support all the qualifying projects it expects in 2022, 2023, and 2024, there may not be enough funds left in 2025 to meet the expected need, based on the current budget. Therefore, the forecast shows a decrease in spending in 2025 as funds run low.

¹¹⁶ Lower-cost Home Energy Reports and retail lighting combined with anticipated multifamily comprehensive project completions between 2023 and 2025 result in a forecasted reduction in total electric portfolio unit costs as compared to total ordered electric portfolio unit costs. Electric spend and achievement projections further account for an expected decrease in lighting savings resulting from the Energy Independence and Security Act beginning in 2023.

The forecast presented in the Implementation Plan does not include the integration of Clean Heat with AMEEP. With the addition of Clean Heat, it is expected that both savings and spending will increase. This may lead to the need for additional funding in order to meet the projected demand for projects serving LMI customers. The Company will seek to address this issue during the NE: NY Interim Review, which is scheduled to begin in November 2022. During the Interim Review, the Company will seek additional funds to meet the Climate Act goal of providing 35% of program benefits to support disadvantaged communities. Additionally, the forecast presented here is aligned with the directive in the NE: NY Order for 20% of utility incremental funds to be spent on LMI energy efficiency programs.

Electric Budget Distribution (\$)							
	2020	2021	2022	2023	2024	2025	Total
Existing 1-4 Family Homes							
Incentives & Services			202,800	265,200	343,200	468,000	1,279,200
Program Implementation			26,000	34,000	44,000	60,000	164,000
Total Budget			228,800	299,200	387,200	528,000	1,443,200
Existing Affordable Multifamily							
Buildings							
Incentives & Services	3,187,222	2,278,778	3,448,637	4,730,122	6,674,681	6,573,012	26,892,452
Program Implementation	461,955	538,641	518,433	575,437	669,333	581,434	3,345,234
Total Budget	3,649,178	2,817,419	3,967,070	5,305,559	7,344,014	7,154,447	30,237,686
Affordable New Construction							
Incentives & Services							
Program Implementation							
Total Budget							
Customer Awareness, Outreach							
& Engagement							
Incentives & Services	1,130,560	17,086	726,636	761,676	761,676	704,199	4,101,833
Program Implementation	1,097,967	166,459	207,138	330,361	330,361	267,425	2,399,711
Total Budget	2,228,527	183,545	933,774	1,092,037	1,092,037	971,624	6,501,544
Portfolio Administration	176,444	546,817	1,054,330	834,330	917,763	558,148	4,087,833
Portfolio EM&V	318,925	188,872	144,456	173,348	190,682	95,341	1,111,624
Total Portfolio Budget	6,373,073	3,736,654	6,328,430	7,704,474	9,931,696	9,307,560	43,381,887

Gas Budget Distribution (\$)							
	2020	2021	2022	2023	2024	2025	Total
Existing 1-4 Family Homes							
Incentives & Services			682,500	853,125	1,066,406	1,333,008	3,935,039
Program Implementation			87,500	109,375	136,719	170,898	504,492
Total Budget			770,000	962,500	1,203,125	1,503,906	4,439,531
Existing Affordable Multifamily							
Buildings							
Incentives & Services	3,066,284	10,816,538	18,761,754	20,407,761	27,476,722	21,463,964	101,933,023
Program Implementation	865,848	2,808,057	3,980,609	4,163,266	5,274,253	3,537,791	20,629,824
Total Budget	3,932,132	13,624,595	22,742,363	24,571,027	32,750,975	25,001,755	122,622,847
Affordable New Construction							
Incentives & Services							
Program Implementation							
Total Budget							
Customer Awareness, Outreach &							
Engagement							
Incentives & Services	326,144	9,669	26,512	26,512	26,512	6,628	421,977
Program Implementation	474,685	6,314	17,339	17,339	17,339	4,335	537,352
Total Budget	800,829	15,983	43,851	43,851	43,851	10,963	959,329
Portfolio Administration	86,956	659,442	878,523	636,376	700,013	350,007	3,311,316
Portfolio EM&V	181,514	480,203	528,586	634,303	761,164	380,582	2,966,351
Total Portfolio Budget	5,001,431	14,780,223	24,963,324	26,848,057	35,459,128	27,247,212	134,299,375

Electric Target Distribution (MWh)							
	2020	2021	2022	2023	2024	2025	Total
Existing 1-4 Family Homes			123	185	239	326	874
Existing Affordable Multifamily	3,950	4,047	5,843	7,105	7,613	6,259	34,817
Buildings							
Affordable New Construction							
Customer Awareness, Outreach	34,594	9,317	10,040	5,830	5,830	5,632	71,243
& Engagement							
Total	38,544	13,363	16,006	13,121	13,682	12,218	106,935

Gas Target Distribution (MMBtu)							
	2020	2021	2022	2023	2024	2025	Total
Existing 1-4 Family Homes			2,762	3,314	4,143	5,179	15,398
Existing Affordable Multifamily	62,348	202,174	236,950	226,283	271,539	172,061	1,171,356
Buildings							
Affordable New Construction							
Customer Awareness, Outreach	32,374	370	1,210	1,210	1,210	302	36,675
& Engagement							
Total	94,722	202,544	240,922	230,087	276,892	177,542	1,223,429

B.3 KEDLI¹¹⁷

The budgets and targets presented here differ from the funding allocated in the 2020 NE: NY Order because additional funding has been added to the portfolio, as approved in KEDLI's most recent rate case, to support the HEAT program. Previously the HEAT program was funded through the Company's rate cases, but in order to better align with statewide efforts, is now incorporated into the Statewide LMI Portfolio.

The forecasted budgets and targets below are based off of the Company's plan to fully spend the allocated budgets to support LMI customers. However, between the programs currently existing in market, planned modifications, and upcoming initiatives, KEDLI is not currently forecasting that it will reach the ordered savings target. The reasons include the challenges described above in the Executive Summary, such as supply chain, inflationary pressures, material and labor costs, as well as historically low participation rates. These forecasts reflect what the Company views as most realistic, and work will continue towards acquiring savings to bring the portfolio closer to achieving its goal. Efforts to bring in more savings are described in more detail in the program descriptions within the body of this plan. In summary, KEDLI will continue to expand the KEDLI HEAT program to serve more moderate-income customers and will work to align the offering with EmPower+, increase marketing and outreach efforts for the multifamily sector to spur more participation in AMEEP, develop and launch community-based initiatives to expand awareness of LMI program offerings, and develop relationships with relevant program administrators such as PSEG LI.

¹¹⁷ KEDLI 2020 and 2021 gas spend and savings have been updated from the values filed in the May 31, 2022, Implementation Plan to reflect corrections filed in the National Grid Notice of Errata to the Q2 2022 Clean Energy Dashboard Scorecard Report, filed on October 26, 2022, in case 18-M-0084 and 15-M-0252.

Gas Budget Distribution (\$)							
	2020	2021	2022	2023	2024	2025	Total
Existing 1-4 Family Homes							
Incentives & Services	1,152,184	1,044,955	3,003,000	3,318,900	3,816,735	4,569,250	16,905,024
Program Implementation	303,377	325,581	819,000	941,850	1,083,128	1,296,679	4,769,615
Total Budget	1,455,561	1,370,536	3,822,000	4,260,750	4,899,863	5,865,929	21,674,639
Existing Affordable Multifamily Buildings							
Incentives & Services			100,000	899,500	1,050,000	1,155,200	3,204,700
Program Implementation			15,000	192,750	225,000	247,543	680,293
Total Budget			115,000	1,092,250	1,275,000	1,402,743	3,884,993
Affordable New Construction							
Incentives & Services							
Program Implementation							
Total Budget							
Customer Awareness, Outreach & Engagement							
Incentives & Services			203,672	354,603	400,000	425,000	1,383,275
Program Implementation			34,485	359,040	366,532	306,753	1,066,811
Total Budget			238,157	713,643	766,532	731,753	2,450,086
Portfolio Administration	95,377	39,476	164,969	339,629	372,092	374,470	1,386,013
Portfolio EM&V	8,109		•	200,470	232,169	264,651	705,400
Total Portfolio Budget	1,559,047	1,410,012	4,340,126	6,606,742	7,545,656	8,639,547	30,101,130

Gas Target Distribution (MMBtu)							
	2020	2021	2022	2023	2024	2025	Total
Existing 1-4 Family Homes	3,763	9,427	19,600	22,540	25,921	31,032	112,282
Existing Affordable Multifamily			700	7,688	8,974	9,874	27,236
Buildings							
Affordable New Construction							
Customer Awareness, Outreach			3,269	5,692	6,421	6,822	22,203
& Engagement							
Total	3,763	9,427	23,569	35,920	41,316	47,727	161,722

B.4 KEDNY

Gas Budget Distribution (\$)							
	2020	2021	2022	2023	2024	2025	Total
Existing 1-4 Family Homes							
Incentives & Services			900,002	399,218	422,517	580,477	2,302,214
Program Implementation			126,923	56,300	59,586	81,862	324,671
Total Budget			1,026,926	455,518	482,102	662,339	2,626,885
Existing Affordable Multifamily Buildings							
Incentives & Services			2,800,000	3,597,022	4,272,022	5,073,368	15,742,412
Program Implementation			400,000	671,444	797,444	947,029	2,815,917
Total Budget			3,200,000	4,268,466	5,069,466	6,020,397	18,558,328
Affordable New Construction							
Incentives & Services							
Program Implementation							
Total Budget							
Customer Awareness, Outreach &							
Engagement							
Incentives & Services				51,200	51,200	51,200	153,601
Program Implementation			4,800	15,133	15,133	15,133	50,200
Total Budget			4,800	66,334	66,334	66,334	203,801
Portfolio Administration			322,866	595,141	668,025	809,886	2,395,919
Portfolio EM&V			34,615	160,769	188,665	226,794	610,843
Total Portfolio Budget	-	-	4,589,207	5,546,227	6,474,592	7,785,750	24,395,776

Gas Target Distribution (MMBtu)							
	2020	2021	2022	2023	2024	2025	Total
Existing 1-4 Family Homes			3,720	1,551	1,641	2,255	9,168
Existing Affordable Multifamily			21,000	42,375	50,327	59,767	173,469
Buildings							
Affordable New Construction							
Customer Awareness, Outreach							
& Engagement							
Total	-	-	24,720	43,926	51,968	62,022	182,636

B.5 National Fuel Gas

Gas Budget Distribution (\$)							
	2020	2021	2022	2023	2024	2025	Total
Existing 1-4 Family Homes							
Incentives & Services	4,563,489	3,568,004	8,871,900	4,903,523	4,713,904	4,737,277	31,358,097
Program Implementation		368,180	1,137,423	596,606	572,295	575,292	3,249,796
Total Budget	4,563,489	3,936,184	10,009,323	5,500,128	5,286,200	5,312,569	34,607,893
Existing Affordable Multifamily Buildings							
Incentives & Services			364,001	405,841	502,378	568,953	1,841,173
Program Implementation			90,466	102,163	128,033	146,726	467,388
Total Budget			454,467	508,004	630,411	715,679	2,308,561
Affordable New Construction							
Incentives & Services							
Program Implementation							
Total Budget							
Customer Awareness, Outreach							
& Engagement							
Incentives & Services							
Program Implementation							
Total Budget							
Portfolio Administration			1,042,113	556,323	531,040	530,977	2,660,452
Portfolio EM&V			341,227	178,982	171,689	172,588	864,485
Total Portfolio Budget	4,563,489	3,936,184	11,847,130	6,743,437	6,619,339	6,731,812	40,441,391

Gas Target Distribution (MMBtu)							
	2020	2021	2022	2023	2024	2025	Total
Existing 1-4 Family Homes	16,334	15,465	36,525	18,079	17,342	17,433	121,178
Existing Affordable Multifamily			4,823	5,102	5,785	6,207	21,917
Buildings							
Affordable New Construction							
Customer Awareness, Outreach							
& Engagement							
Total	16,334	15,465	41,348	23,181	23,127	23,640	143,095

B.6 New York State Energy Research & Development Authority

As part of the Performance Management & Improvement Process established by DPS, NYSERDA revises the forecast of all CEF initiatives in the Compiled Investment Plans (CIP) November 1 filing annually (the reforecast). Each initiative's budget and benefit values have been updated to reflect NYSERDA's best understanding at this time, including actual progress reported for past years alongside adjustments to future year projections where necessary. The implications of the EISA standard for light bulbs effective Jan. 2023 are being explored and should be addressed through the TRM Management Committee for all sectors, including LMI.

