CHAPTER 4

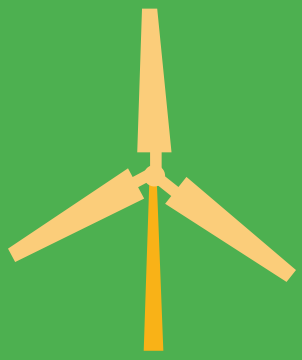
BREAKING DOWN THE SCORES

Section Overview

To provide an in-depth analysis of the results of this Scorecard, the following sections break down each of the four categories used to score MLPs: Energy Transition, Energy Efficiency, Transparency and Community Engagement, and Policy Context. We provide the following in each section:

1. An introduction outlining the importance and justification for including the category in our analysis
2. A description and breakdown of the scoring method used for the category
3. An overview of MLPs' scores in the category
4. An analysis of our results and observations
5. Recommendations for how MLP stakeholders can enhance efforts in the category

These sections offer MLP stakeholders a clear understanding of the data gathered and scored for this Scorecard, MLPs' progress in each category, and potential next steps to build on the progress thus far.



Energy Transition

(50 points)

Introduction

An energy transition is underway in Massachusetts. With the adoption and acceleration of the RPS, adoption of a net zero target by 2050, and aggressive interim targets for 2030 and 2040, the Commonwealth is taking significant steps to drastically reduce emissions and transition to clean energy. For the state to effectively accomplish this transition, *every part of the electricity sector* must be a part of it.

MLPs represent 14% of the energy grid in the Commonwealth. Unlike IOUs, MLPs are not required to adhere to the RPS. In fact, prior to the adoption of *An Act Creating a Next-Generation Roadmap for Massachusetts Climate Policy*, they were not required by the state to meet any emissions standards for clean or non-emitting energy. The lack of regulatory oversight and policy levers has meant that MLPs vary in their level of emphasis on reducing emissions and transitioning their operations.

MLPs are well positioned to lead the energy transition for numerous reasons. As public entities, MLPs are responsible for addressing the needs and desires of their customers and communities. They also have more flexibility to be ambitious in developing strategies for a clean energy transition because they are non-profit utilities not beholden to shareholders or profit margins. Finally, MLPs can own energy generation

facilities, which enhances their capacity to directly contribute to the development and diffusion of clean energy projects.

This section examines each MLP's progress in transitioning to clean and non-emitting energy. Specifically, this section assesses MLP progress in the energy transition by identifying (1) MLPs' efforts to transition to clean energy; (2) MLPs' adoption of non-emitting sources; and (3) the extent to which MLPs have adopted, and enabled their residents to adopt, clean energy technologies while transitioning away from polluting and harmful technologies. Following a discussion of MCAN's scoring methods and an analysis of the results, this section outlines recommendations for MLPs to enhance their efforts in the energy transition moving forward.

Energy Transition Scoring Methods

In scoring the progress that MLPs have made in energy transition, MCAN acknowledges the unique nature of individual MLPs while recognizing the importance of identifying progress relative to statewide goals. The data used to score MLPs in this section provide a comprehensive snapshot of MLPs' progress. However, they may not include all dimensions of energy transition in which MLPs are involved. **Table 4** describes the metrics included in our scoring and summarizes how MLPs were scored.

The percentage of clean and non-emitting energy in MLPs' energy mixes played a significant role in the scoring of this category. MCAN analyzed and scored the percentage of clean energy in MLPs' energy mixes, using the 2019 RPS of 14% clean energy as a standard target. Progress in the percentage of clean energy between 2017 and 2019 was measured against the change in the RPS over that same period (i.e., an increase of 2%). The data used to determine these scores were drawn from MLPs' 2017 and 2019 AQ31 reports submitted to the DEP. At the time of the Scorecard's publication, the 2019 AQ31 reports had not been reviewed by the DEP.

Given considerable variation in the percentage of non-emitting energy in energy mixes across MLPs, MCAN compared MLPs to each other in

this category on a scale of 0–100%. To determine non-emitting energy for MLPs, MCAN included RECs and emissions-free energy credits (EFECs) that would be eligible for consideration by the DEP in the AQ31 report.[43] This includes non-emitting MWh from municipally owned generators, MWh from a generator with which an MLP has an electricity contract, and MWh that are eligible for the Massachusetts RPS (either Class I or Class II).[44] MWh that qualified as Class II RECs in other Northeastern states and were purchased without the energy were not considered.

43 "AQ 31 Optional Greenhouse Gas Emissions Reporting Form and Spreadsheet for Municipal Retail Sellers of Electricity" (Massachusetts Department of Environmental Protection, n.d.), https://www.mass.gov/doc/instructions-aq31-optional-ghg-reporting-for-municipal-retail-sellers/download, pg 3, No. 6.

44 Ibid.

TABLE 4 ENERGY TRANSITION SCORING METRICS AND CATEGORIES

METRICS	TOTAL POINTS POSSIBLE	FACTORS	SCORING SUMMARY
PERCENTAGE OF CLEAN ENERGY	10	Number of Class I RECs retired compared to total energy sold in 2019	Scored on a scale between 0% and 14% (14% being equal to the 2019 RPS level): ≥14.00% yielded full points; <0.5% yielded zero points
RETIRED CLASS I RECS	5	If the number of Class I RECs retired was greater than zero in 2019	If MLPs retired any Class I RECs, they received full points in this category
CLEAN ENERGY % CHANGE (2017-2019)	5	Number of Class I RECs retired in 2017 and 2019 compared to total energy sold in the respective years	Scored based on the rate of change in the percentage of clean energy between 2017 and 2019: an increase in % clean energy of 2% (equal to the increase in the RPS between 2017 and 2019) yielded full points.
PERCENTAGE OF NON-EMITTING ENERGY	10	Number of non-emitting MWh retired compared to total energy sold in 2019	Scored on a scale of 0–100%: MLPs with ≥80% non-emitting energy received full points; those with 0% non-emitting energy received zero points

TABLE 4 ENERGY TRANSITION SCORING METRICS AND CATEGORIES

METRICS	TOTAL POINTS POSSIBLE	FACTORS	SCORING SUMMARY
CLEAN RENEWABLE SITING PER CAPITA (kW/CUSTOMER)	3	Number of kW of Class I renewables installed in MLP districts per customer	Scored on a range between 1.0 kW and 0.0 kW per customer, with MLPs with ≥1.0 kW per customer receiving full points
MLP SOLAR REBATE PROGRAM SPENDING ($/CUSTOMER)	2	Dollar amount spent through the MLP Solar Rebate Program to date	Scored within a range of $0.01/customer and $5.00/customer; MLPs that spent ≥$5/customer received full points
NET METERING POLICY	5	Existence of a policy, size of residential system capacity limit, existence of aggregate capacity limit, and $/kWh credited to customers for excess energy	Scored based on the existence of a net metering policy as well as characteristics found to affect policy strength. Methods for assessing policy characteristics were derived using regulations in 220 CMR 18.
BATTERY STORAGE ADOPTION	5	Utility-scale battery storage installed or planned; whether the battery's source of energy was solar, grid mix, or both	Scored on whether utility-scale batteries were installed or planned and the battery's energy source. Full points were awarded for installed batteries connected to solar.
PLANS FOR GAS SERVICES AND NUCLEAR ENERGY CONTRACTS	5	Stated plans for nuclear energy contracts and, when relevant, gas services	Scored on whether MLPs planned to decrease, not change, or increase nuclear energy in their energy mix and gas services. Full points were awarded for plans to decrease nuclear or when nuclear was not present in the energy mix.
TOTAL	50 + BONUS POINTS		

TABLE 4 ENERGY TRANSITION SCORING METRICS AND CATEGORIES

BONUS

METRICS	TOTAL POINTS POSSIBLE	FACTORS	SCORING SUMMARY
IMPLEMENTING ADVANCED METERING INFRASTRUCTURE (AMI)	1	Evidence of having adopted (or adopting) AMI	Full points awarded for MLPs that showed evidence of having adopted, or being in the process of adopting, AMI
ELECTRIC VEHICLE CHARGING REBATE	1	Existence of rebate	Full points awarded for MLPs that offered rebates for charging infrastructure
MOR-ELECTRIC VEHICLE (EV) REBATES PER CUSTOMER	1	How many MOR-EV rebates were processed during 2019 and 2020	Full points awarded if greater than the average number of MOR-EV rebates per customer were processed in the MLP's district
100% CLEAN ENERGY OPT-IN PROGRAM	1	Existence of an opt-in program that allowed residents to become 100% renewable by retiring RECs	Full points awarded for MLPs that offered a 100% clean energy program
BATTERY STORAGE: INSTALLED WITH MORE PLANNED	2	If MLPs had already installed battery storage and were planning to install more	Full points awarded to MLPs planning to install more utility-scale battery storage
PERCENT OF CLEAN ENERGY 10% GREATER THAN RPS	2	If MLPs have a clean energy percentage greater than 10% above the RPS	Full points awarded to MLPs that have greater than 24% clean energy
TOTAL	8		

MCAN used the legally accepted practice of tracking the number of RECs and EFECs that MLPs retired to determine the percentage of clean and non-emitting energy. In the utility sector, RECs represent the renewable characteristic of energy generation. EFEC's represent the emissions-free characteristics of non-renewable resources (e.g., nuclear energy). When decoupled from energy generation (i.e., RECs are sold or are not purchased directly with the accompanying energy), that generation – no matter the source – **cannot be represented as clean energy**.[45, 46] The clean and renewable characteristic of an energy source is only considered when RECs are retired. The clean energy of MLPs, and their progress in clean energy as measured in this Scorecard, was based on the number of RECs that MLPs retired in 2019. Similarly, when determining non-emitting energy, only the non-emitting MWh that were retired by MLPs (including Class I RECs, Class II RECs, and EFECs) were considered.

It is worth noting that MLPs, through their capacity to own energy generation, have invested in clean energy projects across the Commonwealth and the Northeast.[47, 48, 49] However, MCAN and other statewide actors maintain that the RECs for these projects must be retired by MLPs on an annual basis in order for the projects' renewable characteristics to be accounted for as part of an MLP's energy mix. If the Scorecard were to represent any RECs that came from these projects and had been sold by MLPs, we would be double counting; that is, the RECs would have been purchased by an IOU or another actor and thus already accounted for in the energy sector.

MLPs' efforts to adopt clean technology represent another key component of this analysis. These data include projects undertaken by MLPs to install clean technology (e.g., utility-scale battery technology) as well as information on the availability and strength of programs and policies that enable customers to transition to clean technology. In our scoring, MCAN emphasized programs and policies that support residents in transitioning to renewable energy (e.g., the MLP Solar Rebate Program and Net Metering Policies). We also included programs that support the transition to electric vehicles in the Bonus section. This section also scores the progress made in technology adoption by tracking the clean renewable capacity in MLP districts as well as (in the Bonus section)

45 Todd Jones, Robin Quarrier, and Maya Kelty, "The Legal Basis for Renewable Energy Certificates" (Center for Resource Solutions, June 17, 2015), http://resource-solutions.org/wp-content/uploads/2015/07/The-Legal-Basis-for-RECs.pdf.

46 "Renewable Energy Certificates (RECs)," Green Power Partnership (Environmental Protection Agency, May 13, 2019), https://www.epa.gov/greenpower/renewable-energy-certificates-recs.

47 "Spruce Mountain Wind" (Patriot Renewables, LLC), accessed May 26, 2021, https://www.patriotrenewables.com/projects/spruce-mountain-wind/.

48 "Wind" (Massachusetts Wholesale Electric Company), accessed May 26, 2021, https://www.mmwec.org/how-we-are-green/wind-2/.

49 D. E. Shaw Renewable Investments, "Energy New England and D. E. Shaw Renewable Investments Complete 50 MW Solar Agreement," (Cision PR Newswire, September 28, 2020), https://www.prnewswire.com/news-releases/energy-new-england-and-d-e-shaw-renewable-investments-complete-50-mw-solar-agreement-301138544.html.

the adoption of electric vehicles, which was done by tracking the total number of MOR-EV Rebates processed between 2019 and 2020.[50] The ranges used for some of the metrics were established specifically in order to identify differences between MLPs. For example, when scoring the clean renewable capacity in MLP districts, MLPs were scored on a scale from 0.00 kW – 1.00 kW per customer. Similarly, investment in the MLP rebate program was assessed on a scale of $0.01–$5.00 per customer. While these ranges appear arbitrary, upon evaluating MLP data, the ranges were found to provide a distribution that enables a clear understanding of MLPs' progress and level of spending through the program relative to each other. Using the number of customers in the denominator controlled for MLP district sizes.

In other instances, ranges and characteristics were established for explicit reasons. For example, net metering policies were assessed on policy characteristics congruent with state regulations in 220 CMR 18 to which IOUs are required to adhere. One exception is the system capacity limit for residential solar: MLPs received 1 point if they had a residential system limit greater than 10 kW. This was based on available information that average solar systems range between 2 kW and 20 kW and that a 10-kW system will produce slightly more energy than the average household uses.[51, 52] To ensure that net metering policies are not restricting solar installation, any limits should be well above the average to accommodate larger systems.

Finally, MCAN accounted for MLPs' intentions and efforts to transition away from gas services (where applicable) and harmful energy sources, specifically nuclear energy. While existing regulations consider nuclear energy a non-emitting energy source, MCAN contends that the high risk nuclear poses to local communities living near nuclear facilities and nuclear waste sites – which are disproportionately communities of color and low-income communities – do not coincide with MCAN's vision of a just energy future. As such, MCAN considers it necessary for MLPs to reduce dependence on nuclear energy over time, and we score MLPs' intentions to do so. All energy transition scores are summarized in **Table 5**.

50 While we believe that using MOR-EV rebates processed in MLP communities between 2019 and 2020 is the most effective proxy readily available for electric vehicle adoption, we acknowledge that some limitations exist in this dataset (as outlined in Appendix C). To accommodate for some variance and the potential inclusion of non-electric alternative vehicles that may have been included in the dataset, we scored this metric based on the average adoption across MLPs. In this way, minor inaccuracies in the data would be less likely to influence scoring.

51 Nate Hausman, Emma Krause, and Kaitlin Kelly, "A Massachusetts Homeowner's Guide to Solar: Leases, Loans, and PPAs" (Massachusetts Department of Energy Resources, n.d.), https://www.mass.gov/files/documents/2016/12/rm/ma-homeowners-guide-to-solar-financing-2-3.pdf, pg 3.

52 "Solar Sizing" (Eversource), accessed May 26, 2021, https://www.eversource.com/content/wma/residential/save-money-energy/explore-alternatives/learn-about-solar-energy/is-solar-right-for-you/solar-sizing.

TABLE 5 MLP SCORES IN ENERGY TRANSITION

MUNICIPAL UTILITY	CLEAN ENERGY 10 PTS	CLEAN ENERGY % CHANGE 5 PTS	CLASS 1 REC RETIREMENT 5 PTS	NON-EMITTING ENERGY 10 PTS	RENEWABLE SITING 3 PTS	MLP SOLAR REBATE PROGRAM 2 PTS	NET METERING POLICY 5 PTS	STORAGE PLANS 5 PTS	NUCLEAR PLANS 5 PTS	BONUS 8 PTS	ENERGY TRANSITION SCORE 50 PTS
CONCORD	10	5	5	6	3	2	4	3	0	5	43
BELMONT	10	5	5	4	0	2	4	2	5	4	41
BRAINTREE	7	5	5	6	1	1	3	5	2	2	37
MIDDLEBOROUGH	2	5	5	4	2	1	3	3	5	3	33
HOLYOKE	0	0	0	10	3	1	3	5	5	4	31
WELLESLEY	5	5	5	2	0	2	4	3	2	3	31
TAUNTON	1	3	5	4	3	1	4	4	0	4	29
GROVELAND	4	3	5	2	3	1	2	0	5	0	25
HUDSON*	0	0	0	10	2	1	4	0	2	3	22
WEST BOYLSTON	0	0	0	6	2	1	3	5	2	3	22
SHREWSBURY	0	0	5	4	1	2	3	0	2	4	21
STERLING	0	0	0	6	3	1	2	5	2	2	21
TEMPLETON	0	0	0	6	3	2	3	4	2	1	21
HOLDEN	1	3	5	6	0	1	3	0	0	1	20
NORWOOD	0	0	0	2	0	1	4	4	5	3	19
SOUTH HADLEY	0	0	0	10	0	2	3	0	2	2	19
WAKEFIELD	0	0	0	6	0	2	3	4	2	2	19
ASHBURNHAM	0	0	0	4	3	1	2	5	2	0	17
CHICOPEE	0	0	0	2	2	1	3	2	5	2	17
HINGHAM*	0	0	0	6	0	2	4	2	0	3	17
GROTON	0	0	0	4	2	1	4	0	2	3	16

TABLE 5 MLP SCORES IN ENERGY TRANSITION

MUNICIPAL UTILITY	CLEAN ENERGY 10 PTS	CLEAN ENERGY % CHANGE 5 PTS	CLASS 1 REC RETIREMENT 5 PTS	NON-EMITTING ENERGY 10 PTS	RENEWABLE SITING 3 PTS	MLP SOLAR REBATE PROGRAM 2 PTS	NET METERING POLICY 5 PTS	STORAGE PLANS 5 PTS	NUCLEAR PLANS 5 PTS	BONUS 8 PTS	ENERGY TRANSITION SCORE 50 PTS
HULL	0	0	0	6	1	0	5	0	2	2	16
IPSWICH	0	0	0	4	2	2	3	0	2	3	16
MANSFIELD	0	0	0	6	1	2	4	0	0	3	16
MARBLEHEAD	0	0	0	4	0	1	4	2	2	3	16
READING	0	0	0	2	0	2	3	4	2	2	15
WESTFIELD*	0	0	0	6	2	1	4	0	0	2	15
PAXTON	0	0	0	8	0	1	2	0	2	1	14
DANVERS*	0	0	0	6	1	1	3	0	0	2	13
MIDDLETON*	0	0	0	6	3	1	0	3	0	0	13
PEABODY	0	0	0	4	0	0	4	2	2	1	13
BOYLSTON	0	0	0	6	0	1	2	0	2	1	12
CHESTER	0	0	0	2	3	0	2	0	5	0	12
GEORGETOWN*	0	0	0	6	0	1	4	0	0	1	12
LITTLETON*	0	0	0	2	3	2	2	0	0	3	12
MERRIMAC*	0	0	0	2	1	1	2	0	5	0	11
N. ATTLEBOROUGH	0	0	0	4	0	1	3	0	2	1	11
PRINCETON	0	0	0	2	3	1	0	0	2	2	10
ROWLEY	0	0	0	2	2	2	3	0	0	0	9
RUSSELL	0	0	0	2	3	0	2	0	2	0	9
GOSNOLD	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

* indicates MLPs that did not submit questionnaires or provide feedback to MCAN for the purpose of this report

Results and Observations

Summary of Energy Transition Scores

The results above provide a useful snapshot of MLPs' performance, relative to each other, in actions that enhance and enable a clean energy transition. The average energy transition score was 19.2 points and the median score was 16.5 points. Most MLPs (24 out of 40) earned between 10 and 20 points. Six MLPs scored between 20 and 30 points, and seven received a score of 30 points or more. Concord, Belmont, and Braintree were the top three scorers in energy transition with 43, 41, and 37 points, respectively.

