REPORT TO THE VERMONT LEGISLATURE Act 151 Energy Efficiency Programs Pursuant to Act No. 151 (2020)

Submitted by the Vermont Public Utility Commission

April 30, 2021



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 \$2,000,000.00 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 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 and spending for 2021, and their anticipated spending for 2022.

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).



April 15, 2022

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

Re: Case 22 – 1209 Act 151

Dear Ms. Anderson,

This letter is in response to the Public Utility Commission's ("Commission") April 11 request for comments relative to approved Act 151 programs, actual spending in 2021 and anticipated spending in 2022.

The Commission approved the City of Burlington Electric Department's ("BED") demand resource plan on August 29, 2021 in Case 19 – 3272, including its proposed Act 151 programs. Due to the relatively late approval and several other delays, BED was unable to commence Act 151 program implementation in 2021. Consequently, actual 2021 spending of \$8,300 was limited to implementation planning.

The table below provides summary descriptions of BED's approved Act 151 programs, and anticipated calendar year 2022 spending.

		Original Anticipated 2022
Program	Description	Spending
Efficient EVs	Provide enhanced incentives	
	over/above Tier III incentives	\$30,000
Preferred Dealer Network	Increase dealer and public awareness, education, and	
	outreach	\$60,000
	Provide incentives to install	
MF EVSE Support	eligible Level 2 EVSE at MF	
	locations	\$25,000
Advanced Heat Pumps	Provide enhanced incentives	
Advanced freat fullips	over/above Tier III incentive	\$65,000



Geo Testing	Provide incentives to reduce cost of testing water wells to support large-scale, custom	
	GSHP projects	\$25,000
	Continue financial support of	
	innovative companies and	
DeltaClime	products focused on	
	beneficial electrification	
	and/or carbon reduction	\$30,000
Total		\$235,000

For a full description of the programs, please refer to BED's approved demand resource plan located <u>here</u>.

BED would like to note, however, that while its overall Act 151 spending shall not exceed the amount approved by the Commission in Case 19 – 3272, anticipated spending in 2022 (as outline above) and 2023 may differ from the original forecasted annual spending levels based on the Commission's ruling in Case 22 – 0663, which relates to BED's petition to carry over Act 151 funds from 2021 into 2022).

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

Sincerely,

Thomas Lyle, Programs and Policy Burlington Electric Department Burlington Vermont 05401





This document was filed electronically in ePUC.

Tom Knauer, Policy Director Vermont Public Utility Commission 112 State St. Montpelier, VT 05620-2701

April 20, 2022

Re: Case No. 22-1209-INV. Efficiency Vermont response to Public Utility Commission request for information regarding Efficiency Vermont's 2021-2023 Act No. 151 Programs

Dear Mr. Knauer:

Pursuant to the Public Utility Commission's April 11, 2022 Memo and 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 2021 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 previously reported information that Efficiency Vermont has filed with the Commission from the following reports and plans:

- Efficiency Vermont 2022 Update to the 2021-2023 Triennial Plan ("2022 Triennial Plan")¹
- Efficiency Vermont 2021 Savings Claim Summary²
- Efficiency Vermont Revised 2021 Budget Variance Report.³

Attachment 1 also includes a program design update regarding Efficiency Vermont's Act No. 151 heating electrification with weatherization program.

If you have any questions, please let me know.

Sincerely,

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Matthew Walker, Regulatory Project Manager

¹ Case No. 21-4611-PET, Efficiency Vermont 2022 Update to the 2021-2023 Triennial Plan, 11/1/2021.

² Case No. 22-11087-PET, Efficiency Vermont 2021 Savings Claim Summary, 4/1/2022.

³ Case No. 22A-0616, Efficiency Vermont Revised 2021 Budget Variance Report, 3/23/2022.

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

1. Efficiency Vermont's Act No. 151 programs

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. **Table 1** shows Efficiency Vermont's revised 2021-2023 Act No. 151 program budgets. The 2022 and 2023 budgets reflect Efficiency Vermont's current expectations for its Act No. 151 spending in both years.⁵ For 2021 spending results, see **Table 2** at the end of this attachment.

