
# 2024-2026 NEW HAMPSHIRE STATEWIDE ENERGY EFFICIENCY PLAN

**Jointly submitted by New Hampshire's Electric and Natural Gas Utilities:**

- Liberty Utilities (Granite State Electric) Corp., d/b/a Liberty
- Liberty Utilities (EnergyNorth Natural Gas) Corp., d/b/a Liberty
- New Hampshire Electric Cooperative, Inc.
- Northern Utilities, Inc. d/b/a Unitil-NH Gas Operations
- Public Service Company of New Hampshire d/b/a Eversource Energy
- Unitil Energy Systems, Inc. d/b/a Unitil-NH Electric Operations

**Submitted June 30, 2023**

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**Attachments**

# Executive Summary

For more than two decades, New Hampshire's electric and natural gas utilities ("NH Utilities") have offered award-winning energy efficiency and demand response programs to residential and commercial and industrial ("C&I") customers[1] across the state. Energy efficiency is the lowest-cost energy resource available, yet significant barriers exist to the adoption of high-efficiency equipment and behaviors. Energy Efficiency programs, including those offered under the NHSaves® brand ("NHSaves Programs"), are designed to educate and induce customers to choose products and services that are appropriate for their specific circumstances and result in energy and cost savings to both participating customers and users of the electricity and natural gas systems. NHSaves programs have also been shown to deliver significant economic benefits to New Hampshire, reduce the need for additional investments in generating capacity, reduce greenhouse gas emissions and achieve other environmental objectives related to energy generation and consumption.

This Statewide Energy Efficiency Plan ("2024-2026 Plan" or "Plan") is being submitted jointly by Liberty Utilities (Granite State Electric) Corp., d/b/a Liberty ("Liberty Electric"), New Hampshire Electric Cooperative, Inc. ("NHEC"), Public Service Company of New Hampshire d/b/a Eversource Energy ("Eversource"), and Unitil Energy Systems, Inc. d/b/a Unitil-NH Electric Operations ("Unitil Electric") (hereinafter referred to as the "NH Electric Utilities"), and Liberty Utilities (EnergyNorth Natural Gas) Corp., d/b/a Liberty ("Liberty Gas"), and Northern Utilities, Inc. d/b/a Unitil-NH Gas Operations ("Unitil Gas") (hereinafter referred to as the "NH Natural Gas Utilities").

The NH Utilities are well-trusted advisors on energy-related issues and have successfully worked with stakeholders, legislators, state agency staff, and regulators to continuously deliver cost-effective energy efficiency solutions across the state. This Plan will continue the long and successful track record of delivering energy efficiency savings to New Hampshire customers by producing the following results:

[1] Hereinafter, the word "customer" will be understood to mean both utility customers and New Hampshire Electric Cooperative members.

- **Customer Energy Cost Savings.** The 2024-2026 NHSaves Programs will result in customer energy cost savings of more than $675 million over the lifetime of the measures installed under the program, accruing to both participating and non-participating customers from all sectors and parts of the state. Programs are designed to maximize participation opportunities to all customers in all rate classes, with opportunities ranging from common appliances to complex new construction and retrofit projects.

**$675,000,000**
customer cost savings

in benefits for
every $1 invested

- **Continued Energy Savings.** During the 2024-2026 Plan, the Programs will result in savings of 2.6 billion electric kilowatt-hours ("kWh") and 6.5 million MMBtus of natural gas over the lifetime of installed energy-saving measures. In addition, New Hampshire's 2024-2026 energy efficiency programs will save 5.2 million MMBtu from oil, propane, and other fossil fuels.

**2,600,000,000 kWh**
lifetime electric savings

**11,600,000 MMBtu**
lifetime MMBtu savings

- **Peak Demand Reduction Savings.** The 2024-2026 Plan results in passive demand reduction savings that will reduce summer peak demand by 42.5 megawatts ("MW"). The NHSaves Active Demand Reduction ("ADR") programs are also designed to provide incremental reduction to summer peak demand each year of 20-30 MW.

**42.5 MW**
summer peak savings

- **Lower Greenhouse Gas Emissions.** Energy efficiency programs help reduce energy consumption, in turn reducing the amount of carbon-intensive fossil fuels burned by power plants. This reduces GHG emissions that contribute to climate change, which helps minimize the cost of mitigation at the state and federal levels. This objective is embodied in the New Hampshire 10-year State Energy Strategy: "[c]limate change related to greenhouse gases is a real, escalating issue with significant impacts... [e]nergy systems can contribute to and exacerbate the effects of climate change."[2] In furtherance of the 2022 State Energy Strategy, the NHSaves Programs will prevent 2.0 million tons of GHG emissions from entering the atmosphere over the life of the measures installed, which is equivalent to removing more than 436,000 cars from highways for one year[3]. Additionally, the Plan will lead to avoidance of 17 tons of $SO_2$ emissions and 175 tons of $NO_X$ emissions, helping to ensure that all regions of New Hampshire maintain compliance with clean air standards, which will correspondingly preserve the health and well-being of New Hampshire residents. As one of the least-cost ways of managing and reducing emissions, pursuing energy efficiency in the built environment is critical to achieving New Hampshire's climate objectives.

[2] Page 21 of the 2022 State Energy Strategy, https://www.energy.nh.gov/sites/g/files/ehbemt551/files/2022-07/2022-state-energy-strategy.pdf
[3] Utilizing the Environmental Protection Agency's Greenhouse Gas Equivalencies Calculator. Retrieved from: www.epa.gov/energy/greenhouse-gas-equivalencies-calculator.


- **Overcoming Market Barriers.** The NHSaves energy efficiency offerings are resource acquisition programs designed to enable customers to pursue investments in increased efficiency of the energy usage of their homes and businesses that would otherwise not be pursued due to market barriers such as incomplete information and upfront costs. Through a combination of education and outreach, technical support, comprehensive installation services, attractive financing options, and reduced payback periods, the NHSaves suite of programs put efficient measures on a more level playing field with less efficient alternatives available to customers, which enables customers to make informed decisions and select investments that are appropriate for their particular circumstances. Please see Section 1.2.2 and Attachments N and O for more information on how the NHSaves programs overcome market barriers.

- **Strong State Economy.** New Hampshire's energy efficiency investments help support the state's economy in multiple ways, including:
    - The location of projects: all projects must necessarily be completed within New Hampshire residences and businesses;
    - Revenue generation: NHSaves projects are estimated to increase the local and state tax revenues generated by millions of dollars per year[4];

[4] Page 3 of https://www.puc.nh.gov/Regulatory/Docketbk/2022/22-042/LETTERS-MEMOS-TARIFFS/22-042_2023-03-31_NH_UTILITIES_2022-REPORTING-REQUIREMENTS.PDF, also provided as Attachment M in this filing.

- Job creation and retention: numerous local contractors and vendors partner with NHSaves to deliver projects. The Plan will support 1,718 full-time equivalents ("FTEs") or 3.6 million work hours[5];

**1,718**
jobs supported

- Reinvesting in the economy: savings from projects create additional room in participating customers' budgets, which can be directed to other needs, goods, and services; and
- Maximizing public funds: energy savings that result from municipal building projects lead to a more efficient use of taxpayer dollars in the community.

The Plan will be implemented with the funding from a combination of funds collected through rates (System Benefits Charge ["SBC"] and Local Distribution Adjustment Charges ["LDAC"]), the portion of the Regional Greenhouse Gas Initiative ("RGGI") auction revenues directed to NHSaves, and Forward Capacity Market ("FCM") revenues. The NH Utilities provide an additional funding source through customer loan options to help cover the customer's portion of the cost of energy efficiency improvements. The 2024-2026 triennial period also affords the NH Utilities to further program and policy objectives by: collaborating with the New Hampshire Department of Energy ("NH Department of Energy") to access federal funding; continuing to guide customers to available tax credits and other offerings that can further reduce the cost burden associated with adoption of high-efficiency appliances, weatherization, and heating strategies; and pairing customers with well-trained and responsible contractors and vendors to ensure positive and impactful project outcomes. In furtherance

[5] Page 3 https://www.puc.nh.gov/Regulatory/Docketbk/2022/22-042/LETTERS-MEMOS-TARIFFS/22-042_2023-03-31_NH_UTILITIES_2022-REPORTING-REQUIREMENTS.PDF, also provided as Attachment M in this filing.

of that last objective, the NH Utilities will continue to manage, support, and train a dynamic workforce of vendors and contractors. The NH Utilities will also continue to rely on the highly developed and robust collaboration with the dedicated and experienced stakeholders who play a central role in driving continuous improvement of the NHSaves programs.

All changes to the Plan are largely budgetary or administrative, with program structure and offerings remaining largely unchanged. Changes include the creation of a dedicated Gas Municipal program instead of funding Gas municipal projects through C&I programs, conversion of the Active Demand Response pilots into full programs, targeted efforts for electric baseboard heat conversions, and the addition of a multi-family pathway within the Home Performance program. The Plan as proposed satisfies all applicable statutory requirements, including:

- $400k of SBC funding set aside for NH DOE, per RSA 374-F:3 VI-a(a)(6)[6];
- 20% of program budgets to income-eligible programs, per RSA 374-F:3 VI-a(c);
- 65% of the Electric Utilities' energy savings contained within the Plan are electric savings, per RSA 374-F:3 VI-a(d)(4);
- RGGI funding allocated to the municipal and income-eligible programs, consistent with RSA 125-O:23[7];
- Rates will update annually consistent with RSA 374-F:3 VI-a(d)(2); and
- The Plan's portfolio of programs meets the test for cost-effectiveness as enshrined in the Granite State Test, consistent with RSA 374-F:3 VI-a(d)(5).

Given that the proposed Plan includes only non-controversial and previously reviewed enhancements to the existing Commission-approved 2022-2023 plan, and that the Plan complies with all regulatory and legal mandates, the NH Utilities respectfully recommend the Plan be approved as proposed, as it will sustain and advance the NHSaves programs, which have become critical savings opportunities for Granite State residents and businesses alike with numerous benefits that resonate statewide.

[6] https://www.gencourt.state.nh.us/rsa/html/XXXIV/374-F/374-F-3.htm

[7] https://www.gencourt.state.nh.us/rsa/html/X/125-O/125-O-23.htm

# Chapter One: 2024-2026 Plan Overview

For the 2024-2026 term, the NH Utilities will remain focused on driving broad participation and achieving deep energy savings from the NHSaves Residential and C&I Programs. We will strengthen our collaboration with state and local government, non-profit organizations, and the private market to deliver customer-focused solutions under the NHSaves umbrella. These objectives will be met through hands-on management of energy efficiency programs that address changing federal and state economic conditions, evolving energy code and appliance standards, changing customer expectations, emerging technologies, and an evolving landscape of vendors, distributors, retailers, and service providers.

New Hampshire's energy efficiency programs are marketed by the NH Utilities under a statewide marketing brand—NHSaves—which serves as a statewide marketing platform to ensure consistency and continuity in branding and messaging. The NHSaves.com website serves as the information hub where customers throughout the state are directed to learn about and take advantage of incentives and services offered through the NHSaves Programs, regardless of what utility or utilities serve them.

## 1.1 State Energy Policy

In 2022, the New Hampshire Legislature amended RSA 374-F:3, VI-a with HB 549, highlighting the state's commitment to energy efficiency and providing policy direction on SBC and LDAC funding levels, programming elements, and the process for future filings. Programming elements reaffirmed include maintaining the programming framework and performance incentive framework that was in place during the 2018-2020 term, the NH Utilities serving as the program administrators, and applying the Granite State Test as the primary cost-effectiveness test for the program portfolio. In July 2022, the NH Department of Energy published the most recent version of the New Hampshire 10-Year State Energy Strategy, which states in part that "HB 549 will provide significant stability to the utilities, businesses, households and other stakeholders involved in New Hampshire energy efficiency."[8]

[8] Page 20 https://www.energy.nh.gov/sites/g/files/ehbemt551/files/2022-07/2022-state-energy-strategy.pdf

Most recently, SB 113 has been approved by both houses of the Legislature, awaiting the Governor's signature, and is expected to be in effect by 2024. SB 113 further modifies the language in RSA 374-F:3, VI-a by removing the 0.25% adder within the annual inflation adjustment for funding and clarifying that the Electric Utilities must plan for 65% annual kWh savings when determining the programs' energy savings mix.

## 1.2 2024-2026 Plan Strategy and Goals

As described in detail in Chapter 2, the Plan contains savings and budget goals to be achieved for the 2024-2026 Term, along with non-binding annual benchmarks by which performance toward goals can be regularly monitored and assessed by stakeholders, the Commission and the NH Utilities themselves. The NH Utilities will continue to file quarterly and annual reports consistent with past practice, as well as file with the Commission and to the docket that gets opened for the consideration and approval of this plan all final evaluation reports, and the annually updated Technical Reference Manual ("TRM"). The NH Utilities will also host periodic meetings with stakeholders to discuss progress toward term goals and other relevant matters. After the conclusion of the three-year term, on June 1, 2027, each utility will file its three-year term report documenting achievements and providing a quantitative comparison to the Commission-approved 2024-2026 Plan, along with an accounting of performance incentive earned.

Utilizing the funding and program structure provided by RSA 374-F:3, VI-a, as revised by SB 113, and in response to the current clean energy and economic landscape in New Hampshire, the 2024-2026 Plan strategy is optimized to deliver cost-effective programs that reach all customer segments and demographics, are adaptable to changing marketplace dynamics and trends, and can complement federally funded programs and incentives as existing programs evolve and new programs and incentives are developed and launched.

Over the coming three-year term, the NH Utilities will strive to remove all remaining electric baseboard heating in the state and replace it with high efficiency air source heat pump systems. We will also target for replacement all inefficient window air conditioning units and continue to develop offerings that better serve moderate-income customers. The Plan will achieve cumulative energy savings of 2.8

percent of the NH Electric Utilities' 2022 kWh delivery sales and 2.0 percent of the NH Natural Gas Utilities' 2022 MMBtu delivery sales. The data in Table 1-1 and Table 1-2 provide an overview of 2024-2026 Plan Goals.

**Table 1-1: 2024-2026 Plan Goals (Electric)**

| Electric Programs | 2024-2026 Plan | Annual Benchmarks | | |
|---|---|---|---|---|
| | | 2024 | 2025 | 2026 |
| Cumulative Lifetime MWh Savings | 2,596,564 | 864,189 | 868,507 | 863,867 |
| Cumulative Annual MWh Savings | 300,948 | 101,021 | 100,388 | 99,538 |
| Cumulative Annual Savings as a % of 2022 Delivery Sales | 2.84% | 0.95% | 0.95% | 0.94% |
| Cumulative Program Funding | $214,930,917 | $69,187,378 | $71,716,137 | $74,027,403 |
| Program Cost per Lifetime kWh Savings | $0.083 | $0.080 | $0.083 | $0.086 |

*Note: Any seeming discrepancy in the numbers is due to rounding*

**Table 1-2: 2024-2026 Plan Goals (Natural Gas)**

| Natural Gas Programs | 2024-2026 Plan | Annual Benchmarks | | |
|---|---|---|---|---|
| | | 2024 | 2025 | 2026 |
| Cumulative Lifetime MMBtu Savings | 6,455,002 | 2,112,465 | 2,151,192 | 2,191,344 |
| Cumulative Annual MMBtu Savings | 494,968 | 162,166 | 165,311 | 167,491 |
| Cumulative Annual Savings as a % of 2022 Delivery Sales | 2.04% | 0.67% | 0.68% | 0.69% |
| Cumulative Program Funding | $38,838,406 | $12,455,140 | $12,972,250 | $13,411,016 |
| Program Cost per Lifetime MMBtu Savings | $6.02 | $5.90 | $6.03 | $6.12 |

*Note: Any seeming discrepancy in the numbers is due to rounding.*

Detailed estimates of the energy savings and benefits resulting from NHSaves Programs described here for 2024, 2025, and 2026 can be found in the attachments accompanying this Plan. The following tables summarize those savings. Specifically, Table 1-3 shows electric savings in megawatt-hours ("MWh") and the proportion of statewide savings contributed by each of the NH Electric Utilities.

Table 1-4 shows the statewide electric savings and the proportion contributed by each customer sector. The focus of weatherization programs in the residential sector (including services to income-eligible customers) results in some electric cooling load reductions in the summer months, but primarily generates a significant amount of energy savings in the winter months, predominantly related to heating oil, propane, kerosene, and wood.

Table 1-5 and 1-6 show the statewide natural gas savings and the proportion contributed by the state's two natural gas distribution companies, and the proportion contributed by each customer sector, respectively.

**Table 1-3: Electric Program Savings, by Utility**

| Utility | 2024-2026 | Annual Benchmarks | | | Percentage of 3-Year Savings |
|---|---|---|---|---|---|
| | | 2024 | 2025 | 2026 | |
| **Electric Annual Savings (MWh)** | | | | | |
| Eversource | 223,384 | 74,998 | 74,300 | 74,086 | 74% |
| Liberty Electric | 20,350 | 7,254 | 6,790 | 6,306 | 7% |
| NHEC | 22,890 | 7,335 | 7,855 | 7,700 | 8% |
| Unitil Electric | 34,325 | 11,434 | 11,443 | 11,447 | 11% |
| **Total** | **300,948** | **101,021** | **100,388** | **99,538** | **100%** |

*Note: Any seeming discrepancy in the numbers is due to rounding*

**Table 1-4: Electric Program Savings, by Sector**

| Sector | 2024-2026 | Annual Benchmarks | | | Percentage of 3-Year Savings |
|---|---|---|---|---|---|
| | | 2024 | 2025 | 2026 | |
| **Electric Annual Savings (MWh)** | | | | | |
| C&I and Municipal | 234,923 | 80,670 | 78,182 | 76,071 | 78% |
| Residential | 55,565 | 17,156 | 18,705 | 19,704 | 18% |
| Income-Eligible | 10,461 | 3,196 | 3,501 | 3,764 | 3% |
| **Total** | **300,948** | **101,021** | **100,388** | **99,538** | **100%** |

*Note: Any seeming discrepancy in the numbers is due to rounding*

**Table 1-5: Natural Gas Program Savings, by Utility**

| Utility | 2024-2026 | Annual Benchmarks | | | Percentage of 3-Year Savings |
|---|---|---|---|---|---|
| | | 2024 | 2025 | 2026 | |
| **Natural Gas Annual Savings (MMBtu)** | | | | | |
| Liberty Gas | 380,322 | 124,252 | 127,274 | 128,795 | 77% |
| Northern Utilities | 114,646 | 37,914 | 38,036 | 38,696 | 23% |
| **Total** | **494,968** | **162,166** | **165,311** | **167,491** | **100%** |

*Note: Any seeming discrepancy in the numbers is due to rounding*

**Table 1-6: Natural Gas Program Savings, by Sector**

| Sector | 2024-2026 | Annual Benchmarks | | | Percentage of 3-Year Savings |
|---|---|---|---|---|---|
| | | 2024 | 2025 | 2026 | |
| **Natural Gas Annual Savings (MMBtu)** | | | | | |
| C&I and Municipal | 220,543 | 69,982 | 75,069 | 75,492 | 45% |
| Residential | 234,625 | 79,411 | 76,898 | 78,316 | 47% |
| Income-Eligible | 39,800 | 12,772 | 13,344 | 13,683 | 8% |
| **Total** | **494,968** | **162,166** | **165,311** | **167,491** | **100%** |

*Note: Any seeming discrepancy in the numbers is due to rounding*

### 1.2.1 Benefits of Energy Efficiency Programs

The NHSaves Programs provide significant value to all customers (both participants and non-participants) including direct energy and cost savings, direct and indirect jobs creation, energy bill relief for state and local governments and school districts, reinvestment in local New Hampshire communities, reduced GHG emissions, improved air quality, and a variety of other non-energy benefits. In 2023, the NH Utilities commissioned a third-party consultant to model the economic

impact of the NHSaves programs on New Hampshire. This report was filed on March 31, 2023, in Docket No. IR 22-042, and provided with this filing as Attachment M.