The overall scores in this section suggest that, while several MLPs are taking leadership and have made substantial progress, more work is needed to ensure that all MLPs effectively carry out a rapid energy transition. To provide an in-depth assessment of energy transition scores and their implications, the following subsections discuss the results of relevant subcategories and share key observations that help us better understand what specific actions must be taken to enhance MLPs' efforts to transition to clean, renewable energy.

Clean Energy

Overall, 31 of the 40 MLPs did not have any clean energy in their energy mix. While many of these MLPs used energy from clean energy sources, they did not retire Class I RECs; therefore, **they could not receive credit for these resources in their energy portfolio**. Our analysis demonstrates that the majority of MLPs have yet to incorporate Class I REC retirements into their strategies for transitioning to clean energy.

Of the nine MLPs that had clean energy in their energy mix, several made **significant progress and demonstrated leadership in the clean energy transition** (see **Table 6**). Two MLPs (Belmont and Concord) met and exceeded the 2019 RPS standard of 14% clean energy. Approximately 16.5% of Belmont's energy mix was clean energy and approximately 43% of Concord's energy mix was clean energy. These percentages, particularly that of Concord, clearly indicate that **MLPs are and can be leaders in the transition to clean energy** when they choose to adopt a strategy that combines Class I REC retirement with clean energy procurement.

In addition to Concord and Belmont, several other MLPs made significant progress integrating clean energy into their energy mix. As outlined in **Table 6**, eight MLPs increased the percentage of clean energy between 2017 and 2019. Five – Concord, Belmont, Braintree, Wellesley, and Middleborough – increased their percentage of clean energy at a pace faster than the RPS.

Considerable work remains to be done to increase the percentage of clean energy across MLPs and ensure that the entire Commonwealth rapidly transitions to clean energy. Even so, significant improvements are being made. These data reveal that MLPs are capable of leading in clean energy if they adopt aggressive policies and integrate Class I REC retirement.

TABLE 6

MLPS WITH CLEAN ENERGY IN 2019

MUNICIPAL UTILITY	PERCENTAGE OF CLEAN ENERGY	PERCENTAGE CHANGE BETWEEN 2017 AND 2019
CONCORD	42.80% *	+35.79% **
BELMONT	16.56% *	+11.21% **
BRAINTREE	10.38%	+10.38% **
WELLESLEY	6.88%	+3.60% **
GROVELAND	5.08%	+1.71%
MIDDLEBOROUGH	2.64%	+2.64% **
TAUNTON	1.81%	+1.65%
HOLDEN	0.88%	+0.88%
SHREWSBURY	0.12%	-0.17%

NOTE:
* MLPS THAT MET OR EXCEEDED THE 2019 RPS OF 14%
** MLPS THAT INCREASED THE PERCENTAGE OF CLEAN ENERGY AT A RATE FASTER THAN THE RPS BETWEEN 2017 AND 2019.

Non-Emitting Energy

Some MLPs have invested considerably in non-emitting energy sources such as nuclear energy and hydropower, positioning themselves to be leaders in transitioning away from fossil fuels. As shown in **Figure 2**, three MLPs – Holyoke, South Hadley, and Hudson – had more than 80% non-emitting energy in their total energy mix. Holyoke's energy mix was approximately 85% non-emitting, South Hadley's energy mix was approximately 90% non-emitting, and Hudson's energy mix was approximately 94% non-emitting. We observed a substantial drop-off following these three MLPs, with the remaining MLPs falling into the ranges of 40%–60%, 20%–40%, and 0%–20%.

While there was variability in which energy sources constituted the non-emitting portion of MLPs' energy mix – spanning from nuclear energy to hydropower to wind and solar – nuclear energy was one of the primary sources for many MLPs. As observed in **Table 7**, while 10 MLPs did not use nuclear energy in 2019, **nuclear accounted for over 75% of the remaining 29 MLPs' total non-emitting energy on average[53].**

53 MCAN was unable to determine the sources of Russell's non-emitting energy because they did not submit a DPU Annual Report in 201

FIGURE 2 PERCENTAGE OF NON-EMITTING SOURCES IN FUEL MIX

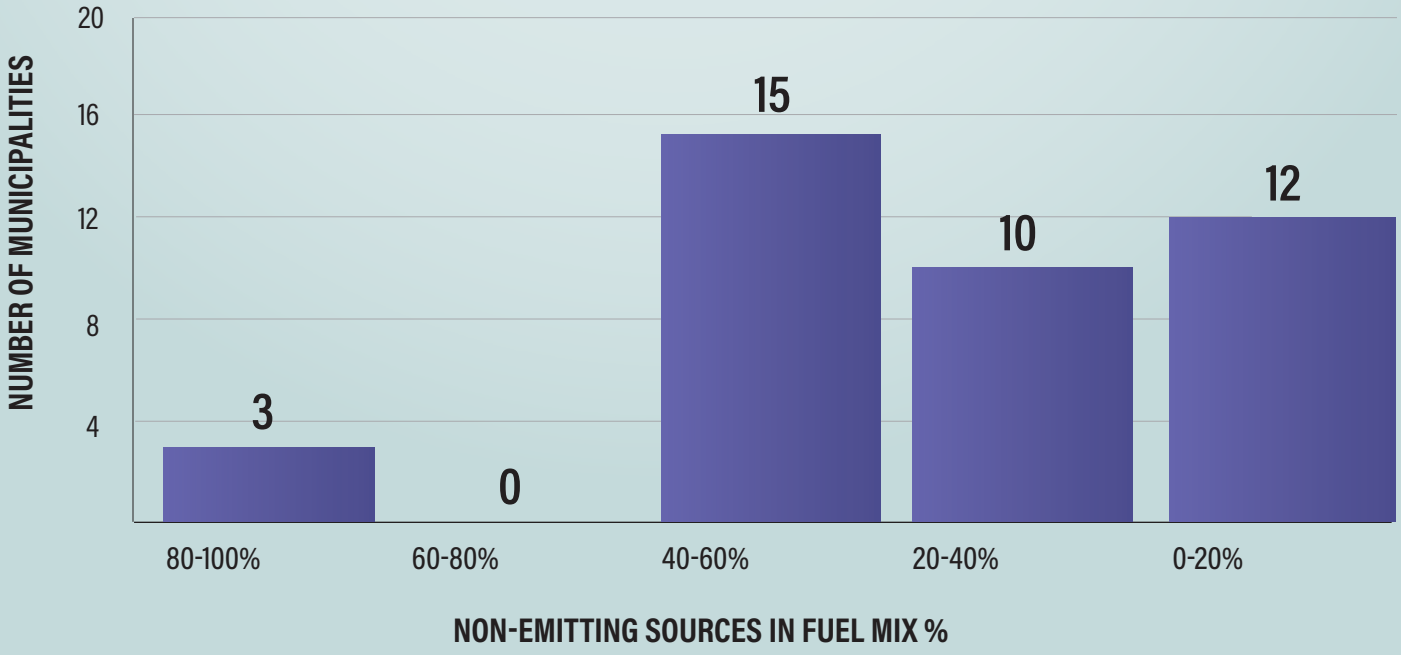


TABLE 7

PERCENTAGE OF NUCLEAR IN MLPS' ENERGY MIX

MUNICIPAL UTILITY	PERCENTAGE OF NUCLEAR ENERGY IN ENERGY MIX	NUCLEAR PERCENTAGE OF TOTAL NON-EMITTING ENERGY	MUNICIPAL UTILITY	PERCENTAGE OF NUCLEAR ENERGY IN ENERGY MIX	NUCLEAR PERCENTAGE OF TOTAL NON-EMITTING ENERGY
ASHBURNHAM	29.65%	77.68%	MERRIMAC	0%	0%
BELMONT	0%	0%	MIDDLEBOROUGH	24.73%	64.84%
BOYLSTON	36.77%	83.49%	MIDDLETON	42.21%	80.35%
BRAINTREE	20.03%	48.44%	N. ATTLEBOROUGH	26.59%	81.05%
CHESTER	0%	0%	NORWOOD	0%	0%
CHICOPEE	0%	0%	PAXTON	52.19%	86.16%
CONCORD	0%	0%	PEABODY	31.61%	86.40%
DANVERS	49.84%	92.41%	PRINCETON	0%	0%
GEORGETOWN	26.72%	66.37%	READING	16.84%	85.00%
GROTON	23.43%	76.11%	ROWLEY	0%	0%
GROVELAND	0%	0%	RUSSELL	N/A	N/A
HINGHAM	31.81%	68.18%	SHREWSBURY	30.37%	83.46%
HOLDEN	48.40%	85.00%	SOUTH HADLEY	83.33%	92.33%
HOLYOKE	29.04%	34.04%	STERLING	40.33%	87.06%
HUDSON	84.55%	89.82%	TAUNTON	3.42%	16.18%
HULL	44.42%	79.82%	TEMPLETON	44.80%	89.24%
IPSWICH	16.17%	70.47%	WAKEFIELD	36.30%	84.80%
LITTLETON	7.10%	69.58%	WELLESLEY	0%	0%
MANSFIELD	49.18%	91.09%	WEST BOYLSTON	49.01%	89.18%
MARBLEHEAD	29.44%	75.64%	WESTFIELD	41.01%	89.56%

NOTE: CALCULATIONS BASED ON 2019 DATA SUBMITTED IN MLP ANNUAL REPORTS TO THE DPU. NUCLEAR CONTRACTS WERE DIVIDED BY MLPS' TOTAL RETAIL ELECTRICITY SOLD TO DERIVE THE PERCENTAGE. PERCENTAGES DO NOT INCLUDE NUCLEAR ENERGY FROM THE GRID MIX.

When setting aside energy type, the overall results show that many MLPs are exceeding, or keeping pace with, IOUs in their efforts to decarbonize their energy mix, which had an estimated non-emitting percentage of 45% in 2019.[54, 55] However, some MLPs remain heavily reliant on fossil fuels. The implementation of the first-of-its-kind emissions standard for MLPs marks an important step towards ensuring that progress is made across all MLPs.

54 "2019 Net Energy and Peak Load by Source," Energy, Load, and Demand Reports (ISO-NE, October 16, 2020), https://www.iso-ne.com/isoexpress/web/reports/load-and-demand/-/tree/net-ener-peak-load.

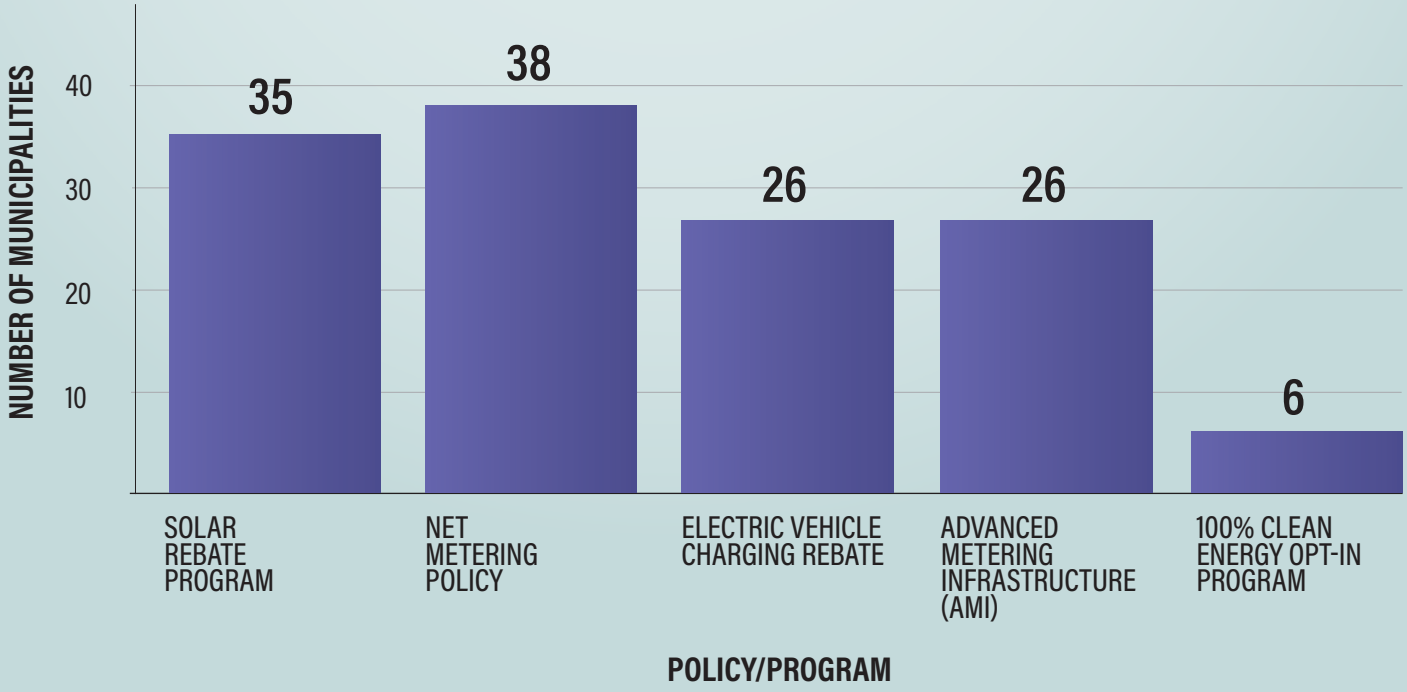
55 Based on general data from ISO-NE and accounting for sources that MCAN considers to be non-emitting (e.g., nuclear, hydro, solar, wind, and landfill gas)

Energy Transition Programs and Policies

As depicted in **Figure 3**, MLPs support a range of programs that help their residents transition to renewable energy and clean technology.

Equally important to the availability of programs for customers is the level of investment and the strength of these policies in MLP districts. When considering policy strength and investment, the results are more scattered. Such variation can be observed by looking at spending through the MLP Solar Rebate Program. While the median amount spent was

FIGURE 3 ENERGY TRANSITION REBATES AND PROGRAM PARTICIPATION



just over $3.00 per customer, thirteen MLPs spent more than $5.00 per customer, as of the publication of this report. The remaining twenty-two participating MLPs spent between $0.01–$5.00 per customer.[56, 57] Concord, Ipswich, and Littleton spent more per customer than any other MLP, spending $26.41, $19.94, and $11.07 per customer, respectively.

The strength of net metering policies among MLPs based on the characteristics we monitored also varied widely. As outlined in **Figure 4**, when factoring in aggregate capacity limits, residential capacity limits, and the policy's excess generation credit, **Hull was the only MLP to receive full points.** Most MLPs met either one or two of our criteria, and nine MLPs' net metering policies did not meet any.

The most common aspect on which MLPs fell short was providing a strong excess generation credit, with only nine MLPs providing a credit equal to or greater than the residential rate (**Figure 5**). Nearly half of all MLPs with net metering policies had residential system capacity limits greater than 10 kW and/or no aggregate residential capacity limits.

