Department of Energy Resources

Energy Efficiency Advisory Council (EEAC) Report

2022-2023

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Overview

On behalf of the Massachusetts Energy Efficiency Advisory Council (EEAC), [1] the Department of Energy Resources (DOER) is pleased to share the 2022-2023 Annual Reports with the Joint Committee on Telecommunications, Utilities and Energy, and the Massachusetts Department of Public Utilities (DPU). This report summarizes the 2022-23 results of the ratepayer investments in energy efficiency across the Commonwealth of Massachusetts.

The EEAC was created by the Green Communities Act of 2008,[2] a comprehensive energy reform law which the legislature has amended from time to time, as further discussed below. EEAC members guide the development of a nation-leading energy efficiency plan, administered by the Commonwealth's investor-owned gas and electric utilities and authorized municipal aggregators (Program Administrators or PAs).[3] Each of the Program Administrators develops a territory-specific plan, which together comprise a statewide three-year plan (the Statewide Plan). The Council's priorities are to develop, evaluate, and monitor the implementation of the Statewide Plan.

The Council is also charged with developing a long-term vision for the Commonwealth's energy future. In recommending and overseeing specific studies and research, the Council works to achieve energy efficiency savings and to maximize the economic and environmental benefits of energy efficiency.

The Statewide Plan covers three core sectors: Residential, Income Eligible, and Commercial & Industrial. The Residential sector is made up of all residential customers (single family and multi-family buildings) who do not meet the Low-Income program eligibility criteria. Generally speaking, this applies to all customers who earn more than 60 percent of the state median income and who do not qualify for fuel assistance and/or utility discount rates. The Income Eligible sector, sometimes referred to as Low Income or Income Eligible Services (IES), is made up of all residential customers (single family and multi-family buildings) in dwellings in which at least 50 percent of the occupants earn at or below 60 percent of the state median income level or who are qualified to receive fuel assistance and/or utility discount rates. The C&I sector encompasses all non-residential customers. This includes everything from small offices to restaurants to large manufacturing and industrial process facilities. Also, because multi-family buildings may contain both residential and commercial meters, residential services and incentives are supplemented by applicable commercial program services and incentives for multi-family buildings.

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[1] See, G.L. c. 25, § 22.

[2] St. 2008, c. 169.

[3] See, G.L. c. 25, § 21.

In 2021, the Climate Act made significant changes to the statutory requirements for the Statewide Plans' structure, prioritized measures, and goals.[4] Specifically, the Climate Act included an ambitious GHG emission reduction requirement and directed the Secretary of EEA to set a GHG goal for the Statewide Plans' necessary contribution to meeting the Commonwealth's GHG emissions limit and sublimit[5] The Energy Act of 2022 further amended the is statute, requiring the PA Plans to maximize net climate, environmental and equity impacts, and directed the phase out of support for new fossil fuel equipment.[6]

Governance: The Energy Efficiency Advisory Council

The Massachusetts EEAC guides the development of comprehensive, integrated statewide energy efficiency plans and monitors their implementation. Its primary role is to fulfill the efficiency requirements, goals, and obligations of its enabling .[7] The fifteen voting members of the EEAC represent a variety of energy efficiency and customer stakeholders and twelve non-voting members that represent the PAs and other stakeholder groups. The Commissioner of the Massachusetts Department of Energy Resources (DOER) sits as chair of the EEAC.

Whereas the EEAC is responsible for guiding the PAs in developing and implementing the Statewide Plan, the PAs are responsible for delivering programs that result in measurable, verifiable energy savings in accordance with the three-year goals approved by the Department of Public Utilities (DPU). As regulated entities, the PAs must receive approval from the DPU for their efficiency program spending and related cost recovery. On January 31, 2022, the DPU approved the goals and costs in the current Three-Year Plan, covering the period from January 1, 2022, to December 31, 2024.

2022- 2023 Program Highlights

Summary

This report presents a summary of Massachusetts' programming, including accomplishments and results for the first and second year of the 2022 to 2024 Joint Statewide Three-Year Energy Efficiency Plan (Three-Year Plan).

The Three-Year Plans are required to capture all cost-effective energy efficiency opportunities. The previous Three-Year Plan (2019–2021) generated over $6.4 billion in cumulative benefits to

[4] An Act Creating a Next-Generation Roadmap for Massachusetts Climate Policy St. 2021, c. 8 (the 2021 Climate Act).