B.6.1 CEF Budget Expenditures

CEF Budget Distribution (\$000)												
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Total
Existing 1-4 Family												
Homes												
Incentives & Services	40,581	59,449	56,011	11,520	2,416							169,977
Program Implementation	6,560	7,356	13,000	4,744	418							32,079
Research and Technology				400								400
Studies												
Tools, Training, and		8	25	704	86							823
Replication												
Business Support			50	275	25							350
Total Budget	47,141	66,813	69,086	17,643	2,945							203,629
Existing Affordable												
Multifamily Buildings												
Incentives & Services	7,011	5,513	4,398	13,578	31,739	42,636	25,247	21,292				151,413
Program Implementation	2,317	2,045	2,007	3,004	5,216	3,246	2,596	1,318				21,750
Research and Technology				600	600	600	600	600	600			3,000
Studies												
Tools, Training, and	44	492	1,155	1,514	2,436	2,371	1,967	159				10,137
Replication												
Total Budget	9,372	8,049	7,559	18,096	39,991	48,853	30,411	23,369	600			186,300
Affordable New	•	•		•	•			•				•
Construction												

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CEF Budget Distribution (\$0	00)										
Incentives & Services	4,097	5,455	10,470	5,550	16,583	24,252	29,861	22,000	16,865		135,132
Program Implementation	726	773	713	470	468	286	200	70			3,706
Tools, Training, and	211	389	212	550	950	1,200	1,209	1,009	750		6,481
Replication											
Total Budget	5,034	6,617	11,395	6,570	18,001	25,738	31,270	23,080	17,615		145,319
Customer Awareness,											
Outreach & Engagement											
Incentives & Services	156	471	531	525	758	1,064	548				4,052
Program Implementation	15	304	1,561	1,619	1,496	1,156	868				7,018
Tools, Training, and	25	55	4,242	8,723	8,716	8,716	8,710				39,187
Replication											
Total Budget	195	829	6,334	10,867	10,970	10,936	10,126				50,257
Pilots and											
Demonstrations											
Tools, Training, and			213	639	398	398	398	398			2,444
Replication											
Total Budget			213	639	398	398	398	398			2,444
LMI Solar											
Incentives & Services	1,093	821	1,200	1,200	1,148	1,100	1,100	1,100	1,100	1,100	10,962
Program Implementation	189	74	100	100	100	100	87				750
Total Budget	1,283	895	1,300	1,300	1,248	1,200	1,187	1,100	1,100	1,100	11,713
Electrification											
Incentives & Services		3,043	2,000	4,000	5,000	7,699	4,912				26,655
Program Implementation	13	789	250	380	380	283	250				2,345
Tools, Training, and		13	30	200	257	250	250				1,000
Replication											
Total Budget	13	3,845	2,280	4,580	5,637	8,233	5,412				30,000
Healthy Homes VBP											
Incentives & Services		4	17	116							137
Program Implementation	56	81	9	75	75	69					365
Research and Technology	865	200	598	3,622	3,516	522					9,322
Studies											
Total Budget	921	285	624	3,813	3,591	591					9,825
Total Portfolio Budget	63,959	87,334	98,791	63,508	82,781	95,948	78,804	47,946	19,315	1,100	- 639,486

B.6.2 Electric Savings

Electric Savings Distribution (MWh)												
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Total
Existing 1-4 Family Homes	2,214	4,324	3,959	410	115							11,022
Existing Affordable Multifamily Buildings	3,134	11,293	9,110	5,383	11,432	22,724	17,939	9,025				90,040
Affordable New Construction	2,346	3,717	2,960	3,000	11,079	16,090	14,850	14,332	14,475	3,857	1,929	88,635
Customer Awareness, Outreach &												
Engagement												
Pilots and Demonstrations												
Healthy Homes Pilot			15	150	135							300
Total	7,694	19,334	16,044	8,943	22,761	38,814	32,789	23,357	14,475	3,857	1,929	189,997

B.6.3 Gas Savings

Gas Savings Distribution	(MMBtu)											
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Total
Existing 1-4 Family	96,474	149,388	124,896	14,897	5,670							391,325
Homes												
Existing Affordable	35,875	61,369	132,272	223,301	320,303	694,703	462,780	371,931				2,302,534
Multifamily Buildings												
Affordable New	39,517	36,222	29,000	32,150	86,848	117,413	99,675	84,857	73,250	20,357	10,179	629,468
Construction												
Customer Awareness,												
Outreach &												
Engagement												
Pilots and												
Demonstrations												
Healthy Homes VBP			400	4,100	3,700							8,200
Total	171,866	246,979	286,568	274,448	416,521	812,116	562,455	456,788	73,250	20,357	10,179	3,331,527

B.6.4 Other Fuels Saving

Other Fuels Savings Distr	ibution (MME	Btu)										
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Total
Existing 1-4 Family Homes	52,852	78,778	57,738	8,744	4,568							202,680
Existing Affordable Multifamily Buildings	844	2,503	27,048	74,924	108,745	242,426	184,445	163,838				804,773
Affordable New	1,945				2,303	2,438	3,175	3,571	2,750	1,071	536	17,789
Construction Customer Awareness,												
Outreach &												
Engagement Pilots and												
Demonstrations Healthy Homes VBP			100	900	800							1,800
Total	55,641	81,281	84,886	84,568	116,416	244,864	187,620	167,409	2,750	1,071	536	1,027,042

B.6.5 Indirect Electric Savings

Indirect Electric Savings (MWh)											
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Total
Existing Affordable			1,964	7,685	8,040	11,698	24,101	29,941	38,410	50,996	63,652	236,487
Multifamily Buildings												
Affordable New	6,974	2,594	3,105	3,105	3,105	3,105	3,105	3,105	3,105	3,105	3,105	37,513
Construction												
Healthy Homes VBP	192						4,858				50,950	56,000
Total	7,166	2,594	5,069	10,790	11,145	14,803	27,206	37,904	41,515	54,101	117,707	330,000

B.6.6 Indirect Gas Savings

Indirect Gas Savings (MME	3tu)											
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Total
Existing Affordable			77,307	248,373	317,464	440,255	612,071	645,112	715,874	886,198	1,049,160	4,991,814
Multifamily Buildings												
Affordable New	48,209	14,392	16,725	16,725	16,725	16,725	16,725	16,725	16,725	16,725	16,725	213,126
Construction												
Healthy Homes VBP	5,120						129,280				1,361,600	1,496,000
Total	53,329	14,392	94,032	265,098	334,189	456,980	628,796	791,117	732,599	902,923	2,427,485	6,700,940

B.6.7 Indirect Other Fuels Savings

Indirect Other Fuels Savings	(MMBtu)											
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Total
Existing Affordable			19,327	75,464	92,737	151,966	193,314	201,574	219,263	261,845	303,407	1,518,897
Multifamily Buildings												
Affordable New	2,537	758	774	774	774	774	774	774	774	774	774	10,261
Construction												
Healthy Homes VBP	1,280						32,320				340,400	374,000
Total	3,817	758	20,101	76,238	93,511	152,740	194,088	234,668	220,037	262,619	644,581	1,903,158

B.6.8 Direct CO2 Emission Reduction

CO2e Emission Reduction	(metric tons)	Annual (Dire	ct Only)									
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Total
Existing 1-4 Family	8,958	14,224	13,278	1,653	675							38,788
Homes												
Existing Affordable	3,419	8,279	14,022	21,303	32,528	70,103	50,165	39,023				238,842
Multifamily Buildings												
Affordable New	3,394	3,785	3,023	3,210	10,367	14,511	13,014	12,003	11,383	3,108	1,554	79,352
Construction												
Healthy Homes VBP			38	374	336							748
Total	15,771	26,288	30,361	26,540	43,906	84,614	63,179	51,026	11,383	3,108	1,554	357,730

CO2e Emission Reducti	on (metric to	ns) Lifetime	(Direct Only)									
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Total
Existing 1-4 Family	215,590	339,911	313,724	39,685	16,616							925,526
Homes												
Existing Affordable	50,287	121,922	201,924	274,661	489,002	1,052,705	758,280	586,567				3,535,348
Multifamily Buildings												
Affordable New	76,781	89,834	66,828	70,717	242,438	344,266	325,351	300,069	284,585	77,706	38,861	1,917,436
Construction												
Healthy Homes VBP		3	710	7,029	6,319							14,061
Total	342,658	551,670	583,186	392,092	754,375	1,396,971	1,083,631	886,636	284,585	77,706	38,861	6,392,371

B.6.9 Indirect CO2 Emission Reduction

CO2e Emission Reduction	n (metric tons) Annual										
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Total
Existing Affordable			6,830	23,836	29,240	42,924	61,983	67,403	76,994	96,175	114,908	520,293
Multifamily Buildings												
Affordable New	6,280	2,131	2,512	2,512	2,512	2,512	2,512	2,512	2,512	2,512	2,512	31,019
Construction												
Healthy Homes VBP	483							12,210			128,490	141,183
Total	6,763	2,131	9,342	26,348	31,752	45,436	64,495	82,125	79,506	98,687	245,910	692,495

CO2e Emission Reduction	n (metric tor	ns) Lifetime	•									
	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Total
Existing Affordable			102,722	292,657	373,721	596,318	942,754	1,085,057	1,310,742	1,701,140	2,080,285	8,485,396
Multifamily Buildings												
Affordable New	157,005	53,277	62,805	62,805	62,805	62,805	62,805	62,805	62,805	62,805	62,805	775,527
Construction												
Healthy Homes VBP	9,091							229,616			2,416,846	2,655,553
Total	166,096	53,277	165,527	355,462	436,526	659,123	1,005,559	1,377,478	1,373,547	1,763,945	4,559,936	11,916,476

B.7 New York State Electric & Gas (NYSEG)

The budgets and targets below represent a 60%/40% split between residential (EmPower NY) and multifamily ordered spend per the January 2020 Order. Within the Customer Awareness, Outreach and Engagement section, there is collective funding for planned LMI programs and activities that will utilize non-LMI funding to support LMI goals The costs per savings assumed in our orders are significantly less than what the YTD actual costs per savings are. While we plan to fully invest all ordered LMI funding we would fall short of the savings targets. In an effort to offset those (savings) shortfalls we plan to offer supplemental programs that will cross promote Empower and AMEEP while providing additional savings.

Electric Budget Distribution (\$)							
	2020	2021	2022	2023	2024	2025	Total
Existing 1-4 Family Homes							
Incentives & Services	382,682	368,025	465,057	853,902	1,228,916	1,677,816	4,976,398
Program Implementation	53,698	40,544	67,013	17,622	33,004	43,793	255,674
Total Budget	436,380	408,569	532,070	871,524	1,261,920	1,721,609	5,232,072
Existing Affordable Multifamily							
Buildings							
Incentives & Services	405,309	21,708	123,637	763,032	809,848	1,111,642	3,235,176
Program Implementation	38,171	40,408	16,795	54,908	55,508	56,108	261,898
Total Budget	443,480	62,116	140,432	817,940	865,356	1,167,750	3,497,074
Affordable New Construction							
Incentives & Services							
Program Implementation							
Total Budget							
Customer Awareness, Outreach &							
Engagement							
Incentives & Services			170,236	352,000			522,236
Program Implementation			35,897	20,000			55,897
Total Budget			206,133	372,000			578,133
Portfolio Administration		27,539	44,787	120,004	150,004	170,447	512,781
Portfolio EM&V			96,763	130,353	138,625	142,668	508,409
Total Portfolio Budget	879,860	498,224	1,020,185	2,311,821	2,415,905	3,202,474	10,328,469

Gas Budget Distribution (\$)							
	2020	2021	2022	2023	2024	2025	Total
Existing 1-4 Family Homes							
Incentives & Services	46,651	637,378	1,274,893	1,991,979	2,863,323	3,914,898	10,729,122
Program Implementation	2,444	60,186	15,893	60,954	97,132	138,755	375,364
Total Budget	49,095	697,564	1,290,786	2,052,933	2,960,455	4,053,653	11,104,486
Existing Affordable Multifamily Buildings							
Incentives & Services	25,506	3,875	95,440	1,974,675	1,891,194	2,596,578	6,587,268
Program Implementation	3,211	50,404	39,257				479,788
riogiam implementation				128,972	128,972	129,572	
Total Budget	28,717	54,279	134,697	2,103,047	2,020,166	2,726,150	7,067,056
Affordable New Construction							
Incentives & Services							
Program Implementation							
Total Budget							
Customer Awareness, Outreach &							
Engagement							
Incentives & Services				790,000	790,000	790,000	2,370,000
Program Implementation				30,000	30,000	30,000	90,000
Total Budget				820,000	820,000	820,000	2,460,000
Portfolio Administration		33,776	53,495	94,774	176,020	274,754	632,819
Portfolio EM&V			118,268	132,844	170,233	216,554	637,899
Total Portfolio Budget	77,812	785,619	1,597,246	5,203,598	6,146,874	8,091,111	21,902,260

Electric Target Distribution (MWh)							
	2020	2021	2022	2023	2024	2025	Total
Existing 1-4 Family Homes	384	220	238	465	669	913	2,889
Existing Affordable Multifamily	882	48	320	1,941	2,025	2,769	7,984
Buildings							
Affordable New Construction							
Customer Awareness, Outreach			2,360	1,879			4,239
& Engagement							
Total	1,266	268	2,917	4,285	2,694	3,682	15,112

Gas Target Distribution (MMBtu)							
	2020	2021	2022	2023	2024	2025	Total
Existing 1-4 Family Homes	158	2,613	3,294	6,036	8,677	11,863	32,641
Existing Affordable Multifamily	638	31	1,104	15,612	14,967	20,464	52,817
Buildings							
Affordable New Construction							
Customer Awareness, Outreach				29,250	29,250	29,250	87,750
& Engagement							
Total	796	2,644	4,398	50,898	52,894	61,577	173,208

B.8 NMPC

The forecasted electric budgets and targets below are based off the Company's plan to fully spend the allocated budgets to support LMI customers. However, between the programs currently existing in market, planned modifications, and upcoming initiatives, NMPC Electric is not currently forecasting to reach the ordered target. The reasons include the challenges described above in the Executive Summary, such as supply chain, inflationary pressures, material and labor costs, as well as a slow ramp up in participation in AMEEP, and the new EISA standards' impacts on lighting measures. These forecasts reflect what the Company views as most realistic at this point, and work will continue towards accruing savings to bring the portfolio closer to achieving its goal. Efforts to bring in more savings are described in more detail in the program descriptions within the body of this plan.

