

REPORT TO THE VERMONT LEGISLATURE

Act 151 Energy Efficiency Programs

Pursuant to Act No. 151 (2020)

Submitted by the Vermont Public Utility Commission

April 28, 2023

I. Introduction and Statutory Basis

Under Act 151 (2020), the Vermont Public Utility Commission (“Commission”) was directed to authorize entities appointed to provide electric energy efficiency and conservation programs and measures pursuant to 30 V.S.A. § 209(d)(2)(A) to spend a portion of their electric resource-acquisition budget, in an amount to be determined by the Commission but not to exceed \$2,000,000 per year, on programs, measures, and services that reduce greenhouse gas emissions in the thermal energy or transportation sectors.

Pursuant to Section 1(e) of Act 151, the Commission must submit a written report by April 30, 2021, and every April 30 for three years thereafter, to the House Committee on Energy and Technology (which is now the House Environment and Energy Committee) and the Senate Committees on Natural Resources and Energy and on Finance “concerning any programs, measures, and services approved pursuant to this section.”

II. Approved measures, programs, and services

Of the entities appointed by the Commission to provide electric energy efficiency and conservation programs and measures pursuant to 30 V.S.A. § 209(d)(2)(A), Efficiency Vermont and the City of Burlington Electric Department (“BED”) both requested approval to spend a portion of their electric resource-acquisition budgets on Act 151 activities for the 2021-2023 period. The Commission authorized these entities to spend a portion of their electric resource-acquisition budget on programs, measures, and services that reduce greenhouse gas emissions in the thermal energy or transportation sectors, pursuant to Act 151.¹

The attached letters from Efficiency Vermont and BED document their Act 151 programs, measures, and services for 2022, their spending for 2021 through 2022, and their anticipated spending for 2023. They describe actions taken, and expenditures made, to promote the uptake of electric vehicles in the transportation sector and heat pumps and weatherization in the building sector and how the actions and expenditures described in the attachments fit the requirements and goals of Act 151.

¹ Case No. 19-3272-PET, Order of 8/26/21 (approving BED’s Demand Resources Plan, including Act 151 spending); Case No. 19-3272-PET, Order of 5/27/21 (approving Efficiency Vermont’s revised Demand Resources Plan to allow for Act 151 spending).



March 14, 2023

RE: Case No. 23-0640-INV – Information request for annual Act 151 Report

Dear Ms. Krolewski,

Pursuant to the Public Utility Commission's February 23, 2023 information request in the above, aforementioned case, please see Attachment 1 to this letter which includes the following requested information:

- Descriptions of Efficiency Vermont's approved 2021-2023 Act No. 151 programs, measures and services.
- Efficiency Vermont's 2022 Act No. 151 program activities and spending.
- Efficiency Vermont's 2022 and 2023 Act No. 151 budgets.

The information contained within Attachment 1 is a summary of information either previously filed with the Commission, or is in draft form and due to be filed with the Commission shortly. These reports are as follows:

- Efficiency Vermont 2023 Update to the 2021-2023 Triennial Plan (2023 Triennial Plan Update)¹
- Efficiency Vermont 2022 Savings Claim Summary ²
- Efficiency Vermont 2023 Budget Variance Report. ³

Efficiency Vermont reserves the opportunity to update the descriptions of Act No. 151 activities represented in the 2022 Savings Claim Summary and 2022 Budget Variance Report before filing with the Commission in the respective cases for these filings. However, in the interest of meeting the timeframe stipulated by the Vermont Legislature and not anticipating significant or material deviations from the descriptions provided herein, Efficiency Vermont provides these Act No. 151 draft descriptions for the Commission's stated purpose of developing a report for the Legislature.

If you have any questions, please let me know.

Sincerely,

A handwritten signature in black ink that reads "Matthew Walker".

Matthew Walker, Regulatory Project Manager

¹ The 2023 Triennial Plan Update was filed on November 1, 2022 in Case No. 22-4719-INV. The program descriptions included in Attachment 1 were filed in the 2023 Triennial Plan Update.

² The 2022 Savings Claim Summary will be filed with the Commission on or before April 3, 2023. The program highlights included in Attachment 1 will be filed in 2022 Savings Claim Summary.

