

Statewide Low- and Moderate-Income Portfolio 2021 Annual Report

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1. Executive Summary

Pursuant to the January 16, 2020 Order Authorizing Utility Energy Efficiency and Building Electrification Portfolios through 2025 (“2020 NE: NY Order”), the New York State Energy Research and Development Authority (“NYSERDA”) and the New York Utilities¹ (collectively, “Program Administrators”) hereby file this Statewide LMI Portfolio Annual Report for 2021 (“Annual Report” or “Report”).²

In 2021 the Program Administrators continued the implementation and advancement of the Low- and Moderate-Income (“LMI”) statewide³ portfolio of energy efficiency programs and initiatives (the “Statewide LMI Portfolio” or the “Portfolio”), consistent with the Statewide Low- and Moderate-Income Portfolio Implementation Plan (“2020 Implementation Plan” or “2020 Plan”).⁴ The goal of the Implementation Plan⁵ 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. As stated in the 2020 Plan, the Statewide LMI Portfolio is designed to: (1) improve the experience of and ultimately benefit 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. The Plan contributes to achieving key goals from the Climate Leadership and Community Protection Act⁶ (“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 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 achieve two million climate-friendly homes by 2030. This includes at least one million efficient and electrified homes and one million electrification-ready homes by 2030, with at least 800,000 of the two million serving LMI households. The initiative calls on NYSEDA, New York State Homes and Community Renewal (“NYS HCR”), New York State Department of Public Service

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”), NMPCC Power Corporation d/b/a National Grid (“NMPCC”) (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”). The Utilities providing electric service to customers are referred to as “NY Electric Utilities.”

² Case 18-M-0084, *In the Matter of a Comprehensive Energy Efficiency Initiative* (“NE: NY Proceeding”), Order Authorizing Utility Energy Efficiency and Building Electrification Portfolios Through 2025 (issued January 16, 2020) (“2020 NE: NY Order”), p. 103.

³ For the purpose of the Statewide LMI Portfolio, these initiatives serve customers located in the territories of the Utilities defined and do not serve, unless otherwise noted, customers in other utility territories across the state. NYSEDA and the Utilities coordinate and share information on initiatives with utilities not outlined in this Report, to ensure alignment and advancement of energy efficiency initiatives across the state.

⁴ NE: NY Proceeding, Statewide Low- and Moderate-Income Implementation Plan (“2020 Implementation Plan”), (filed July 24, 2020).

⁵ Whereas “2020 Implementation Plan” and “2020 Plan” refer the Implementation Plan filed in July, 2020, this Annual Report also use the non-date-specific term “Implementation Plan” to describe more generally the applicable governing plan for the Portfolio, which is to be revised and updated periodically (*i.e.*, “Implementation Plan”).

⁶ Chapter 106 of the Laws of 2019. The Climate Act is available at <https://legislation.nysenate.gov/pdf/bills/2019/S6599>.

("DPS"), and Department of State to produce an executable plan and funding proposal by end of 2022 to guide achievement of this goal.

During 2021, the Program Administrators' achievements under the Portfolio framework included the following key activities and milestones:

- 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 and delivering the benefits of comfort, improved indoor air quality, and cost savings to low- and moderate-income residents;
- 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;
- Building 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 customer referral process, increasing awareness of and participation in cost-saving energy programs;
- Developing and launching NY Energy Advisor⁷, 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 LMI households and affordable multifamily buildings and assess real-world barriers and solutions to make heat pumps more accessible and affordable for LMI customers;
- Engaging with stakeholders through statewide LMI Portfolio webinars in July and November, completing co-design phase of Regional Clean Energy Hubs initiative, as well as multiple meetings with multifamily stakeholders and the Strategic Advisory Group ("SAG"), a stakeholder group

⁷ <https://energyadvisor.ny.gov/>

convened by the DPS Staff (“Staff”) as part of its Performance Management and Improvement Process (“PM&IP”) regarding the Statewide LMI portfolio⁸;

- Revising and filing the Statewide LMI Joint Management Committee (the “JMC” or the “Committee”) Manual (“JMC Manual”), primarily to address the establishment of a new LMI JMC Executive Council (“Executive Council”) that provides oversight and guidance to the JMC (filed December 22, 2021);⁹
- Continued coordination around Evaluation, Measurement, and Verification (“EM&V”) issues for the Portfolio, including regarding the Statewide LMI Verified Gross Savings (“VGS”) Specifications for the Statewide LMI Portfolio (“LMI VGS Specifications”);¹⁰ 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; aligning on EM&V results and approaches for several sectors;
- Developed and executed agreements with NYSERDA to administer funding through NYSERDA’s EmPower NY program (“EmPower NY” or “EmPower”) and to develop and implement the Energy Advisor website;
- Developing agreements between the Program Administrators to enable joint program delivery and improved coordination for the benefit of customers and service providers; and
- Developing a framework for combining and streamlining the EmPower NY program with Assisted Home Performance with ENERGY STAR (®) (“AHP”) into a single LMI program called EmPower+, informed by extensive stakeholder input, including releasing an RFP for program management software for EmPower+, with anticipated launch in 2023.

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 applicable to 2021 are reflected in this Annual Report, including in tables throughout the Report, as well in the Implementation Plan.¹¹

During 2021, the Program Administrators collectively spent \$111 million, with estimated gross annual electric savings of approximately 49,400 megawatt hours (“MWh”), gross annual gas savings of approximately 633,600 million British Thermal Units (“MMBtu”),¹² and annual greenhouse gas emissions reductions of approximately 56,500 metric tons of carbon dioxide equivalent (“CO₂e”).¹³ The Program Administrators served approximately 28,100 participants through the 1-4 Family Homes, Affordable

⁸ 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.

⁹ NE: NY Proceeding, “Statewide Low- to Moderate-Income Joint Management Committee Manual, Version 2” (Filed: December 22, 2021).

¹⁰ NE: NY Proceeding, Consolidated LMI Verified Gross Savings Specifications (filed Dec. 14, 2020). Revised VGS Specifications are to be filed in Q2, 2022.

¹¹ See, NE: NY Proceeding, 2020 NE: NY Order, p. 69-70.

¹² Includes NYSERDA savings from fuels other than electric and gas.

¹³ Includes NYSERDA indirect savings.

Multifamily, and Affordable New Construction initiatives, and reached approximately 66,700 participants through Customer Awareness, Outreach and Engagement initiatives.¹⁴

[Table 1](#), below, provides a brief description and key highlights for each major segment of the Statewide LMI Portfolio.

Table 1. Description of Sections and Key Highlights

| Section Name | Description of Section | Key Highlights and Takeaways |
|--|--|---|
| 2. Introduction | <ul style="list-style-type: none"> • Introduction and Background on 2021 Statewide LMI Portfolio Activities | <ul style="list-style-type: none"> • Continued implementation of Statewide LMI Portfolio for New York |
| 3. Portfolio Administration and Progress | <ul style="list-style-type: none"> • Description of JMC and Executive Council establishment and roles • Presentation and Review of Statewide LMI Portfolio Performance Metrics for 2021 • Summary of 2021 Budget and Target Metrics for 2021 • Updates on Key Coordination Areas | <ul style="list-style-type: none"> • Updates to JMC structure, including creation of an Executive Council • Reporting on updated status of Performance Metrics for 2021 • Budget and Target metrics and context for 2021, including alignment with 2020 Implementation Plan and cost efficiencies being pursued • Focused work on complex topics requiring coordination over time |
| 4. Stakeholder Engagement | <ul style="list-style-type: none"> • Summary of stakeholder sessions and stakeholder feedback, including a description of how input has been integrated into the Portfolio | <ul style="list-style-type: none"> • Conducted numerous stakeholder input sessions throughout 2021, which enabled significant feedback to program development and Portfolio calibration • Completed a co-design process with 30 organizations to develop the Regional Clean Energy Hubs initiative, a holistic, multi-disciplinary approach to ensure equitable access to benefits of New York’s clean energy transition • 247 attendees participated in two formal webinar stakeholder input sessions |
| 5. 1-4 Family Homes | <ul style="list-style-type: none"> • Summary of 2021 Activity • Program Summary • Implementation Milestones • Budgets, Targets, and Metrics • Findings and Planned Improvements | <ul style="list-style-type: none"> • Created a combined LMI programs application and built an online version • Doubled the number of moderate-income homes served through Assisted Home Performance over pre-COVID annual average • 17,077 households served¹⁵ • \$74 million total expenditures |

¹⁴ The Customer Awareness, Outreach and Engagement initiatives included measures such as energy efficiency kits and LED distribution at food banks. More detail regarding these programs and how metrics are calculated is provided in the sector-specific sections of this report.

¹⁵ Across various funding sources including Clean Energy Fund (“CEF”), New Efficiency: New York, Regional Greenhouse Gas Initiative and federal funding

| Section Name | Description of Section | Key Highlights and Takeaways |
|--|--|---|
| | | <ul style="list-style-type: none"> • 7,767 gross annual MWh savings • 324,105 gross annual MMBtu savings |
| 6. Existing Affordable Multifamily Buildings | <ul style="list-style-type: none"> • Summary of 2021 Activity • Program Summary • Implementation Milestones • Budgets, Targets, and Metrics • Findings and Planned Improvements | <ul style="list-style-type: none"> • Developed and launched the Statewide multifamily program, AMEEP • Launched partnership between NYSERDA and NYC HPD, integrating high-efficiency and electrification incentives into affordable housing preservation finance process • Released the Clean Heat for All Challenge, an industry competition to spur development of a packaged, window-mounted cold climate heat pump that will accelerate electrification of NYCHA’s portfolio and NYS multifamily buildings • 9,867 participants served¹⁶ • \$26 million total expenditures • 19,506 gross annual MWh savings • 281,248 gross annual MMBtu savings |
| 7. Affordable New Construction | <ul style="list-style-type: none"> • Summary of 2021 Activity • Program Summary • Implementation Milestones • Budgets, Targets, and Metrics • Findings and Planned Improvements | <ul style="list-style-type: none"> • Launched transformative partnership with NYS HCR to integrate technical assistance and high-efficiency and electrification incentives into affordable new construction finance applications • Awarded second round winners of Buildings of Excellence competition, recognizing design, construction and operation of low-carbon or carbon neutral multifamily buildings, with 78% of units constructed serving LMI households • 1,183 participants served • \$3.8 million total expenditures • 4,049 gross annual MWh savings¹⁷ • 27,766 gross annual MMBtu savings¹⁸ |
| 8. Pilots and Demonstrations | <ul style="list-style-type: none"> • Summary of 2021 Pilots and Demonstrations Programs and Activities • Budgets, Targets, and Metrics | <ul style="list-style-type: none"> • Released the Heat Pump Adder Pilot, funding over \$10M in electrification measures as part of comprehensive energy upgrades in low-to-moderate income homes and affordable multifamily buildings |

¹⁶ In some cases, Program Administrators defined program participants in multifamily initiatives differently in 2021 (e.g., for programs prior to the launch of AMEEP, Con Edison participants are calculated based on total electric and gas accounts, NYSEG/RG&E participants are calculated based on unit area or property owner, and NYSERDA’s MPP program calculates participants based on dwelling units served). With the launch of AMEEP, the Program Administrators standardized the definition of program participants as dwelling units served.

¹⁷ Including NYSERDA indirect savings.

¹⁸ Including NYSERDA indirect savings.

| Section Name | Description of Section | Key Highlights and Takeaways |
|---|--|---|
| | <ul style="list-style-type: none"> • Findings and Planned Improvements | |
| 9. Beneficial Electrification in LMI Homes | <ul style="list-style-type: none"> • Summary of 2021 Programs and Activities Addressing Beneficial Electrification in LMI Homes • Implementation Milestones • Budgets, Targets, and Metrics • Findings and Planned Improvements | <ul style="list-style-type: none"> • Launched Heat Pump Adder Pilot for single family and multifamily LMI homes • Commenced research and analysis to inform heat pump deployment strategy in LMI market segment |
| 10. Additional LMI Initiatives | <ul style="list-style-type: none"> • Summary of NYSERDA’s Clean Energy Fund (“CEF”) “Solar for All” and New York State Healthy Homes Value-Based Payment Pilot (“Healthy Homes Pilot”) • Implementation Milestones • Budgets, Targets, and Metrics • Findings and Planned Improvements | <ul style="list-style-type: none"> • Launched Healthy Homes Pilot |
| 11. Customer Awareness, Outreach & Engagement | <ul style="list-style-type: none"> • Summary of Customer Awareness, Outreach & Engagement activity, including Marketing Efforts • Budgets, Targets, and Metrics • Findings and Planned Improvements | <ul style="list-style-type: none"> • Released the Regional Clean Energy Hubs RFP to contract with partner organizations in each of the ten economic development regions of the state to provide holistic, multi-disciplinary outreach services to ensure equitable access to the benefits of New York’s clean energy transition • 66,681 participants served through customer-based engagement initiatives • \$1.7 million total expenditures • 18,075 gross annual MWh savings • 579 gross annual MMBtu savings |

2. Introduction

Pursuant to the 2020 NE: NY Order, this Statewide LMI Portfolio Annual Report for 2021 gives an overview of the Statewide LMI Portfolio’s performance and subsequent findings and planned improvements.¹⁹ This Annual Report is consistent with the 2020 Implementation Plan, as well as the Program Administrators’ compliance filings that provide additional detail on the plans for implementing the Statewide LMI Portfolio: the LMI JMC Manual, the LMI Coordination Plan, and the LMI VGS Specifications. This Annual Report also demonstrates that Program Administrator activity for 2021 is consistent with the directives from the New York Public Service Commission (“Commission”), including the Accelerated Efficiency Order²⁰ from December 2018 and the 2020 NE: NY Order from January 2020.²¹ The LMI programs currently administered and in development under the Statewide LMI Portfolio will advance the climate and equity objectives of New York’s Climate Act, which requires a minimum of 35% of clean energy program spending, with a goal of 40%, be directed to disadvantaged communities. Furthermore, Statewide LMI Portfolio will incorporate the Disadvantaged Communities criteria as established by the Climate Justice Working Group and informed by public comment, into existing programs and new initiative developments where applicable and appropriate. The activities and investments outlined in this Report help to lower energy consumption and energy bills for LMI residents and affordable housing owners; reduce on-site combustion of fossil fuels, help to reduce localized air pollution; and improve outreach and engagement within LMI and disadvantaged communities.

In the sections below, the Program Administrators describe their activities and results in 2021, including data on budgets, savings, and participants, both targeted achievement and actual achievement. This data is provided at a Statewide level. Data specific to each Program Administrator is provided in [Appendix A](#). In the 2020 Implementation Plan, the Program Administrators established key objectives and associated performance metrics for the Statewide LMI Portfolio, which are described further in [Section 3.3](#).²² The reporting of performance metrics in this Annual Report is consistent with those established in the 2020 Implementation Plan.

3. Portfolio Administration and Progress

Effective and robust coordination among the Program Administrators is foundational to the success of the Statewide LMI Portfolio, and the Program Administrators’ activity in 2021 reflects their focus on this key objective. Central to this are (1) continuous improvement in the operation and effectiveness of the LMI JMC in delivering on the goals and outcomes of the Statewide LMI Portfolio framework; (2) the creation of the LMI JMC Executive Council; and (3) addressing complex coordination topics (“Coordination

¹⁹ NE: NY Proceeding, 2020 NE: NY Order, p. 103.

²⁰ NE: NY Proceeding, Order Adopting Accelerated Energy Efficiency Targets (issued December 13, 2018) (“Accelerated Efficiency Order”).

²¹ Per the directives in the Accelerated Efficiency Order and the 2020 NE: NY Order, the Program Administrators have allocated over 20% of incremental energy efficiency funding to the LMI sector in 2021, with 71% of utility incremental energy efficiency funding allocated to the multifamily market segment on a cumulative Portfolio basis.

²² NE: NY Proceeding, 2020 Implementation Plan, p. 7, 11-12. Key objectives listed on p. 7 are to: Achieve savings goals within budget; Increase the number of customers served annually; 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.

Points”) as part of the development and refinement of the Statewide LMI Portfolio.²³ Areas of emphasis in the coordinated administration and progress of the Portfolio include performance metrics and budgets and targets.

3.1. LMI JMC

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.

3.2 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.²⁴ 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.²⁵

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. In 2022 and beyond, the Committee will continue to engage with the Executive Council to accelerate the development and refinement of LMI Portfolio offerings.

3.3 Statewide LMI Portfolio Performance Metrics

In the 2020 Implementation Plan, the Program Administrators noted they would measure the success of the Statewide LMI Portfolio in meeting the objectives noted above²⁶ by tracking the Performance Metrics shown in [Table 2](#). 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 2](#) 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 2](#) quarterly for the Clean Energy Dashboard (“CED”) (as well as each Annual Report). [Appendix B](#) describes how the remaining Performance Metrics are to be assessed and reported. The Program Administrators will be looking to report on these remaining metrics in the future as well. The Program

²³ The Program Administrators addressed the LMI JMC and the Coordination Points in the 2020 Implementation Plan (p. 9-11 and 8, respectively) and the separate LMI JMC Manual and LMI JMC Coordination Plan filings, which were provided in compliance with the DPS Staff letter approving the 2020 Implementation Plan. NE: NY Proceeding, “Statewide LMI Implementation Plan Approval Letter,” (Filed September 14, 2020) (“Approval Letter”), p. 2

²⁴ NE: NY Proceeding, Order Approving Clean Energy Fund Modifications (Issued and Effective September 9, 2021), p. 61-62, and Ordering Clause No. 9, p. 95.

²⁵ NE: NY Proceeding, JMC Manual Version 2, pp. 8-11.

²⁶ See, Footnote 22, above.

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.