[5] G.L. 25, § 21 (d)(4) ("Notwithstanding the requirements of paragraph (1) of subsection (b), the plans shall be constructed to meet or exceed the goal set by the secretary pursuant to section 3B of chapter 21N.")

[6] G.L. 25, § 21(b) (1) and (2), as amended by An Act Driving Clean Energy and Offshore Wind (the Energy Act of 2022) St. 2022, c. 179.

[7] G.L. c. 25, §22.

the Commonwealth. In 2022, the Program Administrators (PAs) began implementing the Three-Year Plan with goals to deliver even greater benefits and continued improvement in all areas of program delivery, and began to offer fuel switching in support of building decarbonization through the elimination or reduction of fossil fuel end uses.

The tables below summarize many of the key quantitative outcomes from 2022 and 2023. The PAs increased overall savings while staying close to the budget. The electricity, natural gas and heating oil savings created through the Mass Save and other energy efficiency programs in 2022-2023 were equal to the power used annually by more than 114,000 households.

2022 Year End Results	Column1	Column2	Column3
Metric	Achievements	% of Annual Goal	Progress towards 2022-2024 Three-Year Goal
Total Benefits	2,394,260,489	89%	26%
Program Spending	920,994,167	84%	23%
Lifetime Electric Savings (MWh)*	3,979,042	79%	30%
Lifetime Gas Savings (Million Therms)	335	91%	29%
Lifetime Oil Savings (MMBtu)	14,382,944	97%	22%
Lifetime Propane Savings (MMBtu)	3,018,713	66%	13%
Lifetime Savings All Fuels (MMBtu)	66,213,898	91%	28%
Total 2030 Avoided CO2e (Metric Tons)**	203,687	91%	24%
Heat Pump Installations (Number of Households)	18,362	132%	29%
Weatherizations (Number of Households)	49,645	87%	28%
*No Fuel Switching or Demand Response			
**Calculated using methodology described in EEA Sectretary's letter regarding a Greenhouse Gas Emissions Reduction Goal for Mass Save			

2023 Year End Results	Column1	Column2	Column3
Metric	Achievements	% of Annual Goal	Progress towards 2022-2024 Three-Year Goal
Total Benefits	2,551,031,897	85%	54%
Program Spending	1,131,409,427	89%	52%
Lifetime Electric Savings (MWh)*	3,288,831	78%	54%
Lifetime Gas Savings (Million Therms)	403	103%	63%
Lifetime Oil Savings (MMBtu)	17,886,007	90%	50%
Lifetime Propane Savings (MMBtu)	4,160,368	52%	30%
Lifetime Savings All Fuels (MMBtu)	68,220,077	85%	56%
Total 2030 Avoided CO2e (Metric Tons)**	247,156	91%	53%
Heat Pump Installations (Number of Households)	28,273	139%	74%
Weatherizations (Number of Households)	59,373	100%	62%
*No Fuel Switching or Demand Response			
**Calculated using methodology described in EEA Sectretary's letter regarding a Greenhouse Gas Emissions Reduction Goal for Mass Save			

Program Highlights

2022 Sector Metrics	Column1	Column2	Column3	Column4
Category	Residential	Income Eligible	C&I	Total
Program Spending	492,805,719	151,945,890	276,242,558	920,994,167
Total Benefits	703,443,397	216,473,143	640,603,146	1,560,519,686
Lifetime Electric Savings (MWh)*	810,484	282,804	2,885,755	3,979,042
Lifetime Gas Savings (Million Therms)	194.10	50.28	90.95	335.33
Lifetime Oil Savings (MMBtu)	13,135,022	1,421,177	(173,256)	14,382,944
Lifetime Propane Savings (MMBtu)	2,645,561	312,811	60,341	3,018,713
Lifetime Savings All Fuels (MMBtu)	33,906,656	8,367,122	23,940,120	66,213,898
*No Fuel Switching or Demand Response				

2023 Sector Metrics	Column1	Column2	Column3	Column4
Category	Residential	C&I	Low Income	Total
Program Spending	630,136,304	243,531,123	257,742,000	1,131,409,427
Total Benefits	838,810,007	258,822,459	529,668,963	1,627,301,430
Lifetime Electric Savings (MWh)*	985,987	369,504	1,933,340	3,288,831
Lifetime Gas Savings (Million Therms)	240.83	67.01	95.59	403.43
Lifetime Oil Savings (MMBtu)	15,049,456	2,366,408	470,143	17,886,007
Lifetime Propane Savings (MMBtu)	3,670,836	244,667	244,865	4,160,368
Lifetime Savings All Fuels (MMBtu)	37,225,318	11,186,683	19,808,076	68,220,077
*No Fuel Switching or Demand Response				