In other areas measuring efforts to provide programs and policies that help transition residents to clean energy, we observed substantial

56 While Holyoke did not participate in the program, they were awarded one point in this category because of the unique solar loan program that they provide to residential customers.

57 The data received from DOER was up-to-date as of August, 2021.

FIGURE 4 NET METERING POLICY CHARACTERISTICS SATISFIED

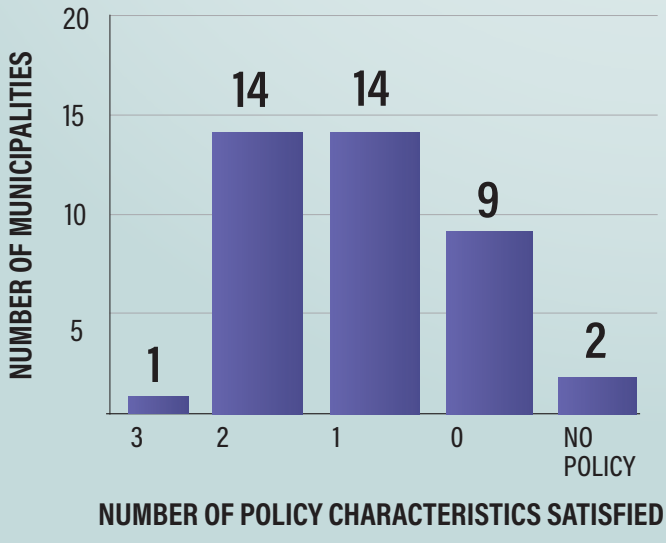
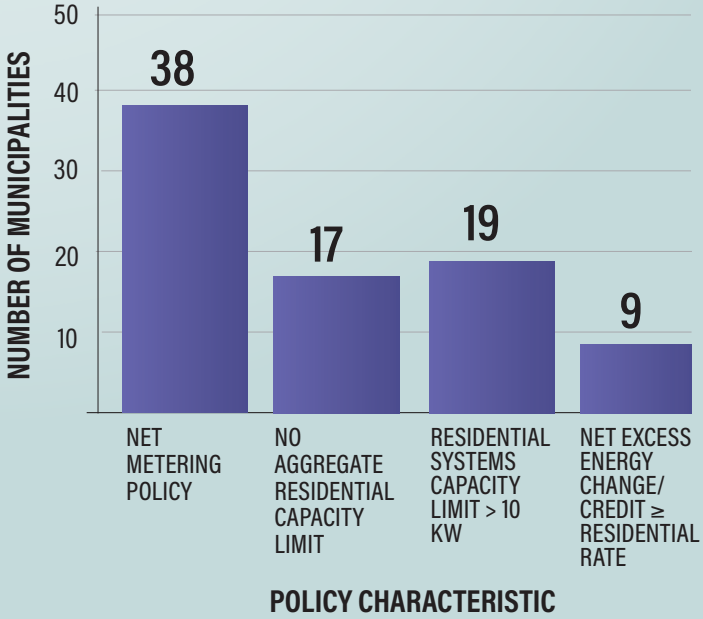


FIGURE 5 NET METERING POLICY CHARACTERISTICS



progress. Well over half of MLPs offered an electric vehicle charging rebate and have installed (or are in the process of installing) Advanced Metering Infrastructure (AMI). Electric vehicle infrastructure is a critical part of the transportation sector's electrification and the transition to clean transportation technology (e.g., electric vehicles). Efforts made by MLPs to incorporate incentives and rebates for electric vehicles and electric vehicle infrastructure into their energy transition efforts will go a long way in facilitating an equitable and efficient clean energy transition. The same is true of including AMI, which involves installing smart meters, communication networks, and data management systems that enable two-way communication between utilities and customers. AMI greatly enhances MLPs' resiliency and capacity to integrate distributed resources.[58] The relatively widespread inclusion of this infrastructure in MLP operations is promising and could be immensely helpful in their efforts to integrate more clean energy resources.

58 "Advanced Metering Infrastructure and Customer Systems: Results from the Smart Grid Investment Grant Program," Advanced Metering Infrastructure and Customer Systems: Results from the Smart Grid Investment Grant Program _ (2016), https://www.energy.gov/sites/prod/files/2016/12/f34/AMI%20Summary%20Report_09-26-16.pdf, pg 4.

Clean Technology Adoption

Results in the categories measuring clean technology adoption showed substantial variation across MLPs. When looking at clean energy installed in MLP districts per capita, we observed that 12 MLPs had installed greater than 1.0 kW of clean energy per customer whereas 14 had installed less than 0.33 kW per customer; the remaining MLPs fell somewhere in between. Of the MLPs that had installed more than 1.0 kW of clean energy per customer, some MLPs installed considerably more than others. Most notably, Chester, Russell, and Holyoke installed approximately 8.68 kW, 6.56 kW, and 3.54 kW of clean energy per customer, respectively.

The adoption of battery storage technology also varied. As illustrated in **Figure 6**, 10 MLPs had already adopted utility-scale battery technology, four of which were planning to install more. Additionally, the storage systems in five of these 10 MLPs were either partially or completely powered by solar energy. Battery storage offers a prime opportunity for MLPs to leverage their flexibility and innovative capacity to lead the Commonwealth's energy transition.

FIGURE 6 BATTERY TECHNOLOGY ADOPTION

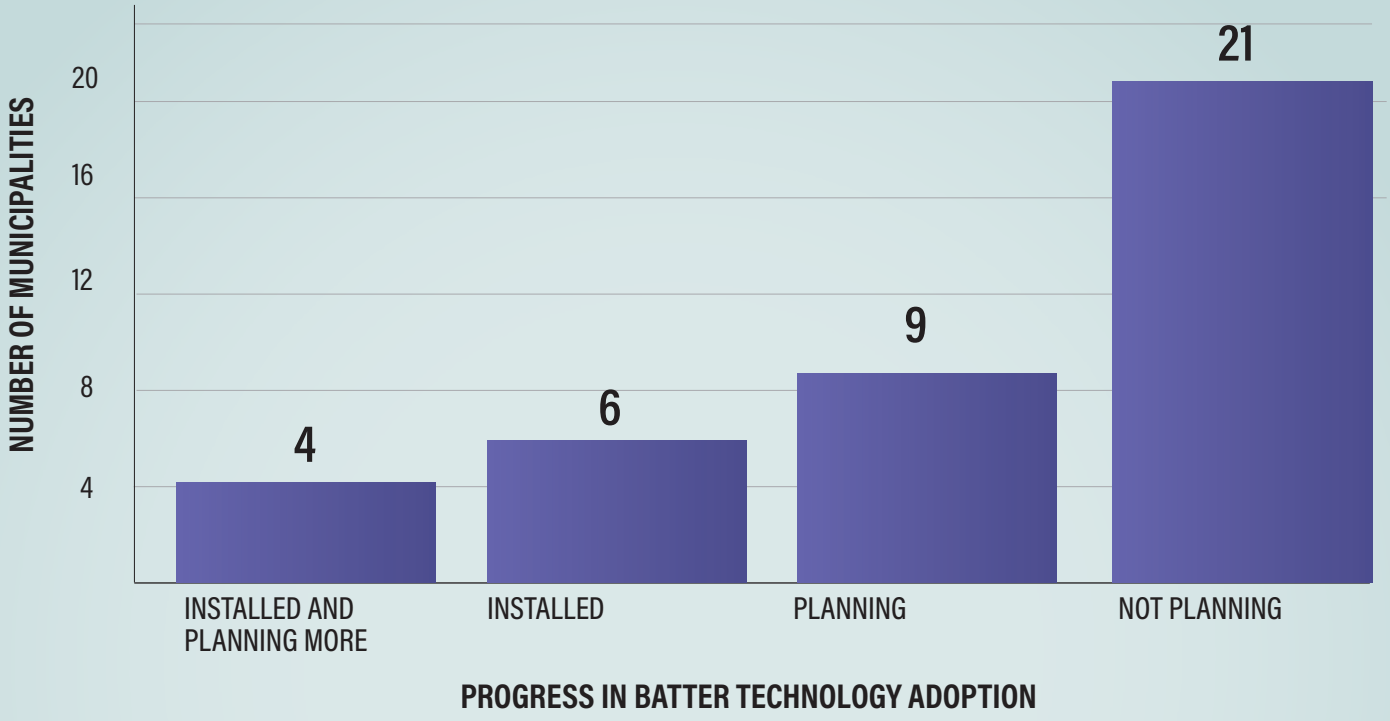
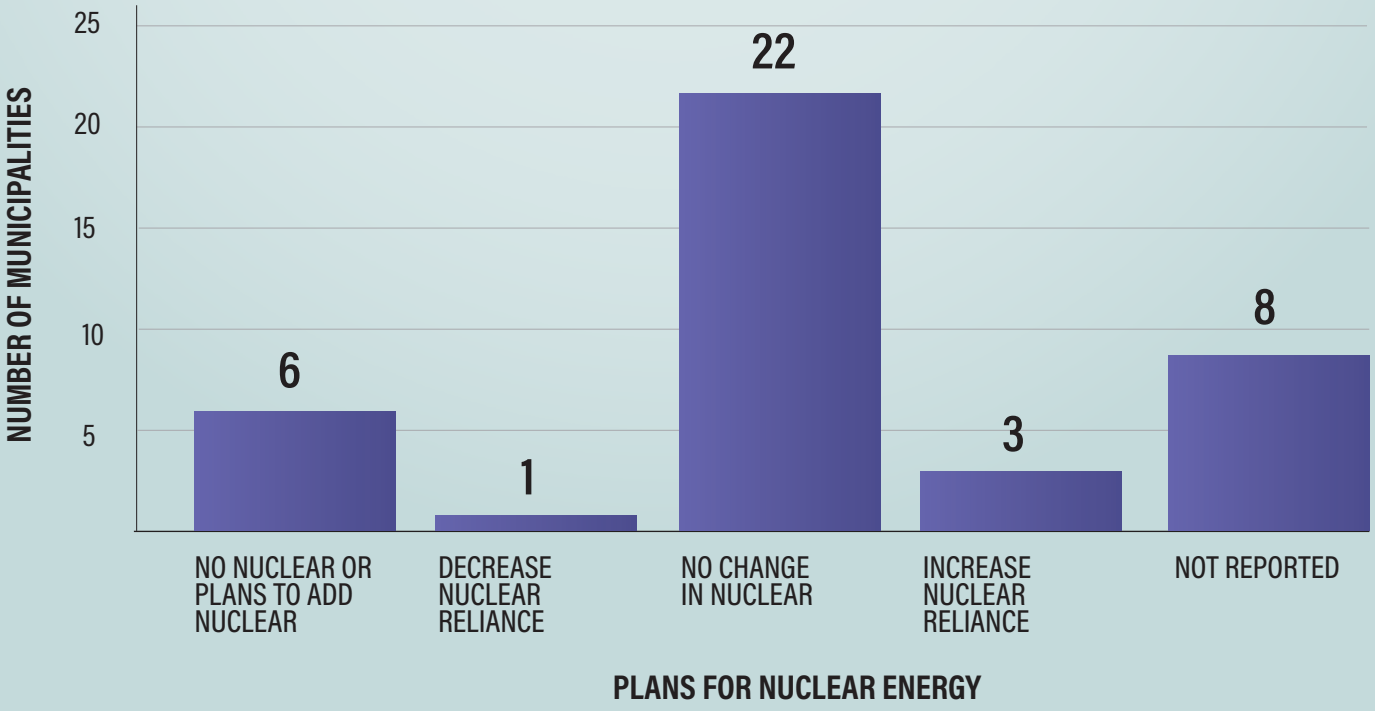


FIGURE 7 FUTURE PLANS FOR NUCLEAR ENERGY



Plans for Gas Services and Nuclear Energy

Figure 7 presents a summary of MLPs' future plans with respect to nuclear energy in their energy mix. The data demonstrate that a majority of MLPs are unlikely to either decrease or increase their dependence on nuclear energy in the future. One possible explanation for this trend is that some MLPs have long-term contracts for nuclear power that will not allow them to decrease nuclear power in the near future. It is nevertheless necessary for MLPs to develop long- and short-term strategies to transition away from their over-reliance on nuclear energy.

While most MLPs had nuclear in their energy mix, six had no nuclear energy and provided no evidence that this would change. A handful of MLPs intended to increase nuclear power in the future.

Only four MLPs provide gas services to their customers. Among them, only Holyoke had clear intentions and an action plan in place to decrease gas services through concerted electrification. Wakefield and Middleborough did not plan to increase or decrease their gas services, and Westfield did not report its intentions in this regard.

MCAN's Recommendations for an Effective Energy Transition

Based on our results, MCAN recommends that MLP staff, MLP associations, state officials, and advocates consider taking the following steps to enhance the energy transition in MLP districts:

1. **Incorporate Class I REC retirement into long- and short-term MLP strategies**
   - Adopt plans to strategically accelerate Class I REC retirement
   - Meet or exceed the RPS over time
   - Adopt 100% renewable energy opt-in programs for residents

- Expand state involvement in REC retirement through incentives or mandates

While MLPs have made considerable strides in developing and contracting for energy from clean energy sources, this progress is not and cannot reasonably be attributed to MLPs' energy mix because they are not retiring the Class I RECs associated with it. The retirement of Class I RECs from the MLPs' power supply is an integral part of any utility's energy transition. Advocates, MLP light boards, MLP staff, MLP associations, and state agencies should work together to identify best practices for effectively integrating Class I REC retirement into MLP operations. Specifically, stakeholders should aim to incorporate **consistent and continually increasing Class I REC retirement into long- and short-term plans and budgets.** In doing so, MLPs should aim to increase the number of RECs retired year-over-year at a pace that meets or exceeds that of the RPS; 100% renewable energy opt-in programs for residents and businesses can contribute to Class I REC retirement goals while providing customers with a cleaner electricity option.

If MLPs do not retire RECs for clean energy, then approximately 14% of the Commonwealth's electricity will not be transitioning to clean energy at a pace that aligns with the rest of the state. This discrepancy will influence the Commonwealth's overall ability to transition to clean energy. As such, the state government has a role to play in enhancing the rate at which MLPs retire Class I RECs. State involvement could come in the form of a clean energy standard for MLPs, as was done for IOUs through the creation of the RPS, which has been shown to be highly effective. Alternatively, the state could provide incentives or create programs to support MLPs in Class I REC retirement. Regardless of the approach, the Commonwealth has a responsibility to ensure that communities are not being left behind in the clean energy transition.

2 **Strengthen and enhance policies that enable residents to transition to clean energy**

- Strengthen net metering policies
- Leverage MLP innovation to enhance battery storage, advanced metering infrastructure (AMI), electric vehicle adoption and infrastructure, and other clean energy technology

- Strengthen and expand services that assist low- and moderate-income households in transitioning to clean energy
- Increase state investment in MLP clean energy innovation

MLPs offer a variety of programs that enable residents to transition to clean energy. Even so, ongoing work is required to strengthen these programs and ensure they are on par with programs available in non-MLP regions. This need is most evident in MLP residential net metering policies. For net metering to be effective, MCAN recommends that **MLPs align their net metering policies with statewide regulations outlined in 220 CMR 18.** Accordingly, we encourage MLPs to eliminate or increase the aggregate residential capacity limit, increase the residential system capacity limit to above 10 kW, and increase the net excess generation charge to be equal to or greater than the residential rate. MCAN acknowledges that these improvements may not be feasible without state assistance; however, we encourage all MLPs to investigate what can be reasonably achieved.

MLPs have shown that they can be leaders in the energy transition by being early adopters of technology and by developing programs that enable their customers to be early adopters as well. Some areas in which MLPs can continue to lead are battery technology adoption and AMI. MCAN recommends that MLPs coordinate with each other to devise strategies to increase such adoption and potentially identify joint goals. Doing so would be particularly useful in cleaning peak demand for MLPs across the Commonwealth. Similarly, MLPs should work together to identify effective ways to install and utilize AMI. If properly collected and assessed, data derived from AMI could be immensely useful in MLPs' efforts to transition to clean energy. MMWEC and ENE are the ideal entities to facilitate industry-wide efforts in battery technology adoption, AMI installation and management, and other collaborative efforts if they are directed by members and participating MLPs to do so.

Equity and justice must be central to MLP energy transition programs. To achieve this, every clean energy program or policy that MLPs implement must be designed with a clear understanding of how it will affect low-income communities, communities of color, non-English speakers, and renters. Policies must also have clear tools and goals

geared towards combating historic injustices in MLP communities. Examples of such tools include but are not limited to increased rebates for income-qualified residents, targeted outreach to historically burdened residents, or specific programs for low-income communities and renters. Substantial work is needed to ensure that equity and justice are centered in clean energy programs. MCAN believes that prioritizing energy justice in MLP programs will contribute to an equitable clean energy future.

Finally, MCAN recognizes that, due to their size and structure, some MLPs have limited resources to develop and implement ambitious energy transition programs and policies. Given the need to ensure an energy transition across every community in the Commonwealth, state officials should aim to identify additional financial and technical resources to support MLPs' clean energy transition. Such investments would help ensure that no community is being left behind on the basis of the type of utility that serves them or the size of that utility.