Table 2: Portfolio Objectives and Performance Metrics

| Portfolio Objective | Performance Metrics | Status |
|---|---|---|
| Portfolio Savings & Spend | | |
| Achieve Portfolio-wide savings goals within budget | 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 |
| | CO ₂ e 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 ²⁷ served | Currently provided in Annual Report |
| Adopt comprehensive ²⁸ efficiency projects | Energy savings acquired from comprehensive projects | To be provided in the 2022 Annual Report |

²⁷ For the purposes of this Report, “participant” is defined as dwelling units served in statewide programs. Dwelling units that receive both electric and gas measures will be counted in both the electric and gas category by utility but will only be counted once at the state level. Prior to the launch of AMEEP, the definition of participants depended on the initiative type, and may have referred to households, multifamily buildings, tenants, and/or accounts.

²⁸ 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.”

| Portfolio Objective | Performance Metrics | Status |
|--|---|--|
| 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.) | Program Administrators, including EM&V teams, are currently discussing approaches for assessing, including survey instruments, to be coordinated with evaluation contractors |
| Achieve high customer satisfaction | Participation satisfaction rating | |
| Advance energy affordability for LMI customers | Participant bill savings, annual and lifetime | Currently provided in Annual Report |
| Portfolio Efficiencies | | |
| Increase efficiencies of Portfolio investments ²⁹ | Cost and burden associated with all Portfolio investments | To be provided in the 2022 Annual Report comparing year over year spend and unit costs (\$/MMBtu) |

3.4 Budgets and Targets

During 2021, the Program Administrators collectively spent \$111 million, with estimated gross annual electric savings of approximately 49,400 MWh, and gross annual gas savings of approximately 633,600 MMBtu. Individual Program Administrator budgets and targets, as well as other metrics, are shown in [Appendix A](#). [Appendix A](#) also includes Program Administrator-specific narrative regarding 2021 spending and savings performance as compared to 2021 projections in the 2020 Implementation Plan. For several Program Administrators in particular, the 2021 targets achieved differ materially from those in the 2020 Implementation Plan and the 2020 NE: NY Order, with the result being a decrease or increase in the level of savings achieved given the level of spending.

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 factors, including inflation, COVID-19 pandemic-related costs, and global supply chain issues, the unit cost data from that time period varies compared to actual unit costs seen in 2021.

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

²⁹ Such efficiencies are described in [Section 3.4](#), and may apply to categories including, but not limited to, administration, implementation, marketing, incentives, and EM&V.

The following summarizes key trends, which are discussed in detail in [Appendix A](#):

Targets

- Achievement of electric Utility Program Administrator targets for 2021 varied from overachievement, to alignment, to underachievement relative to 2020 NE: NY Order and 2020 Implementation Plan targets.
- NYSERDA's funding is on a fuel neutral basis and aligns with the 2020 NE: NY Order and 2020 Implementation Plan budgets. NYSERDA 2021 performance compared to electric targets shows overachievement in the 1-4 Family sector; achievement in Existing Affordable Multifamily sector, and underachievement in Affordable New Construction. NYSERDA performance compared to gas targets shows overachievement in 1-4 Family Homes sector and underachievement in Existing Affordable Multifamily and Affordable New Construction.

Budgets:

- Utilities shifted funds or plan to shift funds between years to optimize Portfolio performance; some plan to use additional 2021 budgets in future years while others spent future year funding in 2021 to meet demand.

The Program Administrators also note that differences in 2021 actuals from the 2020 Implementation Plan 2021 projections reflect the inherent challenge in providing highly accurate projections given that the initiatives in the Statewide LMI Portfolio are generally different than what the Program Administrators have run in the past. 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.

The Program Administrators specifically address instances where there is substantial variance between 2021 portfolio targets as identified in the 2020 Implementation Plan and actual 2021 achievement in [Appendix A](#). Specifically, each Program Administrator provides narrative description following its Program Administrator-specific [Appendix A](#) tables, including the factors that may have caused variance from projected performance, and any actions taken or planned in response.

The Program Administrators remain committed to achieving cost efficiencies to reduce overall costs. Cost efficiencies identified and achieved and/or continuing to be pursued beyond 2021 by the Program Administrators include the following, which are noted in detail throughout this Report:

- Adjusting multifamily implementation contractor ("Implementation Contractor") structures 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 2023 with the aim of achieving administrative cost efficiencies.

3.5 Coordination Points

As a follow-up to the 2020 Implementation Plan, the Program Administrators filed a Coordination Plan in November 2020 to address several complex coordination and administration elements that would require a transition period and timelines for the topics identified.³⁰ These Coordination Points are:

- Data Sharing Between the Program Administrators
- Evaluation, Measurement & Verification
- Implementation Contractor Models and Procurement
- Marketing
- Development and Use of Single Applications Across Program Administrators

The following sections describe progress made during the reporting period of the 2021 Annual Report for each element, as well as supporting context from the LMI JMC Coordination Plan.

One key area of coordination that cuts across these points is that, over the course of 11-14 months, NYSERDA worked with each utility to execute agreements to allow for the administration of utility funding through NYSERDA. Through this agreement, NYSERDA and the Utilities have centralized the administration of 1-4 Family programs through NYSERDA's EmPower program. The JMC has also leveraged the agreement to administer funding through NYSERDA to centralize the development and implementation of the NY Energy Advisor website and marketing plan.

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;
- 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.

³⁰ NE: NY Proceeding, Approval Letter, p. 2, citing, NE: NY Proceeding, 2020 Implementation Plan, p. 8. In the Approval Letter DPS Staff cited the 2020 Implementation Plan in the identification of these topics.

In 2021, progress on data-sharing was made in two high-impact areas of the Portfolio, 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 has updated terms in its Flexible Technical Assistance (“FlexTech”) program for customer consent authorizing NYSERDA to share FlexTech study information with the Utilities.
- Utilities have 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.³¹
- The Utilities are coordinating projects in overlapping service territories, which has required new and/or amended agreements and process 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 have described in detail in the EmPower NY Referral Process filings submitted by each of the Utilities on October 25, 2021.³² NYSERDA shares individual and aggregate referral status information with each utility via an interactive dashboard.
- The Program Administrators developed and executed agreements to enable centralized program delivery through EmPower and improved coordination for the benefit of customers and service providers.

In addition to the above, in 2021 the Program Administrators continued the review of legal agreements and program materials in order to determine whether modifications were needed, and, where appropriate, worked toward alignment of language and terms. For example, in 2021 and into 2022, Program Administrators have been coordinating to expand existing consent language in EmPower NY’s customer attestation form to enable ongoing sharing of customer data.³³

In 2022, the Program Administrators will continue to identify any necessary modifications to current agreements to facilitate the sharing of relevant data for the benefit of customers. For example, the EmPower program will consider additional data to be shared via referrals to target high impact

³¹ Usage data is not included in the application, and is therefore not shared as part of this process.

³² DMM Case Number 18-M-0084.

<https://documents.dps.ny.gov/public/MatterManagement/CaseMaster.aspx?MatterCaseNo=18-M-0084>

and DMM Case Number 19-M-0084.

<https://documents.dps.ny.gov/public/MatterManagement/CaseMaster.aspx?MatterCaseNo=14-m-0094&submit=Search+by+Case+Number>

³³ The Program Administrators approved revised attestation language for EmPower NY in February 2022.

customers. As part of AMEEP, the Utilities and NYSERDA are working to improve processes for sharing energy audits and application information. Program Administrators also plan to discuss data sharing as it relates to standardized statewide reporting for AMEEP.

Evaluation, Measurement & Verification

Consistent with the Coordination Plan and the Approval Letter, the Program Administrators initially filed VGS Specifications for the Statewide LMI Portfolio in December 2020 for the following initiatives:

- Existing 1-4 Family Homes
- Existing Affordable Multifamily Buildings
- Affordable New Construction
- Additional LMI Initiatives³⁴

The Program Administrators' EM&V experts continued to coordinate throughout 2021 on EM&V topics, including with DPS Staff. This work contributed to revisions to the VGS Specifications, which are expected to be filed in Q2 2022. VGS Specifications filings include the name and description of each initiative, gross savings methodology, realization rates, planned VGS approach, and an indication of whether the initiative had an exemption status from a utility's earnings adjustment mechanism ("EAM").³⁵ Key activity from 2021 includes the following:³⁶

- The Program Administrators developed a standardized series of survey questions for statewide use when conducting process evaluation research with LMI customers in 1-4 Family homes.
- Through its work in 1-4 Family homes, NYSERDA began to align the EmPCalc baselines through the Technical Resource Manual ("TRM") Management Committee, which is due for completion and publication in TRM Version 10 in 2022.
- For the EmPower NY program, the Program Administrators' EM&V teams aligned on which evaluation results would be applied to each program year. The 2012-2016 evaluation results apply to the statewide program through 2020. The 2017-Q1 2019 evaluation is currently underway by NYSERDA, on target to be completed in Q4 2022, and the results will be applicable to the 2021 program year up until launch of the EmPower+ Program.³⁷
- 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. The Program Administrators will use company-specific evaluation results for multifamily programs run prior to AMEEP in 2020 and 2021.

³⁴ The initial VGS Specifications were filed in December 2020. NE: NY Proceeding, "Consolidated LMI VGS Specifications." (Filed December 14, 2020). Updated VGS Specifications are to be filed with the revised Implementation Plan in 2022.

³⁵ See, Clean Energy Guidance CE-08: Gross Savings Verification Guidance (issued August 23, 2019)

³⁶ Milestones for EM&V were not included in the 2020 Implementation Plan, but will be included in the revised Implementation Plan to be filed in 2022.

³⁷ Upon launch of the EmPower+ program, a new evaluation will be conducted and results will apply to the program from its launch onwards.

- New Construction program impacts are undergoing a 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 2022, and results of the multifamily analysis will be released in Q2 2023. Analysis will continue for projects completed through 2022. The estimated completion of the Gross Savings Analysis report is Q1 2024.

Implementation Contractor Models and Procurement

The Coordination Plan recognized 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. 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. As the Program Administrators developed AMEEP in 2021, there was significant focus on the approach to procuring and contracting with Implementation Contractors. As a foundational element, the Utilities shared and assessed the scope and term of Implementation Contractors in current existing utility multifamily programs. The Utilities also developed a “pros and cons” analysis of different Implementation Contractor structures for both the near-term and long-term. Based on such information sharing and analyses, the Utilities selected and implemented a structure to expeditiously and effectively allow for launch and implementation of the new Statewide program; *i.e.*, two Implementation Contractors are now being used in AMEEP, one covering Central Hudson, Con Edison, Orange and Rockland, and National Grid’s KEDLI and KEDNY service territories, and one covering NFGDC, NYSEG, RG&E, and National Grid’s NMPC service territory. Agreements are being established between utilities as needed in areas where a customer may have service from multiple utilities.

For 1-4 Family residential programs, a single Implementation Contractor model is used to deliver the programs statewide. NYSERDA administers the programs for the vast majority of the state, 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 (*i.e.*, on Long Island, and between NYSERDA and National Grid for the Home Energy Affordability Team (“HEAT”) Program, or in municipal electric territories, where supplemental funding is provided through the RGGI Annual Operating Plan³⁸).

The JMC will continue to assess opportunities for optimal Implementation Contractor structures in 2022 by performing an analysis on existing structures. Throughout this analysis, the Program Administrators will collaborate with Staff.

Marketing

The Coordination Plan addressed marketing and outreach, noting the importance of these efforts in raising awareness among LMI customers and affordable multifamily property owners about the initiatives and services available to them. As described in the Coordination Plan, marketing efforts consist of a combination of statewide and localized marketing. The LMI JMC established a working group that oversaw and provided input on the development and launch of the NY Energy Advisor website in 2021, as

³⁸ RGGI Meeting and Planning Documents website <https://www.nysERDA.ny.gov/Researchers-and-Policymakers/Regional-Greenhouse-Gas-Initiative/Useful-Documents>

well as on collateral materials and a statewide branded campaign. Other specific topics addressed by the Marketing Working Group in 2021 included NY Energy Advisor website content, outreach strategy, a measurement plan, a creative marketing campaign, and Utility/NYSERDA agreements addressing task and cost details related to the NY Energy Advisor.

The LMI JMC Marketing Working Group launched the NY Energy Advisor marketing campaign in Q1 2022. This working group will focus in 2022 on steering the campaign launch, assessing its effectiveness at reaching customers and meeting their needs, and refining the NY Energy Advisor marketing campaign to maximize impact for LMI customers.

[Section 11](#) provides additional information about the progress of marketing among the Program Administrators.

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 has expanded 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 for AMEEP. Links to both program pages can be found on the NY Energy Advisor website,³⁹ and the AMEEP application can be found on the Statewide AMEEP documents page.⁴⁰

4. Stakeholder Engagement

4.1 Summary of Stakeholder Engagement Activity

As noted in the 2020 Implementation Plan,⁴¹ the Program Administrators view engagement with stakeholders as core to the design, implementation, refinement and overall success of the Portfolio, and this priority was reflected in 2021 through numerous stakeholder engagement efforts.⁴²

The Program Administrators conducted statewide stakeholder engagement sessions in July and November 2021. Each of these sessions was held virtually given continued COVID-19 concerns regarding in-person gatherings. In advance of each session, the Program Administrators posted meeting announcements on the DPS Document and Matter Management website ("DMM"),⁴³ as well as on NYSEDA's LMI Stakeholder Resources webpage.⁴⁴ Following each session, the Program Administrators

³⁹ <https://energyadvisor.ny.gov/>

⁴⁰ <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>

⁴¹ NE: NY Proceeding, 2020 Implementation Plan, p. 11-12.

⁴² The 2020 NE: NY Order requires the Program Administrators to conduct two stakeholder engagement sessions annually, which are described herein. NE: NY Proceeding, 2020 NE: NY Order, p. 101.

⁴³ NE: NY Proceeding, Notice Announcing Statewide LMI Stakeholder Webinar, (filed June 15, 2021 and October 19, 2021, respectively).

⁴⁴ <https://www.nyserda.ny.gov/All-Programs/Low-to-moderate-Income-Programs/LMI-Stakeholder-Resources-New-Efficiency-New-York>

posted meeting slides and a summary document reflecting the key issues discussed as well as questions, comments received, and responses given during the meetings.⁴⁵

The following table provides additional key data regarding the stakeholder sessions:

Table 3. Stakeholder Engagement Information

| Date | Description | Participants |
|-------------------|-------------------------------|--------------|
| July 14, 2021 | Statewide Stakeholder Webinar | 123 |
| November 17, 2021 | Statewide Stakeholder Webinar | 124 |

In addition, the Program Administrators continued to engage with stakeholders throughout 2021 during the development of AMEEP in order to inform the design of the new program. Specifically, the Program Administrators conducted two rounds of targeted “Voice of Customer” outreach sessions to multifamily stakeholders who represent a range of backgrounds, including contractors/installers, energy efficiency providers, affordable housing agencies, community-based partners, building owners/developers, Implementation Contractors, energy efficiency advocates, and local government. Further, the Program Administrators met with the PM&IP Stakeholder Advisory Group several times to solicit feedback on the proposed multifamily program structure and draft program manual.

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.

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.

4.2 Stakeholder Input and Integration

Stakeholder input was important to the Program Administrative efforts in 2021 and provides the foundation to much of what follows in the initiative summaries in Section 5-11.

In advance of each stakeholder engagement webinars, the formal email invitation to potential attendees included the opportunity to submit questions to LMIForum@nyserda.ny.gov. The invitation also included the agenda so that potential attendees would know what topics were going to be addressed in each session.

The Program Administrators presented on a wide range of topics during the two formal stakeholder engagement sessions, providing stakeholders with both general background and specific details, as

⁴⁵ <https://www.nyserda.ny.gov/All-Programs/Low-to-moderate-Income-Programs/LMI-Stakeholder-Resources-New-Efficiency-New-York>

appropriate. Such topics ranged from outlining the context for the LMI initiatives, to providing an overview and updates of initiatives and services, to the launch of the NY Energy Advisor.

The Program Administrators organized both formal stakeholder sessions to encourage engagement and participation from attendees. At both sessions, stakeholders had the opportunity to ask questions and provide comment. During the July engagement session, questions, comments and answers were provided after the formal presentation. During the second engagement session, stakeholders were encouraged to ask questions and provide comments after each section of the presentation. This provided insights to the presenters regarding areas of interest, attention, or clarification in “real time.” The range of interest in all aspects of the Portfolio was evident in the breadth of the questions and comments raised. Those questions and comments are found in the Stakeholder Reports.⁴⁶

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. This equitable engagement model directly steered the development of the \$53M Regional Energy Hubs RFP, which NYSERDA released in Fall 2021. As part of the RFP process, NYSERDA also created a clearinghouse where organizations could register to connect with other organizations across a region and facilitate partnerships in an effort to bring together multi-disciplinary organizations that could provide wide geographic reach while meeting local needs on energy-related programs, assistance and complementary social services. Contract awards are expected to be announced mid-2022.

The development of AMEEP is another example of stakeholder input and how it informed work completed in 2021 (and additional planning for beyond 2021). In 2021, leading up to the launch of AMEEP, the Program Administrators met often with stakeholders and gathered their feedback to inform program design (see “Development of AMEEP” in Section 6 for more details about meetings with stakeholders and the feedback collected by the Program Administrators). Stakeholders provided input that the new statewide multifamily offering should encourage comprehensive energy retrofits but also be simple, flexible, provide incentive clarity, and drive quality, efficient work scopes. This feedback influenced numerous innovations in the design of the program. For example, stakeholders indicated that the program should be easy to sell and understand. To address that sentiment, the Program Administrators implemented a clear, innovative “points” system that encourages deep energy retrofits and simplifies project incentive calculation.

Stakeholder input will continue as part of the iterative process to refine the development of the 1-4 Family Homes EmPower+ program model, which will integrate the EmPower and AHP program offerings into one streamlined and more accessible program. Stakeholder input formed the basis of the high-level program design articulated in an RFP, issued by NYSERDA in 2021, for a new residential Program Management Software to support the new program, which will launch in 2023.

⁴⁶ 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).