Residential and Low-income

The 2022 to 2024 Plan began a directional shift in the program, expanding beyond just weatherization, toward a decarbonization program supporting the electrification of buildings and the reduction of fossil fuel end uses. Importantly, this term also sought to improve equitable access to Mass Save for underserved customers (including low- and moderate-income customers, renters, and language-other-than-English customers) as informed by the input of the newly established Equity Working Group of the EEAC. To achieve these two overarching goals, the 2022 to 2024 Plan includes the following program enhancements:

- In 2022 the PAs established the Heat Pump Installer Network (HPIN) to foster a network of quality installers with training experience, and knowledge necessary to ensure properly sized and quality heat pump installations. As of the end of 2023, HPIN included 1,642 heat pump installers.
- In 2022, the PAs launched enhanced HVAC incentives for moderate income customers (61-80% area median income), i.e., higher incentives for heating equipment for income – verified, moderate-income customers who have completed weatherization in their home.
- In 2022, the PAs announced the new all-electric new construction offer for the 1–4-unit market segment. As of the end of 2023, 187 projects have been enrolled through the

Passive House multifamily new construction offering, consisting of 13,175 units and 13,989,711 square feet of building space. These projects have anticipated completion dates from 2023-2029.

- In 2023, the PAs and Low-Income Energy Affordability Network (LEAN) launched the "deep energy retrofit" offering for low-income multifamily comprehensive projects designed to achieve 40% energy use intensity (EUI) reduction through energy efficiency and electrification. These projects receive incentives based on $350/MMBTU of savings, thus allowing for greater transparency and simplicity for stakeholders earlier in the project development process.
- In 2023, LEAN implemented a concerted effort to work on displacing delivered fuels (oil, propane) and inefficient electric resistance heat with heat pumps in both multifamily facilities and single family (1-4) units. PAs also socialized the importance of co-delivery of weatherization and heat pump installations across all participating contractor networks.
- In 2022 and 2023, PAs exceeded their planned targets for supporting households installing heat pumps. In 2022, PAs supported heat pumps at approximately 18,000 homes. In 2023, PAs supported heat pumps at over 28,000 homes, including over 2,500 income-eligible households. 60% of 2023 installations were full displacements, not simply adding a heat pump to a room or two, showing that the Mass Save programs are driving deep decarbonization in residences across the Commonwealth.
- In 2022, PAs exceeded their planned goal for low-income weatherization, supporting 9,179 weatherization jobs versus the planned goal of 8,932. In 2022, PAs supported 49,600 weatherization jobs in total, falling short of their goal of 57,200 jobs. In 2023, PAs again exceeded their planned goal for low-income weatherization, supporting 11,865 weatherization jobs versus their planned goal of 9,419. In 2023, PAs supported 59,305 weatherization jobs in total, exceeding their planned goal of 58,882 jobs.
- In 2022 and 2023 the PAs implemented strategies to streamline income verification for moderate income customers (61-80% area median income), including:
    - launching a system that allows customers to complete the income verification process entirely online and provides multiple income verification options. Customers may also call a representative and complete the process over the phone.
    - National Grid introduced a moderate-income "navigator" to provide facilitated support for moderate-income customers throughout the qualification, assessment, decision-making, installation, and inspection processes. This navigator is intended to alleviate customer level of effort, improve informational and process clarity, and provide customers a dedicated point-of-contact throughout the project life cycle.