	2020	2021	2022	2023	2024	2025	Total
5 to 4.45 % H	2020	2021	2022	2023	2024	2023	10tai
Existing 1-4 Family Homes							
Incentives & Services			463,935	534,436	751,753	1,012,483	2,762,607
Program Implementation			59,277	76,348	107,393	144,640	387,658
Total Budget			523,213	610,784	859,146	1,157,123	3,150,266
Existing Affordable Multifamily Buildings							
Incentives & Services			300,000	672,308	814,089	1,141,572	2,927,969
Program Implementation			79,631	127,788	171,460	245,888	624,767
Total Budget			379,631	800,096	985,549	1,387,460	3,552,736
Affordable New Construction							
Incentives & Services							
Program Implementation							
Total Budget							
Customer Awareness, Outreach &							
Engagement							
Incentives & Services			398,248	225,293			623,541
Program Implementation			1,800	1,800	1,800	1,800	7,200
Total Budget			400,048	227,093	1,800	1,800	630,741
Portfolio Administration			178,702	289,473	364,800	494,836	1,327,811
Portfolio EM&V			17,934	68,387	63,581	88,625	238,527
Total Portfolio Budget	-	-	1,499,527	1,995,833	2,274,876	3,129,844	8,900,080

Gas Budget Distribution (\$)							
	2020	2021	2022	2023	2024	2025	Total
Existing 1-4 Family Homes							
Incentives & Services			1,001,801	1,108,459	1,559,191	2,099,965	5,769,416
Program Implementation			94,186	158,351	222,742	299,995	775,274
Total Budget			1,095,987	1,266,810	1,781,933	2,399,960	6,544,690
Existing Affordable Multifamily							
Buildings							
Incentives & Services			400,000	2,043,850	2,553,720	3,404,428	8,401,998
Program Implementation			150,000	468,840	585,800	780,944	1,985,584
Total Budget			550,000	2,512,690	3,139,520	4,185,372	10,387,582
Affordable New Construction							
Incentives & Services							
Program Implementation							
Total Budget							
Customer Awareness, Outreach &							
Engagement							
Incentives & Services				66,357	66,357	66,357	199,071
Program Implementation			4,350	9,424	9,424	9,424	32,622
Total Budget			4,350	75,781	75,781	75,781	231,693
Portfolio Administration			313,851	667,400	859,711	1,131,960	2,972,922
Portfolio EM&V			94,186	133,046	172,537	230,195	629,964
Total Portfolio Budget	-	-	2,058,374	4,655,727	6,029,482	8,023,268	20,766,851

Electric Target Distribution (MWh)							
	2020	2021	2022	2023	2024	2025	Total
Existing 1-4 Family Homes			338	295	414	558	1,605
Existing Affordable Multifamily			356	815	1,093	1,571	3,835
Buildings							
Affordable New Construction							
Customer Awareness, Outreach			4,653	2,141			6,794
& Engagement							
Total	-	-	5,347	3,251	1,507	2,129	12,234

Gas Target Distribution (MMBtu)							
	2020	2021	2022	2023	2024	2025	Total
Existing 1-4 Family Homes			2,959	1,551	1,642	2,255	8,407
Existing Affordable Multifamily			3,500	25,026	32,178	44,116	104,820
Buildings							
Affordable New Construction							
Customer Awareness, Outreach							
& Engagement							
Total	-	-	6,459	26,577	33,820	46,371	113,227

B.9 Orange & Rockland

Forecasted budgets and targets for O&R are directed towards the goal of fully investing the allocated budgets to support LMI customers. The Company expects the majority of LMI participation to be in the 1-4 Family Homes sector, so therefore 70% of the electric budget and 80% of the gas budget have been allocated towards the EmPower NY program. However, due to the high YTD run rate of the EmPower program, we are expecting a shortfall in achieving the savings target. In addition, EISA may have further impacts to achieve the saving target once it is in effect in the near future. As the Company expands its Customer Awareness, Outreach and Engagement initiatives to increase awareness of LMI offerings, it will also engage and guide LMI customers to make energy-wise decisions for their homes.

Electric Budget Distribution (\$)							
	2020	2021	2022	2023	2024	2025	Total
Existing 1-4 Family Homes							
Incentives & Services			397,800	429,000	429,000		1,255,800
Program Implementation			112,200	121,000	121,000		354,200
Total Budget			510,000	550,000	550,000		1,610,000
Existing Affordable Multifamily Buildings							
Incentives & Services			19,782	23,420	27,962	30,658	101,822
Program Implementation			4,946	5,855	6,990	7,664	25,455
Total Budget			24,728	29,275	34,952	38,322	127,277
Affordable New Construction							
Incentives & Services							
Program Implementation							
Total Budget							
Customer Awareness, Outreach &							
Engagement							
Incentives & Services			112,147	53,357	53,357	53,357	272,218
Program Implementation			46,725	10,850	10,850	10,850	79,275
Total Budget			158,872	64,207	64,207	64,207	351,493
Portfolio Administration			42,600	43,400	43,200	42,792	171,992
Portfolio EM&V			14,400	15,600	15,300	15,597	60,897
Total Portfolio Budget	-	-	750,600	702,482	707,659	160,918	2,321,659

Gas Budget Distribution (\$)							
	2020	2021	2022	2023	2024	2025	Total
Existing 1-4 Family Homes							
Incentives & Services			1,070,160	1,014,000	156,000		2,240,160
Program Implementation			301,840	286,000	44,000		631,840
Total Budget			1,372,000	1,300,000	200,000		2,872,000
Existing Affordable Multifamily Buildings							
Incentives & Services			34,167	46,791	61,380	74,932	217,270
Program Implementation			8,542	11,698	15,345	18,733	54,318
Total Budget			42,709	58,488	76,725	93,665	271,588
Affordable New Construction							
Incentives & Services							
Program Implementation							
Total Budget							
Customer Awareness, Outreach &							
Engagement							
Incentives & Services			39,956	42,387	42,387	42,387	167,116
Program Implementation			15,500	4,650	4,650	4,650	29,450
Total Budget			55,456	47,037	47,037	47,037	196,566
Portfolio Administration			65,000	67,000	65,300	65,424	262,724
Portfolio EM&V			28,500	27,000	26,700	26,625	108,825
Total Portfolio Budget	-	-	1,563,664	1,499,525	415,762	232,751	3,711,702

Electric Target Distribution (MWh)							
	2020	2021	2022	2023	2024	2025	Total
Existing 1-4 Family Homes			163	299	299		761
Existing Affordable Multifamily			40	47	58	63	207
Buildings							
Affordable New Construction							
Customer Awareness, Outreach			1,814	281	281	281	2,657
& Engagement							
Total			2,017	627	637	344	3,625

Gas Target Distribution (MMBtu)							
	2020	2021	2022	2023	2024	2025	Total
Existing 1-4 Family Homes			3,521	3,939	606		8,066
Existing Affordable Multifamily			382	499	609	694	2,184
Buildings							
Affordable New Construction							
Customer Awareness, Outreach			3,644	4,527	4,527	4,527	17,226
& Engagement							
Total			7,547	8,966	5,742	5,221	27,476

B.10 Rochester Gas & Electric (RG&E)

The budgets and targets below represent a 60%/40% split between residential (EmPower NY) and multifamily ordered spend per the January 2020 Order. Within the Customer Awareness, Outreach and Engagement section, there is collective funding for planned LMI programs and activities that will utilize non-LMI funding to support LMI goals. The costs per savings assumed in our orders are significantly less than what the YTD actual costs per savings are. While we plan to fully invest all ordered LMI funding we would fall short of the savings targets. In an effort to offset those (savings) shortfalls we plan to offer supplemental programs that will cross promote Empower and AMEEP while providing additional savings.

Electric Budget Distribution (\$)							
	2020	2021	2022	2023	2024	2025	Total
Existing 1-4 Family Homes							
Incentives & Services	199,277	227,407	289,958	427,183	593,660	771,595	2,509,080
Program Implementation	28,829	27,137	3,649	5,376	12,647	18,800	96,438
Total Budget	228,106	254,544	293,607	432,559	606,307	790,395	2,605,518
Existing Affordable Multifamily Buildings							
Incentives & Services	256,456	73,013	155,438	253,052	390,285	507,613	1,635,857
Program Implementation	19,220	38,041	12,164	18,067	18,666	19,266	125,424
Total Budget	275,676	111,054	167,602	271,119	408,951	526,879	1,761,281
Affordable New Construction							
Incentives & Services							
Program Implementation							
Total Budget							
Customer Awareness, Outreach &							
Engagement							
Incentives & Services			59,154	190,000			249,154
Program Implementation			23,416	20,000			43,416
Total Budget			82,570	210,000			292,570
Portfolio Administration		17,678	36,891	37,431	38,321	39,263	169,584
Portfolio EM&V			46,402	49,900	55,665	61,770	213,737
Total Portfolio Budget	503,782	383,276	627,072	1,001,009	1,109,244	1,418,307	5,042,690

Gas Budget Distribution (\$)							
	2020	2021	2022	2023	2024	2025	Total
Existing 1-4 Family Homes							
Incentives & Services	19,183	370,104	674,883	992,921	1,382,538	1,791,727	5,231,356
Program Implementation	1,879	36,517	15,620	27,692	45,490	63,540	190,738
Total Budget	21,062	406,621	690,503	1,020,613	1,428,028	1,855,267	5,422,094
Existing Affordable Multifamily							
Buildings							
Incentives & Services	29,846	57,516	240,783	831,114	912,287	1,187,033	3,258,579
Program Implementation	1,253	41,856	18,496	41,334	41,934	42,354	187,227
Total Budget	31,099	99,372	259,279	872,448	954,221	1,229,387	3,445,806
Affordable New Construction							
Incentives & Services							
Program Implementation							
Total Budget							
Customer Awareness, Outreach & Engagement							
Incentives & Services				140,000	140,000	140,000	420,000
Program Implementation				20,000	20,000	20,000	60,000
Total Budget				160,000	160,000	160,000	480,000
Portfolio Administration		19,289	87,010	89,357	92,231	95,252	383,139
Portfolio EM&V			105,432	116,458	129,959	144,146	495,995
Total Portfolio Budget	52,161	525,282	1,142,224	2,258,876	2,764,439	3,484,052	10,227,034

Electric Target Distribution (MWh)							
	2020	2021	2022	2023	2024	2025	Total
Existing 1-4 Family Homes	280	236	146	235	327	425	1,649
Existing Affordable Multifamily	566	51	421	707	1,082	1,402	4,229
Buildings							
Affordable New Construction							
Customer Awareness, Outreach			1,039	742			1,781
& Engagement							
Total	846	287	1,606	1,684	1,409	1,827	7,658

Gas Target Distribution (MMBtu)							
	2020	2021	2022	2023	2024	2025	Total
Existing 1-4 Family Homes	216	1,569	1,866	3,054	4,252	5,511	16,468
Existing Affordable Multifamily	639		4,338	13,481	14,781	19,154	52,393
Buildings							
Affordable New Construction							
Customer Awareness, Outreach				5,609	5,609	5,609	16,827
& Engagement							
Total	855	1,569	6,204	22,144	24,642	30,274	85,688

Appendix C: Budgets, Targets, and Metrics by Sector

C.1 Existing 1-4 Family Homes

Metric	2020	2021	2022	2023	2024	2025	2026	Total
Total Budget Spend								
(\$000)	53,895	73,887	91,651	37,526	25,207	26,368	-	266,223
Additional Utility								
Funding ¹¹⁹ (\$000)								42,311
MWh Annual	2,878	4,780	5,018	1,938	2,124	2,328	-	19,066
MWh Lifetime	44,318	72,360	76,136	30,618	34,048	37,983	-	295,463
MMBtu Annual	116,945	178,462	199,963	75,593	70,633	76,506	-	718,101
MMBtu Lifetime	2,863,698	4,349,676	4,708,887	1,623,754	1,478,767	1,568,834	-	16,593,616
CO2e Emission	10,378	15,998	17,798	5,644	5,134	5,232	-	60,185
Reduction (metric								
tons) Annual								
CO2e Emission	245,168	376,356	406,444	118,449	103,865	102,404	-	1,352,686
Reduction (metric								
tons) Lifetime								
Participant Bill Savings	1,053	1,646	1,800	685	639	695	-	6,519
Annual (\$000)								
Participant Bill Savings	25,845	40,125	42,340	14,588	13,240	14,114	-	150,252
Lifetime (\$000)								
Participants	14,933	17,314	17,028	8,434	9,374	9,509	-	76,673
Leveraged Funds	14,100	29,408	12,348	3,632	2,609	-	-	62,097
(\$000)								

¹¹⁹ Additional Utility Funding in Appendix C tables contributed by KEDLI and LIURP from rate case allocated funds, and by Central Hudson and NYSEG/RG&E from market rate program funds.