3 **Implement plans to transition away from nuclear energy and gas services**

- Implement policies and plans specifying no new nuclear energy and establishing a clear timeline for replacing current nuclear sources with safe and clean alternatives
- Phase out gas services and accelerate electrification

MLPs' progress in transitioning away from fossil fuels and towards non-emitting energy sources has largely relied on nuclear and hydroelectric energy. MCAN acknowledges the need to rapidly transition away from fossil fuel sources while recognizing the danger that nuclear energy poses to communities, both in the operation of nuclear facilities and in the storage of nuclear waste. These activities disproportionately affect low-income communities, communities of color, and non-English speaking communities. MCAN also recognizes that large hydroelectric energy can permanently alter ecosystems and destroy culturally valued community resources. For a just transition to occur, MCAN firmly believes that these energy sources must be replaced with clean energy technologies such as wind, solar, and geothermal. We encourage MLPs that are heavily dependent on nuclear and large hydro to consider the

adverse impacts of these energy sources on vulnerable people and landscapes and to take steps to transition away from these sources.

MCAN further recommends that MLPs stop increasing their reliance on nuclear energy sources and transition away from nuclear and towards clean renewable sources such as wind and solar. The most effective way to ensure this transition is to adopt policies with long-term strategies. Such policies should explicitly state that **no additional nuclear energy will be procured by MLPs and clearly outline the timeline for MLPs to transition away from this harmful energy source.** MCAN specifically encourages the adoption of long-term policies aimed at replacing nuclear energy with clean energy sources such as wind, solar, and geothermal in all MLP districts.

For MLPs that provide gas services, MCAN recommends implementing plans to rapidly phase out gas services and accelerate electrification. MLPs with gas services are in a unique position, as they will not lose customers by phasing out gas. Rather, demand for gas will simply be transferred to electrical demand. Moreover, as electrification accelerates, industry experts predict that gas will become increasingly expensive, burdening low-income residents who remain on gas with high utility costs. By rapidly phasing out gas, MLPs can be leaders in the energy transition both among MLPs and across the state.

4 **Stop investing in new fossil fuel infrastructure and dirty energy projects**

- Commit to making no new investments in coal, oil, and natural gas projects or infrastructure
- Commit to making no investments in dirty biomass energy
- Commit to making no investments in projects that exacerbate environmental injustice

Recent energy projects have shown that, despite the Commonwealth's clear direction towards a clean energy future, MLPs are still making long-term investments in fossil fuel infrastructure and other dirty energy projects. Most notable among these projects is the 60 MW combined cycle peaker plant that MMWEC is proposing to build in Peabody, MA and the Palmer Biomass facility in Springfield, MA — a project whose

permit was recently revoked by the DEP and may not be built. At the time of this report's publication, 12 MLPs remained committed to participating in the Peabody peaker project[59] and 7 MLPs had signed contracts to receive energy from the Palmer Biomass Plant.[60] By investing in fossil fuels and dirty energy projects, MLPs are restricting their ability to transition rapidly to clean energy, increasing costs for ratepayers and risking investing in infrastructure that will be forced to cease operations prior to the end of its natural life cycle. Investing in projects that will become stranded assets runs counter to the global trend of allocating resources to clean energy technologies and infrastructure.

Investing in new dirty fuel projects also perpetuates chronic exposure to harmful pollution from which residents in Environmental Justice communities have long suffered. The Palmer Biomass Plant and the Peabody Peaker Plant are both proposed to be built in and adjacent to Environmental Justice neighborhoods that are already facing increased burdens from pollution. These plants' operation would only add to the cumulative impact of this pollution, exacerbating existing disparities in our state. Unlike IOUs, MLPs have the authority to own and operate energy production facilities. MCAN strongly recommends that MLPs use this authority to exercise leadership and a commitment to the public good that alleviates, rather than exacerbates, the disproportionate impact of our energy system on low-income communities, communities of color, and non-English speaking residents.

Conclusions

The results of this section are unequivocal: MLPs can be leaders in the energy transition. Whether looking at the adoption of new technology, the transition to clean energy and non-emitting energy, or effective programs and policies that enable customers to transition to clean technology, MLPs are making progress.

MLPs have the power and capacity to make significant contributions to a clean energy transition. From providing 100% clean energy opt-in programs to initiating programs that reduce peak energy demand and establishing strategies for deep integration of distributed resources, MLPs are playing a critical role in enabling and enhancing the Com-

59 Specifically Boylston, Holden, Hull, Mansfield, Marblehead, Peabody, Russell, Shrewsbury, South Hadley, Sterling, Wakefield, and West Boylston. Chicopee and Holyoke have requested to withdraw from the project.

60 Specifically Braintree, Danvers, Groveland, Merrimac, Middleton, Norwood, Reading, and Taunton

monwealth's transition to a clean energy future. We encourage MLPs to embrace this role. Not only will transitioning to clean energy contribute to mitigating negative effects of the climate crisis and facilitating the state's transition, but it will also aid MLP communities and increase satisfaction among MLP customers.

MLPs and the state government can accelerate the clean energy transition by retiring Class I RECs. This can best be achieved by establishing short- and long-term plans that clearly incorporate Class I REC retirement targets. Strengthening policies that support residents in transitioning to clean energy can be done in parallel. Areas where state funding and support can promote this process should be investigated, as should opportunities that will directly enable MLPs to be the leaders they have shown they can be.

MLPs have made real progress over the past several years in the energy transition. To ensure that this progress continues and that the Commonwealth as a whole meets its climate targets, these efforts must continue at an accelerated pace. Cooperation among relevant stakeholders will increase the success of MLPs and the broader energy sector in Massachusetts, with the benefits going directly to Commonwealth residents both now and in the future.

MLP ENERGY TRANSITION RECOMMENDATIONS

1 INCORPORATE CLASS I REC RETIREMENT INTO LONG- AND SHORT-TERM MLP STRATEGIES	RELEVANT ACTORS
• Adopt plans to strategically accelerate Class I REC retirement	LIGHT BOARDS MLPs
• Meet or exceed the RPS over time	LIGHT BOARDS MLPs
• Adopt 100% renewable energy opt-in programs for residents	LIGHT BOARDS MLPs
• Expand state involvement in REC retirement through either incentives or mandates	LEGISLATURE DOER

2 STRENGTHEN AND ENHANCE POLICIES THAT ENABLE RESIDENTS TO TRANSITION TO CLEAN ENERGY	RELEVANT ACTORS
• Strengthen net metering policies	LIGHT BOARDS MLPs
• Leverage MLP innovation to enhance battery storage, advanced metering infrastructure (AMI), electric vehicle adoption and infrastructure, and clean energy technology	LIGHT BOARDS MLPs MMWEC & ENE
• Strengthen and expand services that assist low- and moderate-income households in transitioning to clean energy	LIGHT BOARDS MLPs MMWEC & ENE
• Increase state investment in MLP clean energy innovation	LEGISLATURE DOER

3 IMPLEMENT PLANS TO TRANSITION AWAY FROM NUCLEAR ENERGY AND GAS SERVICES	RELEVANT ACTORS
• Implement policies and plans specifying no new nuclear energy and establishing a clear timeline for replacing current nuclear sources with safe and clean alternatives	LIGHT BOARDS MLPs
• Phase out gas services and accelerate electrification	LIGHT BOARDS MLPs

4 STOP INVESTING IN NEW FOSSIL FUEL INFRASTRUCTURE AND DIRTY ENERGY PROJECTS	RELEVANT ACTORS
• Commit to making no new investments in coal, oil, and natural gas projects or infrastructure	LIGHT BOARDS MLPs MMWEC & ENE
• Commit to making no investments in dirty biomass energy	LIGHT BOARDS MLPs MMWEC & ENE
• Commit to making no investments in projects that exacerbate environmental injustice	LIGHT BOARDS MLPs MMWEC & ENE

Energy Efficiency

(25 points)

Introduction

Increasing the energy efficiency of homes, businesses, and our energy system overall is crucial for solving the climate crisis in the Commonwealth. As public utilities, MLPs provide programs and rebates for customers (residential and commercial) that support and incentivize energy efficiency practices and the adoption of energy-efficient technologies. These incentives focus on home improvements such as weatherization and insulation, transitioning to efficient electric heaters (i.e., heat pumps), and upgrading lights and appliances.

The energy efficiency programs offered by MLPs and IOUs differ significantly in terms of state oversight and funding sources. The Green Communities Act, enacted in 2008, requires IOUs to implement and provide state-approved energy efficiency programs that are overseen by the Energy Efficiency Advisory Council and the Residential Conservation Services (RCS) of DOER.[61] This program, commonly known as Mass Save, is offered to all Massachusetts residents in IOU territories. Mass Save adheres to policies and guidelines laid out by the state. The program has four funding streams: (1) revenue collected from ratepayers through a mandatory charge; (2) proceeds from IOUs' participation in energy markets; (3) proceeds from cap-and-trade pollution, such as the Regional Greenhouse Gas Initiative; and (4) other funding as approved by the Department.[62] In other words, the state provides a substantial amount

61 "An Act Relative to Green Communities," Chapter 169 (Commonwealth of Massachusetts, 2008), https://malegislature.gov/Laws/SessionLaws/Acts/2008/Chapter169.

62 "2019-2021 Three Year Plans Order" (Massachusetts Department of Public Utilities, January 29, 2019), https://www.mass.gov/doc/2019-2021-three-year-plans-order/download, pg 112.

of financial support and requires that IOUs collect revenue specifically for energy efficiency.

MLP energy efficiency programs are not heavily regulated or supported by the state. Under the Green Communities Act, MLPs are exempted from regulations relevant to the adoption of energy efficiency programs, meaning that MLP-sponsored energy efficiency programs are offered voluntarily and with little state oversight. Indeed, up until 2020, MLPs were not even required to submit their energy efficiency plans to the DOER. As a result of regulatory changes, MLPs are now required to submit municipal action plans (MAPs) to the RCS.[63] However, these plans are not subject to the same standards or requirements as Mass Save and consequently, MLPs are not eligible for the same financial support from state funds. Most notably, MLPs do not receive funding from proceeds of cap-and-trade pollution programs such as the Regional Greenhouse Gas Initiative. They also are not required to implement a mandatory charge.

The state's limited involvement in MLP energy efficiency programs has practical implications, some of which support efficiency goals and others that do not. On one hand, current regulations allow MLPs to adapt quickly to community needs and present the potential for committed MLPs to be leaders in climate innovation that prioritizes energy efficiency programs and incentives. On the other hand, limited regulation leaves open the possibility that MLPs are not providing programs on par with those available through Mass Save. The limited state funding offered to MLPs and lack of a mandatory charge makes it nearly impossible for MLPs to invest a proportional amount of resources towards their energy efficiency programs compared to IOUs.

This section assesses MLP programs by evaluating the existence and strength of incentives, MLPs' commitment to energy efficiency and observable progress, and the accessibility of programs to low-income and Environmental Justice communities. Following a discussion of our methods and an analysis of the results, we outline recommendations for how MLPs can enhance their energy efficiency efforts moving forward. While we did not do so in the scoring, this section compares programs offered by Mass Save to those offered by MLPs. This comparison is not intended to reflect the success of MLPs' energy efficiency programs but

63 "Guideline Interpreting 225 CMR 4.00" (Massachusetts Department of Energy Resources, February 20, 2020), https://www.mass.gov/doc/rcs-guideline-revised-2202020/download.

instead to highlight potential gaps and areas of improvement that can be addressed through coordination between MLPs, MLP associations, state government agencies, and advocates.

Energy Efficiency Scoring Methods

In scoring MLPs' progress in energy efficiency, MCAN used methods that mirror those in similar reports comparing energy efficiency programs across a set of actors (e.g., the State Energy Efficiency Scorecard published by the American Council for an Energy-Efficient Economy [ACEEE]). We scored energy efficiency progress based on the availability and strength of free audits, energy rebates, and loans; MLPs' level of

TABLE 8 ENERGY EFFICIENCY SCORING METRICS AND CATEGORIES

METRICS	TOTAL POINTS POSSIBLE	FACTORS	SCORING SUMMARY
FREE AUDITS AND ENERGY EFFICIENCY INCENTIVES	10	Based on the seven factors listed below	Full points awarded if all seven factors were satisfied
► FREE ENERGY AUDITS	1	Availability of free home audit	Full points awarded for program availability
► FREE OR DISCOUNTED LED LIGHTS	1	Availability of program or discount	Full points awarded for the availability of free or discounted LED light bulbs
► ENERGY STAR REBATES	1	Availability of Energy Star rebates	Full points awarded if more than one Energy Star rebate was available

TABLE 8 ENERGY EFFICIENCY SCORING METRICS AND CATEGORIES

METRICS	TOTAL POINTS POSSIBLE	FACTORS	SCORING SUMMARY
► SMART THERMOSTAT REBATE	1	Availability of smart thermostat rebate	Full points awarded for a smart thermostat rebate
► 0% LOANS	2	Availability of 0% loan	Full points awarded for the availability of 0% loans for weatherization, heat pumps, or both
► WEATHERIZATION INCENTIVES	2	Availability of weatherization rebate, size of rebate	Full points awarded for MLPs that had weatherization programs that either covered more than 50% of total costs and/or had a maximum rebate size that was greater than $500 per action
► HEAT PUMP REBATES	2	Availability of heat pump rebate, size of maximum rebate per item	Full points awarded for MLPs that had heat pump rebates, with the maximum rebate per item being greater than $700 (i.e., the approximate average maximum across MLPs)
ENERGY EFFICIENCY ACCESS	5	Resources in multiple languages, increased rebates for low-income residents, targeted outreach	Points awarded based on whether MLPs observe practices that advance energy efficiency access. Full points were awarded when all three practices were conducted.
ENERGY EFFICIENCY SPENDING	5	Energy efficiency program spending as a percent of total revenue	Points distributed on a scale from 0.25% to 1.00%. Total points were received for spending ≥ 1.00%.
ANNUAL ELECTRICITY SAVINGS (KWH)	5	Tracking and reporting of annual electricity savings, amount of savings as a percent of total kWh distributed	Points awarded if MLPs tracked and reported electricity savings data. Full points were awarded if reported savings were ≥ 0.5%.
TOTAL	25 + BONUS POINTS		

TABLE 8 ENERGY EFFICIENCY SCORING METRICS AND CATEGORIES

BONUS

METRICS	TOTAL POINTS POSSIBLE	FACTORS	SCORING SUMMARY
COMMERCIAL ENERGY EFFICIENCY	1	Existence of program or incentives	Full points awarded for MLPs that offered a commercial energy efficiency program or incentives
MUNICIPAL PROGRAMS AND UPGRADES	1	Existence of municipal energy efficiency audits or funding for upgrades	Full points awarded for the existence of funding or programs
EDUCATIONAL EVENTS	1	Whether events took place between 2019 and 2020 that specifically focused on energy efficiency programs and rebates	Full points awarded if satisfactory evidence was available that an event of such nature occurred (either in person or virtually)
ADDITIONAL PROGRAMS	NO MAX	Existence of programs not accounted for in other sections of this category	Existence of program
TOTAL	3+		

NOTE: ENERGY EFFICIENCY PROGRAMS ADOPTED IN 2021 WERE NOT INCLUDED IN THIS REPORT.

investment in energy efficiency programs; the effectiveness of their programs based on the energy saved; and, importantly, the extent to which energy efficiency programs were responsive to issues of accessibility for low-income residents, non-English speakers, and renters (see **Table 8**).

Energy efficiency audits and incentives played a significant role in this section. The list of programs considered was based on general offerings available to residents who are eligible for Mass Save programs. The availability of each incentive was worth one point. An additional point was awarded for weatherization and heat pump incentives based on whether MLPs had programs stronger than the average offerings across all MLPs. Similarly, 0% loans were allocated an additional point given their overarching benefits in enhancing the adoption of energy efficiency practices.

Access to energy efficiency programs for low-income households, renters, and non-English speakers is an area of growing importance. To measure this, MCAN used access metrics that the DOER requested to be reported in MLPs' MAPs, which include whether resources are available in multiple languages, whether there are increased rebates for low-income residents, and whether MLPs conduct targeted outreach to vulnerable communities.[64]

Measuring the level of investment in energy efficiency programs by comparing program budget to the total revenue of utilities is a common practice in similar reports and is an important indicator of MLPs' commitment to energy efficiency (acknowledging the wide variety of total revenue across MLPs). Similarly, the progress and effectiveness of energy efficiency programs are frequently tracked by observing the energy saved (in kWh) as a percentage of total energy distributed. MCAN incorporated tracking and reporting into our scoring even though not all MLPs tracked or reported their kWh savings for the purposes of this Scorecard.

Substantial bonus points were available in this section. These points were intended to credit MLPs that provided energy incentives and programming that enhanced their energy efficiency efforts. Acknowledging that MLPs offer a wide variety of energy efficiency programs, any program

64 "Guideline Interpreting 225 CMR 4.00" (Massachusetts Department of Energy Resources, February 20, 2020), https://www.mass.gov/doc/rcs-guideline-revised-2202020/download, pg 10, pg 13.