<u>Act No. 151 Budgets</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2021-2023</u>	
Business Sector					
Existing Facilities	\$0	\$0	\$0	\$0	
New Construction	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>	
Total Business Sector	\$0	\$0	\$0	\$0	
Residential Sector					
New Construction	\$0	\$0	\$0	\$0	
Efficient Products	<u>\$1,400,506</u>	<u>\$1,718.834</u>	<u>\$1,593,000</u>	<u>\$4,712,240</u>	
Existing Homes	<u>\$4,660</u>	<u>\$350.000</u>	<u>\$350,000</u>	<u>\$704,660</u>	
Total Residential Sector	\$1,405,166	\$2,068,834	\$1,943,000	\$5,417,000	
Total Budget	\$1,405,166	\$2,068,834 ⁶	\$1,943,000	\$5,417,000	
-					

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

Efficiency Vermont's approved 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.

⁵ Pursuant to the Commission's 12/23/2021 Order in Case No. 19-3272-PET, Efficiency Vermont carriedover unspent Act No. 151 funds from its 2021 Act No. 151 budget to its 2022 Act No. 151 budget. The revised 2021 and 2022 budgets in this table are both reflective of those carry-over adjustments. These revised budgets were also filed in Efficiency Vermont's Revised 2021 Budget Variance Report on 3/23/2022 in Case No. Case No. 22A-0616. (Efficiency Vermont's 2022 Triennial Plan, which was filed on 11/1/2021 in Case No. 21-4611-PET, does not reflect the revised Act No. 151 budgets. Efficiency Vermont plans to file a revised version of the 2022 Triennial Plan with revised Act No. 151 budgets, in a separate filing). ⁶ Id.



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

Though the focus in 2021 was on electric transportation-related initiatives, in 2022-2023 Efficiency Vermont is developing limited thermal electrification programs enabled under Act No. 151 Programs, in collaboration with electric distribution utilities, Weatherization Agencies, and other stakeholders that combine thermal efficiency with heating electrification for low-income customers.

1.1 Electric Transportation

EV Supply Chain Support

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, electric utilities, 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 preowned EV sales. Therefore, Efficiency Vermont's Act No. 151 electric transportation program include the following activities to further support development of a robust statewide EV supply chain:

- In 2022-2023, Efficiency Vermont is continuing to engage with dealers on program considerations to ensure the program is aligned with dealer support needs. This builds upon one-on-one interviews conducted by Efficiency Vermont with 25 new and used car dealers, that gathered information to inform program design, including better understanding of new- and pre-owned dealership business models, market barriers, perceptions of EVs, and support needs to advance EV sales. In 2021, Efficiency Vermont analyzed responses collected as part of this dealer research effort and shared insights and key themes with stakeholders including electric distribution utilities, the Vermont Vehicle and Automotive Distributors Association, DEV stakeholders, and the Vermont Agency of Transportation. These conversations provided an invaluable learning opportunity and were a key step in ensuring that the program design was aligned with dealer support needs and effectively addressed market barriers. It also gave Efficiency Vermont added confidence that its program concepts were sound. Key themes of the responses were:
 - Dealer EV readiness varies across the board, but most dealers see EVs as the future.
 - Driving range was a top concern for dealers, both proponents and skeptics, and may even create some hesitancy among some dealers to promote EVs to their customers.
 - Whether dealers feel that EVs are a good fit for their customers depends on factors such as driving habits, geographic location, and lifestyle.
 - A big part of the "sale" happens before consumers arrive at the dealership, as most consumers do online research beforehand.
- 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. In 2021, Efficiency Vermont provided a webinar to the Vermont auto dealers community to inform them about the EV dealer program and how to enroll. 24 dealers enrolled in the program. In return, participating dealers 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. In 2021, 12 dealers received incentives for such improvements, including 11 direct current (DC) fast charging stations.
- Salesperson trainings that will provide Vermont-specific information on EV incentives, operating conditions and other sales-related issues

