Efficiency Vermont Annual Report 2023

For the period 1/1/2023-12/31/2023

December 23, 2024

Efficiency Vermont
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Contents

Pursuant to the January 27, 2022 Order of Appointment for Vermont Energy Investment Corporation (Section III.10.A) and December 27, 2022 Process and Administration of an Energy Efficiency Utility Order of Appointment (Appendix B.4), Efficiency Vermont submits its 2023 Annual Report to the Vermont Public Utility Commission (Commission) and the Vermont Department of Public Service (Department) in fulfillment of its energy efficiency utility (EEU) annual reporting requirements.

1 Executive Summary

1.1 About Efficiency Vermont

Efficiency Vermont is helping the state transition to a more affordable and cleaner future. The work of Efficiency Vermont, which is enabled by the support of Vermont electric ratepayers, aims to reduce the cost of energy for all Vermonters, while creating good jobs, improving the economy, and lowering carbon emissions. Efficiency Vermont helps Vermont families, businesses, and institutions understand and make better use of energy, whether lowering the cost of heating and cooling buildings or adopting efficient appliances, lighting, and other technologies that drive down the total cost of energy. By engaging up and down the supply chain, Efficiency Vermont works with partners to lower the cost of energy efficiency solutions through the utilization of market transformation tools including incentives, training, and expert advice. These market transformation tools assist Efficiency Vermont in partnering with distribution utilities (DUs), heating fuel suppliers, building trades professionals, manufacturers, distributors, and retailers to save customers energy and money.

Efficiency Vermont operates in three-year periods with specific State-mandated performance goals linked to compensation. Efficiency Vermont was created by the Commission and the Vermont Legislature in 2000 as a statewide, third-party, objective resource to meet the public's need for energy services through the development and implementation of energy efficiency programs in Vermont. Since its inception, Efficiency Vermont has been administered by VEIC, which currently holds an appointment from the Commission to administer Efficiency Vermont through the end of 2033.

1.2 2023 Summary

In 2023, the third year of the three-year performance period (2021–2023), Efficiency Vermont was privileged to help more than 30,463 Vermonters with objective guidance to improve the affordability and comfort of their homes, businesses, institutions, and communities with energy efficiency. Together, Vermonters will save more than $174 million over the lifetime of the 2023 investments[1] in efficient equipment and buildings.

These benefits are the result of a statewide effort. While Efficiency Vermont worked with Vermonters in every county, it also supported and grew the Efficiency Excellence Network (EEN), the statewide network of installers, designers, builders, architects, and electric vehicle (EV) auto dealers trained to deliver the highest-quality efficient technologies and services. With these partners—who provide a growing number of green jobs—Efficiency Vermont worked hard to ensure that all Vermonters have local access to affordable, top-quality efficient goods and services.

[1] 2023 investments factored into the lifetime savings calculation include the following costs: a) Efficiency Vermont 2023 costs: $55,068,840 (includes Resource Acquisition and Development and Support Services spending actuals, and the Performance Award; b) Customer costs: $31,333,471; and 3) Department of Public Service evaluation and other costs, $1,430,809.

As Vermont's energy sector changes rapidly, the critical role of effective partnerships in delivering value has emerged in every aspect of Efficiency Vermont's work. Efficiency Vermont partnered with distribution utilities (DUs), state agencies, weatherization agencies, clean energy advocates, retailers, and contractors to ensure a positive customer experience in the delivery of comprehensive energy services that lower customers' energy burden, including new Flexible Load Management (FLM) and refrigerant management programs intended to lower both energy costs and greenhouse gas (GHG) emissions, while helping the state achieve its clean energy and climate goals.

1.3 2023 Savings

Efficiency Vermont's deployment of 2023 funds and savings results provided in this Annual Report are reported in relation to its 2023 budgets and three-year 100% Quantifiable Performance Indicators (QPIs) and Minimum Performance Requirements (MPRs).[2] At the end of 2023, which represents the full three-year performance period, Efficiency Vermont had achieved savings results of 91% of its three-year 100% Electric QPI#2 megawatt hours (MWh) savings goal and 96% of its three-year 100% Thermal Energy and Process Fuels (TEPF) QPI#1 million British thermal units (MMBtu) savings goal. Efficiency Vermont achieved between 82% and 106% of its 100% goals for electric QPIs #1 through #6 with an average of 93%; and achieved 96% and 76% of its100% goals for TEPF QPIs #1 and #4 respectively. Figure 1 illustrates Efficiency Vermont's 2023 savings results toward its 100% energy-related QPI goals.

[2] Efficiency Vermont's 2023 budgets and 2021-2023 performance goals were originally approved by the Commission in Order Approving Revised Demand Resources Plan for Efficiency Vermont (Case No. 19-3272-PET, 05/27/2021) and Order Approving Compliance Filing of Efficiency Vermont's Performance Targets for 2021-2023 Performance Period (Case No. 19-3272-PET, 09/20/2021). Updated budgets were filed in Efficiency Vermont's Revised 2022 Budget Variance Report (Case No. 23A-0924, 03/23/2023) and in a subsequent correction filed on 06/7/2023. The updated budgets included the carryover of unspent 2022 funds approved by the Commission in Order Approving Efficiency Vermont Request to Carry Over Unspent EEC and TEPF Funds (Case No. 23-0926-PET, 04/25/2023). Additionally, the Commission approved 2021-2023 performance target adjustments in Order Approving Vermont's 2021-2023 Savings Verification and Performance Compensation (Case No. 24-0967-PET, 10/03/2024).

Figure 1. Efficiency Vermont's 2021-2022 savings results toward its three year (2021-2023) 100% energy-related QPI goals.

1.4 Electric Efficiency

In 2023, Efficiency Vermont generated electric energy savings of 72,579 MWh. By the end of 2023, this brought Efficiency Vermont's performance towards its three-year 100% Electric QPI #2 goal to 91% or 231,533 MWh. In 2023, Efficiency Vermont electric resource acquisition (RA) spending was $40,090,231[3] or 92% of the electric RA budget for the year.[4] The vast majority of 2023 MWh savings came from investments in three major markets: the business existing facilities market with43,239 MWh or 60% of total electric MWh savings for the year; the residential efficient products market with 21,225 MWh or 29% of total electric MWh savings for the year; and the business new construction market with 4,206 or 6% of total electric MWh savings for the year.

[3] Excluding operations fee.
[4] For more information on Efficiency Vermont's 2023 spending results, see Efficiency Vermont's 2023 Budget Variance Report filed on 3/15/2024 in Case No. 24A-0799.

Figure 2 shows 2023 electric RA spending by major market and the Energy Savings Account (ESA) Pilot.[5] Figure 3 shows 2023 MWh savings by major market and the ESA Pilot. (See Sections 2-4 for RA program highlights, and Section 5 for Development and Support Services [DSS] program highlights.)

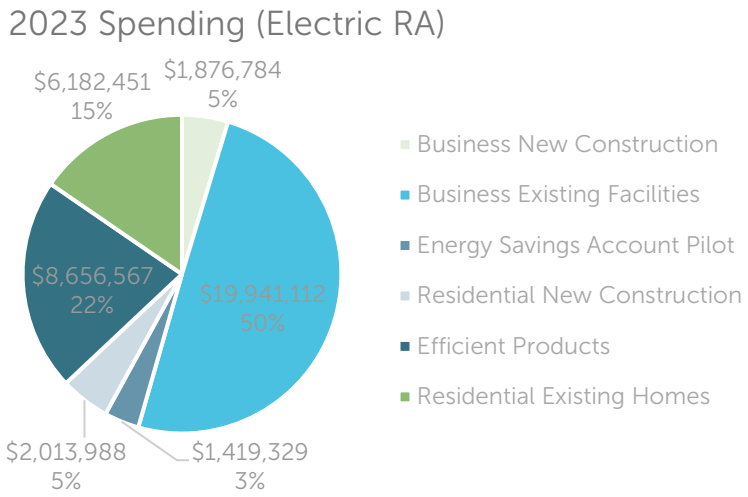

Figure 2. 2023 electric RA spending by major market and the ESA Pilot.

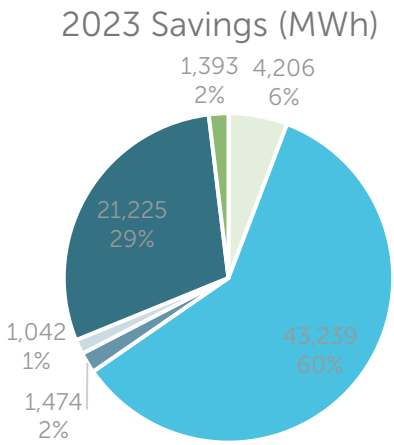

Figure 3. 2023 electric savings (MWh) by major market and the ESA Pilot.

1.5 Thermal Energy and Process Fuels Efficiency

In 2023, Efficiency Vermont generated preliminary savings of 110,825 MMBtu. By the end of 2023, this brought Efficiency Vermont's preliminary performance towards its three-year 100% TEPF QPI #1 goal to 327,388 MMBtu or 96%. In 2023, Efficiency Vermont TEPF RA spending was $8,302,054[6] or 100% of the TEPF RA budget for the year. Preliminary 2023 MMBtu savings came from RA investments in three major markets: the business existing facilities market with 57,482 MMBtu or 52% of total TEPF MMBtu savings for the year; efficient products with 37,661 MMBtu or 34% of total MMBtu savings for the year; and existing homes with 15,681 MMBtu or 14% of total MMBtu savings for the year. Figure 4[7] shows 2023 TEPF major market RA spending. Figure 5 shows 2023 TEPF major market MMBtu savings. (See Section 2-4 for RA program highlights and Section 5 for DSS program highlights.)

[5] The spending values reported in Figure 2 exclude Efficiency Vermont's operations fee.
[6] Excludes Efficiency Vermont's operations fee.
[7] The spending values reported in Figure 4 exclude Efficiency Vermont's operations fee.

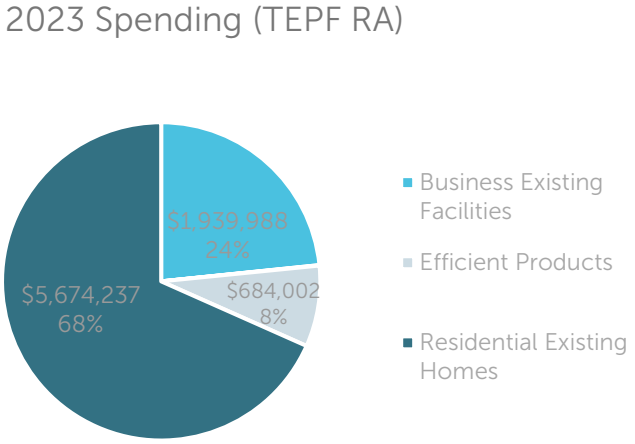

Figure 4. 2023 TEPF RA spending

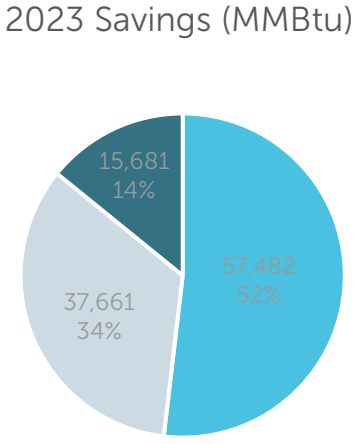

Figure 5. 2023 TEPF savings (MMBtu)

2023 Services

Efficiency Vermont designed and delivered objective, customer-focused, technical, financial, and educational services to help Vermonters overcome barriers to improving the energy efficiency of their homes, businesses, institutions, municipal facilities, and transportation choices.

2 Services for Business Customers

2.1 Business Existing Facilities

This category includes commercial, industrial, institutional, and municipal facilities. Efficiency Vermont provided electric and TEPF prescriptive rebates across a range of technologies for lighting; heating, ventilation, and air conditioning (HVAC); and refrigeration equipment. In addition, Efficiency Vermont offered customized efficiency incentives and financing to help business owners purchase and install specialized energy-saving equipment and technical support for high-performance operations that match their unique needs. Business services were tailored for businesses of all sizes and market sectors in Vermont. (See Section 2.3 for information about crosscutting services for both business existing facilities and business new construction.)

In 2023, Efficiency Vermont saw increased market activity in the SMARTLIGHT program and in cold climate heat pumps. Throughout 2023, Efficiency Vermont supported the market to obtain savings prior to (1) the sunsetting of ENERGY STAR fixture incentives in July (due to federal EISA, which banned the sale of CFLs), [8] and (2) the end of SMARTLIGHT incentives due to the Vermont Jan 1, 2024, ban of 4-foot linear fluorescent bulbs, per Act 120. [9]

2.1.1 Energy Savings Account Pilot

In 2023:

- Six of eight participants requested and received extensions to spend down their pilot operating balance in 2024 and beyond.
- Five of eight pilot participants completed a total of nine projects.
- All eight participants submitted their required annual progress reports to Efficiency Vermont.

2.2 Business New Construction

Efficiency Vermont's support for the creation of efficient new buildings continued to focus on architects, engineers, specialty design service providers, construction tradespeople, equipment suppliers, installation contractors, commissioning agents, appraisers, lenders, developers, and real estate agents. Efficiency Vermont also worked with building owners who were key members of

[8] The federal Energy Independence and Security Act (EISA) of 2007 effectively ended Efficiency Vermont's support of ENERGY STAR LED downlights and fixtures, starting July 1, 2023.

[9] Act 120 went into effect on January 1, 2024, and bans the sale of 4-foot mercury-containing fluorescent lamps. Although the ban will increase the sales of energy-efficient products in 2024 and beyond, it will increase the energy savings baseline. This will diminish the amount of incremental claimed energy savings Efficiency Vermont can report in 2024. Therefore, in 2023 Efficiency Vermont emphasized the installations of energy-efficient lamps to increase energy savings in the market before the ban of mercury-containing lamps occurred, while also being able to report an optimum amount of energy savings in 2023. The emphasis occurred in several markets.

teams undertaking construction projects by institutions, government agencies, and large businesses with multiple buildings. Efficiency Vermont completed 65 building projects in 2023. Additionally, Efficiency Vermont provided energy efficiency training and information to professionals and tradespeople involved in new construction and renovation projects through the EEN, Energy Code Assistance Center, and Better Buildings by Design (BBD) conference (see sections 4.3, 5.1.1, and 5.1.4), and through video-based training on Efficiency Vermont's website. For information about crosscutting services for both business new construction and existing facilities, see Section 2.3.

In 2023, Efficiency Vermont:

- Closed 65 new construction projects: 47 in Controlled Environment Agriculture (CEA) cannabis facilities, and others including municipal buildings, medical facilities, and geothermal systems.

2.3 Crosscutting Services for Business Existing Facilities and New Construction

2.3.1 Vermont's Largest Energy Users

In 2023, Efficiency Vermont supported approximately 293 large businesses that typically use more than 1,000 MWh of electricity per year. Efficiency Vermont continued to take a customized approach with designated staff maintaining long-term proactive relationships with individual businesses. To design and deliver effective, customized services, Efficiency Vermont maintained a deep understanding of each company's priorities and challenges. Additionally, Efficiency Vermont increased its engagement with the supply chain to help address the unique hurdles facing its largest customers.

In 2023, Efficiency Vermont:

- Closed over 293 projects as part of Round II of its Regional Development Corporation (RDC) initiative. This involves close partnership with the twelve RDCs in the state, achieving geographic equity.
- Provided a presentation introducing the Strategic Energy Management (SEM) Program to four companies participating in Kaizen Events or "energy treasure hunts".[10] SEM provides continuous improvement opportunities resulting in energy savings for engaged customers, helping them commit to enhanced, and longer-term efficiency realization goals.
- Recognized 20 facilities that achieved 100% LED status thanks to the new Tubular LED (TLED) initiative that provided enhanced incentives and proactive outreach to businesses to support the replacement of fluorescent tubes with LEDs.
- Conducted the Best Practices Exchange (BPX), welcoming 200 commercial and industrial (C&I) facilities managers, decision-makers, mechanical contractors, and manufacturers to share industry best practices. This was the highest attendance in the history of the event.

[10] Kaizens deliver a comprehensive list of energy efficiency projects and actions.

2.3.2 Small and Medium-Sized Businesses

Efficiency Vermont designed and implemented services addressing the needs of Vermont businesses that typically use up to 1,000 MWh per year and that are not served under Efficiency Vermont's targeted markets initiatives (see Targeted Markets in Section 2.3.3). In 2023, Efficiency Vermont engaged with over 425 businesses, including conducting 219 on-site business energy walk-throughs throughout the state, to assist customers in identifying efficiency opportunities and help them leverage Efficiency Vermont's rebates and services.

Additionally in 2023, Efficiency Vermont:

- Sent letters to the roughly 45 businesses that met the eligibility criteria for an enhanced rebate for high-efficiency refrigeration equipment.
- Launched a social equity bonus for BIPOC (Black, Indigenous, and People of Color)-owned and women-owned businesses in the Focused Communities of Brattleboro and Winooski.[10]
- Launched a limited-time (2023 only) enhanced incentive offering for commercial LED lighting and supported 118 businesses in upgrading their lighting.
- Launched the Flood Recovery Rebate for Businesses to support commercial customers affected by the catastrophic July 2023 flooding. The rebate offer was $1,000 per piece of qualifying equipment (heat pumps, heat pump water heaters, high efficiency evaporators, high efficiency condensing units, and commercial kitchen equipment), for up to 4 units. Flood Recovery rebates were updated December 1st to include fossil fuel equipment and building envelope measures and to increase rebates to up to $4,000 per piece of qualifying equipment for up to 4 units.[11]

2.3.3 Focused Markets

Efficiency Vermont continued to implement focused initiatives—each with its own approaches, energy-saving measures, and incentives—to address the priorities, challenges, and motivations of specific markets. To address the needs and challenges of distinct business sectors, Efficiency Vermont provided technical guidance, financial incentives for recommended energy saving measures, and access to third-party financing for specific commercial and industrial markets. Through an understanding of the characteristics common to each market, Efficiency Vermont focused on shaping effective approaches to acquiring greater market adoption of efficient technologies than would be achievable through services offered only at the individual project level. Additionally, Efficiency Vermont continued to develop partnerships with community-based organizations to design and implement efficiency programs tailored to the needs of local businesses. Activities in selected markets are described below.

Agriculture

In 2023, Efficiency Vermont:

- Sent postcards to approximately 4,000 agricultural businesses advertising lighting incentive offerings specifically for dairy customers.
- Incentivized 20 farms to purchase and install lighting upgrades through the Dairy Enhanced Lighting program.

[11] For flood funding and spending details, see Section 6.2.

- Supported another 19 farms in the process of purchasing and installing lighting upgrades.
- Incentivized 12 maple operations to purchase and install energy efficient equipment through the prescriptive and custom agriculture programs.

Controlled Environment Agriculture (CEA) - Cannabis Growing

In 2023, Efficiency Vermont:

- Advised 60 cannabis cultivators in building energy-efficient facilities. Forty-seven have completed their projects, and 13 are in the process of purchasing and installing energy-efficient grow equipment.
- Provided training to Vermont Cannabis Control Board (CCB) staff on the identification and confirmation that grow equipment meets the energy efficiency criteria of CCB Rule 2.
- Provided a 25% bonus on standard custom rebates, up to $5,000, for CEA social equity license-holders

Colleges and Universities

In 2023, Efficiency Vermont:

- Completed 18 projects with colleges and universities across Vermont.
- Supported nine colleges and universities on lighting upgrades before the January 1, 2024 effective date of Act 120.
- Completed projects in the following areas: steam trap audits, space heat efficiency improvements, and thermal shell and ventilation efficiency projects.

Commercial Kitchen Equipment (CKE)

In 2023, Efficiency Vermont:

- Launched a direct mail campaign to 1,600 owners/managers of establishments that would benefit from rebates and incentives.
- Added rebates for batch ice machines.

Hospitals and Healthcare

In 2023, Efficiency Vermont:

- Supported 15 total projects at hospitals across Vermont. These projects included lighting upgrades, controls commissioning, and HVAC/refrigeration projects.
- Served four hospitals and healthcare facilities through lighting upgrades before the January 1, 2024, effective date of Act 120.
- Completed seven controls commissioning projects.
- Provided steam trap audits to three hospitals.

Other projects at hospitals included boiler draft fans getting variable frequency drives (VFDs), installing replacement chillers, and installing high efficiency condensing units or evaporators.

K–12 Schools

In 2023, Efficiency Vermont:

- Supported 98 individual projects at schools across Vermont.

- Presented on commercial lighting to the Vermont Superintendents Association Facilities leadership upon their request. This presentation led to a significant increase in engagement with the K–12 market segment on lighting projects.
- Completed 23 lighting projects in schools before the January 1, 2024, effective date of Act 120.
- Supported a variety of projects including: steam trap audits, air conditioning efficiency, installation of efficient commercial kitchen equipment, controls commissioning, building envelope/thermal shell improvements, ventilation projects, and Advanced Wood Heating projects including fuel switching.

Ski Areas

In 2023, Efficiency Vermont continued its partnership with the Vermont Ski Areas Association (Ski Vermont) and provided ongoing project development and support to most Vermont ski areas. Specifically, Efficiency Vermont:

- Collaborated with three ski areas to recommission lift terminal heater controls and make significant lighting upgrades to LEDs.
- Presented on energy efficiency opportunities at Ski Vermont's annual meeting.
- Collaborated with Ski Vermont to deliver a presentation on geothermal heating and cooling to Vermont ski areas.

2.3.4 Key Commercial Technologies

Efficiency Vermont promoted awareness of efficient technologies and engaged in the following efforts to bring these benefits to the state's commercial sector (also see Section 4.7 for HVAC and Refrigeration).

Commercial Lighting

In 2023, Efficiency Vermont:

- Supported 99 custom lighting projects.
- Promoted the commercial lighting rebate changes (discussed in Section 2.1) to small and medium-sized businesses (SMB) and large business customers through a direct mail campaign and a broader digital marketing campaign (www.efficiencyvermont.com/bizlighting).
- Supported participating midstream partners in adapting to the end of rebates (as discussed in Section 2.1).
- Successfully sunset the midstream lighting program, SMARTLIGHT, after 15 years in the market (as discussed in Section 2.1).
- Supported SMB customers with the replacement of fluorescent lighting with efficient LED fixtures through the RDC lighting program.
- Supported 16 larger C&I customers with the pilot TLED offer.

Industrial Process Equipment

In 2023, Efficiency Vermont:

- Supported nine Kaizen Events. Worked with customers to identify and prioritize projects. Completed low-cost and no-cost projects following the Kaizen Events.
- Launched an Advanced Motor Pilot targeting the installation of an IE5 rated motor.

3 Services for Residential Customers

3.1 Existing Homes

3.1.1 Existing Low-Income Homes

Efficiency Vermont undertook its efforts in service to low-income households in collaboration with the following long-standing partners: low-income housing and service providers, including agencies of Vermont's weatherization program and 3E Thermal; affordable housing funders, including the Vermont Housing & Conservation Board (VHCB) and the Vermont Housing Finance Agency (VHFA); and multifamily housing developers, including Housing Vermont. In 2023, Efficiency Vermont engaged in the activities described below, as well as those described in Section 3.2.1 for new low-income homes.

Single-Family

In 2023, Efficiency Vermont provided diversified offers to income-eligible households in order to better meet customers' needs depending on their annual electric usage and household energy burden.