- In 2022 and 2023, through the Community First Partnership, PAs provided 26 Community First Partners (local organizations and municipalities) with grants up to $60,000 annually to serve 52 communities with community-led outreach and local Energy Advocates to communicate with and assist customers through their decarbonization journey. This helped achieve: 72,716 Home Energy Assessments 18,112 residential weatherization upgrades, 20,887 home heating and cooling upgrades, and 2,709 small business energy efficiency upgrades.
- In 2022 the PAs welcomed a new Language Access Plan vendor to help assess language access needs, existing language access services, and develop recommendations for improving language access across the programs. The joint Residential Coordinated Delivery 2023 marketing plan included outreach and advertising in Portuguese and Spanish to reach more renters who speak these languages.
- In 2023 the PAs submitted the Strategic Renter Plan to the Energy Efficiency Advisory Committee and Department of Public Utilities, which introduced strategies to improve renter participation.
- In 2023, the PAs and LEAN integrated home performance contractors into the network of contractors who can serve low-income customers, which improved program capacity to serve our most vulnerable customers.
- In 2023, PAs and LEAN launched the LEAN Statewide Client Service Center (LEAN SCSC). The LEAN SCSC acts as a centralized processing center for all referrals within Eversource, National Grid, Unitil, and Berkshire Gas Company territories. The LEAN SCSC accelerates customer outreach and reduces customer service response times. The LEAN SCSC conducts due diligence on referrals to ensure the customer qualifies for service, including verification of discount rate status. The LEAN SCSC has language capabilities in Spanish, Portuguese, French, Haitian Creole, Cantonese, Mandarin, Japanese, Korean, and Vietnamese. In 2023, the LEAN SCSC assisted approximately 11,000 customers.

Commercial & Industrial

For the commercial and industrial (C&I) sector, the PAs implemented a deep energy retrofit offering that aims to cut GHG emissions by at least 40%, streamlined access to weatherization for small businesses, re-worked the new construction offering to be all-electric and engaged with customers to improve the custom pathway for energy efficiency projects, as well as the following:

- In 2022, the Commercial and Industrial Working Group (CIWG) was formed to enhance coordination and collaboration between the program administrators (PAs) and C&I program stakeholders including customers and consultants. Co-led by the PAs and DOER, the group has identified challenges customers face and made progress towards

addressing these through an evaluation study, a focus group and a task force. Concurrent with the working group meetings, a stakeholder hour is held that is open to questions and comments from the public on the C&I programs.

- In 2022, the PAs introduced a prescriptive pathway for small commercial buildings (less than 8,000 square feet) to receive insulation and air sealing incentives. Access to weatherization incentives has been historically demanding for small- and micro-businesses. This offering enables eligible customers to receive rebates for weatherization through a streamlined process.
- In November 2022, the PAs launched the Deep Energy Retrofit (DER) offering that focuses on driving cumulative savings through long-term customer engagement, adoption of efficiency measures, and energy usage reporting. In late 2024, the DER offering's first project resulted in a 68% reduction of GHG emissions at the project site by replacing an aging oil boiler with a variable refrigerant flow (VRF) heat pump system.
- In late 2023 the PAs developed offers for new buildings that will be mandatory beginning in 2025, which preclude the use of fossil fuels, with only limited exceptions. Such exceptions include allowing limited natural gas use in highly ventilated buildings (e.g., labs) and natural gas emergency generation in emergency facilities where loss of power could present a public safety concern.

Evaluation, Measurement &Verification (EM&V)

EM&V is the systematic collection and analysis of data to verify, document, and improve program performance and to enhance the program offers and services for all participants. EM&V analysis helps ensure that participants benefit from energy efficiency and decarbonization investments made, and that the reported savings and benefits are fully realized for residents and businesses. For its Statewide Plans, Massachusetts maintains a vigorous and far-reaching EM&V program in which virtually all studies are performed at a statewide level. EM&V studies are administered jointly by the PAs and in collaboration with the EEAC. In 2022 and 2023, the PAs completed over 70 EM&V studies, including several focused on multi-family barriers, a residential participant study, and impact evaluations of C&I programs.[8] Robust EM&V ensures the integrity of the program investment, savings and benefits and provides integral program process feedback to improve the delivery of the Statewide Plans.

Residential EM&V

2022 saw a significant investment in evaluation of residential baselines, including more detail on the multi-family housing sector, and a multi-family passive house baseline study. This mostly

[8] https://ma-eeac.org/studies/

rental sector of the market historically was less well studied and served than single-family housing.

Multi-family studies published in 2022 included a census of multi-family buildings, a small multi-family barriers study and a multi-family heat pump barrier study. For new buildings a multi-family passive house market effects baseline study was completed along with new differentiated baselines for single-family and multi-family new construction, allowing updated and more accurate program savings to be calculated.

The Residential Building Use and Equipment Characterization Study, helped to quantify and clarify that A/C use in summer and electric water heaters in winter present the biggest opportunities for peak demand reduction. More than 10% of homes in Massachusetts purchased room ACs in 2020 and 2021 alone, adding to future summer peak demand.