C.2 Existing Affordable Multifamily Buildings

Metric	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Total
Total Budget Spend												
(\$000)	17,732	24,818	39,737	61,707	96,053	101,195	30,411	23,369	600	-	-	394,193
Additional Utility												
Funding (\$000)												1,431
Direct MWh Annual	8,532	15,438	16,089	16,070	23,392	34,908	17,939	9,025	-	-	-	141,394
Direct MWh Lifetime	106,900	214,344	214,173	201,763	307,657	482,207	269,085	135,375	-	-	-	1,931,504
Indirect MWh Annual	-	-	1,964	7,685	8,040	11,698	24,101	29,941	38,410	50,996	63,652	236,487
Indirect MWh Lifetime	-	-	29,460	115,275	120,600	175,470	361,515	449,115	576,150	764,940	954,780	3,547,305
Direct MMBtu Annual	100,345	266,077	432,117	636,314	830,803	1,273,055	647,225	535,769	-	-	-	4,721,705
Direct MMBtu Lifetime	1,368,852	3,542,383	5,993,340	9,165,547	12,000,112	18,893,186	9,708,375	8,036,535	-	-	-	68,708,330
Indirect MMBtu Annual	-	-	96,634	323,837	410,201	592,221	805,385	846,686	935,137	1,148,043	1,352,567	6,510,711
Indirect MMBtu												
Lifetime	-	-	1,449,510	4,857,555	6,153,015	8,883,315	12,080,775	12,700,290	14,027,055	17,220,645	20,288,505	97,660,665
Direct CO2e Emission												
Reduction (metric tons)												
Annual	9,502	21,102	31,830	43,292	58,159	91,712	50,165	39,023	-	-	-	344,786
Direct CO2e Emission												
Reduction (metric tons)												
Lifetime	123,740	281,795	429,264	563,096	825,230	1,342,530	758,280	586,567	-	-	-	4,910,502
Indirect CO2e Emission												
Reduction (metric tons)												
Annual	-	-	6,830	23,836	29,240	42,924	61,983	67,403	76,994	96,175	114,908	520,293
Indirect CO2e Emission												
Reduction (metric tons)												
Lifetime	-	-	102,722	292,657	373,721	596,318	942,754	1,085,057	1,310,742	1,701,140	2,080,285	8,485,396
Participant Bill Savings												
Annual (\$000)	741	2,072	4,275	5,499	7,012	9,241	3,931	3,159	-	-	-	35,930
Participant Bill Savings												
Lifetime (\$000)	9,940	27,237	58,094	77,331	98,954	135,287	58,965	47,385	-	-	-	513,193
Participants	4,811	9,867	102,139	103,684	121,184	97,751	10,536	1,022	-	-	-	450,993
Leveraged Funds (\$000)	19,196	33,738	25,808	282,468	385,288	393,393	380,637	151,965	-	_	-	1,672,492

C.3 Affordable New Construction

Metric	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Total
Total Budget Spend												
(\$000)	5,034	6,617	11,395	6,570	18,001	25,738	31,270	23,080	17,615	-	-	145,319
Direct MWh Annual	2,346	3,717	2,960	3,000	11,079	16,090	14,850	14,332	14,475	3,857	1,929	88,635
Direct MWh Lifetime	58,650	92,925	74,000	75,000	276,975	402,250	371,250	358,300	361,875	96,425	48,225	2,215,875
Indirect MWh Annual	6,974	2,594	3,105	3,105	3,105	3,105	3,105	3,105	3,105	3,105	3,105	37,513
Indirect MWh Lifetime	174,350	64,850	77,625	77,625	77,625	77,625	77,625	77,625	77,625	77,625	77,625	937,825
Direct MMBtu Annual	41,462	36,222	29,000	32,150	89,151	119,851	102,850	88,428	76,000	21,428	10,715	647,257
Direct MMBtu Lifetime	1,036,550	905,550	725,000	803,750	2,228,775	2,996,275	2,571,250	2,210,700	1,900,000	535,700	267,875	16,181,425
Indirect MMBtu Annual	50,746	15,150	17,499	17,499	17,499	17,499	17,499	17,499	17,499	17,499	17,499	223,387
Indirect MMBtu												
Lifetime	1,268,650	378,750	437,475	437,475	437,475	437,475	437,475	437,475	437,475	437,475	437,475	5,584,675
Direct CO2e Emission												
Reduction (metric tons)												
Annual	3,394	3,785	3,023	3,210	10,367	14,511	13,014	12,003	11,383	3,108	1,554	79,352
Direct CO2e Emission												
Reduction (metric tons)												
Lifetime	76,781	89,834	66,828	70,717	242,438	344,266	325,351	300,069	284,585	77,706	38,861	1,917,436
Indirect CO2e Emission												
Reduction (metric tons)												
Annual	6,280	2,131	2,512	2,512	2,512	2,512	2,512	2,512	2,512	2,512	2,512	31,019
Indirect CO2e Emission												
Reduction Lifetime	157,005	53,277	62,805	62,805	62,805	62,805	62,805	62,805	62,805	62,805	62,805	775,527
Participant Bill Savings												
Annual (\$000)	218	200	246	273	738	998	847	721	623	173	87	5,126
Participant Bill Savings												
Lifetime (\$000)	5,461	5,011	6,161	6,830	18,454	24,951	21,183	18,037	15,573	4,328	2,164	128,153
Participants	1,922	3,068	2,055	2,071	4,857	7,645	6,685	6,637	5,175	1,429	714	42,258
Leveraged Funds (\$000)	7,388	11,869	8,040	10,150	27,925	42,855	36,860	24,857	10,929	-	-	180,873

C.4 Customer Awareness, Outreach, and Engagement

Metric	2020	2021	2022	2023	2024	2025	2026	Total
Total Budget Spend								
(\$000)	3,225	1,029	8,463	14,760	14,109	13,887	10,126	61,789
Additional Utility Funding								
(\$000)								3,811
MWh Annual	34,594	9,317	20,413	11,146	6,384	6,187	-	88,041
MWh Lifetime	297,509	80,123	241,946	129,883	58,453	56,752	-	864,667
MMBtu Annual	32,374	370	8,123	46,288	47,016	46,510	-	180,682
MMBtu Lifetime	323,738	3,701	51,808	63,060	63,789	55,118	-	561,214
CO2e Emission Reduction								
(metric tons) Annual	19,029	4,681	10,645	8,037	5,694	5,568	-	53,654
CO2e Emission Reduction								
(metric tons) Lifetime	166,058	40,283	123,803	68,335	32,636	31,324	-	462,439
Participant Bill Savings								
Annual (\$000)	343	6	94	364	372	363	-	1,542
Participant Bill Savings								
Lifetime (\$000)	3,424	55	609	706	707	581	-	6,082
Participants	501,558	66,682	233,561	182,501	148,847	130,719	-	1,263,868
Leveraged Funds (\$000)	2,028	1,028					-	3,056

C.5 Pilots and Demonstrations

Metric	2020	2021	2022	2023	2024	2025	2026	2027	Total
Total Budget Spend (\$000)			213	639	398	398	398	398	2,444
MWh Annual									-
MWh Lifetime									-
MMBtu Annual									-
MMBtu Lifetime									-
CO2e Emission Reduction									
(metric tons) Annual									-
CO2e Emission Reduction									
(metric tons) Lifetime									-
Participant Bill Savings									
Annual (\$000)									-
Participant Bill Savings									
Lifetime (\$000)									-
Participants									-
Leveraged Funds (\$000)									-

C. 6 NYS Healthy Homes VBP

Metric	2020	2021	2022	2023	2024	2025	2027	2030	Total
Total Budget Spend (\$000)	921	285	624	3,813	3,591	591	-	-	9,825
MWh Annual	-	-	15	150	135	-	-	-	300
MWh Lifetime	-	-	210	2,100	1,890	-	-	-	4,200
Indirect MWh Annual	192	-	-	-	-	-	4,858	50,950	56,000
Indirect MWh Lifetime	2,688	-	-	-	-	-	68,012	713,300	784,000
MMBtu Annual	-	-	500	5,000	4,500	-	-	-	10,000
MMBtu Lifetime	-	-	10,000	100,000	90,000	-	-	-	200,000
Indirect MMBtu Annual	6,400	-	-	-	-	-	161,600	1,702,000	1,870,000
Indirect MMBtu Lifetime	128,000	-	-	-	-	-	3,232,000	34,040,000	37,400,000
Direct CO2e Emission Reduction									
(metric tons) Annual	-	-	38	374	336	-	-	-	748
Direct CO2e Emission Reduction									
(metric tons) Lifetime	-	3	710	7,029	6,319	-	-	-	14,061
Indirect CO2e Emission Reduction									
(metric tons) Annual	483	-	-	-	-	-	12,210	128,490	141,183
Indirect CO2e Emission Reduction									
(metric tons) Lifetime	9,091	-	-	-	-	-	229,616	2,416,846	2,655,553
Participant Bill Savings Annual (\$000)	-	-	5	47	42	-	-	-	94
Participant Bill Savings Lifetime									
(\$000)	-	-	94	943	849	-	-	-	1,887
Participants	-	-	25	250	225	-	-	-	500
Leveraged Funds (\$000)	-	-	-	-	-	-	-	-	-

C.7 Beneficial Electrification¹²⁰

Metric	2020	2021	2022	2023	2024	2025	2026	Total
Total Budget Spend (\$000)	13	3,845	2,280	4,580	5,637	8,233	5,412	30,000
MWh Annual								-
MWh Lifetime								-
MMBtu Annual								-
MMBtu Lifetime								-
CO2e Emission Reduction (metric tons) Annual								-
CO2e Emission Reduction (metric tons) Lifetime								-
Participant Bill Savings Annual (\$000)								-
Participant Bill Savings Lifetime (\$000)								-
Participants								-
Leveraged Funds (\$000)								-

¹²⁰ At the time of this filing, the Beneficial Electrification activities are currently being planned. Projected savings, participants, leveraged funds, and participant bill savings will be incorporated in an updated future filing of the Implementation Plan.

C.8 LMI Solar¹²¹

Metric	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Total
Total Budget Spend	1,283	895	1,300	1,300	1,248	1,200	1,187	1,100	1,100	1,100		11,713
(\$000)												
MWh Annual												-
MWh Lifetime												-
MMBtu Annual												-
MMBtu Lifetime												-
CO2e Emission Reduction												
(metric tons) Annual												-
CO2e Emission Reduction												
(metric tons) Lifetime												-
Participant Bill Savings												
Annual												-
Participant Bill Savings												
Lifetime												-
Participants												-
Leveraged Funds												-

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¹²¹ The total budget for Solar for All is \$21,245,000. However, \$8,723,237 is uncommitted in the CEF LMI Chapter and is being carried forward into the Statewide LMI Portfolio Implementation Plan. Metrics for LMI Solar are included and reported through NY-Sun.

Appendix D: Statewide LMI Portfolio Performance Metrics Tracking Mechanisms

The below table indicates how the Performance Metrics in <u>Section 2.5</u> will be assessed.

Performance Metrics Tracking Mechanism	Relevant Performance Metrics
Utilize quarterly portfolio performance metrics to assess performance	 MWh annual/lifetime savings achievements MMBtu annual/lifetime savings achievements CO2e Emission Reduction (metric tons) annual/lifetime achievements Number of participants served Participant bill savings annual/lifetime achievements Budget spent
Collaboration on data collection tools and practices with potential for additional portfolio-level market research	 Percentage of participants that learn about portfolio initiatives from various sources (e.g., Customer Hub, Utility or NYSERDA outreach materials, contractors, etc.) Participation satisfaction rating
Analyze administrative costs through Statewide LMI Portfolio BCA	Administrative cost associated with statewide approach
Track savings acquired that were related to a comprehensive project	 Energy savings acquired from comprehensive projects

Appendix E: Preliminary BCA Results by Program Administrator

The table below lists the benefits and costs considered in calculating benefit/cost ratios for the Statewide LMI Portfolio.

Туре	Component
	Measure equipment and installation (labor) costs
Costs	Program administrator costs (program administration, including marketing, implementation contractor, and EM&V)
	Avoided energy costs
Benefits	Deferred capacity costs (generation, transmission, and
bellellis	distribution)
	Reduced CO ₂ emissions

The following tables report preliminary BCA results by Program Administrator.