³ The 2022 Budget Variance Report will be filed with the Commission on or before March 15, 2023.

Attachment No. 1: Efficiency Vermont Act No. 151 Programs

1. Program Descriptions, Budgets, 2022 Results

1.1 Programs Summary

On May 27, 2021, the Vermont Public Utility Commission (Commission) approved Efficiency Vermont's motion to amend its 2021-2023 Demand Resources Plan pursuant to Act No. 151.⁴ This enables up to \$2,000,000 per year of Efficiency Vermont's 2021-2023 energy efficiency charge (EEC) funds, for programs, measures and services that reduce greenhouse gas (GHG) emissions in the transportation and thermal energy sectors.⁵

Efficiency Vermont's Act No. 151 Programs are focused on improving various aspects of transportation sector electrification, namely two focal points related to plug-in electric vehicle (EV) market development: expanding current EV supply chain development efforts; and supporting consumer outreach and education. (See Section 1.3)

Though the focus in 2021 was on transportation-related initiatives, in 2022-2023 Efficiency Vermont will also offer an Act No. 151 thermal electrification program, in partnership with electric distribution utilities (DUs), that combine thermal efficiency with heating electrification for low-income customers. (See Section 1.4)

1.2 Budgets and Spending Results

Table 1 shows Efficiency Vermont's updated 2021-2023 Act No. 151 program budgets. The 2021 and 2022 budgets reflect spending actuals. The 2023 budget reflects Efficiency Vermont's current expectations for its Act No. 151 spending in 2023.⁶

⁴ Case No. 19-3272-PET, Public Utility Commission, Order Approving Revised Demand Resources Plan for Efficiency Vermont, 5/27/21.

⁵ Efficiency Vermont's electric transportation programs are enabled by Act No. 151 for 2021-2023. To implement these programs beyond 2023 would require further legislative action to do so.

⁶ The "Total Act 151 Budget" annual budgets in Table 1 will be filed in Efficiency Vermont's forthcoming 2022 Budget Variance Report; the total three-year 2021-2023 budget of \$5,417,000 is the PUC approved budget in the aforementioned 5/7/21 Order.

Table 1: Efficiency Vermont Updated 2021-2023 Act No. 151 Budgets

Act 151 Budget	2021 ⁷	2022 ⁸	2023 ⁹	2021-2023
<u>Business Sector</u>				
Business Existing Facilities	\$0	\$0	\$0	\$0
<u>Business New Construction</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
Sub-Total Business Sector	\$0	\$0	\$0	\$0
<u>Residential Sector</u>				
Residential New Construction	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
Efficient Products	\$1,400,506	\$1,593,493	\$1,124,507	\$4,118,506
Existing Homes	\$4,660	\$171,374	\$1,122,460	\$1,298,494
<u>Subtotal Residential Sector</u>	<u>\$1,405,166</u>	<u>\$1,764,867</u>	<u>\$2,246,967</u>	<u>\$5,417,000</u>
Total Act 151 Budget	\$1,405,166	\$1,764,867	\$2,246,967	\$5,417,000

⁷ Updated to reflect 2021 actual spending.

⁸ Updated to reflect 2022 actual spending.

⁹ Updated 2023 budgets.

Table 2 shows Efficiency Vermont’s 2022 and 2021-2022 Act. No 151 programs spending results.

Table 2. Efficiency Vermont’s 2022 and 2021-2022 Act. No 151 programs spending results¹⁰