In 2023, the major customer profile study was published covering 2013-2022 .This study combines mass save participation data with utility data to track how programs have impacted energy use over time and help identify where the programs have had high and low rates of uptake by residents, including a focus on Environmental Justice populations in Massachusetts.

Commercial & Industrial EM&V

2022 saw the publication of the 2020 Massachusetts commercial & industrial (C&I) customer profile study, which presents an overview of the Massachusetts C&I customer population and energy efficiency program activity.

It highlighted that as recently as 2020, the vast majority of the C&I sector was focused on lighting retrofits, and gas heating and combined heat and power (CHP) projects. All areas of declining relevance as we transition to the decarbonization of buildings and led lighting and controls become ubiquitous.

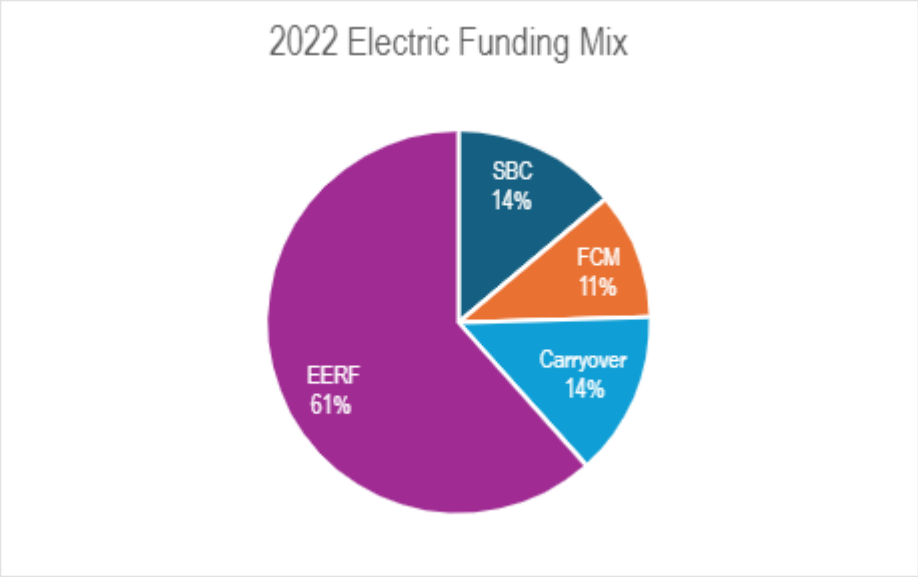
The PAs published impact evaluations of custom electric programs in 2022, and custom gas programs in 2023. These custom programs are by far the largest non-lighting C&I programs. These studies showed lower than forecast savings across a diverse portfolio and led to a renewed focus on improving building commissioning to ensure planned savings are realized in the field.

Funding Sources

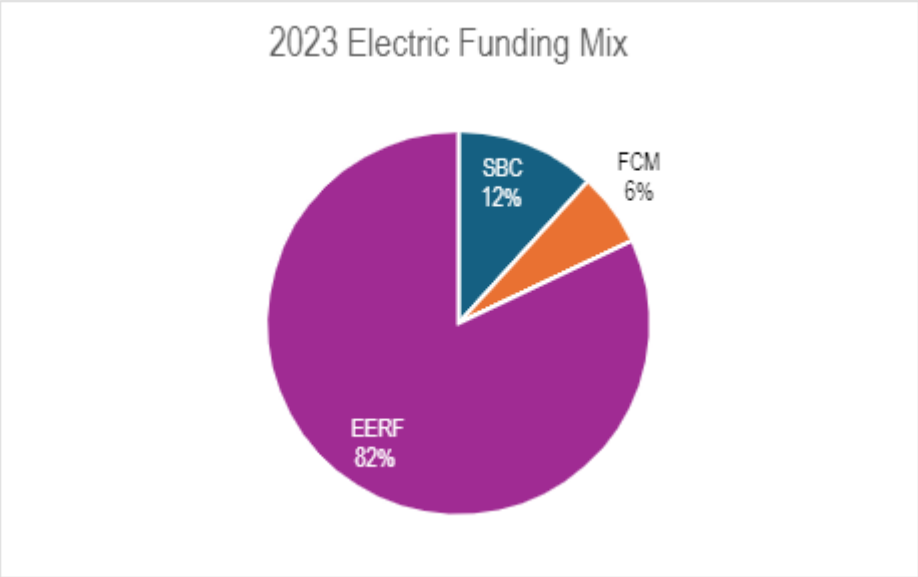
Pursuant to G.L. c. 25, § 19, a variety of sources fund the electric energy efficiency programs, the largest of which are the System Benefit Charge (SBC), and the Energy Efficiency Reconciliation Factor (EERF) as established in the GCA. The percentage of the 2022 and 2023 Plan years funding that was budgeted and approved by the DPU from each source is listed in parentheses below.