Through the ongoing Low-Income Electrical Efficiency Program (LEEP) / Targeted High Use collaboration with the Weatherization Assistance Programs (WAPs), Efficiency Vermont:

- Served 1186 households.
- Replaced 7212 incandescent screw-based light bulbs with LED lighting, 284 refrigerators/freezers, 55 dehumidifiers, and 112 clothes washers.
- Installed 184 heat pump hot water heaters, replacing less efficient electric resistance hot water heaters, and 12 cold-climate heat pump systems.

Through the ongoing Appliance Replacement Voucher Program, Efficiency Vermont issued 89 vouchers to qualifying low-income customers (below 80% of area median income) to replace an existing refrigerator, freezer, washing machine, dehumidifier, or air conditioner. Mailers to approximately 20,000 customers had a response rate of 2%. 71 vouchers were redeemed.

Through the Low-Income Energy Savings Kit (ESK) program, Efficiency Vermont provided 90 qualifying low-income customers with an ESK.

Multifamily

In 2023, Efficiency Vermont:

- Expanded the Multifamily Prescriptive Program, now the "Rental Property Rebate Program." In addition to serving multifamily properties (+5 units), the enhanced program serves single family rental properties (1-4 units). The program was available statewide and was marketed more specifically in the Focused Communities of Brattleboro and Winooski (see Focused Communities, Section 4.3). Efficiency Vermont provided incentives to rental property owners on refrigerator replacements and bath fan installations. In addition, enhanced incentives on the following measures were also offered: qualifying freezers, dehumidifiers, in-unit washers and dryers, and heat pump water heaters (HPWHs). A "Do More Bonus" incentive was also provided when a rental property owner replaced or

installed at least four measures in a single rental unit or rental property. Since the updated rebate program launched mid-2023, the average quantity of projects per month more than doubled.
- Through the Rental Property Free Products Program, provided 1,147 LEDs and water saving devices at no cost directly to renters and rental property owners across 246 rental units. This included 71 single family (1-4) rental units that were previously unable to participate in the program when it was solely focused on multifamily rental properties.
- Worked with Winooski Housing Authority to complete a large refrigerator replacement project that spanned multiple years.
- In collaboration with 3E Thermal, helped replace fossil fuel heating equipment with wood pellet heating and air source heat pump (ASHP) domestic hot water, along with extensive insulation and air sealing efforts. This effort provided efficient housing for 20 families, many of whom pay for their utilities.
- In collaboration with 3E Thermal, completed a project that included the retrofit of 15 rental units across four existing buildings, which received comprehensive air sealing and insulation, exterior rigid insultation, ventilation, window improvements, and efficient lighting.
- Provided design incentives to help system re-design for domestic hot water circulation.

3.1.2 Existing Market-Rate Homes

Single-Family

In 2023, Efficiency Vermont:

- Completed 662 total projects representing 687 housing units weatherized through the Home Performance with ENERGY STAR (HPwES) program; 385 of the projects reported were market rate (above 120% area median income) customers.
- Conducted 670 virtual home energy visits via phone and video chat, 10 of which were in Tailored Program communities. (See Section 4.3 for Tailored Programs.)
- Processed completion of 388 customer DIY weatherization projects.
- Raised incentives for market rate customers from 75% of project costs up to $2,000 to 75% of project costs up to $4,000 given an observed increase in the reported costs of projects in the past year.
- Launched the HPwES Expansion, which enables the conversion of unconditioned to conditioned habitable space to be considered eligible for HPwES incentives within specific parameters. This eligibility change enabled households to add or convert living space, with the potential to bring more efficient accessory dwelling units online.
- Modified some of its standard rules and protocols for HPwES projects to enable flood impacted households to participate, including waiving an initial blower door test in the event that a homeowner made significant alterations to the thermal envelope and waiving the need to achieve a 10% air leakage reduction given expected modifications to the thermal envelope and the need to prioritize highest-need based on how a home may have been damaged from the flooding.

Multifamily

In 2023, Efficiency Vermont completed 10 building performance projects, including:

- Technical support and incentives for attic and foundation insulation for a six-unit rental property, resulting in a 58% air leakage reduction.

- Support and incentives for wall and foundation insulation in two 18-unit condominium buildings, resulting in a 16% air leakage reduction in one and a 23% air leakage reduction in the other.
- A condo unit that was one of three pilot installations using line voltage Wi-Fi thermostats to control electric heat strips.
- Rental property owners completed 123 prescriptive rebate projects, with an additional 34 ordering no-cost LED bulbs and water saving devices for their rental units, including downstream rebates on 81 early replacement energy efficient refrigerators and 435 no-cost LED bulbs.

3.2 Residential New Construction

3.2.1 New Low-Income Homes

Single-Family

In 2023, Efficiency Vermont:

- Completed eight low-income Certified 2.0 all-electric homes and one High Performance all-electric home through collaboration with a low-income housing partner.
- Completed two high-performance all-electric farmworker housing projects, which provide safe, healthy, and highly energy efficient housing to farmworkers.
- Worked with a developer to provide eight affordable homes for sale in Chittenden County at the Efficiency Vermont Certified 2.0 level.
- Provided incentives for three new privately owned homes that qualified for the low-income program and were built to the Certified 2.0 standard.

Multifamily

In 2023, Efficiency Vermont:

- Performed a final blower door test for an eight-unit project. This was part of a scattered site project involving four existing buildings being addressed through Efficiency Vermont's partnership with 3E Thermal and eight units in one new construction building.
- Completed a 36-unit project with whole building energy recovery ventilation (ERV). This method offers multiple benefits. No duct penetrations through floors means no fire-rated dampers are required, which reduces the cost. Also, an ERV serving each floor is easier to balance, and ERVs' location inside closets results in easy access for maintenance regardless of weather or time of year.
- Completed a 26-unit project in partnership with an affordable housing provider. This development replaced a dilapidated old building, transforming it into a gateway into the downtown. A central variable refrigerant flow system provided heating and cooling.
- Completed a new construction project with affordable housing provider involving installations of all-in-one Minotair units that will be monitored for efficiency and a re-design of the building's hot water plumbing layout.
- Completed a 47-unit affordable housing project with a private developer. The property was one of the first buildings Efficiency Vermont supported that met the compartmentalization requirements of the 2020 Commercial Building Energy Standards (CBES) code. This meant that additional air sealing measures were undertaken in each dwelling unit in order to meet the CBES requirement of 0.35cfm50/sf. The builder used their own blower door equipment to conduct progress testing in each unit to ensure success. Additionally, with direct guidance from Efficiency Vermont, this developer was

the first to pursue the 45L tax credit (net zero ready tier, $5,000 per dwelling unit) which requires Energy Star certification. Through participating in Efficiency Vermont's High-Performance Track of the Multifamily New Construction program, the builder easily attained the Energy Star certification as part of pursuing the 45L tax credit.
- In collaboration with 3E Thermal, completed the construction of one new building for which Efficiency Vermont directly provided technical assistance and incentives.

3.2.2 New Market-Rate Homes

Single-Family

To encourage best practices intended to result in healthy and comfortable homes that both exceed residential building energy standards and align with the State's goal of a net-zero ready residential building energy standard by 2030, Efficiency Vermont provided ongoing technical support and educational materials to homeowners and professionals engaged in the design and construction of new homes in Vermont. In 2023, Efficiency Vermont, through the EEN Residential New Construction (RNC) trade group, implemented programming that more directly supported builders and developers in delivering newly constructed, high-performing homes that were healthy, comfortable, and net-zero ready (for more information, see Efficiency Vermont's 2023 Update to the 2021–2023 Triennial Plan, Section 3.3/Residential New Construction at www.efficiencyvermont.com/about/annual-plans-reports).

Additionally, Efficiency Vermont:

- Completed 38 Certified 2.0 legacy projects that had been granted extensions into 2023, along with seven high-performance homes, six of which were all-electric. All legacy market-rate projects have now all been completed.
- Completed four Efficiency Vermont Certified 3.0 projects.

Multifamily

In 2023, Efficiency Vermont:

- Completed a new housing project involving the construction of 3-plex villas. The scope involves the measures on the Efficiency Vermont Multifamily Housing Certified track, minus thermal shell upgrades and lighting. The project also involved the installation of cold-climate heat pumps and HPWHs.

3.3 Retail Efficient Product Services

Efficiency Vermont's services were designed to increase availability and knowledge of high-quality efficient products and to reduce purchase costs, to motivate Vermonters to select them for their homes and businesses. Efficiency Vermont incentivized products that met or exceeded efficiency standards set by the U.S. Department of Energy's / Environmental Protection Agency's ENERGY STAR program, which included HPWHs and clothes dryers, appliances, smart thermostats, electronics, and lighting (including indoor horticultural lighting and connected lighting). An essential element of these efforts continued to be services to retailers and to upstream partners in the product supply chain to ensure the availability of high-quality efficient products in Vermont stores, which included the following tactics: price reductions at the manufacturer and retail level, midstream sales incentives that influenced stocking practices,

point-of-purchase information, advertising, an online marketplace scoring the energy efficiency of products to inform customer buying decisions, and promotional and public information activities (also, see Section 4.3 for services to contractors and equipment suppliers).

Additionally in 2023, Efficiency Vermont:

- Ended the ENERGY STAR retail lighting program on July 1, 2023, due to changes in federal efficiency standards for lighting products, as discussed in Section 2.1. This marked 20 years of work from Efficiency Vermont and partners to transform the lighting market in Vermont and nationwide.
- Implemented the "Shift" initiative aimed at reducing the up-front cost of specific ENERGY STAR certified washers and a specific refrigerator to prices comparable to those of cheaper, less efficient appliances. This initiative, offered at 13 appliance dealers, provides $75 off at the point of sale for qualified models and aspires to reach more low-income customers.
- Provided 1,135 ESKs at in-person events, eliminating traditional customer barriers to accessing ESKs (like lack of internet access). Of these, 432 kits were provided directly to customers through in-person events in the Focused Communities of Winooski and Brattleboro. ESKs include LED lightbulbs, a showerhead, bathroom and kitchen sink aerators, and a Wi-Fi-connected bulb. Continued a push for ESKs, including via paid promotional emails, Front Porch Forum, social media, and digital and print ads that resulted in 16,673 leads to the Statewide ESK order portal.
- In collaboration with Vermont Public Power Supply Authority (VPPSA), created a new TEPF-funded thermal energy savings kit for the Tailored Programs communities (see Section 4.3 Tailored Programs for more information).
- Ended the statewide energy efficiency charge (EEC)–funded energy savings kit offer. More than 36,000 kits had been provided since the program's inception; over 8,000 were ordered in 2023. (The TEPF-funded energy savings kits offer will continue.)
- Continued engagement with appliance dealers to incentivize qualifying appliances through the new Shift program. In coordination with these dealers, Efficiency Vermont incentivized more than 820 appliances through Shift.
- Updated savings claims for measures with natural refrigerant in the ENERGY STAR retail products platform program to adhere to new U.S. Environmental Protection Agency standards.
- In partnership with the Burlington Electric Department (BED), launched a new rebate for combination washers/dryers with heat pump technology.

4 Activities in Service to All Major Markets

While serving specific markets (as described in previous sections), Efficiency Vermont also provided services with an impact on multiple sectors. A key priority for Efficiency Vermont is to serve all Vermonters, no matter their race, income level, or geographic location. In 2023, Efficiency Vermont maintained an increased focus on diversity, equity, and inclusion (DEI) in its services.

Recognizing that barriers to saving energy are higher for many BIPOC and low-income Vermonters, Efficiency Vermont promoted equity programs for business customers, in addition to its standard suite of low-income programming delivered through WAP agency partners and

direct-to-consumer efficient products offers for residential customers. Those equity programs for businesses included the following offers:

- Enhanced incentives for BIPOC and woman-owned businesses in Focused Communities (See Section 4.4 for Communities)
- Enhanced incentives for non-profit business in Focused and Tailored Communities (See Section 4.4 for more for Communities)
- Enhanced incentives for municipal facilities in Focused and Tailored Communities (See Section 4.4 for Communities)
- Enhanced incentives for CEA social equity license holders (See Section 2.3.3 CEA)
- Enhanced incentives for lighting upgrades in partnership with Vermont's Regional Development Corporations (See Section 2.3.2 SMB)
- Enhanced incentives for flood-affected businesses (See Section 2.3.2 SMB)

Efficiency Vermont offers ongoing support for the businesses that Vermonters turn to for efficient products and services. Although these partnerships are not always evident to the general public, they have a profound impact on all Vermonters' ability to lower energy use in their homes and places of business. Joint efforts included workforce development training, information exchange, quality assurance, financial incentives, outreach and engagement with renters and rental property owners, and promotional activities. In addition to the activities outlined in this section, efforts made alongside partners in various initiatives appear in other sections throughout this report. Included in this section are also the results of Efficiency Vermont's annual brand performance research (see Section 4.11).

4.1 Coordination with Utility Partners

Efficiency Vermont participated in a number of broad partnership efforts with DUs. It also convened monthly Utility Working Group meetings to share technology, program, and customer insights, while ensuring continuous improvement in program coordination and collaboration. Specific partnership activities are discussed below, and in other sections of this report.

In 2023, Efficiency Vermont worked with its utility partners on the following projects:

- Flexible Load Management— Various FLM programs and engagement continued with DU partners. This included support of the Green Mountain Power (GMP) C&I FLM pilot, development of a C&I pilot with Vermont Electric Cooperative (VEC), exploration of a C&I program with SED, and management of the PowerShift programs with both Washington Electric Co-op (WEC) and VPPSA. Efficiency Vermont also began discussions with all the DUs about a possible electric vehicle (EV) telematics program using a single vendor. (See Section 4.8 for more details on FLM.)
- Tailored Programs with VPPSA: Efficiency Vermont launched its Tailored Program efforts with a new cohort of VPPSA member utilities. (See Section 4.4 for more details.)
- Flood Response and Recovery: Efficiency Vermont coordinated with its utility partners to respond to and support customers affected by the July floods. This coordination involved program development with the other energy efficiency utilities, Vermont Gas Systems (VGS), and BED. Efficiency Vermont also provided customers with information on flood recovery programs via utility bill inserts. Efficiency Vermont continues to facilitate

coordination meetings with several of our utility partners involved in ongoing support to flood recovery efforts.

- **Events**: Many utility partners showed their support for the 12th Best Practices Exchange (BPX) (Killington, September 20 – 21). Several of the partners helped sponsor the event. The utility partners' attendance was key to demonstrating joint support of commercial and industrial customers who attended the conference and provided a unique opportunity to network and share best practices from peer organizations. (See also Section 2.3.1.) Additionally, several utility partners along with Efficiency Vermont came together to lead a panel discussion at the 2023 BBD conference, discussing the barriers and solutions to electrifying existing facilities and other retrofit scenarios. (See Section 5.1.4 for more details on the conference.) Other events included the WEC and VEC annual meetings, tabling with Stowe Electric Department (SED) at the Stowe Farmers' Market, and several community events in the Tailored Programs communities of Enosburg, Johnson, and Orleans. (See also Section 4.4.)
- **EEU Coordination:** Efficiency Vermont, BED, and VGS communicated closely to ensure consistent messaging to contractors and supply partners and sharing of best practices for reaching customers, including low-income and hard-to-reach customer segments.

4.2 State, Regional and National Partnerships

In service to Vermonters and in support of the State's energy goals, Efficiency Vermont continued to leverage the expertise and resources of entities engaged in a range of energy and efficiency endeavors. Efficiency Vermont shared its own expertise at regional and national gatherings, enabling Vermont to be both recognized for its innovations and informed by best practices in other states. Efficiency Vermont's work has influenced the establishment of specifications that ensure that Vermont consumers have access to the highest-quality, most energy-efficient products. In Vermont, partners included the Vermont Community Foundation, the VHCB, the Regulatory Assistance Project, and many others. On a regional and national level, Efficiency Vermont maintained partnerships with such organizations as the Northeast Energy Efficiency Partnerships (NEEP), the New Buildings Institute, Consortium for Energy Efficiency (CEE), ENERGY STAR, and the American Council for an Energy-Efficient Economy (ACEEE), working to share information on best practices and to establish uniform product eligibility criteria and program designs.

4.3 Services to Contractors and Equipment Suppliers

4.3.1 The Efficiency Excellence Network

In 2023, Efficiency Vermont:

- Held 17 trade group-specific EEN member calls. Seven were for Home Performance with ENERGY STAR contractors (172 attendees total), six were for heat pump contractors (123 attendees), and four were for RNC builders (46 attendees). Promoted 150 third-party trainings covering energy efficiency topics on the Efficiency Vermont website.
- Added 22 EEN members to one or more trade groups; 20 companies added service listings to their already listed EEN member services.
- Enrolled 14 companies in flood recovery heating system replacement service listings.
- Delivered 48 EEN member communications and partnered on 16 cooperative advertisements.

- Hosted one EEN member appreciation event at a Lake Monsters baseball game. Tabling at the event offered EEN brand recognition to park attendees; drew 36 EEN members and related coworkers, family, and friends; and offered general public engagement with an estimated 30 additional event attendees.

4.3.2 Trade Association Partnerships

In addition to engaging in direct customer interaction, Efficiency Vermont worked with professional and trade member organizations representing a wide range of constituents. By sharing targeted information through these trusted channels, Efficiency Vermont empowered businesses with knowledge about best practices and resources intended to help strengthen their bottom line. Vehicles included association newsletters, websites, and technical materials, as well as event sponsorship, speaking engagements, conference and trade show participation, training workshops, and promotional and educational campaigns.

In 2023, Efficiency Vermont:

- Delivered or hosted 98 trainings, attracting 2,070 total attendees. Trainings as well as attendance are inclusive of sessions offered at the BBD conference.

4.4 Community-Based Activities

Throughout the state, Efficiency Vermont engaged with Vermonters in their communities in the following efforts to reduce energy use in their businesses, homes, institutions, and municipal facilities.

Focused Communities

In 2023, Efficiency Vermont continued its work in the diverse towns of Winooski and Brattleboro. Efficiency Vermont:

- Distributed 432 energy savings kits at in-person events to Brattleboro and Winooski community members. Efficiency Vermont partnered with organizations that serve vulnerable and disadvantaged communities, such as food shelves, senior centers, the Family Room, and community centers. Most of the kits handed out in Winooski were given to renters, older residents, New Americans, and low-income individuals.
- Conducted 22 site visit consultations.
- Promoted a social equity bonus for women-owned / BIPOC-owned businesses, including walking through the downtowns of Brattleboro and Winooski, introducing the offer, and meeting business owners face to face. Three businesses took advantage of the bonus offer.
- Placed advertisements in local digital and print publications to promote special offers to residents and rental property owners.

Tailored Programs

Tailored Programs are intended to meet the needs of individual municipal electric utilities, providing both residential and business customers served by these utilities a suite of programs including enhanced rebates, income-eligible services, and workshops and education on weatherization, heat pumps, and EVs. In 2023, Efficiency Vermont in coordination with VPPSA provided tailored services for three member utilities: Orleans, Johnson, and Enosburg Falls. These

efforts included co-branded bill inserts promoting free energy savings kits and appliance coupons, information tables at local events, and targeted outreach to local municipalities and businesses. As a result of these efforts, Efficiency Vermont connected with 230 attendees at public events in VPPSA communities, conducted 25 site visit consultations; and distributed 216 ESKs (120 of which were the new thermal weatherization kits), one cold-climate heat pump bonus, and one DIY bonus coupon to residents. Two nonprofit bonuses, three municipal bonuses, and five commercial enhanced rebates were also provided.

4.5 Financial Services

Efficiency Vermont continued coordinating with credit unions that provide capital for the following loan products.

4.5.1 Home Energy Loan

A total of 468 loans to homeowners totaling $5,250,628 in loan principal closed in 2023. The cost to Efficiency Vermont for those loans was $582,446 in interest rate buy-down (classified as incentive payments) and $104,825 in loan loss reserve deposits (which are refundable if they are not utilized). Of the 468 loans closed, 118 were for low-income customers (below 80% of area median income) and 168 were for moderate-income customers (80–120% of area median income).

Weatherization Repayment Assistance Program (WRAP)

In 2023, Efficiency Vermont:

- In collaboration with Vermont Housing Finance Agency, Vermont EEUs (BED and VGS), and DU partners, launched the on-bill financing program WRAP on its website.
- Concluded 10 signed agreements with contractors to participate, providing ample coverage across the state. Ten contractors trained on modeling software to help Efficiency Vermont qualify projects.
- Reached out to 14 customers of three utilities to begin the program process with their contractors. Promoted program with 5,000 mailers with WRAP inserts in Qualified Census Tracts during summer 2023. This number would have been higher; however, further mailers were put on pause due to flooding. In Q4, 17,898 mailers were sent mentioning WRAP.

4.5.2 Business Energy Loan

A total of 26 loans totaling $697,080 in loan principal closed in 2023. Of the 26 loans closed, 80% were for SMB customers, including farms and agricultural businesses, food sales and service, and lodging facilities. Measures supported included heat pumps, lighting, weatherization measures, custom HVAC, advanced wood heating, and commercial kitchen equipment.

4.6 Data Analytics

In 2023, Efficiency Vermont:

- Completed the refactor of the advanced metering infrastructure (AMI) ingest process, which improved performance, reliability, flexibility, status tracking, and backfill capabilities, and documented the maintenance and monitoring plan and infrastructure decisions.

- Completed a platform to automate data ingest from individual submeters, which will improve efficiency, accessibility, and reliability related to submeter data.
- Finalized approach to weather data ingest.

4.7 Heating, Ventilation, Air Conditioning, and Refrigeration

In 2023, Efficiency Vermont:

- Launched a VFD incentive for HVAC contractors.
- Noted increase of 200% in heat pump water heater incentives in August (compared to July), most likely due to customers replacing units lost to the July flooding.
- Achieved a new record total number of heat pumps installed in one year, with over 11,400 units. Additionally, the total number of heat pumps installed over the ten years of Efficiency Vermont's programs surpassed 60,000 units in 2023.

4.7.1 Refrigerant Management

Efficiency Vermont implemented a refrigerant management portfolio to provide meaningful GHG and energy savings. Offers included refrigerant leak repair (including installation of permanent leak detection systems, where appropriate), natural refrigerant freezers and refrigerators, and natural refrigerant racks.

Additionally in 2023, Efficiency Vermont:

- Launched a limited-time enhanced rebate for small grocery-type stores located in communities with low food access (as designated by the U.S. Department of Agriculture). When an eligible store upgrades its refrigeration equipment and replaces its existing refrigerant with a low-global warming potential (GWP alternative, it will receive up to 75% of the project costs back as a rebate.
- Closed out the first walk-in cooler refrigeration upgrade project using a new packaged high-efficiency evaporator with natural refrigerant (R290). This is a new product that offers a cost-effective solution for SMB customers with walk-in refrigeration systems.

4.8 Flexible Load Management

Efficiency Vermont:

- Completed six C&I projects under the GMP FLM 2.0 framework. The largest flexible kW projects included an electric boiler for a pool, a water treatment pump control, and an HVAC at a large campus.
- Collaborated with GMP on the design of FLM 3.0, which will optimize load management at customer sites during peak events.
- Established an incentive agreement with VEC to complete their first C&I FLM project.
- Hired two commissioning agent firms to assess FLM success for three C&I customers in 2024, two institutions of higher education and one office building.
- Added six electric vehicle supply equipment (EVSE) installers to the EEN.
- Connected 21 new EVSE projects via WEC's and VPPSA's PowerShift program.
    - The supply chain for transformers is opening up slowly to enable upgrades needed for EVSE customer participation in WEC territory.
- In coordination with distribution utilities, drafted EV telematics essential criteria and boundary conditions to guide a vendor request for proposals (RFP), then drafted and released the RFP.