8.5 Act No. 151 Programs Summary						
	% of Year Expired			% of Period Expired		
	100%			67%		
	Budget	Actual	%	Budget	Actual	%
Act 151 Major Market Spending	2022	2022		2021-2023	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	\$1,718,834	\$1,593,493	93%	\$4,712,340	\$2,993,999	64%
Existing Homes	\$350,000	\$171,374	49%	\$704,660	\$176,034	25%
Total Residential Sector	\$2,068,834	\$1,764,867	85%	\$5,417,000	\$3,170,033	59%
Total Act 151 Spending	\$2,068,834	\$1,764,867	85%	\$5,417,000	\$3,170,033	59%
Act 151 Incentive & Non-Incentive Spending						
Incentives	\$460,000	\$851,066	185%	\$2,550,000	\$1,138,327	45%
Non-Incentives	\$1,608,834	\$913,801	57%	\$2,867,000	\$2,031,707	71%
Total Act 151 Spending	\$2,068,834	\$1,764,867	85%	\$5,417,000	\$3,170,033	59%
Business Existing Facilities						
Lighting & Custom Project Variance¹	DRP Model	Actual	%	DRP Model	Actual	%
	2022	2022		2021-2023	2021-2023	
Incentives						
Lighting	\$4,030,648	\$3,628,576	90%	\$11,808,940	\$5,969,145	51%
Custom C&I ²	\$4,764,117	\$3,964,902	83%	\$14,266,014	\$9,306,912	65%
Annual Net MWh Savings						
Lighting	26,933	24,869	92%	80,704	45,052	56%
Custom C&I	23,541	13,818	59%	70,395	29,111	41%
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						

¹⁰ The 2022 Act No. 151 budgets shown in Table 2 were previously filed in the 2023 Triennial Plan Update on 11/1/2022 in Case No. 22-4719-INV. (Table 2 will be included in Section 8.5 of Efficiency Vermont’s forthcoming 2022 Savings Claim Summary.)

1.3 Electric Transportation

1.3.1 EV Supply Chain Support

Program Description

Auto dealerships are a critical partner in advancing EV adoption in Vermont. Efficiency Vermont's stakeholder engagement revealed many EV supply chain initiatives undertaken by dealerships, automakers, DUs, Drive Electric Vermont (DEV) and others which have enhanced Vermont's EV sales network over the past ten years. However, there was also recognition that increased investment in the EV supply chain could be beneficial, particularly in expanding pre-owned EV sales. Therefore, Efficiency Vermont's Act No. 151 Programs include the following activities to further support development of a robust statewide EV supply chain:

- Development of an EV dealership network embedded within Efficiency Vermont's Efficiency Excellence Network (EEN). Efficiency Vermont's Act No. 151 EV dealer program features new and used car dealers who have demonstrated a commitment to promoting EVs, and in return receive benefits including:
 - Financial and technical support for dealership investments in EV charging and service infrastructure
 - Marketing support to help differentiate and promote dealers that support the adoption of EVs
 - Dealership and salesperson incentives designed to encourage sales staff to learn about and sell more EVs
 - Salesperson trainings that will provide Vermont-specific information on EV incentives, operating conditions and other sales-related issues of interest to both new and used car dealers
- Regular outreach to and engagement with dealer program members to understand challenges and barriers related to dealership preparedness for EVs. These market insights help inform program updates and changes that ensure that the program is aligned with dealer support needs for advancing EV sales

2022 Program Highlights

Efficiency Vermont's EEN EV Dealer Program:

- Expanded to include a total of 50 dealers participating in the program in 2022 (45 new car dealers and five used car dealers). This exceeded Efficiency Vermont's minimum target of 40 participating dealers by the end of the pilot.
- Provided EV sales incentives for 531 plug-in EVs submitted by EEN EV dealers, including 412 new all-electric vehicles, 81 new plug-in hybrids, 26 used all-electric vehicles, and 12 used plug-in hybrids.
- Helped dealers complete 14 EV readiness projects. Dealers can leverage the readiness incentive to help pay for projects such as charging stations, service tools and equipment, trainings for tech and service department staff, and any other EV-related investment at the dealership. On August 1, the incentive was increased to 50% of project costs up to \$50,000 per year, in response to dealer needs.
- Offered 15 EV sales trainings, which covered Vermont-specific EV topics such as battery health and winter performance, with the goal of providing knowledge and information to dealer sales staff to support their conversations with car shoppers. Over 90 dealer staff, representing 33 dealerships, participated in the trainings in 2022.

- Surveyed participating dealers as part of the annual EEN member survey, to learn more about dealers' experience and satisfaction with the program thus far. The survey was sent to all 45 participating dealers enrolled at the time, and 19 dealers responded (42% response rate). The majority of dealers reported that the program had had a positive impact on their dealership's EV readiness and EV sales, and overall satisfaction with the program was high.