TABLE 9 MLP SCORES IN ENERGY EFFICIENCY

MUNICIPAL UTILITY	AUDITS & ENERGY EFFICIENCY REBATES 10 PTS	ENERGY EFFICIENCY ACCESS 5 PTS	ENERGY EFFICIENCY PROGRAM SPENDING 5 PTS	ANNUAL ELECTRICITY SAVINGS 5 PTS	BONUS 3+ PTS	ENERGY EFFICIENCY SCORE 25 PTS
BELMONT	8	5	5	2	6	26
CONCORD	6	2	5	5	6	24
HOLYOKE	9	5	5	2	3	24
MIDDLEBOROUGH	8	4	3	2	4	21
READING	6	0	5	5	5	21
CHICOPEE	6	1	3	5	3	18
WAKEFIELD	8	1	3	2	4	18
WESTFIELD*	5	5	5	0	3	18
IPSWICH	7	0	5	2	3	17
BRAINTREE	6	3	3	0	4	16
SHREWSBURY	8	1	3	0	4	16
TAUNTON	6	1	2	0	6	15
NORWOOD	6	0	2	2	4	14
PEABODY	6	3	2	0	3	14
WEST BOYLSTON	6	1	3	0	4	14
HINGHAM*	7	0	2	0	4	13
HUDSON*	4	0	4	0	5	13
PRINCETON	6	1	4	0	2	13
SOUTH HADLEY	6	1	3	0	3	13
STERLING	5	1	3	0	4	13
BOYLSTON	6	1	5	0	0	12

TABLE 9 MLP SCORES IN ENERGY EFFICIENCY

MUNICIPAL UTILITY	AUDITS & ENERGY EFFICIENCY REBATES 10 PTS	ENERGY EFFICIENCY ACCESS 5 PTS	ENERGY EFFICIENCY PROGRAM SPENDING 5 PTS	ANNUAL ELECTRICITY SAVINGS 5 PTS	BONUS 3+ PTS	ENERGY EFFICIENCY SCORE 25 PTS
HOLDEN	6	1	3	0	2	12
MARBLEHEAD	6	1	3	0	2	12
PAXTON	6	1	4	0	1	12
ASHBURNHAM	5	1	3	0	2	11
GROTON	5	1	3	0	2	11
N. ATTLEBOROUGH	6	0	2	0	3	11
GEORGETOWN*	5	0	2	0	3	10
GROVELAND	6	0	2	2	0	10
ROWLEY	4	0	4	0	2	10
RUSSELL	6	1	3	0	0	10
TEMPLETON	5	1	3	0	1	10
DANVERS*	4	0	3	0	2	9
HULL	6	1	2	0	0	9
LITTLETON*	6	0	2	0	1	9
MERRIMAC*	5	4	0	0	0	9
WELLESLEY	5	0	2	0	2	9
MIDDLETON*	5	0	2	0	1	8
MANSFIELD	3	0	3	0	1	7
CHESTER	1	0	2	0	1	4
GOSNOLD	N/A	N/A	N/A	N/A	N/A	N/A

* indicates MLPs that did not submit questionnaires or provide feedback to MCAN for the purpose of this report

that was not accounted for in our methods was listed as an additional program and awarded one bonus point. Programs that qualified for this bonus varied, spanning from electric vehicle promotion and education efforts to peak demand reduction, tree giveaways, and more. **Table 9** displays MLPs' energy efficiency scores by category and total.

Results and Observations

Summary of Energy Efficiency Scores

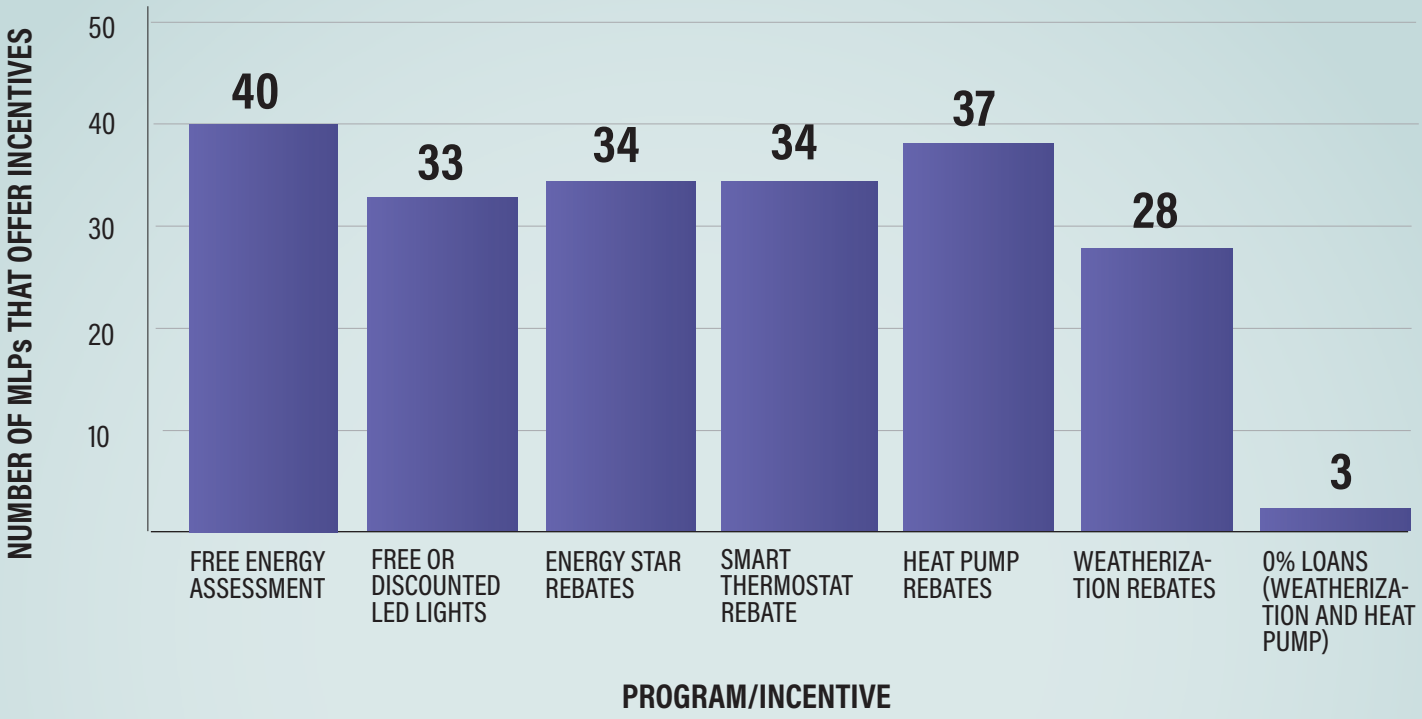
The results above provide a useful snapshot of MLPs' performance, relative to each other, in energy efficiency efforts. The average energy efficiency score was 13.6 points with a median score of 13 points. Half of MLPs (i.e., 20 out of 40) earned between 10 and 15 points, seven scored between 15 and 20 points, and five scored more than 20 points. Belmont, Concord, and Holyoke were the top three scorers in energy efficiency with 26, 24, and 24 points, respectively.

The overall scores in this section suggest that, while several MLPs are taking leadership and have made substantial progress, more work is needed to ensure that all MLPs have comprehensive and effective energy efficiency programs. To provide an in-depth overview of energy efficiency scores and their implications, the following subsections discuss the results of relevant subcategories and share key findings in various energy efficiency subcategories that help us better understand what specific actions must be taken to enhance MLPs' energy efficiency programs.

Free Energy Efficiency Audits and Incentives

The results indicate that the majority of MLPs provided free audits and energy efficiency programs and rebates. As seen in **Figure 8**, every MLP offered a free energy assessment; more than 90% offered heat pump rebates; more than 80% offered free or discounted LED lights, Energy Star rebates, and smart thermostat rebates; and 70% provided rebates for weatherization. Groton, Holyoke, and Shrewsbury were the only MLPs that provided 0% loans.

FIGURE 8 FREE AUDITS AND INCENTIVES



Of the 28 MLPs offering weatherization rebates, seven provided rebates greater than the average offering across MLPs (i.e., a rebate covering up to 50% of a project with a maximum limit of $500). The highest project percentage covered was 75%, and the highest maximum limit was $1,000 (excluding rare instances where multi-family homes were differentiated from other homes, in which case the maximum rebate was $4,000 as offered by Middleborough[65]).

Even the larger rebates were smaller than weatherization incentives offered to non-MLP residents through Mass Save. Mass Save offers to cover 75% of the total cost of weatherization activity, with no limit on the size of the total rebate. For income-eligible residents (i.e., low-income households), 100% of weatherization is covered with no maximum limit.[66]

Of the 37 MLPs offering rebates for heat pump technology, eight provided rebates greater than the average approximate maximum rebate (for any technology) of $700. The highest maximum rebate for non-in-

65 "MGED Home Energy Saving Rebates," Middleborough Gas & Electric, November 20, 2020, https://www.mged.com/save-energy/pages/home-energy-saving-rebates.

66 "Home Insulation Improvement Savings" (Mass Save), accessed May 27, 2021, https://www.masssave.com/en/saving/residential-rebates/home-insulation.

come-eligible residents was $3,125 for the installation of a heat pump technology, offered by Concord.

Again, rebates for heat pump technology provided by MLPs were less than those offered by Mass Save. Mass Save determines rebates on a per-ton basis for heat pumps. Mass Save provides a rebate of $1,250 per ton of heat pump installed with a maximum rebate of $6,250.[67]

67 "Electric Heating and Cooling Equipment Rebates" (Mass Save), accessed May 27, 2021, https://www.masssave.com/en/saving/residential-rebates/electric-heating-and-cooling.

Energy Efficiency Access

MLPs' implementation of practices and policies that enhance access to energy efficiency has yet to be closely tracked or required. Our results indicate that some voluntary efforts are being made; however, there are opportunities to expand the implementation of policies and practices that increase access to energy efficiency programs. **Figure 9** presents a breakdown of the number of MLPs that have implemented practices that expand accessibility. As indicated, a majority of MLPs have taken action by providing materials and information about energy efficiency in multiple languages. Few MLPs offered increased rebates for low-income

FIGURE 9 ENERGY EFFICIENCY ACCESS PRACTICES AND PROGRAMS

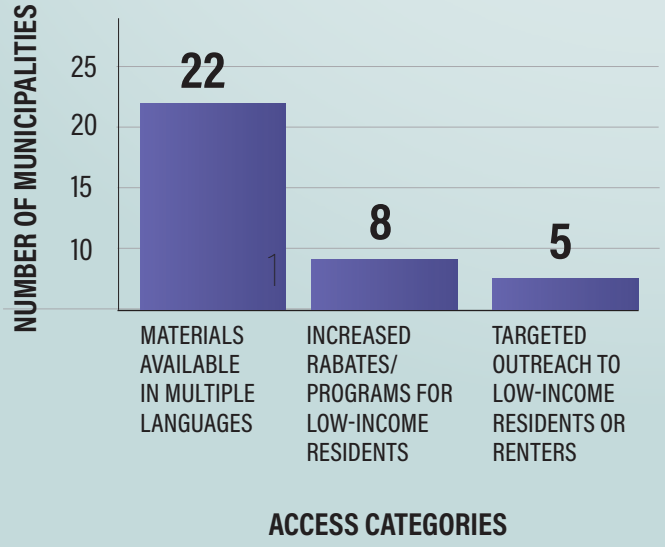
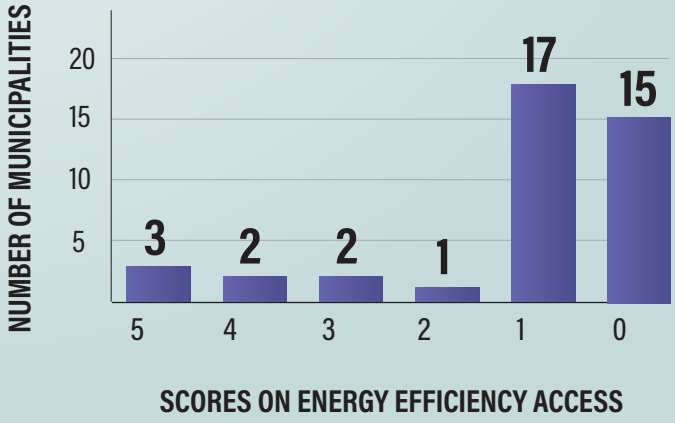


FIGURE 10 MLP SCORES ON ACCESS PRACTICES



residents or have conducted targeted outreach to enroll low-income residents and renters in these programs.

Figure 10 displays how MLPs scored on the accessibility metrics. Twenty-five MLPs had taken at least one step to increase accessibility. Belmont, Holyoke, and Westfield led in this category by adopting all three practices tracked in this report to increase accessibility.

Increasing the accessibility of energy efficiency presents an opportunity for MLPs to take action. Especially in light of the COVID-19 crisis and ongoing recovery, every chance to support individuals who have been adversely affected by the pandemic's economic disruption must be taken. Enhancing the energy efficiency of homes and transitioning to clean technology can make homes safer and reduce indoor pollution. Eliminating barriers to these programs, especially for low-income and non-English speakers in MLP districts, is an essential part of the Commonwealth's recovery from COVID-19.

Spending on Energy Efficiency

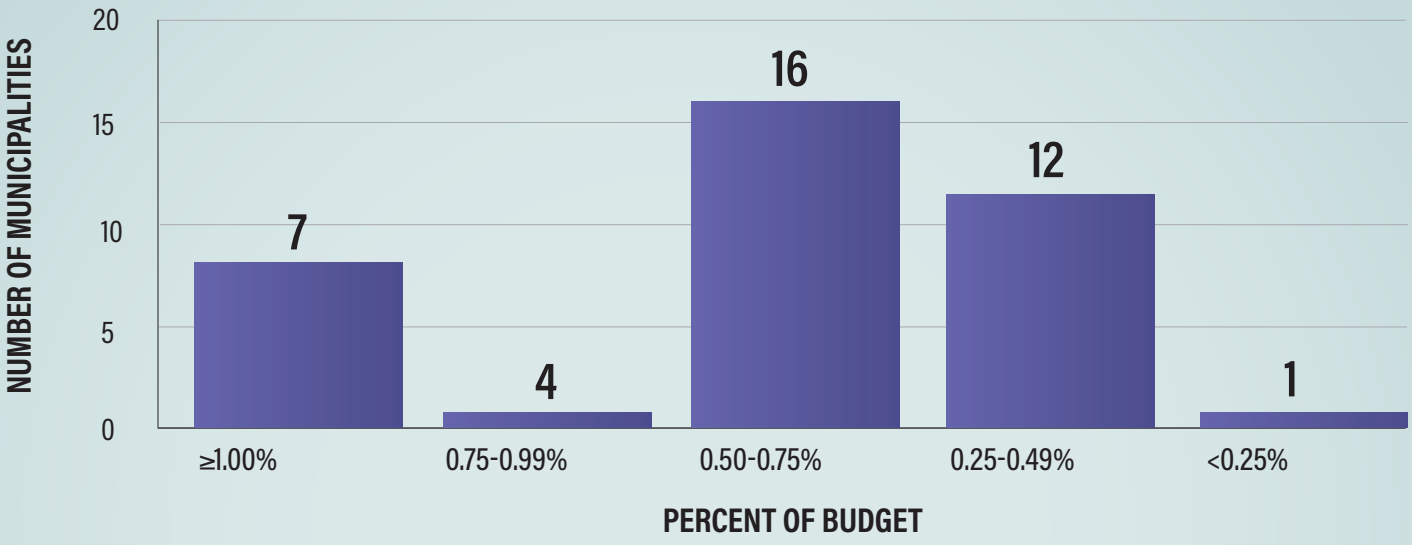
When evaluating total spending on a scale from 0.00% to 1.00% of an MLP's total revenue, the results are clustered. Most MLPs committed to spending between 0.25% and 0.75% of their revenue on energy efficiency programs in 2020. As shown in **Figure 11**, four MLPs planned to spend between 0.75% and 0.99% of their total revenue, and seven planned to spend more than 1.00% of their revenue. Spending levels varied among these seven leading MLPs. Concord exhibited the largest commitment to energy efficiency by far, with approximately 2.90% of revenue allocated to energy efficiency programs. They were followed by Belmont and Boylston with 1.80% and 1.34% of total revenue going towards energy efficiency, respectively. The remaining four MLPs (Westfield, Reading, Ipswich, and Holyoke) committed between 1.00% and 1.20% of their total revenue to energy efficiency.

Relative to Mass Save, **MLPs are spending a much smaller percentage of their total revenue on energy efficiency programs**. According to the ACEEE 2020 State Energy Efficiency Scorecard, in 2019, Massachusetts IOUs spent 6.29% of their revenue on energy efficiency.[68] In other words, **compared to most MLPs, IOUs spent approximately 12 times as much**

68 Weston Berg et al., "The 2020 State Energy Efficiency Scorecard" (American Council for an Energy Efficient-Economy, December 2020), https://www.aceee.org/state-policy/scorecard, pg 38.