- In coordination with VEC and GMP, designed a technology demonstration project of the Harvest Air to Water Heat Pump with Thermal Storage System. Efficiency Vermont evaluated over ten residential sites and recruited two retrofit residential applications for 2024 installation. Efficiency Vermont expects the demonstration to show load shifting and energy efficiency potential and its suitability to the Vermont winter climate.
- Launched an updated FLM PowerShift landing page aligning WEC and VPPSA offers, outlining the new enrollment processes, and including information about potential transformer upgrades and EV charger installation costs.
- Provided technical and program support to SED as they continue to explore FLM among its commercial customers and electric vehicle charging.

4.9 Act No. 151 Programs

Act No. 151 enables up to $2 million per year of Efficiency Vermont's 2021–2023 EEC funds for programs, measures, and services that reduce GHG emissions in the transportation and thermal energy sectors. Efficiency Vermont's Act No. 151 programs complement the Tier III energy transformation projects implemented by electric DUs in the statewide EEU service area as well as State programs.

In 2023, Efficiency Vermont:

- Fully subscribed the Low-Income Fuel Switch program, and closely managed budget in order to absorb increased equipment prices.
- Ended the EV marketing campaign
- Paused all EV-related incentives in the electric transportation program in order to ensure existing low-income thermal program commitments could be met.

4.9.1 Electric Transportation

In 2023, Efficiency Vermont's EEN EV Dealer Program:

- Added one new car dealer to the EEN EV dealer program, bringing the total number of participating dealers to 51.
- Helped seven EEN EV dealers complete EV readiness projects and received four applications for EV readiness projects. In August, Efficiency Vermont paused the EV readiness incentive offer.
- Provided EV sales incentives for 714 vehicles, including 411 new all-electric vehicles, 237 new plug-in hybrids, 36 used all-electric vehicles, and 30 used plug-in hybrids. In May, Efficiency Vermont updated EV sales incentive offer to $500 per EV (it was previously $800 per EV) and reinstated an annual limit of 50 sales incentives per dealership. In November, Efficiency Vermont paused the EV sales incentive offer.
- Gave refresher EV sales training to 24 dealer staff, representing six dealerships.
- Presented about program impact to date at the Vermont Vehicle and Automotive Distributors' Association (VADA) annual meeting on September 28.

In 2023, Efficiency Vermont's EV Consumer Education and Awareness Campaign:

- Released an updated version of the "EV vs. Mule" ad, which is part of Efficiency Vermont's "1902" series of ads, in response to feedback from viewers who expressed concerns about how Vermonters were portrayed. Updates included new voiceovers, trimming of dialogue, and use of sepia tones to emphasize that the ad was meant to seem historical and not

portray actual, present-day Vermonters. The updated ad campaign continued to run through various channels including digital, radio, and TV. Web traffic saw a 19.68% increase in users and a 14.8% increase in sessions compared to 2022.

- In partnership with *Seven Days*, launched "Is Vermont's Grid Ready for Electrification? A Q&A with Energy Experts," answering nuanced questions from Vermonters about the effects of increased demand from EVs and other electrified technologies. Compared to the start of the campaign in 2021, DriveElectricVermont.com saw a 200+% increase in users.

4.9.2 Heating Electrification with Weatherization (Low-Income Fuel Switch)

In consultation with electric DU partners, weatherization agencies, and others, Efficiency Vermont implemented a program to support low-income customers in combining weatherization with heating electrification. In partnership with DUs, Efficiency Vermont installed cold climate heat pumps (CCHPs) at no cost to qualifying low-income customers whose homes were previously weatherized by the State's Weatherization Assistance Program.

Additionally in 2023, Efficiency Vermont:

- Through ongoing recruitment and training efforts, increased the statewide pool of contractors participating in the program to 18.
- Enrolled 145 customers in the program and added a total of 153 customers to the waitlist (calculation of program capacity is based on DU capacity).
- Processed payment on 230 completed heat pump installations, of which 64 (28%) received required electric panel upgrade work.
- In collaboration with the Office of Economic Opportunity (OEO), published a low-income weatherization offer page to bring more awareness to the assistance available through the state's community action agencies.

4.10 Customer Engagement

In 2023, Efficiency Vermont's customer engagement activities and results included the following:

- On its core website, Efficiency Vermont welcomed 472,002 unique users, with almost 2 Million pageviews (1,966,203 pageviews)
  - Top website content areas included the "Find-A-Pro or Retailer" search tool and the Rebates search tool, with 41,018 searches for contractors
  - Efficiency Vermont optimized filtering for rebates for rental properties on its website, making it easier for renters and rental property owners to find rebates.
- Across Efficiency Vermont's multiple market newsletters, Efficiency Vermont saw an increase of subscribers. By the end of 2023, total subscribers for the following newsletters was:
  - *Watts New* (Residential Market) = 33,326 subscribers
  - *Business Solutions* (Business Market) = 3,259 subscribers
  - *The Link* (Contractor/Trade Ally Market) = 2,190 subscribers
- Efficiency Vermont relaunched a partner communication newsletter (*The EVT Insider*) to better reflect the needs and interests of the partner audience.
- On Social Media, Efficiency Vermont's Facebook page now totals to 22,356 followers. We also ran a pop-quiz giveaway contest on Instagram September 20 – 27, driving 331 engagements, 125 new followers, and an average engagement rate of 19%
- Attended 132 events across the state (+33% YOY), reaching 41,677 customers.

Other notable activities include:

- The Button Up Vermont weatherization campaign kicked off October 2 and ran through November. Highlights of the campaign included:
  - 2,423 total webinar registrants
  - 1,298 webinar recording YouTube views + 1,150 Facebook video views
  - 13.5M media impressions
  - 28,000 website views
  - 960 visits to efficiencyvermont.com from buttonupvermont.org
  - 30 engaged partner/community orgs
  - 13 partner-led events with at least 1,250 total attendees
- At the end of July, Efficiency Vermont launched its Flood Resources page, and on September 5, launched rebates for Residential, Business, and Rental Property Owner customers. The pages contain information about the eligible equipment, rebate amounts, qualifying criteria, and information about FEMA, events, and financing.
  - Efficiency Vermont also hosted public webinars in August and September, on re-building from flood damage and new flood recovery offers. Efficiency Vermont also offered information webinars about flood recovery for partners and stakeholder groups.
- To support the education of consumers across a variety of topics, Efficiency Vermont published the following Blogs:
  - Boosting resilience in your home in the wake of floods and other climate hazards
  - What's your energy burden? Understanding the impacts of Vermont's energy costs
  - Ready to take your home heating electric? Answering your heat pump questions
  - Lights out on lighting rebates: Celebrating 20 years of savings
  - Ask the Expert: Why does building science matter when you weatherize your home?
  - Why does diversity, equity, and inclusion matter when it comes to energy efficiency?
  - Waste not, want not - Essex Junction plant turns community water waste into a resource
  - How a cutting-edge wood boiler and efficiency upgrades revived Rochester's Stable Inn
  - Jenna's Coffeehouse helps builds community in Johnson
  - Statewide partnership with RDCs is a big win for local businesses
  - A cool way to serve the community
  - How to save money and space with a heat pump washer-dryer
  - How to make your restaurant sustainable now and into the future
  - Easier and greener: How to electrify your lawn care routine
  - How to clean and maintain your ductless heat pump system
  - Fact or Fiction: EVs are not cut out for winter driving

5 Development and Support Services

Efficiency Vermont engaged in efforts that built customer awareness, knowledge, and motivation regarding energy use reduction; supported efforts to shape energy efficiency policies; and identified approaches for optimal service development, delivery, and improvement. DSS activities

may not directly result in efficiency savings but represent valuable aspects of energy efficiency service delivery and development. These activities are essential to Efficiency Vermont's efforts to deepen energy savings and to have a lasting, positive impact on Vermont households, businesses, and communities.

5.1 Education and Training

5.1.1 Codes and Standards Support—Residential and Commercial / Industrial

In 2023, Efficiency Vermont:

- Managed 52 inbound and outbound commercial code assistance calls and emails, and 431 inbound and outbound residential code assistance calls and emails through the Energy Code Assistance Center (ECAC). This assistance included technical support as well as code material and training requests.
- Offered eight CBES trainings, five in-person and three virtual. There were 135 total participants in the trainings.
- Provided 16 Residential Building Energy Standards (RBES) trainings to a total of 360 participants. Of the 15 trainings, 11 were in-person and five were virtual.
- Mailed approximately 373 International Code Council (ICC) CBES books to designers, architects, and builders who had attended previous CBES trainings, or whom Efficiency Vermont had worked with on commercial new construction projects.
- Mailed approximately 206 RBES Handbooks to builders, contractors, designers, and other interested parties that attended RBES trainings or that submitted a request.

5.1.2 Energy Literacy Project (ELP)

Efficiency Vermont worked in coordination with K–12 schools throughout the state to inspire lifelong commitment to energy efficiency, conservation, and environmental stewardship in Vermont's youth. In 2023, Efficiency Vermont's contract implementer, Vermont Energy Education Program:

- Delivered 88 workshops to 35 schools in nine of the state's 14 counties.
- Delivered 99 ELP kits to 47 schools in 13 of the state's 14 counties.
- Trained 27 teachers in energy literacy. Three teachers completed a week-long Summer Institute, four afterschool educators completed a day-long workshops, and 20 pre-service teachers at a university completed a workshop on the ELP toolkit.
- Revised the WindWorks and Solar Challenge curricula.
- Reviewed and overhauled all workshops to better align with Next Generation Science Standards best practices and better divide the lessons so that teachers may complete portions before and after on-site visits, leading to a less rushed experience in the classroom.
- Launched a new website that makes it easier for teachers to sign up for programs and "shop" for kits online.
- Developed a poster explaining the electrical grid and how it will need to change to accommodate widespread electrification and grow more robust in the face of climate change. Of the classrooms reached, 48% were in areas with high or with moderate energy burdens.

5.1.3 General Public Education

To increase public awareness of energy efficiency and available services, Efficiency Vermont developed, managed, and shared key messages and materials through traditional print and broadcast media, social media, and website content. In 2023, efforts focused on:

- **Earned Media***:* Efficiency Vermont was featured in 144 news articles, driven by coordinated outreach on flood recovery programs, the release of the 2023 Energy Burden Report, and Efficiency Vermont press releases.
- **Enervee Digital Marketplace Tool** (www.EfficiencyVermont.com/Shop)**:** The online marketplace had 75,971 unique visitors whose top searches included electric water heaters, thermostats, dehumidifiers, dryers, air conditioners, and refrigerators.

5.1.4 Better Buildings by Design Conference

In 2023, Efficiency Vermont hosted its 25th BBD conference in South Burlington on April 5 and 6, offering trade allies access to experts in the energy efficiency and building performance fields. It also showcased the latest residential and commercial building products and services and offered technical workshops.

The conference welcomed more than 837 participants and featured 46 educational sessions with over 86 presenters, in addition to 61 sponsors and exhibitors. It also offered up to 11.5 professional credit hours across 10 eligible organizations.

Efficiency Vermont also set the dates and determined the theme for the 2024 conference (Blueprint for Equity: Energy Efficiency & the Future of Building on April 3-4, 2024) and launched the call for presentation proposals.

5.1.5 Customer Support

In 2023, Efficiency Vermont's Contact Center provided Vermonters with information about electrical, thermal, and transportation efficiency; conservation; resources; and referrals. The Contact Center:

- Managed 26,905 customer contacts, which included all inbound and outbound calls, emails, and live chats.
- Tracked activity breakout of those contacts by market as follows: 93% residential, 7% commercial.
- Provided expert guidance on the following key topics:
    - 25% residential HVAC
    - 23% residential weatherization
    - 12% residential efficient products
    - 11% low income

5.1.6 Building Labeling and Benchmarking

In 2023, Efficiency Vermont:

- Generated 90 building energy labels across the state in 2023, 74 of which were in Montpelier and 16 across the remainder of the state. Since the start of the Vermont Home Energy Profile (VHEP) effort, 278 labels have been generated, 179 of which are in Montpelier.

- Held one meeting in 2023 of the VHEP Advisory Committee. The committee continues to seek integration of the HELIX database with MLS, the real estate listing service system, so that realtors and homebuyers could access energy information, although there was not much movement in 2023 on that effort as it has been a low priority for many of the stakeholders.

5.2 Applied Research and Development

In 2023, Efficiency Vermont engaged in a range of research and development projects to gather information on areas with potential for inclusion in future programming.

5.2.1 Technology Demonstrations

Technology demonstration funding supported applied research, development, and demonstrations to optimize the creation of cost-effective solutions for meeting Efficiency Vermont's long-term RA goals. Efficiency Vermont engaged in these activities to advance the goals of sound product and program design through field testing, demonstrations, and research into emerging technologies and implementation strategies. Efficiency Vermont maintained a web page at https://www.efficiencyvermont.com/media-room/whitepapers, providing the public with access to information about technology demonstration efforts. An overview of 2023 activities follows.

Greenhouse Gas Reduction

Efficiency Vermont undertook two projects:

- *Carbon Analysis*—Efficiency Vermont explored the value of higher frequency methods to better inform impact estimates for carbon reduction. Using hourly data for carbon emissions and program savings, two separate modeling exercises compared carbon reduction estimates for different impact summarization periods. The research team found that, generally, using an average emission factor to determine the emissions saved by a particular efficiency measure is nearly as accurate as using an actual, unique emission factor for every hour of the year. In rare cases when efficiency measures have very high use while the grid is especially clean or dirty, using an average emission factor can cause an emission savings overestimate error of 100% or an underestimate of 50%.
- *Load Shape Segmentation Study*—Efficiency Vermont hypothesized that AMI data could be used to maximize temporal energy savings and geotargeting potential for program designers. Because of the ongoing electrification of residential appliances, systems, and transportation, the team determined that residential customers could benefit from the most savings opportunities from new program designs. The research team also hypothesized that a targeted exploration of energy data could support residential programs where barriers related to program outreach can constrain steps toward decarbonization. The research team recognized that for greater participation among residential customers in electrifying their buildings, programs must continue to find ways in which energy efficiency can reduce grid constraints–particularly by reducing peak use.

Justice

Efficiency Vermont worked on two projects:

- *Social Justice Impacts of Energy Efficiency Projects*–Efficiency Vermont determined which equity metrics identified in the 2022 research and development project could provide the

greatest insight into equitable program design by pairing available program data with external datasets to carry out an equity analysis and explored C&I value drivers related to equity.

- *Addressing Program Barriers for Low- and Moderate-Income Households*–Efficiency Vermont examined ways to remove participation barriers for residential customers and provided specific recommendations for pilot and program designs.

Resilience

Efficiency Vermont undertook two projects:

- *Comprehensive Single-Family Home Deep Energy Retrofits with Prefabricated Panel-Block Wall Insulation*–Efficiency Vermont evaluated the panel-block (PB) technology designed to (1) minimize site work; (2) enable computer-aided manufacturing mass customization; (3) empower workers to be more efficient; and (4) ensure high-quality retrofits, in a capital-lean way that is compatible with the business model of most small business contractors. The team provided recommendations to improve the technology-to-market approach and technical specifications for the PB technology for effective weatherizing, to define optimal building characteristics, and considerations regarding the role of the State in accelerating the achievement of its weatherization goal through the scaled deployment of this technology.
- *Efficiency Vermont Energy Resilience*—Efficiency Vermont established an internal definition for energy resilience and identified the following roles for itself in supporting customers with their energy resilience planning:
    - Collaborating with the State, DUs, and Vermont Electric Power Company (VELCO) for long-range energy resilience planning, such as 2024 participation in the flexible load management (FLM) working group to map out the use of long-term FLM which could be used for energy resilience
    - Using such planning to inform ways to achieve Efficiency Vermont's goals for delivering energy efficiency (including weatherization), FLM, and energy storage that support customer and grid energy resilience
    - Co-designing systems-optimized programs and services with DUs, customers, and other stakeholders to achieve customer energy resilience
    - Reinforcing the nexus of the "voice of the customer / community," their energy resilience timescale, greenhouse gas (GHG) reduction goals, and climate adaptation needs
    - Communicating the need for customer energy resilience and the quantifiable value of Efficiency Vermont's programs and services in contributing to such resilience

5.3 Planning and Reporting

5.3.1 Annual Plans and External Reporting

In 2023, Efficiency Vermont prepared and submitted required documents to the Commission, the Department, and other stakeholders. The below documents were presented in fulfillment of requirements specified under its regulations, to maintain accountability and provide accurate tracking of progress for service delivery optimization, public benefit, and the benefit of entities outside Vermont seeking replication:

- 2023 Quarterly Reports for March, June, and September, including any program change or budget variance forecast notices as needed

- 2022 Budget Variance Report
- 2022 Savings Claim Summary
- 2021 Annual Report
- Updates to Efficiency Vermont 2021-2023 Triennial Plan budgets, which were filed in both Case No. 23-0926-PET (Disposition of Unspent 2022 Funds) and Case No. 20A-0924 (Efficiency Vermont's 2022 Budget Variance Report)
- 2024-2026 Triennial Plan

5.3.2 Demand Resources Plan

In 2023, Efficiency Vermont participated as a party in the Commission-led regulatory process, also known as the DRP Proceeding (Case No. 22-2954-PET) that occurs every three years. The proceeding establishes Efficiency Vermont's three-year performance period programs, budgets and goals, among other objectives of the proceeding. Efficiency Vermont filed a comprehensive DRP proposal that focused on proposed updates to its 2024-2026 DRP, accompanied by materials offered in support of its proposal, as well as responses to information requests regarding its proposal, and other parties' respective filings in the case. The Commission approved updates to Efficiency Vermont's 2024-2026 DRP, after which Efficiency Vermont filed proposed amendments to its approved DRP pursuant to the Energy Efficiency Modernization Act (EEMA) or Act No. 44. EEMA affords the Commission the authorization to approve Act No. 151-type programs, that were previously approved for the 2021-2023 period, for the 2024-2026 period. For more information on Efficiency Vermont's Act No. 151 Programs, see Section 4.9.

5.3.3 Vermont System Planning Committee Participation

In 2023, Efficiency Vermont participated in four VSPC quarterly meetings, one Geographic Targeting subcommittee meeting, and two Load Forecasting subcommittee meetings.

5.3.4 Independent System Operator–New England Forward Capacity Market Administration

In 2023, Efficiency Vermont qualified four MW of additional summer capacity and ten MW of additional winter capacity, for an obligation starting in 2027. It also bid capacity exceeding the obligation into monthly and annual reconfiguration auctions, to monetize a small amount of performance above its obligation, resulting in over $440,000 of additional revenue in 2023.

5.3.5 External Non-Regulatory Reporting

In 2023, Efficiency Vermont:

- Submitted quarterly reports for American Rescue Plan Act (ARPA)-funded programs on weatherization, workforce development training, and flood support.
- Provided Efficiency Vermont annual and lifetime energy and demand savings, as well as incentive and non-incentive costs for the 2022 EIA-861 Annual Report.
- Redeveloped its external non-regulatory reports in concert with the Tracker Measure Management software update, including but limited to: DU EEC Collections and Benefit Report, VPPSA Utility Pipeline Report, VPPSA Utility Actuals Report, Regional Planning Commission Report, and DU Installation Report.
- Developed a new Processing Utility Submission Report to enable regular data sharing with VGS and BED.

- Updated the Regional Planning Commission report, which summarizes Efficiency Vermont's performance for Vermont regions and towns, for 2019-2022 data, and distributed it to RPCs in July.
- Submitted 2021 TEPF program descriptions, costs and performance results, including a customer "success story" to RGGI for its 2021 Annual Proceeds Report. The narrative and data will form the content presented in the Vermont section of the report.
- Submitted 2022 program costs and performance results data to ISO New England (ISO-NE) for its 2024 energy efficiency forecast.

5.4 Evaluation

As an essential part of its reporting efforts, Efficiency Vermont engaged in activities designed to maintain the accuracy of reported savings claims. These activities included the following initiatives.

5.4.1 Annual Savings Verification

Efficiency Vermont supported the annual savings verification process for program year (PY) 2022, by coordinating with the Department's third-party evaluation contractor, including: transferring the 2022 program tracking database, providing sampled project data, responding to custom project reports, and reviewing evaluation findings and recommendations. Results of the savings verification:

- Efficiency Vermont's realization rates for electric efficiency programs in 2022 were 97.0% for MWh, 96.8% for winter kW, 97.8% for summer kW, 97.6% for lifetime MWh savings, and 98.6% for GHG reductions.
- Efficiency Vermont's realization rate for TEPF efficiency programs in 2022 was 99.2% for MMBtu savings and 98.7% for GHG reductions.
- Efficiency Vermont's realization rate was 100.2% for total resource benefits, and 100% for flexible kW installed.

5.4.2 Technical Advisory Group (TAG)

Efficiency Vermont's TAG activities included discussion and review of the Technical Reference Manual (TRM). In addition to TRM review, TAG discussed technical topics related to EEU savings claims, reviewed Program Implementation Procedures (PIPs), and coordinated other EEU evaluation efforts.

Additionally, in 2023, Efficiency Vermont worked with EEUs and the Department to address:

- ESA Pilot project methodology for electrification projects
- Non-energy GHG measures
- Home Performance with ENERGY STAR eligibility updates
- FLM value and potential screening measures
- 2023 lighting initiatives
- Efficiency Vermont's annual promotions and focus on customer segments
- Lighting power density analyses and screw-based sockets
- Embodied carbon in insulation programs
- Weather data used for prescriptive and custom measures for the 2027-2029 performance period
- Guidelines for measures with persistence issues

- School wood boiler controls memo
- Continuation of custom lighting measures for retrofit and market opportunity applications

5.4.3 Technical Reference Manual

In 2023, Efficiency Vermont:

- Maintained, updated, and ensured the reliability of the TRM, which characterizes energy-saving measures on the basis of numerous parameters: annual electric savings, annual coincident peak savings, annual fossil fuel energy savings, incremental costs and measure lives, and other applicable resource savings such as water savings and operational and maintenance cost savings. TRM efforts included continuous process improvement activities and quality assurance and evaluations of high-impact efficiency programs and measures.
- Developed one new measure characterization and completed updates for 12 existing characterizations that were submitted for review by the Department and its contractor, including advanced manufactured homes, commercial kitchen equipment, room air conditioners, ducted and ductless heat pumps, dehumidifiers, and others.

5.4.4 ISO-NE FCM Metering, Monitoring, and Evaluation

In 2023, Efficiency Vermont:

- Performed in-program metering on large C&I sites in anticipation of the sites being metered by a third party in the 2024 evaluation to discover and correct any problems.
- Supported customers' inquiries on meter installations and helped them gain a better understanding of their sites' electricity usage.

5.4.5 Quality Management

Service Quality and Reliability Plan

Efficiency Vermont achieved the following service quality results:

- Contact Center metrics:
  - 8 seconds average speed to answer
  - 93% of calls handled by a live agent during normal business hours[12]
  - 2.2 % call abandonment rate[13]
- Complaints
  - Received 0 complaints
  - Followed up within 24 hours —100%
  - Resolution within 12 business days — 100%
- General customer satisfaction (as measured by the percentage of customers who contact Efficiency Vermont and are satisfied or very satisfied with Efficiency Vermont customer service; should be greater than or equal to 80%)[14]
  - Residential = 81%

[12] Contact Center performance for (1) average percentage of calls answered (SQRP metric #5) and (2) average percentage of abandoned calls (SQRP Metric #6) excludes data from May 22, 2023, through August 15, 2023. Data available during that time period was associated with a new phone system vendor that was unable to meet reporting criteria needs for SQRP metrics 5 and 6. VEIC switched back to its prior phone system vendor effective August 16, 2023, from which point necessary performance reporting was again available. See Section 6.7 for SQRP results.