1.3.2 EV Consumer Education and Outreach

Program Description

Efficiency Vermont will leverage the DEV website as well as Efficiency Vermont's own engagement channels to increase consumer awareness and knowledge of EV options available to Vermont households and businesses. Components of this work will include:

- A statewide EV consumer education and awareness campaign focused on the benefits of EVs and available federal, State, and utility incentives, created in partnership with DEV, DUs, and other stakeholders
- Research to inform campaign design, including better understanding issues of concern for Black, Indigenous, and People of Color (BIPOC) and low-and-moderate income customers who might consider an EV purchase
- Advertising across a variety of media outlets
- Website updates and resources for EV shoppers
- Community engagement and event support, including potential partnerships with DUs, the State of Vermont and others interested in accelerating EV adoption
- In-dealership materials & collateral and cooperative marketing support with dealers (as noted above).

2022 Program Highlights

Efficiency Vermont's EV Consumer Education and Awareness Campaign:

- Employed tactics including: TV ads, media partnerships, Front Porch Forum posts, digital search and display ads, radio ads, social media posts, bus wraps, point-of-sale materials at EEN EV dealerships, an EV installation at Burlington International Airport, and consumer resources such as blog posts and a vehicle comparison tool. The driveelectricvt.com website saw an 83% increase in users from 2021 to 2022.
- Won second place in E Source's Utility Ad Awards (in the solar, storage, EVs, and electrification category).

1.3.3 Electric Transportation Program and EV Market Metrics, and 2021-2022 Results

As with all programs and services, Efficiency Vermont will continue to monitor market conditions as a foundation for any potential future program design decisions. As market conditions change and shift, future programs would be designed based on identifying key interventions to continue the work to increase and accelerate market adoption of EVs as well as other technologies and services that provide meaningful GHG reductions.

In order to understand how the Vermont EV market is evolving, it is important to track a variety of market metrics that will help to determine the status of the market over time. Efficiency Vermont will track two types of metrics: program and market metrics.¹¹ The program metrics are tied to specific program activities and can be measured with Efficiency Vermont program data. Developed to support and align with the market metrics and goals, 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.

The purpose of these metrics is to track general market trends that will inform Efficiency Vermont Act No. 151 EV program decisions and direction. These metrics will be tracked using data largely from outside Efficiency Vermont and will help Efficiency Vermont understand how the market is transforming, as well as assess whether its market interventions are appropriate based on market adoption trends.

See **Tables 3 and 4** for the electric transportation program and market metrics/targets, including 2021-2022 results, that Efficiency Vermont is tracking for the 2021-2023 performance period. Efficiency Vermont continues to work with the Department on the tracking and reporting of EV market metrics to understand how this market is evolving in Vermont.

¹¹ Efficiency Vermont consulted with the Department on the development of these metrics.

Table 3. Efficiency Vermont 2021-2023 Act No. 151 electric transportation program metrics and targets, and 2021-2022 results.¹²

8.6 Act 151 Transportation - Program Metrics									
<i>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.</i>									
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	50	83%	
		% 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	532	27%	
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	94	78%	
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%	64%	71%	
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	214,134	150%	
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	1269	176%	
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	N/A	NA	
Notes									
The Program Metrics are tied to specific to 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 the Act 151 workpaper, 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.									

¹² Table 3 will be included in Section 8.6 of Efficiency Vermont's forthcoming 2022 Savings Claim Summary.

Table 4. Efficiency Vermont 2021-2023 Act No. 151 electric vehicle market metrics and 2021-2022 results.¹³