- SBC: Electric customers served by Eversource, NGRID and Unitil pay 2.5 mills ($0.0025) per kilowatt-hour (‘22: 14% of total funding, ‘23: 12% of total funding)
- EERF: Recovers additional program costs from electric customers in proportion to the costs of programs directed at each sector (i.e., residential, commercial & industrial), as a separate per kilowatt-hour charge to customers. (‘22: 61% of total funding, ‘23: 82% of total funding)
- Regional Greenhouse Gas Initiative (RGGI) auction proceeds (0% of total funding)[9]
- Forward Capacity Market (FCM) payments from ISO-NE (‘22: 11% of total funding, ‘23: 6% of total funding)
- Carryover funds from previous years (‘22: 14% of total funding).

The natural gas efficiency programs are 100% funded by an Energy Efficiency Surcharge (EES) on gas customers’ bills.



[9] At the time the Program Administrators developed the 2022-2024 Plan, the legislature had re-directed RGGI proceeds to other uses, so there were no RGGI proceeds available for the Statewide Plan. However, in October 2023, DOER distributed to the Program Administrators over $118 million of RGGI proceeds remaining from 2021 and 2022. Due to the expiration of that legislative change, DOER was able to distribute RGGI proceeds from the quarterly RGGI auctions for the remainder of the 2022-2024 term. This change in planned budget and actual budget should be reflected in the Program Administrators’ end-of-term report, to be filed with the DPU in August of 2025.


2023 Electric Funding Mix
SBC
12%
FCM
6%
EERF
82%

Legislative Background

History

In Massachusetts, regulated electric or gas distribution service must also offer cost-effective energy efficiency programing under the Green Communities Act of 2008. The 2022–2024 Three-Year Plan is the result of collaboration between DOER, the PAs, the EEAC, and many interested stakeholders in the public, private, and nonprofit sectors. First created in 2010, energy efficiency plans under the Mass Save ® brand serve customers in 340 communities, however, municipal light plants do not offer energy efficiency programming under this framework.[10]

Two acts signed into law in 2008 guide the continued evolution of efficiency programs in Massachusetts:

- The **Green Communities Act (GCA)** requires the PAs to develop energy efficiency plans that will "provide for the acquisition of all available energy efficiency and demand reduction resources that are cost-effective or less expensive than supply." In connection with these energy efficiency plans, the Act established the EEAC to oversee and advise the PAs on all aspects of efficiency planning and program execution.
- The **Global Warming Solutions Act (GWSA)** mandates the reduction of greenhouse gas emissions in the Commonwealth, establishing a schedule of emissions reduction goals designed to spur innovation and promote research and development in the area of clean energy.
- Following ten years of nation-leading programing, amendments to state law broadened and evolved the content of these energy efficiency programs, as further described below.

- **Act to Advance Clean Energy** (2018) expanded the definition of efficiency programs to include "energy storage and other active demand management technologies, and strategic electrification…" Following the legislation, PAs could use ratepayer dollars to fund strategic electrification and active demand management efforts.
- The **2021 Climate Law** established economy-wide GHG reduction targets and directed the Secretary of Energy and Environmental Affairs (EEA) to set GHG emissions-reduction goals for the three-year energy efficiency plans. It also expanded the benefits that could be included in the total resource cost test to include a social cost of carbon. The Secretary issued her first such goals for the 2022-2024 Plans, directing the PAs to reduce

[10] https://www.mass.gov/info-details/massgis-data-public-utility-service-providers . Currently, there are 50 municipalities served by either a municipal electric or gas public utility. Customers in 39 of these municipalities may participate in Mass Save because they receive either electric or gas service from an investor owned utility.

GHG emissions by 845,000 metric tons over the term.

- The **2022 Energy Law** prohibits energy efficiency plan spending on most new fossil fuel equipment. Exemptions exist, including for low-income households, emergency facilities, hospitals, and hard to electrify uses. The law included additional decarbonization-focused directions, including updating plans to "promote energy storage and electrification technologies necessary to decarbonize the environment and economy" and cooperation with other New England states on long- term projects that would advance the Commonwealth's decarbonization goals. These changes are effective for the 2025-2027 plan term.