[13] Id.

[14] These percentages represent customers who responded to survey questions.

  - Commercial = 73%
- Transactional customer satisfaction (as measured per each transaction category; annual percentage of survey respondents with average service rating of 3 or better equals 90%)
  - Commercial prescriptive projects = 100%
  - Home Performance with ENERGY STAR = 100%
  - Custom C&I = 100%

5.5 Administration and Regulatory Affairs

5.5.1 General Administration

In 2023, Efficiency Vermont:

- Coordinated service implementation across various functions; performed budget and performance forecasting and management; participated in regular check-ins with the two other EEUs; and reviewed, managed, monitored, and conducted internal communication of overall performance and spending.
- Undertook activities in key organizational functions as relates to budgets, performance, and the 2024 EEC rates calculation. Additionally, the data steward for Efficiency Vermont reviewed third-party requests for Efficiency Vermont information consistent with its guidelines and processes for sharing intellectual property.
- Developed and proposed the 2024 EEC Rates for Commission approval.

5.5.2 Regulatory Affairs (Non-DRP)

In 2023, Efficiency Vermont:

- Provided expert testimony to Senate and House State Legislators on technical matters pertaining to pending legislation, with particular focus on the Affordable Heat Act and providing suggestions for improving the chances that weatherization becomes a major component of clean heat credit generation.
- Provided technical analysis of the Affordable Heat Act to several legislative committees on the role of weatherization in a clean heat market.
- Contracted with Synapse for the Vermont share of the regional Avoided Energy Supply Cost Study Group, and participated in weekly and regular meetings leading to development of the new AESC Study.
- Continued executing grant agreements with the Department for delivery of weatherization, workforce development, and flood relief services.
- Launched work on the Clean Heat Standard rulemaking proceeding (Case No. 23-2220-INV).

5.5.3 Public Affairs

In 2023, in addition to providing physical or virtual representation at policy forums, meetings, and conferences around the state, Efficiency Vermont:

- Engaged in extensive discussion, testimony, and information gathering related to the proposed extension of the Energy Efficiency Modernization Act and the proposed Clean Heat Standard legislation.
- Testified before the Vermont Legislature nearly a dozen times on a variety of topics, including weatherization, transportation electrification, thermal measures, equity, and overall energy efficiency.

5.6 Information Systems

5.6.1 Core Business Software Applications

Efficiency Vermont supported some existing software applications that enabled program implementation activities.

Efficiency Vermont's releases and updates in 2023 included:

- A new Measure Management application, supporting the administration of all prescriptive measures. Efficiency Vermont also made significant upgrades and enhancements to the upstream, online rebates, qualified product management, and Tracker applications. These upgrades will allow the applications to integrate with the new central Measure Management system, improve the configurability of program setup, and streamline operations by leveraging current and secure technologies.
- Enhancements to the FCM application to support changes to FCM reporting required by ISO-NE.
- New measure technology and modifications to online rebates to support flood recovery.
- Significant maintenance work on the technology stack to ensure Efficiency Vermont's frameworks remain current and secure.
- Many minor improvements, user-requested updates, and bug fixes implemented in Tracker, Online Rebates, and Upstream.

5.6.2 Utility Data Management

In 2023, Efficiency Vermont:

- Performed communication and support activities to acquire utility data securely from Vermont's 16 participating electric DUs and one participating gas utility.
- Performed ongoing maintenance of custom staging and integration packages to ingest billing data from the DUs to the Tracker utility database (daily, weekly, and monthly).
- Worked closely with three Vermont electric departments in Northfield, Hardwick, and Swanton to complete large projects to migrate existing billing data transfer format and protocols to the new standard. Efficiency Vermont completed development, testing, and deployment of new data staging and ingest packages according to Docket No. 8316 for Vermont municipal utilities, their vendors, and VPPSA.
- Supported Stowe Electric Department Advanced Metering Infrastructure AMI data transfer issues. Efficiency Vermont undertook initial communication, meetings, and iterative file review with the new Stowe vendor related to the upcoming migration of Stowe Electric's meter data management and billing systems to a new software provider in Q4 2023. Additionally, Efficiency Vermont began large internal project to update existing Stowe data in internal Efficiency Vermont billing and AMI systems and updates to ingest packages.
- Identified and implemented improvements in distribution utility data alerts and file handling.

5.6.3 Reporting and Business Intelligence

Data storage, management, and access provided critical support for EEU operations. As the volume of data and number of business software applications continued to grow in 2023, so did the need to provide scaled data systems, architecture, and reporting to support this growth.

Efficiency Vermont:

- Made significant enhancements to existing business intelligence infrastructure. Efficiency Vermont designed and implemented new Reporting Warehouse structures to align with the Tracker Measure Management software release and database changes. Additional warehouse enhancements were made to improve and scale reporting for upstream, online rebates, etc.
- Redeveloped and deployed more than 140 existing Efficiency Vermont program and operational reports, migrating to new database and warehouse structures, as part of the new Measure Management release. Efficiency Vermont archived more than 20 reports.
- Finished deploying the new C&I dashboard and enhanced the existing report to support C&I Custom Managers and tracking.
- Made updates to the existing Estimated Completion Date logic in the Efficiency Vermont data cubes to support more accurate forecasting of incentives and savings.
- Provided general database, warehouse, and report support for Efficiency Vermont Home Performance with ENERGY STAR program changes.
- Provided general database, warehouse, and report support for Efficiency Vermont RNC program changes and retired obsolete RNC shell measure upload tool and process.

6 Resource Acquisition and Development and Support Services Results

6.1 Resource Acquisition Summary[1]

Resource Acquisition Category	Total Efficiency Vermont Resource Acquisition	Thermal Energy and Process Fuels Resource Acquisition	Electric Resource Acquisition
Efficiency Vermont Costs			
Year to Date Costs	$48,744,581	$8,364,319	$40,380,262
Annual Budget Estimate[2]	$51,829,695	$8,374,890	$43,454,805
Unspent Annual Budget Estimate	$3,085,114	$10,571	$3,074,543
% Annual Budget Estimate Unspent	6.0%	0.1%	7.1%
MWh Savings Results			
MWh Year to Date	70,011	-2,568	72,579
MWh Cumulative starting 1/1/21	226,398	-5,135	231,533
Winter Peak Coincident kW Savings Results			
Winter Coincident Peak kW Year to Date	11,016	-663	11,679
Winter Coincident Peak kW Cumulative Starting 1/1/21	35,106	-1,349	36,455
Summer Peak Coincident kW Savings Results			
Summer Coincident Peak kW Year to Date	10,102	-90	10,192
Summer Coincident Peak kW Cumulative Starting 1/1/21	28,743	-187	28,930
Total Resource Benefits (TRB) Savings Results			
TRB Year to Date	$89,411,606	$32,807,619	$56,603,987
TRB Cumulative Starting 1/1/21	$312,274,036	$94,194,373	$218,079,663
MMBtu Savings Results			
MMBtu Year to Date	107,458	110,825	-3,367
MMBtu Cumulative Starting 1/1/21	385,413	327,388	58,026
MWh Lifetime Savings Results			
MWh Lifetime Year to Date	912,803	-40,972	953,775
MWh Lifetime Cumulative Starting 1/1/21	2,947,203	-82,242	3,029,446
Greenhouse Gas (GHG) Savings Results			
GHG Reductions (metric tons CO2e) Year to Date	30,153	5,203	24,949
GHG Reductions (metric tons CO2e) Starting 1/1/21	126,172	15,466	110,706

[1] All values in this table include Operations Fees.

[2] Annual budgets are estimates only and provided for informational purposes. Efficiency Vermont operates under three-year Commission approved budgets.

6.2 Budget Summary

	Budget 2023[1]	Actual 2023	%	Budget 2021-2023	Actual 2021-2023	%
RESOURCE ACQUISITION						
Electric Efficiency Funds Activities						
Business Sector	$ 19,706,452	$ 21,604,501	110%	$ 59,812,510	$ 61,710,559	103%
Energy Savings Account Pilot	$ 4,294,718	$ 1,419,329	33%	$ 6,000,000	$ 3,124,609	52%
Residential Sector	$ 19,162,120	$ 16,768,864	88%	$ 54,667,442	$ 52,274,187	96%
Total Electric Efficiency Funds Activities	**$ 43,163,290**	**$ 39,792,694**	**92%**	**$ 120,479,952**	**$ 117,109,355**	**97%**
Thermal Energy and Process Fuels Funds Activities						
Business Sector	$ 1,755,875	$ 1,939,987	110%	$ 3,688,961	$ 3,873,073	105%
Residential Sector	$ 6,556,671	$ 6,362,066	97%	$ 17,381,539	$ 17,186,934	99%
Total Thermal Energy and Process Fuels Funds Activities	**$ 8,312,547**	**$ 8,302,054**	**100%**	**$ 21,070,500**	**$ 21,060,007**	**100%**
TOTAL RESOURCE ACQUISITION	**$ 51,475,837**	**$ 48,094,748**	**93%**	**$ 141,550,452**	**$ 138,169,362**	**98%**
DEVELOPMENT & SUPPORT SERVICES						
Education and Training	$ 506,600	$ 473,474	93%	$ 1,414,029	$ 1,380,903	98%
Applied Research and Development	$ 174,100	$ 177,853	102%	$ 510,154	$ 513,908	101%
Planning and Reporting	$ 681,000	$ 605,164	89%	$ 1,658,452	$ 1,582,616	95%
Evaluation, Measurement, and Verification	$ 488,800	$ 451,287	92%	$ 1,326,850	$ 1,289,337	97%
Administration and Regulatory Affairs	$ 502,100	$ 446,038	89%	$ 1,688,324	$ 1,632,263	97%
Information Systems	$ 1,351,633	$ 1,246,324	92%	$ 3,824,964	$ 3,719,654	97%
TOTAL DEVELOPMENT & SUPPORT SERVICES	**$ 3,704,233**	**$ 3,400,140**	**92%**	**$ 10,422,773**	**$ 10,118,681**	**97%**
Operations Fee[2]	$ 381,640	$ 377,798	99%	$ 1,497,565	$ 1,493,723	100%
Sub-Total Prior to Performance-Based Compensation	**$ 55,561,709**	**$ 51,872,686**	**93%**	**$ 153,470,790**	**$ 149,781,766**	**98%**
Performance-Based Compensation (4.0%)[3]	$ 1,911,911	$ 3,196,153	167%	$ 5,851,600	$ 5,671,936	97%
Flood Recovery Funding	$ 1,008,361	$ 297,542	30%	$ 1,008,361	$ 297,542	30%
Total Efficiency Vermont	**$ 58,481,981**	**$ 55,366,382**	**95%**	**$ 160,330,751**	**$ 155,751,244**	**97%**

[1] Annual budgets are provided for information purposes only. Efficiency Vermont operates under three-year Commission approved budgets.

[2] The 2023 Operations Fee was 0.75%. (Note, the 2021 Operations Fee was 1.35% and the 2022 Operations Fee was 1.0%.)

[3] The 2023 performance award was approved by the Commission on October 10, 2024 in Case No. 24-0967-PET, following the Department's 2023 savings verification process. The 2021-2023 performance award actuals, as shown in this table, include the total approved performance awards for the three-year performance period.

In accordance with both statutory and Vermont Public Utility Commission requirements, the funding source for Efficiency Vermont's electric efficiency services was separate and distinct from funding sources for efficiency services related to thermal energy and process fuels (TEPF). Electric services were funded through the Energy Efficiency Charge, whereas TEPF services were funded by Vermont's Regional Greenhouse Gas Initiative revenues and by revenues earned from meeting electric capacity commitments (Efficiency Vermont demand savings) bid into the regional grid's Forward Capacity Market (FCM). The Efficiency Vermont administrator—the Vermont Energy Investment Corporation—bid these expected demand savings into the FCM on behalf of the State of Vermont. 2022 FCM activities are discussed in Section 5.3.4. Also see Sections 8.8 FCM current claim and forecasts, and 8.9 FCM future commitments and revenue forecast.

6.3 Electric Performance Indicators & Minimum Requirements

QPI#	Title	Performance Indicator / Milestone	Target	Status	%
1	Total Resource Benefits	Present value of lifetime electric, fuel, and water benefits	$211,800,874	$218,079,663	103%
2	Annual Electricity Savings	Annual incremental net MWh savings	254,854	231,533	91%
3	Statewide Summer Peak Demand Savings	Cumulative net summer peak demand (kW) savings	27,209	28,930	106%
4	Statewide Winter Peak Demand Savings	Cumulative net winter peak demand (kW) savings	34,418	36,455	106%
5	Lifetime Electricity Savings	Lifetime incremental net MWh savings	3,183,007	3,029,446	95%
6	Greenhouse Gas Reduction	Energy and non-energy benefits, in metric tons of CO_2e	134,996	110,706	82%
7	Flexible Load	Annual kW of flexible load (controllable load)	2,700	4,777	177%
8	Administrative Efficiency	5% administrative cost reduction	$988,600	$950,441	96%

MPR#	Title	Minimum Requirement	Minimum	Status	%
9	Minimum Electric Benefits	Total electric benefits divided by total costs	1.2	1.4	116%
10	Threshold (or minimum acceptable) Level of Participation by Residential Customers	Total residential sector spending	$37,989,000	$52,901,662	139%
11	Threshold (or minimum acceptable) Level of Participation by Low-Income Households	Total low-income services spending	$11,480,000	$13,787,162	120%
12	Threshold (or minimum acceptable) Level of Participation by Small Business Customers	Number of total non-residential premises with annual electric use of 40,000 kWh/yr or less that acquire kwh savings	2,000	6,772	339%
13	Geographic Equity - County	TRB for each geographic area is greater than values shown on Geo-Equity County table	12	12	100%
14	Geographic Equity - Utility	Customer Lifetime Savings for each distribution utility is greater than values shown on Geo-Equity Utility table (VPPSA aggregated)	6	6	100%
15	Service Quality	Achieve 92 or more metric points	92	96	104%
16	Resource Acquisition- Performance Period Spending	Total spending for a three-year performance period (including applicable operations fees) is less than threshold	$124,004,000	$118,582,380	96%
17	Development and Support Services- Performance Period Spending	Total spending for a three-year performance period (including applicable operations fees) is less than threshold	$11,071,000	$10,222,567	92%

6.4 Electric Minimum TRB per Geographic Area (MPR #13)

Geographic Area[1]	Required TRB per Geographic Area[2]	Period To Date TRB per Geographic Area	% of Goal
Addison	$8,929,033	$19,965,402	224%
Bennington	$10,499,973	$11,707,109	111%
Caledonia	$6,035,370	$9,062,934	150%
Chittenden	$29,862,922	$45,542,751	153%
Essex/Orleans	$7,766,941	$13,689,135	176%
Franklin	$15,072,873	$17,368,485	115%
Grand Isle/Lamoille	$8,136,246	$12,275,492	151%
Orange	$5,189,836	$8,151,879	157%
Rutland	$16,858,625	$23,557,349	140%
Washington	$14,142,821	$23,372,830	165%
Windham	$15,708,749	$17,117,632	109%
Windsor	$15,812,773	$16,268,665	103%
Total	**$154,016,162**	**$218,079,663**	**142%**

[1] All geographic names above refer to Vermont Counties.

[2] Required Total Resource Benefits (TRB) targets have been adjusted for the Self Managed Energy Efficiency Program (SMEEP)

6.5 Electric Minimum Customer Lifetime Savings per Distribution Utility (MPR #14)

Distribution Utility	% EEC by Utility[1]	Minimum Lifetime Customer Savings[2] per Utility	Period To Date Lifetime Customer Savings per Utility	% of Goal
VPPSA Aggregate[3]	7.70%	$10,782,391	$31,731,539	294%
Barton Village Electric Department	0.30%	$420,093	$1,371,280	326%
Enosburg Falls Inc. Water & Light Department	0.60%	$840,186	$1,783,778	212%
Hardwick Electric Department	0.80%	$1,120,248	$4,829,751	431%
Ludlow Electric Light Department	1.10%	$1,540,342	$2,851,962	185%
Lyndonville Electric Department	1.40%	$1,960,435	$6,559,522	335%
Swanton Village Electric Department	1.20%	$1,680,373	$4,397,997	262%
Town of Northfield Electric Department	0.60%	$840,186	$1,792,638	213%
Village of Jacksonville Electric Department	0.10%	$140,031	$295,130	211%
Village of Johnson Electric Department	0.30%	$420,093	$1,715,791	408%
Village of Morrisville Water & Light Department	1.00%	$1,400,311	$5,496,555	393%
Village of Orleans	0.30%	$420,093	$637,134	152%
Green Mountain Power	79.00%	$110,624,536	$366,169,842	331%
Stowe Electric Department	1.70%	$2,380,528	$7,780,771	327%
Vermont Electric Co-op	9.70%	$13,583,013	$51,862,569	382%
Village of Hyde Park	0.20%	$280,062	$860,094	307%
Washington Electric Co-op	1.70%	$2,380,528	$8,167,335	343%
Total		**$140,031,058**	**N/A**	**N/A**

[1] % EEC by Utility is the average percent contributed by ratepayers in each distribution utility for the period 2016-2018 per the annual December reports issued by the Efficiency Vermont Fiscal Agent

[2] Minimum Lifetime Customer Savings values are the sum of customer electric, water and fuel cost savings at DPS approved retail rate averages over the lifetime of the efficiency measures

[3] Minimum Lifetime Customer Savings for VPPSA is an aggregate target for all VPPSA members.

6.6 Thermal Energy and Process Fuels Funds Performance Indicators & Minimum Requirements

QPI#	Title	Performance Indicator / Milestone	Target	Status	%
1	Thermal & Mechanical Energy Efficiency Savings	Annual incremental net MMBtu savings	340,600	327,388	96%
2	Residential Single Family Comprehensiveness	Combined performance for metrics 2.a.-2.c.	100%	100%	100%
		a. Average air leakage reduction per comprehensive project.	34%	29%	85%
		b. Percent of comprehensive projects with square feet of added insulation at least 50% of the home's finished square feet of floor area.	44%	45%	102%
		c. Percent of households (premises) that implement shell measures, and also have a heating system measures installed within three years of the shell measure.	16%	18%	113%
3	Housing Units Weatherized	Number of Residential Housing Units comprehensively weatherized.	4,400	2,931	67%
4	Greenhouse Gas Reductions	Energy and non-energy benefits, in metric tons CO_2e	20,400	15,466	76%

MPR#	Title	Minimum Requirement	Minimum	Status	%
5	Threshold (or minimum acceptable) Level of Participation by Residential Customers	Residential sector spending as % of total 2021-2023 spending	62.5%	81.6%	131%
6	Threshold (or minimum acceptable) Level of Participation by Low-Income Households	Low-income single- and multi-family spending as % of total 2021-2023 spending	17.0%	26.2%	154%
7	Performance Period Spending	Total 2021-2023 spending (including applicable operations fees) is less than threshold	$21,500,000	$21,274,360	99%

6.7 Service Quality and Reliability Summary Report

Metric #	Metric Description	Reporting Frequency	Performance this Period	Points Earned this Period	Cumulative 2021-2023 Points Earned	Total Possible 2021-2023 Points	Points Earned % of Total Possible
1	Residential Customer Service Satisfaction: Percentage of Residential Customers who contact Efficiency Vermont and are satisfied or very satisfied with Efficiency Vermont Customer Service will be greater than or equal to 80%	performance period	83%	12	12	12	100%
2	Business Customer Service Satisfaction: Percentage of Business Customers who contact Efficiency Vermont and are satisfied or very satisfied with Efficiency Vermont Customer Service will be greater than or equal to 80%	performance period	79%	0	0	12	0%
3	Customer Satisfaction upon Project Completion: Per each market segment, annual percentage of survey respondents with average service ratings of 3 (or better) shall be ≥ 90%	annually	100%	4	12	12	100%
4	Average answer time shall be ≤ 15 seconds per call	quarterly	8.0	1	12	12	100%
5	Average percentage of calls answered shall be ≥ 85% [1]	quarterly	93.1%	1	12	12	100%
6	Average percentage of abandoned calls shall be ≤ 3% [1]	quarterly	2.2%	1	12	12	100%
7	Percentage of complaint follow-up call attempted by end of next business day shall be ≥ 95%	quarterly	100%	1	12	12	100%
8	Percentage of complaints closed within 12 business days of initial complaint call shall be ≥ 95%	quarterly	100%	1	12	12	100%
9	For each reporting year, the ratio of total complaints received per total number of Efficiency Vermont participants shall be ≤ 0.5% (one-half of one percent)	annually	0.0%	4	12	12	100%
	Totals			**25**	**96**	**108**	**89%**

6.8 Electric Resource Acquisition Summary

	Totals			Business Energy Services			Residential Energy Services		
Services	Total Electric Efficiency Services	Subtotal Business Efficiency Services	Subtotal Residential Efficiency Services	New Construction	Business Existing Facilities (excl ESA Pilot)	Business Existing Facilities (ESA Pilot only)	New Construction	Efficient Products	Existing Homes
Electric Resource Acquisiton Costs									
Year to Date Costs	$40,380,262	$23,400,859	$16,979,404	$1,890,860	$20,090,670	$1,419,329	$2,029,093	$8,721,492	$6,228,819
Annual Budget Estimate[1]	$43,454,805	$24,148,969	$19,305,836	$2,329,221	$17,525,029	$4,294,718	$2,937,916	$10,470,432	$5,897,488
Unspent Annual Budget Estimate	$3,074,543	$748,110	$2,326,432	$438,362	($2,565,641)	$2,875,389	$908,823	$1,748,940	($331,331)
% Annual Budget Estimate Unspent	7%	3%	12%	19%	-15%	67%	31%	17%	-6%
MWh Savings Results									
MWh Year to Date	72,579	48,919	23,661	4,206	43,239	1,474	1,042	21,225	1,393
MWh Starting 1/1/21	231,533	150,702	80,831	28,407	120,178	2,116	4,148	72,070	4,612
3-Year MWh Goal	254,854	169,677	85,177	9,754	159,924	N/A	5,601	67,890	11,685
% of 3-Year MWh Goal	91%	89%	95%	291%	75%	N/A	74%	106%	39%
Winter Peak Coincident kW Savings Results									
Winter Coincident Peak kW Year to Date	11,679	6,361	5,318	631	5,561	169	264	4,761	292
Winter Coincident Peak kW Starting 1/1/21	36,455	19,063	17,392	4,033	14,813	217	873	15,536	983
3-Year Winter Coincident Peak kW Goal	34,418	19,778	14,640	1,163	18,615	N/A	873	12,022	1,745
% of 3-Year Winter Coincident Peak kW Goal	106%	96%	119%	347%	80%	N/A	100%	129%	56%
Summer Peak Coincident kW Savings Results									
Summer Coincident Peak kW Year to Date	10,192	8,732	1,460	1,006	7,621	105	86	1,260	114
Summer Coincident Peak kW Starting 1/1/21	28,930	23,769	5,161	5,129	18,487	153	277	4,529	354
3-Year Summer Coincident Peak kW Goal	27,209	20,407	6,802	1,437	18,970	N/A	287	5,940	575
% of 3-Year Summer Coincident Peak kW Goal	106%	116%	76%	357%	97%	N/A	96%	76%	62%
Total Resource Benefits (TRB) Savings Results									
TRB Year to Date	$56,603,987	36,184,667	$20,419,320	$2,810,256	$31,904,090	$1,470,321	$1,560,390	$17,693,158	$1,165,772
TRB Starting 1/1/21	$218,079,663	132,298,793	$85,780,870	$26,626,326	$102,173,556	$3,498,911	$8,697,212	$73,414,919	$3,668,739
3-Year TRB Goal	$211,800,874	$141,682,950	$70,117,924	$8,428,203	$133,254,748	N/A	$19,612,098	$44,248,041	$6,257,785
% of 3-Year TRB Goal	103%	93%	122%	316%	77%	N/A	44%	166%	59%
MWh Lifetime Savings Results									
MWh Lifetime Year to Date	953,775	644,236	309,539	43,560	581,803	18,873	16,322	278,408	14,809
MWh Lifetime Starting 1/1/21	3,029,446	1,933,870	1,095,575	338,036	1,570,544	25,290	71,324	968,091	56,160
3-Year MWh Lifetime Goal	3,183,007	2,198,149	984,858	128,770	2,069,379	N/A	100,336	797,776	86,746
% of 3-Year MWh Lifetime Goal	95%	88%	111%	263%	76%	N/A	71%	121%	65%
Greenhouse Gas (GHG) Savings Results									
GHG Reductions (metric tons CO2e) Year to Date	24,949	16,948	8,001	1,302	15,124	522	432	7,091	478
GHG Reductions (metric tons CO2e) Starting 1/1/21	110,706	75,080	35,626	12,536	61,492	1,051	2,448	31,283	1,895
3-Year GHG Goal	134,996	94,940	40,056	4,429	90,511	N/A	4,622	30,042	5,392
% of 3-Year GHG Goal	168%	79%	89%	283%	68%	N/A	53%	104%	35%

[1] Annual budgets are provided for information purposes only. Efficiency Vermont operates under three-year Commission approved budgets.