EV Consumer Education and Outreach

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

- A statewide EV consumer awareness and education campaign (launched in 2021) focused on the benefits of EVs and available federal, State, and utility incentives, created in partnership with DEV, utilities, and other stakeholders.
 - o Full versions of these campaign pieces can be viewed here: <u>https://www.driveelectricvt.com/blog/then-and-now-vermont-s-ev-story</u>
- Advertising across a variety of media outlets. Advertising channels for the 2021 launch included broadcast and streaming television, broadcast radio, digital, community newspapers, direct mail, community events, and an installation at Burlington International Airport. Since launching the campaign:
 - The DEV website saw a 164% increase in users, 151% increase in sessions, and 145% increase in pageviews.
 - Radio live reads have proven to be especially useful radio hosts were taking 30 seconds worth of talking points and adding their own stories and positive insights. The live reads ended up being closer to 01:30 minutes.
 - Paid advertising offset organic traffic (historically, organic traffic has comprised approximately 60% of DEV website traffic). Both organic and paid traffic comprised approximately 30% of website traffic, indicating: 1) Efficiency Vermont advertisements engaged a broad audience and encouraged click-throughs to get to the website; and 2) content on DEV is authoritative and search-engineoptimized (a healthy organic traffic benchmark Efficiency Vermont generally strives for is 16%).
 - Efficiency Vermont experienced significant levels of feedback on social media (hundreds of EV-related Facebook comments over the span of a few weeks) and to the contact center after launching the video advertisements. The advertisements prompted some responders to provide positive feedback and many other responders to provide negative opinions or misconceptions about EV technology. This underscored the need for continued education and awareness-building to



encourage EV education and awareness building, healthy informed discussion, and to persuade Vermonters to purchase or lease an EV.

- Website updates and resources for EV shoppers. In 2021, Efficiency Vermont updated its website to include improved content and messaging on EVs in the transportation section, new rebate pages for comprehensive listing of EV incentives (available through electric utilities' Tier III programs and the State of Vermont), new blogs focused on EVs, and the addition of EV dealers and EVSE contractors to Efficiency Vermont's Find a Pro or Retailer tool. It also supported the re-launch of the DEV website to improve user experience and highlight the information residents were most likely to seek, and also created pages to help Vermonters understand more about EVs and what rebates were available for buying or leasing an EV or installing a charging station.
- Research to inform campaign design, including better understanding issues of concern for Black, Indigenous, and People of Color (BIPoC) and low-and-moderate income Vermonters who might consider an EV purchase. In 2021, Efficiency Vermont performed consumer insights research to learn more about Vermonters' car shopping behaviors and how they relate to EV purchases. Fifteen one-on-one interviews were conducted. The qualitative research focused on understanding shopping behavior and EV motivations and barriers within BIPOC and low-income communities.
- Community engagement and event support, including potential partnerships with utilities, the State of Vermont and others interested in accelerating EV adoption; and
- In-dealership materials & collateral and cooperative marketing support with dealers (as noted above).

Electric Transportation Program and EV Market Metrics

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. In 2021, Efficiency Vermont coordinated with the Department on the development of program and market metrics. 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 that were originally presented in Efficiency Vermont's Act No. 151 Programs Workpaper,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.

The purpose of the market metrics is to track general market trends that will inform Efficiency Vermont Act No. 151 EV program decisions and direction. These metrics are 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.

⁷Case No. 19-3272-PET, Exhibit No. EVT-CW-4, Efficiency Vermont Workpaper Act No. 151 Programs, February 12, 2021, at 19.



See **Tables 3 and 4** for the electric transportation program and market metrics/targets, including 2021 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.

1.2 Heating Electrification with Weatherization

Based on Efficiency Vermont's ongoing engagement in 2021 to present with electric distribution utility partners, Weatherization Agencies, and other stakeholders: Efficiency Vermont is planning to launch programs in 2022 and 2023 to support low-income customers in combining weatherization with heating electrification. In partnership with distribution utilities, Efficiency Vermont will install cold climate heat pumps in the homes of approximately 300 low-income customers at no cost to the customer. Eligible customers will include those served by Weatherization Agencies within the last five years and whose primarily heating source is currently fossil fuel based. The program is set to launch in June 2022, and will conclude by December 2023.

Weatherization Agencies will mail eligible customers letters inviting them to participate in the program by contacting Efficiency Vermont's customer support. Heat pump installations will be performed by heat pump installers who participate in Efficiency Vermont's EEN. The cost of the heat pump unit and installation will be shared between Efficiency Vermont and the customer's distribution utility.