E.1 Central Hudson

	SCT			UCT		
	Benefits	Costs	Benefit Cost Ratio	Benefits	Costs	Benefit Cost Ratio
2022	\$1,100,170	\$801,487	1.37	\$563,799	\$709,516	0.79
2023	\$1,306,671	\$821,157	1.59	\$678,392	\$758,044	0.89
2024	\$1,586,361	\$1,115,729	1.42	\$825,812	\$901,454	0.92
2025	\$2,271,100	\$1,744,310	1.30	\$1,186,417	\$1,275,993	0.93

E.2 Con Edison

		SCT			UCT		
	Benefits	Costs	Benefit Cost Ratio	Benefits	Costs	Benefit Cost Ratio	
2022	\$51,080,543	\$51,133,391	1.00	\$25,724,450	\$33,765,575	0.76	
2023	\$53,268,295	\$63,748,630	0.84	\$27,293,375	\$42,927,176	0.64	
2024	\$62,389,118	\$76,246,720	0.82	\$32,981,194	\$51,718,109	0.64	
2025	\$18,585,128	\$20,456,887	0.91	\$9,716,518	\$14,606,893	0.67	

E.3 National Grid (KEDLI)

	SCT			UCT		
	Benefits	Costs	Benefit Cost Ratio	Benefits	Costs	Benefit Cost Ratio
2022	\$2,967,462	\$3,671,284	0.81	\$1,413,084	\$3.461,042	0.41
2023	\$3,457,351	\$4,510,816	0.77	\$1,654,740	\$4,258,399	0.39
2024	\$4,259,962	\$5,353,215	0.80	\$2,030,332	\$5,081,170	0.40
2025	\$5,219,937	\$6,061,711	0.86	\$2,516,949	\$5,683,069	0.44

E.4 National Grid (KEDNY)

	SCT			UCT		
	Benefits	Costs	Benefit Cost Ratio	Benefits	Costs	Benefit Cost Ratio
2022	\$5,190,045	\$4,609,228	1.13	\$2,461,883	\$4,074,140	0.60
2023	\$7,154,423	\$5,949,257	1.20	\$3,419,462	\$5,245,694	0.65
2024	\$8,738,207	\$7,075,575	1.23	\$4,206,620	\$6,209,344	0.68
2025	\$11,741,031	\$9,495,279	1.24	\$5,695,205	\$8,320,164	0.68

E.5 National Fuel Gas

	SCT			UCT		
	Benefits	Costs	Benefit Cost Ratio	Benefits	Costs	Benefit Cost Ratio
2022	\$13,786,505	\$13,264,762	1.04	\$7,170,221	\$12,813,246	0.56
2023	\$8,777,934	\$8,919,949	0.98	\$4,515,327	\$8,388,351	0.54
2024	\$8,853,170	\$8,875,968	1.00	\$4,574,321	\$8,235,878	0.56
2025	\$9,053,885	\$9,016,712	1.00	\$4,700,476	\$8,326,578	0.56

E.6 New York State Energy Research & Development Authority

		SCT		UCT		
	Benefits	Costs	Benefit Cost Ratio	Benefits	Costs	Benefit Cost Ratio
2022	\$123,062,056	\$171,892,755	0.72	\$66,513,484	\$85,127,359	0.78
2023	\$202,073,274	\$158,557,184	1.27	\$113,991,098	\$73,594,632	1.55
2024	\$223,283,211	\$159,971,111	1.40	\$127,722,744	\$68,918,472	1.85
2025	\$303,399,470	\$214,246,523	1.42	\$174,550,033	\$72,816,016	2.40
2026	\$155,304,952	\$137,101,783	1.13	\$89,752,333	\$48,146,083	1.86
2027	\$45,406,627	\$98,047,352	0.46	\$25,954,905	\$17,777,508	1.46
2028	\$13,661,876	\$9,450,895	1.45	\$7,927,563	\$6,613,693	1.20
2029	\$4,930,952	\$2,515,370	1.96	\$2,882,858	\$2,515,370	1.15

E.7 New York State Electric & Gas (NYSEG)

	SCT			UCT		
	Benefits	Costs	Benefit Cost Ratio	Benefits	Costs	Benefit Cost Ratio
2022	\$2,929,427	\$3,790,650	0.77	\$1,147,129	\$3,624,001	0.32
2023	\$5,346,983	\$6,852,238	0.78	\$2,164,809	\$6,329,408	0.34
2024	\$7,759,571	\$10,989,299	0.71	\$3,214,530	\$10,002,023	0.32
2025	\$11,565,913	\$16,290,098	0.71	\$4,935,957	\$14,604,530	0.34

E.8 National Grid (NMPC)

	SCT			UCT		
	Benefits	Costs	Benefit Cost Ratio	Benefits	Costs	Benefit Cost Ratio
2022	\$9,350,025	\$4,747,160	1.97	\$4,092,232	\$4,507,331	0.91
2023	\$9,684,813	\$6,698, 929	1.45	\$4,546,634	\$6,309,273	0.72
2024	\$11,312,959	\$8,581,369	1.32	\$5,459,277	\$8,099,339	0.67
2025	\$16,620,138	\$11,917,709	1.39	\$8,273,160	\$11,181,779	0.74

E.9 Orange & Rockland

	SCT			UCT		
	Benefits	Costs	Benefit Cost Ratio	Benefits	Costs	Benefit Cost Ratio
2022	\$4,073,400	\$2,280,267	1.79	\$1,652,659	\$2,222,822	0.74
2023	\$2,423,222	\$2,155,234	1.12	\$1,092,525	\$2,072,147	0.53
2024	\$2,773,362	\$2,474,243	1.12	\$1,265,312	\$2,369,635	0.53
2025	\$2,967,579	\$2,616,112	1.13	\$1,367,891	\$2,493,688	0.55

E.10 Rochester Gas & Electric (RG&E)

	SCT			UCT		
	Benefits	Costs	Benefit Cost Ratio	Benefits	Costs	Benefit Cost Ratio
2022	\$1,490,165	\$2,088,591	0.71	\$572,344	\$1,991,277	0.29
2023	\$2,402,498	\$3,307,788	0.73	\$948,567	\$3,084,559	0.31
2024	\$3,657,119	\$4,979,804	0.73	\$1,469,738	\$4,622,560	0.32
2025	\$5,564,652	\$7,470,173	0.74	\$2,269,141	\$6,837,399	0.33

Appendix F: Implementation Milestones

This Appendix provides additional detail regarding the milestones provided in the 2020 Plan and this Plan. The tables below have two milestone columns to indicate whether a milestone is from the 2020 Plan or is new or updated in this Plan. The third column provides the Status as of the filing of this Plan. Additional information on the progress of meeting milestones to date is provided in Annual Reports. For example, the 2021 Annual Report provides additional detail on progress made in 2021 towards the milestones from 2020 and 2021 as laid out in the 2020 Implementation Plan. Any milestone with the status "Delayed" or "No Longer Applicable" has its status explained in more detail below its respective milestone table.

1-4 Family Homes

Year	Milestone from 2020 Implementation Plan	Milestone Added or Updated in a 2022 revision to the Implementation Plan ¹²³	Status
2020	• Redesign of current set of initiatives to better align utility and NYSERDA offers, improve customer experience by reducing administrative burden, and developing a more graduated scale of financial support		Complete
	 Stakeholder engagement to inform redesign of programs 		Complete
	 Test a model geographic- based eligibility and determine how it can be applied to programs going forward 		Complete
2021	• Launch of redesigned programs (milestone moved from 2021 to 2023)		Delayed

¹²² NE: NY Proceeding, 2021 Annual Report.

¹²³ Most milestones included in the "Milestone Added or Updated in a 2022 revision to the Implementation Plan" column throughout Appendix F were updated or added in the April 29, 2022, Implementation Plan filing. Some were added or further updated in the November 1, 2022, filing. Where a milestone was added or further updated in the November 1 filing, it is indicated by an explanatory footnote.

	 Ongoing stakeholder engagement and coordination with other programs (e.g., HEAP and WAP) 		In Progress
2022	 Calibration of programs, where necessary, to improve impact and reach underserved or otherwise disadvantaged communities 		No Longer Applicable
	 Ongoing stakeholder engagement and coordination with other programs (e.g., HEAP and WAP) 	 Improve coordination with other programs (e.g., HEAP and WAP) 	In Progress
		Enhance effectiveness of the EmPower referral process and improve customer conversion rate by conforming to consistent data file submission to NYSERDA	In Progress
		Identify ways to enhance or add measures to the existing EmPower offerings, particularly for gas savings	In Progress
		Contract for new program workflow software and implementation support services	In Progress
		Increase awareness, community outreach and education through coordination with the new Clean Energy Hubs and existing utility outreach programs.	In Progress
		Work with NYS Clean Heat JMC to streamline customer access to both	Planning

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		NYS Clean Heat and	
		EmPower with appropriate	
		affordability protections	
		Outline and seek input on	Planning
		a plan to phase out	
		support for fossil fuel fired	
		equipped in GJGNY audits,	
		financing, and LMI	
		programs to align with	
		Climate Act while	
		preserving energy	
		affordability.	
2023	• Launch of rodesigned	·	In Progress
2023	Launch of redesigned programs (milestone)	Edditori tite combined)	III FI OKI COS
	programs (milestone	streamlined LMI program:	
	moved to 2023 from	EmPower+	
	2021)		DI :
		Increase DAC access to	Planning
		EmPower+ by	
		incorporating DAC	
		geographic eligibility and	
		coordinating with regional	
		Clean Energy Hubs on	
		targeted outreach to DACs	
		 Integrate EmPower+ and 	Planning
		NYS Clean Heat offerings	
		to increase access to	
		incentives for	
		electrification	
		Pursue opportunities to	Planning
		obtain and incorporate	
		funding from the Inflation	
		Reduction Act into LMI	
		programs ¹²⁴	
2024		Evaluate program	Planning
- '		performance and optimize	
		design to serve more	
		homes and encourage	
		more contractors to offer	
		efficiency and	
		electrification services	
		through the program	

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 $^{^{124}}$ Milestone added in the November 1, 2022, Implementation Plan filing.

	•	Launch Customer portal for increased customer engagement and project monitoring	Planning
	•	Increase contractor base and expand offerings to meet increased climate goals	Planning

Milestones marked as "Delayed" or "No Longer Applicable"

The "Launch of redesigned programs" milestone originally included for 2021 in the 2020 Implementation Plan is marked as "Delayed" in this Implementation Plan due to unforeseen unavailability of program management software and the need to procure new program workflow software and implementation support services to operate EmPower+. It is anticipated that new software and implementation support will be acquired and operational by 2023. Therefore, a new milestone for the "Launch of the combined, streamlined LMI program: EmPower+" has been added for 2023.

The "Calibration of programs, where necessary, to improve impact and reach underserved or otherwise disadvantaged communities" milestone originally included for 2022 in the 2020 Implementation Plan is marked as "No Longer Applicable" because it has been replaced with more specific and actionable milestones, such as the "Increase DAC access to EmPower+ by incorporating geographic eligibility and coordinating with regional Clean Energy Hubs on targeted outreach to DACs" milestone and the "Work with NYS Clean Heat JMC to streamline customer access to both NYS Clean Heat and EmPower with appropriate affordability protections" milestone.

Statewide Existing Affordable Multifamily Program

Year	Milestone from 2020 Implementation Plan	Milestone Added or Updated in a 2022 revision	Status
		to the Implementation Plan	
2020	Determine implementation structure and coordination among Program Administrators		Complete
	Develop a consistent framework for an incentive program that promotes comprehensive upgrades but allows		Complete

	flexibility for a second	
	flexibility for prescriptive	
	upgrades	C
	Develop process to	Complete
	coordinate technical	
	assistance with incentive-	
	based program	
	 Work with housing 	Complete
	agencies to develop an	
	approach to directly	
	incorporate program	
	incentives into the	
	capital stack for	
	affordable multifamily	
	buildings that are being	
	refinanced	
2021	Launch consistent	Complete
	statewide framework for	
	incentive-based program	
	Identify additional areas	Delayed
	to streamline	
	administration of	
	program (milestone	
	moved from 2021 to	
	2022)	
	• Launch approach to	Complete
	working with housing	
	agencies	
2022	Identify additional areas	In Progress
	to streamline	
	administration of	
	program (milestone	
	moved to 2022 from	
	2021)	
	Calibration of programs,	Delayed
	where necessary, to	
	improve impact and	
	reach underserved or	
	otherwise disadvantaged	
	communities <i>(milestone</i>	
	moved from 2022 to	
	2023)	
	<u> </u>	

 Ongoing stakeholder engagement and coordination with other programs (e.g., NYS HCR, NYC HPD and housing agencies) 	Expand direct funding partnership between NYSERDA and NYS HCR to serve affordable housing new construction and preservation	Complete
	Develop Program Administrator processes for statewide operations of AMEEP (e.g., document updates) and launch webinar series to engage Participating Contractors and Industry Partners by Q2	Complete ¹²⁵
	Coordinate AMEEP incentives with NYS Clean Heat and align release to market with NYS Clean Heat announcement cycles for program changes	In Progress
	NYSERDA to support housing agencies in development of sustainability/design guidelines for efficient, all-electric new construction and retrofit projects	Complete
	Issue Clean Heat for All packaged window heat pump RFP through partnership between NYSERDA, NYPA, and NYCHA	Complete

 $^{^{125}}$ Status updated from "In Progress" in the April 29, 2022, Implementation Plan filing to "Complete" in the November 1, 2022, Implementation Plan filing.