5. 1-4 Family Homes

5.1 Program Summary

In 2021 the EmPower NY,⁴⁷ AHP, and HEAT programs were administered, providing energy efficiency services to LMI households in 1-4 Family homes.⁴⁸ Following the approval of the 2020 Implementation Plan, the Program Administrators began the transition to a more uniform, statewide program model to improve overall energy affordability for LMI households through the EmPower NY program as the statewide platform. The Program Administrators expended over \$74 million on 1-4 Family homes initiatives in 2021, serving over 17,000 households and achieving 7,767 gross annual MWh savings and 324,105 gross annual MMBtu savings. EmPower and AHP exceeded most 2021 targets, including doubling the number of homes served through AHP.

5.1.1 EmPower NY and AHP

EmPower NY provides no-cost energy efficiency services to low-income households in utility service territories that pay into the System Benefits Charge with funding through the CEF. The AHP program provides incentives that cover up to 50% of the cost of an energy efficiency retrofit for moderate-income households. In 2021, 8,290 households were served through the EmPower NY program with CEF funding, saving an average of \$347 annually per participant; while 5,600 households received services under AHP, saving an average of \$278 annually per participant. The EmPower and AHP programs expended \$59 million in incentives, achieving 7,000 gross annual MWh savings and 284,000 gross annual MMBtu savings.

The program continued its COVID-19 response through 2021 with incentives for EmPower remaining at \$10,000 and AHP at \$5,000. The income range for AHP was expanded at the start of COVID until July 2021 to help more households access cost-saving upgrades. Despite the persistence of COVID, 2021 was a record year for AHP, which served over 5,000 homes, doubling the pre-COVID annual average. However, labor shortages and supply chain issues have continued to drive up costs, for example, with some insulation costs rising 30% in 2021. Current program incentive levels will be reassessed in 2022 and beyond in the context of other available funding sources (*e.g.*, federal funding, RGGI, *etc.*) and policy imperatives such as increasing the homes served, expanding access to affordable electrification and phasing out fossil fuel use, and will be informed by stakeholder and service provider input.

In addition, NYSERDA tested the use of a geographic eligibility determination for the AHP program. In the pilot, households residing in communities identified in Monroe, Albany, Schenectady, and Rensselaer counties have been deemed automatically eligible for program incentives. Through 2021, 147 projects were completed as part of the pilot. While the pilot is still underway, this approach is expected to decrease the administrative burden associated with income eligibility determinations and streamline engagement and outreach by contractors. The results from the pilot determined a higher rate of

⁴⁷ Through the end of 2020, NFGDC's low-income energy efficiency program was called the Low income usage reduction program ("LIURP"). As of January 1, 2021, NFGDC's program has become the EmPower NY program, consistent with the other New York utilities.

⁴⁸ Eligibility for the LMI programs is set as follows: households with annual income below 60% of the State Median Income ("SMI") meet the low-income threshold; while households with annual incomes over 60% of SMI up to 80% of the Area Median Income ("AMI") or SMI, whichever is greater, meet the moderate-income threshold.

applications using geo-eligibility, especially by contractors, with an estimated 30% of geo-eligible customers being over what would have normally been the income thresholds for the program.

In July of 2021, the EmPower and AHP programs introduced a new online combined application for both programs. Geographic eligibility was incorporated into the online application, identifying census tracts where 50% or more of the population was at or below 250% of the federal poverty rate as eligible for the EmPower program without having to provide income documentation – further increasing the accessibility of the program. The online application has been a great success with 90% of all applications coming in through the online portal and 10% coming in on paper via standard mail.

EmPower and AHP are used broadly statewide to administer funding for efficiency services to decrease energy burden. In 2021, NYSERDA continued its partnership with Office of Temporary and Disability Assistance (“OTDA”), to administer Weatherization Assistance Program (“WAP”) and Home Energy Assistance Program (“HEAP”) funding through EmPower. Using this model, NYSERDA administered EmPower on behalf of NYSEG, RG&E and NFGDC under existing agreements. In November of 2021, NYSERDA executed agreements to administer funding on behalf of Central Hudson and National Grid companies. Having executed the remaining agreements in early 2022, NYSERDA will continue to administer funding through EmPower on behalf of the Utilities through 2025.

5.1.2 Home Energy Affordability Team (HEAT)

In 2021 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. Due to the impacts of the COVID-19 pandemic, National Grid began offering remote energy audits and quality assurance/quality control visits. Despite interest from customers, in-home work continued to be negatively impacted due to localized surges in infections. Many customers, as well as field staff, were forced to quarantine after exposure in order to remain in compliance with federal, state and local mandates. This had an impact upon the number of customers that were able to be served. Despite these accessibility issues, the Program Administrators provided energy efficiency services to 237 households, providing prescriptive measure and custom health and safety for 426 completed work scopes in 2021, delivering an estimated deemed savings of 12,327.02 MMBtus.

5.2 Program Implementation Milestones

With the approval of the 2020 Implementation Plan, the Program Administrators began working to: redesign the EmPower NY program to provide a more streamlined process for service providers and customers; develop enhancements to the incentive structure to incorporate a graduated incentive schedule, including for moderate-income households; 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 enrollment of eligible customers from the Utilities to NYSERDA. Progress on the implementation milestones identified in the 2020 Implementation Plan include the information in the following table.

| 2020 Milestone from 2020 Implementation Plan | 2021 Progress |
|--|---|
| <ul style="list-style-type: none"> • Redesign of current set of initiatives to better align utility and NYSEDA offers, improve customer experience by reducing administrative burden, and developing a more graduated scale of financial support. | <p>In Progress</p> <ul style="list-style-type: none"> • Program redesign has been continuing with the outline of program measures, procedures, and incentive tiers agreed upon by NYSEDA and the Utilities. A combined application has been launched and further alignment of the programs is continuing with full integration of the programs to be finalized in Spring 2023. • Coordination between NYSEDA, National Grid, and PSEG LI to align EmPower NY, HEAT and PSEG LI programs is ongoing, including alignment of measures and incentive levels. |
| <ul style="list-style-type: none"> • Stakeholder engagement to inform redesign of programs | <p>Ongoing</p> <ul style="list-style-type: none"> • Solicited and received feedback on 1-4 Family topics in two public stakeholder engagement sessions, numerous informal stakeholders sessions and contractor convenings in 2021 to inform the blueprint for Empower+. |
| <ul style="list-style-type: none"> • Test a model geographic-based eligibility and determine how it can be applied to programs going forward | <p>Complete</p> <ul style="list-style-type: none"> • Geographic eligibility was tested through the AHP program in Monroe, Albany, Schenectady, and Rensselaer counties. Through the pilot, 147 projects were completed by 15 contractors in 2020. An ex-post analysis determined that 30% of completed projects were for customers that would have normally been over the income thresholds for the program. |
| 2021 Milestone from 2020 Implementation Plan | 2021 Progress |
| <ul style="list-style-type: none"> • Launch of redesigned programs | <p>In Progress</p> <ul style="list-style-type: none"> • Launch of the redesigned, merged LMI program EmPower+ was on track and scheduled for Fall 2021. However, due to unforeseen long-term unavailability of program software, NYSEDA shifted to a phased roll-out of program enhancements and integration. Complete Empower+ launch expected in 2023. • Developed direct install for moderate income customers, align eligible measures. These program changes are scheduled to launch in March 2022 • Completed a new combined, streamlined and improved application for AHP and EmPower NY with online and paper versions launched in July 2021 • Released RFP for new residential program management software to support Empower+ |

| | |
|--|--|
| <ul style="list-style-type: none"> • Ongoing stakeholder engagement and coordination with other programs (e.g.; HEAP and WAP) | <ul style="list-style-type: none"> • NYSERDA continued to engage stakeholders through monthly contractor meetings and stakeholder feedback sessions • NYSERDA continued to coordinate with OTDA and NYS HCR, administering funding through EmPower |
|--|--|

5.3 Budgets, Targets, and Metrics

The budgets, targets, and metrics below reflect program spend for the 1-4 Family Homes portfolio from NYSERDA, National Grid in KEDLI, and utilities that had pre-existing agreements with NYSERDA. Due to timing, utilities that began administering funding through EmPower starting in November of 2021 were unable to reflect program spend and savings within 2021 reporting. These projects will be reflected in the 2022 LMI Statewide Portfolio Annual Report.

| Metric | 2021 Achieved ⁴⁹ | 2021 Target from 2020 Implementation Plan ⁵⁰ |
|--|-----------------------------|---|
| Total Budget Spend | \$74,041,740 | \$39,717,109 |
| MWh Annual | 7,767 | 6,118 |
| MWh Lifetime | 117,570 | 75,005 |
| MMBtu Annual ⁵¹ | 324,105 | 249,623 |
| MMBtu Lifetime | 7,951,546 | 4,885,571 |
| CO2e Emission Reduction (metric tons) Annual | 19,993 | 16,331 |
| CO2e Emission Reduction (metric tons) Lifetime | 458,744 | 270,525 |
| Participant Bill Savings Annual | \$3,010,252 | \$2,145,403 |
| Participant Bill Savings Lifetime | \$73,885,464 | \$40,584,562 |
| Participants | 17,077 | 12,963 |
| Leveraged Funds | \$29,546,338 | \$5,578,866 |

5.4 Findings & Planned Improvements

The Program Administrators expended over \$74 million on 1-4 Family homes initiatives in 2021, serving over 17,000 households and achieving 7,767 gross annual MWh savings and 324,105 gross annual MMBtu savings. This represents an increase over 2020 funding and a historical high for the programs. Increased project costs due to higher materials and labor costs will continue for the foreseeable future.

NYSERDA worked with each utility to execute agreements to administer utility funding through EmPower. This will allow for a streamlined administrative approach, centralized program implementation and

⁴⁹ Metrics represent 2021 gross savings and 2021 expenditures. This applies to all Budgets, Targets, and Metrics tables throughout this Annual Report. Reflective of the ongoing evaluation of initiatives through the EM&V process, the verified gross savings will be different from gross savings. See, LMI VGS Specifications.

⁵⁰ NE: NY Proceeding, 2020 Implementation Plan, Appendix C.

⁵¹ MMBtu savings include gas savings achieved by all Program Administrators as well as other fuel savings achieved by NYSERDA. This applies to all Budgets, Targets, and Metrics tables throughout this Annual Report.

mitigate customer confusion. Funding allocated for 2021 but not spent will be rolled forward to offset CEF funding in future years.

NYSERDA and the Utilities are working to improve outreach and program design and have committed to meeting bi-monthly during the first full year of implementation. Enhanced referrals, with the Utilities identifying high energy use, low-income customers, are a priority. They are the subject of multiple workstreams, including utility access to the online application to facilitate client access to the program, and the use of referral codes to measure the success of outreach efforts.

In addition, the working group established priorities for 2022 to further program efficiencies and better align program activities and impact with the Climate Act. Both AHP and the EmPower NY programs will be fully combined into a new program, EmPower+, in the spring of 2023 with the launch of a new program workflow currently in development.

6. Existing Affordable Multifamily Buildings

6.1 Program Summary

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 2025.⁵²

On November 3, 2021, the Program Administrators launched AMEEP, the result of Program Administrator efforts throughout 2021 (and prior) to develop and implement a new, coordinated statewide program to meet the state's and the Program Administrators' objectives for energy efficiency in this important sector. AMEEP represents a significant step in development of the Statewide LMI Portfolio, as it provides a consistent framework across the state whereby all existing affordable multifamily building owners, developers, and their representatives have access to enhanced financial incentives for energy efficiency upgrades. 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 2021 prior to the launch of AMEEP, several Program Administrators continued to operate separate programs and initiatives to provide existing affordable multifamily building owners and their representatives with increased access to energy efficiency upgrades. This included Con Edison's Multifamily Energy Efficiency Program ("MFEEP"), NYSERDA's MPP, NYSEG and RG&E's LMI Multifamily Program, and NYSERDA's RetrofitNY program. National Grid had an operational Multifamily Program that was available to all multifamily buildings including affordable properties, but the program was not

⁵² NE: NY Proceeding, 2020 NE: NY Order, p. 93. As is noted in the 2020 Implementation Plan, 51% of total Portfolio budgets and 65% of total incremental energy efficiency budgets were allocated to the affordable multifamily market segment. In 2021, 27% of total Portfolio funding and 71% of NENY LMI Ordered Funds for 2021 went to multifamily initiatives. The Program Administrators will manage budgets such that at least 40% of incremental funding is directed to affordable multifamily initiatives over the course of 2020-2025, as directed by the 2020 NE: NY Order.

tailored to nor did it specifically track affordable multifamily buildings served. (As a result, National Grid's spending and savings for that program are not reflected in this Annual Report.)⁵³

The sections below describe the multifamily programs in market during 2021. AMEEP and these other predecessor programs reflect the objectives identified for this segment, which include addressing cost barriers experienced by owners of affordable multifamily buildings, increasing awareness of energy efficiency among tenants and building owners, providing a simplified experience to navigate offerings, and addressing the barrier of split incentives between owner and tenant.⁵⁴

6.1.1 Affordable Multifamily Energy Efficiency Program (AMEEP)

AMEEP is the new statewide LMI multifamily program designed and managed collaboratively by the Program Administrators, offering incentives for the installation of energy efficient equipment and technology in existing affordable multifamily housing. The Program Administrators began accepting applications through AMEEP in November 2021.

Development of AMEEP

While initial planning for the new statewide multifamily program began in 2020, the LMI JMC 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, 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 which the LMI multifamily program was a key focus; met several times with the SAG; and engaged in one-on-one 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 Program Administrators greatly appreciate the time, effort, and insight offered by stakeholders; the feedback from stakeholders was instrumental in developing the AMEEP design described below and detailed in the AMEEP Program Manual.⁵⁵

⁵³ See [Section 6.3](#).

⁵⁴ NE: NY Proceeding, 2020 Implementation Plan, p. 26.

⁵⁵ See, <https://www.nyserda.ny.gov/-/media/Migrated/Files/Programs/LMI/NYS-Affordable-Multifamily-Energy-Efficiency-Program-Manual.ashx>

AMEEP Design

The core focus of AMEEP is 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. Utilities are funding the measure installation incentives for AMEEP and serve as the main point of contact for customers applying to the program.

Incentives for all Comprehensive Pathway projects are calculated using an innovative “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 to simplify the calculation of the total project incentive for buildings, reflecting a best practice adopted from the prior MPP offering. Additionally, incentives differ by region, with downstate incentives being greater than upstate incentives, to account for project cost differences between the two regions. As described further below, an energy audit is required as part of the Comprehensive Pathway to help identify the scope of work, and incentives are available from NYSERDA to offset the cost of the audit through their FlexTech Program.

Due to the scale of comprehensive projects, projects may require a couple of years to complete installations. For this reason, AMEEP includes a mid-project incentive payment to help allay upfront investments in equipment and other costs borne by the customer. The default period for completing a comprehensive project is two years, and AMEEP includes a provision for extending the commitment if appropriate.

The Program Administrators also spent considerable time designing streamlined, uniform application materials for both the Comprehensive and Non-Comprehensive Pathways to simplify participation for AMEEP applicants across the state. The materials include a single “Program Manual”, customer application, contractor application, contractor agreement letter, and incentive fact sheet.⁵⁶

Transition to AMEEP from MPP

NYSERDA and the Utilities coordinated on a statewide transition, as MPP wound down and AMEEP was launched. 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. MPP’s final day in market and accepting applications was February 4, 2022, and NYSERDA is allowing projects that already applied to MPP to continue in that program through project completion. As part of the transition, the Program Administrators also developed criteria and processes that allowed certain customers who had already applied to MPP the option to switch to AMEEP. Effective communication was provided to the multifamily customer base and service providers about the transition to guide them through the process.

⁵⁶ <https://www.nyscrda.ny.gov/All-Programs/Low-to-moderate-Income-Programs/LMI-Stakeholder-Resources-New-Efficiency-New-York/NYS-Affordable-Multifamily-Energy-Efficiency-Program>

AMEEP Technical Assistance

As part of AMEEP, the Program Administrators include a technical assistance offering in conjunction with the measure incentives for comprehensive projects. Technical assistance helps building owners plan projects to achieve greater energy efficiency savings and simultaneously maximize program incentive opportunities. 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.

AMEEP Launch – Marketing and Implementation

To support the implementation and launch of AMEEP, the Program Administrators established a dedicated Multifamily Marketing Working Group in 2021. The working group undertook the creation of AMEEP marketing and launch materials including email announcement template materials, coordinated webpage content for each Program Administrator, and webinar content to brief participating contractors on the new program offering.

After the launch of AMEEP in late 2021, Program Administrators with existing multifamily programs, such as Con Edison, National Grid, NYSEG RG&E, and NYSERDA, worked to transition customers to the new offering. Program Administrators without existing multifamily programs worked to stand up AMEEP and develop leads in their territories. The Program Administrators will continue to collaborate on program operations in 2022, and plan to calibrate the program going forward, including planned coordination with the New York State Clean Heat Program ("NYS Clean Heat"), which is discussed in more detail in [6.4 Findings and Planned Improvements](#) below.

6.1.2 Con Edison Multifamily Energy Efficiency Program (MFEED)

Prior to the launch of AMEEP, Con Edison's MFEED served owners and property managers of both market-rate and affordable multifamily buildings, offering a tier of higher incentives for affordable buildings. After enrolling in MFEED, customers had the option to select their desired energy efficiency products and services from a menu of offerings, which include direct installations and both prescriptive and custom rebates for both gas and electric measures. The program offered to help facilitate the coordination of building surveys and custom audits to help customers identify efficiency solutions appropriate for their buildings. Con Edison completed over 3,000 MFEED projects in 2021 for affordable multifamily buildings. MFEED is now only offered for market-rate multifamily buildings, as affordable multifamily buildings now participate in AMEEP.

As part of its Rate Plan,⁵⁷ Con Edison is required to offer technical assistance funding for affordable multifamily building owners. While the statewide technical assistance offering was being developed, 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

⁵⁷ 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.

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. Overall, 46 buildings completed a survey or assessment through this offering in 2021; one additional building received an extension and is completing their assessment in 2022. Eight of the 46 buildings that received an assessment in 2021 completed free gas measures, and 15 buildings plan to complete energy efficiency measures as a result of this offering in 2022. This offering closed at the completion of 2021, at which point the launch of AMEEP enabled streamlined coordination of technical assistance for Con Edison customers via FlexTech.