6.9 Electric Resource Acquisition

	Prior Year 2022	Current Year 2023	Cumulative starting 1/1/21
# participants with installations	35,542	27,021	91,033
Operating Costs			
Administration	$2,341,992	$2,326,111	$4,668,103
Programs and Implementation	$3,810,865	$3,913,118	$7,723,983
Strategy and Planning	$595,870	$631,273	$1,227,142
Subtotal Operating Costs	**$6,748,727**	**$6,870,501**	**$13,619,228**
Technical Assistance Costs			
Services to Participants	$6,562,031	$6,622,856	$13,184,887
Services to Trade Allies	$1,274,081	$1,292,557	$2,566,638
Subtotal Technical Assistance Costs	**$7,836,112**	**$7,915,413**	**$15,751,525**
Support Services			
Consulting	$87,368	$84,814	$172,182
Customer Support	$83,263	$89,515	$172,778
Data and Technical Services	$833,611	$890,886	$1,724,497
Information Technology	$0	$0	$0
Marketing	$3,224,500	$2,950,703	$6,175,203
Policy & Public Affairs	$0	$235	$235
Other	$0	$0	$0
Subtotal Support Services Costs	**$4,228,742**	**$4,016,153**	**$8,244,896**
Incentive Costs			
Incentives to Participants	$21,196,776	$21,112,813	$40,542,669
Incentives to Trade Allies	$365,945	$465,382	$831,327
Subtotal Incentive Costs	**$21,562,721**	**$21,578,195**	**$41,373,997**
Total Efficiency Vermont Costs	**$40,376,303**	**$40,380,262**	**$78,989,646**
Total Participant Costs	$23,483,491	$18,482,925	$63,961,494
Total Third Party Costs	$113,731	$98,309	$281,862
Total Resource Acquisition Costs	**$63,973,525**	**$58,961,496**	**$143,233,002**

Annualized MWh Savings	89,450	72,579	231,533
Lifetime MWh Savings	1,150,453	953,775	3,029,446
TRB Savings (2021 $)	$90,871,001	$56,603,987	$218,079,663
Winter Coincident Peak kW Savings	13,823	11,679	36,455
Summer Coincident Peak kW Savings	11,182	10,192	28,930
GHG Reductions (metric tons CO_2e)	46,190	24,949	110,706
Annualized MWh Savings/Participant	2.517	2.686	2.543
Weighted Lifetime	12.9	13.1	13.1

6.10 Electric Resource Acquisition - End Use Breakdown

End Use	# of Participants	MWh Net	GHG (metric tons CO2e) Saved	Lifetime MWh Net	Winter KW Net	Summer KW Net	MMbtu Net	TRB Net	Participant Incentives Paid	Participant Costs
Air Conditioning Eff.	1,905	1,338	541	17,956	111	289	0	$1,066,232	$355,696	$402,722
Cooking and Laundry	1,042	1,769	619	21,542	260	205	1,499	$3,295,247	$591,563	$916,160
Design Assistance	111	3,903	1,346	37,397	564	941	2,701	$2,943,431	$525,382	$869,135
Electronics	1	31	10	307	4	4	0	$16,599	$5,000	$15,300
Hot Water Efficiency	1,759	3,333	743	39,630	562	272	-5,706	$560,720	$1,584,360	-$86,417
Industrial Process	41	3,281	1,023	36,252	379	341	14	$1,815,857	$423,966	$1,251,793
Lighting	10,924	36,318	10,151	464,992	4,887	6,656	-15,001	$24,459,466	$7,233,876	$5,070,446
Motors	1,907	1,727	544	26,509	262	181	92	$1,393,810	$408,731	$543,924
Other Efficiency	773	1,871	1,125	15,610	431	143	8,241	$5,086,275	$1,482,265	$123,616
Other Indirect Activity	827	0	0	0	0	0	0	$0	$1,493,113	-$1,301,089
Refrigeration	1,312	3,679	3,784	49,226	499	496	401	$2,832,318	$1,539,945	$2,065,738
Space Heat Efficiency	9,664	14,429	4,656	231,469	3,586	375	1,504	$11,202,067	$2,840,633	$8,772,946
Space Heat Fuel Switch	295	0	0	0	0	0	0	$0	$1,061,774	-$777,216
Ventilation	852	895	405	12,797	132	288	2,888	$1,880,656	$142,399	$579,224
Water Conservation	91	6	2	87	1	0	0	$51,309	$2,450	$36,644
Totals		72,579	24,949	953,775	11,679	10,192	-3,367	$56,603,987	$19,691,153	$18,482,925

6.11 Electric Resource Acquisition - Utility Breakdown

Utility	# of Participants	MWh Net	GHG (metric tons CO2e) Saved	Lifetime MWh Net	Winter KW Net	Summer KW Net	MMbtu Net	TRB Net	Participant Incentives Paid	Participant Costs
Barton	183	158	46	2,031	25	20	-51	$107,645	$64,550	$25,306
Burlington	68	45	16	458	7	7	32	$53,088	$341,211	-$330,751
Enosburg Falls	207	225	70	2,998	40	33	-8	$190,477	$130,387	$7,259
Green Mountain	23,728	56,550	19,947	737,924	8,980	7,758	-1,496	$44,055,891	$15,047,719	$14,985,093
Hardwick	394	725	208	9,988	117	127	-264	$537,354	$223,944	$74,832
Hyde Park	148	115	36	1,413	22	12	-5	$87,631	$41,847	$19,617
Jacksonville	22	46	14	595	7	7	-8	$36,585	$13,723	$4,481
Johnson	185	309	89	3,942	40	51	-83	$231,970	$73,342	$60,374
Ludlow	165	332	104	4,452	64	40	-21	$234,335	$92,125	$83,328
Lyndonville	591	950	279	13,471	159	120	-237	$727,090	$283,464	$256,629
Morrisville	519	793	238	10,150	139	102	-179	$547,683	$270,701	$224,326
Northfield	107	420	117	5,774	55	82	-161	$337,004	$115,290	$26,812
Orleans	106	100	30	1,204	17	13	-27	$71,969	$55,236	$20,542
Stowe	563	899	295	12,284	181	79	190	$723,759	$211,553	$384,588
Swanton	229	1,030	418	14,350	153	218	-273	$867,886	$384,043	$98,551
VT Electric Coop	3,398	8,303	2,562	112,977	1,385	1,271	-570	$6,602,078	$1,947,428	$2,279,659
Washington Electric	891	1,579	482	19,765	289	252	-204	$1,191,542	$394,589	$262,279
Totals	31,504	72,579	24,949	953,775	11,679	10,192	-3,367	$56,603,987	$19,691,153	$18,482,925

6.12 Electric Resource Acquisition - County Breakdown

County	# of Participants	MWh Net	GHG (metric tons CO2e) Saved	Lifetime MWh Net	Winter KW Net	Summer KW Net	MMbtu Net	TRB Net	Participant Incentives Paid	Participant Costs
Addison	1,765	5,732	1,723	70,174	1,028	886	-372	$4,210,541	$1,451,633	$1,286,518
Bennington	1,556	4,511	1,363	61,162	726	635	-765	$3,394,130	$1,051,705	$838,707
Caledonia	1,282	3,716	1,087	50,018	552	556	-999	$2,666,955	$932,527	$1,022,958
Chittenden	5,742	14,577	6,552	191,210	2,262	2,118	19	$11,898,238	$4,596,710	$3,967,911
Essex	201	329	100	3,978	51	48	-37	$244,329	$106,640	$40,856
Franklin	1,708	6,435	2,060	88,361	980	1,073	-927	$5,262,176	$1,629,410	$963,397
Grand Isle	386	1,426	440	17,124	275	234	-60	$1,020,275	$220,205	$397,747
Lamoille	1,442	2,880	894	38,720	519	332	-156	$2,169,455	$773,047	$976,618
Orange	1,116	3,958	1,182	53,978	669	545	-698	$2,884,193	$824,938	$623,516
Orleans	1,620	2,863	857	37,422	436	437	-497	$2,154,542	$1,006,298	$1,146,091
Rutland	3,066	9,025	2,934	114,805	1,342	1,057	580	$7,281,542	$2,004,568	$3,001,299
Washington	2,918	6,354	2,093	88,021	1,036	881	415	$5,369,695	$1,916,092	$1,182,639
Windham	1,795	4,626	1,535	59,592	785	584	-179	$3,461,425	$1,438,482	$1,300,435
Windsor	2,459	6,147	2,130	79,212	1,016	805	308	$4,586,492	$1,738,898	$1,734,233
Totals	27,056	72,579	24,949	953,775	11,679	10,192	-3,367	$56,603,987	$19,691,153	$18,482,925

6.13 Electric Business Energy Services Summary

	Prior Year 2022	Current Year 2023	Cumulative starting 1/1/21
# participants with installations	7,174	5,900	16,538
Operating Costs			
Administration	$1,213,763	$1,279,597	$2,493,361
Programs and Implementation	$1,760,398	$1,746,077	$3,506,475
Strategy and Planning	$337,609	$339,985	$677,594
Subtotal Operating Costs	**$3,311,770**	**$3,365,659**	**$6,677,429**
Technical Assistance Costs			
Services to Participants	$4,919,203	$4,999,841	$9,919,044
Services to Trade Allies	$886,001	$895,233	$1,781,234
Subtotal Technical Assistance Costs	**$5,805,204**	**$5,895,074**	**$11,700,278**
Support Services			
Consulting	$70,871	$69,089	$139,960
Customer Support	$35,408	$33,906	$69,313
Data and Technical Services	$580,294	$665,642	$1,245,935
Information Technology	$0	$0	$0
Marketing	$1,296,077	$1,315,188	$2,611,265
Policy & Public Affairs	$0	$128	$128
Other	$0	$0	$0
Subtotal Support Services Costs	**$1,982,649**	**$2,083,951**	**$4,066,601**
Incentive Costs			
Incentives to Participants	$11,014,791	$11,659,730	$20,907,601
Incentives to Trade Allies	$258,441	$396,444	$654,885
Subtotal Incentive Costs	**$11,273,232**	**$12,056,174**	**$21,562,487**
Total Efficiency Vermont Costs	**$22,372,856**	**$23,400,859**	**$44,006,795**
Total Participant Costs	$15,880,254	$12,306,032	$42,364,577
Total Third Party Costs	$20,000	$0	$20,000
Total Resource Acquisition Costs	**$38,273,110**	**$35,706,890**	**$86,391,372**

Annualized MWh Savings	60,063	48,919	150,702
Lifetime MWh Savings	743,663	644,236	1,933,870
TRB Savings (2021 $)	$56,967,406	$36,184,667	$132,298,793
Winter Coincident Peak kW Savings	7,540	6,361	19,063
Summer Coincident Peak kW Savings	9,349	8,732	23,769
GHG Reductions (metric tons CO_2e)	31,973	16,948	75,080
Annualized MWh Savings/Participant	8.372	8.291	9.112
Weighted Lifetime	12.4	13.2	12.8

6.14 Electric Residential Energy Services Summary

	Prior Year 2022	Current Year 2023	Cumulative starting 1/1/21
# participants with installations	28,368	21,121	74,495
Operating Costs			
Administration	$1,128,229	$1,046,514	$2,174,742
Programs and Implementation	$2,050,467	$2,167,041	$4,217,508
Strategy and Planning	$258,261	$291,288	$549,548
Subtotal Operating Costs	**$3,436,957**	**$3,504,842**	**$6,941,799**
Technical Assistance Costs			
Services to Participants	$1,642,828	$1,623,015	$3,265,844
Services to Trade Allies	$388,080	$397,323	$785,403
Subtotal Technical Assistance Costs	**$2,030,908**	**$2,020,338**	**$4,051,247**
Support Services			
Consulting	$16,497	$15,725	$32,222
Customer Support	$47,855	$55,610	$103,465
Data and Technical Services	$253,318	$225,244	$478,561
Information Technology	$0	$0	$0
Marketing	$1,928,424	$1,635,515	$3,563,939
Policy & Public Affairs	$0	$108	$108
Other	$0	$0	$0
Subtotal Support Services Costs	**$2,246,093**	**$1,932,202**	**$4,178,295**
Incentive Costs			
Incentives to Participants	$10,181,985	$9,453,083	$19,635,068
Incentives to Trade Allies	$107,504	$68,938	$176,442
Subtotal Incentive Costs	**$10,289,489**	**$9,522,021**	**$19,811,510**
Total Efficiency Vermont Costs	**$18,003,447**	**$16,979,404**	**$34,982,851**
Total Participant Costs	$7,603,237	$6,176,893	$21,596,917
Total Third Party Costs	$93,731	$98,309	$261,862
Total Resource Acquisition Costs	**$25,700,415**	**$23,254,606**	**$56,841,630**

Annualized MWh Savings	29,387	23,661	80,831
Lifetime MWh Savings	406,789	309,539	1,095,575
TRB Savings (2021 $)	$33,903,595	$20,419,320	$85,780,870
Winter Coincident Peak kW Savings	6,282	5,318	17,392
Summer Coincident Peak kW Savings	1,833	1,460	5,161
GHG Reductions (metric tons CO_2e)	14,217	8,001	35,626
Annualized MWh Savings/Participant	1.036	1.120	1.085
Weighted Lifetime	13.8	13.1	13.6

6.15 Thermal Energy and Process Fuels Resource Acquisition Summary

	Totals			Business Energy Services		Residential Energy Services		
Services	Total Thermal Energy and Process Fuels Efficiency Services	Subtotal Business Efficiency Services	Subtotal Residential Efficiency Services	New Construction	Existing Facilities	New Construction[2]	Efficient Products	Existing Homes
Costs								
Year to Date Costs	$8,364,319	$1,954,537	$6,409,781	$0	$1,954,537	$3,855	$689,132	$5,716,793
Annual Budget Estimate[1]	$8,374,890	$1,769,044	$6,605,846	$0	$1,769,044	$0	$1,056,935	$5,548,911
Unspent Annual Budget Estimate	$10,571	($185,493)	$196,065	($0)	($185,493)	($3,855)	$367,803	($167,883)
% Annual Budget Estimate Unspent	0%	-10%	3%	0%	-10%	0%	35%	-3%
Savings Results								
MMBtu Year to Date	110,825	57,482	53,343	-	57,482	-	37,661	15,681
MMBtu Cumulative starting 1/1/21	327,388	139,007	188,381	-	139,007	-	133,819	54,562
3-Year MMBtu Goal	340,600	194,100	146,500	N/A	194,100	N/A	88,100	58,400
% of 3-Year MMBtu Goal	96%	72%	129%	N/A	72%	N/A	152%	93%
Associated Electric Benefits								
MWh Year to Date	(2,568)	(450)	(2,118)	-	(450)	-	(2,058)	(60)
MWh Cumulative starting 1/1/21	(5,135)	(864)	(4,271)	-	(864)	-	(3,999)	(272)
Winter Coincident Peak kW Year to Date	(663)	(110)	(553)	-	(110)	-	(546)	(6)
Winter Coincident Peak kW Cumulative starting 1/1/21	(1,349)	(281)	(1,069)	-	(281)	-	(1,021)	(48)
Summer Coincident Peak kW Year to Date	(90)	(6)	(84)	-	(6)	-	(84)	-
Summer Coincident Peak kW Cumulative starting 1/1/21	(187)	(25)	(162)	-	(25)	-	(161)	(1)
TRB Year-to-Date	$32,807,619	$16,335,346	$16,472,273	$0	$16,335,346	$0	$8,919,042	$7,553,231
TRB Starting 1/1/21	$94,194,373	$37,597,303	$56,597,070	$0	$37,597,303	$0	$32,666,902	$23,930,167
Lifetime MWh Year to Date	(40,972)	(7,114)	(33,858)	-	(7,114)	-	(32,835)	(1,023)
Lifetime MWh Cumulative starting 1/1/21	(82,242)	(14,734)	(67,508)	-	(14,734)	-	(62,888)	(4,620)
GHG Reductions (metric tons CO2e) Year to Date	5,203	3,611	1,592	-	3,611	-	630	963
GHG Reductions (metric tons CO2e) Starting 1/1/21	15,466	7,943	7,524	-	7,943	-	4,238	3,286

[1] Annual budgets are provided for information purposes only. Efficiency Vermont operates under three-year Commission approved budgets.

[2] Costs reported for Residential New Construction were for off-grid homes.

6.16 Thermal Energy and Process Fuels Resource Acquisition

	Prior Year 2022	Current Year 2023	Cumulative starting 1/1/21
# participants with installations	2,991	3,442	90,860
Operating Costs			
Administration	$314,421	$445,416	$759,838
Programs and Implementation	$1,316,291	$1,869,391	$3,185,682
Strategy and Planning	$8,036	$10,106	$18,142
Subtotal Operating Costs	**$1,638,749**	**$2,324,913**	**$3,963,662**
Technical Assistance Costs			
Services to Participants	$417,605	$874,441	$1,292,046
Services to Trade Allies	$20,298	$111,794	$132,091
Subtotal Technical Assistance Costs	**$437,902**	**$986,235**	**$1,424,137**
Support Services			
Consulting	$4,356	$11,029	$15,386
Customer Support	$31,776	$33,171	$64,947
Data and Technical Services	$75,589	$95,014	$165,584
Information Technology	$0	$62	$62
Marketing	$331,418	$476,745	$807,635
Policy & Public Affairs	$0	$349	$349
Other	$0	$0	$0
Subtotal Support Services Costs	**$443,139**	**$616,370**	**$1,053,962**
Incentive Costs			
Incentives to Participants	$3,123,503	$4,195,951	$7,319,454
Incentives to Trade Allies	$169,800	$240,850	$410,650
Subtotal Incentive Costs	**$3,293,303**	**$4,436,801**	**$7,730,104**
Total Efficiency Vermont Costs	**$5,813,094**	**$8,364,319**	**$14,171,864**
Total Participant Costs	$10,654,040	$12,186,482	$37,623,948
Total Third Party Costs	$368,415	$565,755	$1,410,967
Total Resource Acquisition Costs	**$16,835,549**	**$21,116,556**	**$53,206,779**

Annualized MMBtu Savings	83,237	110,825	327,388
Lifetime MMBtu Savings	1,283,590	1,510,972	4,923,912
TRB Savings (2021 $)	$22,204,306	$32,807,619	$94,194,373
GHG Reductions (metric tons CO_2e)	2,913	5,203	15,466
Annualized MMBtu Savings/Participant	27.829	32.198	3.603
Weighted Lifetime	15.4	13.6	15.0

[1]2022 budgeted amount represents a correcting entry (made in 2022) for miscoded costs reported for Residential New Construction in 2021.