		Along with NYCHA and NYPA, select winning manufacturer(s) that responded to Clean Heat for All packaged window heat pump challenge RFP	In Progress
		Provide technical assistance and staffing resources to assist with capacity-building at HCR and HPD	In Progress
2023	Calibration of programs, where necessary, to improve impact and reach underserved or otherwise disadvantaged communities (milestone moved from 2022 to 2023)	Organize stakeholder interviews on AMEEP design and operations based on the first full year of operation to get feedback to guide analysis and potential program changes, and adapt program eligibility to reflect final DAC criteria	Future
		Review program objectives and operations to enable alignment with potential policy changes scheduled to take place in 2022 and 2023 (e.g., NE: NY midpoint review, Climate Act definition of providing benefits to DACs)	Future
		Issue initial small purchase order for and install initial packaged window heat pumps in NYCHA properties as part of 'demonstration	Future

	phase' of Clean Heat for All initiative	
2024	Study creation of measure packages for comprehensive retrofits by building typology based on data from AMEEP participants, and assess ability to offer packages as part of AMEEP	Future
	Assess viability of packaged window heat pumps as an effective electrification approach/model for NYCHA housing and broader NY multifamily market	Future
	 Pending success of demonstration phase, initiate broader implementation phase of Clean Heat for All initiative and install additional packaged window heat pumps 	Future

Milestones marked as "Delayed"

The "Identify additional areas to streamline administration of program" milestone originally included for 2021 in the 2020 Implementation Plan was moved to 2022 and marked as "In Progress" in this Implementation Plan because the Program Administrators began work on streamlining administration of the program in 2021, such as using only two Implementation Contractors statewide for AMEEP. The Program Administrators believe that this is an ongoing milestone that merits additional analysis following the launch of AMEEP in late 2021.

The "Ongoing stakeholder engagement and coordination with other programs (e.g., NYS HCR, NYC HPD and housing agencies)" milestone has been replaced with more specific and actionable milestones, such as the "Expand direct funding partnership between NYSERDA and NYS HCR to serve affordable housing new construction and preservation"

milestone, and the "Launch webinar series to engage Participating Contractors and Industry Partners by Q2" milestone.

Similarly, the "Calibration of programs, where necessary, to improve impact and reach underserved or otherwise disadvantaged communities" milestone originally included for 2022 in the 2020 Implementation Plan was moved to 2023, and the language was refined to read "Organize stakeholder interviews on AMEEP design and operations based on the first full year of operation to get feedback to guide analysis and potential program changes." While the original milestone will indeed be an ongoing effort throughout 2022, the Program Administrators reframed the milestone to be more actionable.

Technical Assistance for Affordable Multifamily Buildings

Year	Milestone from 2020 Implementation Plan	Milestone Added or Updated in a 2022 revision to the Implementation Plan	Status
2020	Develop process to coordinate technical assistance with incentive- based program		Complete
	Work with housing agencies and financiers to identify gaps in available performance data and invest in the development of data sets that can be used to aid in determinations on underwriting and build confidence among financiers and housing agencies		In Progress
2021	Launch technical assistance in a coordinated approach with the incentive-based program		Complete
	Identify additional opportunities to work with housing agencies and financiers to develop		In Progress

	initiatives to aid in project development		
		Identify technical assistance provider to service NYSERDA/ NYC HPD electrification pilot ¹²⁶ Complete	2
		Identify projects for the NYSERDA/ NYC HPD electrification pilot	SS
		NYSERDA will offer FlexTech services for AMEEP projects that pay SBC on gas but not electric	ss
		NYSERDA will assess how technical assistance feeds into and informs the development and completion of the 2M climate friendly homes by 2030 action plan	SS
		Clean Heating and Cooling Analysis of FlexTech studies that will help inform future program development and is intended to increase the rate at which clean energy technologies are identified through studies or best practices	ss
2022	Calibration of programs, where necessary, to improve impact and reach	Update program eligibility to increase	

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 $^{^{126}}$ Additional historical milestones for 2021 (i.e., as compared to the 2020 Plan) are provided here to reflect additional detail for Technical Assistance for Affordable Multifamily Buildings.

	underserved or otherwise disadvantaged communities.	access in disadvantaged communities
	 Ongoing stakeholder engagement and coordination with other programs (e.g., NYS HCR, NYC HPD and housing agencies) 	Engage with NYS HCR colleagues, affordable housing owners, and developers to refine integration of technical assistance within housing financing application processes In Progress In Progress
		Encourage energy service providers to include electrification and/or electrification readiness as part of any subsidized technical assistance scopes to support long-term decarbonization efforts In Progress In Progress
2023		Provide technical assistance resources to housing agencies to build in-house capacity to assess and support sustainability as part of core mission In Progress In Progress
		Require consideration of electrification and/or electrification readiness as part of any subsidized technical assistance to enable long-term building decarbonization efforts

RetrofitNY

Year	Milestone from 2020 Implementation Plan	Milestone Added or Updated in a 2022 revision to the Implementation Plan	Status
	One or more solutions are built and tested through		In Progress

2021	the design-build competition process		
	 Solution(s) are adapted to additional building typologies 		In Progress
2022	• Integration of retrofit solutions in the public housing authorities' and affordable housing regulators' preservation strategies (milestone moved from 2022 to 2023 and 2024)		Delayed
2023	• Integration of retrofit solutions in the public housing authorities' and affordable housing regulators' preservation strategies (milestone moved to 2023 from 2022)	Integration of retrofit solutions in the public housing authorities' strategies (milestone moved to 2023 from 2022)	In Progress
2024	• Integration of retrofit solutions in the public housing authorities' and affordable housing regulators' preservation strategies (milestone moved to 2024 from 2022)	Integration of retrofit solutions into regulated affordable housing preservation strategies (milestone moved to 2024 from 2022)	Future
2025	 Retrofit solutions are cost effective and NYSERDA subsidies are no longer necessary. 	Deliver retrofit solutions that are cost effective such that NYSERDA subsidies are no longer necessary	Future
	Building components and systems required for deep energy retrofits are readily available in the New York market.	Develop a market for building components and systems required for deep energy retrofits so that they are readily available in New York	Future
	• Financing solutions exists for building owners to	Support creation of financing solutions to	Future

purchase these solutions with minimal upfront cost.	enable building owners to take advantage of	
	these solutions at scale	

Milestones marked as "Delayed"

The "Integration of retrofit solutions in the public housing authorities' and affordable housing regulators' preservation strategies" milestone was delayed from 2022 to 2023 and 2024 because of impacts related to COVID-19. Due to stalled pipelines, demonstration projects were substantially delayed in financial closings with the housing agencies and could not enter construction.

Affordable New Construction

Year	Milestone from 2020 Implementation Plan	Milestone Added or Updated in a 2022 revision to the Implementation Plan	Status
2020	Existing programs will continue		Completed
	 Design of coordinated offerings between NYSERDA and utilities 		No Longer Applicable
2021	Launch of coordinated program offerings		No Longer Applicable
	Launch of high- performance demonstrations and competitions		Complete
2022	Launch of high- performance demonstrations and competitions		Complete
	 Incorporation of lessons learned from previous demonstrations and competitions 		Complete

	Launch of Round 3 of the Buildings of Excellence Multifamily Design Competition	Complete ¹²⁷
	Expand integrated funding with State and local affordable housing agencies	In Progress
2023	 Continue expanding integration with public housing agencies 	In Progress
	Utilize data and successful sets from decarbonization projects to deploy information through Channel Partners, conferences, and other general awareness activities	In Progress
2024	Continue expanding integration with public housing agencies	Future
	Utilize data and successful sets from decarbonization projects to deploy information through Channel Partners, conferences, and other general awareness activities	Future
2025	Continue expanding integration with public housing agencies	Future
	Utilize data and successful sets from	Future

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 $^{^{127}}$ Status updated from "In Progress" in the April 29, 2022, Implementation Plan filing to "Complete" in the November 1, 2022, Implementation Plan filing.

	decarbonization projects to deploy information through	
	Channel Partners, conferences, and other	
	general awareness activities	

Milestones marked as "No Longer Applicable"

The "Design of coordinated offerings between NYSERDA and utilities" milestone originally included for 2021 in the 2020 Implementation Plan is no longer applicable as the milestones have evolved with the New Construction portfolio. NYSERDA will continue to coordinate with Utilities throughout all sectors of the LMI portfolio.

Beneficial Electrification in LMI Homes

Year	Milestone from 2020 Implementation Plan	Milestone Added or Updated in a 2022 revision to the Implementation Plan	Status
2020	Research and analysis on institutional barriers, consumer protections, and application of heat pump solutions to ensure greater impact for LMI customers, tenants, and affordable multifamily building owners		Complete
	Design of short-term incentives	Design and launch short-term incentives to offset costs of heat pump installations in LMI homes and affordable multifamily buildings to advance heat	Complete

		pump deployment in LMI housing and support future market learnings ¹²⁸	
2021	 Continued research and analysis 		No Longer Applicable
	Launch of short-term incentives to offset costs of heat pump installations in LMI homes or affordable multifamily buildings		Complete
	 Launch pilots and demonstrations 		Delayed
	 Assess lessons learned from research, analysis, pilots, and incentive offerings 		In Progress
2022	Continued pilots and demonstrations		No Longer Applicable
	Continued incentive offerings		No Longer Applicable
	Planning for long-term investment in electrification for the LMI market segment, based on research and analysis and learnings from the pilots, demonstrations, and incentive offerings		No Longer Applicable
		 Launch evaluation and market insights study based on projects completed through short-term 	In Progress

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 $^{^{128}}$ This historical milestone for 2020 is updated (*i.e.*, as compared to the 2020 Plan) to provide additional detail regarding short-term incentives.

		incentive offering	
		incentive offerings	
	•	Publish LMI chapter	In Progress
		within Building	
		Electrification	
		Roadmap, outlining	
		key policy	
		approaches to scale	
		LMI electrification	
		through 2030	
	•	Partner with sister	In Progress
		agencies to	
		aggressively shift	
		existing benefit	
		programs into	
		alignment with the	
		State's housing	
		decarbonization	
		targets, especially	
		LIHEAP, WAP, and	
		the State's Energy	
		Affordability Policy	
		and Utility Energy	
		Assistance Programs	
	•	Conduct research	In Progress ¹³⁰
		and analysis on	
		electrification of	
		affordable housing,	
		develop	
		recommendations	
		for protecting	
		tenants from	
		heating cost shifts ¹²⁹	
	•	Continue	Planning
		programmatic	
		support for LMI heat	
		pump installations,	
		with a focus on	
		segments that	
		present the least	
		technical difficulty	
		and/or the most	
		-,	

¹²⁹ Milestone updated from "Conduct research and analysis leading to the development of an Affordability and Consumer Protections framework for LMI Electrification, outlined in the Two Million Climate-Friendly Homes Action Plan" in the April 29, 2022, Implementation Plan filing to current language.

¹³⁰ Status updated from "Planning" in the April 29, 2022, Implementation Plan filing to "In Progress" in the November 1, 2022, Implementation Plan filing.

		favorable return on investment, including buildings using delivered fuels and electric resistance heat, buildings with inefficient gas furnaces or boilers, and multifamily buildings with steam distribution systems	
	•	Design and launch a program offering supporting rapid response heat pump conversions in situations where existing fossil heating systems are at or near failure	Planning
	•	Launch additional program support for LMI multifamily building owners seeking to integrate electrification into their portfolio by providing wraparound services for guidance on capital planning, identifying best-fit technology solutions, employee training, project scoping, how to overcome hurdles related to existing subsidy agreements and tenant leases, and identifying incentives and other financial support for installing heat pumps	Planning

	•	Design pilot(s)	Planning
		supporting DHW electrification	
		conversions for	
		multifamily buildings	
	•	Launch research focused on policy	Planning
		and regulatory	
		initiatives that can further enable heat	
		pump adoption in	
		LMI housing	
	•	Conduct Stakeholder engagement to	Planning
		develop promising	
		approaches for community- and	
		place-based	
		interventions supporting heat	
		pump deployment in	
		LMI and Disadvantaged	
		Communities	
	•	Develop and launch additional	Planning
		educational	
		materials for LMI	
		customers and building owners,	
		including short how-	
		to videos and other multimedia offerings	
	•	In collaboration with	Planning
		DPS and the utilities, identify the scope of	
		and pathway to	
		increased support for pre-	
		electrification make-	
		ready work such as	
		electrical panel upgrades	
2023	•	Publish interim	Future
		learnings from the	
		single-family LMI	

	•	heat pump demonstration study (short term incentives) Publish interim learnings from the multifamily LMI heat pump demonstrations study (short term incentives)	Future
		Revise program rules to incorporate learnings from affordability and consumer protections research	Future
2024		Publish interim learnings from pilots and demonstrations	Future
		Revise program rules to incorporate affordability and consumer protections learnings from research and evaluation of real-world projects	Future

Milestones marked as "Delayed" or "No Longer Applicable"

The milestones marked as "Delayed" and "No Longer Applicable" have evolved and are combined with new milestones noted above.