Looking Ahead

In 2023 the EEAC began the planning process for development of the 2025-2027 Plan. Beginning in August through October 2023, the full EEAC held six facilitated workshops each focused on different sectors and programs. During this process, the EEAC reviewed briefing materials, including potential recommendations, developed by the EEAC consultant team. During the workshops, Councilors engaged in discussion, with input from the PAs and EEAC consultants to reach consensus and develop a list of informed recommendations.

The EEAC continues to be informed by public comments and stakeholder input. Leading into the workshop process, the EEAC held two public listening sessions on August 9, 2023. Further opportunities for public comment are included at the beginning of each EEAC monthly meeting and written comment is always accepted and shared with Councilors. This public feedback is used to inform the workshop materials and discussion. The EEAC held two more listening sessions after the PAs filed their draft 2025-2027 Plan with the EEAC in March 2024.

EEAC Members

Name	Affiliation	Seat
Voting Members		
Elizabeth Mahony	Massachusetts Department of Energy Resources	EEAC Chairperson
Andrea Joy Campbell / DESIGNEE: William Rose	Massachusetts Office of the Attorney General	Representing Attorney General
Yvonne Hao / DESIGNEE: Greg Abbe	Massachusetts Executive Office of Housing and Livable Communities	Representing Executive Office of Economic Development
Bonnie Heiple / DESIGNEE: Sharon Weber	Massachusetts Department of Environmental Protection	Representing Environmental Protection

Brian Beote	Action Inc.	Representing Low Income Weatherization & Fuel Assistance Network
Paul Johnson	Climate Action Now	Representing Energy Efficiency Small Businesses
Daniel Leary	Local 369 of the Utility Worker Union of American	Representing Organized Labor
Meg Lusardi		Representing Massachusetts Non-Profits
Steven Miller	The Lab Project	Representing Businesses and Large Commercial & Industrial End Users
Kyle Murray	Acadia Center	Representing Environmental Community
Robert Rio	RAR Strategies	Representing Manufacturing Industry
Jonathan Schreiber	The Massachusetts Association of Realtors®	Representing Massachusetts Realtors
Mary Wambui	Planning Officer for Urban Affairs	Representing Residential Consumers
Alexis Washburn	Emerald Cities Collaborative	Representing Energy Efficiency Experts
Brooks Winner	City of Boston	Representing Commonwealth Cities and Towns
Non-Voting Members		
Tim Costa	ISO New England	Representing Regional Electric Transmission Organization
Michael Ferrante	Massachusetts Energy Marketers Association	Representing Heating Oil Industry
Martijn Fleuren	HomeWorks Energy Inc.	Representing Energy Efficiency Businesses
Cindy Carroll	Unitil	Representing Utility Energy Efficiency Program Administrator

Hammad Chaudhry	Berkshire Gas	Representing Utility Energy Efficiency Program Administrator
Maggie Downey	Cape Light Compact	Representing Utility Energy Efficiency Program Administrator
Chris Porter	National Grid	Representing Utility Energy Efficiency Program Administrator
Tilak Subrahmanian / DESIGNEE: Kate Peters	Eversource	Representing Utility Energy Efficiency Program Administrator
Stephanie Terach	Liberty Utilities	Representing Utility Energy Efficiency Program Administrator

Appendix A

2019- 2021 Program Highlights

	2021	2019-2021	% of 2019-2021 Goal
Total Benefits (Million $)	$2,110	$6,475	94%
Program Spending (Million $)	$665	$1,874	96%
Economic benefits per dollar spent	$3.17	$3.46	97%
Annual Electricity Savings (GWh)	939	3,329	97%
Annual Gas Savings (million therms)	(10,948)	(42,441)	135%
Lifetime All Fuel Savings (thousand MMBtu)	52,161	175,995	154%
Annual CO2e reductions (metric tons)	524,203	1,833,097	102%

Residential

Residential	Program Spending (Million $)	Participants (thousands)	Annual GWh	Lifetime GWh	Annual Therms (thousand)	Lifetime Therms (thousand)	Lifetime All Fuel Savings (thousand MMBtu)	Annual CO2e (metric Tons)
2021	$286	4,388	264	1,085	(352)	6,333	22,922	237,232
2019-2021	$859	19,045	1,204	4,308	(5,052)	5,313	68,118	987,282
% of 2019-2021 Goal	113%	136%	119%	109%	179%	-24%	196%	128%