For businesses, more efficient operations are often accompanied by reduced operation and maintenance costs due to longer-lived and cleaner equipment, improved building value, lower water and wastewater emissions, and reduced utility bill arrearage fees.

However, while not dismissing these non-energy benefits, the Granite State Test underscores that the primary purpose of the NHSaves Programs is to reduce the demand for and consumption of energy by users of the electric and natural gas systems. The 2024-2026 NHSaves Programs will save 2.6 billion electric kWh and 6.5 million natural gas MMBtu. In addition, the 2024-2026 NHSaves Residential and C&I Programs will save 5.2 million MMBtu from fossil fuels such as oil, propane, and kerosene. Over the lifetime of these measures, this will result in customer cost savings of more than $675 million. The 2024-2026 NHSaves Programs will also lead to a reduction of more than 2.0 million tons of GHG emissions, the equivalent of taking more than 436,000 passenger vehicles off the road for one year, and significant reductions in nitrous oxides and sulfur oxides, which are significant contributors to acid rain and air pollution.

Spending on energy efficiency supports the local workforce in New Hampshire. For every million dollars spent on energy-efficient measures, such as building retrofits or installing new equipment, an estimated 5.09 direct jobs and 1.68 indirect jobs are supported.[9] Using this calculation, the 2024-2026 NHSaves Programs will support 1,718 FTEs or 3.6 million work hours. Direct jobs are defined as those that perform energy services or install equipment in a home or a building, such as a home energy auditor, installation contractor, or energy service company. Typically, direct jobs in the energy efficiency industry are located close to where building retrofits and new construction take place, thereby ensuring investments stay in the New Hampshire economy rather than being diverted out of state. Indirect jobs are defined as those that supply direct-install companies with the equipment

[9] Page 3 https://www.puc.nh.gov/Regulatory/Docketbk/2022/22-042/LETTERS-MEMOS-TARIFFS/22-042_2023-03-31_NH_UTILITIES_2022-REPORTING-REQUIREMENTS.PDF, also provided as Attachment M in this filing.

needed for building retrofits and construction, such as high-efficiency commercial kitchen equipment, insulation, lighting controls, and refrigeration equipment.

### 1.2.2 Market Barriers

By offering consistently designed and delivered resource acquisition energy efficiency programs, the NH Utilities have a long-standing commitment to help customers across the state overcome the specific market barriers they face. In 2023, the NH Utilities commissioned a third-party analysis of the impact of market barriers on customer adoption of energy efficiency and how resource acquisition energy efficiency programs such as NHSaves have found ways to intervene, circumvent, and address them. This report was filed on March 31, 2023, in Docket No. IR 22-042, and is provided with this filing as Attachment N.

Among the market barriers addressed by NHSaves Programs are: reducing first-cost obstacles by providing customer incentives; increasing stocks of energy efficient equipment at retailers, distributors, and suppliers; training and recruiting installers and other market actors in highly efficient design and installation; and educating customers about the benefits of energy efficiency.

As equipment efficiency standards and standard practices improve and evolve, so do the minimum standards that qualify for a rebate within the energy efficiency programs. There is continual innovation, adoption, and transformation within the energy efficiency industry, and continual adjustment on the part of the NH Utilities as program administrators and NHSaves vendors to correspondingly raise the bar. New Hampshire customers in every sector face a variety of impediments to acquiring energy efficiency equipment, as well as adopting behaviors and practices that conserve or reduce energy use to achieve the same result. Barriers differ depending on each customer's particular circumstances and generally change over time both due to individual customer circumstances and as a result of the evolving marketplace of energy-consuming equipment.

Because new, more energy-efficient technologies and equipment are constantly being developed, improved upon, and brought to market, barriers to adoption evolve accordingly in the forms of higher cost, lack of information, lack of availability, and lack of trained contractors with the requisite experience to recommend and install the equipment knowledgeably and safely. The NHSaves programs

work with vendors and retailers on the supply side as well as with customers on the demand side to ensure these and other barriers are comprehensively addressed and overcome. For more information on how the NHSaves programs address market barriers, please refer to Attachment O.

## 1.3 Energy Efficiency Program Funding

### 1.3.1 Energy Efficiency Funding for NHSaves Electric Programs

Table 1-7 shows the sources and estimated amount of funding for each of the NH Electric Utilities for the efficiency programs during the term. RSA 374-F:3, VI-a(b) directs that up to $400,000 in funding from the SBC revenues be directed to the NH Department of Energy annually to promulgate the benefits of energy efficiency. Accordingly, that funding is not reflected in these tables given that it will not be available for NHSaves Programs offered by the NH Electric Utilities.

**Table 1-7: 2024-2026 Electric Program Funding**

| Utility | 2024-2026 | | | | |
|---|---|---|---|---|---|
| | Carryover | RGGI | FCM | SBC Funds | Total |
| Eversource | $13,541,052 | $5,640,177 | $9,907,464 | $138,159,489 | **$167,248,183** |
| NHEC | $2,426,484 | $642,625 | $300,000 | $14,232,801 | **$17,601,910** |
| Liberty | $1,171,011 | $641,306 | $910,370 | $16,870,681 | **$19,593,367** |
| Unitil | $695,755 | $840,864 | $925,627 | $19,784,641 | **$22,246,886** |

*Note: Any seeming discrepancy in the numbers is due to rounding.*

*SBC: (Prior Funding Rate + Forecasted Inflation Adder) * Forecasted Sales - $400k for NH DOE*

*RGGI: Forecast*

*FCM: Forecast*

There are three main funding sources for the NHSaves electric programs:

(1) a portion of the SBC determined by RSA 374-F:3, VI-a(d)(2) and applied to the electric bills of all customers receiving delivery service from one of the NH Electric Utilities;

(2) a portion of the RGGI auction proceeds that is determined by RSA 125-O:23, III(b); and

(3) proceeds earned by each of the NH Electric Utilities from ISO-NE for participation in ISO-NE's FCM.[10]

(1) The NH Utilities' SBC rates (Attachments E3, F3, G3, and H3) estimate the three-year average inflation rate applicable to the annual rate adjustment under RSA 374-F:3, VI-a(d)(2). Each company's sales forecast is then applied to the rate to determine the estimated SBC funding to be collected. Annually, each of the NH Electric Utilities will update the SBC rate for the following year, consistent with RSA 374-F:3, VI-a(d)(2) and any increase or decrease to the rates shall be filed with the Commission for review and approval.

(2) The NH Department of Energy's staff typically provides an estimate of RGGI revenue figures to be dedicated to the energy efficiency programs. Revenues from RGGI have been relatively fixed for the past several years based on legislation that limits the amount of funding made available to the energy efficiency programs to $1 per allowance. Further restrictions on how the RGGI revenues can be spent limit most funding to the Municipal and Home Energy Assistance programs. RGGI estimates provided by the New Hampshire Department of Energy are used for planning purposes, and as they are estimates, will necessarily differ from actual revenues. This difference can be exacerbated by the timing of payment transfer to the energy efficiency programs if that timing is delayed.

(3) ISO-NE's FCM revenues are estimated by each NH Electric Utility based on the market price for passive demand savings and the obligation of each company to deliver capacity savings during the commitment periods covered by calendar years 2024-2026. These figures differ by each NH Electric Utility and can be subject to reconciliation based on actual performance. FCM estimates used for planning purposes will differ from actual revenues and can be impacted by the timing of payment transfer to the energy efficiency programs.

Any balance of funds, positive or negative, from prior program years is carried forward to future years and reconciled at the end of the plan term. This includes interest applied on the monthly balance at

[10] All Electric Utility FCM revenues are derived from the NH Utilities' energy efficiency programs and support NHSaves electric programs.

the Prime Rate. The NH Utilities have estimated prior year carryforwards for calculation of 2024-2026 funding. Ending year balances (over- or under-collections) will be included by each utility in its annual report for 2024 and 2025 and at the conclusion of the term each utility will file its respective term report (Section 2.1.6) and reconcile the final three-year program revenues and expenses.

### 1.3.2 Efficiency Funding for NHSaves Natural Gas Programs

The NHSaves natural gas programs are funded by a portion of the LDAC rate, which is applied to natural gas bills for customers of the NH Natural Gas Utilities. As with the NHSaves electric programs, the NH Natural Gas Utilities have estimated prior year carryforwards for the calculation of 2024-2026 funding. The NH Natural Gas Utilities will also file annual reports for 2024 and 2025 and at the conclusion of the term each utility will file its respective term report (Section 2.1.6) and reconcile the final three-year program revenues and expenses.

Under RSA 374-F:3, VI-a(d)(2), the LDAC rate applicable to energy efficiency programs will go into effect on January 1 of each year, thereby avoiding the previous inconsistency between the effective date of new rates and the energy efficiency program year. Table 1-8 shows the sources and estimated amount of funding for each of the NH Natural Gas Utilities for the energy efficiency programs during the term.

**Table 1-8: 2024-2026 Natural Gas Program Funding**

| Utility | 2024-2026 | | |
|---|---|---|---|
| | Carryover | LDAC Funds | Total |
| Liberty | $315,353 | $31,897,985 | **$32,213,338** |
| Unitil | ($165,107) | $8,931,240 | **$8,766,133** |

*Note: Any seeming discrepancy in the numbers is due to rounding*

### 1.3.3 Supplemental Funding for Energy Efficiency

The NH Utilities have spent considerable time and effort investigating the possibility of supplementing the existing funding sources of the customer-funded SBC rate, and RGGI and FCM revenues with

outside sources of funding and the NH Utilities remain engaged with community partners and the NH Department of Energy to identify potential opportunities from the recently passed federal Infrastructure Law and Inflation Reduction Act. As was the case with the federal American Recovery and Reinvestment Act, the NH Utilities are willing partners in leveraging external sources of funding for the Weatherization Assistance Program, the Better Buildings Program, and other energy-related initiatives at the state and federal levels. Prior efforts were researched and documented by the Funding and Finance working group, convened during Docket No. DE 17-136, and its report, "NH Saves: External Funding and Partnership Assessment".

To supplement existing funding sources, the NH Utilities' have fostered long-standing relationships with for-profit and non-profit lenders, which enable our mutual customers to access private financing to cover the customers' portion of energy efficiency projects that are not covered by program incentives. These offerings are described in more detail in Sections 3.1.1 and 4.1.1 related to on-bill and third-party financing in the residential and commercial and industrial program sections of this Plan.

## 1.4 Program Budgets

Tables 1-9 and 1-10 display budgets by utility and fuel source, with annual contributions for reference.

**Table 1-9: Electric Budgets, by Utility**

| Utility | 2024-2026 | Annual Benchmarks | | | Percentage of 3-Year Budget |
|---|---|---|---|---|---|
| | | 2024 | 2025 | 2026 | |
| Eversource | $158,533,775 | 50,788,265 | 52,874,430 | 54,871,080 | 74% |
| Liberty Electric | $18,571,912 | 6,162,612 | 6,196,058 | 6,213,242 | 9% |
| NHEC | $16,684,273 | 5,370,884 | 5,583,542 | 5,729,848 | 8% |
| Unitil Electric | $21,140,956 | 6,865,616 | 7,062,107 | 7,213,233 | 10% |
| **Total** | **$214,930,917** | **$69,187,378** | **$71,716,137** | **$74,027,403** | **100%** |

*Note: Any seeming discrepancy in the numbers is due to rounding*

**Table 1-10: Natural Gas Budgets, by Utility**

| Utility | 2024-2026 | Annual Benchmarks | | | Percentage of 3-Year Budget |
|---|---|---|---|---|---|
| | | 2024 | 2025 | 2026 | |
| Liberty Gas | $30,533,969 | $9,926,588 | $10,140,417 | $10,466,964 | 79% |
| Unitil Gas | $8,304,437 | $2,528,551 | $2,831,833 | $2,944,052 | 21% |
| **Total** | **$38,838,406** | **$12,455,140** | **$12,972,250** | **$13,411,016** | **100%** |

*Note: Any seeming discrepancy in the numbers is due to rounding*

Each utility develops budgets at the sector level (C&I, Residential, and Income Eligible) based on the funds available from the funding sources described in Section 1.3. Pursuant to RSA 374-F:3, VI-a(c), at least 20 percent of all SBC funds for energy efficiency are budgeted for low-income energy efficiency programs.[11] Aside from the revenues needed for the low-income programs (which are funded by both the residential and C&I sectors, relative to revenues), SBC and LDAC funds collected are expended on the sector from which they are collected, preventing cross subsidization by customer class. Once sector budgets are determined, each utility develops a budget for each of the NHSaves Programs it is offering based on expected opportunity and demand, past experience, and cost-effectiveness. Variation among the utilities is expected based on characteristics unique to each service territory, customer composition and vendor capacity.

**Adjusted Accounting Cost Categories.** After careful review of various types of energy efficiency expenditures, and in the interest of greater transparency into the various activities related to the NHSaves programs, the NH Utilities are proposing an adjustment to the definition of accounting categories used to track expenses for the 2024-2026 Plan. Specifically, the revised accounting categories will distinguish between customer incentives and those expenses that relate to appropriate program management, data tracking and oversight. With the exception of customer incentives, each of

[11] https://www.gencourt.state.nh.us/rsa/html/XXXIV/374-F/374-F-3.htm

the accounting cost categories includes, but is not limited to, personnel expenses incurred both by the NH Utilities directly as well as their vendor partners. Please see Table 1-11 for a listing and description of each accounting category and Table 1-12 for the Plan's aggregated costs within each category.

**Table 1-11: Accounting Cost Categories**

| Accounting Category | Description |
|---|---|
| Program Planning & Administration | Costs associated with portfolio and program planning and management, regulatory compliance, stakeholder engagement, and legal representation. |
| Customer Incentives | Reimbursement to vendors for the cost of direct services to customers and/or rebates provided directly to customers resulting in measurable energy or capacity savings. Includes the cost of energy audits, technical studies and expert support, and the appropriate deployment of energy saving measures or services. |
| Implementation Services | Costs associated with day-to-day energy efficiency program management, including data collection and analysis, accounting, vendor management, and other costs of compliance with NHSaves program requirements. |
| Education and Marketing | Costs associated with training of professionals, customers or specific NH-based audiences related to energy efficiency and the NHSaves programs, as well as the costs of planning for and executing multi-channel marketing to engage or recruit vendors and customers. Costs include both statewide marketing as well as marketing by each Company to achieve program and portfolio savings goals. |
| Evaluation, Measurement & Verification (EM&V) | Costs related to statewide evaluation of programs, participation in the EM&V Working Group, and maintenance of various energy efficiency modeling and tracking systems. Also includes the cost of compliance with ISO-New England requirements relating to the certification of capacity resources in the Forward Capacity Market, the Avoided Energy Supply Components Study, and other market research needed to inform program design and success. |

**Table 1-12: Accounting Cost Categories, Budgets**

| | Program Planning & Administration | Customer Incentives | Implementation Services | Education & Marketing | Evaluation, Measurement & Verification (EM&V) |
|---|---|---|---|---|---|
| **Total ($)** | **$6,784,532** | **$194,909,629** | **$28,296,010** | **$11,840,988** | **$11,938,165** |
| **Total (%)** | **2.7%** | **76.8%** | **11.2%** | **4.7%** | **4.7%** |

### 1.4.1 Interim Changes in Sector-Level Budgets

Individual programs are described in Chapters 3 and 4 and included in each utility's program cost-effectiveness table, included in this Plan as Attachments E1, F1, G1, H1, I1 and J1. Once portfolio budgets are approved, there will be no transfer of funds among the Residential, Income Eligible and C&I sectors unless specifically requested by the NH Utilities on July 1 of any program year and approved by the Commission, as permitted by RSA 374-F:3, VI-a(d)(5). However, the NH Utilities retain flexibility within the sector to shift funds between programs to respond to demand for program support and other changes in the marketplace.

# Chapter Two: Three-Year Planning Structure

This chapter describes the administration of a three-year plan with binding savings goals and budgets over the full three-year term, with annual benchmarks to gauge progress.

## 2.1 A Multi-Year Plan

For the 2024-2026 Plan term, RSA 374-F:3, VI-a(d)(5) directs the NH Utilities to file, and the Commission approve, changes to program offerings and budgets for the next three-year period, which will leave sector budgets, planned energy savings and benefits goals, and proposed program designs contained in this Plan in place for the triennium, absent any interim program update permitted by RSA 374-F:3, VI-a(d)(5). The multi-year plan framework has numerous benefits:

- **Adaptability.** a three-year plan period enables the NH Utilities as program administrators to adapt to market changes and respond to customer and vendor needs to meet goals without having to increase or decrease the pace of program activity at the end of each calendar year, which causes inefficiencies.
- **Customer Stability.** Multi-year plans provide certainty and stability for customers and contractors as they plan and develop projects by reducing barriers related to stopping or slowing programs and then ramping up again at the turn of the calendar year. Furthermore, a multi-year plan's stability signals contractors and vendors to invest more confidently in long term business growth, training and workforce development. The three-year plan period will be particularly beneficial for executing multi-year commitments with large C&I and municipal customers.
- **Common Practice Across Jurisdictions**. Best practice for energy efficiency planning is to implement multi-year plan operating cycles where funding and goals can be adjusted within the

term, allowing for focus on longer term goals, new technologies, innovative program designs, and more effective targeting of all customer demographics.[12]

Key characteristics of this Plan include:

- **Three-Year Savings and Goals with Annual Benchmarks**. The Plan includes three-year program designs, with minor enhancements from the previous plan period as described in this filing, three-year budgets, benefits and savings goals, to which performance incentive is tied. Non-binding annual benchmarks are included to help measure progress against the Plan goals and metrics.
- **Consistency in approach to evaluation and calculation of savings and benefits.** The current approach to evaluation, compilation of the Technical Reference Manual ("TRM"), the Avoided Energy Supply Components ("AESC") Study, Benefit Cost ("BC") Models, and frequency and detail included in reporting remains unchanged, and NH Utilities will apply new evaluation results and updated avoided costs on a prospective basis. The actual savings and benefits resulting from the portfolio of programs will be modeled and reported using the prospective application of results from evaluations.
- **Continued Level of Reporting.** To ensure all stakeholders remain informed of the programs' progress towards goals and current activities and that the Commission continues to have adequate insight into the programs, the NH Utilities will continue to provide regular and transparent reporting (Section 2.1.6), on a quarterly and annual basis regarding progress toward the three-year goals.

The NH Utilities will maintain transparency and accountability with both the Commission and stakeholders over the entirety of the 2024-2026 term.

[12] ACEEE. 2022 State Scorecard. Available at: https://database.aceee.org/state-scorecard-rank. In the 2022 State Scorecard, California, Massachusetts, and Vermont, which implement multi-year plans, were ranked first, second, and fourth, respectively.

### 2.1.1 Interim Program Changes

Since RSA 374-F:3(d)(5) allows for interim program updates to be filed with the Commission each July 1 during the three-year plan period, some changes that may warrant an interim program update include:

- An increase to a utility's expected sector-level spending representing a variance of more than five percent of the previously approved sector budget;
- The addition or termination of a program, demonstration or pilot to the portfolio of programs that have been previously approved;
- A change in law impacting program design, savings, benefits or allocation of funds;
- An update to avoided costs (i.e., benefits) resulting from an update in the AESC impacting one or more years of the three-year plan; or
- An update from an EM&V study causing a variance in approved annual or lifetime energy savings and/or benefits at the sector level of no less than 10% over the term.