New York State Healthy Homes Value-Based Payment Pilot

Year	Milestone from 2020	Milestone Added or	Status
	Implementation Plan	Updated in a 2022 revision	
		to the Implementation	
		Plan ¹³¹	

 $^{^{131}}$ Milestones for 2020 and 2021 are included here for New York State Healthy Homes Value-Based Payment Pilot and were not included in the 2020 Implementation Plan.

2020	Finalize specification list for the Healthy Homes intervention associated with the pilot	Complete
	 Onboard energy services implementation contractor and health services implementation partners 	Complete
	Secure submission of social determinants of health template for VBP Arrangement integration	Complete
	Finalize specification list for healthy homes interventions that address asthma and household injury	Complete
2021	Release a Request for Qualifications for pilot participating energy/housing service providers and assign pilot participation status to qualified providers	Complete
	Commence pilot field work	Complete
2022	Complete value-based payment participation toolkits for MCO/VBP providers and community-based organizations	In Progress
2023	Commence interim reporting on Year One intervention implementation	Planning

		process ¹³²	
2024	•	Complete draft of the full evaluation report	Planning

LMI Portfolio Marketing

Year	2020 and 2021 "Key	Milestone Added or	Status
	Milestones" from 2020 IP ¹³³	Updated in a 2022 revision	
		to the Implementation Plan	
2020	Statewide Brand:		In Progress
and	The Program		
2021	Administrators expect to		
	complete development by		
	the first quarter of 2021		
2020	NY Energy Advisor:		Complete
and	• During Q3 of 2020, the		
2021	Program Administrators		
	expect to launch an initial		
	version of the NY Energy		
	Advisor website,		
	introducing customers and		
	affordable housing		
	property owners to the		
	current initiative offerings		
	The full NY Energy Advisor		
	website will be launched by		
	end of Q2 2021		
2020	Hard Copy Customer Education		In Progress
and	Collateral and Multilingual		
2021	Communications:		
	Hard copy customer		
	collateral will be developed		
	in parallel with the online		
	NY Energy Advisor, in order		

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¹³² Milestone delayed from 2022 in the April 29, 2022, Implementation Plan filing to 2023 in the November 1, 2022, Implementation Plan filing. Milestone delay due to complications of the COVID-19 pandemic, challenges in enrolling eligible Medicaid members in the Pilot, challenges in obtaining full consent from interested eligible members, and challenges maintaining engagement and continuity of Pilot services with those households who are fully consented.

¹³³ Note that the milestones listed in this column were not provided within milestones tables in the 2020 Implementation Plan. Rather, information is drawn from descriptions of Key Milestones in the 2020 Implementation Plan.

F	to analyse consistent		
	to ensure consistent		
	messaging and calls to		
	action and to streamline		
	development costs		
2020	Community-Based Marketing		In Progress
and	and Paid Advertising:		
2021	Specific media and paid		
	advertising approaches will		
	be developed and		
	coordinated with the		
	statewide campaign and as		
	initiatives are		
	added/changed in the		
	Portfolio		
2022	rene	NY Energy Advisor:	In Progress
		 Launch a marketing 	
		campaign for the NY	
		Energy Advisor in Q1	
		2022 that will continue	
		through 2025	
		Hard Copy Customer	In Progress
		Education Collateral and	
		Multilingual	
		Communications:	
		 Develop and distribute 	
		to stakeholders hard	
		copy customer collateral	
		beginning in Q1 2022 in	
		parallel with operation	
		of the online NY Energy	
		Advisor, to ensure	
		consistent messaging	
		and calls to action and	
		to streamline	
		development costs.	
		Materials available in	
		multiple languages	
		include posters and fact	
		sheets.	
		Community-Based	In Progress
		Marketing and Paid	
		Advertising:	
		 Specific media and paid 	
		1	

	advertising approaches will be developed and coordinated with the statewide campaign and as initiatives are added/changed in the Portfolio	
2023	NY Energy Advisor: Review NY Energy Advisor analytics, determining effectiveness of marketing campaigns Make adjustment to paid media campaigns if needed Continue to support the Program Administrators and stakeholders' efforts to obtain earned media	Future
2024	NY Energy Advisor: Continue to analyze NY Energy Advisor marketing campaigns and make corresponding campaign adjustments	Future

Community-Based Outreach, Education, and Engagement Partnerships

Year	2020 and 2021 "Key	Milestone Added or	Status
	Milestones" from 2020 IP	Updated in a 2022 revision	
		to the Implementation Plan	
2020	Expansion of Existing LMI		In Progress
and	Community Partnerships:		
2021	• Starting in 2021, the		
	Program Administrators		
	will design the community-		
	based outreach and		
	engagement initiative, with		
	full implementation launch		
	in Q2 2021 to provide		
	timely transition from the		

2022		The Regional Clean Energy Hub network will	In Progress
2021	During the balance of 2020, the Program Administrators will assess evaluation results from the existing pilots and determine effectiveness of the neighborhood-based delivery model. If warranted, the Program Administrators will develop a replicable event/implementation plan, including consideration of remote webinar-based platforms as an alternative delivery mechanism to minimize risks associated with large, in-person events. The target for rollout would be Q3 2021.		
2020 and	engagement initiative. Neighborhood-Based Delivery Model:		In Progress
	 NYSERDA has been engaged with community partners in a co-design process to identify opportunities for improving the reach and impact of an outreach and engagement initiative within disadvantaged communities. This co-design process began in early 2020 and will inform the design of the subsequent community 		

		process with community partners to improve the reach and impact of outreach and engagement efforts within disadvantaged communities	
2023	•	Hubs fully onboarded in the market and working with local communities to support and streamline program engagement	Future
2024	•	Hubs to begin launching community campaigns and local pilot programs	Future

Community-Based Customer Engagement Initiatives

Year	2020 and 2021 "Key	Milestone Added or Updated	Status
	Milestones" from 2020 IP	in a 2022 revision to the	
		Implementation Plan	
2022	Milestones" from 2020 IP	Implementation Plan Community-Based Customer Engagement Initiatives: Central Hudson plans to continue their Community Lighting Program and will distribute LEDs through Food Banks and the United Way starting again in 2022. Con Edison will continue to offer energy efficiency kits via an opt-in approach to customers participating in Con Edison's Energy Affordability Program (formerly called the Low Income Discount	In Progress
		Program) and to collaborate with food pantries to distribute LED lightbulbs.	

	 National Grid will expand their LED Food Bank program to the Albany and Syracuse areas and will increase frequency to twice per year with continued collaboration with NYSEG/RGE Orange & Rockland will expand their food bank kit offering and will provide energy efficiency kits via an opt-in approach for customers participating in the Company's Energy Affordability Program. Additionally, Orange & Rockland will expand the existing MY ORU Store ecommerce platform to include additional functionality that includes new tools, products, and offerings that will specifically engage and guide LMI customers to make energy-wise decisions for their homes. 	
	Neighborhood-Based Delivery Model: During the balance of 2022, the Program Administrators will assess evaluation results from the existing pilots and determine effectiveness of the neighborhood- based delivery model. If warranted, the Program Administrators will develop a replicable event/implementation plan, including	In Progress

	consideration of remote	
	webinar-based platforms	
	as an alternative delivery	
	mechanism to minimize	
	risks associated with large,	
	in-person events. This	
	event/outreach strategy	
	would be implemented	
	beginning in 2022 after	
	final evaluation results are	
	determined.	

Evaluation, Measurement, & Verification Approach

Year	Milestone from 2020 Implementation Plan	Milestone Added or Updated in a 2022 revision to the Implementation Plan	Status
2022		 Continued ongoing meetings between Program Administrator VGS teams 	In Progress
		Refine and finalize standardized survey questions to be used when conducting process evaluation research	In Progress
		Complete 2017-Q1 2019 evaluation of EmPower NY Program, on target to be finished by NYSERDA in Q4 2022	In Progress
		Begin to develop and implement average existing condition baselines, facilitated through the TRM Management Committee, and identify key LMI measures for further research	In Progress
		 Select EM&V vendor for AMEEP evaluations to be undertaken in 2023 	Planning
		 Assess impact of NYS Clean Heat coordination with AMEEP and any resulting evaluation needs 	Planning
2023		Begin EmPower+ evaluation process	Future
		 Develop the workplan and conduct statewide evaluation for AMEEP, as operated in 2022 	Future

Appendix G: Scorecard Program Mapping to Implementation Plan Statewide Categories

This appendix maps individual LMI programs as identified in Program Administrators' quarterly scorecard reporting to Implementation Plan Statewide Categories and Sub-Initiatives.

G.1 Central Hudson

Statewide Category	Sub-Initiative	Fuel Type Funding Source	2022 Scorecard Program Name ¹³⁴	2022 Scorecard Program Code	2021 Scorecard Program Name	2021 Scorecard Program Code	2020 Scorecard Program Name	2020 Scorecard Program Code
Existing 1-4 Family Homes	EmPower NY	Electric	Empower (Electric)	CH-E-L-R-22				
Existing Affordable Multifamily Buildings	AMEEP	Electric	Clean Heat (CH) & Affordable Multifamily Energy Efficiency Program (AMEEP)	CH-E-M-X- 21				
Customer Awareness, Outreach & Engagement	Distribution of LEDs through food banks and the United Way	Electric	Community Lighting ¹³⁵	CH-E-M-R-5				
Existing 1-4 Family Homes	EmPower NY	Gas	Empower (Gas)	CH-G-L-R-23				

¹³⁴ 2022 scorecard IDs are used to report actual savings and spend in 2022 and may differ from projected 2022 budgets and targets reported in the body of this Implementation Plan.

¹³⁵ Central Hudson's community lighting program described in the Community-Based Outreach, Education, and Engagement Partnerships section of the Implementation Plan was historically accounted for under market rate programs. Since the initiative was created to support and engage with LMI customers in our service territory, the Community Lighting program was moved under the Statewide LMI Portfolio in 2021.

Existing	AMEEP	Gas	Affordable	CH-G-L-M-		
Affordable			Multifamily Energy	20		
Multifamily			Efficiency Program			
Buildings			(AMEEP)			
Customer		Gas				
Awareness,						
Outreach &						
Engagement						

G.2 Con Edison

Statewide Category	Sub-Initiative	Fuel Type Funding Source	2022 Scorecard Program Name ¹³⁶	2022 Scorecard Program Code	2021 Scorecard Program Name	2021 Scorecard Program Code	2020 Scorecard Program Name	2020 Scorecard Program Code
Existing 1-4 Family Homes	EmPower NY	Electric	Empower Electric	CE-E-L-R- 32N				
Existing Affordable Multifamily Buildings	AMEEP	Electric	Affordable Multifamily Energy Efficiency Program (AMEEP) Electric	CE-E-L-M- 5N	Multifamily - LMI	CE-E-L-M- 4N	Multifamily - LMI	CE-E-L-M- 4N
Customer Awareness, Outreach & Engagement	Energy Conservation Kits Program for EAP customers	Electric	Efficiency Starter Program - LMI	CE-E-L-R- 14N	Efficiency Starter Program - LMI	CE-E-L-R- 14N	Efficiency Starter Program - LMI	CE-E-L-R- 14N
	Food banks LED distribution	Electric	Retail Lighting - LMI	CE-E-L-R- 25N	Retail Lighting - LMI	CE-E-L-R- 25N	Retail Lighting - LMI	CE-E-L-R- 25N
	Home Energy Reports	Electric					Residential Home Energy Reports - LMI	CE-E-L-R- 17N
Existing 1-4 Family Homes	EmPower NY	Gas	Empower Gas	CE-G-L-R- 32N				
Existing Affordable	AMEEP	Gas	Affordable Multifamily Energy	CE-G-L-M- 5N	Multifamily - LMI	CE-G-L-M- 4N	Multifamily - LMI	CE-G-L-M- 4N

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¹³⁶ 2022 scorecard IDs are used to report actual savings and spend in 2022 and may differ from projected 2022 budgets and targets reported in the body of this Implementation Plan.

Multifamily			Efficiency Program					
Buildings			(AMEEP) Gas					
Customer	Energy	Gas	Efficiency Starter	CE-G-L-R-	Efficiency	CE-G-L-R-	Efficiency	CE-G-L-R-
Awareness,	Conservation		Program - LMI	14N	Starter	14N	Starter	14N
Outreach &	Kits Program				Program -		Program -	
Engagement	for EAP				LMI		LMI	
	customers							
	Home Energy	Gas					Residential	CE-G-L-R-
	Reports						Home	17N
							Energy	
							Reports -	
							LMI	

G.3 National Grid (KEDLI)

Statewide Category	Sub-Initiative	Fuel Type Funding Source	2022 Scorecard Program Name ¹³⁷	2022 Scorecard Program Code	2021 Scorecard Program Name	2021 Scorecard Program Code	2020 Scorecard Program Name	2020 Scorecard Program Code
Existing 1-4 Family Homes	KEDLI HEAT	Gas	Gas LMI - Existing 1-4 Family Homes Program	KL-G-L-R-12	Gas LMI - Existing 1-4 Family Homes Program	KL-G-L-R-12		
Existing Affordable Multifamily Buildings	АМЕЕР	Gas	Gas LMI - Existing Affordable Multifamily Program	KL-G-L-M-13				
Customer Awareness, Outreach & Engagement	Customer Awareness, Outreach, & Engagement Program	Gas	Gas LMI - Customer Awareness, Outreach, & Engagement Program	KL-G-L-R-10				

¹³⁷ 2022 scorecard IDs are used to report actual savings and spend in 2022 and may differ from projected 2022 budgets and targets reported in the body of this Implementation Plan.