8.7 Act 151 Transportation - Market Metrics																		
County	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					
	2020 (Baseline)	2021	2022	2020 (Baseline)	2021	2022	2020 (Baseline)	2021	2022	2020 (Baseline)	2021	2022	2020 (Baseline)	2021	2022			
Addison	2	N/A	N/A	9	N/A	N/A	0	0	49	283	436	601	Measured on a statewide basis					
Bennington	5	N/A	N/A	16	N/A	N/A	0	0	25	189	319	422						
Caledonia	4	N/A	N/A	29	N/A	N/A	0	0	24	134	185	250						
Chittenden	22	N/A	N/A	402	N/A	N/A	0	0	136	1,616	2,404	3,181						
Essex	0	N/A	N/A	0	N/A	N/A	0	0	1	12	13	17						
Franklin	5	N/A	N/A	43	N/A	N/A	0	0	20	117	191	281						
Grand Isle	0	N/A	N/A	0	N/A	N/A	0	0	2	61	76	110						
Lamoille	1	N/A	N/A	22	N/A	N/A	0	0	29	131	205	286						
Orange	0	N/A	N/A	0	N/A	N/A	0	0	24	149	242	330						
Orleans	0	N/A	N/A	0	N/A	N/A	0	0	14	70	111	171						
Rutland	7	N/A	N/A	111	N/A	N/A	0	0	78	228	381	511						
Washington	7	N/A	N/A	53	N/A	N/A	0	0	86	573	802	1,056						
Windham	3	N/A	N/A	31	N/A	N/A	0	0	13	355	492	633						
Windsor	7	N/A	N/A	39	N/A	N/A	0	0	31	421	632	862						
Unknown	0	N/A	N/A	0	N/A	N/A	0	0	0	21	96	164						
Statewide	63	84	102	755	1,623	1,543	0	0	532	4,360	6,585	8,875				2.8%	5.4%	6.5%
N/A means data is not available at this time.																		
M1: Number of VT dealerships selling at least 1 EV registered in VT. 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 VT 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 6 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 Market Metrics were presented in the Act 151 workpaper. The purpose of these 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.																		

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

Program Description

Based on Efficiency Vermont’s ongoing engagement with DU partners, Weatherization Agencies, and other stakeholders: Efficiency Vermont launched in 2022 and will continue implementing in 2023, a program to support low-income customers in combining weatherization with heating electrification. In partnership with DUs, Efficiency Vermont will install cold climate heat pumps (CCHPs) in the homes of approximately 300 low-income customers at no cost to the customer. Eligible customers will include those previously served by Weatherization Agencies and whose primary heating source is currently fossil fuel based. Weatherization Agencies will mail eligible customers letters on behalf of Efficiency Vermont and DU partners inviting them to participate in the program by contacting Efficiency Vermont’s customer support. Installations will be performed by EEN heat pump contractors who agree to participate in the program. On a limited basis, the program will also support electric panel upgrades required to accommodate the heat pump installation. The cost of the heat pump unit and installation will be shared between Efficiency Vermont and the customer’s DU.

¹³ Table 4 will be included in Section 8.7 of Efficiency Vermont’s forthcoming 2022 Savings Claim Summary.

2022 Program Highlights

In partnership with DUs, Efficiency Vermont enrolled approximately 150 qualifying low-income customers in this program to install CCHPs at no cost to them, of which 31 received their installed units in 2022. EEN member heat pump installers who serve as participating contractors for the program performed the installations. The cost of the heat pump unit and installation was shared between Efficiency Vermont and the customer's DU. Additionally, Efficiency Vermont:

- Developed key tools to support the customer enrollment process, including an enrollment tracker, customer economics tool, and heat pump assessment survey as well as contractor training (e.g., a Q&A webinar) for 16 participating EEN ductless heat pump contractors.
- Engaged with Low Income Home Energy Assistance Program (LIHEAP) leadership to ensure program alignment.



March 14, 2023

Ms. Holly Anderson, Clerk
Vermont Public Utility Commission
112 State Street, Drawer 20
Montpelier, VT 05620

Re: Case 23 - 0640
CY 2022 Act 151 Program update

Dear Ms. Anderson,

Pursuant to Public Utility Commission ("Commission") Order in the above reference proceeding, the City of Burlington Electric Department ("BED") provides the following Act 151 program update for review. BED understands this report, or portions thereof, may be included in the Commission's written report to the Legislature, pursuant to Section 1(e.) of Act 151.