Con Edison conducted an electric geotargeting pilot in 2021 to test methods of determining affordability eligibility other than supporting documentation, and to see if removal of this step in the application process could lead to an increase in program participation. From June 1 through December 31, any multifamily customer completing an electric project in Bronx Community District 4, Highbridge and Concourse, was classified as eligible for the LMI program without needing to provide supporting documentation. Con Edison selected this district after reviewing census tract median household income data, number of customers, usage across multiple community districts within the service territory, and after receiving feedback from a knowledgeable stakeholder. Bronx Community District 4 contains approximately 1,500 multifamily buildings and has a median household income of \$33,000. There were 119 projects completed within this district in 2021, compared to 10 in 2020, showing a significant increase. Con Edison plans to survey participants of this pilot in early 2022 to audit pilot performance and better understand the affordability status of participating buildings.

In 2021, MFEEP leveraged and fostered several working relationships to support the success of the program. Con Edison meets regularly with NYCHA to provide additional support for their MFEEP projects and executed on MFEEP projects for NYCHA in 2021. Con Edison also continued to coordinate 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, which aims to reduce barriers to electrification in existing affordable multifamily buildings by scaling up electrification retrofits in the NYC HPD Preservation pipeline. Con Edison will be helping to coordinate program incentives to fill funding gaps in these projects.

In 2021, Con Edison had two active Joint Energy Efficiency Plans (“JEEPs”) with non-profit agencies that own affordable housing buildings. JEEPs create a collaboration between Con Edison and these organizations to help identify and support energy efficiency upgrades in their portfolio of buildings, and to provide enhanced incentives and goals. These working relationships all contribute towards better

synchronization efforts, to coordinate offerings and increase participation in the existing affordable multifamily program.

6.1.3 National Grid KEDNY Multifamily Program

In 2021, National Grid conducted an LMI-specific One Pipe Steam initiative which provided efficiency upgrades to existing one-pipe steam distribution systems in affordable multifamily buildings for no cost. The retro-commissions included boiler clean and tunes, master and riser venting, and the install of TRVs. This initiative was run as a pilot to boost system capabilities, bring savings, and provide an alternative way for customers to see energy efficiency savings in the time of uncertainty that surrounded the COVID-19 pandemic. Due to timing, spend and savings will be reported in 2022.

6.1.4 NYSEG and RG&E LMI Multifamily Program

The NYSEG and RG&E Multifamily program provides direct installation of energy-saving measures in common areas such as hallways, storage rooms, and outdoor walkways, and direct energy efficiency services in individual dwelling units. NYSEG and RG&E cover the entire amount of the in-unit project costs, including energy-efficient measures, administrative fees, and labor charges. For other common, non-residential area equipment upgrades, NYSEG and RG&E pay a percentage of the installed costs and require the building owner to cost share the remaining balance.

Throughout Q1 and Q2 of 2021, NYSEG and RG&E actively collaborated with the LMI JMC working group and their Implementation Contractor to concurrently identify best practice models and program designs better suited to statewide uniformity. With a focus on aligning upstate efforts, NYSEG and RG&E reviewed several program delivery models and identified opportunities to reduce inspection costs, expand/unify relationships with the trade ally network, align measures offered, and establish a process for overlapping territories with neighboring gas utilities and National Grid.

In August 2021, and shortly thereafter, NYSEG and RG&E leveraged existing vendor contracts in place at National Grid and consolidated to a unified upstate vendor. While this transition temporarily delayed/limited program performance in 2021, it positions NYSEG and RG&E to be nimble and aligned with upstate utilities for AMEEP in 2022 and beyond.

6.1.5 Multifamily Performance Program (MPP)

In 2021, MPP continued to see strong project intake after making program adjustments in 2020. In March 2020, the MPP Team reduced the energy savings threshold to participate in MPP from 20% energy savings to 15% energy savings. This update was made in response to market feedback that the 20% energy savings threshold was too difficult to meet. The energy savings metric was also adjusted from source savings to site savings. This update was made to enable more electrification projects to participate in the pipeline.

Additionally, in April 2020, due to the uncertainty of COVID-19 impacting project intake and project progress, NYSERDA made temporary changes to the program requirements to improve the flexibility of the program and make payments to projects earlier in the project lifecycle. Due to the positive response of these temporary changes, many of these changes were codified into the Program Guidelines in 2021. NYSERDA continued to make incentive funding available earlier in the project lifecycle and ease program access to those incentives. In 2021, MPP received applications for 19,787 units, which was approximately 75% above target.

NYSERDA streamlined the program offerings under MPP due to market feedback. The High Performance Component of the Multifamily Performance Program officially closed on April 1, 2021 due to poor market response. The High Performance Component followed the same structure as MPP. MPP projects that had 40% or more in projected energy savings were eligible to participate in the High Performance Component and receive \$3,500/dwelling unit incentives. Prior to 2021, there was interest in the Component, but no project had an approved work scope that met the 40% requirement. Just prior to the close of the program, NYSERDA received seven High Performance Component applications aggregating to approximately 400 units.

In December 2020, NYSERDA launched the Heat Pump Demonstration Study under MPP. The purpose of the Study is to provide proof points of heat pump installations in existing multifamily building retrofits, understand market and technical barriers to these installations in affordable multifamily buildings, and inform future program design. Under this study, \$5 million has been provided in incentives for MPP projects with heat pumps in their work scopes. The heat pumps must meet the technical requirements of the NYS Clean Heat Program. A project approved for the study is eligible to receive incentives from MPP, the NYS Clean Heat Program, and the Study. The Study provides two types of incentives on a per dwelling unit basis – an incentive for the installation of approved heat pump equipment and an incentive for electric service upgrade, if that is deemed necessary for the building. Over the course of 2021, MPP enrolled 16 projects into the program and has a waitlist of projects as scopes of work are approved and pre-encumbered funds are freed up.

Lastly, NYSERDA supports the adoption of Integrated Physical Needs Assessments (“IPNA”) under the MPP umbrella. The IPNA Management Committee, composed of representatives from NYC HPD, NYC Housing Development Corporation (“NYC HDC”), and NYS HCR, continued to meet in 2021 and finalized updated versions of the IPNA Tool, the IPNA Standard and the IPNA Provider Request for Qualifications (“RFQL”). The RFQL included a new requirement that the Energy Assessors must be energy service companies that are approved under the Multifamily Building Solutions Network. The IPNA Provider RFQL was released in 2020 and a new list of pre-qualified IPNA Providers was announced on December 7, 2021. NYSERDA, in conjunction with the housing agencies, held a Provider Training on December 13th to review the updated IPNA Tool and Standard, discuss the integration of the NYC Local Law 97 into the IPNA Tool, and expectations for project submissions. Training for staff of the housing agencies that will cover a reviewer’s checklist for the energy audit component of IPNAs, supportive resources that NYSERDA offers agency staff reviewing IPNAs, and an overview of the updated IPNA Tool and Standard will be held in Q1 of 2022.

On November 5, 2021, NYSERDA announced that the MPP would sunset on February 4, 2022 due to the launch of AMEEP. The three-month lead time was intended to mitigate disruption in the market and provide sufficient time for the market to transition to the new program.

6.1.6 RetrofitNY

In 2018, under the first RetrofitNY pilot round, NYSERDA selected six design-build teams to each design a retrofit solution for a specific building. All designs were completed in 2019 and the first pilot project started construction in mid-2019. The building is owned by RiseBoro Community Partnership and the design team was led by Chris Benedict, R.A. The project was financed by NYS HCR, NYC HPD and NYSERDA. The construction faced some delays due to COVID-19 and is expected to complete construction in April 2022. Several other selected teams are working toward starting construction in 2022, including projects from the second building typology, low-rise residential, currently supported by RetrofitNY.

In 2021, the program also worked with NYCHA to select a design team for the first RetrofitNY style project funded by NYCHA. NYSERDA collaborated with NYCHA on a Request for Proposals (“RFP”) issued by NYCHA in January 2020 to select a design team. Prior to the issuance of the RFP, NYSERDA released a RFQL and selected teams eligible to answer NYCHA’s RFP. The design team was selected at the end of 2020 and construction is anticipated to start in Q3 2022.

Additionally, the program made substantial progress on demand aggregation and industry engagement. NYSERDA launched the RetrofitNY Pledge, a formal call to action signed by building owners to help motivate manufacturers to make cost-effective, high-performance building solutions more affordable and accessible. The Pledge enables building owners to use their collective buying power, at no risk to themselves, to urge manufacturers to introduce new retrofit solutions into the market. To date the Pledge has aggregated over 407,000 units of affordable housing. NYSERDA also released several innovation solicitations to support industry players in creating new types of mechanical systems and offsite-manufactured envelope panel systems, accelerate innovation, and rapidly reduce the cost of net-zero energy retrofits.

NYSERDA has released a series of rolling Requests for Qualifications in March 2021 to qualify teams for participation in future RetrofitNY funding rounds. NYSERDA launched the second funding round of RetrofitNY in November 2021. The solicitation has committed a total of \$5M to qualified teams seeking to design and build the next generation of whole building retrofit solutions.

6.1.7 NYSERDA Partnerships with Affordable Housing Agencies

In 2021, the Program Administrators made significant progress building partnerships with state and local affordable housing agencies and public housing authorities, who in turn continued to demonstrate vital leadership on climate action and building decarbonization. In August, NYSERDA and NYS Homes and Community Renewal announced a transformative partnership called the Clean Energy Initiative (“CEI”), providing \$7.5M in CEF funding to create up to 600 state-of-the-art all-electric affordable homes and creating streamlined access to technical assistance and electrification funding integrated directly into NYS HCR’s affordable housing finance applications. The CEI launched in 2021 starting with affordable new construction and adaptive reuse projects and will expand to encompass existing affordable multifamily retrofits in 2022.

In a similar effort, NYSERDA also partnered with NYC HPD to create the Retrofit Electrification Pilot, with NYSERDA 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 and bring the comfort and health benefits of electrification to roughly 1,200 LMI households. 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 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 partnerships with housing agencies by Con Edison are outlined in [Section 6.1.2](#).

6.2 Program Implementation Milestones

6.2.1 Statewide Existing Affordable Multifamily Program

The chart below outlines the implementation milestones from the 2020 Implementation Plan that the JMC targeted for completion in 2020 and 2021, as well as progress towards achieving those milestones.

| 2020 Milestones from 2020 Implementation Plan | 2021 Progress |
|--|--|
| <ul style="list-style-type: none"> Determine implementation structure and coordination among Program Administrators | <p>Complete</p> <ul style="list-style-type: none"> Program Administrators are using two implementation contractors statewide to operate AMEEP. Utilities are coordinating program operations and execution of projects in overlapping service territories. |
| <ul style="list-style-type: none"> Develop a consistent framework for an incentive program that promotes comprehensive upgrades but allows flexibility for prescriptive upgrades | <p>Complete</p> <ul style="list-style-type: none"> Launched AMEEP statewide on November 3, 2021. AMEEP offers a comprehensive pathway for whole building energy retrofits, and a non-comprehensive pathway for measure-level upgrades. |
| <ul style="list-style-type: none"> Develop process to coordinate technical assistance with incentive-based program | <p>Complete</p> <ul style="list-style-type: none"> AMEEP leverages the NYSERDA FlexTech program to provide energy audits for AMEEP comprehensive projects. Utilities and NYSERDA are coordinating to share FlexTech energy audits and AMEEP application information. |
| <ul style="list-style-type: none"> Work with housing agencies to develop an approach to directly incorporate program incentives into the capital stack for affordable multifamily buildings that are being refinanced | <p>Complete</p> <ul style="list-style-type: none"> NYSERDA established partnerships with NYS HCR and NYC HPD to develop an approach to incorporate funding into refinancing and launch pilots in market with both agencies in 2021. |
| 2021 Milestones from 2020 Implementation Plan | 2021 Progress |
| <ul style="list-style-type: none"> Launch consistent statewide framework for incentive-based program | <p>Complete</p> <ul style="list-style-type: none"> Launched AMEEP statewide on November 3, 2021. |

| | |
|---|---|
| <ul style="list-style-type: none"> • Identify additional areas to streamline administration of program | <p>In Progress</p> <ul style="list-style-type: none"> • In 2021, the Program Administrators streamlined administration of AMEEP by using two implementation contractors statewide, coordinating projects in overlapping utility service territories, developing statewide program documentation, and by coordinating on marketing materials. • Program Administrators plan to continue analyzing opportunities for increased administrative efficiencies in 2022. |
| <ul style="list-style-type: none"> • Launch approach to working with housing agencies | <p>Complete</p> <ul style="list-style-type: none"> • NYSERDA partnered with NYC HPD to launch the Retrofit Electrification pilot, which incorporates \$24M of NYSERDA technical assistance and electrification incentives into NYC HPD’s refinancing process. NYSERDA will launch a similar partnership with NYS HCR in 2022 to integrate decarbonization incentives into existing multifamily retrofits, building under the affordable new construction pilot released in 2021. |

6.2.2 Technical Assistance for Affordable Multifamily Buildings

Technical assistance helps building owners inform capital planning to achieve greater energy efficiency savings and simultaneously maximize program incentive opportunities. As noted above, technical assistance through NYSERDA’s FlexTech program is a key component of AMEEP. In addition, FlexTech operated in 2021 prior to AMEEP’s launch. Additional information on FlexTech in 2021 is provided below.

| 2020 Milestone from 2020 Implementation Plan | 2021 Progress |
|---|--|
| <ul style="list-style-type: none"> • Develop process to coordinate technical assistance with incentive-based program | <p>Complete</p> <ul style="list-style-type: none"> • Discussed coordination between technical assistance and the multifamily program offering across Program Administrators in relation to the customer journey • Discussed technical assistance offering goals, potential structures, and key components • FlexTech continued to support the affordable multifamily sector while a statewide program was fully designed. |
| <ul style="list-style-type: none"> • 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 | <p>In Progress</p> <ul style="list-style-type: none"> • NYSERDA contracted with a consultant to assess the current affordable housing portfolio, performance and design standards, and identify opportunities to support underwriting in housing finance to drive higher performance rehab and new construction. |
| 2021 Milestone from 2020 Implementation Plan | 2021 Progress |

| | |
|---|--|
| <ul style="list-style-type: none"> • Launch technical assistance in a coordinated approach with the incentive-based program | <p>Complete</p> <ul style="list-style-type: none"> • A technical assistance offering is included in AMEEP in conjunction with the measure incentives for comprehensive projects. Funding for technical assistance is provided through NYSEERDA’s FlexTech program. |
| <ul style="list-style-type: none"> • Identify additional opportunities to work with housing agencies and financiers to develop initiatives to aid in project development | <p>In Progress</p> <ul style="list-style-type: none"> • Under a Memorandum of Understanding (MOU) executed by NYS HCR and NYSEERDA in December of 2021, the agencies established a collaborative program and streamlined incentive delivery infrastructure. In addition to this game-changing incentive delivery model, this collaboration led to the establishment of NYS HCR’s Sustainability Stretch Standards for project scopes. This will enable more NYS HCR projects to achieve high performance envelope improvements and electrification of space heating and domestic hot water systems using heat pump technology. Similar efforts are underway with NYC HPD. |

6.3.3 Retrofit NY

In 2021, the RetrofitNY Program progressed on the following implementation milestones, as outlined in the 2020 Implementation Plan.

| 2021 Implementation Milestones from 2020 Implementation Plan | 2021 Progress |
|--|---|
| <ul style="list-style-type: none"> • One or more solutions are built and tested through the design-build competition. | <p>In Progress</p> <ul style="list-style-type: none"> • First mid-rise pilot completion expected in March 2022 |
| <ul style="list-style-type: none"> • Solution(s) are adapted to additional building typologies. | <p>In Progress</p> <ul style="list-style-type: none"> • Low rise-pilot pending |

6.3 Budgets, Targets, and Metrics

The savings and budgets reported for 2021 for existing affordable multifamily initiatives are based on programs administered independently by the Program Administrators. Through the CEF, NYSEERDA administered MPP, RetrofitNY, and Real Time Energy Manager (“RTEM”) throughout the state. Con Edison and NYSEG/RG&E each offered financial incentives for approved equipment upgrades by measure for existing affordable multifamily buildings. Given the mid-Q4 launch of AMEEP, other utilities do not have 2021 spend or savings achievement represented in this report, but they did build a pipeline of projects for the 2022 program year.

| Metric | 2021 Achieved | 2021 Target from 2020 Implementation Plan |
|--------|---------------|---|
| | | |

| | | |
|--|--------------|--------------|
| Total Budget Spend | \$26,306,635 | \$22,418,148 |
| MWh Annual | 19,506 | 19,454 |
| MWh Lifetime | 237,572 | 285,374 |
| MMBtu Annual | 281,248 | 632,254 |
| MMBtu Lifetime | 3,794,432 | 11,852,200 |
| CO2e Emission Reduction (metric tons) Annual | 23,907 | 43,344 |
| CO2e Emission Reduction (metric tons) Lifetime | 300,085 | 772,852 |
| Participant Bill Savings Annual | \$2,243,911 | \$3,909,277 |
| Participant Bill Savings Lifetime | \$30,014,742 | \$71,511,646 |
| Participants ⁵⁸ | 9,867 | 2,973 |
| Leveraged Funds | \$33,689,945 | \$29,619,955 |

6.4 Findings & Planned Improvements

In 2021, the Program Administrators expended approximately \$26 million on existing affordable multifamily initiatives, serving roughly 10,000 participants and achieving 19,506 gross annual MWh savings and 281,248 annual MMBtu savings. Funds spent in 2021 are higher than the 2020 Implementation Plan targets, as Program Administrators were able to shift funding between initiatives and from other years in order to accommodate the 2021 demand and pipeline.

On November 3, 2021, the Program Administrators launched AMEEP. While AMEEP is now in market, Program Administrators are coordinating with NYS Clean Heat with the aim of helping accelerate LMI customer participation in the clean energy transition. The Program Administrators are in the process of developing a seamless experience for LMI customers who are electrifying their heat or hot water systems while also completing other energy efficiency upgrades and expect to update AMEEP to include coordination with NYS Clean Heat in 2022.