Electric Savings equivalent to heating **317,767 homes** for a year

Gas Savings equivalent to heating **38,953 homes** for a year

GHG Savings equivalent to taking **267,169 cars** off the road

Low-income

Low Income	Program Spending (Million $)	Participants (thousands)	Annual GWh	Lifetime GWh	Annual Therms (thousand)	Lifetime Therms (thousand)	Lifetime All Fuel Savings (thousand MMBtu)	Annual CO2e (metric Tons)
2021	$67	30	33	275	15	250	2,746	18,872
2019-2021	$176	85	89	729	64	926	7,983	51,940
% of 2019-2021 Goal	83%	102%	90%	73%	59%	64%	115%	83%

Electric Savings equivalent to heating **12,482 homes** for a year

Gas Savings equivalent to heating **8,528 homes** for a year

GHG Savings equivalent to taking **19,131 cars** off the road

Commercial & Industrial

C&I	Program Spending (Million $)	Participants	Annual	Lifetime GWh	Annual Therms	Lifetime Therms	Lifetime All Fuel Savings	Annual CO2e

		(thousands)	GWh		(thousand)	(thousand)	(thousand MMBtu)	(metric Tons)
2021	$312	27	642	7,089	(10,611)	(192,706)	26,493	268,099
2019-2021	$839	75	2,036	27,030	(37,453)	(759,296)	99,894	793,875
% of 2019-2021 Goal	86%	121%	88%	89%	130%	143%	137%	82%

Electric Savings equivalent to heating **320,853 homes** for a year

GHG Savings equivalent to taking **204,521 cars** off the road

Appendix B

2016- 2018 Program Highlights

	2018	2016-2018	% of 2016-2018 Goal
Total Benefits (Million $)	$2,679	$8,070	103%
Program Spending (Million $)	$827	$2,306	91%
Economic benefits per dollar spent	$3.24	$3.50	112%
Annual Electricity Savings (GWh)	1,498	4,570	110%
Annual Gas Savings (million therms)	22	55	108%
Lifetime All Fuel Savings (thousand MMBtu)	86,336	242,107	100%
Annual CO2e reductions (metric tons)	962,708	2,731,502	131%

Residential

Residential	Program Spending (Million $)	Participants (thousands)	Annual GWh	Lifetime GWh	Annual Therms (thousand)	Lifetime Therms (thousand)	Lifetime All Fuel Savings (thousand MMBtu)	Annual CO2e (metric Tons)
2018	$409	5,193	753	4,514	13,796	210,364	45,202	521,126
2016-2018	$1,089	14,697	2,200	13,569	33,740	505,414	116,835	1,420,033
% of 2016-2018 Goal	91%	117%	124%	98%	105%	113%	101%	139%

Electric Savings equivalent to heating **355,424 homes** for a year

Gas Savings equivalent to heating **35,088 homes** for a year

GHG Savings equivalent to taking **218,217 cars** off the road

Low-income

Low Income	Program Spending (Million $)	Participants (thousands)	Annual GWh	Lifetime GWh	Annual Therms (thousand)	Lifetime Therms (thousand)	Lifetime All Fuel Savings (thousand MMBtu)	Annual CO2e (metric Tons)
2018	$128	48	48	450	2,272	44,664	7,240	41,536
2016-2018	$336	146	134	1,251	6,300	125,161	20,653	117,231
% of 2016-	99%	111%	112%	115%	102%	102%	94%	136%

2018 Goal								

Electric Savings equivalent to heating **18,383 homes** for a year

Gas Savings equivalent to heating **7,600 homes** for a year

GHG Savings equivalent to taking **19,550 cars** off the road

Commercial & Industrial

C&I	Program Spending (Million $)	Participants (thousands)	Annual GWh	Lifetime GWh	Annual Therms (thousand)	Lifetime Therms (thousand)	Lifetime All Fuel Savings (thousand MMBtu)	Annual CO2e (metric Tons)
2018	$290	26	697	9,261	5,548	31,369	33,894	400,046
2016-2018	$881	86	2,236	28,370	15,058	123,011	104,619	1,194,238
% of 2016-2018 Goal	90%	93%	99%	109%	123%	61%	99%	121%

Electric Savings equivalent to heating **306,494 homes** for a year

Gas Savings equivalent to heating **24,566 homes** for a year

GHG Savings equivalent to taking
178,477 cars off the road