Efficiency Vermont Act No. 151 Programs - Summary								
	% of	Year Expired	100%	% of P	% of Period Expired			
Act 151 Major Market Spending	<u>Budget</u> <u>2021</u>	<u>Actual</u> 2021	<u>%</u>	<u>Budget</u> 2021-2023	<u>Actual</u> 2021-2023	<u>%</u>		
Business Sector								
Existing Facilities	\$0	\$0	N/A	\$0	\$0	N/A		
New Construction	<u>\$0</u>	<u>\$0</u>	<u>N/A</u>	<u>\$0</u>	<u>\$0</u>	<u>N/A</u>		
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	\$1,535,000	\$1,400,506	91%	\$5,417,000	\$1,400,506	26%		
Existing Homes	<u>\$0</u>	<u>\$4,660</u>	<u>N/A</u>	<u>\$0</u>	<u>\$4,660</u>	<u>N/A</u>		
Total Residential Sector	<u>\$1,535,000</u>	<u>\$1,405,166</u>	<u>92%</u>	<u>\$5,417,000</u>	<u>\$1,405,166</u>	<u>26%</u>		
Total Act 151 Spending	\$1,535,000	\$1,405,166	92%	\$5,417,000	\$1,405,166	26%		
1								
Act 151 Incentive & Non-Incentive Spending	Budget 2021	Actual 2021	<u>%</u>	<u>Budget</u> 2021-2023	<u>Actual</u> 2021-2023	<u>%</u>		
Act 151 Incentive & Non-Incentive Spending	<u>Budget</u> <u>2021</u> \$460.000	<u>Actual</u> <u>2021</u> \$287.261	<u>%</u> 62%	<u>Budget</u> <u>2021-2023</u> \$2,550,000	<u>Actual</u> 2021-2023 \$287.261	<u>%</u> 11%		
Act 151 Incentive & Non-Incentive Spending Incentives	<u>Budget</u> <u>2021</u> \$460,000 \$1,075,000	<u>Actual</u> <u>2021</u> \$287,261 \$1.117,905	<u>%</u> 62% 104%	<u>Budget</u> <u>2021-2023</u> \$2,550,000 \$2,867.000	<u>Actual</u> <u>2021-2023</u> \$287,261 \$1.117,905	<u>%</u> 11% 39%		
Act 151 Incentive & Non-Incentive Spending Incentives Non-Incentives Total Act 151 Spending	Budget 2021 \$460,000 \$1,075,000 \$1,535,000	<u>Actual</u> 2021 \$287,261 \$1,117,905 \$1,405,166	<u>%</u> 62% <u>104%</u> 92%	Budget 2021-2023 \$2,550,000 \$2,867,000 \$5,417,000	<u>Actual</u> 2021-2023 \$287,261 \$1,117,905 \$1,405,166	<u>%</u> 11% <u>39%</u> 26%		
Act 151 Incentive & Non-Incentive Spending Incentives Non-Incentives Total Act 151 Spending	Budget 2021 \$460,000 \$1,075,000 \$1,535,000	<u>Actual</u> 2021 \$287,261 <u>\$1,117,905</u> \$1,405,166	<u>%</u> 62% <u>104%</u> 92%	Budget 2021-2023 \$2,550,000 \$2,867,000 \$5,417,000	<u>Actual</u> 2021-2023 \$287,261 <u>\$1,117,905</u> \$1,405,166	<u>%</u> 11% <u>39%</u> 26%		
Act 151 Incentive & Non-Incentive Spending Incentives Non-Incentives Total Act 151 Spending	Budget 2021 \$460,000 \$1,075,000 \$1,535,000	Actual 2021 \$287,261 \$1,117,905 \$1,405,166	<u>%</u> 62% <u>104%</u> 92%	Budget 2021-2023 \$2,550,000 \$2,867,000 \$5,417,000	<u>Actual</u> 2021-2023 \$287,261 \$1,117,905 \$1,405,166	<u>%</u> 11% <u>39%</u> 26%		
Act 151 Incentive & Non-Incentive Spending Incentives Non-Incentives Total Act 151 Spending	Budget 2021 \$460,000 \$1,075,000 \$1,535,000	Actual 2021 \$287,261 \$1,117,905 \$1,405,166 Actual	<u>%</u> 62% <u>104%</u> 92%	Budget 2021-2023 \$2,550,000 \$2,867,000 \$5,417,000	<u>Actual</u> 2021-2023 \$287,261 \$1,117,905 \$1,405,166 <u>Actual</u>	<u>%</u> 11% <u>39%</u> 26%		
Act 151 Incentive & Non-Incentive Spending Incentives Non-Incentives Total Act 151 Spending Business Existing Facilities Lighting & Custom Project Variance ⁹	Budget 2021 \$460,000 \$1,075,000 \$1,535,000	Actual 2021 \$287,261 \$1,117,905 \$1,405,166 Actual 2021	<u>%</u> 62% <u>104%</u> 92%	Budget 2021-2023 \$2,550,000 \$2,867,000 \$5,417,000 DRP Model 2021-2023	Actual 2021-2023 \$287,261 \$1,117,905 \$1,405,166 Actual 2021-2023	<u>%</u> 11% <u>39%</u> 26%		