6.17 Thermal Energy and Process Fuels Services & Initiatives - End Use Breakdown

End Use	# of Participants	MWh Net	GHG (metric tons CO2e) Saved	Lifetime MWh Net	Winter KW Net	Summer KW Net	MMbtu Net	TRB Net	Participant Incentives Paid	Participant Costs
Cooking and Laundry	19	14	48	198	2	2	677	$294,483	$25,050	$2,815
Design Assistance	18	27	39	222	8	9	560	$236,676	$77,290	$87,827
Hot Water Efficiency	327	-61	226	-735	-10	-5	3,751	$1,263,436	$58,249	$48,217
Hot Water Fuel Switch	41	0	36	0	0	0	509	$170,737	$0	$32,086
Industrial Process	19	-42	247	-430	0	0	4,373	$980,044	$69,924	$744,022
Lighting	1	0	1	0	0	0	9	$1,797	$550	$1,288
Other Efficiency	71	13	13	136	2	1	139	$94,794	$6,720	$0
Other Fuel Switch	3	-5	340	-110	0	0	5,361	$3,350,064	$72,000	$638,236
Other Indirect Activity	289	0	0	0	0	0	0	$0	$1,160,083	-$599,283
Space Heat Efficiency	2,527	0	1,981	-234	1	3	50,256	$11,515,130	$1,725,961	$5,403,508
Space Heat Fuel Switch	483	-2,516	2,244	-40,033	-666	-101	44,698	$14,763,003	$987,420	$5,682,638
Ventilation	40	1	29	12	1	0	492	$137,454	$12,703	$145,128
Totals		-2,568	5,203	-40,972	-663	-90	110,825	$32,807,619	$4,195,951	$12,186,482

6.18 Thermal Energy and Process Fuels Business Energy Services Summary

	Prior Year 2022	Current Year 2023	Cumulative starting 1/1/21
# participants with installations	210	190	16,365
Operating Costs			
Administration	$62,738	$114,182	$176,920
Programs and Implementation	$47,309	$145,627	$192,936
Strategy and Planning	$120	$2,160	$2,280
Subtotal Operating Costs	**$110,168**	**$261,968**	**$372,136**
Technical Assistance Costs			
Services to Participants	$175,928	$481,489	$657,417
Services to Trade Allies	$0	$22,589	$22,589
Subtotal Technical Assistance Costs	**$175,928**	**$504,078**	**$680,006**
Support Services			
Consulting	$3,856	$10,388	$14,244
Customer Support	$64	$1,231	$1,295
Data and Technical Services	$25,097	$33,330	$58,427
Information Technology	$0	$14	$14
Marketing	$15	$0	$15
Policy & Public Affairs	$0	$0	$0
Other	$0	$0	$0
Subtotal Support Services Costs	**$29,032**	**$44,963**	**$73,995**
Incentive Costs			
Incentives to Participants	$659,585	$1,138,228	$1,797,814
Incentives to Trade Allies	$5,900	$5,300	$11,200
Subtotal Incentive Costs	**$665,485**	**$1,143,528**	**$1,809,014**
Total Efficiency Vermont Costs	**$980,613**	**$1,954,537**	**$2,935,150**
Total Participant Costs	$2,649,526	$6,058,795	$11,654,445
Total Third Party Costs	$0	$0	$165,413
Total Resource Acquisition Costs	**$3,630,138**	**$8,013,333**	**$14,755,007**

Annualized MMBtu Savings	34,435	57,482	139,007
Lifetime MMBtu Savings	482,744	687,773	1,839,791
TRB Savings (2021 $)	$9,106,979	$16,335,346	$37,597,303
GHG Reductions (metric tons CO_2e)	1,365	3,611	7,943
Annualized MMBtu Savings/Participant	163.978	302.539	8.494
Weighted Lifetime	14.0	12.0	13.2

6.19 Thermal Energy and Process Fuels Residential Energy Services Summary

	Prior Year 2022	Current Year 2023	Cumulative starting 1/1/21
# participants with installations	2,781	3,252	74,495
Operating Costs			
Administration	$251,684	$331,234	$582,918
Programs and Implementation	$1,268,982	$1,723,764	$2,992,746
Strategy and Planning	$7,916	$7,946	$15,862
Subtotal Operating Costs	**$1,528,581**	**$2,062,945**	**$3,591,526**
Technical Assistance Costs			
Services to Participants	$241,677	$392,952	$634,629
Services to Trade Allies	$20,298	$89,205	$109,502
Subtotal Technical Assistance Costs	**$261,974**	**$482,157**	**$744,131**
Support Services			
Consulting	$500	$642	$1,142
Customer Support	$31,711	$31,940	$63,651
Data and Technical Services	$50,492	$61,683	$107,157
Information Technology	$0	$48	$48
Marketing	$331,404	$476,745	$807,620
Policy & Public Affairs	$0	$349	$349
Other	$0	$0	$0
Subtotal Support Services Costs	**$414,107**	**$571,407**	**$979,967**
Incentive Costs			
Incentives to Participants	$2,463,918	$3,057,722	$5,521,640
Incentives to Trade Allies	$163,900	$235,550	$399,450
Subtotal Incentive Costs	**$2,627,818**	**$3,293,272**	**$5,921,090**
Total Efficiency Vermont Costs	**$4,832,481**	**$6,409,781**	**$11,236,714**
Total Participant Costs	$8,004,514	$6,127,687	$25,969,503
Total Third Party Costs	$368,415	$565,755	$1,245,554
Total Resource Acquisition Costs	**$13,205,410**	**$13,103,223**	**$38,451,772**

Annualized MMBtu Savings	48,802	53,343	188,381
Lifetime MMBtu Savings	800,846	823,199	3,084,121
TRB Savings (2018 $)	$13,097,327	$16,472,273	$56,597,070
GHG Reductions (metric tons CO_2e)	1,548	1,592	7,524
Annualized MMBtu Savings/Participant	17.548	16.403	2.529
Weighted Lifetime	16.4	15.4	16.4

7 Major Market Resource Acquisition Results

7.1 Electric Business New Construction Summary

	Prior Year 2022	Current Year 2023	Cumulative starting 1/1/21
# participants with installations	67	61	173
Operating Costs			
Administration	$204,659	$67,058	$271,717
Programs and Implementation	$191,852	$186,741	$378,593
Strategy and Planning	$39,089	$39,446	$78,535
Subtotal Operating Costs	**$435,600**	**$293,245**	**$728,844**
Technical Assistance Costs			
Services to Participants	$846,166	$793,403	$1,639,569
Services to Trade Allies	$107,687	$98,346	$206,033
Subtotal Technical Assistance Costs	**$953,853**	**$891,749**	**$1,845,602**
Support Services			
Consulting	$11,054	$9,507	$20,561
Customer Support	$4,052	$3,412	$7,464
Data and Technical Services	$73,011	$74,622	$147,633
Information Technology	$0	$0	$0
Marketing	$167,323	$152,500	$319,824
Policy & Public Affairs	$0	$15	$15
Other	$0	$0	$0
Subtotal Support Services Costs	**$255,441**	**$240,056**	**$495,497**
Incentive Costs			
Incentives to Participants	$1,766,919	$465,810	$465,810
Incentives to Trade Allies	$0	$0	$0
Subtotal Incentive Costs	**$1,766,919**	**$465,810**	**$465,810**
Total Efficiency Vermont Costs	**$3,411,813**	**$1,890,860**	**$3,535,753**
Total Participant Costs	$3,321,635	$788,704	$5,664,307
Total Third Party Costs	$20,000	$0	$20,000
Total Resource Acquisition Costs	**$6,753,448**	**$2,679,563**	**$9,220,060**
Annualized MWh Savings	20,516	4,206	28,407
Lifetime MWh Savings	232,002	43,560	338,036
TRB Savings (2021 $)	$17,453,862	$2,810,256	$26,626,326
Winter Coincident Peak kW Savings	2,821	631	4,033
Summer Coincident Peak kW Savings	3,555	1,006	5,129
GHG Reductions (metric tons CO_2e)	9,183	1,302	12,536
Annualized MWh Savings/Participant	306.216	68.949	164.205
Weighted Lifetime	11.3	10.4	11.9

7.2 Electric Business Existing Facilities Summary

	Prior Year 2022	Current Year 2023	Cumulative starting 1/1/21
# participants with installations	7,107	5,839	16,365
Operating Costs			
Administration	$1,009,105	$1,212,539	$2,221,644
Programs and Implementation	$1,568,546	$1,559,336	$3,127,882
Strategy and Planning	$298,520	$300,539	$599,059
Subtotal Operating Costs	**$2,876,171**	**$3,072,414**	**$5,948,585**
Technical Assistance Costs			
Services to Participants	$4,073,037	$4,206,438	$8,279,474
Services to Trade Allies	$778,314	$796,887	$1,575,201
Subtotal Technical Assistance Costs	**$4,851,351**	**$5,003,325**	**$9,854,676**
Support Services			
Consulting	$59,817	$59,582	$119,399
Customer Support	$31,356	$30,494	$61,849
Data and Technical Services	$507,282	$591,020	$1,098,302
Information Technology	$0	$0	$0
Marketing	$1,128,753	$1,162,688	$2,291,441
Policy & Public Affairs	$0	$113	$113
Other	$0	$0	$0
Subtotal Support Services Costs	**$1,727,208**	**$1,843,896**	**$3,571,104**
Incentive Costs			
Incentives to Participants	$9,247,871	$11,193,920	$20,441,791
Incentives to Trade Allies	$258,441	$396,444	$654,885
Subtotal Incentive Costs	**$9,506,313**	**$11,590,364**	**$21,096,677**
Total Efficiency Vermont Costs	**$18,961,043**	**$21,509,999**	**$40,471,042**
Total Participant Costs	$12,558,619	$11,517,328	$36,700,270
Total Third Party Costs	$0	$0	$0
Total Resource Acquisition Costs	**$31,519,662**	**$33,027,327**	**$77,171,311**
Annualized MWh Savings	39,546	44,713	122,294
Lifetime MWh Savings	511,661	600,676	1,595,834
TRB Savings (2021 $)	$39,513,544	$33,374,411	$105,672,467
Winter Coincident Peak kW Savings	4,720	5,730	15,030
Summer Coincident Peak kW Savings	5,794	7,726	18,640
GHG Reductions (metric tons CO_2e)	22,790	15,646	62,543
Annualized MWh Savings/Participant	5.564	7.658	7.473
Weighted Lifetime	12.9	13.4	13.0

7.3 Electric Residential New Construction Summary

	Prior Year 2022	Current Year 2023	Cumulative starting 1/1/21
# participants with installations	629	353	1,655
Operating Costs			
Administration	$159,269	$94,742	$254,011
Programs and Implementation	$204,498	$216,599	$421,097
Strategy and Planning	$33,621	$35,064	$68,685
Subtotal Operating Costs	**$397,388**	**$346,405**	**$743,793**
Technical Assistance Costs			
Services to Participants	$817,618	$730,196	$1,547,813
Services to Trade Allies	$43,408	$43,150	$86,558
Subtotal Technical Assistance Costs	**$861,026**	**$773,346**	**$1,634,372**
Support Services			
Consulting	$13,223	$12,891	$26,115
Customer Support	$3,464	$3,397	$6,861
Data and Technical Services	$41,175	$33,982	$75,157
Information Technology	$0	$0	$0
Marketing	$146,307	$137,813	$284,120
Policy & Public Affairs	$0	$19	$19
Other	$0	$0	$0
Subtotal Support Services Costs	**$204,170**	**$188,102**	**$392,272**
Incentive Costs			
Incentives to Participants	$1,364,489	$721,240	$2,085,730
Incentives to Trade Allies	$0	$0	$0
Subtotal Incentive Costs	**$1,364,489**	**$721,240**	**$2,085,730**
Total Efficiency Vermont Costs	**$2,827,073**	**$2,029,093**	**$4,856,166**
Total Participant Costs	$223,940	$279,978	$966,140
Total Third Party Costs	$37,400	$1,200	$82,600
Total Resource Acquisition Costs	**$3,088,413**	**$2,310,271**	**$5,904,906**
Annualized MWh Savings	1,414	1,042	4,148
Lifetime MWh Savings	25,441	16,322	71,324
TRB Savings (2021 $)	$3,186,928	$1,560,390	$8,697,212
Winter Coincident Peak kW Savings	304	264	873
Summer Coincident Peak kW Savings	93	86	277
GHG Reductions (metric tons CO_2e)	895	432	2,448
Annualized MWh Savings/Participant	2.248	2.953	2.506
Weighted Lifetime	18.0	15.7	17.2

7.4 Electric Efficient Products Summary

	Prior Year 2022	Current Year 2023	Cumulative starting 1/1/21
# participants with installations	25,209	17,502	63,600
Operating Costs			
Administration	$732,756	$596,558	$1,329,313
Programs and Implementation	$874,923	$844,241	$1,719,164
Strategy and Planning	$152,142	$161,837	$313,979
Subtotal Operating Costs	**$1,759,820**	**$1,602,637**	**$3,362,456**
Technical Assistance Costs			
Services to Participants	$333,335	$366,900	$700,234
Services to Trade Allies	$149,159	$169,760	$318,919
Subtotal Technical Assistance Costs	**$482,493**	**$536,660**	**$1,019,153**
Support Services			
Consulting	$1,734	$1,467	$3,201
Customer Support	$17,702	$18,088	$35,791
Data and Technical Services	$124,404	$108,523	$232,927
Information Technology	$0	$0	$0
Marketing	$1,316,077	$897,524	$2,213,602
Policy & Public Affairs	$0	$53	$53
Other	$0	$0	$0
Subtotal Support Services Costs	**$1,459,917**	**$1,025,656**	**$2,485,574**
Incentive Costs			
Incentives to Participants	$6,762,850	$5,502,719	$12,265,569
Incentives to Trade Allies	$94,304	$53,820	$148,124
Subtotal Incentive Costs	**$6,857,154**	**$5,556,539**	**$12,413,693**
Total Efficiency Vermont Costs	**$10,559,385**	**$8,721,492**	**$19,280,876**
Total Participant Costs	$7,624,383	$7,185,586	$21,703,146
Total Third Party Costs	$0	$0	$0
Total Resource Acquisition Costs	**$18,183,768**	**$15,907,077**	**$40,984,022**
Annualized MWh Savings	26,782	21,225	72,070
Lifetime MWh Savings	367,542	278,408	968,091
TRB Savings (2021 $)	$29,939,469	$17,693,158	$73,414,919
Winter Coincident Peak kW Savings	5,748	4,761	15,536
Summer Coincident Peak kW Savings	1,632	1,260	4,529
GHG Reductions (metric tons CO_2e)	12,822	7,091	31,283
Annualized MWh Savings/Participant	1.062	1.213	1.133
Weighted Lifetime	13.7	13.1	13.4

7.5 Electric Existing Homes Summary

	Prior Year 2022	Current Year 2023	Cumulative starting 1/1/21
# participants with installations	2,530	3,266	9,240
Operating Costs			
Administration	$236,204	$355,214	$591,418
Programs and Implementation	$971,046	$1,106,201	$2,077,247
Strategy and Planning	$72,498	$94,386	$166,884
Subtotal Operating Costs	**$1,279,749**	**$1,555,801**	**$2,835,550**
Technical Assistance Costs			
Services to Participants	$491,876	$525,920	$1,017,796
Services to Trade Allies	$195,513	$184,413	$379,926
Subtotal Technical Assistance Costs	**$687,389**	**$710,333**	**$1,397,722**
Support Services			
Consulting	$1,540	$1,366	$2,906
Customer Support	$26,688	$34,125	$60,813
Data and Technical Services	$87,739	$82,738	$170,477
Information Technology	$0	$0	$0
Marketing	$466,039	$600,178	$1,066,218
Policy & Public Affairs	$0	$36	$36
Other	$0	$0	$0
Subtotal Support Services Costs	**$582,006**	**$718,444**	**$1,300,449**
Incentive Costs			
Incentives to Participants	$2,054,646	$3,229,123	$5,283,769
Incentives to Trade Allies	$13,200	$15,118	$28,318
Subtotal Incentive Costs	**$2,067,846**	**$3,244,241**	**$5,312,087**
Total Efficiency Vermont Costs	**$4,616,989**	**$6,228,819**	**$10,845,808**
Total Participant Costs	($245,085)	($1,288,670)	($1,072,368)
Total Third Party Costs	$56,331	$97,109	$179,262
Total Resource Acquisition Costs	**$4,428,235**	**$5,037,258**	**$9,952,702**
Annualized MWh Savings	1,191	1,393	4,612
Lifetime MWh Savings	13,806	14,809	56,160
TRB Savings (2021 $)	$777,199	$1,165,772	$3,668,739
Winter Coincident Peak kW Savings	230	292	983
Summer Coincident Peak kW Savings	108	114	354
GHG Reductions (metric tons CO_2e)	500	478	1,895
Annualized MWh Savings/Participant	0.471	0.426	0.499
Weighted Lifetime	11.6	10.6	12.2

7.6 Thermal Energy and Process Fuels Business New Construction Summary

	Prior Year 2022	Current Year 2023	Cumulative starting 1/1/21
# participants with installations	0	0	0
Operating Costs			
Administration	$0	$0	$0
Programs and Implementation	$0	$0	$0
Strategy and Planning	$0	$0	$0
Subtotal Operating Costs	**$0**	**$0**	**$0**
Technical Assistance Costs			
Services to Participants	$0	$0	$0
Services to Trade Allies	$0	$0	$0
Subtotal Technical Assistance Costs	**$0**	**$0**	**$0**
Support Services			
Consulting	$0	$0	$0
Customer Support	$0	$0	$0
Data and Technical Services	$0	$0	$0
Information Technology	$0	$0	$0
Marketing	$0	$0	$0
Policy & Public Affairs	$0	$0	$0
Other	$0	$0	$0
Subtotal Support Services Costs	**$0**	**$0**	**$0**
Incentive Costs			
Incentives to Participants	$0	$0	$0
Incentives to Trade Allies	$0	$0	$0
Subtotal Incentive Costs	**$0**	**$0**	**$0**
Total Efficiency Vermont Costs	**$0**	**$0**	**$0**
Total Participant Costs	$0	$0	$0
Total Third Party Costs	$0	$0	$0
Total Resource Acquisition Costs	**$0**	**$0**	**$0**
Annualized MMBtu Savings	-	-	-
Lifetime MMBtu Savings	-	-	-
TRB Savings (2021 $)	$0	$0	$0
GHG Reductions (metric tons CO_2e)	-	-	-
Annualized MMBtu Savings/Participant	-	-	-
Weighted Lifetime	0.0	0.0	0.0

7.7 Thermal Energy and Process Fuels Business Existing Facilities Summary

	Prior Year 2022	Current Year 2023	Cumulative starting 1/1/21
# participants with installations	210	190	16,365
Operating Costs			
Administration	$62,738	$114,182	$176,920
Programs and Implementation	$47,309	$145,627	$192,936
Strategy and Planning	$120	$2,160	$2,280
Subtotal Operating Costs	**$110,168**	**$261,968**	**$372,136**
Technical Assistance Costs			
Services to Participants	$175,928	$481,489	$657,417
Services to Trade Allies	$0	$22,589	$22,589
Subtotal Technical Assistance Costs	**$175,928**	**$504,078**	**$680,006**
Support Services			
Consulting	$3,856	$10,388	$14,244
Customer Support	$64	$1,231	$1,295
Data and Technical Services	$25,097	$33,330	$58,427
Information Technology	$0	$14	$14
Marketing	$15	$0	$15
Policy & Public Affairs	$0	$0	$0
Other	$0	$0	$0
Subtotal Support Services Costs	**$29,032**	**$44,963**	**$73,995**
Incentive Costs			
Incentives to Participants	$659,585	$1,138,228	$1,797,814
Incentives to Trade Allies	$5,900	$5,300	$11,200
Subtotal Incentive Costs	**$665,485**	**$1,143,528**	**$1,809,014**
Total Efficiency Vermont Costs	**$980,613**	**$1,954,537**	**$2,935,150**
Total Participant Costs	$2,649,526	$6,058,795	$11,654,445
Total Third Party Costs	$0	$0	$165,413
Total Resource Acquisition Costs	**$3,630,138**	**$8,013,333**	**$14,755,007**
Annualized MMBtu Savings	34,435	57,482	139,007
Lifetime MMBtu Savings	482,744	687,773	1,839,791
TRB Savings (2021 $)	$9,106,979	$16,335,346	$37,597,303
GHG Reductions (metric tons CO_2e)	1,365	3,611	7,943
Annualized MMBtu Savings/Participant	163.978	302.539	8.494
Weighted Lifetime	14.0	12.0	13.2

7.8 Thermal Energy and Process Fuels Residential New Construction Summary

	Prior Year 2022	Current Year 2023	Cumulative starting 1/1/21
# participants with installations	0	1	1,655
Operating Costs			
Administration	$1,163	$330	$1,493
Programs and Implementation	$0	$0	$0
Strategy and Planning	$0	$0	$0
Subtotal Operating Costs	**$1,163**	**$330**	**$1,493**
Technical Assistance Costs			
Services to Participants	$0	$13	$13
Services to Trade Allies	$0	$13	$13
Subtotal Technical Assistance Costs	**$0**	**$26**	**$26**
Support Services			
Consulting	$0	$0	$0
Customer Support	$0	$0	$0
Data and Technical Services	$0	$0	$0
Information Technology	$0	$0	$0
Marketing	$0	$0	$0
Policy & Public Affairs	$0	$0	$0
Other	$0	$0	$0
Subtotal Support Services Costs	**$0**	**$0**	**$0**
Incentive Costs			
Incentives to Participants	$12,396	$3,500	$15,896
Incentives to Trade Allies	$0	$0	$0
Subtotal Incentive Costs	**$12,396**	**$3,500**	**$15,896**
Total Efficiency Vermont Costs [1]	**$13,560**	**$3,855**	**$17,415**
Total Participant Costs	($12,396)	($3,500)	($15,896)
Total Third Party Costs	$0	$0	$0
Total Resource Acquisition Costs	**$1,163**	**$355**	**$1,518**
Annualized MMBtu Savings	-	-	-
Lifetime MMBtu Savings	-	-	-
TRB Savings (2021 $)	$0	$0	$0
GHG Reductions (metric tons CO_2e)	-	-	-
Annualized MMBtuSavings/Participant	-	-	-
Weighted Lifetime	0.0	0.0	0.0

[1] Costs reported for Residential New Construction were for off-grid homes.

7.9 Thermal Energy and Process Fuels Efficient Products Summary

	Prior Year 2022	Current Year 2023	Cumulative starting 1/1/21
# participants with installations	1,447	1,567	63,600
Operating Costs			
Administration	$35,864	$54,314	$90,178
Programs and Implementation	$20,253	$61,671	$81,925
Strategy and Planning	$40	$723	$763
Subtotal Operating Costs	**$56,158**	**$116,708**	**$172,866**
Technical Assistance Costs			
Services to Participants	$0	$4,399	$4,399
Services to Trade Allies	$0	$2,854	$2,854
Subtotal Technical Assistance Costs	**$0**	**$7,253**	**$7,253**
Support Services			
Consulting	$0	$4	$4
Customer Support	$0	$3	$3
Data and Technical Services	$5,019	$6,614	$6,614
Information Technology	$0	$5	$5
Marketing	$529	$0	$0
Policy & Public Affairs	$0	$0	$0
Other	$0	$0	$0
Subtotal Support Services Costs	**$5,548**	**$6,625**	**$6,625**
Incentive Costs			
Incentives to Participants	$374,953	$558,546	$933,499
Incentives to Trade Allies	$0	$0	$0
Subtotal Incentive Costs	**$374,953**	**$558,546**	**$933,499**
Total Efficiency Vermont Costs	**$436,658**	**$689,132**	**$1,120,243**
Total Participant Costs	$2,704,513	$3,080,371	$10,924,633
Total Third Party Costs	$0	$0	$0
Total Resource Acquisition Costs	**$3,141,171**	**$3,769,503**	**$12,044,876**
Annualized MMBtu Savings	30,719	37,661	133,819
Lifetime MMBtu Savings	417,627	486,051	1,900,480
TRB Savings (2021 $)	$5,668,115	$8,919,042	$32,666,902
GHG Reductions (metric tons CO_2e)	437	630	4,238
Annualized MMBtu Savings/Participant	21.230	24.034	2.104
Weighted Lifetime	13.6	12.9	14.2

7.10 Thermal Energy and Process Fuels Existing Homes Summary

	Prior Year 2022	Current Year 2023	Cumulative starting 1/1/21
# participants with installations	1,329	1,684	9,240
Operating Costs			
Administration	$214,656	$276,591	$491,247
Programs and Implementation	$1,248,729	$1,662,093	$2,910,822
Strategy and Planning	$7,875	$7,223	$15,099
Subtotal Operating Costs	**$1,471,260**	**$1,945,907**	**$3,417,168**
Technical Assistance Costs			
Services to Participants	$241,677	$388,540	$630,217
Services to Trade Allies	$20,298	$86,338	$106,635
Subtotal Technical Assistance Costs	**$261,974**	**$474,878**	**$736,852**
Support Services			
Consulting	$500	$638	$1,138
Customer Support	$31,711	$31,937	$63,648
Data and Technical Services	$45,473	$55,070	$100,543
Information Technology	$0	$44	$44
Marketing	$330,875	$476,745	$807,620
Policy & Public Affairs	$0	$349	$349
Other	$0	$0	$0
Subtotal Support Services Costs	**$408,560**	**$564,782**	**$973,342**
Incentive Costs			
Incentives to Participants	$2,076,569	$2,495,676	$4,572,245
Incentives to Trade Allies	$163,900	$235,550	$399,450
Subtotal Incentive Costs	**$2,240,469**	**$2,731,226**	**$4,971,695**
Total Efficiency Vermont Costs	**$4,382,263**	**$5,716,793**	**$10,099,057**
Total Participant Costs	$5,312,398	$3,050,816	$15,060,767
Total Third Party Costs	$368,415	$565,755	$1,245,554
Total Resource Acquisition Costs	**$10,063,076**	**$9,333,365**	**$26,405,378**
Annualized MMBtu Savings	18,082	15,681	54,562
Lifetime MMBtu Savings	383,219	337,148	1,183,641
TRB Savings (2021 $)	$7,429,211	$7,553,231	$23,930,167
GHG Reductions (metric tons CO_2e)	1,111	963	3,286
Annualized MMBtu Savings/Participant	13.606	9.312	5.905
Weighted Lifetime	21.2	21.5	21.7