FIGURE 11

ENERGY EFFICIENCY PROGRAM SPENDING



of their total budget on energy efficiency. As specified above, this discrepancy is primarily due to IOUs having additional requirements and revenue sources for their programs. Nonetheless, this disparity is striking and identifies gaps in MLP programs that must be addressed.

69 Ibid. pg 32

Energy Saved from Energy Efficiency Programs

MCAN's results in this category were limited because several MLPs did not track their energy savings from energy efficiency. In some instances, MCAN was aware that energy savings had been tracked to some extent, but these data were not provided for this report.

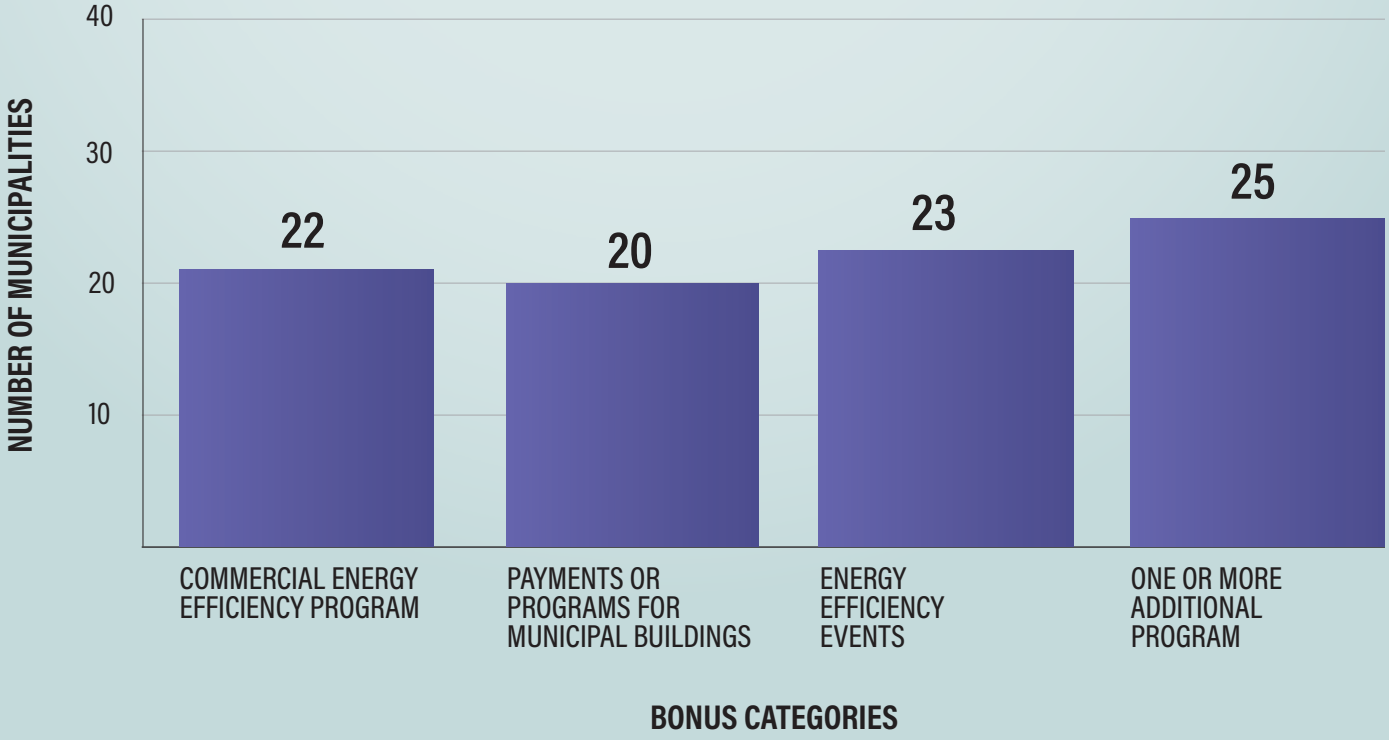
In total, 10 MLPs reported savings data to MCAN. Of these, Reading, Concord, and Chicopee had savings of more than 0.5% (in kWh) at 0.84%, 0.65%, and 0.55%, respectively. The remaining seven MLPs reported savings between 0.00% and 0.50%. These data indicate **lower savings compared to the Mass Save program**, which was estimated to have saved 2.25% of kWh in 2019.[69]

Additional Energy Efficiency Programs

In addition to providing standard programs and incentives to enhance residential energy efficiency, MLPs have taken multiple other steps including promoting energy efficiency by holding specific events, offering programs for commercial customers and municipal governments, providing payments to municipal governments for increasing energy efficiency, and implementing additional programs intended to decrease energy use and increase efficiency. **Figure 12** provides a summary of the level of MLPs' engagement in each of these actions.

Just over half of MLPs offered a commercial energy efficiency program of any kind. When considering the immense potential for energy savings that can be achieved when commercial buildings implement energy efficiency improvements, and the fact that commercial energy efficiency programs are provided to all non-MLP communities, the lack of a commercial program in many MLPs highlights a clear opportunity

FIGURE 12 BONUS CATEGORIES AND ADDITIONAL PROGRAMS



for MLPs to enhance their energy efficiency efforts. Given that many of the existing programs are limited in scope, this opportunity applies to virtually every MLP in the Commonwealth.

As can also be seen in **Figure 12**, 25 MLPs offered at least one additional program not tracked in the Scorecard. Concord had the largest number of additional programs (*n* = 4), followed by Taunton and Belmont (*n* = 3). This shows that MLPs can be ambitious and leverage their unique position to be leaders in energy efficiency.

MCAN's Recommendations for Energy Efficiency Programs

Based on our results, MCAN recommends that light board members, MLP staff, MLP associations, state officials, and advocates consider taking the following steps to enhance energy efficiency efforts in MLP districts:

1

Increase the size of energy efficiency programs and rebates

- Increase the size of weatherization and heat pump rebates for residents
- Work with the state to create and adopt a 0% interest loan program for energy efficiency retrofits
- Implement and expand commercial energy efficiency programs and offerings
- Increase the percentage of overall revenue allocated to energy efficiency programs

Based on our analysis, MLPs provide their customers an array of energy efficiency incentives. However, efforts must be made to enhance available programs and to ensure that incentives available to MLP customers are on par with those offered through Mass Save. Areas where enhance-

ments are most necessary include weatherization incentives, heat pump rebates, 0% loans, and commercial energy efficiency.

Weatherization is one of the most effective means of increasing energy efficiency. As a state with an old housing stock, one of Massachusetts's major areas of inefficiencies in residential heating is the lack of home insulation. If communities want to increase energy efficiency, weatherization is the ideal place to start. MCAN strongly **encourages all MLPs to offer weatherization incentives.** Where possible, MLPs should increase the size of these rebates and the total project cost covered. Such rebates should be equal to those of the Mass Save program. In this case, MLP incentives would cover 75% of project costs and have no total spending limit. **MLPs should also consider enhanced weatherization rebates for low- and moderate-income residents**, as these residents are more likely to have a significant need for weatherization and limited financial means to make upgrades.

Adopting heat pump technology is critical for electrifying homes and transitioning away from propane and natural gas heating sources. While the vast majority of MLPs provided heat pump rebates, MCAN remains concerned that these rebates may not be large enough to incentivize a critical mass of residents – particularly given the upfront cost of this technology. As such, MCAN strongly recommends that MLPs seek to **increase both the size of heat pump rebates as well as the maximum amount available for each project.** To be consistent with the offerings available to residents in non-MLP territories, MLPs should provide incentives of up to $6,250 based on the size of the heat pump system (using a per-ton unit of measurement).

Zero-interest loans can further incentivize energy efficiency upgrades and clean technology adoption. While they pay off in the long term through reduced energy bills and improved indoor air quality for occupants, some energy efficiency upgrades require significant upfront investment. Low- and zero-interest financing options are effective tools for making such upgrades possible for low- and moderate-income residents. Unfortunately, few MLPs currently offer 0% loans for energy efficiency programs. To ensure that energy efficiency upgrades are easy and accessible in MLP districts, solutions that provide low-risk, low-interest financing must be available to residents. These financial tools generally

require the participation of financial institutions, and some financial institutions have appeared reluctant to provide such loans to interested MLPs in the past. MCAN therefore strongly recommends that the DOER create a program to provide 0% interest loans to MLP customers. If such a program is optional for MLPs, MCAN encourages all MLPs to opt in. Participation in this type of program would be an important step in enabling customers with limited financial resources to make energy efficiency improvements.

Finally, commercial energy efficiency is an important part of any effort to reduce emissions and increase savings across the state. Despite this, only about half of all MLPs currently have programs or incentives available to their commercial customers. Furthermore, when programs are available for commercial customers, they are often limited in scope. **MLPs can significantly enhance their energy savings efforts by substantially incorporating commercial energy efficiency into their efforts.** MCAN strongly encourages all MLPs to take this opportunity to develop and implement a commercial energy efficiency program that effectively incentivizes commercial customers to make upgrades and improvements that promote energy savings, decarbonization, and electrification.

2

Increase equity and access to energy efficiency programs

- Provide increased energy efficiency rebates for low- and moderate-income home-owners and renters
- Conduct specific outreach to low-income residents and renters who stand to benefit the most from energy efficiency programs
- Identify households in MLP districts based on income, race, and language isolation; develop outreach strategies to reduce barriers and raise awareness of program offerings

Despite the lack of a relevant mandate, MLPs have voluntarily implemented practices to increase energy efficiency program access among low-income, Black and Brown, and non-English speaking households as well as renters. However, more must be done to ensure that programs are fully accessible. This aspect of energy equity is particularly important in light of COVID-19 and the pandemic's disproportionate impacts on frontline workers, low-income communities, communities of color, and non-English speakers.

A simple and essential step is to ensure that all resources related to energy efficiency programs, including marketing and program information, are available in multiple languages. Translation into multiple languages is readily available for website resource guides and program materials. To develop other non-English-translated pamphlets and additional resources, MCAN recommends that MLPs refer to available census data and conduct surveys to identify commonly spoken languages in their district.

Additional ways to increase energy justice and access to energy efficiency include direct outreach and education to low-income, Black and Brown, and non-English speaking households and to renters about energy efficiency programs. **Targeted outreach will increase awareness among community members who stand to benefit the most.** Stronger rebates for income-eligible households acknowledges the **disproportionate burden that the high upfront costs of energy efficiency upgrades pose to low- and moderate-income customers**. Additionally, MLPs could consider partnering with local Community Action Program (CAP) agencies to enhance efforts to provide energy efficiency programs to low-income residents through the agency. Enhanced rebates and funding through CAP agencies are important to ensuring equitable access to and distribution of energy efficiency upgrades and clean technologies.

The steps identified and scored in this report represent initial actions to help ensure access to the benefits of energy efficiency programs for all residents in MLP districts. MCAN recommends that MLPs identify specific challenges faced by low-income residents, Black and Brown communities, non-English speaking households, and renters and then develop comprehensive plans to address these challenges, focused on all aspects of MLP operations and programming. MMWEC and ENE may have the insight and capacity to support MLPs in this effort.

Track savings and progress of energy efficiency programs

- Track and report kWh savings from energy efficiency programs in annual Municipal Action Plans (MAPs)
- Track and make public energy savings in a way that enables MLPs to be accountable for equity

- Set ambitious energy savings goals based on kWh savings and other metrics
- Track energy efficiency using additional metrics that account for electrification

For this iteration of the Scorecard, MCAN collected limited data on energy savings from energy efficiency programs due to MLPs not tracking these data and/or not reporting their data to MCAN. MCAN recommends tracking kWh savings as a core part of energy efficiency program evaluation.

IOUs that participate in Mass Save are required to track their savings, which serve as key indicators for program evaluation and planning for a net zero future. Similarly, **MLPs should be required to monitor progress**. MCAN specifically suggests that the RCS ask that these data be included in MLPs' annual MAPs. To do this, RCS should establish clear criteria for how MLPs should track savings and offer technical assistance to ensure that MLPs can provide savings data. By tracking savings in annual MAPs, MLPs and RCS can easily assess energy efficiency progress and identify more aggressive goals for the future.

While tracking overall savings is important, we also recommend that MLPs go further and **track energy savings in a way that enables them to be accountable for equity in their energy efficiency programs**. Specifically, their methods should allow data to be disaggregated (to the greatest extent possible while maintaining customer privacy) into multiple categories in order to determine whether low-income, Black and Brown, and non-English speaking households as well as renters are utilizing energy efficiency programs. Because other utilities' efforts to track data in a disaggregated manner have not been as effective as desired, **MLPs have an opportunity to lead in this area** and model ambitious tracking of energy efficiency data for utilities. Tracking savings helps to ensure that utilities are accountable for equity-related issues in energy efficiency and is vital to MLPs' equitable transition to a clean energy future. We also believe that such tracking represents a prime way in which MLPs can be a model for other utilities across the state and country.

Another important component of energy efficiency practices and the transition to clean energy involves electrification, and some programs may actually increase the amount of electricity (or kWh) used. To account for these efforts, MCAN recommends that MLPs and their professional associations consider tracking the carbon intensity of decarbonization activities (e.g., electrification) and include carbon intensity goals in overall energy efficiency programs.

Increase state support for MLP energy efficiency

- Mitigate disparities in energy efficiency programs between MLPs and IOUs
- Provide more funding for MLP energy efficiency programs
- Allocate funding specifically for MLPs to enhance their energy efficiency incentives
- Allocate funding for innovative programs and pilot projects in MLP districts

The wide disparity in programs offered by MLPs and IOUs should be of deep concern to the state government. While these discrepancies are partly due to MLPs prioritizing other areas of operation, the gaps also arise from limited state resources available to MLPs. To address these disparities, the state government should identify funding pathways and mechanisms for MLP energy efficiency incentives and program offerings. Particular areas in which the state should aim to invest include enhancing weatherization and heat pump incentives, adopting stronger rebates for income-eligible residents, and implementing innovative energy efficiency programs.

The disparities between weatherization and heat pump program offerings provided by MLPs versus Mass Save are stark. To prevent a substantial portion of our Commonwealth from falling behind the rest of the state in efficiency, Massachusetts should focus first on providing mechanisms that incentivize MLPs to invest in these programs and then offer additional funds to align MLP incentives more closely with those of Mass Save. MCAN encourages government officials, state legislators, and MLP lobbying groups to identify mechanisms that would best achieve this goal.

The state's reporting requirements for MAPs place little emphasis on access. Similarly, no program exists that either mandates, incentivizes, or supports MLPs in taking steps to ensure access to their energy efficiency programs. The state should consider developing equity targets and introducing reporting, providing technical assistance, and offering funding for efforts that enhance energy equity in energy efficiency programs.

Finally, MLPs have the capacity to innovate quickly in energy efficiency, electrification, and demand reduction programs. To encourage MLPs to capitalize on this potential, the state should provide funding or programs that expand MLPs' capabilities to accelerate energy efficiency adoption and to address climate change in data-driven, equitable, and impactful ways. As the entities responsible for providing energy efficiency services to the majority of MLPs across the Commonwealth, MCAN also encourages MMWEC and ENE to actively contribute and support MLPs in adopting innovative approaches to energy efficiency. These associations' resources and capacity can propel innovation if creative solutions are encouraged and invested in.

Conclusion

This section provides clear evidence that, despite limited regulations and state support, MLPs provide a variety of energy efficiency incentives to their customers. These offerings include a host of programs that have become expected as standard incentives and rebates, along with programs that address the climate crisis and energy efficiency using creative solutions. Even with substantial effort, opportunities for improvement remain.

This section identifies notable disparities in the incentives offered to residents and progress made in energy efficiency between IOUs and MLPs. MCAN believes these disparities are driven by an absence of proportionate resources from the state supporting MLPs. Other contributing factors include minimal regulatory oversight and nominal investment in energy efficiency by some MLPs. Moving forward, all relevant actors – advocates, MLP staff and light boards, MLP associations, state departments, and legislators – should seek appropriate ways to address these

gaps. Otherwise, the Commonwealth faces the risk of watching some communities fall well behind the rest of the state in energy efficiency.

Another important area where progress is being made but additional steps are needed is reducing barriers for low-income, Black and Brown, and non-English speaking households and renters to participate in energy efficiency programs. Some MLPs have taken initial steps to help foster equity; however, more must be done to ensure that substantial efforts are made across the state. Here, again, MLPs and the state must work together to address these issues and identify feasible solutions that promote energy and climate justice.

Considerable progress has been made in energy efficiency in MLP districts. To ensure that this progress continues at pace with the rest of the state and that no community falls behind, stakeholders need to collaborate to address funding disparities between MLP energy efficiency and Mass Save, to significantly improve program access, and to incentivize MLPs to be ambitious and creative in their approaches. These issues may be difficult to address. Nevertheless, we are confident that solutions exist which can rectify these issues while ensuring that the interests of relevant stakeholders are acknowledged.