Act 151 Incentive & Non-Incentive Spending Incentives Non-Incentives Total Act 151 Spending Business Existing Facilities Lighting & Custom Project Variance ⁹ Incentives	Budget 2021 \$460,000 \$1,075,000 \$1,535,000	Actual 2021 \$287,261 \$1,117,905 \$1,405,166 Actual 2021	<u>%</u> 62% <u>104%</u> 92%	Budget 2021-2023 \$2,550,000 \$2,867,000 \$5,417,000 DRP Model 2021-2023	Actual 2021-2023 \$287,261 \$1,117,905 \$1,405,166 Actual 2021-2023	<u>%</u> 11% <u>39%</u> 26%		
Act 151 Incentive & Non-Incentive Spending Incentives Non-Incentives Total Act 151 Spending Business Existing Facilities Lighting & Custom Project Variance ⁹ Lighting	Budget 2021 \$460,000 \$1,075,000 \$1,535,000 DRP Model 2021 \$4,306,230	<u>Actual</u> \$287,261 \$1,117,905 \$1,405,166 <u>Actual</u> <u>2021</u> \$2,340,569	% 62% 104% 92%	Budget 2021-2023 \$2,550,000 \$2,867,000 \$5,417,000	<u>Actual</u> 2021-2023 \$287,261 \$1,117,905 \$1,405,166 Actual 2021-2023 \$2,340,569	<u>%</u> 11% <u>39%</u> 26% <u>%</u> 20%		
Act 151 Incentive & Non-Incentive Spending Incentives Non-Incentives Total Act 151 Spending Business Existing Facilities Lighting & Custom Project Variance ⁹ Incentives Lighting Custom C&l ¹⁰	Budget 2021 \$460,000 \$1,075,000 \$1,535,000 DRP Model 2021 \$4,306,230 \$4,791,618	Actual 2021 \$287,261 \$1,117,905 \$1,405,166 Actual 2021 \$2,340,569 \$4,697,951	<u>%</u> 62% <u>104%</u> 92% <u>%</u> 54% 98%	Budget 2021-2023 \$2,550,000 \$2,867,000 \$5,417,000 DRP Model 2021-2023 \$11,804,118 \$14,266,014	Actual 2021-2023 \$287,261 \$1,117,905 \$1,405,166 Actual 2021-2023 \$2,340,569 \$4,697,951	<u>%</u> 11% <u>39%</u> 26% <u>%</u> 20% 33%		
Act 151 Incentive & Non-Incentive Spending Incentives Non-Incentives Total Act 151 Spending Business Existing Facilities Lighting & Custom Project Variance ⁹ Incentives Lighting Custom C&I ¹⁰ Annual Net MWh Savings	Budget 2021 \$460,000 \$1,075,000 \$1,535,000 DRP Model 2021 \$4,306,230 \$4,791,618	Actual \$287,261 \$1,117,905 \$1,405,166 Actual 2021 \$2,340,569 \$4,697,951	<u>%</u> 62% <u>104%</u> 92% <u>%</u> 54% 98%	Budget 2021-2023 \$2,550,000 \$2,867,000 \$5,417,000 DRP Model 2021-2023 \$11,804,118 \$14,266,014	Actual 2021-2023 \$287,261 \$1,117,905 \$1,405,166 Actual 2021-2023 \$2,340,569 \$4,697,951	<u>%</u> 11% <u>39%</u> 26% <u>%</u> 20% 33%		
Act 151 Incentive & Non-Incentive Spending Incentives Non-Incentives Total Act 151 Spending Business Existing Facilities Lighting & Custom Project Variance ⁹ Incentives Lighting Custom C&I ¹⁰ Annual Net MWh Savings Lighting	Budget 2021 \$460,000 \$1,075,000 \$1,535,000 DRP Model 2021 \$4,306,230 \$4,791,618 29,888	Actual 2021 \$287,261 \$1,117,905 \$1,405,166 Actual 2021 \$2,340,569 \$4,697,951	<u>%</u> 62% <u>104%</u> 92% <u>%</u> 54% 98%	Budget 2021-2023 \$2,550,000 \$2,867,000 \$5,417,000 DRP Model 2021-2023 \$11,804,118 \$14,266,014 80,639	Actual 2021-2023 \$287,261 \$1,117,905 \$1,405,166 Actual 2021-2023 \$2,340,569 \$4,697,951	<u>%</u> 11% <u>39%</u> 26% 20% 33% 26%		
Act 151 Incentive & Non-Incentive Spending Incentives Non-Incentives Total Act 151 Spending Business Existing Facilities Lighting & Custom Project Variance ⁹ Incentives Lighting Custom C&I ¹⁰ Annual Net MWh Savings Lighting Custom C&I	Budget 2021 \$460,000 \$1,075,000 \$1,535,000 DRP Model 2021 \$4,306,230 \$4,791,618 29,888 23,896	Actual 2021 \$287,261 \$1,117,905 \$1,405,166 Actual 2021 \$2,340,569 \$4,697,951 20,755 14,229	% 62% 104% 92%	Budget 2021-2023 \$2,550,000 \$2,867,000 \$5,417,000 DRP Model 2021-2023 \$11,804,118 \$14,266,014 80,639 70,193	Actual 2021-2023 \$287,261 \$1,117,905 \$1,405,166 Actual 2021-2023 \$2,340,569 \$4,697,951	<u>%</u> 11% <u>39%</u> 26% 20% 33% 26% 20%		