Table 2-1 provides an overview of how various elements within this section are handled within the Three-Year Term framework.

**Table 2-1: Multi-Year Plan Overview**

| Element | Description |
|---|---|
| Funding | SBC and LDAC energy efficiency rates based on rates set in law / approved by the Commission |
| Energy Savings Goals | Three-Year Approval, with annual non-binding benchmarks |
| Budgets | Three-Year Approval, with annual non-binding benchmarks |
| Program Designs | Three-Year Approval |
| Benefit Cost Models | Plan models serve as basis for setting term goals, Report models serve as basis for reporting actual performance |
| Performance Incentive | Calculated at end of three-year period in Term Report |
| Annual Reports | Interim results compared to annual benchmarks |

| Element | Description |
|---|---|
| Quarterly Reports | 60 days after the end of each quarter |
| Term Report | By June 1 after the conclusion of the term |
| Evaluation | EM&V Working Group oversight |
| | Results applied prospectively every year and documented in TRM as filed with the Commission |
| AESC Inputs and Avoided Costs | Applied prospectively and updated once every three years |

### 2.1.2 Savings Goals

As noted above, energy savings and benefits goals are set for the three-year period and consist of the cumulative result of three years of activity. The NH Utilities have provided a projection of savings not only for the term, but for each program year of the term. Projected annual achievement, or "annual benchmarks", are not binding; only the term goals are binding.

### 2.1.3 Funding

As specified in Section 1.3 above, the Plan includes forecasted SBC and LDAC rates, consistent with the law, as well as forecasted RGGI and FCM revenues. Under (over) collections will continue to be tracked and reconciled on an ongoing basis, with the cumulative impact affecting the subsequent term's budget. The Plan includes estimated funding and customer bill and rate impacts by utility for each year of the triennium (Attachments E3, F3, G3, H3, and J3).

### 2.1.4 Program and Sector Budgets

As specified in Section 1.4 above, each NH Utility developed individual program budgets for the Plan. Commission approval of the Plan will constitute approval of each of the NH Utilities' three-year term portfolio budget, as well as the budgets for each program. Any budgeted but underspent program funds from one year will be carried over into the next program year (until the conclusion of the three-year term), with those carryover funds remaining in the same energy-saving program. Likewise, overspending in one year will necessitate underspending in the following year(s). However, the Plan

does not alter the precedent of allowing each NH Utility to spend up to 120 percent of a program budget without notification, and preserves the requirement to notify the Commission should a program's budget be expected to exceed 120 percent of the approved term budget. Further, the Plan preserves the precedent of allowing each NH Utility to spend up to 105 percent of each sector's approved term budget without requiring Commission approval[13].

### 2.1.5 Performance Incentive

Under the proposed Plan, each NH Utility's Performance Incentive ("PI") will be determined based on its achievement against its term goals. The NH Utilities will retain the existing PI framework, with two minor adjustments (Section 6.5) for this Plan.

Annually, each NH Utility will complete an illustrative PI calculation based on actual costs, savings, and benefits for the program year compared to the annual benchmarks included in this Plan. At the end of the third year of the three-year term, each NH Utility will perform a final calculation of earned PI to be filed with its term report, based on actual achievement over the term compared to the three-year term goals.

### 2.1.6 Reporting

**Quarterly Reporting.** Over the course of the 2024-2026 term, the filing of Quarterly Reports will ensure continued transparency into the progress of the NH Utilities in achieving the proposed goals, as well as provide an opportunity for New Hampshire's regulators and stakeholders to engage with the NH Utilities to provide feedback on the evolving market for energy efficiency. The NH Utilities will continue to submit a joint Quarterly Report no later than 60 days after the end of each quarter.

**Annual Reporting.** At the conclusion of the first and second years of the term, Annual Reports will be filed with the Commission. Assumptions underlying the reported savings and benefits will be based on that year's annual benchmarks and TRM (see below). For program years 2025 and 2026, annual reports will reflect the avoided costs applied from the 2024 AESC Study (see below). In addition, each Annual

[13] Section IV, https://www.puc.nh.gov/EESE%20Board/EERS_WG/20190913-EERS-WG-PI-FINAL-REPORT.pdf

Report will detail the progress made by the NH Utilities individually and as a group toward achieving the three-year goals, as well as a calculation of PI for illustrative purposes. This structure will provide the Commission and stakeholders with the continued ability to assess cost-effectiveness and progress toward goals on an annual basis and will reduce administrative time and cost burdens.

**Term Reporting.** At the end of the term, each NH Utility will calculate actual achievement of term goals, budgets, benefits and PI as part of a comprehensive term report. The NH Utilities will report actual achievement relative to planned goals, as adjusted by any interim program updates (Section 2.1.1). The Term Reports will be filed with the Commission, along with a statewide summary, no later than June 1, 2027.

**TRM.** For a more detailed description of the TRM, please refer to Section 6.6. By July 1 of each year, the NH Utilities will file an updated TRM, reflecting prospective changes to measure assumptions that will take effect on January 1 of the following program year. This TRM will incorporate all evaluation findings, marketplace changes, emerging technologies, changing federal and state regulations, building code standards, and other pertinent information impacting measure savings calculations and other assumptions. For the 2024-2026 term, the NH Utilities anticipate producing three TRMs, which are detailed in Table 2-2.

**Table 2-2: Planned TRMs during the 2021-2023 Plan Term**

| TRM Version | Used for: |
|---|---|
| 2024-2026 Plan TRM, filed with Plan | Planned 2024-2026 activity<br>Reporting 2024 actual activity |
| 2025 TRM for Reporting, to be filed 7/1/2024 | Reporting 2025 actual activity |
| 2026 TRM for Reporting, to be filed 7/1/2025 | Reporting 2026 actual activity |

This TRM update process will continue to be managed by the EM&V Working Group. The changes reflected in the annual update to the TRM must be finalized and agreed to by the EM&V Working

Group by June 1 of each year to be included in the updated TRM and shall take effect with the commencement of the subsequent program year. All members of the EM&V Working Group will strive to reach consensus with the full EM&V working group, but in the event a consensus is not reached after reasonable efforts, any member of the working group may seek a Commission determination on the issue. In such a circumstance, the status quo shall continue to apply until the Commission issues an order resolving the dispute.

**Avoided Energy Supply Components Study Update.** For a more detailed description of the AESC study, please refer to Section 6.4.3, "Benefits". New Hampshire's three-year term starts one year earlier than the AESC three-year schedule, with the next report expected to be finalized in early 2024. The outputs of the AESC, when applied, will result in changes to the marginal avoided costs (i.e., benefits) of avoided electricity, natural gas, and other resources as reflected in the NH Utilities' BC models. The NH Utilities will file an interim program update to apply the updated benefits from the 2024 AESC study to program years 2025 and 2026. Upon Commission approval of the interim program update, the portfolio planned benefits and net benefits against which utility performance is measured will be adjusted to reflect the updated AESC values.

# Chapter Three: NHSaves C&I Energy Efficiency Programs

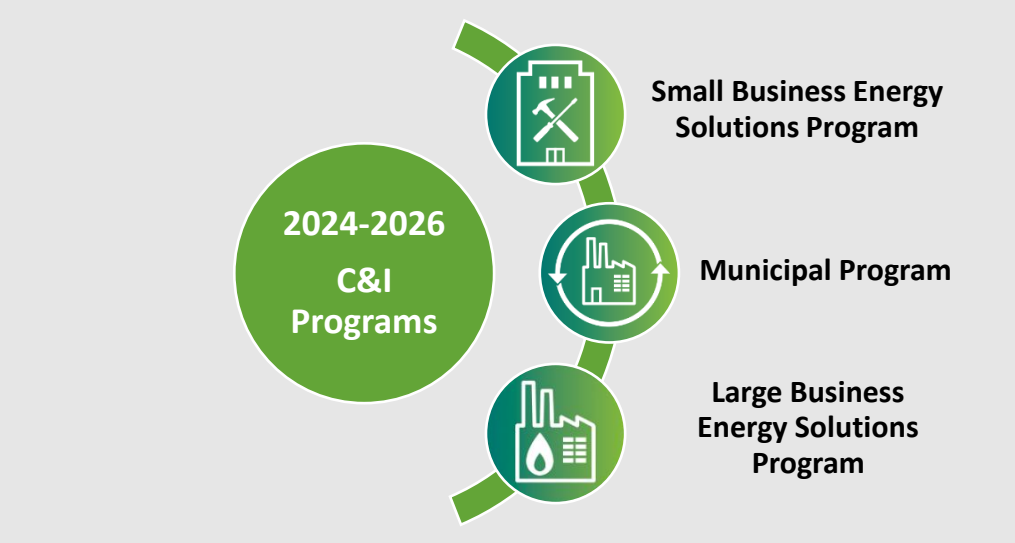
Since 2002, the NH Utilities have implemented programs to help improve the efficiency of small and mid-size businesses, municipalities, and large C&I customers across New Hampshire. The NHSaves C&I Programs are designed to help businesses and municipalities overcome financial barriers, organizational barriers and supply / provisional barriers[14]. By addressing these market barriers through various interventions, the NH Utilities help commercial, industrial and municipal customers reduce operating costs, implement high-efficiency equipment and technologies, and increase productivity while simultaneously delivering energy savings and benefits to all users of the electric and natural gas systems.

## 3.1 NHSaves Commercial, Industrial and Municipal Programs

In addition to serving customers, the NHSaves C&I Programs collaborate with a mature and robust network of stakeholders, including but not limited to: energy efficiency contractors, architects, developers, distributors, manufacturers, and retailers. The NH Utilities provide education, incentives, design and technical assistance, and workforce development opportunities to promote investment in energy-efficient technologies and designs in C&I buildings and facilities. Figure 3-1 displays the C&I statewide programs, to which ADR (Chapter 5) will be added, and are described in detail below.

[14] For more information on market barriers, please refer to Attachments N and O.

**Figure 3-1: 2024-2026 C&I Sector Programs**




- **Small Business Energy Solutions Program.** Small businesses are the backbone of the state's economy. This program provides technical expertise and incentives to small business customers who often lack the dedicated staff, time, and other resources necessary to effectively address energy use and cost. This program provides critical assistance to small business owners so that they can manage their energy use and realize other benefits, freeing them up to focus their time and resources on their business.
- **Municipal Program.** Municipalities and school districts can be large users of energy. Unlike for-profit businesses, the buildings owned and managed by our public servants are often old, historic, and inefficient. Many public assets have unique uses, such as wastewater treatment plants, gymnasiums, and 24-hour services. The Municipal Program is designed to help cities and towns within the state to identify and undertake energy-saving opportunities.

  The Municipal Program was established by legislation and has historically been funded by the revenues from the RGGI and administered by the NH Electric Utilities.[15] While the NH Gas Utilities have historically provided similar support to municipalities across the state, the 2024-

[15] Given the RGGI's focus on reducing greenhouse gas emissions, this program has a fuel neutral focus and generates both electric and fossil fuel reducing projects.

2026 Plan will incorporate a dedicated Municipal program for each of the NH Utilities. As with the existing electric NHSaves Municipal Program, gas municipal customers are able to participate in the other Commercial Programs even once funds in the Municipal Program are exhausted. Measure offerings are largely consistent with the Commercial Programs for gas customers, with the Municipal Program providing dedicated marketing and attention to municipal and public-school staff, as well as community-led efforts related to energy efficiency. The NHSaves Municipal Program provides invaluable technical assistance and vendor management assistance to help town and school officials move forward on projects that reduce their buildings' energy costs, often a large component of their operations and maintenance ("O&M") budgets, allowing them to redirect the savings toward other public services.

- **Large Business Energy Solutions Program.** Large businesses and manufacturers represent the largest energy users in the state and provide important opportunities for energy savings that benefit not only the customer, but the state's economy as a whole. This program offers technical services and incentives to help large C&I customers view energy efficiency projects on more equal footing with other conflicting capital improvement priorities. Through the program, large C&I customers are able to retrofit existing facilities or equipment, expand or replace equipment that is at the end of its useful life, and expand or construct new facilities to minimize future operating costs related to energy use.

### 3.1.1 Financing

Accessible financing mechanisms can be effective in encouraging C&I customers to invest their own funds in comprehensive energy efficiency projects, especially when combined with the NHSaves Programs' energy-efficient incentives. The NH Utilities currently offer several financing options, including on-bill financing and low-interest/interest-free loans, to commercial, municipal, and industrial customers. It is important to note, however, that many large customers already have access to capital and that NHSaves program interventions are designed to help businesses to elect to pursue energy efficiency improvements from among the many competing capital improvement projects.

All NH Utilities offer on-bill financing mechanisms for commercial, industrial, and municipal customers. On-bill financing mechanisms help reduce upfront costs and allow C&I customers to repay loans

through their monthly natural gas or electric bills. On-bill financing simplifies the practice of applying for loans and allows the customer to treat loan repayment as an operating expense rather than a capital liability. These financing tools allow for more comprehensive energy-saving projects by reducing cost and transaction barriers.

Eversource and NHEC offer SmartSTART tariffs, tied to the meter, with on-bill repayments to municipal customers. This offering provides municipal customers with the opportunity to install energy-saving measures with no upfront costs and the ability to pay for the measures over time on their electric bill with the savings realized from lower energy costs. Municipalities reimburse their utility (Eversource or NHEC) through charges added to their regular monthly electric bill.[16, 17] The SmartSTART charges are calculated to be less than or equal to the customer's estimated monthly energy savings. NHEC also offers SmartSTART to commercial customers.

In addition to on-bill financing offerings, the NH Utilities provide customers with, or can connect customers to, other financing options that can help them invest in energy efficiency. These include an online competitive loan platform as well as loan options offered by the Community Development Finance Authority ("CDFA"), the New Hampshire Business Finance Authority ("NHBFA"), and Property Assessed Clean Energy ("PACE") financing, where available, and from other banks and lending institutions across the state.

### 3.1.2 Marketing and Education

During 2024-2026, the NH Utilities will market the C&I Programs through a variety of proven channels including but not limited to: the NHSaves website; program promotional materials; direct mail; distributor engagement; e-mail; outbound calling; active social media campaigns; paid digital advertising; and design of content for partners' blogs, newsletters, and websites. Please refer to each

[16] Eversource Delivery Service Tariff Rate SSP outlines the requirement for service under the SmartSTART financing option.

[17] NHEC pays all costs associated with the purchase and installation of approved energy efficiency measures. A SmartSTART Delivery Charge, calculated to be less than or equal to the monthly savings, is added to the member's monthly electric bill until all costs are repaid. NHEC's Delivery Service Tariff Rate SmartSTART SDC 107 outlines the requirements for service under the SmartSTART financing option.

C&I program's "Target Market" section, below, for program specific marketing and Sections 6.1 and 6.2 for more overarching information on NHSaves Marketing and Education.

## 3.2 Small Business Energy Solutions Program

### 3.2.1 Target Market

Many small business owners face a variety of needs and market barriers that limit or prevent them from pursuing energy efficiency opportunities, which can include a shortage of capital resources, lack of staff dedicated to operations and facility issues, time, expertise or awareness of energy efficiency programs opportunities, lack of access to skilled vendors who can undertake the work and split incentives in which the building owner makes decisions regarding equipment upgrades, but the tenants pay the energy bills. The Small Business Energy Solutions Program helps identify electric and natural gas-saving opportunities and guides business owners through the process, including assigning experienced "turnkey" vendors vetted and managed by the customer's utility. This removes the customer's barrier of finding the time and bearing the risk of procuring a qualified and reputable contractor to do the work and allows small business owners to continue to focus on their business operations, processes, and customer service.

The small and mid-size business market segment has a diverse set of customer types, including but not limited to: convenience stores, dry cleaners, office buildings, private schools, repair and professional services, restaurants, general and specialty retail stores, and commercially or master-metered multi-tenant facilities.

Throughout 2024-2026, the NH Utilities will continue to apply data analytics to identify underserved small business market segments and determine if new measures or tailored solutions can be cost-effectively employed to engage these businesses, including those in rural or hard-to-serve markets where energy efficiency contractors and program outreach have traditionally been limited. A "Beyond Lighting" evaluation study currently underway and under the direction of the EM&V Working Group

will help to identify new and existing opportunities for electric energy efficiency savings in the C&I sector over the coming term.

### 3.2.2 Incentives Offered

There are two types of incentives for this program – prescriptive and custom:

- **Prescriptive Incentives.** These incentives are fixed-price rebates (either based on the size or the type of measure being acquired by the customers) applied to pre-qualified energy efficiency measures. Prescriptive incentives provide a predictable and streamlined process for customers installing common high efficiency equipment.
- **Custom Incentives.** These incentives vary depending on the application, allowing customers flexibility based on their building and the overall project they are undertaking. Custom projects are reviewed by vendors or utility staff on a site-specific basis, may require a technical study, and rely on engineering calculations to determine energy savings and evaluate cost-effectiveness.

### 3.2.3 Program Design and Delivery Pathways

There are multiple program delivery channels for customers to participate in the Small Business Energy Solutions Program:

- **Turnkey Direct Installations.** This simple, easy-to-use pathway removes the initial barriers to energy efficiency (e.g., time, shortage of capital resources and expertise, lack of awareness of energy efficiency opportunities) and delivers solutions to small business customers. Professional trade ally contractors perform an initial assessment of the small business and its existing equipment at no cost to the customer. The NH Utilities and energy efficiency contractors work with business owners to guide them through the program's processes, determine which prescriptive and custom measures can be installed, and assess how each business can optimize its facility's energy performance. Then, the contractors recommend customized improvements and directly install customer-approved measures including, but not limited to: hot water-saving measures, lighting controls, programmable Wi-Fi thermostats, commercial refrigeration measures, spray rinse valves, and weatherization measures.

- **Customer-Directed Installations.** This pathway accommodates the segment of small business customers that have the capacity and desire to manage the installation of new equipment with their own vendors. The NH Utilities accommodate all such vendors, as long as they are able to provide the requisite data about the measures installed and the cost of installation.
- **Midstream Incentives**. For 2024-2026, the NH Utilities will continue the point-of-service, or midstream, distributor incentives offered for lighting and lighting controls, commercial kitchen equipment (i.e., dishwashers, fryers, griddles, and ice machines), HVAC, and water heating equipment for both gas and electric end uses. The NH Utilities will work with energy efficiency program administrators across the region to provide consistent high-efficiency product offerings to maximize market consistency and effectiveness. The NH Utilities will also continue work with distributors, equipment manufacturers, and the Massachusetts & Connecticut Technical Assessment Center to monitor and evaluate emerging energy-efficient technologies for inclusion in NHSaves offerings. This continual review will ensure that the NH Utilities are incentivizing up-to-date, energy-efficient solutions tailored to optimizing building performance.

  Midstream incentives ensure that distributors stock and promote energy-efficient equipment, which impacts the broader marketplace and impacts what distributors purchase and make available throughout their product inventory. Midstream rebates increase the availability of energy-efficient products, streamline the transaction process for the customer (i.e., they do not have to fill out a rebate form but have cost savings passed on to them by their supplier), and play a critical role in increasing awareness, acceptance and installation of high efficiency alternatives to standard equipment types.

### 3.2.4 Program Budget and Goals

Table 3-1 summarizes the proposed budget, savings targets, and number of participants statewide (i.e., for all Utilities combined) for the term. For more detailed estimates by utility, delivery pathway or measure, please refer to each of the NH Utilities' BC models.