MLP ENERGY EFFICIENCY RECOMMENDATIONS

1 INCREASE THE SIZE OF ENERGY EFFICIENCY PROGRAMS AND REBATES	RELEVANT ACTORS
• Increase the size of weatherization and heat pump rebates for residents	LIGHT BOARDS MLPs
• Work with state officials to create and adopt a 0% interest loan program for energy efficiency retrofits	LIGHT BOARDS MLPs MMWEC & ENE DOER
• Implement and expand commercial energy efficiency programs and offerings	LIGHT BOARDS MLPs MMWEC & ENE
• Increase the percentage of overall revenue allocated to energy efficiency programs	LIGHT BOARDS MLPs

2 INCREASE EQUITY AND ACCESS TO ENERGY EFFICIENCY PROGRAMS	RELEVANT ACTORS
• Provide increased rebates for low-income residents and renters	LIGHT BOARDS MLPs
• Conduct specific outreach to low-income residents and renters who stand to benefit the most from energy efficiency programs	LIGHT BOARDS MLPs MMWEC & ENE
• Identify households in MLP districts based on income, race, and language isolation; develop outreach strategies to reduce barriers and raise awareness of program offerings	LIGHT BOARDS MLPs MMWEC & ENE

3 TRACK SAVINGS AND PROGRESS OF ENERGY EFFICIENCY PROGRAMS	RELEVANT ACTORS
• Track and report kWh savings from energy efficiency programs in annual Municipal Action Plans (MAPs)	LIGHT BOARDS MLPs MMWEC & ENE DOER
• Track and make public energy savings in a way that enables MLPs to be accountable for equity	LIGHT BOARDS MLPs MMWEC & ENE
• Set ambitious energy savings goals based on kWh savings and other metrics	LIGHT BOARDS MLPs MMWEC & ENE DOER
• Track energy efficiency using additional metrics that account for electrification	LIGHT BOARDS MLPs MMWEC & ENE

4 INCREASE STATE SUPPORT FOR MLP ENERGY EFFICIENCY	RELEVANT ACTORS
• Mitigate disparities in energy efficiency programs between MLPs and IOUs	LEGISLATURE DOER
• Provide more funding for MLP energy efficiency programs	LEGISLATURE DOER
• Allocate funding specifically for MLPs to enhance their energy efficiency incentives	LEGISLATURE DOER
• Allocate funding for innovative programs and pilot projects in MLP districts	LEGISLATURE DOER

Transparency and Community Engagement

(15 points)

Introduction

MLPs are democratic institutions. They are governed by either an elected or appointed board and are directly responsible to the communities they serve. The democratic nature of MLPs makes them a unique and preferable type of utility. The programs and practices MLPs implement to afford decision-making power to residents must be protected and enhanced to every extent possible.

For MLPs to operate as effective democratic institutions, residents and customers need access to information about their MLP's decision-making processes and information about their MLP's operations. Engaging community members frequently by soliciting input and feedback is also foundational to the democratic nature of MLPs. MLPs that demonstrate a clear process for integrating community feedback and changing policies in direct response to residents' input reflect the highest standard of a democratically governed public institution.

This section assesses the extent to which MLPs are transparent in decision-making processes and operations, and whether MLPs frequently seek input from community members on issues of renewable energy and energy efficiency. Although we do not capture the full scope of outreach strategies and practices, this section uses general metrics that MCAN adopted as indicators of an MLP's commitment to engaging community residents in decision making and being transparent about decisions regarding programs, operations, and resource allocation.

Following a discussion of our methods and analysis of the results, we outline recommendations for how MLPs can enhance their efforts to be transparent about operations and decision-making processes as well as responsive to community interests.

Transparency and Community Engagement Scoring Methods

For this Scorecard, MCAN focused on three general areas when evaluating MLPs' transparency and community engagement (see **Table 10**). To determine whether MLPs made information about decision-making processes and operations readily available, we identified whether key information was listed on MLPs' websites. To determine whether recent efforts were made to solicit input on clean energy, MCAN identified whether surveys or community forums were recently conducted and the extent to which the results influenced MLP policy. Finally, to indicate

TABLE 10 TRANSPARENCY AND COMMUNITY ENGAGEMENT SCORING METRICS AND CATEGORIES

METRICS	TOTAL POINTS POSSIBLE	FACTORS	SCORING SUMMARY
ACCESSIBILITY OF GOVERNING AND OPERATIONS INFORMATION	8	Based on the four factors listed below	Full points awarded if all four factors were satisfied
► **DPU REPORT AND FINANCIAL REPORTS ON WEBSITE**	2	Presence of an updated DPU report and/or financial reports on website	Full points awarded if a report from 2019 or later was available

TABLE 10 TRANSPARENCY AND COMMUNITY ENGAGEMENT SCORING METRICS AND CATEGORIES

METRICS	TOTAL POINTS POSSIBLE	FACTORS	SCORING SUMMARY
► LIGHT BOARD MEETING TIMES ON WEBSITE	2	The date and time of upcoming light board meeting(s) were clearly listed on website or calendar	Full points awarded if date and time were listed
► LIGHT BOARD CONTACT INFORMATION ON WEBSITE	2	Contact information for at least one, but ideally all, light plant board members was listed on website	Full points awarded if contact information was listed
► UPDATED MINUTES FROM LIGHT BOARD MEETINGS	2	Minutes from light board meetings were up to date (allowing for a lag of 2 months) and available on website	Full points awarded if meetings were listed and up to date
OPPORTUNITIES FOR COMMUNITY TO AFFECT DECISION MAKING (ON CLEAN ENERGY)	5	Surveyed residents on renewable energy in the last 3 years, held a forum on renewable energy in the last 3 years, community input from such events substantially impacted policies and/or strategy	Scores based on whether MLPs had conducted a survey or community forum that included discussion of renewable energy in the last 3 years. Full points awarded if either took place and if community input substantially guided or changed MLP policy.
INFORMATION SHARING FOR MCAN'S ANALYSIS	2	MLP responded to MCAN's questionnaires	Full points awarded if MLP responded to full questionnaire; partial points awarded if MLP only responded to follow-up questionnaire
TOTAL	15 + BONUS POINTS		

TABLE 10 TRANSPARENCY AND COMMUNITY ENGAGEMENT SCORING METRICS AND CATEGORIES

BONUS

METRICS	TOTAL POINTS POSSIBLE	FACTORS	SCORING SUMMARY
LISTS RECENT POWER SUPPLY ON WEBSITE AND IS EXPLICIT ABOUT REC RETIREMENT	8	Presence of power supply from 2019 or later is on website (in a report linked to website did not count), whether MLP discussed their REC retirement strategy, whether MLP accurately represented clean energy based on REC retirement	Full points awarded if power supply was present, there was a discussion of MLP's REC retirement, and clean energy was accurately represented based on REC retirement. Partial points were awarded for presence of power supply and discussion of REC retirement strategy
TOTAL	8		

an MLP's willingness to share information about internal operations, we scored the extent to which an MLP provided information to MCAN for the purposes of this Scorecard. Significant bonus points were provided for MLPs that were transparent about REC retirement and the renewable portions of their energy mix based on the number of RECs retired in 2019 or later.

The availability of information documenting MLPs' decision-making processes and operations accounted for a large proportion of points in this category. To determine information availability, MCAN prioritized four key pieces of information that should be easily accessible to community members and identified whether this information was available on MLPs' websites. The four categories of information listed above rep-

resent some of the basic information residents need to stay informed and involved in decision-making processes.

The other metrics in this category were MLPs' willingness to share public information and community engagement. As a proxy for an MLP's willingness to share information, we awarded points to MLPs that submitted responses to MCAN's Scorecard questionnaires used for the purposes of this report. To determine the extent of community engagement on issues related to MLP clean energy programs, MCAN scored MLPs based on whether they had conducted a customer survey or hosted a community forum on a topic related to clean energy within the past three years. Further, we scored whether community input from this outreach noticeably influenced MLPs' policies and long-term strategies. MCAN relied on responses to our questionnaire to determine whether community input had a noticeable impact. When not available, MCAN scanned MLPs' websites for evidence of survey results that the MLP acknowledged as having been impactful. When neither information source was available, we were unable to award full points.

In the Bonus section, MLPs were awarded additional points for providing information about their power supply, discussing their REC retirement in a detailed and quantitative way, and clearly identifying the percentage of clean and non-emitting energy on the basis of the RECs and EFECs they retired on their website. Score totals for this category are listed in **Table 11**.

TABLE 11 MLP SCORES IN TRANSPARENCY AND COMMUNITY ENGAGEMENT

MUNICIPAL UTILITY	ACCESSIBILITY OF GOVERNING INFORMATION 8 PTS	OPPORTUNITIES TO AFFECT DECISION MAKING 5 PTS	INFORMATION SHARING 2 PTS	BONUS 8 PTS	TRANSPARENCY SCORE 15 PTS
BELMONT	8	5	2	6	21
CONCORD	8	3	2	8	21
IPSWICH	8	5	2	6	21
WEST BOYLSTON	8	5	2	6	21
HOLYOKE	8	5	2	2	17
MIDDLEBOROUGH	8	5	2	2	17
TAUNTON	8	5	2	2	17
SOUTH HADLEY	8	5	2	0	15
READING	6	5	0	2	13
SHREWSBURY	6	5	2	0	13
WAKEFIELD	6	5	2	0	13
BRAINTREE	6	3	1	2	12
CHICOPEE	8	0	2	2	12
NORWOOD	6	5	1	0	12
WESTFIELD*	8	3	0	0	11
PRINCETON	8	0	2	0	10
ROWLEY	6	3	0	0	9
WELLESLEY	4	3	0	2	9
MANSFIELD	6	0	0	2	8
N. ATTLEBOROUGH	2	5	1	0	8
PEABODY	6	0	2	0	8

TABLE 11 MLP SCORES IN TRANSPARENCY AND COMMUNITY ENGAGEMENT

MUNICIPAL UTILITY	ACCESSIBILITY OF GOVERNING INFORMATION 8 PTS	OPPORTUNITIES TO AFFECT DECISION MAKING 5 PTS	INFORMATION SHARING 2 PTS	BONUS 8 PTS	TRANSPARENCY SCORE 15 PTS
STERLING	4	0	2	2	8
ASHBURNHAM	4	0	2	0	6
GROVELAND	4	0	2	0	6
MIDDLETON*	4	0	0	2	6
CHESTER	4	0	1	0	5
MARBLEHEAD	0	3	2	0	5
PAXTON	0	3	2	0	5
DANVERS*	4	0	0	0	4
GROTON	2	0	2	0	4
HINGHAM*	2	0	0	2	4
HOLDEN	2	0	2	0	4
HULL	2	0	2	0	4
LITTLETON*	4	0	0	0	4
TEMPLETON	2	0	2	0	4
BOYLSTON	0	0	2	0	2
GEORGETOWN*	2	0	0	0	2
HUDSON*	2	0	0	0	2
MERRIMAC*	2	0	0	0	2
RUSSELL	0	0	2	0	2
GOSNOLD	N/A	N/A	N/A	N/A	N/A

* indicates MLPs that did not submit questionnaires or provide feedback to MCAN for the purpose of this report

Results and Observations

Summary of Transparency Scores

The results above provide a useful snapshot of how MLPs are performing, relative to each other, in actions that enhance transparency and community engagement. MLPs' average Transparency and Community Engagement score was 9.1 points with a median score of 8 points. Most MLPs (i.e., 24 out of 40) scored between 0 and 10 points in this category, eight scored between 10 and 15 points, and eight scored 15 points or more. Belmont, Concord, Ipswich, and West Boylston were the top four scorers in transparency and community engagement, earning 21 points each.

The overall scores in this section suggest that many MLPs need to do more to be transparent and engage their communities. The following subsections discuss the results of relevant subcategories and present important observations that enable us to better understand what actions MLPs should take to enhance transparency and involve community residents in decision making.

Accessibility of Governing and Operations Information

Findings from this section indicate that MLPs' level of transparency varied widely. While a number of MLPs readily offered information about their light board's decision-making processes and internal operations, other MLPs provided limited or no information (**Figures 13 and 14**). MLPs generally posted updated light board meeting minutes as well as light board dates and times. MLPs posted updated DPU and financial reports and provided contact information for light board members less frequently.

Opportunities to Affect Decision Making

Twenty MLPs either conducted surveys that included questions about renewable energy or held forums on renewable energy (or both) between 2017 and 2021. Of those 20, 12 MLPs showed clear evidence that input from community engagement directly and substantially affected MLP policy. Three of the remaining MLPs held an event or conducted a survey before 2017; 11 MLPs were recorded as having never conducted a survey

or held a forum on renewable energy; and seven did not report results and provided no evidence of either type of community engagement taking place.

70 Increasing Percentage from Non-Carbon Emitting Sources (The Town of Concord, n.d.), https://concordma.gov/515/Power-Supply-Portfolio

Transparency on Clean Energy and REC Retirement

Based on MCAN's criteria, Concord was the only MLP that provided sufficient information about their REC retirement strategy to gain full points in the Bonus section. Specifically, they represented the percentage of clean energy in their energy mix in accordance with the number and types of RECs that were retired.[70]

While no other MLP received full bonus points in this category, Belmont, Ipswich, and West Boylston gained almost full points by including information about REC retirement that specifically related to their energy mix and REC retirement strategy. Twelve other MLPs listed their power supply but did not disclose how the information was influenced by REC retirement and their energy mix. Twenty-five MLPs did not post their power supply on their website in a readily accessible manner (**Figure 15**).

FIGURE 13 ACCESSIBILITY OF GOVERNING INFORMATION POINTS RECIEVED

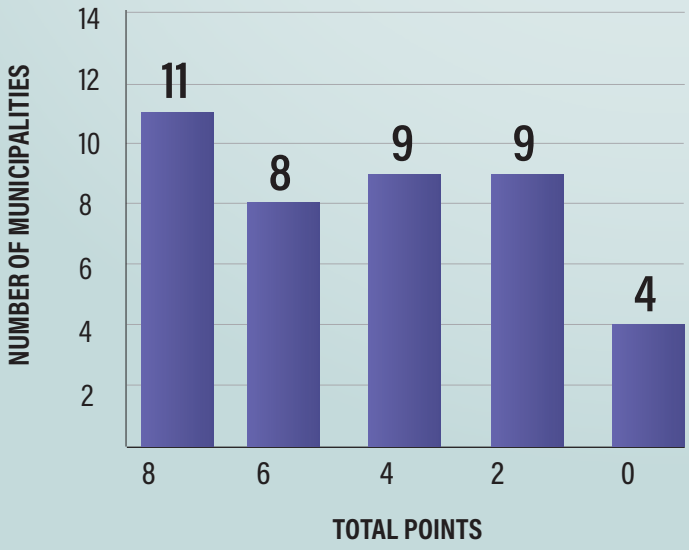


FIGURE 14 GOVERNING AND OPERATIONS INFORMATION AVAILABLE

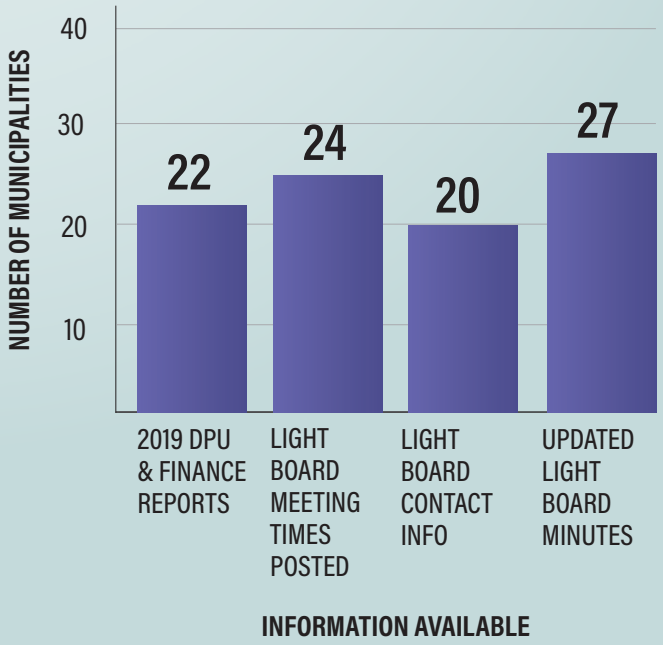
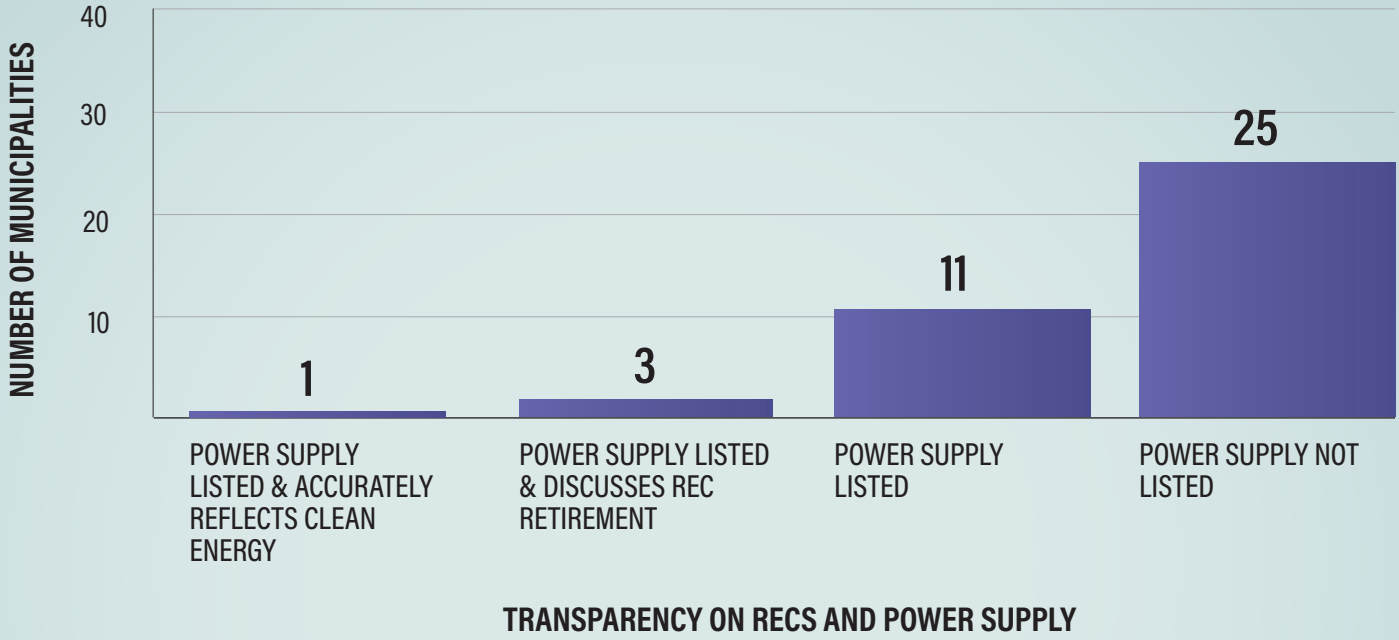