⁸ Efficiency Vermont's total 2021 Act No. 151 budget presented in this table is the original 2021 budget before it was revised. For more information on the revised budget, please see Footnote #5 on page #2.

⁹ 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.

¹⁰ All lighting, flexible load management, refrigerant management, and single head/multi-head cold climate heat pump measures are excluded.



Efficiency Vermont Act No. 151 Electric Transportation - Program Metrics

Efficiency Vermont launched an EV marketing and dealership program in the second half of 2021. Metrics being reported in Tables 3 & 4 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 D	ealer Program Metrics	n Metrics							
D1	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	24	40%	
11		% of enrolled dealerships are used car dealerships	At least 20% are used car dealerships	quarterly	0	12	0	0%	
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 participating dealers complete at least one EV Readiness project at their facility by the end of 2023	quarterly	0	60	12	20%	
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	0%	
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	3	3%	
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%	33%	37%	
P6	Percent of attendees that report satisfaction with any training	Post-training evaluation		quarterly	0	90%	100%	111%	
Р7	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%	N/A	NA	
EV C	ampaign 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	50,796	36%	
Р9	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	208	29%	
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.



Table 4. Efficiency Vermont 2021-2023 Act No. 151 electric transportation market metrics, and 2021 results.

Efficiency Vermont Act No. 151 Electric Transportation - Market Metrics													
	M1: Annual number of Vermon dealerships selling at least 1 EV		: M2: Annual number of EVs sold by all Vermont 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	2020 (Baseline)	2021	2020 (Baseline)	2021	2020 (Baseline)	2021	2020 (Baseline)	2021			
Addison	2	N/A	9	N/A	0	0	283	436					
Bennington	5	N/A	16	N/A	0	0	189	319					
Caledonia	4	N/A	29	N/A	0	0	134	185					
Chittenden	22	N/A	402	N/A	0	0	1,616	2,404					
Essex	0	N/A	0	N/A	0	0	12	13					
Franklin	5	N/A	43	N/A	0	0	117	191					
Grand Isle	0	N/A	0	N/A	0	0	61	76	Maaau				
Lamoille	1	N/A	22	N/A	0	0	131	205	Ivieasur				
Orange	0	N/A	0	N/A	0	0	149	242	statewi	de basis			
Orleans	0	N/A	0	N/A	0	0	70	111					
Rutland	7	N/A	111	N/A	0	0	228	381					
Washington	7	N/A	53	N/A	0	0	573	802					
Windham	3	N/A	31	N/A	0	0	355	492					
Windsor	7	N/A	39	N/A	0	0	421	632					
Unknown	0	N/A	0	N/A	0	0	21	96					
Statewide	63	0	755	0	0	0	4,360	6,585	2.8%	5.4%			

Notes

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

M1: Number of Vermont auto 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 Vermont. 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 market metrics were presented in Efficiency Vermont's Act No. 151 Programs 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 Efficiency Vermont understand how the market is transforming and assess whether our market interventions are appropriate based on market adoption trends.