**Table 3-1: Small Business Energy Solutions Program—Energy Savings and Budgets**

| Savings and Budgets | 2024-2026 | Annual Benchmarks | | |
|---|---|---|---|---|
| | | 2024 | 2025 | 2026 |
| **Electric Programs** | | | | |
| Program Budget | $38,427,950 | $12,938,048 | $12,790,908 | $12,698,994 |
| Annual kWh Savings | 119,765,685 | 41,233,345 | 39,814,401 | 38,717,939 |
| Lifetime kWh Savings | 834,566,026 | 288,504,993 | 277,169,570 | 268,891,463 |
| kW Reduction | 19,131 | 6,699 | 6,305 | 6,127 |
| No. of Participants | 25,198 | 8,705 | 8,379 | 8,115 |
| **Natural Gas Programs** | | | | |
| Program Budget | $6,757,503 | $2,078,803 | $2,299,267 | $2,379,433 |
| Annual MMBtu Savings | 64,560 | 20,570 | 21,588 | 22,402 |
| Lifetime MMBtu Savings | 946,506 | 299,305 | 317,509 | 329,693 |
| No. of Participants | 4,522 | 1,485 | 1,523 | 1,515 |

*Note: Any seeming discrepancy in the numbers is due to rounding*

## 3.3 Municipal Program

### 3.3.1 Target Market

The Municipal Program's objective is to help local communities to better identify, plan, and implement energy efficiency projects to help reduce the energy intensity and operating costs of municipal and school buildings. All municipal and local government energy efficiency projects are eligible to participate in the program, including local governments with municipal utilities, such as Ashland, Littleton, New Hampton, Wolfeboro, and Woodsville.

The program's effective design allows the NH Utilities to help municipal representatives and staff eliminate unique market segment barriers to planning and implementing energy efficiency projects. These barriers include, but are not limited to, a lack of time, expertise, or awareness of energy

efficiency programs and opportunities, potentially shorter operating hours (resulting in reduced cost-benefit savings), the long-term budgeting and approval process of towns and cities for capital improvements, and the cyclic electoral turnover of municipal representatives.

By utilizing turnkey retrofit and new construction approaches, the Municipal Program provides incentives and technical assistance to municipalities and school districts that may lack energy efficiency expertise or resources. The program provides technical review to identify what aging or inefficient existing equipment can cost-effectively be replaced with high-efficiency new equipment or systems. The program also supports major renovation or new construction projects and guides both municipal or school district staff as well as their architects, engineers and contractors through the project process. This assistance includes helping municipal staff understand an energy audit's findings, determining which energy-efficient solutions are right for the town's needs, and how to leverage incentive and loan options to finance projects. For 2024-2026, the NH Utilities will continue to provide technical assistance for specialized assessments of historical buildings, such as building shell or HVAC system audits.

### 3.3.2 Incentives Offered

There are three types of incentives for this program – prescriptive, custom, and targeted:

- **Prescriptive Incentives**. These incentives are fixed-price rebates (either based on the size or the type of measure being acquired by the customers) applied to pre-qualified energy efficiency measures. Prescriptive incentives provide a predictable and streamlined process for customers installing common high efficiency equipment.
- **Custom Incentives.** These incentives vary depending on the application, allowing customers flexibility based on their building and the overall project they are undertaking. Custom projects are reviewed by vendors or utility staff on a site-specific basis, may require a technical study, and rely on engineering calculations to determine energy savings and evaluate cost-effectiveness.
- **Targeted Incentives.** Targeted incentives are additional incentives used on specific measures or to encourage New Hampshire's towns and cities to commit to energy efficiency projects. For

example, public school buildings can potentially be eligible for incentives of up to 100 percent of the incremental cost of new equipment and new construction projects to assist buildings to improve indoor air quality.

Over the past few years, the NH Utilities have observed an increased interest in performance contracting[18] by school districts and municipalities. For 2024-2026, the Municipal Program will continue to support performance contracting given that it spurs comprehensiveness in projects and is a streamlined guided energy efficiency pathway for municipalities and school districts. The NH Utilities will also continue to service wastewater treatment facilities through a partnership with the New Hampshire Department of Environmental Services to implement audit findings and recommendations identified as part of a prior three-year US Department of Energy ("US DOE") grant that funded comprehensive energy audits and building benchmarking.

### 3.3.3 Program Design and Delivery Pathways

There are two program delivery pathways for customers to participate in the Municipal Program:

- **Turnkey Vendor Installations.** This pathway connects municipalities with experienced trade allies who can help design, develop, and install prescriptive measures for town buildings or facilities. The NH Utilities work with the contractors to determine pricing, approve energy savings proposals, and help municipalities prioritize the project solutions available to them.
- **Customer-Directed Installations.** This pathway accommodates the segment of municipal customers that have the capacity and desire to manage the installation of new equipment with their own vendors through prescriptive incentives for common, pre-qualified measures and includes midstream rebates. The NH Utilities accommodate all such vendors, as long as they are able to provide the requisite data about the measures installed and the cost of installation.

[18] Performance contracting provides customers with the ability to have comprehensive energy efficiency projects completed without requiring a copayment. Customers pay for the projects with dollar savings achieved over a period of time that is shorter than the life of the measures. The value proposition for the customers is that the energy savings are free for the remainder of the measure lives.

### 3.3.4 Program Budget and Goals

Table 3-2 summarizes the proposed budget, savings targets, and number of participants statewide (i.e., for all NH Utilities combined) for the term. For more detailed estimates by utility, delivery pathway or measure, please refer to each of the NH Utilities' BC models.

**Table 3-2: Municipal Program—Energy Savings and Budgets**

| Savings and Budgets | 2024-2026 | Annual Benchmarks | | |
|---|---|---|---|---|
| | | 2024 | 2025 | 2026 |
| **Electric Programs** | | | | |
| Program Budget | $6,309,206 | $2,089,277 | $2,020,615 | $2,199,313 |
| Annual kWh Savings | 11,032,162 | 3,640,507 | 3,496,809 | 3,894,845 |
| Lifetime kWh Savings | 98,878,987 | 32,719,175 | 31,427,047 | 34,732,765 |
| kW Reduction | 1,376 | 496 | 415 | 465 |
| No. of Participants | 1,555 | 540 | 511 | 504 |
| **Natural Gas Programs** | | | | |
| Program Budget | $1,510,856 | $477,240 | $505,024 | $528,592 |
| Annual MMBtu Savings | 18,496 | 6,254 | 6,051 | 6,190 |
| Lifetime MMBtu Savings | 272,988 | 92,236 | 89,325 | 91,426 |
| No. of Participants | 785 | 261 | 261 | 263 |

*Note: Any seeming discrepancy in the numbers is due to rounding*

## 3.4 Large Business Energy Solutions Program

### 3.4.1 Target Market

The program serves large C&I customers who are replacing failed equipment, addressing aging, inefficient equipment and systems, or planning new construction or major renovation projects. The target market segments include commercial real estate, healthcare facilities, higher education, hotels, manufacturers, national retail chains, private schools, ski resort areas, and large retail facilities. These

large C&I customers typically have in-house sustainability and energy efficiency expertise and are primarily interested in leveraging support from the NHSaves programs to reduce both upfront costs, operating costs and realize non-energy impacts. In addition to focusing on large C&I energy users, the NH Utilities also target building developers, architects, and design teams through the New Equipment & Construction pathway to ensure energy efficiency opportunities are captured for the entire lifecycle of the building.

A 2019 New Hampshire Energy Efficiency Market Assessment ("Market Assessment") determined the decision-making constraints of four large C&I market segments and identified recommendations for the NHSaves Programs.[19] The NH Utilities will continue to employ this research to effectively engage these large C&I customer segments, including:

- **Large National Retail Chains.** Decisions regarding energy efficiency are made at the national and regional level for large national retail chain stores. The Market Assessment noted that it was essential for the NH Utilities to maintain strong key account representative relationships and to coordinate efforts with other regional utility partners to promote energy efficiency.
- **Large Manufacturers.** The large manufacturing segment is a highly competitive space focused on cost-cutting measures that increase productivity and output and give businesses an advantage over competitors. The decision-making process for large manufacturers is often decentralized and all levels of the business offer energy efficiency opportunities. The NH Utilities will maintain strong account representative relationships and highlight cost-saving measures to this market segment.

- **Municipal and Higher Education.** The decision-making process for these organizations is highly structured, long term, and time consuming.

[19] Navigant Consulting. *New Hampshire Energy Efficiency Market Assessment*. Apr. 19, 2019 presentation. Available at: https://www.puc.nh.gov/EESE%20Board/Meetings/2019/0419Mtg/20190419-EESE-Board-NHSaves-Market-Assessment-Presentation.pdf.

Large-scale projects are often considered with this market segment, increasing the potential for comprehensive energy-saving measures.

- **Seasonal Operations.** This market segment includes resorts, hotels, and manufacturing firms with cyclic down periods and limited operations. It is important to market these types of businesses during their respective off-seasons, so that energy efficiency investments will not interfere with business operations.

### 3.4.2 Incentives Offered

This program provides prescriptive, custom, and performance-based incentives to customers.

- **Prescriptive Incentives.** These incentives allow customers to select equipment from a pre-qualified list of measures and receive an incentive designed to cover the incremental installed cost for New Equipment & Construction pathway projects and a percentage of the installed costs for Retrofit pathway projects, and offer a standardized process for customers to integrate energy efficiency in their renovation or construction projects. Program trade allies can manage the prescriptive incentive process for large C&I customers, allowing them a streamlined pathway to energy efficiency. Prescriptive incentives create a supply chain that includes distributors, manufacturers, key trade ally contractors, and the NH Utilities.
- **Custom Incentives.** These incentives vary depending on the application, allowing customers flexibility based on their building and the overall project they are undertaking. Custom projects are reviewed by vendors or utility staff on a site-specific basis, may require a technical study, and rely on engineering calculations to determine energy savings and evaluate cost-effectiveness.
- **Performance-Based Incentives.** Performance-based incentives are offered to customers to encourage comprehensive energy savings from multiple measures. These incentives are based on energy calculations, including watts saved per square foot, dollars per kWh saved, and energy savings achieved above code. Performance-based incentives encourage customers to move beyond installing just one piece of energy-efficient equipment to consider long-term, holistic building design and measures that optimize the energy performance of systems or buildings.

Similar to the Municipal Program, the NH Utilities have observed an increased interest in performance contracting with large C&I customers over the last few years. During 2024-2026, the Large Business Energy Solutions Program will continue to support large C&I customers who choose to follow the performance contracting path.

### 3.4.3 Program Design and Delivery Pathways

There are four program delivery channels for customers to participate in the program:

- **One-on-One Technical Assistance.** The NH Utilities offer one-on-one technical assistance, through account representatives and energy efficiency staff, to help large C&I customers identify energy-saving opportunities, complete applications, and generally guide them through the process.
- **Energy Service Companies**. These companies offer compressed air, electrical, HVAC, lighting certification, and other comprehensive energy efficiency services to large C&I customers such as state and local government, higher education institutions, hospitals, hotels, manufacturers, and ski resorts.
- **Engineering Firms**. These firms provide whole-building audits, individual building system performance checks, and work directly with a customer's facility team or energy committee to identify whole-building management approaches, behavioral changes, new equipment, renovations, retro-commissioning opportunities, and process improvements that reduce energy use and cost.
- **Midstream.** For 2024-2026, the NH Utilities will continue to expand beyond the lighting market to support new midstream incentives for commercial customers. The NH Utilities will use the results of the Energy Efficiency Baseline and Potential study as a guide to determine which technologies provide opportunity for cost-effective savings and will continue to collaborate with our counterparts across New England to influence distributors to stock high-efficiency equipment.

### 3.4.4 Program Budget and Goals

Table 3-3 summarizes the proposed budget, savings targets, and number of participants statewide (i.e., for all NH Utilities combined) for the term. For more detailed estimates by utility, delivery pathway or measure, please refer to each of the NH Utilities' BC models.

**Table 3-3: Large Business Energy Solutions Program—Savings and Budgets**

| Savings and Budgets | 2024-2026 | Annual Benchmarks | | |
|---|---|---|---|---|
| | | 2024 | 2025 | 2026 |
| **Electric Programs** | | | | |
| Program Budget | $40,613,221 | $13,668,932 | $13,547,182 | $13,397,106 |
| Annual kWh Savings | 104,124,788 | 35,796,333 | 34,870,567 | 33,457,888 |
| Lifetime kWh Savings | 910,784,247 | 316,140,192 | 305,748,115 | 288,895,940 |
| kW Reduction | 11,799 | 4,131 | 3,919 | 3,749 |
| No. of Participants | 6,481 | 2,252 | 2,191 | 2,038 |
| **Natural Gas Programs** | | | | |
| Program Budget | $7,177,124 | $2,201,156 | $2,462,512 | $2,513,457 |
| Annual MMBtu Savings | 137,487 | 43,158 | 47,430 | 46,900 |
| Lifetime MMBtu Savings | 1,722,967 | 539,668 | 595,072 | 588,228 |
| No. of Participants | 991 | 321 | 341 | 329 |

*Note: Any seeming discrepancy in the numbers is due to rounding*

# Chapter Four: NHSaves Residential and Income Eligible Energy Efficiency Programs

Since 2002, the NH Utilities have implemented residential programs to help improve the efficiency of single-family and multifamily homes across the state, including the appliances, HVAC systems and lighting that is used within those homes. The NHSaves Residential Programs are designed to help customers become more familiar with how they use energy so that they can better manage their energy costs, adopt more efficient behaviors, and select high-efficiency equipment and technologies for their homes.[20]

## 4.1 NHSaves Residential and Income Eligible Programs

In addition to serving customers, the NHSaves Residential and Income Eligible Programs engage with a mature and robust network of partners, including but not limited to: energy efficiency contractors, community action agencies ("CAAs"), distributors, manufacturers, and retailers. The NH Utilities and our partners collectively provide education, incentives, design and technical assistance, and contractor education to promote investment in energy efficiency advancement and increase program participation.

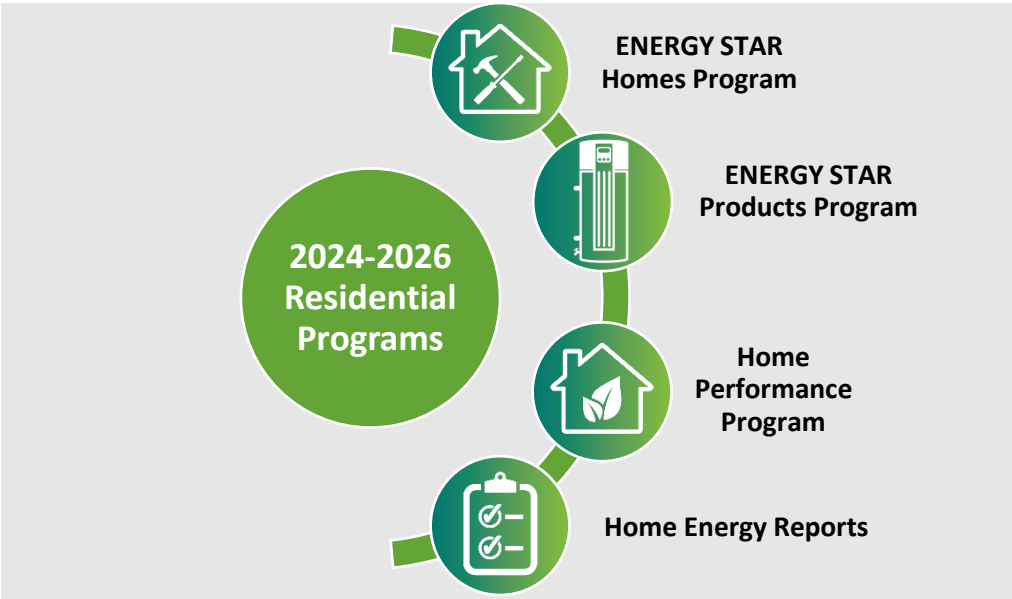
For 2024-2026, the NH Utilities are focused on meeting the strong demand for weatherization assistance and high efficiency appliances within the NHSaves Residential and Income Eligible Programs. The NH Utilities support emerging energy-efficient technologies, ensure convenient customer access to capital, support workforce development efforts, and provide multiple "on-ramps"

[20] For more information on market barriers, please refer to Attachments N and O.

that allow all customers to participate in NHSaves Residential and Income Eligible Programs. Flexibility is imperative in order for the NH Utilities to respond and adapt quickly to new federal and state laws and funding opportunities, changing energy codes and equipment standards, continuous market transformation, emerging technologies, and customer expectations.

Figure 4-1 displays the residential statewide programs, to which ADR (Chapter 5) will be added, and Figure 4-2 displays the income-eligible programs, with additional details provided below each figure.

**Figure 4-1: 2024-2026 Residential Sector Programs**

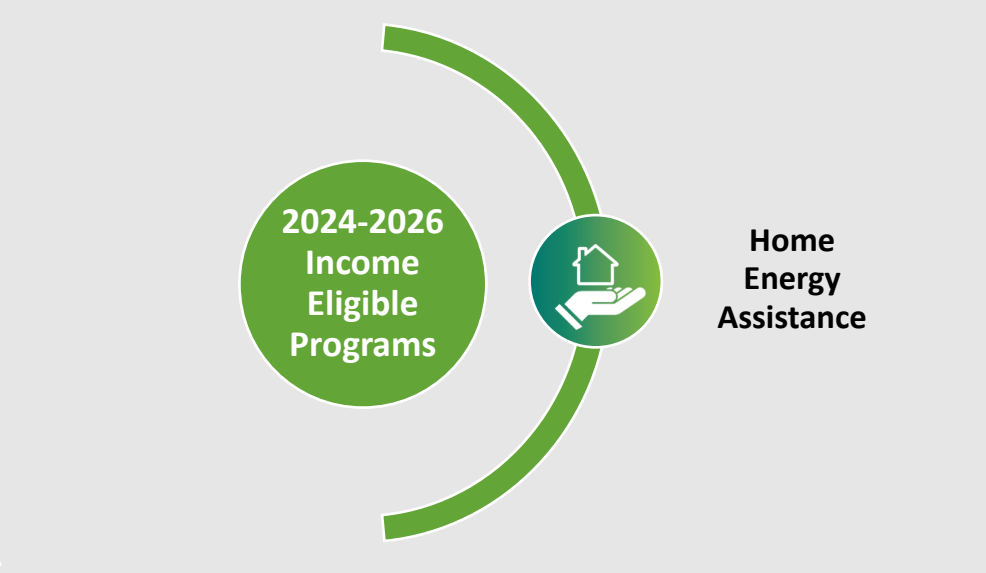



- **ENERGY STAR Homes Program.** This program is for residential single-family and multifamily new construction homes and provides incentives and contractor support through two pathways: (1) Drive to ENERGY STAR ("Drive to ES") and (2) ENERGY STAR Homes Version 3.1 ("ES 3.1").
- **ENERGY STAR Products Program.** This high-volume program with broad reach is designed to help residential customers overcome the extra expense of purchasing and installing measures such as ENERGY STAR-certified appliances, HVAC equipment and systems, and hot water-saving equipment. This is accomplished through consumer education, point-of-sale marketing, active

training, engagement of retailers and distributors, and a variety of incentives both at point of sale and through automatic markdowns.