In 2022, the Program Administrators plan to perform ongoing calibration of AMEEP, where necessary, to improve impact and effectiveness of the program. The Program Administrators are also developing processes for efficient statewide operations of AMEEP, such as document updates, reporting, and stakeholder engagement. Simultaneously, the Program Administrators will seek additional areas to streamline administration of the program.

NYSERDA's affordable housing agency partnerships with NYS HCR and NYC HPD will continue to drive progress in electrification of LMI households. Most notably, in 2022 NYSERDA and NYS HCR will be rolling out a multiyear collaboration that will leverage \$100 million of NYSERDA NYS Clean Heat/CEF (and other RGGI funds) along with \$750 million of NYS HCR funds included in their 5-year capital plan to support electrification in affordable housing. The partnerships with NYC HPD will expand to support affordable new construction electrification.

⁵⁸ Prior to the launch of AMEEP in late 2021, the Program Administrators defined program participants in multifamily initiatives differently (*e.g.*, Con Edison participants are calculated based on total electric and gas accounts, NYSEG/RG&E participants are calculated based on unit area or property owner, and NYSERDA's MPP program calculates participants based on dwelling units served). With the launch of AMEEP, the Program Administrators standardized the definition of program participants as dwelling units served.

7. Affordable New Construction

7.1 Program Summary

Under the CEF, NYSERDA has administered the New Construction-Housing Program and the Buildings of Excellence initiative, which target the development of higher performance affordable new construction. These initiatives continued in 2021, and with the approval of the 2020 Implementation Plan, the Program Administrators began collaboration to align affordable new construction activities, with NYSERDA continuing to administer the statewide affordable new construction programs in 2021 and utilities identifying opportunities to work with local non-profit builders to support the construction of affordable housing and provide other support to new homeowners.

In 2021, 1,183 units of high-performance affordable housing were completed through the New Construction Program, with 4,681 units entering the pipeline. In addition, NYSERDA held the awards ceremony for round 2 of the Buildings of Excellence competition⁵⁹ in March 2021 and awarded 14 projects, 11 of which were predominantly LMI, representing 1,088 units of high-performance affordable housing, which feature all-electric design. NYSERDA also engaged in 104 outreach and education events related to high-performance new construction, including being the Local Host Sponsor for the national 2021 Getting to Zero Forum in New York City.

The New Construction Team also partnered with NYS HCR to implement the Clean Energy Initiative, a groundbreaking pilot to imbed decarbonization incentives directly inside of NYS HCR's programs. This pilot phase of the program was a success in creating a carbon neutral level of performance eligibility and funding the first round of projects.

7.2 Program Implementation Milestones

In 2021, the Program Administrators achieved the following implementation milestones, as outlined in the 2020 Implementation Plan.

⁵⁹ More information on the Buildings of Excellence competition, including details on the award-winning projects can be found here: <https://www.nyserda.ny.gov/All-Programs/Programs/Multifamily-Buildings-of-Excellence/Winners>

| 2020 Milestones from 2020 Implementation Plan | 2021 Progress |
|---|--|
| <ul style="list-style-type: none"> Existing programs will continue | In Progress <ul style="list-style-type: none"> NYSERDA continued the implementation of the New Construction Program and made awards for the second round of the Buildings of Excellence competition, which featured 11 predominantly affordable projects. |
| <ul style="list-style-type: none"> Design of coordinated offerings between NYSERDA and utilities | In Progress <ul style="list-style-type: none"> NYSERDA is planning to develop a coordinated set of affordable new construction offerings between NYSERDA and the Utilities scheduled for 2022. |
| 2021 Milestones from 2020 Implementation Plan | 2021 Progress |
| <ul style="list-style-type: none"> Launch of coordinated program offerings | In Progress <ul style="list-style-type: none"> NYSERDA is planning to develop a coordinated set of affordable new construction offerings between NYSERDA and the Utilities scheduled for 2022. |
| <ul style="list-style-type: none"> Launch of high-performance demonstration and competitions | In Progress <ul style="list-style-type: none"> NYSERDA announced a multiyear, \$100M Memorandum of Understanding with NYS Homes and Community Renewal in 2021, allowing the direct injection of NYSERDA funding to support the new construction and rehabilitation of affordable housing units. |

7.3 Budgets, Targets, and Metrics

Direct Savings⁶⁰

| Metric | 2021 Achieved | 2021 Target from 2020 Implementation Plan |
|--|----------------------|--|
| Total Budget Spend | \$3,812,656 | \$16,049,838 |
| MWh Annual | 1,455 | 16,032 |
| MWh Lifetime | 36,375 | 320,642 |
| MMBtu Annual | 12,616 | 148,904 |
| MMBtu Lifetime | 315,400 | 2,977,929 |
| CO2e Emission Reduction (metric tons) Annual | 1,398 | 15,937 |
| CO2e Emission Reduction (metric tons) Lifetime | 34,961 | 318,731 |
| Participant Bill Savings Annual | \$69,834 | \$1,419,028 |
| Participant Bill Savings Lifetime | \$1,745,846 | \$28,379,105 |
| Participants | 1,183 | 13,560 |

⁶⁰ NYSERDA had both direct and indirect MWh and MMBtu savings for Affordable New Construction in 2021. Indirect savings and their corresponding CO2e emissions reductions have been broken out into a separate table.

| | | |
|-----------------|-------------|--------------|
| Leveraged Funds | \$4,233,502 | \$62,942,110 |
|-----------------|-------------|--------------|

Indirect Savings

| Metric | 2021 Achieved | 2021 Target from 2020 Implementation Plan ⁶¹ |
|---|---------------|---|
| MWh Annual (Indirect) | 2,594 | N/A |
| MWh Lifetime (Indirect) | 64,850 | N/A |
| MMBtu Annual (Indirect) | 15,150 | N/A |
| MMBtu Lifetime (Indirect) | 378,750 | N/A |
| CO2e Emission Reduction (metric tons) Annual (Indirect) | 2,131 | N/A |
| CO2e Emission Reduction (metric tons) Lifetime (Indirect) | 53,277 | N/A |

7.4 Findings & Planned Improvements

The economic uncertainty and supply chain issues for developers resulting from the global pandemic impacted expected affordable new construction across the state, leading to a decrease in the number of buildings and units that NYSEDA expected to reach in 2021; however nearly all other efficiency related targets were met. Towards the end of 2021, the pipeline for affordable new construction began to increase, which is likely to result in an increased uptake in the ratepayer-funded new construction initiatives. In addition to developing a coordinated set of affordable new construction offerings between NYSEDA and the Utilities scheduled for 2022, NYSEDA is working with NYS HCR to deliver clean energy incentives into the capital stack for projects financed through NYS HCR.

8. Pilots and Demonstrations

8.1 Program Summary

To continuously improve the programs and offerings under the Statewide LMI Portfolio, the Program Administrators will incorporate the piloting and demonstration of new technologies and approaches for serving LMI customers and communities. Through pilot activities, the Program administrators will seek to:

- Identify and test technologies and/or approaches for addressing the barriers to improving energy efficiency in the LMI market segment;
- Test approaches that can scale the adoption of energy efficiency solutions in the LMI market segment;
- 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
- Determine innovative approaches for improving awareness and access to energy efficiency solutions for LMI or otherwise disadvantaged communities.

⁶¹ There were no indirect savings targets identified for 2021 in the 2020 Implementation Plan.

The Program Administrators will fund LMI pilots and demonstrations through the CEF, with the expectation that learnings will be communicated and deployed at a larger scale.

Pilot opportunities were not identified in 2021; however, with the design of the Statewide LMI Portfolio underway, the Program Administrators expect to identify and launch pilots to inform the long-term strategy in 2022.

8.2 Program Implementation Milestones

The 2020 Implementation Plan did not include Implementation Milestones for Pilots and Demonstrations. The revised Implementation Plan to be filed in 2022 will include milestones for Pilots and Demonstrations. In 2021, key achievements for the Program Administrators regarding Pilots and Demonstrations included 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.

8.3 Budgets, Targets, and Metrics

The 2020 Implementation Plan outlined the projected achievements for the Pilots and Demonstrations to begin in 2022.

| Metric | 2021 Achieved | 2021 Target from 2020 Implementation Plan |
|--|---------------|---|
| Total Budget Spend | \$0 | \$543,532 |
| MWh Annual | 0 | 0 |
| MWh Lifetime | 0 | 0 |
| MMBtu Annual | 0 | 0 |
| MMBtu Lifetime | 0 | 0 |
| CO2e Emission Reduction (metric tons) Annual | 0 | 0 |
| CO2e Emission Reduction (metric tons) Lifetime | 0 | 0 |
| Participant Bill Savings Annual | \$0 | \$0 |
| Participant Bill Savings Lifetime | \$0 | \$0 |
| Participants | 0 | 0 |
| Leveraged Funds | \$0 | \$0 |

8.4 Findings & Planned Improvements

The priority for the Program Administrators during the timeframe between approval of the 2020 Implementation Plan and the end of 2021 was to develop the standard offer programs and focus on the coordination between the Utilities and NYSERDA. Pilot opportunities were not identified during 2021. However, the Program Administrators expect to develop and launch LMI-focused pilot activities during 2022.

9. Beneficial Electrification in Low- and Moderate-Income Homes

9.1 Program Summary

NYSERDA is investing \$30 million to address the financial and institutional barriers⁶² that pose a challenge for widescale adoption of heat pumps in LMI households or affordable housing, as well as deployment of heat pumps for LMI households. These efforts include: research and analysis towards identifying solutions to address institutional barriers and financial models in the LMI market segment; pilots and demonstrations to identify replicable models for heat pump installation; incentives to allow for the incorporation of heat pumps into LMI energy efficiency projects, where feasible; consumer education to enable LMI consumers to maximize the benefit of a heat pump installation. The Program Administrators expect that these investments will inform the long-term strategy for advancing beneficial electrification for LMI households and affordable housing.

To encourage beneficial electrification in existing affordable multifamily buildings specifically, the Program Administrators initiated coordination discussions between AMEEP and NYS Clean Heat in 2021. See [Section 6.4](#) for more details.

9.2 Program Implementation Milestones

The Program Administrators achieved the following implementation milestones, as outlined in the 2020 Implementation Plan:

⁶² For example, the potential for cost shift from building owners to tenants when an affordable multifamily building converts from a central heating system to in-unit air source heat pumps.

| 2020 Milestones from 2020 Implementation Plan | 2021 Progress |
|---|---|
| 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 <ul style="list-style-type: none"> Completed a market characterization study to understand building characteristics and identify use cases for heat pump technologies by building typology and ownership models |
| Design of short-term incentives | Complete <ul style="list-style-type: none"> Fully committed the budget of LMI Heat Pump Adder Pilot in 2021, with approximately 440 1-4 Family homes and 17 affordable multifamily buildings participating |
| 2021 Milestones from 2020 Implementation Plan | 2021 Progress |
| <ul style="list-style-type: none"> Continued research and analysis | Complete <ul style="list-style-type: none"> See above. |
| <ul style="list-style-type: none"> Launch of short-term incentives to offset costs of heat pump installations in LMI homes or affordable multifamily buildings | In Progress <ul style="list-style-type: none"> See above. |
| <ul style="list-style-type: none"> Launch of pilots and demonstrations | Complete <ul style="list-style-type: none"> See above. |
| <ul style="list-style-type: none"> Assess lessons learned from research, analysis, pilots, and incentive offerings | In Progress <ul style="list-style-type: none"> See above |

Additional 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.

9.3 Budgets, Targets, and Metrics

The LMI Beneficial Electrification expenditures were for research and analysis, which did not have direct savings attributed to the activities. Performance metrics for the LMI beneficial electrification initiatives were not included in the 2020 Implementation Plan. Updates will be made in the revised Implementation Plan to be filed in 2022.

| Metric | 2021 Achieved | 2021 Target from 2020 Implementation Plan |
|--|---------------|---|
| Total Budget Spend | \$3,161,000 | \$20,700,000 |
| MWh Annual | 0 | 0 |
| MWh Lifetime | 0 | 0 |
| MMBtu Annual | 0 | 0 |
| MMBtu Lifetime | 0 | 0 |
| CO2e Emission Reduction (metric tons) Annual | 0 | 0 |
| CO2e Emission Reduction (metric tons) Lifetime | 0 | 0 |
| Participant Bill Savings Annual | \$0 | \$0 |
| Participant Bill Savings Lifetime | \$0 | \$0 |
| Participants | 0 | 0 |
| Leveraged Funds | \$0 | \$0 |

9.4 Findings & Planned Improvements

The initiatives launched in 2020 were completed in 2021 and will inform the development of additional demonstrations and programmatic activity between NYSERDA and the Utilities to increase adoption of heat pump solutions in the LMI market segment.

In 2022, NYSERDA, in particular with NYS HCR, DPS and Department of State will deliver on Governor Hochul’s State of the State commitment to advance an actionable plan and funding proposal to achieve 2 million climate-friendly homes by 2030. This includes at least one million efficient and electrified homes and one million electrification-ready homes by 2030, with at least 800,000 of the two million serving LMI households.

10. Additional LMI Initiatives

10.1 Program Summary

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”). The New York State Healthy Homes Pilot and Solar for All were initially filed as part of the LMI Chapter of the CEF, but were transitioned to the LMI Implementation Plan in 2020.

10.1.2 New York State Healthy Homes Value-Based Payment Pilot

Approved in 2019, the NYS Healthy Homes Value-Based Payment (“VBP”) Pilot seeks to develop a framework that allows New York’s managed care organizations (“MCOs”) to fund residential healthy homes interventions⁶³ as part of their value-based payment arrangements with healthcare providers

⁶³ 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 asthma (e.g., ventilation, moisture/mold mitigation, carpet removal), and includes additional measures aimed at home injury prevention (smoke and carbon monoxide alarms, stair repair, electrical outlet covers). When implemented together,

within the Medicaid Healthcare Delivery System.⁶⁴ By validating impacts such as healthcare cost savings and benefits to residents, as well as 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.

The Pilot is a partnership between NYSERDA and the NYS Department of Health (“DOH”). It has a budget of \$9.6 million and will provide healthy homes interventions in 500 Medicaid member homes, with NYSERDA and DOH jointly evaluating the associated Medicaid cost savings and benefits for residents.

To date, NYSERDA and DOH have partnered with four MCOs covering service areas within all New York City boroughs and Erie, Chautauqua, and Niagara counties to implement the Pilot. NYSERDA and DOH targeted Pilot launch for late 2020, however due to complications of the COVID-19 pandemic, field launch was delayed until late 2021, with projects anticipated for completion in early 2022.

10.1.3 Solar for All

The Solar for All initiative, also administered by NYSERDA, was designed to allow low-income customers access to the community solar market by: (1) developing a community solar subscription model specifically for low-income customers; (2) issuing solicitations for community solar projects to commit project capacity to subscriptions for low-income customers; and (3) working with low-income energy efficiency programs, utilities, community agencies, solar project developers, investors and other market actors to market the program to low-income customers and develop a strategy for a post-initiative transition.

The Solar for All initiative was launched under the CEF Market Development Portfolio in 2018 and community solar project procurement was funded under the CEF Market Development Portfolio through 2020. A single solicitation round was conducted in 2018, which resulted in 9 MWdc of community solar

these interventions can improve occupant health, reduce energy bills and healthcare costs, and improve the comfort and safety of a home. The Pilot intervention includes home skilled nursing visits providing in-home education related to asthma self-management and medication adherence and community health worker support throughout.

⁶⁴ New York State Medicaid has transitioned the managed care healthcare delivery system from a fee-for-service to a VBP model that links healthcare provider performance and reimbursement through a pre-determined set of value metrics. Under the VBP model, managed care organizations (“MCO”) (*i.e.*, healthcare plans such as Empire Blue Cross Blue Shield) can 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 community-based organization (“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 VBP model.

projects being procured for this purpose. No additional solicitation rounds under this model are anticipated. A Solar for All subscription was added as an eligible measure on the EmPower NY application in 2020, to help streamline access to energy efficiency and solar benefits for low-income households. Approximately 4,000 low-income customers are currently enrolled in Solar for All. In January 2022, the Public Service Commission approved with modifications an Expanded Solar for All proposal, filed jointly by National Grid and NYSERDA, that will launch in 2022 and ultimately serve over 160,000 low-income National Grid electric customers. New York's 10 GW Distributed Solar Roadmap, filed by NYSERDA in December 2021, articulates the go-forward strategies to grow this market. It includes a Solar Energy Equity Framework to benefit low-income customers.⁶⁵

10.2 Program Implementation Milestones

The 2020 Implementation Plan did not include Implementation Milestones for Additional LMI Initiatives. The revised Implementation Plan to be filed in 2022 will include milestones for Additional LMI Initiatives. In 2021, key achievements for the Program Administrators in 2021 include:

Healthy Homes Pilot

- Finalized specification list of healthy homes interventions to address asthma and household injury;
- Assigned pilot participation status to qualified energy/housing service providers, following the release of an RFQL;
- Onboarded energy services Implementation Contractor and health implementation;
- Commencement of pilot implementation; and
- Secured all submissions of social determinants of health template for VBP Arrangement integration (rolling).