8 Special Reports

8.1 Incentive, Non-Incentive, and Administrative Cost Summary - Electric & Thermal Energy and Process Fuels

2023 Electric and TEPF Costs	Business Energy Services		Residential Energy Services			Development &	Total	Row
	Business New Construction	Business Existing Facilities	Residential New Construction	Efficient Products	Existing Homes	Support Services		
Program Costs								
Incentive and Technical Assistance Costs								
Incentive Costs								
Incentives to Participants (RA)	$465,810	$12,332,148	$724,740	$6,061,266	$5,722,467	$0	**$25,306,431**	1
Incentives to Trade Allies (RA)	$0	$401,744	$0	$53,820	$253,000	$0	**$708,564**	2
Sub-Total Incentive Costs	**$465,810**	**$12,733,893**	**$724,740**	**$6,115,086**	**$5,975,467**	**$0**	**$26,014,996**	3
Technical Assistance Costs								
Services to Participants (RA)	$718,225	$4,212,079	$657,670	$334,360	$829,918	N/A	**$6,752,251**	4
Services to Trade Allies (RA)	$89,409	$745,358	$38,880	$156,195	$246,399	N/A	**$1,276,241**	5
Energy Code and Standards Support (DSS)	N/A	N/A	N/A	N/A	N/A	$30,115	**$30,115**	6
Building Energy Labeling and Benchmarking (DSS)	N/A	N/A	N/A	N/A	N/A	$21,830	**$21,830**	7
Better Buildings by Design (DSS)	N/A	N/A	N/A	N/A	N/A	($27,008)	**($27,008)**	8
Sub-Total Technical Assistance Costs	**$807,633**	**$4,957,437**	**$696,550**	**$490,555**	**$1,076,317**	**$24,937**	**$8,053,429**	9
Sub-Total Incentive & Technical Assistance Costs	**$1,273,443**	**$17,691,330**	**$1,421,290**	**$6,605,640**	**$7,051,784**	**$24,937**	**$34,068,425**	10
Non-Incentive Program Costs								
Programs and Implementation (RA)	$150,283	$1,385,671	$168,813	$747,789	$2,439,206	N/A	**$4,891,761**	11
Strategy and Planning (RA)	$36,006	$276,302	$31,988	$148,410	$92,757	N/A	**$585,462**	12
Marketing Program (RA)	$139,302	$1,062,068	$125,856	$820,026	$984,078	N/A	**$3,131,332**	13
Customer Support (DSS)	N/A	N/A	N/A	N/A	N/A	$195,499	**$195,499**	14
General Public Education (DSS)	N/A	N/A	N/A	N/A	N/A	$60,742	**$60,742**	15
Energy Literacy (DSS)	N/A	N/A	N/A	N/A	N/A	$129,337	**$129,337**	16
Applied R&D (DSS)	N/A	N/A	N/A	N/A	N/A	$163,555	**$163,555**	17
Support Services (RA)	$84,732	$719,723	$52,329	$123,855	$190,445	N/A	**$1,171,084**	18
Quality Assurance	N/A	N/A	N/A	N/A	N/A	N/A	**$0**	19
Sub-Total Non-Incentive Program Costs	**$410,322**	**$3,443,764**	**$378,986**	**$1,840,080**	**$3,706,487**	**$549,134**	**$10,328,773**	20
Total Program Costs	**$1,683,766**	**$21,135,094**	**$1,800,276**	**$8,445,720**	**$10,758,271**	**$574,071**	**$44,397,198**	21
Administrative Costs								
Sr. Management, Budget, Financial Oversight (RA)	$20,686	$234,998	$23,855	$66,826	$61,916	N/A	**$408,281**	22
Planning & Reporting (DSS)	N/A	N/A	N/A	N/A	N/A	$557,241	**$557,241**	23
Administration & Regulatory (DSS)	N/A	N/A	N/A	N/A	N/A	$379,994	**$379,994**	24
Public Affairs (DSS)	N/A	N/A	N/A	N/A	N/A	$25,999	**$25,999**	25
Information Systems (DSS)	N/A	N/A	N/A	N/A	N/A	$1,146,808	**$1,146,808**	26
Evaluation (DSS)	N/A	N/A	N/A	N/A	N/A	$414,976	**$414,976**	27
Direct and Indirect Overhead *	$172,256	$1,930,055	$193,405	$827,256	$1,034,172	$301,050	**$4,458,194**	28
Total Administrative Costs	**$192,942**	**$2,165,053**	**$217,260**	**$894,082**	**$1,096,088**	**$2,826,068**	**$7,391,493**	29
Total Program and Administrative Costs	**$1,876,708**	**$23,300,147**	**$2,017,536**	**$9,339,802**	**$11,854,359**	**$3,400,139**	**$51,788,691**	30
Earned Compensation								
Base Compensation	N/A	N/A	N/A	N/A	N/A	N/A	**$679,986**	31
Performance Compensation	N/A	N/A	N/A	N/A	N/A	N/A	**$2,093,393**	32
Total Earned Compensation							**$2,773,379**	33
						Overall Total Costs	**$54,562,070**	34

*** Indirect Rate: 0.086**

Summary Metrics			
Incentive	**Costs**	**% of Total**	**Source of Rows**
Incentive	$26,014,996		3
Technical Assistance	$8,053,429		9
Total Incentive & Technical Assistance	**$34,068,425**	62%	10
Non-Incentive			
Non-Incentive Program Costs	$10,328,773		20
Administrative Costs	$7,391,493		29
Earned Compensation	$2,773,379		33
Total Non-Incentive	**$20,493,645**	38%	20, 29, 33
Overall Total	**$54,562,070**	**100%**	34
Incentive-to-Non-Incentive Cost Ratio		**1.7 to 1.0**	**10 / (20,29,33)**
	Costs	**% of Total**	
Program	$44,397,198	81%	21
Administrative	$7,391,493	14%	29
Earned Compensation	$2,773,379	5%	33
Overall Total	**$54,562,070**	**100%**	34

8.2. Incentive, Non-Incentive, and Administrative Cost Summary - Electric

2023 Electric Costs	Business Energy Services		Residential Energy Services			Development &	Total	Row
	Business New Construction	Business Existing Facilities	Residential New Construction	Efficient Products	Existing Homes	Support Services		
Program Costs								
Incentive and Technical Assistance Costs								
Incentive Costs								
Incentives to Participants (RA)	$465,810	$11,193,920	$721,240	$5,502,719	$3,226,791	$0	**$21,110,481**	1
Incentives to Trade Allies (RA)	$0	$396,444	$0	$53,820	$17,450	$0	**$467,714**	2
Sub-Total Incentive Costs	**$465,810**	**$11,590,364**	**$721,240**	**$5,556,539**	**$3,244,241**	**$0**	**$21,578,195**	3
Technical Assistance Costs								
Services to Participants (RA)	$718,225	$3,798,349	$657,658	$330,350	$476,441	N/A	**$5,981,022**	4
Services to Trade Allies (RA)	$89,409	$724,713	$38,868	$153,586	$167,490	N/A	**$1,174,066**	5
Energy Code and Standards Support (DSS)	N/A	N/A	N/A	N/A	N/A	$26,468	**$26,468**	6
Building Energy Labeling and Benchmarking (DSS)	N/A	N/A	N/A	N/A	N/A	$19,177	**$19,177**	7
Better Buildings by Design (DSS)	N/A	N/A	N/A	N/A	N/A	($23,009)	**($23,009)**	8
Sub-Total Technical Assistance Costs	**$807,633**	**$4,523,062**	**$696,526**	**$483,936**	**$643,932**	**$22,636**	**$7,177,724**	9
Sub-Total Incentive & Technical Assistance Costs	**$1,273,443**	**$16,113,426**	**$1,417,767**	**$6,040,475**	**$3,888,173**	**$22,636**	**$28,755,919**	10
Non-Incentive Program Costs								
Programs and Implementation (RA)	$150,283	$1,265,000	$168,813	$695,817	$961,938	N/A	**$3,241,850**	11
Strategy and Planning (RA)	$36,006	$274,328	$31,988	$147,749	$86,155	N/A	**$576,226**	12
Marketing Program (RA)	$139,302	$1,062,068	$125,856	$820,026	$548,354	N/A	**$2,695,607**	13
Customer Support (DSS)	N/A	N/A	N/A	N/A	N/A	$169,498	**$169,498**	14
General Public Education (DSS)	N/A	N/A	N/A	N/A	N/A	$52,652	**$52,652**	15
Energy Literacy (DSS)	N/A	N/A	N/A	N/A	N/A	$110,257	**$110,257**	16
Applied R&D (DSS)	N/A	N/A	N/A	N/A	N/A	$141,699	**$141,699**	17
Support Services (RA)	$84,732	$652,036	$52,329	$117,794	$108,710	N/A	**$1,015,602**	18
Quality Assurance	N/A	N/A	N/A	N/A	N/A	N/A	**$0**	19
Sub-Total Non-Incentive Program Costs	**$410,322**	**$3,253,432**	**$378,986**	**$1,781,387**	**$1,705,158**	**$474,107**	**$8,003,392**	20
Total Program Costs	**$1,683,766**	**$19,366,858**	**$1,796,753**	**$7,821,862**	**$5,593,331**	**$496,742**	**$36,759,311**	21
Administrative Costs								
Sr. Management, Budget, Financial Oversight (RA)	$20,686	$229,084	$23,855	$65,258	$44,249	N/A	**$383,132**	22
Planning & Reporting (DSS)	N/A	N/A	N/A	N/A	N/A	$474,936	**$474,936**	23
Administration & Regulatory (DSS)	N/A	N/A	N/A	N/A	N/A	$323,868	**$323,868**	24
Public Affairs (DSS)	N/A	N/A	N/A	N/A	N/A	$22,159	**$22,159**	25
Information Systems (DSS)	N/A	N/A	N/A	N/A	N/A	$977,424	**$977,424**	26
Evaluation (DSS)	N/A	N/A	N/A	N/A	N/A	$357,675	**$357,675**	27
Direct and Indirect Overhead *	$172,256	$1,763,918	$193,102	$768,681	$544,354	$256,585	**$3,698,895**	28
Total Administrative Costs	**$192,942**	**$1,993,002**	**$216,957**	**$833,938**	**$588,603**	**$2,412,648**	**$6,238,090**	29
Total Program and Administrative Costs	**$1,876,708**	**$21,359,860**	**$2,013,709**	**$8,655,800**	**$6,181,934**	**$2,909,390**	**$42,997,401**	30
Earned Compensation								
Base Compensation	N/A	N/A	N/A	N/A	N/A	N/A	**$561,304**	31
Performance Compensation	N/A	N/A	N/A	N/A	N/A	N/A	**$1,771,642**	32
Total Earned Compensation							**$2,332,946**	33
						Overall Total Costs	**$45,330,347**	34

*** Indirect Rate: 0.086**

Summary Metrics			
Incentive	**Costs**	**% of Total**	**Source of Rows**
Incentive	$21,578,195		3
Technical Assistance	$7,177,724		9
Total Incentive & Technical Assistance	**$28,755,919**	63%	10
Non-Incentive			
Non-Incentive Program Costs	$8,003,392		20
Administrative Costs	$6,238,090		29
Earned Compensation	$2,332,946		33
Total Non-Incentive	**$16,574,428**	37%	20, 29, 33
Overall Total	**$45,330,347**	**100%**	34
Incentive-to-Non-Incentive Cost Ratio		**1.7 to 1.0**	**10 / (20,29,33)**
	Costs	**% of Total**	
Program	$36,759,311	81%	21
Administrative	$6,238,090	14%	29
Earned Compensation	$2,332,946	5%	33
Overall Total	**$45,330,347**	**100%**	34

8.3 Incentive, Non-Incentive, and Administrative Cost Summary - Thermal Energy and Process Fuels

2023 TEPF Costs	Business Energy Services		Residential Energy Services			Development &	Total	Row
	Business New Construction	Business Existing Facilities	Residential New Construction	Efficient Products	Existing Homes	Support Services		
Program Costs								
Incentive and Technical Assistance Costs								
Incentive Costs								
Incentives to Participants (RA)	$0	$1,138,228	$3,500	$558,546	$2,495,676	$0	**$4,195,951**	1
Incentives to Trade Allies (RA)	$0	$5,300	$0	$0	$235,550	$0	**$240,850**	2
Sub-Total Incentive Costs	**$0**	**$1,143,528**	**$3,500**	**$558,546**	**$2,731,226**	**$0**	**$4,436,801**	3
Technical Assistance Costs								
Services to Participants (RA)	N/A	$413,730	$12	$4,010	$353,477	N/A	**$771,229**	4
Services to Trade Allies (RA)	N/A	$20,645	$12	$2,609	$78,909	N/A	**$102,174**	5
Energy Code and Standards Support (DSS)	N/A	N/A	N/A	N/A	N/A	$3,647	**$3,647**	6
Building Energy Labeling and Benchmarking (DSS)	N/A	N/A	N/A	N/A	N/A	$2,653	**$2,653**	7
Better Buildings by Design (DSS)	N/A	N/A	N/A	N/A	N/A	($3,998)	**($3,998)**	8
Sub-Total Technical Assistance Costs	**$0**	**$434,375**	**$24**	**$6,619**	**$432,386**	**$2,302**	**$875,705**	9
Sub-Total Incentive & Technical Assistance Costs	**$0**	**$1,577,904**	**$3,524**	**$565,165**	**$3,163,612**	**$2,302**	**$5,312,506**	10
Non-Incentive Program Costs								
Programs and Implementation (RA)	N/A	$120,671	N/A	$51,972	$1,477,268	N/A	**$1,649,911**	11
Strategy and Planning (RA)	N/A	$1,974	N/A	$661	$6,602	N/A	**$9,236**	12
Marketing Program (RA)	N/A	N/A	N/A	N/A	$435,724	N/A	**$435,724**	13
Customer Support (DSS)	N/A	N/A	N/A	N/A	N/A	$26,002	**$26,002**	14
General Public Education (DSS)	N/A	N/A	N/A	N/A	N/A	$8,090	**$8,090**	15
Energy Literacy (DSS)	N/A	N/A	N/A	N/A	N/A	$19,080	**$19,080**	16
Applied R&D (DSS)	N/A	N/A	N/A	N/A	N/A	$21,856	**$21,856**	17
Support Services (RA)	N/A	$67,687	N/A	$6,061	$81,735	N/A	**$155,483**	18
Quality Assurance	N/A	N/A	N/A	N/A	N/A	N/A	**$0**	19
Sub-Total Non-Incentive Program Costs	**$0**	**$190,332**	**$0**	**$58,693**	**$2,001,329**	**$75,027**	**$2,325,381**	20
Total Program Costs	**$0**	**$1,768,236**	**$3,524**	**$623,859**	**$5,164,940**	**$77,329**	**$7,637,887**	21
Administrative Costs								
Sr. Management, Budget, Financial Oversight (RA)	N/A	$5,914	N/A	$1,568	$17,667	N/A	**$25,149**	22
Planning & Reporting (DSS)	N/A	N/A	N/A	N/A	N/A	$82,304	**$82,304**	23
Administration & Regulatory (DSS)	N/A	N/A	N/A	N/A	N/A	$56,125	**$56,125**	24
Public Affairs (DSS)	N/A	N/A	N/A	N/A	N/A	$3,840	**$3,840**	25
Information Systems (DSS)	N/A	N/A	N/A	N/A	N/A	$169,384	**$169,384**	26
Evaluation (DSS)	N/A	N/A	N/A	N/A	N/A	$57,301	**$57,301**	27
Direct and Indirect Overhead *	$0	$166,137	$303	$58,576	$489,818	$44,465	**$759,299**	28
Total Administrative Costs	**$0**	**$172,051**	**$303**	**$60,144**	**$507,485**	**$413,420**	**$1,153,403**	29
Total Program and Administrative Costs	**$0**	**$1,940,287**	**$3,827**	**$684,002**	**$5,672,425**	**$490,749**	**$8,791,290**	30
Earned Compensation								
Base Compensation	N/A	N/A	N/A	N/A	N/A	N/A	**$118,682**	31
Performance Compensation	N/A	N/A	N/A	N/A	N/A	N/A	**$321,751**	32
Total Earned Compensation							**$440,433**	33
						Overall Total Costs	**$9,231,723**	34

*** Indirect Rate: 0.086**

Summary Metrics			
Incentive	**Costs**	**% of Total**	**Source of Rows**
Incentive	$4,436,801		3
Technical Assistance	$875,705		9
Total Incentive & Technical Assistance	**$5,312,506**	58%	10
Non-Incentive			
Non-Incentive Program Costs	$2,325,381		20
Administrative Costs	$1,153,403		29
Earned Compensation	$440,433		33
Total Non-Incentive	**$3,919,218**	42%	20, 29, 33
Overall Total	**$9,231,723**	**100%**	34
Incentive-to-Non-Incentive Cost Ratio		**1.4 to 1.0**	**10 / (20,29,33)**
	Costs	**% of Total**	
Program	$7,637,887	83%	21
Administrative	$1,153,403	12%	29
Earned Compensation	$440,433	5%	33
Overall Total	**$9,231,723**	**100%**	34

8.4 Flexible Load Management Summary

	% of Year Expired	*100%*		*% of Period Expired*	*100%*	
FLM Major Market Spending	**Budget 2023**	**Actual 2023**	**%**	**Budget 2021-2023**	**Actual 2021-2023**	**%**
Business Sector						
Existing Facilities	$737,352	$691,737	94%	$1,532,138	$1,486,522	97%
New Construction	$25,000	$37,705	151%	$72,589	$85,296	118%
Total Business Sector	**$762,352**	**$729,442**	**96%**	**$1,604,727**	**$1,571,818**	**98%**
Residential Sector						
New Construction	$0	$0	N/A	$0	$0	N/A
Efficient Products	$533,100	$152,742	29%	$677,929	$297,571	44%
Existing Homes	$15,000	$575	4%	$52,344	$37,919	72%
Total Residential Sector	**$548,100**	**$153,317**	**28%**	**$730,274**	**$335,490**	**46%**
Total FLM Spending	**$1,310,452**	**$882,759**	**67%**	**$2,335,000**	**$1,907,308**	**82%**

Annual kW of Flexible Load (controllable load) Installed	**Budget 2023**	**Actual 2023**	**%**	**Target 2021-2023**	**Actual 2021-2023**	**%**
Business Sector						
Existing Facilities	2,787	3,290	118%	4,201	4,705	112%
New Construction	30	-	0%	55	25	45%
Total Business Sector	**2,817**	**3,290**	**117%**	**4,256**	**4,730**	**111%**
Residential Sector						
New Construction	-	-	N/A	-		N/A
Efficient Products	54	10	19%	60	16	27%
Existing Homes	-	-	N/A	9	9	100%
Total Residential Sector	**200**	**10**	**5%**	**69**	**25**	**36%**
Total kW Flexible Load Installed	**3,017**	**3,300**	**109%**	**4,325**	**4,755**	**110%**

FLM Incentive & Non-Incentive Spending	**Budget 2023**	**Actual 2023**	**%**	**Budget 2021-2023**	**Actual 2021-2023**	**%**
Incentives	$529,574	$444,441	84%	$842,120	$756,986	90%
Non-Incentives	$780,878	$438,318	56%	$1,492,881	$1,150,322	77%
Total FLM Spending	**$1,310,452**	**$882,759**	**67%**	**$2,335,000**	**$1,907,308**	**82%**

8.5 Act No. 151 Programs Summary

	% of Year Expired	*100%*		*% of Period Expired*	*100%*	
Act 151 Major Market Spending	**Budget 2023**	**Actual 2023**	**%**	**Budget 2021-2023**	**Actual 2021-2023**	**%**
Business Sector						
Existing Facilities	$0	$0	N/A	$0	$0	N/A
New Construction	$0	$0	N/A	$0	$0	N/A
Total Business Sector	**$0**	**$0**	N/A	**$0**	**$0**	N/A
Residential Sector						
New Construction	$0	$0	N/A	$0	$0	N/A
Efficient Products	$1,124,507	$1,176,810	105%	$4,118,506	$4,170,809	101%
Existing Homes	$1,122,460	$1,058,538	94%	$1,298,494	$1,234,573	95%
Total Residential Sector	**$2,246,967**	**$2,235,348**	**99%**	**$5,417,000**	**$5,405,381**	**100%**
Total Act 151 Spending	**$2,246,967**	**$2,235,348**	**99%**	**$5,417,000**	**$5,405,381**	**100%**

Act 151 Incentive & Non-Incentive Spending	**Budget 2023**	**Actual 2023**	**%**	**Budget 2021-2023**	**Actual 2021-2023**	**%**
Incentives	$1,597,062	$1,564,836	98%	$2,735,389	$2,703,163	99%
Non-Incentives	$649,905	$670,512	103%	$2,681,611	$2,702,218	101%
Total Act 151 Spending	**$2,246,967**	**$2,235,348**	**99%**	**$5,417,000**	**$5,405,381**	**100%**

Business Existing Facilities Lighting & Custom Project Variance[1]	**DRP Model 2023**	**Actual 2023**	**%**	**DRP Model 2021-2023**	**Actual 2021-2023**	**%**
Incentives						
Lighting	$3,472,063	$6,288,018	181%	$11,808,941	$12,257,163	104%
Custom C&I[2]	$4,710,278	$3,008,445	64%	$14,266,013	$12,315,357	86%
Annual Net MWh Savings						
Lighting	23,883	32,760	137%	80,704	76,744	95%
Custom C&I	22,958	8,162	36%	70,395	36,042	51%

[1] Business Existing Facilities Lighting & Custom Project Variance reporting is being provided for the duration of the 2021-2023 performance period to identify activities for a subset of major markets targeted for modification by Efficiency Vermont in its February 17, 2021 Motion to Amend, filed in Case No. 19-3272-PET.

[2] All lighting, flexible load management, refrigerant management, and single head/multi-head cold climate heat pump measures are excluded

8.6 Act 151 Transportation - Program Metrics

Efficiency Vermont launched an EV marketing and dealership program in the second half of 2021. Metrics being reported on 8.6 and 8.7 are intended to reflect the impacts of the program directly, and market trends more generally. Key metrics being tracked may change, or be altered or removed over time, as more experience in this market develops.

Program Metrics								
#	Metric Description	Measured By	Target Description	Reporting Frequency	Baseline	3-Yr Target	Cumulative Status	%
EV Dealer Program Metrics								
P1	Number of dealerships enrolled in the EEN EV Dealer network	Number of signed participation agreements	40-60 dealerships enrolled in EEN EV Dealer network by the end of 2023.	quarterly	0	60	51	85%
		% of enrolled dealerships are used car dealerships	At least 20% are used car dealerships	quarterly	0	12	5	42%
P2	Number of EEN EV Dealers that complete at least one EV investment at their facility	Number of dealers associated with at least one EV Readiness project	100% of dealers that complete at least one EV Readiness project at their facility by the end of 2023	quarterly	0	60	18	30%
P3	Number of EVs associated with the Dealership/Salesperson EV Sales Incentive	Number of EV Sales Incentives reported	2,000 EVs associated with Dealership/Salesperson EV Sales Incentive by the end of 2023	quarterly	0	2,000	1,246	62%
P4	Number of EEN EV Dealer staff that attend EV Sales Training	Number of training attendees	80-120 salespeople attend trainings 2021-2023	quarterly	0	120	112	93%
P5	Percent of EV Sales Training participants that pass the post-session quiz	Post-training evaluation	90% of attendees pass the posttraining evaluation (first attempt)	quarterly	0	90%	65%	72%
P6	Percent of attendees that report satisfaction with any training	Post-training evaluation	90% of attendees select "Very satisfied" or "Somewhat satisfied" with the training overall	quarterly	0	90%	85%	94%
P7	Percent of EEN EV Dealers that report being motivated and supported by the program to increase the number of EVs they stock and sell	Dealer survey (to be developed)	At least 50% of participating dealers report that the program had an impact on the number of EVs they stock and sell	performance period	0	50%	50%	100%
EV Campaign Metrics								
P8	Customer engagement with the EV campaign digital platform	Number of sessions (DriveElectricVermont.com)	20% increase in digital engagement	quarterly	118,580	142,296	387,467	272%
P9	Number of EV-related contacts	Number of incoming calls to Go Vermont/Drive Electric Vermont, and transportation calls to Efficiency Vermont	20% increase in EV-related contacts	quarterly	600	720	1383	192%
P10	Average likelihood of Vermonters to purchase an EV, as measured on scale of 1 (not likely) to 5 (very likely)	Consumer research (EVT brand awareness survey)	Vermonters report 20% more likelihood in purchasing an EV	performance period	2.5	3.0	2.28	76%

Notes

The Program Metrics are tied to specific program activities and can be measured with Efficiency Vermont program data. Developed to support and be in alignment with the Market Metrics and goals presented in Section 8.7, the Program Metrics in many cases represent “leading indicators” for desired long-term market results focused on two key areas of program activity: dealership engagement and consumer education. These metrics are meant to inform progress toward program objectives and evaluate program impact and success (this is the main distinction from the Market Metrics).