- **Home Performance Program.** This program provides comprehensive energy-saving services at significantly reduced cost to customers' existing homes and may cover weatherization measures, space heating and hot water equipment upgrades, lighting improvements, and appliance replacements.
- **Home Energy Reports**. This program, offered to Liberty and Unitil gas and electric customers, is a highly successful intervention aimed at motivating sustained behavior change around energy use in the home through targeted, normative reports provided to customers by mail and email and supported by customer-specific information accessible online.

**Figure 4-2: Income Eligible Sector Programs**




- **Home Energy Assistance ("HEA") Program.** The Home Energy Assistance Program is currently the only energy-saving program in the Income Eligible Sector, but additional opportunities for reaching this vulnerable population are currently being investigated through a formal evaluation overseen by the EM&V Working Group.

The HEA weatherization program is designed to reduce energy use in both single family and multi-family buildings occupied by residents whose income falls below 60 percent of area median income by covering 100 percent of the cost of improvements.

### 4.1.1 Financing

The NH Utilities recognize that technical assistance, incentives, and innovative financing tools are all important mechanisms to encourage residential customers to invest in comprehensive energy efficiency improvements. During 2024-2026, the NH Utilities will continue to offer on-bill and third-party financing options to overcome the market barrier faced by residential customers who wish to pursue comprehensive and cost-effective energy efficiency projects in their homes but may not have the funds or available credit to cover their portion of the total cost. Offerings include zero percent on-bill offerings for electric and natural gas customers, two percent loans offered in partnership with local lenders, and zero-percent moderate-income loans, also in partnership with local lenders.

**On-Bill Financing.** Each NH Utility offers on-bill financing to help residential customers cover their portion of eligible energy efficiency projects. Lending criteria includes bill payment history (all NH Utilities) and credit score (Eversource only). The NH Utility pays the customer's co-pay directly to the installation contractor, which then constitutes the loan that appears on their utility bill and is repaid by the customer in monthly installments until it is paid off.

The NH Utilities will continue to monitor customer interest in residential on-bill financing as well as capital available for loans and may adjust loan terms as needed. On-bill loan offerings are governed by each NH Utility's tariff and changes are made by updating the tariff with the Commission.

For 2024-2026, no new funds are proposed to be added to the NH Utilities on-bill financing pools. Previously established principal amounts are continuing to serve new customers as loans are paid back by previously served customers, replenishing the fund. As a result, no line item for on-bill financing appears in the 2024-2026 plan, and all energy savings related to the financed projects appear in the program from which rebates were issued.

**Residential Energy Efficiency Loan Program.** Through this program, the NH Utilities partner with local lending institutions, banks, and credit unions to ensure capital and lending expertise is available to customers who want or need it to move forward with larger efficiency projects. Qualified electric and natural gas customers can access a low-interest loan through one of these lender partners to cover their portion of the weatherization work performed through the Home Performance program (e.g., insulation, appliances, and health and safety measures) or for qualified HVAC systems.

Customers are qualified by the lender directly and can finance up to $15,000 for qualifying energy efficiency upgrades, as determined by the customer's utility. The NHSaves Programs provide the lender an up-front interest payment to reduce the customer's loan to two percent APR. Changes to the APR offered to customers may be made by updating agreements with the participating lenders. See Table 4-1 for current loan amounts and repayment terms.

**Table 4-1: Residential Energy Efficiency Loan**

| Amount | Max Loan Repayment Term |
|---|---|
| $1,000 up to $2,000 | 2 Years |
| $2,001 up to $4,000 | 3 Years |
| $4,001 up to $6,000 | 4 Years |
| $6,001 up to $9,000 | 5 Years |
| $9,001 up to $12,000 | 6 Years |
| $12,001 up to $15,000 | 7 Years |

This third-party financing program is not designed to support a specific number of loans, but rather to remove the barrier customers might face in readily securing financing to cover the co-pay portion of their projects. Throughout 2024-2026, the NH Utilities will continue to offer the Residential Energy

Efficiency Loan through current lending partners, with additional lenders added based on customer need and lender interest.[21]

**Moderate-Income Customer Financing.** During the 2019 program year, the NH Utilities established a zero-percent moderate-income financial offering with local lenders. This offering is identical to the loan offering described above, except that the NH Utility buys down the lender interest rate to zero percent and the lender additionally extends the maximum loan term to 10 years. This results in a lower monthly loan payment for moderate-income customers compared to the payment for the Residential Energy Efficiency Loan. The lending partner determines whether the customer is within a moderate-income bracket and eligible for a loan during the loan application process. This financing option for moderate income customers will continue during the 2024-2026 Term.

**Funding—NHSaves Partnership Initiative.** During 2024-2026, the NH Utilities will continue to work with stakeholders, local non-profits, and foundations in order to procure funds to enhance offerings or overcome barriers beyond what is typically funded by the NHSaves Programs. This includes, but is not limited to, addressing pre-weatherization barriers for HEA customers, funding the co-pay of moderate-income customers, coordinating with State agencies or public-serving private entities to identify synergistic opportunities to fund and otherwise promote affordable housing, environmental protection, or public health through energy efficiency activities.

### 4.1.2 Marketing and Education

The NHSaves Residential Programs will be marketed through a variety of channels, both as individual companies as well as through a statewide marketing approach. These channels will include but are not limited to: the NHSaves website; program promotional materials; direct mail; distributor engagement;

[21] The current lending partners include: Merrimack County Saving Bank, Meredith Village Savings Bank, Northeast Credit Union, Woodsville Guaranty County Bank (Eversource and NHEC customers only), Claremont Savings Bank (Eversource customers only), Mills 42 Federal Credit Union (Eversource customers only), and the Savings Bank of Walpole (Eversource customers only).

e-mail; outbound calling; active social media campaigns; paid digital advertising; and design of content for partners' blogs, newsletters, and websites.

The NH Utilities take advantage of market segmentation to effectively target customers and engage them in energy efficiency programs. Understanding what motivates a customer to participate in energy efficiency programs gives the NH Utilities insight into what marketing strategies will work when trying to encourage NHSaves Residential Program participation. During 2024-2026, the NH Utilities plan to continue data analysis of customers' billing and demographic information to effectively market delivery pathways and offerings to those customers who are most likely to respond to and benefit from the NHSaves Residential Programs.

In addition, the NH Utilities conduct significant community outreach through training, such as through the currently offered Button Up Workshops. This is a popular energy-saving workshop series sponsored by NHSaves and coordinated by the Plymouth Area Renewable Energy Initiative ("PAREI"). Please refer to Sections 6.1 and 6.2 for more information on NHSaves Marketing and Education.

Additionally, the NH Utilities have and continue to be committed to coordinating with the NH Department of Energy and other stakeholders regarding the $400,000 in annual SBC funding for the NH Department of Energy's education and outreach, with the intent of encouraging complimentary marketing and outreach efforts.

## 4.2 ENERGY STAR Homes Program

The ENERGY STAR Homes ("ES Homes") program is New Hampshire's energy efficiency solution for residential single-family and multifamily new construction homes. Residential new construction homes must meet strict building guidelines to earn the US Environmental Protection Agency's ("EPA") ENERGY STAR certification and are typically 15 to 30 percent more efficient than standard, built-to-code homes. The EPA's ENERGY STAR Home certification uses the Home Energy Rating System ("HERS") as a scoring mechanism, analogous to a miles-per-gallon sticker for new homes, giving current or future homeowners insight into the home's energy performance. The lower the HERS Index Score, the more energy efficient the home is compared to one built to standard building code.

The goal of ES Homes is to make the building of high-performance single- and multi-family homes the standard for new construction in the State. By targeting home buyers, home builders and new construction contractors, the program connects home builders with third-party HERS Raters who provide support and verification services throughout the construction process. Cash incentives are provided to builders who meet high efficiency standards, and the cost of the HERS rating and expertise is covered by the program.

Over the past decade, the program has captured between 15 and 35 percent of New Hampshire's new construction market, helping newly built homes achieve ENERGY STAR certification. The NH Utilities, participating home builders, HERS Raters, and contractors have been recognized annually with national ENERGY STAR awards and recognition for driving the New Hampshire residential construction market toward high efficiency building designs, techniques, and technologies.

### 4.2.1 Target Market and Incentives

The target market for ENERGY STAR Homes is the entire residential new construction community across the state of New Hampshire. This includes architects, developers, home builders, homeowners, and HVAC contractors. All residential single-family and multifamily new construction projects are eligible to participate in the program, regardless of the fuel or system used in the home for space heating. Manufactured, prefabricated, and site-built homes are all eligible to participate in the performance-based program, which ties incentives to the HERS Index Score achieved by the home post-construction. Net-zero homes have a low HERS Index Score (i.e., energy efficient); therefore, homeowners and builders who build a net zero home will earn a higher performance-based incentive for building above code.

### 4.2.2 Program Design and Delivery Pathways

The program contains two primary pathways— ENERGY STAR 3.1 and Drive to ENERGY STAR – as well as the Drive to Net Zero Competition:

**ENERGY STAR Version 3.1 (ES 3.1).** This pathway establishes a high-efficiency target for new construction homes to be built above code in the state. On average, ES 3.1 homes are designed to save 15 percent or more energy relative to homes built to the International Energy Conservation Code ("IECC") 2015 standards, which are the minimum requirement in the State, currently. When New Hampshire adopts revised building code standards, which is expected to happen during the 2024-2026 Term, the program will update the baselines and adapt their offerings to accommodate the changes.

The NH Utilities rely on the robust HERS Rater contractor network to provide independent third-party inspection, verification, and diagnostic testing to help maximize the energy efficiency of newly built single-family and multifamily homes. Once enrolled in ES Homes, a home builder submits design plans to a HERS Rater for review. The HERS Rater analyzes the submitted designs to determine and share with builders the energy-efficient features needed to ensure the home earns the ENERGY STAR certification. During the construction process, the HERS Rater is responsible for performing site visits and inspections and guiding the builder and contractors about high performance design. Thus, the interventions address not only *financial* barriers, but *informational* barriers as well.

To be eligible for incentives, a home must be enrolled in ES Homes and inspected prior to the installation of any sheet rock or other type of wall covering to ensure that an insulation inspection can occur. Once a home is fully built, the HERS Rater performs a final inspection and calculates the home's energy performance. For 2024-2026, the NH Utilities will encourage the continued adoption of ES 3.1 and will consider adding an all-electric option for builders and customers, such as the ENERGY STAR Next Gen design, to align with and encourage the trend towards electrification and reducing greenhouse gas emissions[22].

**Drive to ENERGY STAR (Drive to ES).** The Drive to ES pathway is designed as an entry point for new builders, HVAC contractors, and single-family homeowners who might be new to energy-efficient

[22] https://www.energystar.gov/newhomes/energy_star_nextgen

building design and practices. The pathway incentivizes home builders to build more efficient homes than the minimum required by the State's energy code. Once a home builder participates in the Drive to ES pathway, an identified program barrier is removed: the erroneous assumption that committing to building an ENERGY STAR-certified home is a complex undertaking requiring multiple steps and interactions with other firms or contractors.

**Drive to Net Zero Home Competition.** The competition is designed to challenge homebuilders, architects, and homeowners to build high-efficiency, net zero energy homes that generate more energy on-site than is used at the home. Typically, net zero homes are 40 to 50 percent more energy efficient than standard homes and score a 10 or below on the HERS Index Score. The NH Utilities started the competition in 2017 and have seen considerable success in promoting beyond ENERGY STAR construction techniques to the New Hampshire residential home builder community through the competition.

The annual competition recognizes three homes in five categories, including: lowest overall HERS Index, lowest overall HERS Index prior to renewables, home's estimated annual operating costs, construction cost per square foot, and technological innovation. The competition is marketed to the state's home builder community and publicized through press releases, videos on the NHSaves website, and at an annual awards presentation. For 2024-2026, the NH Utilities will continue to partner with the New Hampshire Home Builders Association ("NHHBA") to recognize the Drive to Net Zero Home Competition winners at the NHHBA's annual Cornerstone Awards.[23] These awards are presented yearly to recognize excellence in the building industry. Throughout 2024-2026, the NH Utilities will also continue to meet with the EPA to collaborate on how to continue integrating advancements in net zero homes in New Hampshire.

[23] NHHBA. Website: https://nhhba.com/nhhbaevents/cornerstone-awards/.

### 4.2.3 Program Budget and Goals

Table 4-2 summarizes the proposed budget, savings targets and number of participants statewide (i.e., for all Utilities combined) for the term. For more detailed estimates by utility, delivery pathway or measure, please refer to each of the NH Utilities' BC models.

**Table 4-2: ES Homes Program—Energy Savings and Budgets**

| Savings and Budgets | 2024-2026 | Annual Benchmarks | | |
|---|---|---|---|---|
| | | 2024 | 2025 | 2026 |
| **Electric Programs** | | | | |
| Program Budget | $11,256,987 | $3,598,136 | $3,783,971 | $3,874,881 |
| Annual kWh Savings | 7,419,110 | 2,330,862 | 2,493,042 | 2,595,205 |
| Lifetime kWh Savings | 174,310,328 | 54,745,806 | 58,574,779 | 60,989,744 |
| kW Reduction | 400 | 127 | 134 | 139 |
| No. of Participants | 4,061 | 1,290 | 1,368 | 1,403 |
| **Natural Gas Programs** | | | | |
| Program Budget | $3,013,131 | $1,006,146 | $982,651 | $1,024,334 |
| Annual MMBtu Savings | 21,639 | 7,425 | 7,032 | 7,183 |
| Lifetime MMBtu Savings | 510,294 | 175,074 | 165,825 | 169,395 |
| No. of Participants | 877 | 301 | 285 | 291 |

*Note: Any seeming discrepancy in the numbers is due to rounding*

## 4.3 ENERGY STAR Products Program

The ENERGY STAR Products ("ES Products") program's objective is to increase the adoption rates for purchasing and installing high-efficiency appliances, heating, cooling, and water heating systems.

### 4.3.1 Target Market and Incentives

All residential customers in New Hampshire's 540,498[24] households have access to incentives via the ES Products program, which helps to reduce the incrementally higher cost of a wide and evolving array of high efficiency appliances and systems. In addition to incentives, the ES Products program provides consumer education through a robust network of distributors, manufacturers, installation contractors, and retailers all promoting the purchase of energy-efficient products over standard-efficiency options. The program's incentives are designed to help customers overcome the tendency to make purchase decisions based on the lowest purchase price. By providing messaging at the point of sale about the long-term benefits of energy efficiency and reducing the purchase price at the register, the barrier presented by the higher priced ENERGY STAR-certified model is overcome. This program helps customers to lock in energy and cost savings for the life of their qualifying appliance or system purchase. The program also provides customers opportunities to properly dispose and recycle old appliances through turn-in events, thereby ensuring appropriate handling and removal of inefficient appliances from future operation.

### 4.3.2 Program Design and Priorities

The NH Utilities will continue ES Products during 2024-2026 by offering incentives for high-efficiency products, such as appliances, advanced power strips, air purifiers, and dehumidifiers, and will continue to evaluate the cost-effectiveness of other measures for inclusion in the 2024-2026 program, such as smart home energy management systems and connected products. The program will also continue offer incentives for high-efficient heating, cooling, and water heating systems along with control thermostats.

The transformation of the residential lighting market has changed both the measure mix and scale of this program for the 2024-2026 term compared to recent years. Driven in part by the loss of this

[24] https://www.census.gov/quickfacts/NH

significant contributor to energy efficiency savings at the sector level, the EM&V Working Group has commissioned a third-party study to investigate new and untapped opportunity for electric energy efficiency savings in ES Products, as well as other programs. In the meantime, the NH Utilities have been implementing innovations in order to reach more customers and retailers through new and enhanced channels. The NH Utilities introduced midstream incentives for heat pump water heaters in 2023. The NH Utilities will consider changes to the list of measures offered by the existing midstream distributor network to include heat pumps for heating and cooling and Electronically Commutated Motor ("ECM") circulating pumps.

During 2024-2026, the NH Utilities will evaluate cost-effectiveness and customer benefits of introducing the ENERGY STAR Retail Products Platform ("ESRPP"), a collaborative marketing and upstream initiative facilitated by the EPA, ENERGY STAR, energy efficiency program sponsors (i.e., NH Utilities), retailer partners, and other stakeholders to the New Hampshire marketplace. The ESRPP gives program sponsors a national-level structure to offer modest incentives to retailers such as Best Buy, Home Depot, Lowe's, Wal-Mart, Target, and small independent stores (as part of the Nationwide Marketing Group) to increase the sale, promotion, and stocking of high-efficiency appliances.

Incentivized measures may include, but are not limited to: clothes dryers, clothes washers, freezers, refrigerators, and room air conditioners. This new product channel will be designed to generate increased electric energy savings as more energy-efficient products are stocked and sold at big-box and small independent retail stores. In preparation, the NH Utilities will research other state's ESRPP programs and evaluations of those offerings to help determine best practices regarding a possible deployment of a New Hampshire ESRPP.

### 4.3.3 Program Budget and Goals

Table 4-3 summarizes the proposed budget, savings targets and number of participants statewide (i.e., for all Utilities combined) for the term. For more detailed estimates by utility, delivery pathway or measure, please refer to each of the NH Utilities' BC models.

**Table 4-3: ES Products Program—Energy Savings and Budgets**

| Savings and Budgets | 2024-2026 | Annual Benchmarks | | |
|---|---|---|---|---|
| | | 2024 | 2025 | 2026 |
| **Electric Programs** | | | | |
| Program Budget | $25,378,440 | $7,676,235 | $8,555,004 | $9,147,200 |
| Annual kWh Savings | 29,973,168 | 8,818,050 | 10,156,638 | 10,998,480 |
| Lifetime kWh Savings | 375,000,100 | 108,556,962 | 127,798,110 | 138,645,027 |
| kW Reduction | 5,302 | 1,544 | 1,806 | 1,952 |
| No. of Participants | 93,543 | 28,919 | 31,066 | 33,559 |
| **Natural Gas Programs** | | | | |
| Program Budget | $4,481,562 | $1,518,141 | $1,457,572 | $1,505,849 |
| Annual MMBtu Savings | 85,501 | 29,210 | 27,620 | 28,671 |
| Lifetime MMBtu Savings | 1,395,391 | 477,217 | 450,436 | 467,738 |
| No. of Participants | 11,999 | 4,090 | 3,877 | 4,032 |

*Note: Any seeming discrepancy in the numbers is due to rounding*

## 4.4 Home Performance Program

The Home Performance program is a comprehensive, fuel-neutral, whole home program that improves energy efficiency and comfort in existing residential single-family and multifamily homes. The primary objectives are to help customers reduce their energy usage, manage costs, and improve their home's energy performance. This is achieved by deploying and paying for a portion of the cost for utility-managed contractors to undertake heating and hot water equipment upgrades, weatherization measures, and refrigerator replacements.

During the 2024-2026 term, the US Department of Energy will be sunsetting the Home Performance with Energy Star program. Established in 2002, the program has supported 45 program sponsors across

the country, which have collectively retrofitted more than 1 million homes and supported the establishment of a robust home performance industry. The sunsetting of this federal program is designed "to allow home performance programs the flexibility to help states achieve the clean energy goals of the Bipartisan Infrastructure Bill ("BIL") and the Inflation Reduction Act ("IRA").[25]

The NH Utilities will continue to pursue the objectives it has been achieving for the past two decades while also pursuing new pathways and partnerships. The NH Utilities plan a minor rebranding of the program in compliance with federal guidelines but will continue to offer the same solutions to customers through this pathway. The NH Utilities will also review and adapt offerings to broaden access to multifamily buildings with more than four units, and otherwise incorporate or supplement federally funded programs and tax incentives as they are rolled out.