⁶⁵ 10 GW Solar Roadmap. <https://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId=%7B4C42AAFF-0EB9-4890-AA0D-21C70B088F4B%7D>

10.3 Budgets, Targets, and Metrics

Healthy Homes Pilot

| Metric | 2021 Achieved | 2021 Target from 2020 Implementation Plan |
|--|---------------|---|
| Total Budget Spend | \$285,393 | \$5,686,011 |
| MWh Annual | 0 | 240 |
| MWh Lifetime | 0 | 3,600 |
| MMBtu Annual | 0 | 8,000 |
| MMBtu Lifetime | 0 | 120,000 |
| CO2e Emission Reduction (metric tons) Annual | 0 | 545 |
| CO2e Emission Reduction (metric tons) Lifetime | 3 | 8,180 |
| Participant Bill Savings Annual | \$0 | \$76,438 |
| Participant Bill Savings Lifetime | \$0 | \$1,146,569 |
| Participants | 0 | 400 |
| Leveraged Funds | \$0 | \$0 |

Solar for All⁶⁶

| Metric | 2021 Achieved | 2021 Target from 2020 Implementation Plan |
|--|---------------|---|
| Total Budget Spend | \$894,884 | \$4,181,604 |
| MWh Annual | 0 | 0 |
| MWh Lifetime | 0 | 0 |
| MMBtu Annual | 0 | 0 |
| MMBtu Lifetime | 0 | 0 |
| CO2e Emission Reduction (metric tons) Annual | 0 | 0 |
| CO2e Emission Reduction (metric tons) Lifetime | 0 | 0 |
| Participant Bill Savings Annual | \$0 | \$0 |
| Participant Bill Savings Lifetime | \$0 | \$0 |
| Participants | 0 | 3,359 |
| Leveraged Funds | \$0 | \$0 |

10.4 Findings & Planned Improvements

Going forward, the Solar for All initiative and other initiatives to increase access to solar for LMI households, affordable housing, and disadvantaged communities will be funded as part of the Solar Equity Framework of NY Sun, as outlined in the NY Sun 2020-2025 Operating Plan,⁶⁷ filed with the DPS on June 1, 2020.

⁶⁶ Metrics associated with Solar for All are included and reported as part of NY-Sun. Solar for All reported a lower number of participants in the Q4 2020 Scorecard. This discrepancy will be addressed in the Q1 2021 Scorecard.

⁶⁷ <http://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId=%7B4F3CB5E3-BA5A-4182-AA44-94C3C24C2441%7D>.

11. Customer Awareness, Outreach & Engagement

The 2020 Implementation Plan outlined several initiatives intended to increase awareness and access to energy efficiency and energy affordability programs, and to increase energy literacy for LMI residents and communities. In 2021, the Program Administrators continued the development of the NY Energy Advisor website and commenced planning for statewide branding and marketing. Progress and key milestones for each of the Customer Awareness, Outreach, and Engagement initiatives are provided below.

11.1 Statewide Branding and Marketing

The Program Administrators continued to develop statewide branding and a coordinated marketing strategy for the Statewide LMI Portfolio to drive LMI customers and affordable building owners to available programs and resources. This work is ongoing and is expected to accelerate as initiatives are developed.

11.2 NY Energy Advisor

In 2021, the Program Administrators launched the full NY Energy Advisor website (replacing the interim website), 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 completed 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. In addition, collateral materials will be developed and made available for community and utility advocates. The announcement of the full site launch was made during the Stakeholder Engagement Session held in November 2021.

11.3 Community-Based Outreach and Engagement

In the 2020 Implementation Plan, the Program Administrators outlined the plan for building on the Community Energy Engagement Program (“CEEP”) to expand the outreach to and engagement of LMI communities. The CEEP remains active and will end June 30, 2022. In 2020 and 2021, NYSERDA undertook a co-design process with 30 organizations to identify opportunities to improve the reach and effectiveness of the CEEP. In 2021, NYSERDA issued an RFP to establish Regional Clean Energy 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 and participating in the clean energy economy. Contract awards are expected by summer 2022. The Regional Clean Energy Hubs will play an instrumental role by positioning disadvantaged communities to benefit from the clean energy transition by:

- Acting as a trusted local resource for community members to learn more about the energy-related programs and services available to them.
- Increasing 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.
- Developing outreach and engagement strategies to elevate the needs of communities and residents into program and policy development.

- Addressing 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.

Key community-based partners will play an important role with the Regional Clean Energy Hubs.

11.4 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 was 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. NYSERDA completed an evaluation on the pilot in 2021 to determine the effectiveness of a neighborhood-based delivery model in targeting 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.

11.5 Community-Based Customer Engagement Initiatives

In 2021, Con Edison conducted several initiatives to directly engage with LMI customers. These efforts focused on increasing education and awareness about energy efficiency, as well as providing energy efficient equipment for use in the home. Con Edison distributed 3,762 kits to customers participating in Con Edison's Low Income Discount Program, which provides bill assistance. This program was re-launched in late September 2021 as an opt-in only program, where eligible customers were able to claim a kit online. Kits contained LED lightbulbs, two faucet aerators, and a low-flow showerhead. Con Edison also collaborated with food pantries to distribute 62,496 packs of four LEDs to low-income customers.

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 report. 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 and ensure there was no redundancy. Due to timing, the first spend and savings will be reported in 2022.

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.

11.6 Program Implementation Milestones

Note that the milestones discussed below were not provided within milestones tables in the 2020 Implementation Plan. Rather, information is drawn from descriptions of Key Milestones in the 2020 IP.

| 2020 and 2021 “Key Milestones” from 2020 IP | 2021 Progress |
|--|---|
| <p>Statewide Brand:</p> <ul style="list-style-type: none"> • The Program Administrators expect to complete development by the first quarter of 2021. | <p>In Progress</p> <ul style="list-style-type: none"> • The Program Administrators have evolved their approach regarding a statewide brand to instead focus on Statewide Branding, including the development in 2021 and launch in 2022 of a statewide NY Energy Advisor marketing campaign. • A key focus of Statewide Branding is to effectively complement individual Utility and more localized marketing efforts. <p>Complete</p> <ul style="list-style-type: none"> • Program documentation in AMEEP is co-branded with all Program Administrator logos. |
| <p>NY Energy Advisor:</p> <ul style="list-style-type: none"> • During Q3 of 2020, the 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. | <p>Complete</p> <ul style="list-style-type: none"> • The initial NY Energy Advisor website launched in Q3 2021. • The full NY Energy Advisor website launched in Q4 2021. |
| <p>Hard Copy Customer Education Collateral and Multilingual Communications:</p> <ul style="list-style-type: none"> • Hard copy customer collateral will be developed in parallel with the online NY Energy Advisor, in order to ensure consistent messaging and calls to action and to streamline development costs. | <p>In Progress</p> <ul style="list-style-type: none"> • Started in Q4 2021, the development of hard copy customer collateral will continue into 2022. |
| <p>Expansion of Existing LMI Community Partnerships:</p> <ul style="list-style-type: none"> • 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 | <p>In Progress</p> <ul style="list-style-type: none"> • Completed a co-design process with 30 organizations to develop the Regional Clean Energy Hubs initiative, a holistic, multi-disciplinary approach to ensure equitable access to benefits of New York’s clean energy transition |

| | |
|--|--|
| <p>from the current CEEP Program.</p> <ul style="list-style-type: none"> • 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 engagement initiative. | <ul style="list-style-type: none"> • In 2021, NYSERDA released the Regional Clean Energy Hubs RFP to contract with partner organizations in each of the ten economic development regions of the state to provide holistic, multi-disciplinary outreach services to ensure equitable access to the benefits of New York’s clean energy transition. |
| <p>Neighborhood-Based Delivery Model:</p> <ul style="list-style-type: none"> • 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 rolling out would be Q3 2021. | <p>In Progress</p> <ul style="list-style-type: none"> • The evaluation of the 2019 National Grid and NYSERDA Watertown Energy Fair was completed in 2021 and the results will be analyzed in 2022 to determine potential value in replicating a similar event. • Due to the pandemic, the implementation of in-person events was paused and has resumed in hybrid formats, in accordance with state and local guidance. |
| <p>Community-Based Customer Engagement Initiatives:</p> <ul style="list-style-type: none"> • During Q4 2020, sponsoring utilities will finalize measure selections, customer opt-in process, measure distribution process, and energy education material, and initiate outreach to local partners, based on the types of program(s) they are running, to recruit participation in distribution of measures or in promoting the programs to their constituencies. Delivery of these initiatives will commence in 2021 based on schedules coordinated with each partner. | <p>Complete</p> <ul style="list-style-type: none"> • Con Edison delivered community-based engagement initiatives in 2020-2021, including kits and the food banks program. Home Energy Reports were also distributed in 2020. In 2021, Con Edison re-launched the kit program as an opt-in program. • In 2021, NYSEG RG&E and National Grid launched a Foodbank LED program to increase awareness of programs and services available to its customers and to encourage customers to utilize them. <p>In Progress</p> <ul style="list-style-type: none"> • Orange & Rockland offered an LED kit for food banks in 2020 and 2021. The kit packaging included a link to Orange & Rockland’s Empower webpage to increase awareness and facilitate participation. • During 2021, due to the ongoing pandemic, Central Hudson decided to continue the pause face-to-face community-based engagement. Central Hudson plans to continue their Community Lighting Program and will distribute LEDs through Food Banks and the United Way starting again in 2022. |

| | |
|---|---|
| <p>Community Based Marketing and Paid Advertising:</p> <ul style="list-style-type: none"> • Specific media and paid advertising approaches will be developed and coordinated with the statewide campaign and as initiatives are added/changed in the Portfolio. | <p>In Progress</p> <ul style="list-style-type: none"> • Initiated in Q4 of 2021 when the joint NYSERDA and Utility agreements were executed; NYSERDA will go to market with paid advertisement beginning in Q2 2022. |
|---|---|

11.6 Budgets, Targets, and Metrics

| Metric | 2021 Achieved | 2021 Target from 2020 Implementation Plan |
|--|---------------|---|
| Total Budget Spend | \$1,753,828 | \$9,908,129 |
| MWh Annual | 18,075 | 7,716 |
| MWh Lifetime | 168,617 | 94,466 |
| MMBtu Annual | 529 | 25,642 |
| MMBtu Lifetime | 5,287 | 255,862 |
| CO2e Emission Reduction (metric tons) Annual | 9,071 | 5,224 |
| CO2e Emission Reduction (metric tons) Lifetime | 84,642 | 61,082 |
| Participant Bill Savings Annual | \$9,106 | \$208,132 |
| Participant Bill Savings Lifetime | \$87,688 | \$2,080,283 |
| Participants | 66,681 | 82,721 |
| Leveraged Funds | \$0 | \$0 |

11.7 Findings & Planned Improvements

Central Hudson and Orange and Rockland plan to offer similar community-based customer initiatives in the future, starting in 2022.

National Grid found its first distribution of LED lightbulbs and program brochures in the Buffalo area was successful and is exploring expanding to the Albany and Syracuse areas.

12. Appendix A: Budgets and Targets by Program Administrator

Central Hudson

| Electric Budget | | |
|--|------------|---|
| | 2021 Spend | 2021 Target from 2020 Implementation Plan |
| Existing 1-4 Family Homes | | |
| Incentives & Services | \$0 | \$74,001 |
| Program Implementation | \$0 | \$5,000 |
| Total Budget | \$0 | \$79,001 |
| Existing Affordable Multifamily Buildings | | |
| Incentives & Services | \$0 | |
| Program Implementation | \$0 | |
| Total Budget | \$0 | |
| Affordable New Construction | | |
| Incentives & Services | \$0 | \$602 |
| Program Implementation | \$0 | |
| Total Budget | \$0 | \$602 |
| Customer Awareness, Outreach & Engagement | | |
| Incentives & Services | \$0 | \$13,259 |
| Program Implementation | \$0 | \$476 |
| Total Budget | \$0 | \$13,735 |
| Portfolio Administration | \$0 | \$8,097 |
| Portfolio EM&V | \$0 | \$3,137 |
| Total Portfolio Budget | \$0 | \$104,572 |

| Electric Target Distribution (MWh) | | | |
|---|----------------------------------|---|---|
| | 2021 Gross Savings ⁶⁸ | 2021 Verified Gross Savings (Evaluated Programs Only) ⁶⁹ | 2021 Target from 2020 Implementation Plan |
| Existing 1-4 Family Homes | - | - | 152 |
| Existing Affordable Multifamily Buildings | - | - | |
| Affordable New Construction | - | - | 1 |
| Customer Awareness, Outreach & Engagement | - | - | 27 |
| Total | - | - | 180 |

⁶⁸ The “2021 Gross Savings” column reflects savings achieved by Program Administrators in 2021 with no realization rates applied.

⁶⁹ The “2021 Verified Gross Savings (Evaluated Programs Only)” column reflected savings achieved from programs with VGS evaluations completed and resulting realization rates applied.

| Gas Budget | | |
|--|-------------------|--|
| | 2021 Spend | 2021 Target From 2020 Implementation Plan |
| Existing 1-4 Family Homes | | |
| Incentives & Services | \$0 | \$139,890 |
| Program Implementation | \$0 | \$8,650 |
| Total Budget | \$0 | \$148,540 |
| Existing Affordable Multifamily Buildings | | |
| Incentives & Services | \$0 | |
| Program Implementation | \$0 | |
| Total Budget | \$0 | |
| Affordable New Construction | | |
| Incentives & Services | \$0 | \$14,529 |
| Program Implementation | \$0 | |
| Total Budget | \$0 | \$14,529 |
| Customer Awareness, Outreach & Engagement | | |
| Incentives & Services | \$0 | \$19,936 |
| Program Implementation | \$0 | \$824 |
| Total Budget | \$0 | \$20,760 |
| Portfolio Administration | \$0 | \$8,097 |
| Portfolio EM&V | \$0 | \$5,936 |
| Total Portfolio Budget | \$0 | \$197,862 |

| Gas Target Distribution (MMBtu) | | | |
|---|---------------------------|--|--|
| | 2021 Gross Savings | 2021 Verified Gross Savings (Evaluated Programs Only) | 2021 Target from 2020 Implementation Plan |
| Existing 1-4 Family Homes | - | - | 1,469 |
| Existing Affordable Multifamily Buildings | - | - | |
| Affordable New Construction | - | - | 146 |
| Customer Awareness, Outreach & Engagement | - | - | 209 |
| Total | - | - | 1,824 |

| Significant Budget and Target Variance Explanation |
|--|
| <p>Although the Statewide LMI initiatives were launched in 2021, no program spend or savings are reflected for Central Hudson due to the timing of incurring these program costs and reporting timelines.</p> <p>Existing 1-4 Family Homes: As outlined earlier in this report, the agreements to establish the relationship between NYSERDA and the Utilities for the 1-4 Family Homes portfolio and marketing required substantial effort by all parties. The extended timing was necessary to ensure all considerations had been addressed and were thoroughly reviewed. The agreement between NYSERDA and Central Hudson wasn't completed until late 2021. Therefore, the spend and savings</p> |

associated with 2021 program activity after the agreement was fully signed will be reflected in 2022 budget spend and target achievement.

Customer Awareness, Outreach & Engagement:

Central Hudson decided to continue the pause face-to-face community-based engagement. Central Hudson plans to continue their Community Lighting Program and will distribute LEDs through Food Banks and the United Way starting again in 2022

Consolidated Edison

| Electric Budget | | |
|--|--------------------|---|
| | 2021 Spend | 2021 Target from 2020 Implementation Plan |
| Existing 1-4 Family Homes | | |
| Incentives & Services | \$0 | \$168,000 |
| Program Implementation | \$0 | \$32,000 |
| Total Budget | \$0 | \$200,000 |
| Existing Affordable Multifamily Buildings | | |
| Incentives & Services | \$3,625,955 | \$3,909,084 |
| Program Implementation | \$536,066 | \$744,588 |
| Total Budget | \$4,162,021 | \$4,653,672 |
| Affordable New Construction | | |
| Incentives & Services | \$0 | |
| Program Implementation | \$0 | |
| Total Budget | \$0 | |
| Customer Awareness, Outreach & Engagement | | |
| Incentives & Services | \$329,780 | \$372,541 |
| Program Implementation | \$167,342 | \$32,395 |
| Total Budget | \$497,122 | \$404,936 |
| Portfolio Administration | \$366,653 | \$387,235 |
| Portfolio EM&V | \$186,645 | \$217,820 |
| Total Portfolio Budget | \$5,212,441 | \$5,863,662 |

| Electric Target Distribution (MWh) | 2021 Gross Savings | 2021 Verified Gross Savings (Evaluated Programs Only) | 2021 Target from 2020 Implementation Plan |
|---|--------------------|---|---|
| Existing 1-4 Family Homes | - | - | 500 |
| Existing Affordable Multifamily Buildings | 8,791 | 3,902 ⁷⁰ | 6,500 |
| Affordable New Construction | - | - | - |

⁷⁰ 96.5% of gross savings have been evaluated, and a weighted realization rate of 46% was applied to those gross savings. The remaining 3.5% of gross savings from unevaluated programs were not included here.

| | | | |
|---|---------------|---------------------|---------------|
| Customer Awareness, Outreach & Engagement | 16,017 | 9,161 ⁷¹ | 3,171 |
| Total | 24,808 | 13,063 | 10,171 |

| Gas Budget | | |
|--|---------------------|---|
| | 2021 Spend | 2021 Target from 2020 Implementation Plan |
| Existing 1-4 Family Homes | | |
| Incentives & Services | \$0 | \$511,000 |
| Program Implementation | \$0 | \$189,000 |
| Total Budget | \$0 | \$700,000 |
| Existing Affordable Multifamily Buildings | | |
| Incentives & Services | \$13,210,601 | \$8,487,074 |
| Program Implementation | \$2,417,717 | \$3,139,055 |
| Total Budget | \$15,628,318 | \$11,626,129 |
| Affordable New Construction | | |
| Incentives & Services | \$0 | |
| Program Implementation | \$0 | |
| Total Budget | \$0 | |
| Customer Awareness, Outreach & Engagement | | |
| Incentives & Services | \$9,958 | \$413,905 |
| Program Implementation | \$6,503 | \$26,419 |
| Total Budget | \$16,461 | \$440,325 |
| Portfolio Administration | \$661,123 | \$366,170 |
| Portfolio EM&V | \$569,485 | \$549,254 |
| Total Portfolio Budget | \$16,875,387 | \$13,681,878 |

| Gas Target Distribution (MMBtu) | | | |
|---|--------------------|---|---|
| | 2021 Gross Savings | 2021 Verified Gross Savings (Evaluated Programs Only) | 2021 Target from 2020 Implementation Plan |
| Existing 1-4 Family Homes | - | - | 10,000 |
| Existing Affordable Multifamily Buildings | 226,272 | 202,174 ⁷² | 109,000 |
| Affordable New Construction | - | - | - |
| Customer Awareness, Outreach & Engagement | 529 | - ⁷³ | 7,661 |
| Total | 226,800 | 202,174 | 126,661 |

⁷¹ 98.6% of gross savings have been evaluated, and a weighted realization rate of 58% was applied to those gross savings. The remaining 1.4% of gross savings from unevaluated programs were not included here.