Approved Act 151 programs

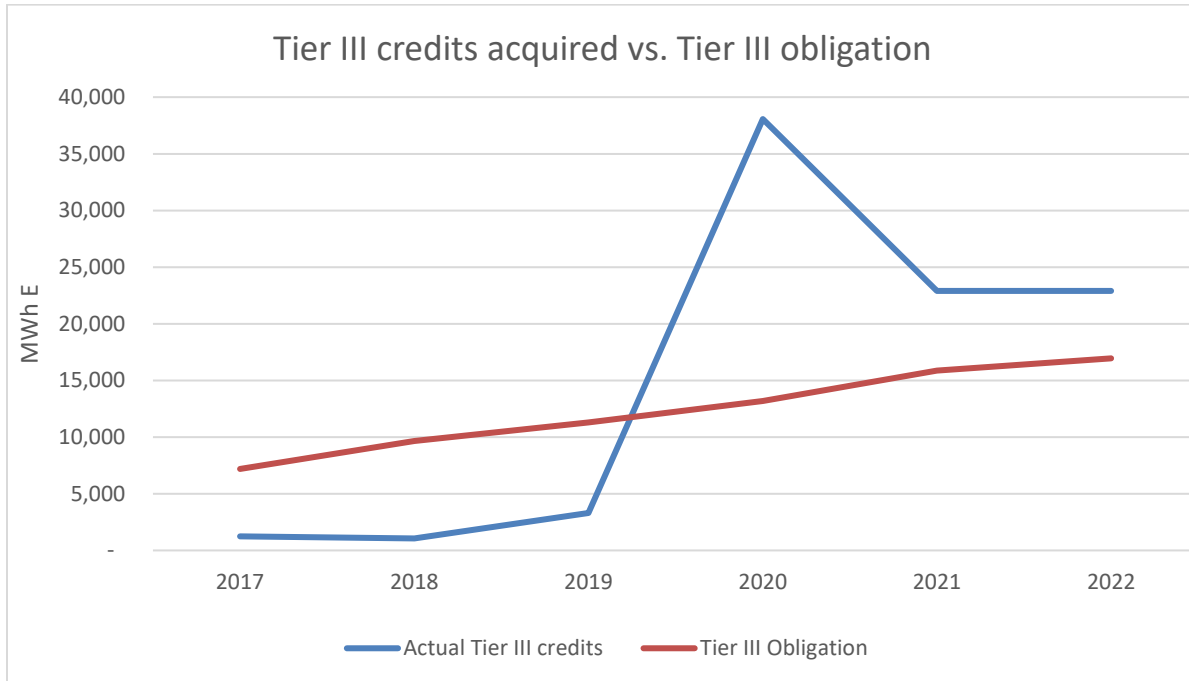
BED's approved Act 151 programs and budgets, as revised, include the following:¹

Act 151 Program	Reallocated Budget 2021 -2023
All -Electric & PHEV	\$ 90,000
Preferred Dealer Network	\$ 45,000
MF EVSE Support	\$ 120,000
Advanced Heat Pumps	\$ 240,000
Geo-Testing Wells	\$ 120,000
DeltaClime	\$ 90,000
Act 151 Program Totals	\$ 705,000
DPS Evaluation	\$ 15,000
Total	\$ 720,000

¹ See: Case 22 – 1473, Order of 10/10/2022.



As noted in our approved 2021 – 2023 Demand Resource Plan (“DRP”)², the intent of the electric vehicle, multifamily EVSE and advanced heat pump programs is to provide additional incentives directly to customers that can be stacked along with Tier III incentives, and EEU incentives, if applicable. Providing additional incentives further increases the cost competitiveness of beneficial electrification measures relative to traditional equipment and leads to greater Tier III program participation over what would have otherwise occurred. With Act 151 funding, BED has been able to sustain the high rate of growth in Tier III participation levels which began to accelerate in the Summer of 2020 with BED’s Green Stimulus Program. Moreover, robust incentives have been instrumental to the City’s efforts to decarbonize the transportation and building sectors.



Our preferred dealer network program, as revised, is intended to support, albeit at a lower level than originally envisioned, our outreach and educational efforts with Chittenden County dealerships. This program also helps to support ride & drive events and/or other joint marketing campaigns in the county in partnership with Drive Electric Vermont and Efficiency Vermont.

Relative to the Geothermal testing, this commercial new construction program provides up to \$15,000 in incentives per project to offset the cost of drilling test wells, which are

² See; Case 19 -3272, Order 8/26/2021.