### 4.4.1 Target Market

The primary market for the program is existing residential 1-to-4-unit family homes with high heating usage where the property owner is seeking to reduce energy bills, improve the home's energy performance, and/or increase the home's comfort. The NH Utilities will work with partners to expand eligibility to multi-family properties while maintaining strict quality controls to ensure the program continues to serve as the standard in cost-effective energy efficiency retrofits.

Single-family homes (1 to 4 units) are eligible to participate regardless of how a home is heated. If a home is primarily served by its natural gas utility (residentially metered home heated by natural gas), it participates in Home Performance through its

[25] See "Letter to Partners Announcing Plans to Sunset Home Performance with Energy Star by 2025", https://www.energystar.gov/saveathome/improvements/about, retrieved 6/18/2023.

natural gas utility and if it is heated with a source other than natural gas (i.e., electricity, home heating oil, or propane), it participates through its electric utility.[26]

**Natural Gas-Heated Homes.** Individually metered residential units are serviced through Home Performance. Centrally heated residential units that are on a commercial or master-meter account are primarily served by the NH Natural Gas Utilities through the NHSaves C&I programs (see Chapter 3), however as the federal program winds down, the NH Natural Gas Utilities will review the program design to ensure efficient program design and delivery that streamlines the customer experience.

**Electric, Oil, Wood and Propane-Heated Homes.** These homes are eligible for all services, which are provided by the respective NH Electric Utility.

**Lead Utility.** In order to ensure efficiency in program delivery, the NH Natural Gas Utilities are the first and primary point of contact on homes heated with natural gas, while the Electric Utilities take the lead on homes heated with other fuels. Should the needs of a home heated with natural gas exceed the program funding limit or there are improvements that save only electricity, the relevant electric utility may elect to supplement the provided incentives for an additional amount up to the electric program funding limit. This structure provides natural gas customers with an opportunity to achieve deeper energy savings while honoring the fact that natural gas customers contribute to the system benefits charge on their electric bill as well as the energy efficiency portion of the local distribution adjustment charge on their natural gas bill.

Regardless of heating fuel, utility territory, or which program the project falls into, customers undertaking a multifamily project will have a streamlined single point of contact through their Contractor, Community Action Agency, or other vendor working with the NH Utilities.

[26] For single-family and multifamily homes that are natural gas-heated, the customer's NH Gas Utility pays for weatherization and health and safety measures and the customer's NH Electric Utility pays for the electric savings measures.

### 4.4.2 Program Design and Delivery Pathways

Eligibility requirements and program delivery channels for Home Performance are as follows:

**Contractor Eligibility.** The program supports a robust network of local energy efficiency professionals who provide a number of implementation services including: raising customer awareness of the program, recruiting participants, conducting home energy audits, recommending energy-saving improvements, installing energy-efficient measures, and tracking the energy savings and project progress. The NH Utilities manage a vetting process to ensure all contractors meet the following qualifications: (1) be a registered business in New Hampshire, (2) have adequate weatherization experience, (3) have a minimum of a BPI Building Analyst certification and lead certification, (4) pass an enhanced quality assurance ("QA") review of at least their initial three jobs performed within the program, (5) be able to provide detailed information about the measures installed and energy saved in each home based on standard algorithms detailed in the NH TRM so that savings can be reported consistently and accurately, and (6) agree to the program's pricing and the NH Utilities' terms and conditions.[27] An independent third-party QA process verifies quality installations and provides feedback to the NH Utilities and contractor.

**Program Qualifications.** Customers play a key role in determining if their home qualifies to participate in the program by filling out a form, the Home Heating Index (HHI) Tool, on the NHSaves.com website. Customers are asked for the following information: (1) ZIP code, (2) conditioned square footage of the home, and (3) annual heating & cooling fuel use (one year of fuel history; system accepts up to two different types of heating fuel).[28] Interested residential customers can also work directly with their respective NH Utility to get assistance in determining eligibility and enrolling in the program.

[27] Customers can choose their own contractor provided the contractor meets meet the program's minimum qualifications. If the contractor is not already approved for work in the program, they can be brought in, provided they agree to all the program rules that participating contractors must follow.

[28] The NH Utilities do allow customers with less than 12 months of fuel data to participate in the program, as long as their usage still meets the HHI threshold for the Home Performance program.

The HHI tool is used as both a screening tool and a customer intake system. It can also raise customer awareness regarding their energy consumption. Based on the energy used per square foot within the home, the HHI Tool indicates whether a customer is considered a low, moderate or high energy use customer. If a customer uses enough heating fuel per square foot to meet the program's qualification threshold, there is an opportunity for cost-effective intervention.

**Full Program Services.** The NH Utilities use a streamlined concierge approach from the energy audit through installation and allow customers to choose their contractor from a prequalified list or ask their utility to assign them a contractor based on location and workload. Once a customer qualifies for the program, the contractor will perform a comprehensive energy audit of the customer's home to identify energy efficiency opportunities, calculate potential savings, and prepare an audit report of their findings. The audit report provides the project cost, incentive availability, and payback or return on investment ("ROI") estimations. When presented with the recommendations and audit report, customers must decide within a specified number of days if they want to proceed with the energy-efficient improvements in order to qualify for program incentives. For customers who decide not to proceed, the contractor may provide direct install measures (such as faucet aerators, pipe insulation and Wi-Fi thermostat) at no cost to the customer in addition to the audit report. If a customer decides to proceed with the home improvements, energy efficient measures, including air sealing and insulation, are installed or overseen by the qualified contractor using statewide pre-negotiated prices.

**Direct Install Pathway.** Direct Install services are offered to electric and natural gas customers who do not meet the current HHI threshold (typically moderate to low-usage customers). The contractor performs a simple walkthrough of the home without the more time-consuming and labor-intensive comprehensive audit, and the customer is provided direct install measures at no cost. Additional appliance vouchers may also be offered to the customer to help replace a failing or inefficient appliance and ensure an ENERGY STAR-certified replacement is purchased.

### 4.4.3 Program Budget and Goals

Table 4-4 summarizes the proposed budget, savings targets, and number of participants statewide (i.e., for all Utilities combined) for the term. For more detailed estimates by utility, delivery pathway or measure, please refer to each of the NH Utilities' BC models.

**Table 4-4: Home Performance Program—Energy Savings and Budgets**

| Savings and Budgets | 2024-2026 | Annual Benchmarks | | |
|---|---|---|---|---|
| | | 2024 | 2025 | 2026 |
| **Electric Programs** | | | | |
| Program Budget | $31,012,876 | $9,822,086 | $10,340,107 | $10,850,684 |
| Annual kWh Savings | 2,571,855 | 805,624 | 855,173 | 911,058 |
| Lifetime kWh Savings | 46,578,331 | 14,688,464 | 15,479,371 | 16,410,496 |
| kW Reduction | 679 | 214 | 225 | 240 |
| No. of Participants | 7,108 | 2,333 | 2,370 | 2,406 |
| **Natural Gas Programs** | | | | |
| Program Budget | $5,249,785 | $1,759,593 | $1,709,553 | $1,780,640 |
| Annual MMBtu Savings | 31,951 | 10,932 | 10,402 | 10,618 |
| Lifetime MMBtu Savings | 661,659 | 224,832 | 216,106 | 220,722 |
| No. of Participants | 631 | 213 | 207 | 212 |

*Note: Any seeming discrepancy in the numbers is due to rounding*

## 4.5 Behavioral Programs and Offerings

### 4.5.1 Home Energy Reports

The NH Utilities' behavioral-based program is currently offered by Liberty and Unitil for both their electric and natural gas customers. Consisting of mailed and emailed home energy reports ("HERs"), as well as access to a customer-specific web-based portal, this program educates customers about their

energy consumption and empowers them to adopt energy-efficient technologies and behaviors. Most residential customers are largely uninformed and unaware of their energy consumption and habits. However, when made aware of how much energy they consume via digital, print, or visual communications, customers are more empowered and motivated to adopt energy-efficient behaviors or technologies. Since 2014, one or more of the NH Utilities have utilized a behavioral-based strategy in the form of HERs as a component of the NHSaves Programs. HERs provide customer-specific information in easy-to-understand language and with easy-to-read graphics. The primary objective of HERs is to induce customers to conserve energy by providing easy-to-understand communications comparing their household energy consumption with that of other customers.

### 4.5.2 HER Program Budget and Goals

Table 4-5 summarizes the proposed budget, savings targets, and number of participants statewide (i.e., for all NH Utilities combined) for program years 2024-2026. For more detailed estimates by utility, delivery pathway or measure, please refer to each of the NH Utilities' BC models.

**Table 4-5: HER Program—Energy Savings and Budgets**

| Savings and Budgets | 2024-2026 | Annual Benchmarks | | |
|---|---|---|---|---|
| | | 2024 | 2025 | 2026 |
| **Electric Programs** | | | | |
| Program Budget | $1,032,321 | $338,766 | $342,764 | $350,791 |
| Annual kWh Savings | 15,613,533 | 5,204,511 | 5,204,511 | 5,204,511 |
| Lifetime kWh Savings | 15,613,533 | 5,204,511 | 5,204,511 | 5,204,511 |
| kW Reduction | 2,174 | 725 | 725 | 725 |
| No. of Participants | 104,400 | 34,800 | 34,800 | 34,800 |
| **Natural Gas Programs** | | | | |
| Program Budget | $811,168 | $268,597 | $266,301 | $276,270 |

| Savings and Budgets | 2024-2026 | Annual Benchmarks | | |
|---|---|---|---|---|
| | | 2024 | 2025 | 2026 |
| Annual MMBtu Savings | 95,533 | 31,844 | 31,844 | 31,844 |
| Lifetime MMBtu Savings | 95,533 | 31,844 | 31,844 | 31,844 |
| No. of Participants | 99,729 | 33,243 | 33,243 | 33,243 |

*Note: Any seeming discrepancy in the numbers is due to rounding*

### 4.5.3 Delivered Energy Insights

Since 2021, Eversource has been piloting a behavior offering, Delivered Energy Insights ("DEI"), in Connecticut, Massachusetts, and New Hampshire, which is designed to encourage program participants to be more energy efficient by sending digital letters via email with personalized energy usage information and energy-saving tips. As such, the program is intended to achieve direct savings through behavioral change. The 2022 results underwent a regional evaluation that concluded in May 2023, showing that there may be claimable savings attributable to the program in New Hampshire. Eversource anticipates continuing to offer these reports during the term and monitoring their impact across the service territory, and if the New Hampshire savings continue to accrue, may file an interim program update to propose offering DEIs as a full program with energy savings and benefits.

## 4.6 Income-Eligible Home Energy Assistance Program

HEA is a fuel-neutral weatherization program designed to reduce energy use and energy burden[29] of limited-income households, from both electric and fossil fuel-consuming appliances and HVAC systems, as well as from inadequate insulation and air sealing allowing air infiltrations through the building's shell. HEA serves the state's income-eligible homeowners and renters, who may live in older homes where maintenance has been deferred. HEA measures, such as air sealing, insulation, heating system replacements, and LED lighting provide long-term solutions that reduce the energy burden of these

[29] High energy burdens, often called energy poverty, are when a household spends 10 percent or more of its income on energy-related expenses.

households through lower energy and water consumption while also providing significant non-energy-related benefits.

HEA covers the entire cost of energy auditor-recommended energy efficiency improvements and pre-weatherization barriers and provides practical solutions to help customers reduce their energy usage without sacrificing comfort or quality of life. In addition to energy-efficient measures, the HEA program may provide services to address health and safety barriers in the home, such as inadequate ventilation, old wiring, and damaged insulation.

### 4.6.1 Target Market and Incentives

A baseline potential study estimates that approximately 22 percent of New Hampshire's households meet the income-eligible criteria for HEA, some of which have been served over the past two decades through the NH Utilities' collaboration with the state's CAAs.[30] The HEA program targets income-eligible residential customers who live in single-family buildings (1 to 4 units) and multifamily buildings (5+ units).

To receive HEA services, a household's income must meet the eligibility criteria for participation in the New Hampshire Fuel Assistance Program ("FAP"),[31] the New Hampshire Electric Assistance Program ("EAP"), or anyone residing in subsidized housing. In addition, HEA services may be offered to facilities operated by municipal or nonprofit organizations serving those in need. To this end, during the term the NH Utilities may explore ways to address the persisting need for additional affordable housing,

[30] Itron, Inc. New Hampshire Residential Energy Efficiency Baseline Study. June 11, 2020.

[31] The New Hampshire FAP is funded by the federal Low Income Home Energy Assistance Program's ("LIHEAP") funds and assists the state's low-income customers in paying for heating costs. The NH Department of Energy and New Hampshire's CAAs distribute FAP benefits.

with the goal of building new income-eligible housing stock to efficient standards in addition to continuing to serve the existing housing stock through retrofit projects.

**Incentives.** The NH Utilities will continue to limit incentives per HEA project to $15,000, to cover the costs associated with remediating barriers to weatherization, as well as air sealing and insulation, and appliance and heating system replacements where recommended. In some circumstances, however, homes may require in excess of $15,000 in weatherization and associated work, and additional incentives may be reviewed and approved by an NH Utility. Fixed limits to incentive levels precludes certain income-eligible customers from participating fully, or in some cases at all, leaving vulnerable customers with energy and cost saving opportunities unaddressed or postponed until a future program year. Because much of the cost of a weatherization job involves the mobilization of a contractor to travel to the home, there is an additional opportunity-cost to undertaking a less-than-comprehensive project and then possibly returning in a subsequent year to complete the remainder of the work.

### 4.6.2 Program Design and Pathways

Below is an overview of the program design and pathways for HEA in 2024-2026.

**Customer Intake.** The NH Utilities partner with the CAAs, NH Department of Energy, housing authorities, and other nonprofits across the state to identify and verify eligible customers and projects. This collaboration ensures that the HEA program fully qualifies, prioritizes, and serves income-eligible customers who have a variety of complex needs. The HEA program's partners serve as a consistent and reliable presence within the low-income community and have established relationships with multiple service providers that promote trust and social acceptance, and have access to a variety of local, state, and federal funding sources that improve services and outcomes for the same customers.

**Energy Efficiency Audit and Direct-Install Pathway.** Verification screenings performed by CAAs determine if customers are eligible for HEA based on their income and household size. HEA contractors then perform a comprehensive energy assessment of the eligible home and work with the NH Utilities to identify and determine which cost-effective improvements are needed and can be funded to optimize the energy performance and safety of each home. Then, a team of energy technicians installs

the selected improvements. After a home has received HEA direct-install services, an energy auditor performs an inspection and explains the improvements and expected energy savings to the customer.

For 2024-2026, the NH Utilities will continue to coordinate with the CAAs to deliver HEA weatherization services and will assist CAAs with workforce recruitment and training to help ensure CAAs are able to continue meeting the demand for program services. Should a CAA not be able to provide HEA program services in a timeframe acceptable to the Utility or declines to deliver the services, the work will be assigned to other qualified contractors who meet the NH Utilities' standards for pricing, customer service, and work quality.

**Direct Install Pathway.** A direct install offering has been deployed through the Home Performance program (Section 4.4) and is being reviewed for its efficacy and cost-effectiveness within the HEA framework. In the direct install pathway, a NH Utility-approved contractor performs an on-site assessment of the home to determine energy-saving opportunities and the customer will receive basic measures, such as Wi-Fi thermostats, flow-control water devices, and up to six feet of domestic hot water pipe insulation, without the need for a full on-site energy audit.

**Coordination with Fuel Assistance Programs, WAP, and other NHSaves Programs.** HEA is closely coordinated with the EAP and FAP (funded by LIHEAP). The NH Utilities work with EAP and FAP participants who need weatherization services to help make their homes more energy efficient and help them save on their energy bills. The current income guidelines for FAP and EAP are at or below 60 percent of the state median income for their household size.

The NH Department of Energy administers WAP and contracts with the CAAs to deliver services. The NH Utilities collaborate closely with these HEA partners to maximize the number of projects that are jointly funded by HEA and WAP. Leveraging other energy efficiency funding allows the NH Utilities to serve more income-qualified customers. The NH Utilities will continue to work with the NH Department of Energy to ensure that the impact of energy efficiency funding for the state's most vulnerable customers is maximized.

When a customer qualifies for Home Performance (Section 4.4), the NH Utility verifies if the customer is receiving EAP benefits to determine if participation through the HEA program would be more appropriate. In addition, the NH Utilities work closely with multi-family building owners and homebuilders serving the low-income sector (e.g., Habitat for Humanity, affordable housing non-profits, etc.) to engage them in the HEA or ES Homes (Section 4.2).

### 4.6.3 Program Budget and Goals

Table 4-6 summarizes the proposed budget, savings targets, and number of participants statewide (i.e., for all NH Utilities combined) for the term. For more detailed estimates by utility, delivery pathway or measure, please refer to each of the NH Utilities' BC models.

**Table 4-6: HEA Program—Energy Savings and Budgets**

| Savings and Budgets | 2024-2026 | Annual Benchmarks | | |
|---|---|---|---|---|
| | | 2024 | 2025 | 2026 |
| **Electric Programs** | | | | |
| Program Budget | $39,702,198 | $12,093,240 | $13,335,690 | $14,273,268 |
| Annual kWh Savings | 10,460,677 | 3,195,736 | 3,501,400 | 3,763,541 |
| Lifetime kWh Savings | 140,844,895 | 43,632,568 | 47,110,140 | 50,102,188 |
| kW Reduction | 1,674 | 506 | 561 | 607 |
| No. of Participants | 2,974 | 934 | 997 | 1,044 |
| **Natural Gas Programs** | | | | |
| Program Budget | $7,241,200 | $2,318,890 | $2,418,308 | $2,504,003 |
| Annual MMBtu Savings | 39,800 | 12,772 | 13,344 | 13,683 |
| Lifetime MMBtu Savings | 849,663 | 272,290 | 285,075 | 292,298 |
| No. of Participants | 736 | 235 | 248 | 254 |

*Note: Any seeming discrepancy in the numbers is due to rounding*

*Does not include education and EM&V costs allocated to the Income Eligible sector*

# Chapter Five: Active Demand Reduction (ADR) Programs

Eversource and Unitil have been offering ADR pilots in New Hampshire since 2019,[32] and to customers in Massachusetts and Connecticut since 2017. These offerings are consistently marketed by the utilities and their third-party implementation vendors as "Connected Solutions". The primary objective of the New Hampshire pilots has been to reduce the ISO-NE Installed Capacity Requirement ("ICR"). Reducing the ICR reduces the amount of new generation capacity that needs to be procured, thereby avoiding costs for all ratepayers.

ADR savings (expressed in kW) are realized by typically dispatching resources during high-temperature weekdays in the summer likely to be associated with the ISO-NE system peak. These programs function in a coordinated fashion to collectively reduce system load and provide savings to all users of the ISO-NE grid. Additionally, these programs have been evaluated across the region over the past several years, with another regional evaluation currently underway to assess the combined NH, MA and CT results. Please refer to Attachment Q for a listing of ADR evaluations performed within the region.