"EEN" refers to the Efficiency Vermont Efficiency Excellence Network
All metrics: "EV" refers to a plug-in electric vehicle (all-electric or plug-in hybrid)
All metrics: "dealership" refers to a new or used car dealership with a physical location in the state of Vermont
P1-P10: The "%" column represents progress towards the 3-year target.
P5: The post-training quiz includes six required questions that test participants' knowledge of concepts and information presented during the training. Participants must get at least 5 out of 6 questions correct to pass.
P8 & P9: Baseline is 2-year period between 9/1/2019 - 8/31/2021
P10: Likelihood to purchase is measured on a scale from 1 (Not at all likely) to 5 (Very likely)

N/A means data is not available at this time.

8.7 Act 151 Transportation - Market Metrics

	M1: Annual number of Vermont dealerships selling at least 1 EV				M2: Annual number of EVs sold by all VT dealerships				M3: Annual number of EVs sold by EEN EV Dealers				M4: Cumulative number of EV registrations				M5: % of total Vermont light duty vehicle registrations that are EVs			
County	**2020 (Baseline)**	**2021**	**2022**	**2023**	**2020 (Baseline)**	**2021**	**2022**	**2023**	**2020 (Baseline)**	**2021**	**2022**	**2023**	**2020 (Baseline)**	**2021**	**2022**	**2023**	**2020 (Baseline)**	**2021**	**2022**	**2023**
Addison	2	N/A	N/A	N/A	9	N/A	N/A	N/A	0	0	49	N/A	283	436	601	877	Measured on a statewide basis			
Bennington	5	N/A	N/A	N/A	16	N/A	N/A	N/A	0	0	25	N/A	189	319	422	651				
Caledonia	4	N/A	N/A	N/A	29	N/A	N/A	N/A	0	0	24	N/A	134	185	250	352				
Chittenden	22	N/A	N/A	N/A	402	N/A	N/A	N/A	0	0	136	N/A	1,616	2,404	3,181	4,496				
Essex	0	N/A	N/A	N/A	0	N/A	N/A	N/A	0	0	1	N/A	12	13	17	32				
Franklin	5	N/A	N/A	N/A	43	N/A	N/A	N/A	0	0	20	N/A	117	191	281	428				
Grand Isle	0	N/A	N/A	N/A	0	N/A	N/A	N/A	0	0	2	N/A	61	76	110	141				
Lamoille	1	N/A	N/A	N/A	22	N/A	N/A	N/A	0	0	29	N/A	131	205	286	407				
Orange	0	N/A	N/A	N/A	0	N/A	N/A	N/A	0	0	24	N/A	149	242	330	470				
Orleans	0	N/A	N/A	N/A	0	N/A	N/A	N/A	0	0	14	N/A	70	111	171	251				
Rutland	7	N/A	N/A	N/A	111	N/A	N/A	N/A	0	0	78	N/A	228	381	511	833				
Washington	7	N/A	N/A	N/A	53	N/A	N/A	N/A	0	0	86	N/A	573	802	1,056	1,476				
Windham	3	N/A	N/A	N/A	31	N/A	N/A	N/A	0	0	13	N/A	355	492	633	873				
Windsor	7	N/A	N/A	N/A	39	N/A	N/A	N/A	0	0	31	N/A	421	632	862	1,206				
Unknown	0	N/A	N/A	N/A	0	N/A	N/A	N/A	0	0	0	N/A	21	96	164	261				
Statewide	**65**	**82**	**83**	**89**	**775**	**1,650**	**1,622**	**2,015**	**0**	**0**	**532**	**1,400**	**4,360**	**6,585**	**8,875**	**12,754**	**2.8%**	**5.4%**	**6.9%**	**9.8%**

N/A means data is not available at this time.

M1: Number of Vermont dealerships selling at least 1 EV registered in Vermont. Excludes direct-to-consumer sellers and sellers of electric motorcycles/mopeds. Data source: Vermont Dept. of Motor Vehicles vehicle registration database as of 1/5/2022. Data processed by Vermont Agency of Natural Resources Dept. of Environmental Conservation.

M2: Number of EVs sold by a Vermont dealership and registered in VT. Excludes direct-to-consumer sellers; excludes electric motorcycles/mopeds and neighborhood EVs; excludes EVs sold by a dealership outside of Vermont. Data source: Vermont Dept. of Motor Vehicles vehicle registration database as of 1/5/2022. Data processed by Vermont Agency of Natural Resources Dept. of Environmental Conservation.

M3: Dealer must be enrolled in program for at least six months out of the year for sales to count toward this metric. *Data source: Efficiency Vermont.*

M4: Data source: Vermont Dept. of Motor Vehicles vehicle registration database as of 1/5/2022. Data processed by Vermont Agency of Natural Resources Dept. of Environmental Conservation.

M5: Data source: Vermont Vehicle and Automotive Distributors Association. County data not available.

The purpose of the Market Metrics is to track general market trends that will inform Efficiency Vermont program decisions and direction. These metrics will be tracked using data largely from outside Efficiency Vermont, and will help us understand how the market is transforming and assess whether our market interventions are appropriate based on market adoption trends.

8.8 Forward Capacity Market (FCM) Current Claims and Forecasts

	Total Portfolio of FCM Participation	Efficiency Vermont Portion of FCM Participation[1]	GMP EEF Portion of FCM Participation[1]	GMP CEED Portion of FCM Participation[1]
Revenue Received				
Revenue Received for Quarter	$769,591	$769,591	$0	$0
Revenue Received Year to Date	$4,373,173	$4,352,383	$7,090	$13,700
* Annual Revenue Estimate	$4,340,267	$4,319,477	$7,090	$13,700
% Annual Revenue Estimate Received	100.8%	100.8%	100.0%	100.0%
Revenue Received during 3-Year Period (2021-2023)	$16,548,203	$16,283,053	$135,510	$129,640
Revenue Estimate for 3-Year Period (2021-2023)	$16,529,711	$16,264,560	$135,510	$129,640
% 3-Year Period Revenue Estimate Received	100.1%	100.1%	100.0%	100.0%
VEIC Costs				
Costs for Quarter	$65,656	N/A		
Year to Date Costs	$242,691			
* Annual Budget Estimate	$253,200			
Unspent Annual Budget Estimate	$10,509			
% Annual Budget Estimate Unspent	4.2%			
FCM Peak Capacity Results[2]				
FCM Summer Peak MW Performance at end of Quarter[3]	118.679	118.679	-	-
Annual Summer FCM Peak MW Forecast (FCM Obligation)	106.207	106.207	-	-
% Annual Summer FCM Peak MW Commitment Achieved	111.7%	111.7%	-	-
3-Year Summer FCM Peak MW Forecast (FCM Obligation)	149.379	149.379	-	-
% 3-Year Summer FCM Peak MW Commitment Achieved	79.4%	79.4%	-	-

[1]The GMP Energy Efficiency Fund (EEF) and Community Energy & Efficiency Development Fund (CEED) portions of FCM revenue shown here are net of allocated cost of participation - as such, costs are not broken out separately below.

[2]Reflects cumulative peak MW savings from measures installed since 6/16/2006. Full details on the ISO-NE Forward Capacity Market and requirements for participation, including calculation of capacity obligations, can be found in: "Playing with the Big Boys: Energy Efficiency as a Resource in the ISO-NE Forward Capacity Market", www.veic.org/ResourceLibrary

[3] Actual claims filed with ISO-NE are for Summer Peak Capacity (MW) for April through November, and for Winter Peak Capacity (MW) for December through March.

* Annual projections are estimates only and provided for informational purposes.

8.9 Forward Capacity Market (FCM) Future Commitments and Revenue Forecast[1,2]

		Summer Peak Capacity (MW)										Revenue			
FCM Period	Delivery Dates	Existing Portfolio	FCM #2-#10: Portfolio Expansions	FCM #11: Portfolio Expansion	FCM #12: Portfolio Expansion	FCM #13: Portfolio Expansion	FCM #14: Portfolio Expansion	FCM #15: Portfolio Expansion	FCM #16: New Resource	FCM #17: New Resource	Total Commitment	Actual FCM Peak Capacity to Date	12-Month Pmt Committed from ISO-NE	Total Actual Payments Received to Date	Revenue Rec'd Over (Under) Commitment
1	6/1/2010 - 5/31/2011	39.117									39.117		$2,607,552	$2,891,075	$283,523
2	6/1/2011 - 5/31/2012	41.377	7.037								48.414		$3,222,168	$3,415,893	$193,725
3	6/1/2012 - 5/31/2013	46.040	9.224								55.264		$3,498,804	$3,621,871	$123,067
4	6/1/2013 - 5/31/2014	54.103	17.990								72.093		$4,450,980	$4,465,395	$14,415
5	6/1/2014 - 5/31/2015	71.313	12.456								83.769		$5,107,413	$5,029,523	($77,890)
6	6/1/2015 - 5/31/2016	84.326	14.806								99.132		$4,542,300	$3,390,207	($1,152,093)
7	6/1/2016 - 5/31/2017	94.062	15.500								109.562		$4,512,993	$3,647,552	($865,440)
8	6/1/2017 - 5/31/2018	108.990	-								108.990		$8,389,492	$8,266,060	($123,432)
9	6/1/2018 - 5/31/2019	104.367	-								104.367		$12,918,648	$12,996,875	$78,227
10	6/1/2019 - 5/31/2020	99.603	-								99.603		$9,074,690	$9,346,421	$271,731
11	6/1/2020 - 5/31/2021	69.642		15.474							85.116		$5,843,057	$5,905,124	$62,067
12	6/1/2021 - 5/31/2022	77.669			25.969						103.638		$6,220,063	$6,743,780	$523,717
13	6/1/2022 - 5/31/2023	95.701				12.500					108.201		$5,328,679	$5,292,502	($36,177)
14	6/1/2023 - 5/31/2024	97.708					8.500				106.208	118.679	$2,754,272	$1,977,316	($776,956)
15	6/1/2024 - 5/31/2025	92.556						9.800			102.356		$3,285,810		
16	6/1/2025 - 5/31/2026	99.258							-		99.258		$3,255,848		
17	6/1/2026 - 5/31/2027	88.156								5.400	93.556		$3,126,897		
												Total:	**$88,139,665**	**$76,989,595**	**-$1,481,516**

	Current Financial Assurance (FA) Obligations Related to FCM Capacity Above[3]										
	Financial Assurance: Non-commercial New Capacity										Total Financial Assurance Obligation[4]
	FCM#1-12	FCM#13	FCM#14	FCM#15	FCM#16	FCM#17	FCM#18	Non-Hourly Requirements	Subtotals	Credit Test Factor	
Financial Assurance Obligation at End of This Quarter	Fully Commercial	Fully Commercial	Fully Commercial	$44,798	$0	$15,903	$8,640	$801	$70,141	80%	$87,676
Expected Upcoming Transactions:											
Additional FA on New Obligations				$0	$0	$0	$0		$0		
FA Obligation Released (Est)				$0	$0	$0	$30,577		$30,577		
Financial Assurance Obligation at End of Next Quarter (Estimate)				$44,798	$0	$15,903	$39,217	$801	$100,718	80%	$125,897
Financial Assurance Forfeited[5]	**$211,623**										

Proposed Commitments		New Capacity Proposed (Summer Peak MW) Not Committed or Not Yet Delivered				
	FCM#1-13	FCM#14	FCM#15	FCM#16	FCM#17	FCM#18
Delivery Period begins:		6/1/23	6/1/24	6/1/25	6/1/26	6/1/27
Date of Auction		2/3/20	2/8/21	2/7/22	3/6/23	2/5/24
Date of Qualification Notification		9/27/19	10/2/20	10/1/21	11/10/22	11/2/23
Date of Qualification Submission		6/21/19	6/19/20	6/18/21	6/7/22	6/20/23
Date of Show of Interest		4/26/19	4/24/20	4/23/21	5/23/22	4/24/23
Additional FCM Peak Capacity Qualified to participate in upcoming auction	Delivered					10.000
Additional FCM Peak Capacity currently under review for Qualification		Committed	Committed	Committed	Committed	10.000
Additional FCM Peak Capacity submitted as a Show of Interest for future auction						10.000

[1] As of this date, there are commitments and committed pricing through FCM Auction #17. The information in this section reflects currently committed capacity and prices for that capacity.

[2] Commitments include capacity from GMP EEF and CEED projects.

[3] Financial Assurance obligations are covered through cash on deposit with BlackRock.

[4] Total Market Obligations (FCM requirements plus non-hourly requirements) plus mark-up to cover 80% credit test.

[5] Financial Assurance forfeited upon termination of 11.385 MW of FCM#6 obligation in October 2016.

9 Program Implementation Procedures

#	Document Name / Title	Major Market	Status	Date
121	Market Shift	RES, LI	Update Approved	3/2023

Key:

RES	Residential
LI	Low Income
LIMF	Low Income Multi-Family
BES	Business Energy Services
MF	Multi-Family
C&I	Commercial & Industrial

10 Data Tables and End Notes

10.1 Data Tables Overview

1 – Section 10.2 includes a list of definitions for items in the data tables.

2 – Data items for which data are not available are labeled "nav". Data items for which data are not applicable are labeled "nap" or "NA".

3 – Except where noted, Efficiency Vermont expenditures data in this report were incurred during the specified reporting periods. All costs are in nominal dollars.

4 - Except where noted, savings data are from measures reported during the specified reporting periods. Electric savings are reported at generation and all savings are net of all approved adjustment factors.

5 – Efficiency Vermont Resource Acquisition and Development and Support Services costs include an operations fee and are reported in all applicable cost categories. The 2021 Operations Fee was 1.35%; 2022 Operations Fee was 1.0%; and the 2023 Operations Fee is .75%. The indirect charges and operations fees for "Incentives to Participants" and "Incentives to Trade Allies" are reported with the "Administration" costs.

6 – Data for "Incentives to Participants" or "Incentives" in Tables 6.9, 6.13, 6.14, 6.16, 6.18, 6.19, 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.7, 7.8, 7.9, 7.10, 8.1, 8.2 8.3, 8.4 and 8.5 are from Efficiency Vermont's accounting system. "Participant Incentives Paid" on Tables 6.10, 6.11, 6.12, and 6.17 are sourced from Efficiency Vermont's project tracking and reporting system. Data for "Incentives to Participants" in Tables 6.10, 6.11, 6.12, and 6.17 exclude incentives paid to Energy Savings Account (ESA) Pilot participants.

7 - Whenever Efficiency Vermont works in collaboration with other providers of efficiency services, savings and participation may be reported by more than one organization. As a result, actual savings and participation might be less than the sum of all the organizations' reported savings. Any data that overlaps or includes data from other services provided by Efficiency Vermont that are external to the Order of Appointment is footnoted in the document.

10.2 Definitions and Report Template

The table templates that appear in the Efficiency Vermont Savings Claim Summary report and Annual Report were developed as a collaborative effort between Efficiency Vermont and the Vermont Public Service Department. Note that there are two major table formats, one for the markets and services summary and the other for breakdowns by end use, utility, and county savings. The definitions of the data reported in these tables follow. The numbers in parentheses on the template refer to the footnoted definitions that immediately follow.

	Prior Year 2022	Current Year 2023	Cumulative starting 1/1/21
	(1)	(2)	(3)
# participants with installations	(4)		
Operating Costs			
Administration	(5)		
Programs and Implementation	(6)		
Strategy and Planning	(7)		
Subtotal Operating Costs	(8)		
Technical Assistance Costs			
Services to Participants	(9)		
Services to Trade Allies	(10)		
Subtotal Technical Assistance Costs	(11)		
Support Services			
Consulting	(12)		
Customer Support	(13)		
Data and Technical Services	(14)		
Information Technology	(15)		
Marketing	(16)		
Policy & Public Affairs	(17)		
Other	(18)		
Subtotal Support Services Costs	(19)		
Incentive Costs			
Incentives to Participants	(20)		
Incentives to Trade Allies	(21)		
Subtotal Incentive Costs	(22)		
Total Efficiency Vermont Costs	(23)		
Total Participant Costs	(24)		
Total Third-Party Costs	(25)		
Total Resource Acquisition Costs	(26)		
Annualized MWh/MMBtu Savings	(27)		
Lifetime MWh/MMBtu Savings	(28)		
TRB Savings (2021 $)	(29)		
Winter Coincident Peak kW Savings	(30)		
Summer Coincident Peak kW Savings	(31)		
GHG Reductions (metric tons CO_2e)	(32)		
Annualized MWh/MMBtu Savings/Participant	(33)		
Weighted Lifetime	(34)		

Definitions for the fields in the report templates

(1) Activity for the prior reporting year.

(2) Activity for the current reporting year.

(3) Data reported for the current performance period (2021-2023) starting January 1, 2021, through the end of the current reporting year.

(4) Number of customers with installed measures. The "# participants with installations" are counted by summing unique physical locations (sites) where efficiency measures have been installed for the reporting period. Additional methodologies are applied if it is a multifamily project or residential buydown.

(5) Costs include Efficiency Vermont senior management, budgeting, and financial oversight. Administration costs also include the operations fee (margin)[1] and corporate indirect charges that were applied

(6) Costs directly associated with the programs and implementation of resource acquisition activities.

(7) Costs related to program design, planning, screening, and other similar strategy and planning functions.

(8) Subtotal of all operating costs detailed in the categories above: (5) + (6) + (7).

(9) Costs related to technical assistance, conducting technical analyses, preparing packages of efficiency measures, contract management, and project follow-up provided to customers.

(10) Costs related to technical assistance, educational or other support services provided to entities other than individual participants, such as trade allies, manufacturers, wholesalers, builders, and architects.

(11) Subtotal reflecting total technical assistance costs: (9) + (10).

(12) Costs related to support provided by the VEIC Consulting group.

(13) Costs related to support provided by the VEIC Customer Support division.

(14) Costs related to support provided by the VEIC Data and Technical Support Services division.

(15) Costs related to support provided by the VEIC Information Technology division.

[1] All costs for fields 6 through 19 include an operations fee (or margin) paid to VEIC as administrator of Efficiency Vermont. In 2021 the operations fee was 1.35%, it was 1.0% in 2022, and it was 0.75% in 2023. Other than the operations fee, VEIC is reimbursed at cost for the administration of Efficiency Vermont. The operations fee is not applied to the Energy Savings Account (ESA) Pilot spending.

(16) Costs related to support provided by the VEIC Marketing division.

(17) Costs related to support provided by the VEIC Policy & Public Affairs division.

(18) Costs related to support provided by the other VEIC divisions.

(19) Subtotal cost of Support Services.

(20) Direct payments to participants to defray the costs of specific efficiency measures. This value includes payments to Energy Savings Account Pilot Participants.

(21) Incentives paid to manufacturers, wholesalers, builders, retailers, or other non-customer stakeholders to encourage their participation. These incentives do not defray the costs of specific efficiency measures.

(22) Subtotal reflecting total incentive costs: (20) + (21).

(23) Total costs incurred by Efficiency Vermont: (8) + (11) + (19) + (22).

(24) Total costs incurred by participants and related to Efficiency Vermont or utility activities. This category includes the participant contribution to the capital costs of installed measures and to specific demand-side-management (DSM)-related services, such as technical assistance or energy ratings. It does not include Efficiency Vermont incentives or services.

(25) Total costs incurred by third parties (i.e., entities other than Efficiency Vermont and participants) and directly related to Efficiency Vermont or utility DSM activities. This category includes contributions by third parties to the capital costs of installed measures and to specific DSM-related services, such as technical assistance or energy ratings.

(26) Total cost of Resource Acquisition: (23) + (24) + (25).

(27) Annual MWh savings at generation or MMBtu savings, net of all approved adjustment factors (e.g., free ridership, spillover, line losses) for measures installed during the current reporting period.

(28) Lifetime estimated MWh or MMBtu savings for measures installed during the current reporting year, at generation and net of all approved adjustment factors.

(29) Total Resource Benefits (TRB) Present Value savings for measures installed during the current reporting period. TRB includes gross electric benefits, fossil fuel savings, and water savings. TRB is stated in 2021 dollars throughout the report.

(30) Estimated impact of measures during the winter peak period, at generation, net of adjustment factors.

(31) Estimated impact of measures during the summer peak period, at generation, net of adjustment factors.

(32) Annual greenhouse gas carbon reductions (metric tons CO_2e) for measures installed during the current reporting year, at generation and net of all approved adjustment factors. Includes all non- energy, fuel, and electric savings.

(33) Annual MWh savings per participant, net at generation or MMBtu net at generation savings per participant: (27) ÷ (4).

(34) Average lifetime MWh or MMBtu net savings, in years, of measures weighted by savings: (28) ÷ (27).

X.X.X. Breakdown Report										
End Use or Utility or County	# of Participants	MWh Saved	GHG (metric tons CO_2e) Saved	Lifetime MWh Saved	Winter KW Saved	Summer KW Saved	Fuel MMBtu Saved	TRB Saved	Participant Incentives Paid	Participant Costs
	(35)	(36)	(37)	(38)	(39)	(40)	(41)	(42)	(43)	(44)

Items 35-44 reflect installed measures for the current reporting period

(35) Number of participants with installed measures for the specified End Use, Utility, or County.

(36) Annualized MWh savings at generation, net of all approved adjustment factors (e.g., free riders, spillover, line loss) for measures installed during the current reporting period. This is the same number as that reported on line (27) for Electric Resource Acquisition programs.

(37) Annual greenhouse gas carbon reductions (metric tons CO_2e) for measures installed during the current reporting period, at generation and net of all approved adjustment factors. This is the same number as that reported on line (32).

(38) Lifetime estimated MWh savings for measures installed during the current reporting period, at generation and net of all approved adjustment factors. This is the same number as that reported on line (28).

(39) Estimated impact of measures during the winter peak period, at generation, net of adjustment factors. This is the same number as that reported on line (30).

(40) Estimated impact of measures during the summer peak period, at generation, net of adjustment factors. This is the same number as that reported on line (31).

(41) MMBtu estimated to be saved (positive) or used (negative) for alternative fuels because of measures installed in the end use. This is the same number as that reported on line (27) for Thermal Energy and Process Fuels Resource Acquisition programs.

(42) Total Resource Benefits (TRB) savings for measures installed during the current reporting period. TRB includes gross electric benefits, fossil fuel savings, and water savings. TRB is stated in 2021 dollars throughout the report. This is the same number as that reported on line (29).

(43) Incentives paid by Efficiency Vermont to participants for measures installed during the current reporting period. This is the same number as that reported on line (20) except this value excludes payments to Energy Savings Account (ESA) Pilot participants.

(44) Costs incurred by participants and related to Efficiency Vermont or utility activities. This is the same number as that reported on line (24).

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