⁷² 100% of gross savings have been evaluated, and a weighted realization rate of 89% was applied to those gross savings.

⁷³ Savings in this category have yet to be evaluated.

Significant Budget and Target Variance Explanation

At a portfolio level, Con Edison's electric and gas budgets did not vary significantly from the original spend projected in the 2020 filing of the Implementation Plan, while estimated electric and gas savings both overachieved compared to Implementation Plan targets. There was an 11% underspend in electric with a projected overachievement on savings. There was a 23% overspend on gas, but there is also a projected proportional, significant overachievement in gas savings.

There was a large demand for gas incentives in the Existing Affordable Multifamily Buildings program in 2021. This led to a large disbursement of gas incentives, and overachievement of multifamily gas program savings. The electric multifamily program saw less demand than anticipated, which led to an underspend and fewer electric multifamily savings than originally projected.

The Customer Awareness, Outreach & Engagement category, which includes the food banks and kits programs, overachieved significantly in electric savings due to the success of the food banks program, which also led to higher spend than projected. Gas savings and spend for this category, which were dependent on the kits program, were lower than projected due to the re-launch of the program as opt-in in late 2021.

Additional costs were driven by Con Edison performing robust multifamily marketing and conducting research to help identify large project and partnership opportunities for the LMI multifamily program going forward. These costs were allocated between electric and gas proportionally to overall portfolio budgets and targets.

Savings and spend in the 1-4 Family Homes category is driven by additional funds being provided to EmPower by Con Edison. In 2021, Con Edison and NYSERDA were developing and finalizing an agreement that enabled coordination for this program. While EmPower operated in the Con Edison service territory in 2021, Con Edison will begin providing supplemental funding and claim associated savings beginning in 2022.

KEDLI

| Gas Budget | | |
|--|--------------------|---|
| | 2021 Spend | 2021 Target from 2020 Implementation Plan |
| Existing 1-4 Family Homes | | |
| Incentives & Services | \$1,044,955 | \$1,900,000 |
| Program Implementation | \$325,581 | \$300,000 |
| Total Budget | \$1,370,536 | \$2,200,000 |
| Existing Affordable Multifamily Buildings | | |
| Incentives & Services | \$0 | \$640,426 |
| Program Implementation | \$0 | \$101,120 |
| Total Budget | \$0 | \$741,546 |
| Affordable New Construction | | |
| Incentives & Services | \$0 | |
| Program Implementation | \$0 | |
| Total Budget | \$0 | |
| Customer Awareness, Outreach & Engagement | | |
| Incentives & Services | \$0 | \$59,299 |
| Program Implementation | \$0 | \$9,363 |
| Total Budget | \$0 | \$68,662 |
| Portfolio Administration | \$71,625 | \$273,655 |
| Portfolio EM&V | \$0 | \$136,828 |
| Total Portfolio Budget | \$1,442,161 | \$3,420,690 |

| Gas Target Distribution (MMBtu) | | | |
|---|--------------------|---|---|
| | 2021 Gross Savings | 2021 Verified Gross Savings (Evaluated Programs Only) | 2021 Target from 2020 Implementation Plan |
| Existing 1-4 Family Homes | 12,327 | - | 23,958 |
| Existing Affordable Multifamily Buildings | - | - | 6,762 |
| Affordable New Construction | - | - | - |
| Customer Awareness, Outreach & Engagement | - | - | 950 |
| Total | 12,327 | - | 31,670 |

| Significant Budget and Target Variance Explanation |
|--|
| <p>In the KEDLI service territory, the KEDLI HEAT program achieved higher savings than previous program years, despite installation work being paused at times due to implementation contractor staff and customer quarantines and restrictions. To boost participation and savings from the KEDLI HEAT program for 2022, moderate income customers will be served with incentives on a sliding scale, dependent upon income.</p> <p>In the Existing Affordable Multifamily portfolio, the new statewide program, AMEEP, did not launch until mid-Q4 of 2021. This timing did not allow for projects to install measures, post-inspect, or pay incentives prior to year-</p> |

end. A pipeline was established, however, for 2022 and additional marketing efforts will be taken to increase participation in AMEEP.

Spend and savings were not realized in the 2021 program year from the Customer Awareness, Outreach, & Engagement category due to the inability to hold in-person events because of the pandemic. Other no-contact methods of customer outreach will be employed in 2022 to boost awareness of and participation in LMI energy efficiency initiatives.

KEDNY

| Gas Budget | | |
|--|------------|---|
| | 2021 Spend | 2021 Target from 2020 Implementation Plan |
| Existing 1-4 Family Homes | | |
| Incentives & Services | \$0 | \$185,887 |
| Program Implementation | \$0 | \$34,854 |
| Total Budget | \$0 | \$220,741 |
| Existing Affordable Multifamily Buildings | | |
| Incentives & Services | \$0 | \$904,649 |
| Program Implementation | \$0 | \$169,622 |
| Total Budget | \$0 | \$1,074,271 |
| Affordable New Construction | | |
| Incentives & Services | \$0 | |
| Program Implementation | \$0 | |
| Total Budget | \$0 | |
| Customer Awareness, Outreach & Engagement | | |
| Incentives & Services | \$0 | |
| Program Implementation | \$0 | |
| Total Budget | \$0 | |
| Portfolio Administration | \$0 | \$185,887 |
| Portfolio EM&V | \$0 | \$68,158 |
| Total Portfolio Budget | \$0 | \$1,549,056 |

| Gas Target Distribution (MMBtu) | | | |
|---|--------------------|---|---|
| | 2021 Gross Savings | 2021 Verified Gross Savings (Evaluated Programs Only) | 2021 Target from 2020 Implementation Plan |
| Existing 1-4 Family Homes | - | - | 23,958 |
| Existing Affordable Multifamily Buildings | - | - | 6,762 |
| Affordable New Construction | - | - | |
| Customer Awareness, Outreach & Engagement | - | - | 950 |
| Total | - | - | 31,670 |

| Significant Budget and Target Variance Explanation |
|---|
| <p>In the KEDNY territory, LMI programs began entering the market in 2021, however no program spend or savings are reflected due to the timing when these program costs were incurred. As outlined earlier in this report, the agreements to establish the relationship between NYSEDA and the Utilities for the 1-4 Family Homes portfolio and marketing required substantial effort to ensure all considerations had been made and took time to complete. Therefore, the spend and savings associated with 2021 program activity after the agreements were signed will be reflected in 2022 spend and savings.</p> <p>In the Existing Affordable Multifamily portfolio, the One Pipe Steam initiative ran during 2021, but projects will not be completed and paid until early 2022. Therefore, the spend and savings for those programs will be reflected in the 2022 performance of the Existing Affordable Multifamily portfolio. The new statewide program,</p> |

AMEEP, did not launch until mid-Q4 of 2021. This timing did not allow for projects to install measures, post-inspect, or pay incentives prior to year-end, however, a strong pipeline was established for 2022. To boost awareness of and participation in AMEEP, additional marketing efforts will be taken in 2022.

Spend and savings were not realized in the 2021 program year from the Customer Awareness, Outreach, & Engagement category due to the inability to hold in-person events because of the pandemic. Other no-contact methods of customer outreach will be employed in 2022 to boost awareness of and participation in LMI energy efficiency initiatives.

National Fuel Gas Distribution Corporation

| Gas Budget | | |
|--|--------------------|---|
| | 2021 Spend | 2021 Target from 2020 Implementation Plan |
| Existing 1-4 Family Homes | | |
| Incentives & Services | \$3,568,004 | \$4,624,585 |
| Program Implementation | \$502,827 | \$450,000 |
| Total Budget | \$4,070,831 | \$5,074,585 |
| Existing Affordable Multifamily Buildings | | |
| Incentives & Services | \$0 | |
| Program Implementation | \$0 | |
| Total Budget | \$0 | |
| Affordable New Construction | | |
| Incentives & Services | \$0 | |
| Program Implementation | \$0 | |
| Total Budget | \$0 | |
| Customer Awareness, Outreach & Engagement | | |
| Incentives & Services | \$315,500 | \$0 |
| Program Implementation | \$0 | \$0 |
| Total Budget | \$315,500 | \$0 |
| Portfolio Administration | \$368,180 | \$321,591 |
| Portfolio EM&V | \$0 | |
| Total Portfolio Budget | \$4,754,511 | \$5,396,176 |

| Gas Target Distribution (MMBtu) | | | |
|---|--------------------|---|---|
| | 2021 Gross Savings | 2021 Verified Gross Savings (Evaluated Programs Only) | 2021 Target from 2020 Implementation Plan |
| Existing 1-4 Family Homes | 22,093 | - | 56,589 |
| Existing Affordable Multifamily Buildings | - | - | |
| Affordable New Construction | - | - | |
| Customer Awareness, Outreach & Engagement | - | - | |
| Total | 22,093 | - | 56,589 |

| Significant Budget and Target Variance Explanation |
|---|
| In 2021, most of National Fuel Gas Distribution Corporation's (NFGDC) LMI budget was invested in EmPower. Program unit costs of EmPower have been higher than ordered unit costs resulting in a savings shortfall. 2021 was a development year for the Affordable Multifamily Energy Efficiency Program (AMEEP) and in 2022, NFGDC will also begin contributing to AMEEP. |

New York State Energy Research & Development Authority

| CEF Budget Distribution | | |
|--|---------------------|---|
| | 2021 Spend | 2021 Target from 2020 Implementation Plan |
| Existing 1-4 Family Homes | | |
| Incentives & Services | \$59,449,006 | \$22,630,653 |
| Program Implementation | \$7,355,917 | \$5,490,589 |
| Research and Technology Studies | \$0 | |
| Tools, Training, and Replication | \$8,333 | |
| Business Support | \$0 | |
| Total Budget | \$66,813,256 | \$28,121,242 |
| Existing Affordable Multifamily Buildings | | |
| Incentives & Services | \$3,709,002 | \$2,600,224 |
| Program Implementation | \$2,002,893 | \$511,557 |
| Research and Technology Studies | \$0 | |
| Tools, Training, and Replication | \$491,633 | |
| Total Budget | \$6,203,528 | \$3,111,781 |
| Affordable New Construction | | |
| Incentives & Services | \$3,001,574 | \$12,456,477 |
| Program Implementation | \$421,695 | \$3,114,119 |
| Tools, Training, and Replication | \$389,387 | |
| Total Budget | \$3,812,656 | \$15,570,596 |
| Customer Awareness, Outreach & Engagement | | |
| Incentives & Services | \$470,981 | \$8,132,438 |
| Program Implementation | \$275,784 | \$0 |
| Tools, Training, and Replication | \$54,964 | |
| Total Budget | \$801,729 | \$8,132,438 |
| Pilots and Demonstrations | | |
| Tools, Training, and Replication | \$0 | \$543,532 |
| Total Budget | \$0 | \$543,532 |
| LMI Solar | | |
| Incentives & Services | \$821,250 | \$4,181,604 |
| Program Implementation | \$73,634 | \$0 |
| Total Budget | \$894,884 | \$4,181,604 |
| Electrification | | |
| Incentives & Services | \$2,353,000 | \$18,700,000 |
| Program Implementation | \$798,000 | \$2,000,000 |
| Tools, Training, and Replication | \$10,000 | |
| Total Budget | \$3,161,000 | \$20,700,000 |
| Healthy Homes Pilot | | |
| Incentives & Services | \$4,074 | \$5,000,000 |
| Program Implementation | \$81,319 | \$686,011 |
| Research and Technology Studies | \$200,000 | |
| Total Budget | \$285,393 | \$5,686,011 |
| Total Portfolio Budget | \$81,972,446 | \$86,047,204 |

| Electric Target Distribution (MWh) - Direct | | | |
|--|---------------------------|--|--|
| | 2021 Gross Savings | 2021 Verified Gross Savings (Evaluated Programs Only) | 2021 Target from 2020 Implementation Plan |
| Existing 1-4 Family Homes | 7,031 | - | 4,589 |
| Existing Affordable Multifamily Buildings | 10,624 | - | 10,571 |
| Affordable New Construction | 1,455 | - | 15,699 |
| Customer Awareness, Outreach & Engagement * | - | - | |
| Pilots and Demonstrations * | - | - | |
| Healthy Homes VBP | - | - | 240 |
| Total | 19,110 | - | 31,099 |

*As noted in the 2020 Implementation Plan, acquired savings are projected to start in 2022

| Electric Target Distribution (MWh) - Indirect | | | |
|--|---------------------------|--|--|
| | 2021 Gross Savings | 2021 Verified Gross Savings (Evaluated Programs Only) | 2021 Target from 2020 Implementation Plan |
| Affordable New Construction | 2,594 | - | |
| Healthy Homes VBP | - | - | |
| Total | 2,594 | - | |

| Gas Target Distribution (MMBtu) - Direct | | | |
|---|---------------------------|--|--|
| | 2021 Gross Savings | 2021 Verified Gross Savings (Evaluated Programs Only) | 2021 Target from 2020 Implementation Plan |
| Existing 1-4 Family Homes | 210,230 | - | 136,572 |
| Existing Affordable Multifamily Buildings | 52,440 | - | 489,676 |
| Affordable New Construction | 12,616 | - | 147,059 |
| Customer Awareness, Outreach & Engagement* | - | - | |
| Pilots and Demonstrations* | - | - | |
| Healthy Homes VBP | - | - | 8,000 |
| Total | 275,286 | - | 781,307 |

*As noted in the 2020 Implementation Plan, acquired savings are projected to start in 2022

| Gas Target Distribution (MMBtu) - Indirect | | | |
|---|---------------------------|--|--|
| | 2021 Gross Savings | 2021 Verified Gross Savings (Evaluated Programs Only) | 2021 Target from 2020 Implementation Plan |
| Affordable New Construction | 14,392 | - | |
| Healthy Homes VBP | - | - | |
| Total | 14,392 | - | |

| Other Fuels Target Distribution (MMBtu) - Direct | | | |
|---|---------------------------|--|---|
| | 2021 Gross Savings | 2021 Verified Gross Savings (Evaluated Programs Only) | 2021 Target from 2020 Implementation Plan* |
| Existing 1-4 Family Homes | 73,733 | - | |
| Existing Affordable Multifamily Buildings | 2,503 | - | |
| Affordable New Construction | - | - | |
| Customer Awareness, Outreach & Engagement | - | - | |
| Pilots and Demonstrations | - | - | |
| Healthy Homes VBP | - | - | |
| Total | 76,236 | - | |

| Other Fuels Target Distribution (MMBtu) - Indirect | | | |
|---|---------------------------|--|--|
| | 2021 Gross Savings | 2021 Verified Gross Savings (Evaluated Programs Only) | 2021 Target from 2020 Implementation Plan |
| Affordable New Construction | 758 | - | |
| Healthy Homes VBP | - | - | |
| Total | 758 | - | |

| Significant Budget and Target Variance Explanation |
|---|
| <p>In 2021, NYSERDA made significant investments in the LMI sector both through near-term existing program delivery, new initiative development, and in cultivating long-term partnerships that will help accelerate the adoption of efficiency and electrification in the long term. Variances from the 2020 implementation plan are addressed below and will be reflected in the 2022 LMI Implementation Plan.</p> <p>At the portfolio level, NYSERDA's spend was on track with projected annual expenditure. However, savings on both gas and electric fell short of projections for the portfolio.</p> <p>As noted in Section 5.1.1., the EmPower and AHS programs experienced significant demand in 2021. In response to COVID, NYSERDA increased the incentive cap per project and allowed the funding of personal protective equipment and other health and safety measures that had not been permitted previously. The programs collectively administered \$59,449,006 in incentives to serve 13,133 homes. The 1-4 Family LMI programs</p> |

expended roughly double what was forecast in the 2020 Implementation Plan; target achievement on both gas and electric also doubled. Over 89% of program budget went to incentives, with the initiative underspending on implementation. NYSERDA has entered into agreements late 2021 / early 2022 with each utility to administer utility funding through EmPower. Additionally, NYSERDA will leverage other funding sources including HEAP, WAP, American Rescue Plan Act (ARPA), federal infrastructure, RGGI and others to serve low-income customers through the EmPower program infrastructure.

Since the 2020 Implementation Plan filing and as noted in the narrative, NYSERDA's investments in the Existing Affordable Multifamily and Affordable New Construction portfolio have shifted from resource acquisition to market transformation. As noted in [Section 6.1.5](#), Multifamily Performance Program overperformed in the market in 2021 with record high intake in its last year. Existing Multifamily achieved its electric target but significantly underperformed on gas. Affordable New Construction underachieved on both MMBTU and electric.

This shortfall is driven by a few factors: 1) project delays due to COVID and COVID-affected supply chain and labor markets including a few large canceled projects, 2) change in program interventions, away from standard offer programs toward market transformation efforts and high-impact partnerships that will deliver replication and scale through industry forces and regulatory levers. NYSERDA's significant up-front investment in the housing agency partnerships will position the housing agencies to require efficient all-electric new construction and retrofits in their design guidelines ahead of anticipated code changes and other mandates. This may result in a gap in direct savings in the near-term, but it will be overcompensated by the direct and indirect savings in the mid-term.

The Healthy Homes Pilot targeted launch was planned for 2020, however due to complications of the COVID-19 pandemic, field launch was delayed until late 2021, with projects anticipated for completion in early 2022.