Through operating the ADR programs, Eversource and Unitil have gained significant experience and several key findings. The first key finding is that there is a need to over-enroll customers into the programs to meet the desired performance reductions. Not every customer who enrolls actually reduces their load up to nominated capacity during each event. Therefore, to meet the overall MW reduction goals, significantly more MW load needs to be enrolled in the program than the customer self-stated targeted reductions. Another finding is that there is significantly more customer interest for a demand response offering in New Hampshire than the pilot program was designed to meet. The expansion of these offerings in 2024-2026[33] will serve to inform the true demand and potential for

[32] https://www.puc.nh.gov/Regulatory/Docketbk/2017/17-136/LETTERS-MEMOS-TARIFFS/17-136_2019-01-28_EVERSOURCE_AND_UES_REDUCTION_INITIATIVE.PDF

[33] Eversource and Unitil intend to approximately double their ADR budgets from the pilot levels in order to simultaneously address waitlists and sustainable growth, and Liberty Electric intends to introduce the program for its customers.

these programs in New Hampshire. Beginning in program year 2024, the ADR pilots will transition into full program offerings for all NH Electric utilities excepting the NH Electric Cooperative, as all requisite criteria for moving to full program status have been met and ADR:

- Provides quantifiable cost-effective benefits to all users of the electric grid;
- Can be paid for with SBC revenues[34] and is recognized as an explicit part of New Hampshire's Energy Strategy;[35]
- Has been evaluated in New Hampshire as well as neighboring states, and baselines against which savings are measured have been established and reviewed by third-party evaluators and consultants;
- Has a meaningful opportunity to expand upon existing participation in the ADR offerings to deliver additional benefits to customers and to the electric grid, particularly if offerings are more widely marketed;
- Complements the existing suite of NHSaves programs;
- Provides an important tool for the NH Electric Utilities to develop relationships with vendors and customers to better manage decarbonization of the regional grid through beneficial electrification.

As pilot programs, Eversource and Unitil included just the operational costs of the pilots in the calculation of PI. As full programs, the design level PI will incorporate both the costs *and* the benefits achieved by the ADR programs. This structure is similar to all other programs offered, where the NH Utilities are incented to not only manage the costs of the program but also ensure that the programs deliver their planned performance and benefits. If performance is below what is planned, the respective utility will be at risk of earning less than the design level of portfolio PI.

[34] RSA 374-f:3 X. https://www.gencourt.state.nh.us/rsa/html/xxxiv/374-f/374-f-mrg.htm

[35] Section 4 of the New Hampshire State Energy Strategy https://www.energy.nh.gov/sites/g/files/ehbemt551/files/2022-07/2022-state-energy-strategy.pdf

## 5.1 C&I Load Curtailment

The C&I Load Curtailment program is designed to induce electric utility customers to shed load in response to communication from the utility or its curtailment service providers ("CSPs"). The means by which customers shed load is technology neutral, meaning customers can select whatever technology or strategy is most appropriate to their circumstances. The program incentive is tied to the actual summer season (June through September) average curtailment performance during called events, measured against the customer's baseline usage. The baseline calculation continues to be the same as used in the initial C&I ADR proposal in 2019,[36] and is also provided in Attachment Q for ease of reference.

For the most recent three full years, 2020-2022, the C&I ADR offerings generated incremental reduction to summer peak demand each year of 9,700-13.400 kW[37]. For 2024-2026, these programs are projected to provide summer peak demand reduction each year of 17,000-26,000 kW.

**Table 5-1: C&I ADR Program Savings**

| C&I DR kW Savings | | | | | |
|---|---|---|---|---|---|
| **2020** | **2021** | **2022** | **2024** | **2025** | **2026** |
| 13,392 | 11,211 | 9,658 | 17,027 | 21,482 | 26,124 |

## 5.2 Residential Bring Your Own Device

The Residential Load Curtailment program began being offered in New Hampshire in 2020.[38] Customers with their own Wi-Fi thermostats or behind-the-meter batteries are eligible to participate.

[36] https://www.puc.nh.gov/Regulatory/Docketbk/2017/17-136/LETTERS-MEMOS-TARIFFS/17-136_2019-01-28_EVERSOURCE_AND_UES_REDUCTION_INITIATIVE.PDF

[37] Utility Q4 Reports

[38] https://www.puc.nh.gov/Regulatory/Docketbk/2017/17-136/LETTERS-MEMOS-TARIFFS/17-136_2020-02-28_EVERSOURCE_UES_SUPP_INFORMATION.PDF

To implement, the utilities send a signal to an energy resource management system (DERMS) provider, which notifies the device manufacturers to send signals to each enrolled device to temporarily change its normal operations, resulting in load reductions. For Wi-Fi thermostats, incentives are paid based on customer participation. For batteries, incentives are paid based on kW reduced during called events in the summer season (June through September) by battery deployment. Customers retain the right to opt out of any event dispatch at any time, but consistent non-participation may result in removal from the program. From 2020-2022, the Residential ADR pilot offerings generated reduction to summer peak demand each year of 1,100-1,400 kW.[39] For 2024-2026, these programs are projected to provide summer peak demand reduction each year of 2,600-3,700 kW.

**Table 5-2: Residential ADR Program Savings**

| Residential DR kW Savings | | | | | |
|---|---|---|---|---|---|
| **2020** | **2021** | **2022** | **2024** | **2025** | **2026** |
| 1,122 | 1,375 | 1,239 | 2,561 | 3,209 | 3,714 |

## 5.3 Incentives

Please refer to Table 5-3 below for the proposed incentive levels offered by each company.[40]

**Table 5-3: 2024 Connected Solutions Incentive Levels**

| C&I Programs | |
|---|---|
| Interruptible Load | $35 per kW |
| Battery Storage | $200 per kW |

[39] Utility Q4 Reports

[40] Eversource has included planned production for battery storage for each of the three years of the term. While Unitil and Liberty did not plan production, they may offer battery measures if there is customer interest and the measures can be offered cost-effectively.

| Residential Programs | |
|---|---|
| Wi-fi Thermostat (new enrollee) | $50 |
| Wi-fi Thermostat (annual participation) | $20 |
| Battery Storage | $275 per kW |

## 5.4 Budgets and Goals

Table 5-4 summarizes the proposed budget, savings targets and number of participants statewide (i.e., for all NH Utilities offering ADR combined) for the term. For more detailed estimates by utility, please refer to each of the NH Utilities' BC models.

**Table 5-4: ADR Programs—Energy Savings and Budgets**

| Savings and Budgets | 2024-2026 | Annual Benchmarks | | |
|---|---|---|---|---|
| | | 2024 | 2025 | 2026 |
| **C&I Programs** | | | | |
| Program Budget | $4,224,252 | $1,088,624 | $1,383,715 | $1,751,913 |
| Active kW Reduction | *Not cumulative* | 17,027 | 21,482 | 26,124 |
| No. of Participants | 419 | 107 | 138 | 174 |
| **Residential Programs** | | | | |
| Program Budget | $1,662,904 | $485,704 | $537,938 | $639,262 |
| Active kW Reduction | *Not cumulative* | 2,561 | 3,209 | 3,714 |
| No. of Participants | 13,546 | 3,650 | 4,584 | 5,312 |

*Note: Any seeming discrepancy in the numbers is due to rounding*

# Chapter Six: Planning Elements

In addition to continuing to participate and aid in the development and deployment of the SBC funding allocated to NH DOE for generally educating the public on the benefits of energy efficiency, the 2024-2026 NHSaves Plan contains many different planning elements, as detailed below:

## 6.1 Marketing and the NHSaves Brand

The NHSaves marketing efforts play a key role as an informational source for customers, linking them to the energy-saving opportunities best suited to improve their homes and businesses regardless of where they are in their energy efficiency journey. The NHSaves utility partners connect customers with energy efficiency programs offered by each NH utility and create engaging, motivational, and educational marketing strategies, with the goal of increasing awareness of the benefits of energy efficiency and driving increased participation in NHSaves programs and services. The marketing strategies and tactics utilized are customer focused and consider the unique motivational differences between and within the residential, municipal, and C&I sectors.

Throughout 2024-2026, the NH Utilities will continue to build on the success of digital and social marketing platforms and use branding strategies designed to leverage customer trust and awareness through the deployment of a fully integrated marketing campaign. This will include:

- Optimizing the NHSaves website, which has become a critical focal point in the comprehensive marketing strategy, to keep its information relevant and engaging, to increase awareness of programs, and to provide an online platform through which customers engage. The website is currently an informational resource for customers and energy service providers wanting to learn about energy efficiency programs and technologies and contains multiple digital conversion points where customers may redeem vouchers, download rebate forms, sign up for a program, learn about energy-efficient equipment and building design, and/or purchase an energy-efficient product through a digital rebate redemption platform.

- Leveraging established social media platforms (Facebook, Instagram, LinkedIn, Twitter, and YouTube) to grow the audience through targeted messaging to select customer groups, using a social media content calendar of planned campaigns and promotions. The NH Utilities will continue to track social media metrics to measure change over time and gauge progress toward meeting key performance indicators.
- Implementing an integrated native and out-of-home advertising campaign to drive awareness and program participation.
- Using paid media for the purpose of building brand awareness and driving traffic to the NHSaves website for program participation.
- Posting customer success stories or "case studies" on the NHSaves website that share positive customer experiences with the offered energy efficiency services, projects, and technologies.
- Reviewing various marketing materials and rebate forms across programs to ensure they leverage a consistent look and allow for a streamlined customer rebate experience.
- Continuing to leverage national and regional energy efficiency partnership campaigns, such as ENERGY STAR®, to promote programs and services.

The brand awareness research and marketing efforts conducted during the 2018-2020 Plan has helped the NH Utilities better understand customer behaviors, familiarity with energy efficiency and available programs, and the motivators and barriers to adoption of energy efficiency in general as well as the NHSaves programs. During 2024-2026, the NH Utilities will continue to leverage this knowledge to inform campaign strategies and to focus on program-specific marketing campaigns.

The program interventions related to "information barriers" as described in the recently completed NH Market Barriers study include marketing and educational materials and campaigns targeting customers, manufacturers, distributors and retailers, as well as educational and informational resources, training and technical support, joint promotion and advertising support provided to contractors and other trade allies.

The NH Utilities have long recognized the benefits of the statewide brand in promoting energy efficiency programs to customers in overcoming information barriers. In 2022, the utilities were

granted a federal service mark registration, which protects against unauthorized use. To further protect the NHSaves brand and ensure that it represents high standards of delivery and customer service, the NH Utilities will monitor and control the word and logo service mark to prevent unauthorized services from diminishing the brand's value or otherwise confusing customers.

Co-branding (presenting the NHSaves and utility logos simultaneously) is a key marketing approach that allows customers to recognize the statewide nature of energy efficiency programs, provides assurance that the offerings are connected to trusted, regulated entities that they already have a relationship with, and makes the connection between interest in energy efficiency and contacting their NH Utility to take action. In addition to trust and awareness of energy efficiency programs, co-branded marketing encourages customers to implement energy efficiency measures by providing a direct link to the service provider. The utility is integrally connected to implementing energy efficiency projects, so it is vital that customers understand the linkage and have a clear understanding of what steps they need to take to move forward. Call centers, energy efficiency employees, and business account executives all provide critical pathways for customers to gather information, begin a project, and/or resolve questions. Understanding the connection between statewide energy efficiency offerings and a customer's utility provides the full circle of information that the customer needs to act and implement energy efficiency improvements.

In addition to utility-led marketing efforts, the NH Utilities also provide enhanced opportunities for contractors to market and support the programs through a trade ally logo. Launched in 2023, this logo was created specifically for contractors and business partners, while differentiating it to signify the trade ally relationship. By using the trade ally logo, contractors receive the benefit of being associated with the NHSaves brand since it visually demonstrates that they have met the requirements to participate in our programs. The trade ally logo also increases the visibility of the NHSaves brand across the state and leverages marketing campaigns funded by contractors to reach more customers. The trade ally logo will be licensed to qualified contractors through an agreement that provides for review of materials by the NH Utilities and detailed brand guidelines to ensure proper use of the mark and to protect its integrity.

## 6.2 Workforce Development and Education of Customers and Contractors

The recently completed study on NH Market Barriers cites supply and provision barriers as one of the primary market barriers inhibiting more widespread adoption of energy efficiency. Defined as 'lack of workforce and/or workforce awareness and expertise', this barrier has become increasingly prevalent in recent years given economic conditions and low unemployment. It affects not only the NHSaves programs, but the economic performance of the state as a whole.

In response to this market barrier, the NH Utilities will continue to offer contractor and customer education trainings and events across the state during the 2024-2026 term and expand the reach and focus of these efforts. Education is an important component of the NH Utilities' efforts to inform the public about the benefits of energy efficiency and the NHSaves Programs, and contractor trainings are essential to ensure there is a trained workforce to deliver programs and to ensure work is performed in a satisfactory manner and at the scale required.

Educating K-12 students on energy efficiency has the double benefit of empowering students and faculty to help their schools set and achieve energy efficiency goals, while also arming participants with information to influence energy efficiency and performance where they live. During 2024-2026, the NH Utilities will continue to partner with schools to introduce school-aged children across the state to ways in which they can help reduce energy use in their homes and at school. The programs will also introduce additional opportunities at the high school level, focusing on career opportunities within the energy industry trades. All K-12 schools in the NH Utilities' service areas are eligible to participate in New Hampshire Energy Education Project ("NHEEP") presentations and workshops to learn about energy efficiency. The student education and professional development workshop curriculum is aligned with Next Generation Science Standards ("NGSS").

A trained and flexible workforce is critical to achieving the energy strategy of "capturing cost-effective energy efficiency in all sectors"[41], and is essential to the success of the NHSaves programs. The state is currently facing a shortfall in energy workers at a time when continued electrification and federally funded investments are expected to significantly increase the demand for skilled trade workers. Without a sufficiently sized and qualified workforce, costs are likely to increase, projects are likely to face delays, and opportunities to realize cost-effective projects are likely to be lost.

In 2023, NHSaves commissioned GDS Associates to evaluate energy workforce needs and opportunities in New Hampshire, including the workforce needs of NHSaves. GDS' "NHSaves Workforce Development Study Key Findings and Recommendations" includes a list of actionable recommendations for the NH Utilities to consider (Attachment L). Utilizing this research, the NH Utilities are taking a targeted approach to addressing workforce development in the 2024-2026 plan, through efforts such as:

- Increase the K-12 Education offerings at the high school level to provide additional focus on educating students about energy career opportunities.
- Organize and host technical trainings to address skill gaps, support career advancement of incumbent workers, and business development for NHSaves vendors.
- Serve in a coordination capacity to work through partner organizations and vendors to help support the recruitment and training of new workers.
- Coordinate with state agencies to potentially leverage outside funding to address mutual workforce needs.

The NH Utilities look forward to being active in building on the foundation GDS has laid out and coordinating with other interested partners and state agencies in overcoming workforce development barriers and working throughout the 2024-2026 term to carry out a robust plan to support the training of new and existing staff.

[41] Page 13 of https://www.energy.nh.gov/sites/g/files/ehbemt551/files/2022-07/2022-state-energy-strategy.pdf

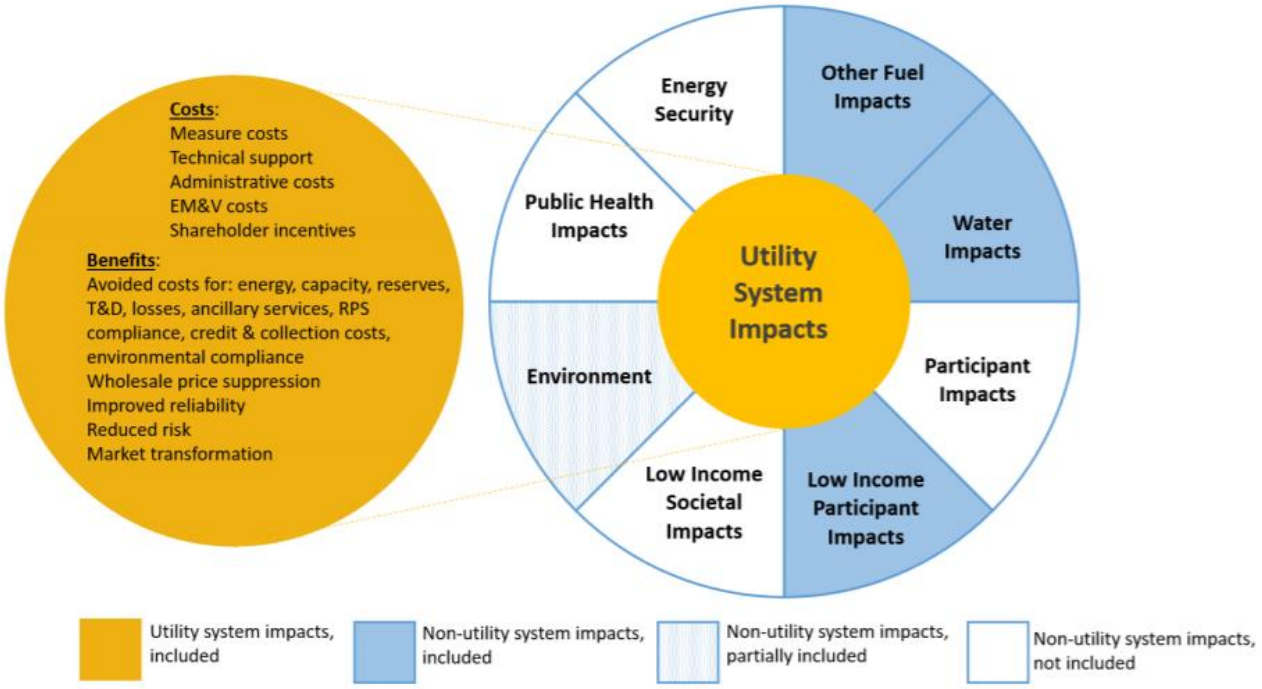
## 6.3 Benefit-Cost Testing

When the energy efficiency programs in New Hampshire were established in 1999, and, then as reaffirmed Commission Order No. 23,850, in DE 01-057, dated November 29, 2001, the NH Utilities utilized the Total Resource Cost ("TRC") test to measure the cost-effectiveness of programs and measures. As part of the settlement to the 2018-2020 Plan, stakeholders agreed to revisit the energy efficiency program's long-standing BC test and assess whether adjustments should be made based on the evolution of policy priorities in New Hampshire. On October 31, 2019, the BC Working Group, which was established by Commission Order for the purpose of reviewing the test, filed a report and a set of recommendations with the Commission regarding the adoption of a new primary cost-effectiveness test (the Granite State Test), and two secondary tests. On December 30, 2019, the Commission issued Order 26,322, approving the BC Working Group's recommendations. As amended in 2022, RSA 374-F:3, VI-a codifies the Granite State Test as the primary cost-effectiveness test for the NHSaves programs, with the TRC test to be used as a secondary test.

### 6.3.1 Granite State and Secondary Tests

The Granite State Test ("GST") (see Figure 6-1) measures the cost to the utility of delivering energy efficiency programs and compares that to the net present value of the benefits of avoided energy (i.e., electricity, natural gas, and other fossil fuels, as well as wood, water, and wastewater), as well as certain non-energy benefits associated with limited-income participants.

**Figure 6-1: Granite State Test**




The GST is applied to each proposed energy-saving program in the portfolio at the time of filing and is applied again when reporting on actual performance to assess achievement of benefits, net benefits and the performance incentive earned. If the Net Present Value ("NPV") of benefits realized by the energy efficiency programs (benefits) is greater than the NPV of costs to deliver those programs (costs), the investment is considered cost-effective. Non-cost-effective expenditures on activities that are not expected to save energy are allowed, and include evaluation, measurement and verification, customer marketing and education, pilot programs, and programs in the early stages of deployment. Further, income-eligible programs may be proposed even if they are not cost-effective.

The GST is also applied by each NH Utility to each approved program at the time of annual and term reporting. If, under that test, a NH Utility's portfolio of programs delivered over the three-year term is cost-effective (with a BC ratio greater than 1.0) and other minimum thresholds are met, the NH Utility is eligible to earn a performance incentive.