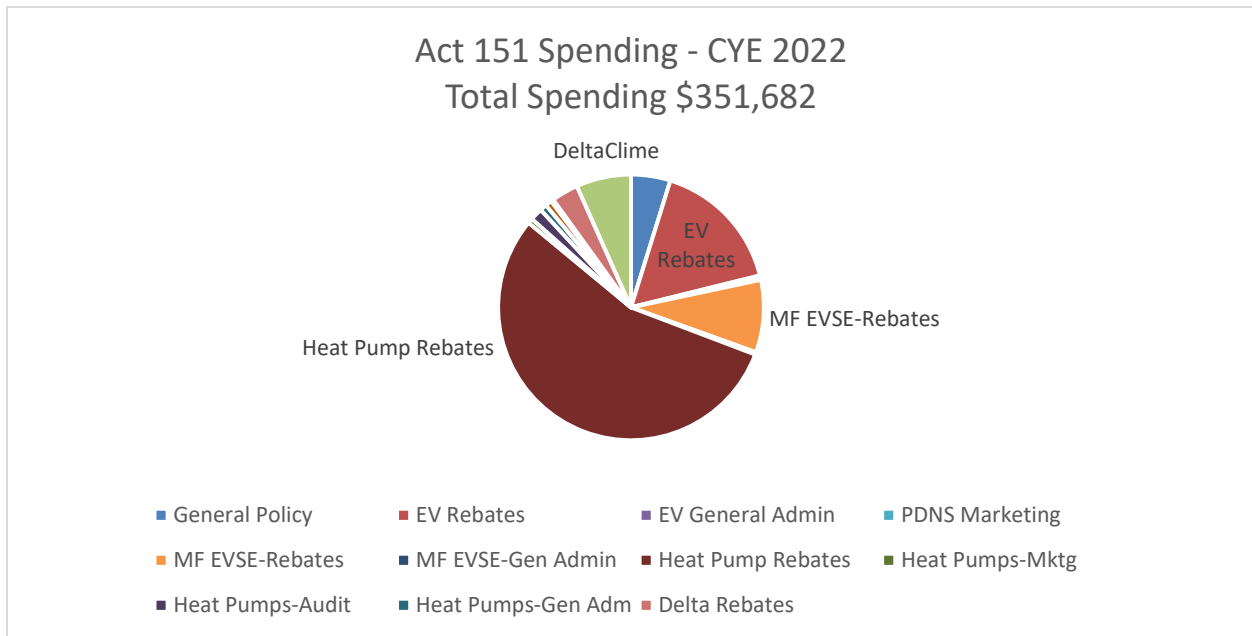


necessary to determine whether a geothermal system would be viable to serve the heating and cooling loads of a building. All incentives are capped at 50% of total test well costs. Prior approval of each geothermal project is required and customers must enroll in BED’s new construction program, which requires customers to exceed commercial building energy codes.

BED’s DeltaClimeVT program provides financial and technical support to the State’s business accelerator program serving start-up ventures focused on climate economy innovations across multiple industries.

2022 Spending

In CY2022, total Act 151 program spending amounted to \$351,682. As shown in the graph below, a majority of the spending supported BED’s heat pump and EV programs.



Estimated 2023 Spending and programs.

After accounting for CY 2022 expenditures, BED expects to continue supporting its existing programs in the amounts listed in the table below.



Est Act 151 Spending - 2023		
All -Electric & PHEV	\$	41,000
Preferred Dealer Network	\$	20,000
MF EVSE Support	\$	54,000
Advanced Heat Pumps	\$	110,000
Geo-Testing Wells	\$	55,000
DeltaClima	\$	40,000
Marketing & Admin	\$	15,000
DPS Evaluation	\$	15,000
Total	\$	350,000

BED is mindful that the pace of spending accelerated in 2022 and is monitoring program activity to ensure overall three-year spending does not exceed the approved budget of \$720,000. Indeed, the amount of cumulative spending represents two year's of forecasted spending all within CY 2022. We also note that in CY2022, two successful geo-test wells were completed. At the time of writing, BED is waiting to be invoiced. Thus, another \$30,000 will be paid out in CY2023.

Should you have any questions or concerns, please do not hesitate to contact me.

Sincerely,

Thomas Lyle
Burlington Electric Department
Tel: 802.922.3204