New York State Electric and Gas

| Electric Budget | | |
|--|------------------|---|
| | 2021 Spend | 2021 Target from 2020 Implementation Plan |
| Existing 1-4 Family Homes | | |
| Incentives & Services | \$368,025 | \$228,995 |
| Program Implementation | \$42,967 | \$4,626 |
| Total Budget | \$410,992 | \$233,621 |
| Existing Affordable Multifamily Buildings | | |
| Incentives & Services | \$20,100 | \$103,412 |
| Program Implementation | \$38,603 | \$16,370 |
| Total Budget | \$58,703 | \$119,782 |
| Affordable New Construction | | |
| Incentives & Services | \$0 | \$168,084 |
| Program Implementation | \$0 | \$3,491 |
| Total Budget | \$0 | \$171,575 |
| Customer Awareness, Outreach & Engagement | | |
| Incentives & Services | \$0 | \$169,706 |
| Program Implementation | \$10,283 | \$32,483 |
| Total Budget | \$10,283 | \$202,189 |
| Portfolio Administration | \$12,837 | \$11,394 |
| Portfolio EM&V | \$0 | \$17,091 |
| Total Portfolio Budget | \$492,815 | \$755,652 |

| Electric Target Distribution (MWh) | | | |
|---|--------------------|---|---|
| | 2021 Gross Savings | 2021 Verified Gross Savings (Evaluated Programs Only) | 2021 Target from 2020 Implementation Plan |
| Existing 1-4 Family Homes | 355 | - | 294 |
| Existing Affordable Multifamily Buildings | 44 | 48 ⁷⁴ | 1,039 |
| Affordable New Construction | - | - | 222 |
| Customer Awareness, Outreach & Engagement | - | - | 2,062 |
| Total | 399 | 48 | 3,617 |

⁷⁴ 95% of gross savings have been evaluated and a realization rate of 108% was applied to those savings.

| Gas Budget | | |
|--|------------------|---|
| | 2021 Spend | 2021 Target from 2020 Implementation Plan |
| Existing 1-4 Family Homes | | |
| Incentives & Services | \$637,378 | \$956,023 |
| Program Implementation | \$82,261 | \$49,832 |
| Total Budget | \$719,639 | \$1,005,855 |
| Existing Affordable Multifamily Buildings | | |
| Incentives & Services | \$3,588 | \$107,315 |
| Program Implementation | \$50,173 | \$32,003 |
| Total Budget | \$53,761 | \$139,318 |
| Affordable New Construction | | |
| Incentives & Services | \$0 | \$112,056 |
| Program Implementation | \$0 | \$7,925 |
| Total Budget | \$0 | \$119,981 |
| Customer Awareness, Outreach & Engagement | | |
| Incentives & Services | \$0 | \$45,694 |
| Program Implementation | \$26,441 | \$43,170 |
| Total Budget | \$26,441 | \$88,864 |
| Portfolio Administration | \$11,699 | \$26,586 |
| Portfolio EM&V | \$0 | \$39,879 |
| Total Portfolio Budget | \$811,540 | \$1,420,484 |

| Gas Target Distribution (MMBtu) | | | |
|---|--------------------|---|---|
| | 2021 Gross Savings | 2021 Verified Gross Savings (Evaluated Programs Only) | 2021 Target from 2020 Implementation Plan |
| Existing 1-4 Family Homes | 3,579 | - | 7,123 |
| Existing Affordable Multifamily Buildings | 33 | 31 ⁷⁵ | 4,574 |
| Affordable New Construction | - | - | 1,133 |
| Customer Awareness, Outreach & Engagement | - | - | 6,170 |
| Total | 3,612 | 31 | 19,000 |

| Significant Budget and Target Variance Explanation |
|--|
| In 2021 NYSEG was fully vested in EmPower NY for its 1-4 Family Electric Residential program and underspent for gas efforts according to plan. Moving forward, NYSEG will invest approximately 60% of the Ordered budgets to |

⁷⁵ 95% of gross savings have been evaluated and a realization rate of 95% was applied to those savings.

these efforts through 2025 with the remaining 40% allocated to LMI MF and/or Affordable New Construction. Dollars were encumbered for Gas efforts in LMI Multifamily, and AFNC that did not happen in 2021.

2021 was a transition year for LMI Multifamily with a change in the Implementation vendors to better align with Statewide efforts. This transition delayed the ability to initiate projects and impacted program performance. Statewide efforts for AMEEP went live in November.

There were also dollars allocated to Affordable New Construction, anticipating there would be a Utility effort and participation opportunity that has not yet materialized with continued focus on other programs.

Underspent dollars will be reallocated across programs in future years as needed.

Savings achievements are lower than anticipated. Gas and electric project costs are coming in higher than expected. NYSEG will continue to work with the EmPower Program Team to identify cost efficiencies and potential new measures. In addition, we will continue to look for cost effective LMI gas/electric programs to supplement funding to come closer to goals.

NMPC

| Electric Budget | | |
|--|------------|---------------------------------|
| | 2021 Spend | 2020 Implementation Plan Target |
| Existing 1-4 Family Homes | | |
| Incentives & Services | \$0 | \$144,667 |
| Program Implementation | \$0 | \$27,125 |
| Total Budget | \$0 | \$171,792 |
| Existing Affordable Multifamily Buildings | | |
| Incentives & Services | \$0 | \$210,801 |
| Program Implementation | \$0 | \$39,525 |
| Total Budget | \$0 | \$250,326 |
| Affordable New Construction | | |
| Incentives & Services | \$0 | |
| Program Implementation | \$0 | |
| Total Budget | \$0 | |
| Customer Awareness, Outreach & Engagement | | |
| Incentives & Services | \$0 | |
| Program Implementation | \$0 | |
| Total Budget | \$0 | |
| Portfolio Administration | \$0 | \$72,334 |
| Portfolio EM&V | \$0 | \$22,217 |
| Total Portfolio Budget | \$0 | \$516,668 |

| Electric Target Distribution (MWh) | | | |
|---|--------------------|---|---|
| | 2021 Gross Savings | 2021 Verified Gross Savings (Evaluated Programs Only) | 2021 Target from 2020 Implementation Plan |
| Existing 1-4 Family Homes | - | - | 254 |
| Existing Affordable Multifamily Buildings | - | - | 421 |
| Affordable New Construction | - | - | |
| Customer Awareness, Outreach & Engagement | - | - | |
| Total | - | - | 674 |

| Gas Budget | | |
|--|------------|---|
| | 2021 Spend | 2021 Target from 2020 Implementation Plan |
| Existing 1-4 Family Homes | | |
| Incentives & Services | \$0 | \$385,779 |
| Program Implementation | \$0 | \$72,334 |
| Total Budget | \$0 | \$458,113 |
| Existing Affordable Multifamily Buildings | | |
| Incentives & Services | \$0 | \$424,357 |
| Program Implementation | \$0 | \$79,567 |
| Total Budget | \$0 | \$503,924 |
| Affordable New Construction | | |
| Incentives & Services | \$0 | |
| Program Implementation | \$0 | |
| Total Budget | \$0 | |
| Customer Awareness, Outreach & Engagement | | |
| Incentives & Services | \$0 | |
| Program Implementation | \$0 | |
| Total Budget | \$0 | |
| Portfolio Administration | \$0 | \$192,889 |
| Portfolio EM&V | \$0 | \$50,633 |
| Total Portfolio Budget | \$0 | \$1,205,559 |

| Gas Target Distribution (MMBtu) | | | |
|---|--------------------|---|---|
| | 2021 Gross Savings | 2021 Verified Gross Savings (Evaluated Programs Only) | 2021 Target from 2020 Implementation Plan |
| Existing 1-4 Family Homes | - | - | 5,289 |
| Existing Affordable Multifamily Buildings | - | - | 5,872 |
| Affordable New Construction | - | - | - |
| Customer Awareness, Outreach & Engagement | - | - | - |
| Total | - | - | 11,161 |

Significant Budget and Target Variance Explanation

In the NMPC territory, LMI programs began entering the market in 2021, however no program spend or savings are reflected due to the timing of incurring these program costs and reporting timelines. As outlined earlier in this report, the agreements to establish the relationship between NYSERDA and the Utilities for the 1-4 Family Homes portfolio and marketing required substantial effort to ensure all considerations had been made and took time to complete. Therefore, the spend and savings associated with 2021 program activity after the agreements were signed will be reflected in 2022 budget spend and target achievement.

Similarly in the Existing Affordable Multifamily portfolio, the new statewide program, AMEEP, did not launch until mid-Q4 of 2021. This timing did not allow for projects to install measures and complete projects prior to year-end. A pipeline was established for 2022 and additional marketing efforts will be taken to boost awareness and participation further.

Within the Customer Awareness, Outreach, & Engagement category, NMPC also launched its LED Foodbank program in late 2021, but due to the timing of invoicing, spend and savings will be reported in 2022. In 2021, a lot of time was spent on program development and coordination amongst the PAs. In 2022, programs will be operational in the market and the Company will work towards improving and refining its reporting timeliness.

Orange & Rockland

| Electric Budget | | |
|--|------------------|---|
| | 2021 Spend | 2021 Target from 2020 Implementation Plan |
| Existing 1-4 Family Homes | | |
| Incentives & Services | \$0 | \$112,567 |
| Program Implementation | \$0 | \$0 |
| Total Budget | \$0 | \$112,567 |
| Existing Affordable Multifamily Buildings | | |
| Incentives & Services | \$0 | \$0 |
| Program Implementation | \$0 | \$0 |
| Total Budget | \$0 | \$0 |
| Affordable New Construction | | |
| Incentives & Services | \$0 | \$7,185 |
| Program Implementation | \$0 | \$0 |
| Total Budget | \$0 | \$7,185 |
| Customer Awareness, Outreach & Engagement | | |
| Incentives & Services | \$66,518* | \$246,826 |
| Program Implementation | \$0 | \$0 |
| Total Budget | \$66,518* | \$246,826 |
| Portfolio Administration | \$0 | \$10,000 |
| Portfolio EM&V | \$0 | \$5,955 |
| Total Portfolio Budget | \$66,518* | \$382,533 |

* Spend in this category served LMI customers, but funds were used from and reported under O&R electric market rate programs in 2021.

| Electric Target Distribution (MWh) | | | |
|---|--------------------|---|--|
| | 2021 Gross Savings | 2021 Verified Gross Savings (Evaluated Programs Only) | 2021 Implementation Plan Target (From 2020 IP) |
| Existing 1-4 Family Homes | - | - | 212 |
| Existing Affordable Multifamily Buildings | - | - | - |
| Affordable New Construction | - | - | - |
| Customer Awareness, Outreach & Engagement | 2,058** | - | 717 |
| Total | 2,058** | - | 929 |

**Savings in this category served LMI customers, but were reported and claimed and budgets under O&R electric market rate programs in 2021.

| Gas Budget | | |
|--|------------|---|
| | 2021 Spend | 2021 Target from 2020 Implementation Plan |
| Existing 1-4 Family Homes | | |
| Incentives & Services | \$0 | \$323,937 |
| Program Implementation | \$0 | |
| Total Budget | \$0 | \$323,937 |
| Existing Affordable Multifamily Buildings | | |
| Incentives & Services | \$0 | |
| Program Implementation | \$0 | |
| Total Budget | \$0 | |
| Affordable New Construction | | |
| Incentives & Services | \$0 | \$20,677 |
| Program Implementation | \$0 | |
| Total Budget | \$0 | \$20,677 |
| Customer Awareness, Outreach & Engagement | | |
| Incentives & Services | \$0 | \$61,476 |
| Program Implementation | \$0 | |
| Total Budget | \$0 | \$61,476 |
| Portfolio Administration | \$0 | \$20,000 |
| Portfolio EM&V | \$0 | \$11,909 |
| Total Portfolio Budget | \$0 | \$438,000 |

| Gas Target Distribution (MMBtu) | | | |
|---|--------------------|---|--|
| | 2021 Gross Savings | 2021 Verified Gross Savings (Evaluated Programs Only) | 2021 Implementation Plan Target (From 2020 IP) |
| Existing 1-4 Family Homes | - | - | 2,455 |
| Existing Affordable Multifamily Buildings | - | - | |
| Affordable New Construction | - | - | |
| Customer Awareness, Outreach & Engagement | - | - | 6,425 |
| Total | - | - | 8,880 |

| Significant Budget and Target Variance Explanation |
|--|
| Orange & Rockland served LMI customers by partnering with local food banks to distribute 13,392 LED kits in 2021. The LED kit informed customers that they may be eligible for the EmPower program and provided a webpage for them to apply. Costs and savings were reported in the Company's electric portfolio. Orange & Rockland also referred 575 customers directly to the EmPower program in 2021. In Q4 of 2021, Affordable Multifamily Energy Efficiency Portfolio (AMEEP), a new statewide program, was launched. The agreement between NYSERDA and O&R for the 1-4 Family homes portfolio and marketing was established in early 2022. |

Rochester Gas & Electric

| Electric Budget | | |
|--|------------------|---|
| | 2021 Spend | 2021 Target from 2020 Implementation Plan |
| Existing 1-4 Family Homes | | |
| Incentives & Services | \$227,407 | \$105,343 |
| Program Implementation | \$27,178 | \$1,339 |
| Total Budget | \$254,585 | \$106,682 |
| Existing Affordable Multifamily Buildings | | |
| Incentives & Services | \$67,605 | \$74,866 |
| Program Implementation | \$37,678 | \$10,535 |
| Total Budget | \$105,283 | \$85,401 |
| Affordable New Construction | | |
| Incentives & Services | \$0 | \$84,042 |
| Program Implementation | \$0 | \$1,266 |
| Total Budget | \$0 | \$85,308 |
| Customer Awareness, Outreach & Engagement | | |
| Incentives & Services | \$0 | \$146,150 |
| Program Implementation | \$5,537 | \$19,862 |
| Total Budget | \$5,537 | \$166,012 |
| Portfolio Administration | \$10,596 | \$6,600 |
| Portfolio EM&V | \$0 | \$9,901 |
| Total Portfolio Budget | \$376,000 | \$459,904 |

| Electric Target Distribution (MWh) | | | |
|---|--------------------|---|--|
| | 2021 Gross Savings | 2021 Verified Gross Savings (Evaluated Programs Only) | 2021 Plan Target from 2020 Implementation Plan |
| Existing 1-4 Family Homes | 381 | - | 117 |
| Existing Affordable Multifamily Buildings | 47 | 51 ⁷⁶ | 922 |
| Affordable New Construction | - | - | 111 |
| Customer Awareness, Outreach & Engagement | - | - | 1,739 |
| Total | 428 | 51 | 2,889 |

⁷⁶ 95% of gross savings have been evaluated and a realization rate of 108% was applied to those savings.

| Gas Budget | | |
|--|------------------|---|
| | 2021 Spend | 2021 Target from 2020 Implementation Plan |
| Existing 1-4 Family Homes | | |
| Incentives & Services | \$370,103 | \$536,232 |
| Program Implementation | \$31,798 | \$24,202 |
| Total Budget | \$401,901 | \$560,434 |
| Existing Affordable Multifamily Buildings | | |
| Incentives & Services | \$53,256 | \$87,608 |
| Program Implementation | \$41,765 | \$24,390 |
| Total Budget | \$95,021 | \$111,998 |
| Affordable New Construction | | |
| Incentives & Services | \$0 | \$56,028 |
| Program Implementation | \$0 | \$3,357 |
| Total Budget | \$0 | \$59,385 |
| Customer Awareness, Outreach & Engagement | | |
| Incentives & Services | \$0 | \$36,850 |
| Program Implementation | \$14,238 | \$25,055 |
| Total Budget | \$14,238 | \$61,905 |
| Portfolio Administration | \$9,670 | \$15,401 |
| Portfolio EM&V | \$0 | \$23,101 |
| Total Portfolio Budget | \$520,829 | \$832,224 |

| Gas Target Distribution (MMBtu) | | | |
|---|--------------------|---|---|
| | 2021 Gross Savings | 2021 Verified Gross Savings (Evaluated Programs Only) | 2021 Target from 2020 Implementation Plan |
| Existing 1-4 Family Homes | 2,143 | - | 4,083 |
| Existing Affordable Multifamily Buildings | - | - | 4,115 |
| Affordable New Construction | - | - | 566 |
| Customer Awareness, Outreach & Engagement | - | - | 4,227 |
| Total | 2,143 | - | 12,990 |

| Significant Budget and Target Variance Explanation |
|---|
| In 2021 RG&E was fully vested in EmPower NY for its 1-4 Family Electric Residential program and underspent for gas efforts according to plan. Moving forward, RG&E will invest approximately 60% of the Ordered budgets to these efforts through 2025 with the remaining 40% allocated to LMI Multifamily and/or Affordable New Construction. Dollars were encumbered for Gas efforts in LMI Multifamily, and AFNC that did not happen in 2021. |

2021 was a transition year for LMI Multifamily with a change in Implementation vendors to better align with Statewide efforts. This transition delayed the ability to initiate projects and impacted program performance. Statewide efforts for AMEEP went live in November.

There were also dollars allocated to Affordable New Construction, anticipating there would be a Utility effort and participation opportunity that has not yet materialized with continued focus on other programs.

Underspent dollars will be reallocated across programs in future years as needed.

Savings achievements are lower than anticipated. Gas and electric project costs are coming in higher than expected. RG&E will continue to work with the EmPower Program Team to identify cost efficiencies and potential new measures. In addition, we will continue to look for cost effective LMI gas/electric programs to supplement funding to come closer to goals.

13. Appendix B: LMI Portfolio Performance Metrics Tracking Mechanisms

The below table indicates how the Performance Metrics in [Section 3.3](#) are and will be assessed.

| Performance Metrics Tracking Mechanism | Relevant Performance Metrics |
|--|--|
| Utilize quarterly portfolio performance metrics to assess performance | <ul style="list-style-type: none"> • 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 | <ul style="list-style-type: none"> • Percentage of participants that learn about portfolio initiatives from various sources (<i>e.g.</i>, NY Energy Advisor, Utility or NYSERDA outreach materials, contractors, etc.) • Participation satisfaction rating |
| Analyze administrative costs through LMI Portfolio BCA | <ul style="list-style-type: none"> • Administrative cost associated with statewide approach |
| Track savings acquired that were related to a comprehensive project | <ul style="list-style-type: none"> • Energy savings acquired from comprehensive projects |