The NH Utilities plan for each program to be cost-effective, which in turn requires that on average the measures and projects that make up the programs must also be cost-effective.

In addition to the GST, the Commission approved two secondary cost-effectiveness tests recommended by the BC Working Group—the Utility Cost Test ("UCT") and the Secondary Granite State Test ("GST-2")—and RSA 374-F:3, VI-a(d)(4) authorizes the TRC test as a secondary test. Secondary test calculations will also be performed by each NH Utility to each of the NHSaves Programs and may be used to help inform resource allocation decisions.

## 6.4 Savings Assumptions

### 6.4.1 Free-ridership and Spillover (Net-to-Gross)

Net-to-gross factors are applied to measures to ensure the savings claimed are attributable to the NHSaves program intervention. "Net-to-gross" is shorthand for the combined impact of applying attribution factors to gross savings. These attribution factors include both free-ridership, in which a customer would have adopted the high-efficiency measure even absent the intervention by the utility, and spillover, in which savings are attributable to the utility program but not captured in the program data. Free-ridership impacts are particularly important for those markets in which there is high saturation of the high-efficiency measures being promoted, whereas spillover is important in those markets where program interventions have impacts beyond participants and are changing market behaviors in ways that are difficult to track.

The EM&V Working Group continues to follow the impact of net-to-gross on lighting and other markets closely in order to identify other measures or categories of measures to which net-to-gross factors should be applied. Updates to all savings factors, including those related to free-ridership and spillover, will appear in the annual update to the Technical Reference Manual ("TRM"), which is reviewed and approved by the EM&V Working Group and subsequently filed with the Commission.

### 6.4.2 Realization Rates

To account for the difference between estimated and actual energy savings, the NH Utilities apply realization rates to certain measures or categories based on various kinds of *ex post facto*

measurements or estimates undertaken by independent third-party evaluators. As with net-to-gross values, updated evaluation results will be incorporated into the next update to the TRM and applied on a prospective basis.

If data quality checks identify typographical or mathematical errors or misapplication of a TRM value in reported savings, the NH Utilities shall correct the errors as soon as they are identified, including after a program year is complete, and the NH Utilities shall seek to ensure that any similar errors are corrected everywhere they are relevant. If errors are discovered as part of an evaluation based on a sample of projects, they shall be accounted for in realization rates that shall be applied prospectively.

### 6.4.3 Benefits

**Avoided Energy Supply Components Study.** Underpinning all benefits calculations related to the NH Utilities' energy efficiency plans and reports is the AESC study. The AESC Study is overseen by and receives input from the AESC Study Group, comprised of regulators, utility staff, and energy efficiency consultants throughout New England, and serves as the source of most avoided costs for calculation of benefits of energy efficiency programs in the New England states. The AESC Study generates state-specific models of the value of avoided energy and capacity (kWh in each of four seasonal periods; kW at summer and winter peak; and natural gas, oil, propane, kerosene, cord wood, and wood pellets), as well as Demand Reduction Induced Price Effect ("DRIPE") and avoided costs of certain transmission infrastructure. These avoided energy values are projected out over a 25-year time horizon. In conjunction with the discount rates applied, the NPV benefits of a given project depend on various project-specific factors, including measure life, load-shape, the coincidence of its use with summer electric system peak, and the fuel(s) whose use is avoided. As a result, the value (or benefit) of an avoided annual kWh varies by measure and by project.

The most recent study, *Avoided Energy Supply Costs in New England: 2021 Report* ("2021 AESC") (Attachment R) was completed in March 2021 and amended in May 2021, the results of which were used to estimate the benefits associated with programs to be delivered in 2024-2026.

As stated in Section 2.1.6, New Hampshire's three-year term starts one year earlier than the AESC three-year schedule, with the next report expected to be finalized in early 2024. The outputs of the

AESC, when applied, will result in changes to the marginal avoided costs (i.e., benefits) of avoided electricity, natural gas, and other resources as reflected in the NH Utilities' BC models. The NH Utilities will submit an interim program update once the AESC report is complete to reflect the impact of new avoided costs on program plans in 2025 and 2026.

**Discount Rate.** In accordance with the Final Energy Efficiency Group Report, dated July 6, 1999, in DR 96-150, the nominal discount rate from June of the prior year is applied to the benefit-cost analysis, while the inflation rate is based on the seasonally adjusted rate of inflation between January of the preceding year and January of the current year, as determined by the US Bureau of Economic Analysis. The discount rate methodology utilized by the NH Utilities since DE 96-150 is updated for current inputs within each planning period. The determination of whether to continue utilizing this methodology or to create a new methodology to arrive at an alternative discount rate was evaluated as part of the Benefit Cost Working Group's efforts in DE 17-136. The Working Group determined that a low discount rate was appropriate to use in evaluating energy-efficiency programs, and the Working Group concluded in a set of recommendations and development of the Granite State Test, both of which were approved by the Commission in December of 2019 in Docket No. DE 17-136.

These efforts were guided in large part by the National Standards Practice Manual, which provides a consistent framework for energy efficiency programs across the country to develop jurisdiction-specific cost-effectiveness tests. This framework is centered on a review of priorities reflected in state policy, law, and regulation, and specifies the need for a low discount rate to accurately evaluate energy efficiency investments. Updating the discount rate inputs for the 2024-2026 Plan, the NH Utilities have applied a nominal discount rate of 8.25 percent (June 2023 value) and an inflation rate of 5.33 percent (rate of inflation between Q1 2022 and Q1 2023), resulting in a real discount rate of 2.78 percent used for NPV cost and benefit calculations.

### 6.4.4 Non-Energy Impacts

As discussed in the BC Working Group, and per Commission Order,[42] the NH Utilities are applying non-energy impacts ("NEIs") in cost-effectiveness screenings in the GST by reflecting low-income participant NEIs, based on New Hampshire-specific primary research on the HEA program. Specifically, based on the HEA evaluation, a per-project value reflecting participant NEIs—including increased comfort, decreased noise, and health-related NEIs—will be applied annually to each weatherization project over its measure life, as reflected in the TRM.[43] The GST also reflects other resource impacts for water and delivered fuels.

## 6.5 Performance Incentive

As part of the DE 17-136 Performance Incentive Working Group, changes to the PI structure were proposed, approved, and implemented for Plan Year 2020. For the 2024-2026 Plan, the NH Utilities will continue to utilize the revised PI framework with two minor adjustments to align with the Plan structure.

This change results in the following:

1) The NH Utilities will continue to file annual reports to illustrate their progress against annual benchmarks, but actual performance incentive will be based on performance over the cumulative three-year term, as documented in each Utility's comprehensive term report to be filed on June 1, 2027.
2) Spending limits shall apply to the approved three-year term budget rather than annual benchmarks.

Table 6-1 and Table 6-2 illustrate the performance incentive matrices.

[42] Docket No. DE 17-136, Order Approving Benefit Cost Working Group Recommendations, No. 26,322, Dec. 30, 2019; Order Approving 2020 Update Plan, No. 26,323, Dec. 31, 2019.

[43] Opinion Dynamics. Home Energy Assistance Program Evaluation Report 2016-2017, Final, July 29, 2020. https://puc.nh.gov/Electric/Monitoring%20and%20Evaluation%20Reports/20200729-NHSaves-HEA-Evaluation-Report-FINAL.pdf.

**Table 6-1: Performance Incentive Components (Electric)**

| PI No. | Component Title | Description | Incentive Weight | Minimum Threshold | Maximum PI Level | Verification |
|---|---|---|---|---|---|---|
| 1 | Lifetime kWh Savings | Actual/Planned Lifetime kWh Savings | 35% | 75% | 125% | **Term Filing w/Commission** |
| 2 | Annual kWh Savings | Actual/Planned Annual kWh Savings | 10% | 75% | 125% | **Term Filing w/Commission** |
| 3 | Summer Peak Demand Savings | Actual/Planned ISO-NE System-wide Summer Peak Passive kW Savings | 12% | 65% | 125% | **Term Filing w/Commission** |
| 4 | Winter Peak Demand Savings | Actual/Planned ISO-NE System-wide Winter Peak Passive kW Savings | 8% | 65% | 125% | **Term Filing w/Commission** |
| 5 | Value | Actual/Planned Net Benefits | 35% | 75% | 125% | **Term Filing w/Commission** |
| **Total** | | | **100%** | | | |

For the NH Natural Gas Utilities, the kW components are omitted from the framework.

**Table 6-2: Performance Incentive Components (Natural Gas)**

| PI No. | Component Title | Description | Incentive Weight | Minimum Threshold | Maximum PI Level | Verification |
|---|---|---|---|---|---|---|
| 1 | Lifetime MMBtu Savings | Actual/Planned Lifetime MMBtu Savings | 45% | 75% | 125% | **Term Filing w/Commission** |
| 2 | Annual MMBtu Savings | Actual/Planned Annual MMBtu Savings | 20% | 75% | 125% | **Term Filing w/Commission** |
| 3 | Value | Actual/Planned Net Benefits[2] | 35% | 75% | 125% | **Term Filing w/Commission** |
| **Total** | | | **100%** | | | |

Additional requirements are as follows:

- The utility's portfolio of programs must be cost-effective before any PI can be earned, meaning the BC ratio must be at least 1.0.
- If the electric program portfolio does not meet a minimum threshold of 55 percent of total energy savings from electricity, the coefficient will be reduced to 80 percent of the design value. That is, the total incentive level decreases to a maximum of 4.4 percent (e.g., for lifetime electric savings the PI would change from a target of 1.925 percent to a maximum of 1.54 percent, etc.).
- Actual Lifetime savings must be at least 75 percent of planned lifetime savings in order for any PI to be earned on the lifetime savings component.
- Actual Annual savings must be at least 75 percent of planned annual savings in order for any PI to be earned on the annual savings component.
- Actual Passive summer peak kW savings must be at least 65 percent of planned passive summer peak kW in order for any PI to be earned on the summer demand component.
- Actual Passive winter peak kW savings must be at least 65 percent of planned passive winter peak kW in order for any PI to be earned on the winter demand component.

- Actual portfolio Net Benefits must be at least 75 percent of the planned Net Benefits in order for any PI to be earned on the Net Benefits component.
- Earned PI on each component is capped at 125 percent of that component's coefficient. That is, the maximum total PI is 6.875 percent of spending.
- PI will be calculated on actual portfolio spending, up to 105 percent of approved portfolio budget, excluding performance incentive. That is, the actual portfolio spending may exceed the planned portfolio budget, regardless of actual revenues and excluding the performance incentive, by up to 5 percent, unless otherwise authorized by the Commission. A utility may request approval from the Commission to spend in excess of 105 percent of **the approved term budget** if it can demonstrate good reasons why the cap should be exceeded. In that case, it is anticipated that PI would be calculated against actual program spending at the portfolio level, up to 105 percent of the revised, Commission-approved budget, or as otherwise ordered.

## 6.6 Technical Reference Manual

The NH Utilities work with the EM&V Working Group to review savings assumptions, incorporate New Hampshire evaluation results, identify changes in federal equipment standards, reference neighboring states' evaluations and TRMs, and update relevant savings algorithms. Historically, these changes have been made by the NH Utilities and reflected in the BC models filed with each plan. Beginning in 2021, these savings assumptions were also thoroughly documented in the New Hampshire TRM, which contains the set of standard methodologies and inputs for calculating the savings impacts of the NHSaves Program measures and is available in two forms: an eTRM available online and a PDF on the Commission website.

The primary source of methodologies and inputs for the TRM is New Hampshire-specific evaluations, where available. New Hampshire-specific results are favored over results from other jurisdictions to account for differences in climate, hours of use, program design and delivery, market conditions, and evaluation frameworks. When considering whether to apply results from a study originating in another jurisdiction to New Hampshire programs, the EM&V Working Group will consider (1) the similarity of evaluated program/measures to those offered in New Hampshire; (2) the similarity of relevant markets and customer bases; (3) the recency of the study relative to the recency of any applicable New

Hampshire results; and (4) the quality of the study's methodology and sample size. In addition to third-party evaluations, inputs may also be based on sources including manufacturer and industry data, data from government agencies such as the US DOE or EPA, or credible and realistic factors developed using engineering judgment. Savings from energy efficiency measures and projects will be calculated using the TRM that is in effect during the program year in which the application or project savings are approved by the respective NH Utility. See Attachment S for the 2024-2026 TRM and Section 2.1.6 for more details on the TRM reporting process within the Plan framework.

## 6.7 Lost Base Revenue

Eversource, as the only NH Utility collecting Lost Base Revenue ("LBR") in 2024-2026 to account for the revenue impacts of energy efficiency, shall calculate planned and actual LBR consistent with prior practice. If Eversource adopts a decoupling mechanism during the Plan, they shall eliminate their LBR mechanism as follows. Eversource shall (1) employ the terminology set forth in the LBR working group report of August 29, 2018, whose methodology was approved in Docket No. DE 17-136, to ensure that the method used for actual LBR collections is consistent; (2) continue to file Quarterly Reports with the Commission, using a consistent format; (3) apply 100 percent of the calculated monthly savings using the paid date, which is on average two months after the install date; (4) cease accruing lost base revenues in the first month following effective date of any decoupling mechanism approved by the Commission; (5) use the average distribution rate in effect at the time of the triennial plan filing, or as updated by Commission order during the term, for planning purposes, while using the actual rate in effect at the time of the reconciliation filing for reconciliation purposes; and (6) determine carrying costs on LBR over and under recoveries using the Prime Rate, compounded monthly.

# Chapter Seven: Evaluation, Measurement & Verification

## 7.1 Purpose and Overview

EM&V has been an integral and essential component of efficiency programs in New Hampshire since inception[44]. Ensuring robust EM&V of energy efficiency programs is critical to demonstrating the accuracy of reported energy and demand savings and determining cost effectiveness of ratepayer-funded programs. The primary purposes of EM&V are as follows:

**Ensure accurate and credible impacts.** EM&V ensures that program impacts reported to regulators and stakeholders are credible and sufficiently accurate for decision-making. EM&V measures "impact factors", including the percentage of energy saving actually realized (i.e., realization rates), based on independent third-party analysis of completed projects. These realization rates are applied to gross savings, resulting in "adjusted gross" values. EM&V also measures the savings attributable to the programs' interventions rather than to naturally occurring market adoption, and applies free-ridership and spillover factors (also called "net-to-gross") to ensure the NH Utilities are credited only for savings the programs induce. EM&V also ensures that measure lives, standard efficiency baselines against which savings are measured, and NEIs are as accurate and up to date as administratively feasible. These impacts are documented in the NH TRM, which includes entries for each measure or measure type offered by the programs and describes in detail how the NH Utilities calculate and adjust savings for energy efficiency measures.

**Determine cost-effectiveness.** EM&V produces impact factors described above and assesses costs of energy efficiency by researching total and incremental costs at the measure level (e.g., the difference between what the customer would pay for a standard-efficiency measure and the high-efficiency measure). These EM&V results are used as inputs to cost-effectiveness tests to gauge both the measure and the overall programs' cost-effectiveness, ensuring that ratepayer dollars are well-spent.

[44] All completed New Hampshire evaluations are posted at: https://puc.nh.gov/Electric/Monitoring_Evaluation_Report_List.htm

**Support continuous program improvement.** EM&V goes beyond verifying program impacts by assessing the effectiveness of program delivery and the evolution of the market. It undertakes primary research such as process evaluation and market characterizations studies, which investigate what is happening at the retail, distributor, and manufacturing levels, what approaches other jurisdictions are taking to address adoption of energy efficiency products, and how customers think and behave in relation to energy use at their homes and businesses. These studies identify program strengths, limitations, and opportunities and make recommendations for continuous program improvement.

**Support timely regulatory reporting.** EM&V is used to meet regulatory commitments to the Commission and the ISO, as well as instilling ratepayers' and stakeholders' confidence that programs are effective and that estimates of claimed savings are credible. The NH EM&V Working Group ("EM&V WG) proposes to continue the evaluation framework in 2024-2026 that has successfully resulted in high-quality, independent EM&V efforts.

The NH EM&V WG historically consisted of representatives from the NH Utilities, staff of the NH Department of Energy (previously the Commission), a representative appointed by the EESE Board to represent stakeholders, and independent evaluation consultants under contract to the NH Department of Energy (and previously under contract with the Commission). As of this writing, the future of the EESE Board is uncertain due to current legislation under consideration. Should the EESE Board be dissolved, the NH Utilities propose that the EESE Board determine who should replace the EESE Board's seat on the EM&V WG going forward.

The EM&V WG has successfully managed numerous studies since its creation, working collaboratively to ensure confidence in evaluation results and build stakeholder and regulatory trust in the NHSaves Programs. The EM&V process ensures credible and accurate reporting of energy savings by conducting independent evaluation of NH programs while also leveraging evaluation results from other jurisdictions, where appropriate, to make best use of available resources. Although members of the EM&V WG have successfully resolved evaluation-related disagreements to date, the Utilities propose to follow the process established in the previous term for resolving potential disputes, which allows for issues on which the EM&V WG cannot reach consensus to be adjudicated by an appeal to the

Commission. In a dispute that is appealed to the Commission, each party will provide a written position summary for Commission review and resolution. For purposes of this dispute resolution process, 'parties' to the EM&V WG include the Utilities and the Department of Energy.

The EM&V WG developed a Strategic Evaluation Plan (SEP) for 2024-2026. The SEP provides a priority set of evaluation activities that are essential to effective programs, transparency, and continuous improvement of the NHSaves programs and the New Hampshire energy efficiency market. Attachment P provides a detailed description of the SEP and each of the planned studies.

## 7.2 Statewide EM&V Budgets

The Statewide EM&V budget (Table 7-1), which entails common EM&V costs shared by all utilities, and Total EM&V budget (depicted in Table 1-12), which entails each utility's entire EM&V budget, including internal and company-specific costs, are consistent with past budgeting and do not exceed five percent of each utility's annual program budget, per the law. Any funds budgeted in the EM&V budget activity category that the NH Utilities anticipate will not be spent within the 2024-2026 term can be utilized for other program-related purposes. Attachment A contains more details on the EM&V activities and budgets.

**Table 7-1: Statewide EM&V Budget 2024-2026**

| EM&V Task | 2024-2026 Plan | Annual Benchmarks | | |
|---|---|---|---|---|
| | | 2024 | 2025 | 2026 |
| Activities to support regulatory and other mandated reporting requirements | $4,525,000 | $1,530,000 | $1,480,000 | $1,515,000 |
| Third-party EM&V Studies | $3,050,000 | $1,510,000 | $1,235,000 | $305,000 |
| Department of Energy Consultants Support | $300,000 | $100,000 | $100,000 | $100,000 |
| **Total Statewide EM&V Budget** | $7,875,000 | $3,140,000 | $2,815,000 | $1,920,000 |
| *Statewide EM&V Budget as % of Total Budget* | 3.1% | 3.8% | 3.3% | 2.2% |
| *Third Party Evaluation Budget as % of Statewide EM&V Budget* | 39% | 48% | 44% | 16% |

*Note: Any seeming discrepancy in the numbers is due to rounding.*

# Conclusion

As presented here, the 2024-2026 Plan reflects a coordinated and integrated planning effort among the six NH Electric and Natural Gas Utilities, based upon two decades of successful program delivery and reflective of the guidance of State policy and the support and input from a diverse array of energy efficiency stakeholders, contractors, and customers. The NH Utilities look forward to working together to executing this plan for 2024-2026 as we simultaneously continue to work to augment and potentially incorporate federal funding to deliver additional programs and benefits seamlessly for the residents and businesses of New Hampshire.