G.4 National Grid (KEDNY)

Statewide Category	Sub-Initiative	Fuel Type Funding Source	2022 Scorecard Program Name ¹³⁸	2022 Scorecard Program Code	2021 Scorecard Program Name	2021 Scorecard Program Code	2020 Scorecard Program Name	2020 Scorecard Program Code
Existing 1-4 Family Homes	EmPower NY	Gas	Gas LMI - Existing 1-4 Family Homes Program	KN-G-L-R-12				
Existing Affordable Multifamily Buildings	AMEEP	Gas	Gas LMI - Existing Affordable Multifamily Program	KN-G-L-M-13				
Customer Awareness, Outreach & Engagement	Customer Awareness, Outreach, & Engagement Program	Gas	Gas LMI - Customer Awareness, Outreach, & Engagement Program	KN-G-L-R-10				

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¹³⁸ 2022 scorecard IDs are used to report actual savings and spend in 2022 and may differ from projected 2022 budgets and targets reported in the body of this Implementation Plan.

G.5 National Grid (NMPC)

Statewide	Sub-Initiative	Fuel Type	2022	2022	2021	2021	2020	2020
Category		Funding	Scorecard	Scorecard	Scorecard	Scorecard	Scorecard	Scorecard
		Source	Program	Program	Program	Program	Program	Program
			Name ¹³⁹	Code	Name	Code	Name	Code
Existing 1-4	EmPower NY	Electric	Electric LMI -	NM-E-L-R-16				
Family			Existing 1-4					
Homes			Family					
			Homes					
			Program					
Existing	AMEEP	Electric	Electric LMI -	NM-E-L-M-17				
Affordable			Existing					
Multifamily			Affordable					
Buildings			Multifamily					
			Program					
Customer	LED Food	Electric	Electric LMI -	NM-E-L-R-14				
Awareness,	Bank		Customer					
Outreach &	Program		Awareness,					
Engagement			Outreach, &					
			Engagement					
			Program					
Existing 1-4	EmPower NY	Gas	Gas LMI -	NM-G-L-R-12				
Family			Existing 1-4					
Homes			Family					
			Homes					
			Program					
Existing	AMEEP	Gas	Gas LMI -	NM-G-L-M-				
Affordable			Existing	13				

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¹³⁹ 2022 scorecard IDs are used to report actual savings and spend in 2022 and may differ from projected 2022 budgets and targets reported in the body of this Implementation Plan.

Multifamily			Affordable			
Buildings			Multifamily			
			Program			
Customer	Customer	Gas	Gas LMI -	NM-G-L-R-10		
Awareness,	Awareness,		Customer			
Outreach &	Outreach, &		Awareness,			
Engagement	Engagement		Outreach, &			
	Program		Engagement			
			Program			

G.6 National Fuel Gas

Statewide	Sub-Initiative	Fuel Type	2022	2022	2021	2021	2020	2020
Category		Funding	Scorecard	Scorecard	Scorecard	Scorecard	Scorecard	Scorecard
		Source	Program	Program	Program	Program	Program	Program
			Name ¹⁴⁰	Code	Name	Code	Name	Code
Existing 1-4	EmPower NY	Gas	EmPower	NF-G-LMI-R-	EmPower	NF-G-LMI-R-	EmPower	NF-G-LMI-R-
Family Homes				3J		3J		3J
Existing	AMEEP	Gas	Affordable	NF-G-LMI-R-				
Affordable			Multifamily	4 J				
Multifamily			Energy					
Buildings			Efficiency					
			Program					
			(AMEEP)					
Customer		Gas						
Awareness,								
Outreach &								
Engagement ¹⁴¹								

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¹⁴⁰ 2022 scorecard IDs are used to report actual savings and spend in 2022 and may differ from projected 2022 budgets and targets reported in the body of this Implementation Plan.

¹⁴¹ National Fuel Gas's weatherization kits program described in the Community-Based Outreach, Education, and Engagement Partnerships section of the IP does not report savings. Spend is included as part of Market Rate Portfolio Administration.

G.7 New York State Electric & Gas (NYSEG)

Statewide	Sub-Initiative	Fuel Type	2022	2022	2021	2021	2020	2020
Category		Funding	Scorecard	Scorecard	Scorecard	Scorecard	Scorecard	Scorecard
		Source	Program	Program	Program	Program	Program	Program
			Name ¹⁴²	Code	Name	Code	Name	Code
Existing 1-4	EmPower NY	Electric	LMI 1-4	NS-E-L-R-7	LMI	NS-E-L-R-7	LMI	NS-E-L-R-7
Family			Family		Residential		Residential	
Homes			Homes		Electric		Electric	
Existing	AMEEP	Electric	The	NS-E-L-M-6	LMI	NS-E-L-M-6	LMI	NS-E-L-M-6
Affordable			Affordable		Multifamily		Multifamily	
Multifamily			Multifamily		Program		Program	
Buildings			Energy					
			Efficiency					
			Program					
Customer	Food Banks,	Electric	LMI	NS-E-L-R-77				
Awareness,	Distributions		Distributions					
Outreach &	to EAP,							
Engagement	School Kits							
	LMI Retail	Electric	Retail	NS-E-L-R-75A				
	Lighting		Lighting LMI					
Existing 1-4	EmPower NY	Gas	LMI-	NS-G-L-R-23	LMI	NS-G-L-R-23	LMI	NS-G-L-R-23
Family			Residential		Residential		Residential	
Homes			Gas		Gas		Gas	
Existing	AMEEP	Gas	The	NS-G-L-M-22	LMI	NS-G-L-M-22	LMI	NS-G-L-M-22
Affordable			Affordable		Multifamily		Multifamily	
Multifamily			Multifamily		Program		Program	
Buildings			Energy					

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¹⁴² 2022 scorecard IDs are used to report actual savings and spend in 2022 and may differ from projected 2022 budgets and targets reported in the body of this Implementation Plan.

		Efficiency			
		Program			
Customer	Gas	LMI	NS-G-L-M-79		
Awareness,		Distributions			
Outreach &					
Engagement					

G.8 Orange & Rockland

Statewide Category	Sub-Initiative	Fuel Type Funding Source	2022 Scorecard Program Name ¹⁴³	2022 Scorecard Program Code	2021 Scorecard Program Name	2021 Scorecard Program Code	2020 Scorecard Program Name	2020 Scorecard Program Code
Existing 1-4 Family Homes	EmPower NY	Electric	LMI Electric	OR-E-M-R-11				
Existing Affordable Multifamily Buildings	AMEEP	Electric	LMI Electric	OR-E-M-R-11				
Customer Awareness, Outreach & Engagement	Food Banks, EE Kits, LMI Marketplace	Electric	LMI Electric	OR-E-M-R-11				
Existing 1-4 Family Homes	EmPower NY	Gas	LMI Gas	OR-E-M-G-12				
Existing Affordable Multifamily Buildings	AMEEP	Gas	LMI Gas	OR-E-M-G-12				
Customer Awareness, Outreach & Engagement	EE Kits, LMI Marketplace	Gas	LMI Gas	OR-E-M-G-12				

¹⁴³ 2022 scorecard IDs are used to report actual savings and spend in 2022 and may differ from projected 2022 budgets and targets reported in the body of this Implementation Plan.

G.9 Rochester Gas & Electric (RG&E)

Statewide Category	Sub-Initiative	Fuel Type Funding Source	2022 Scorecard Program Name ¹⁴⁴	2022 Scorecard Program Code	2021 Scorecard Program Name	2021 Scorecard Program Code	2020 Scorecard Program Name	2020 Scorecard Program Code
Existing 1-4 Family Homes	EmPower NY	Electric	LMI 1-4 Family Homes	RG-E-L-R-39	LMI Residential Electric	RG-E-L-R-39	LMI Residential Electric	RG-E-L-R-39
Existing Affordable Multifamily Buildings	AMEEP	Electric	The Affordable Multifamily Energy Efficiency Program	RG-E-L-M-38	LMI Multifamily Program	RG-E-L-M-38	LMI Multifamily Program	RG-E-L-M-38
Customer Awareness, Outreach & Engagement	Food Banks, Distributions to EAP customers, School Kits	Electric	LMI Distributions	RG-E-L-R-78				
	LMI Retail Lighting	Electric	Retail Lighting LMI	RG-E-L-R-76A				
Existing 1-4 Family Homes	EmPower NY	Gas	LMI 1-4 Family Homes	RG-G-L-R-55	LMI Residential Gas	RG-G-L-R-55	LMI Residential Gas	RG-G-L-R-55
Existing Affordable Multifamily Buildings	AMEEP	Gas	The Affordable Multifamily Energy	RG-G-L-M-54	LMI Multifamily Program	RG-G-L-M-54	LMI Multifamily Program	RG-G-L-M-54

¹⁴⁴ 2022 scorecard IDs are used to report actual savings and spend in 2022 and may differ from projected 2022 budgets and targets reported in the body of this Implementation Plan.

		Efficiency			
		Program			
Customer	Gas	LMI	RG-G-L-R-80		
Awareness,		Distributions			
Outreach &					
Engagement					

G.10 New York State Energy Research & Development Authority

Statewide Category	Sub-Initiative	Fuel Type Funding	2022 Scorecard	2022 Scorecard	2021 Scorecard	2021 Scorecard	2020 Scorecard	2020 Scorecard
		Source	Program Name ¹⁴⁵	Program Code	Program Name	Program Code	Program Name	Program Code
Existing 1-4 Family Homes	EmPower NY		Single Family- Low income	ND-E-L-R-65	Single Family- Low income	ND-E-L-R-65	Single Family- Low income	ND-E-L-R-65
	АНР		Single Family- Moderate Income	ND-E-L-R-66	Single Family- Moderate Income	ND-E-L-R-66	Single Family- Moderate Income	ND-E-L-R-66
Existing Affordable Multifamily Buildings	Multi-Year Affordable Housing Partnerships, Technical Assistance for Affordable Multifamily Buildings		LMI Multifamily	ND-E-L-M- 28a; ND-E-L-M- 28b	LMI Multifamily	ND-E-L-M- 28a; ND-E-L-M- 28b	LMI Multifamily	ND-E-L-M- 28a; ND-E-L-M- 28b
	RetrofitNY		RetrofitNY- LMI	ND-E-L-M-61	RetrofitNY- LMI	ND-E-L-M-61	RetrofitNY- LMI	ND-E-L-M-61
Affordable New Construction	Affordable New Construction		Low Rise New Construction Transition	ND-E-L-C-30	Low Rise New Construction Transition	ND-E-L-C-30	Low Rise New Construction Transition	ND-E-L-C-30

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¹⁴⁵ 2022 scorecard IDs are used to report actual savings and spend in 2022 and may differ from projected 2022 budgets and targets reported in the body of this Implementation Plan.

	Housing	Multifamily	ND-E-L-M-39	Multifamily	ND-E-L-M-39	Multifamily	ND-E-L-M-39
	Program	New		New		New	
		Construction		Construction		Construction	
		Transition		Transition		Transition	
		New	ND-E-L-C-42;	New	ND-E-L-C-42;	New	ND-E-L-C-42;
		Construction-	ND-E-L-M-	Construction-	ND-E-L-M-	Construction-	ND-E-L-M-
		LMI	42;	LMI	42;	LMI	42;
			ND-E-L-R-42		ND-E-L-R-42		ND-E-L-R-42
Customer	LIFE	Low Income	ND-E-L-X-32				
Awareness,		Forum on					
Outreach &		Energy					
Engagement	Regional	Regional	ND-E-L-X-88				
	Clean Energy	Clean Energy					
	Hubs	Hubs					
	REVitalize	REVitalize	ND-E-L-C-64				
Pilots and	LMI Pilots	LMI Pilots	ND-E-L-X-29				
Demonstrations							
LMI Solar	Solar for All	Solar for All	ND-E-L-X-69				
Beneficial	LMI Heat	Heat Pumps	ND-E-L-R-24				
Electrification	Pump Pilot	Phase 2					
Additional LMI	Healthy	Healthy	ND-E-L-R-22	Healthy	ND-E-L-R-22	Healthy	ND-E-L-R-22
Initiatives	Homes	Homes		Homes		Homes	
		Feasibility		Feasibility		Feasibility	
		Study		Study		Study	
		NYS Healthy	ND-E-L-R-48	NYS Healthy	ND-E-L-R-48	NYS Healthy	ND-E-L-R-48
		Homes Value		Homes Value		Homes Value	
		Based		Based		Based	
		Payment		Payment		Payment	
		Pilot		Pilot		Pilot	