FIGURE 15 TRANSPARENCY ON CLEAN ENERGY & REC RETIREMENT



MCAN's Recommendations for Transparency and Community Engagement

MCAN recommends that light board members, MLP staff, MLP associations, state officials, and advocates consider taking the following steps to enhance transparency and community engagement in MLP districts:

1. **Ensure that MLPs' websites contain updated information for residents to engage in decision making**
   - Consistently post and update light board meeting times, meeting minutes, and contact information

- Make it standard practice to post policies, reports, and other operations-related information on websites
- Work towards increasing transparency and educating residents about MLPs' decision-making processes and internal operations

Providing easy-to-find information about decision-making processes and operations is fundamental to an MLP fulfilling its mission as a public, democratic institution. While MCAN recognizes that there are alternative means of disseminating this information to residents, posting information on an MLP's website is standard practice to maintain transparency and enhance community engagement. To ensure that MLPs are being fully transparent, they should post all information relevant to decision-making processes and MLP operations to their websites. These materials should include, but not be limited to, light board meeting times; updated light board meeting minutes; light board member contact information; and all relevant reports, policies, and guiding principles.

In addition to ensuring that information is available to residents online, MCAN recommends that MLPs develop strategies to reach more residents using other technologies. Examples include video-recording meetings and posting those recordings in publicly accessible locations. Such practices became widespread due to COVID-19 and should be continued and enhanced during and after the recovery.

2 **Increase opportunities for community involvement in decision making**

- Conduct surveys and community forums regularly on issues related to MLP policy and long-term strategies
- Solicit feedback and support from community members on proposed energy projects and long-term policies
- Develop clear protocols and procedures to substantively incorporate community input into MLPs' policies and strategies

To understand the priorities, needs, and desires of district residents, MCAN recommends that MLPs regularly solicit formal feedback from their customers. This input can be collected through surveys as well

as community forums on specific policy questions or issues. While renewable energy and energy efficiency programs must be addressed, community input can be invaluable on a variety of topics.

Contracting for energy and investments in energy projects are two specific areas in which MLPs can expand community involvement. MCAN observed multiple instances where, without the knowledge of engaged residents, MLPs signed contracts for energy or invested in energy projects that did not align with the general goals and objectives of their community. Residents have voiced their concerns following the signage of such contracts, but MLPs have been limited in their ability to respond to such input due to the legally binding nature of these contracts. The alignment between residents' preferences and MLPs' financial commitments can be strengthened through consistent community feedback on potential investments and projects prior to contract signing.

As associations dedicated to supporting MLPs in serving the needs and interests of their residents, **MMWEC and ENE can exhibit leadership by being more transparent about the projects that they are presenting to member MLPs**. Furthermore, to minimize community backlash, MMWEC and ENE can use their expertise and resources to host community forums dedicated to reviewing project proposals before these proposals are scheduled to go before light boards. Using community forums – coupled with ongoing updates from individual MLPs through their websites, newsletters, and social media – is highly consistent with MLPs' responsibility to serve the public and create an informed civic culture.

3

Be transparent about clean energy and REC retirement

- Post updated power supply charts on websites
- Be transparent about REC retirement strategies and explain the implications of REC retirement for the energy mix
- Post charts that clearly identify the percentages of energy sources based on the number of RECs retired

MLPs have a responsibility to residents to accurately represent their energy mix in a way that follows the legally accepted practice of explicitly representing the percentage of clean and non-emitting energy. To do

so, **MLPs must represent their energy mix in accordance with the RECs and EFECs they retire from given resources and not based on the power supply.** To account for variance in the percentage of Class I RECs or Class II RECs and EFECs retired in an MLP's energy mix compared to the mix in the electron power supply, MCAN encourages MLPs to develop educational materials and campaigns regarding the benefits (and, if an MLP holds this view, the downsides) of Class I RECs and REC retirement. MLPs can coordinate with local elected officials and municipal staff, educational and library institutions, and nonprofit organizations to assist in conducting outreach and disseminating print and digital materials. Overall, MCAN strongly urges MLPs to be transparent about their strategies for procuring energy and retiring RECs and EFECs.

Conclusions

MLPs are a unique and preferable type of utility because they are responsible directly to the communities they serve. By frequently soliciting input from community members and lowering barriers to community participation in decision making, MLPs are fulfilling their responsibilities as democratic, community-owned organizations and incorporating their customers' priorities into policies and long-term strategies. However, there is still work to be done.

To enhance transparency and community engagement, MLPs can make all relevant and basic information on public involvement in their decision-making processes easily accessible to residents through MLPs' websites and printed materials. Furthermore, MLPs can enhance their efforts to solicit community feedback and actively identify additional ways in which residents can engage, particularly when MLPs are considering new energy contracts or are planning to invest in energy projects. Finally, MLPs must strive to be more transparent about their REC retirement strategies and the impacts of these strategies on the percentage of MLPs' energy mix that they can accurately claim as clean or non-emitting energy.

Transparency and community engagement are vital to MLPs as democratic institutions. Establishing democratic processes in our public utilities will ensure that MLPs are developing climate solutions that

are equitable and just. Through practices that enhance transparency and engagement, MLPs emphasize perhaps their most beneficial and unique quality as a democratic, local utility.

TRANSPARENCY & COMMUNITY ENGAGEMENT RECOMMENDATIONS

1 ENSURE THAT MLPS' WEBSITES CONTAIN UPDATED INFORMATION FOR RESIDENTS TO ENGAGE IN DECISION-MAKING	RELEVANT ACTORS
• Consistently post and update light board meeting times, meeting minutes, and contact information	LIGHT BOARDS MLPs
• Make it standard practice to post policies, reports, and other operations-related information on websites	LIGHT BOARDS MLPs
• Work towards increasing transparency and educating residents about MLPs' decision-making processes and internal operations	LIGHT BOARDS MLPs
2 INCREASE OPPORTUNITIES FOR COMMUNITY INVOLVEMENT IN DECISION MAKING	**RELEVANT ACTORS**
• Conduct surveys and community forums regularly on issues related to MLP policy and long-term strategies	LIGHT BOARDS MLPs
• Solicit feedback and support from community members on proposed energy projects and long-term policies	LIGHT BOARDS MLPs MMWEC & ENE
• Develop clear protocols and procedures to substantively incorporate community input into MLPs' policies and strategies	LIGHT BOARDS MLPs MMWEC & ENE
3 BE TRANSPARENT ABOUT CLEAN ENERGY AND REC RETIREMENT	**RELEVANT ACTORS**
• Post updated power supply charts on websites	LIGHT BOARDS MLPs
• Be transparent about REC retirement strategies and explain the implications of it REC retirement for the energy mix	LIGHT BOARDS MLPs
• Post charts that clearly identify the percentages of energy sources based on the number of RECs retired	LIGHT BOARDS MLPs

MLP Policy Context

(10 points)

Introduction

Efforts to transition to clean energy and increase energy efficiency are strengthened when MLPs and municipal governments establish policy contexts that are conducive to achieving these goals. When climate goals are established, climate action plans are in place, and sufficient resources are allocated, MLPs can better mitigate the harmful effects of climate change and transition to a net zero energy future. These and other local policy tools are useful for both MLP staff and advocates in ensuring and strengthening climate mitigation in their community.

This section assesses the extent to which MLPs and the towns within MLP districts have sought to establish policies and tools that enable climate mitigation. For this report, MCAN examined whether towns and MLPs had established local climate action plans, met all criteria for Green Community Designation, and opted to participate in the Renewable Energy Trust Fund (RETF) – all steps that enhance an MLP's ability to transition to clean energy and enhance energy efficiency. MCAN recognizes that other policies, plans, programs, and initiatives may also aid MLPs in taking progressive action on climate change. However, these three policies and tools are sufficient indicators of the policy context within which MLPs work to advance climate mitigation.

This section first presents MCAN's methods used to assess local policy context. We then discuss our findings and conclude by offering rec-

ommendations for what advocates, MLP staff, light board members, MLP associations, and local and state government officials can do to strengthen the local policy context and accelerate MLPs' clean energy and climate mitigation efforts.

Policy Context Scoring Methods

In scoring MLP policy contexts, MCAN evaluated MLPs' and local governments' efforts to create and participate in policies, plans, and programs that better facilitate the transition to a clean energy future. Points were awarded based on (1) MLPs' participation in opt-in statewide programs that enhance capacity for climate action and (2) MLPs' adoption of

TABLE 12 POLICY CONTEXT SCORING METRICS AND CATEGORIES

METRICS	TOTAL POINTS POSSIBLE	FACTORS	SCORING SUMMARY
CLIMATE ACTION PLAN	5	A published climate action plan, the development of a climate action plan	Scores whether MLPs had climate action plans that cover their complete district. Partial points were given for plans in development; full points were given for completed plans.
GREEN COMMUNITY DESIGNATION	3	Green Community status	MLPs whose towns had completed the process to become a Green Community were awarded full points for this category.
PARTICIPANT IN THE RENEWABLE ENERGY TRUST FUND (RETF)	2	A listed participant in the RETF	MLPs and towns that completed the process to become a member of the RETF were awarded full points in this category.
TOTAL	10 + BONUS POINTS		

TABLE 12 POLICY CONTEXT SCORING METRICS AND CATEGORIES

BONUS

METRICS	TOTAL POINTS POSSIBLE	FACTORS	SCORING SUMMARY
ENERGY/ SUSTAINABILITY COMMITTEE	1	Existence of a committee working on issues of energy and sustainability	Full points were given if a committee existed
PROPERTY ASSESSED CLEAN ENERGY (PACE) PROGRAM PARTICIPATION	1	Participation in Mass Development's PACE program	Full points were awarded if a municipality in an MLPs had opted to participate in to the program
TOTAL	2		

comprehensive climate plans focused on reducing greenhouse gas emissions. A bonus point was awarded to MLPs whose municipalities had standing committees that addressed issues related to energy and climate change. An additional bonus point was awarded to MLPs whose municipalities had opted into Mass Development's Property Assessed Clean Energy (PACE) program. See **Table 12** for details.

For the purposes of this report, MCAN used the Institute of Local Government's definition of a climate action plan: "a comprehensive roadmap that outlines the specific activities that an agency will undertake to reduce greenhouse gas emissions. Climate action plans build upon the information gathered by greenhouse gas inventories and generally focus on those activities that can achieve the relatively greatest emissions reductions in the most cost-effective manner."[71] As such, Municipal Vul-

nerable Preparedness reports and regional plans were not considered in this Scorecard.

MCAN used available government resources to determine MLPs' participation in the RETF and the Green Communities Program. Because participation in the Green Communities program requires multiple steps (including a final vote by town governing bodies) and the designation cannot be guaranteed until all steps are completed, MCAN did not give partial credit to MLPs in the process of receiving this designation.[72] **Table 13** presents MLPs' Policy Context scores.

71 "Climate Action Plans" (Institute for Local Government), accessed May 27, 2021, https://www.ca-ilg.org/climate-action-plans.

72 As of or following MCAN's data review process in spring of 2021.

TABLE 13 MLP SCORES IN POLICY CONTEXT

MUNICIPAL UTILITY	CLIMATE ACTION PLAN 5 PTS	GREEN COMMUNITY DESIGNATION MAKING 3 PTS	PARTICIPANT IN THE RETF 2 PTS	BONUS 2 PTS	POLICY CONTEXT SCORE 10 PTS
IPSWICH	5	3	2	1	11
CONCORD	5	3	0	2	10
BELMONT	5	3	0	1	9
HOLYOKE	0	3	2	2	7
NORWOOD	1	3	0	2	6
ASHBURNHAM	0	3	2	0	5
CHICOPEE	0	3	0	2	5
GROTON	1	3	0	1	5
HINGHAM*	1	3	0	1	5
READING	5	0	0	0	5
TEMPLETON	0	3	2	0	5
WELLESLEY	1	3	0	1	5
BRAINTREE	0	3	0	1	4
GEORGETOWN*	0	3	0	1	4
LITTLETON*	0	3	0	1	4
MIDDLEBOROUGH	0	3	0	1	4
TAUNTON	0	3	0	1	4
CHESTER	0	3	0	0	3
HUDSON*	0	3	0	0	3
MERRIMAC*	0	3	0	0	3
N. ATTLEBOROUGH	0	3	0	0	3

TABLE 13 MLP SCORES IN POLICY CONTEXT

MUNICIPAL UTILITY	CLIMATE ACTION PLAN 5 PTS	GREEN COMMUNITY DESIGNATION MAKING 3 PTS	PARTICIPANT IN THE RETF 2 PTS	BONUS 2 PTS	POLICY CONTEXT SCORE 10 PTS
SHREWSBURY	0	3	0	0	3
WEST BOYLSTON	0	3	0	0	3
WESTFIELD*	0	3	0	0	3
HOLDEN	0	0	2	0	2
HULL	1	0	0	1	2
MARBLEHEAD	1	0	0	1	2
PRINCETON	1	0	0	1	2
RUSSELL	0	0	2	0	2
STERLING	1	0	0	1	2
WAKEFIELD	0	0	0	2	2
PAXTON	1	0	0	0	1
PEABODY	1	0	0	0	1
SOUTH HADLEY	0	0	0	1	1
BOYLSTON	0	0	0	0	0
DANVERS*	0	0	0	0	0
GROVELAND	0	0	0	0	0
MANSFIELD	0	0	0	0	0
MIDDLETON*	0	0	0	0	0
ROWLEY	0	0	0	0	0
GOSNOLD	N/A	N/A	N/A	N/A	N/A

* indicates MLPs that did not submit questionnaires or provide feedback to MCAN for the purpose of this report

Results and Observations

Summary of Policy Context Scores

The results above provide a useful snapshot of the steps MLPs and municipalities are taking to develop local policy tools that support proactive climate action measures. MLPs' average Policy Context score was 3.4 points with a median score of 3 points. The majority of MLPs (i.e., 22 out of 40) scored between 0 and 5 points, and 11 MLPs scored 5 points or more. Ipswich, Concord, and Belmont were the top three scorers in this category, earning 11, 10, and 9 points, respectively.

The overall scores in this section suggest that more can be done in most MLPs to improve the policy context within which they operate. The following subsections discuss the results of subcategories and present important observations that enable us to better understand what actions MLPs should take to improve the policy context across MLPs.

Climate Action Plans

Four MLPs – Belmont, Concord, Ipswich, and Reading – had district-specific climate action plans. Ten additional MLPs reported that climate action plans were underway. However, given confusion around the definition of a climate action plan during reporting, some uncertainty existed about whether those plans would meet the criteria for "climate action plan" used for this assessment.

Participation in Statewide Programs and Designations

As shown in **Figure 16**, participation in statewide programs and designations varied. As of the spring of 2021, municipalities in 23 MLPs had completed the process to become designated as a Green Community. Several additional municipalities including Mansfield, Rowley, and Wakefield were in the process of becoming Green Communities.[73]

Of the 23 MLPs, a few (e.g., Taunton and Littleton) had some municipalities in their MLP districts that were not designated Green Communities. This is partly due to state regulations which make it far more difficult for these municipalities to receive the Green Communities Designation. As discussed below, such regulations are unnecessary barriers to MLP

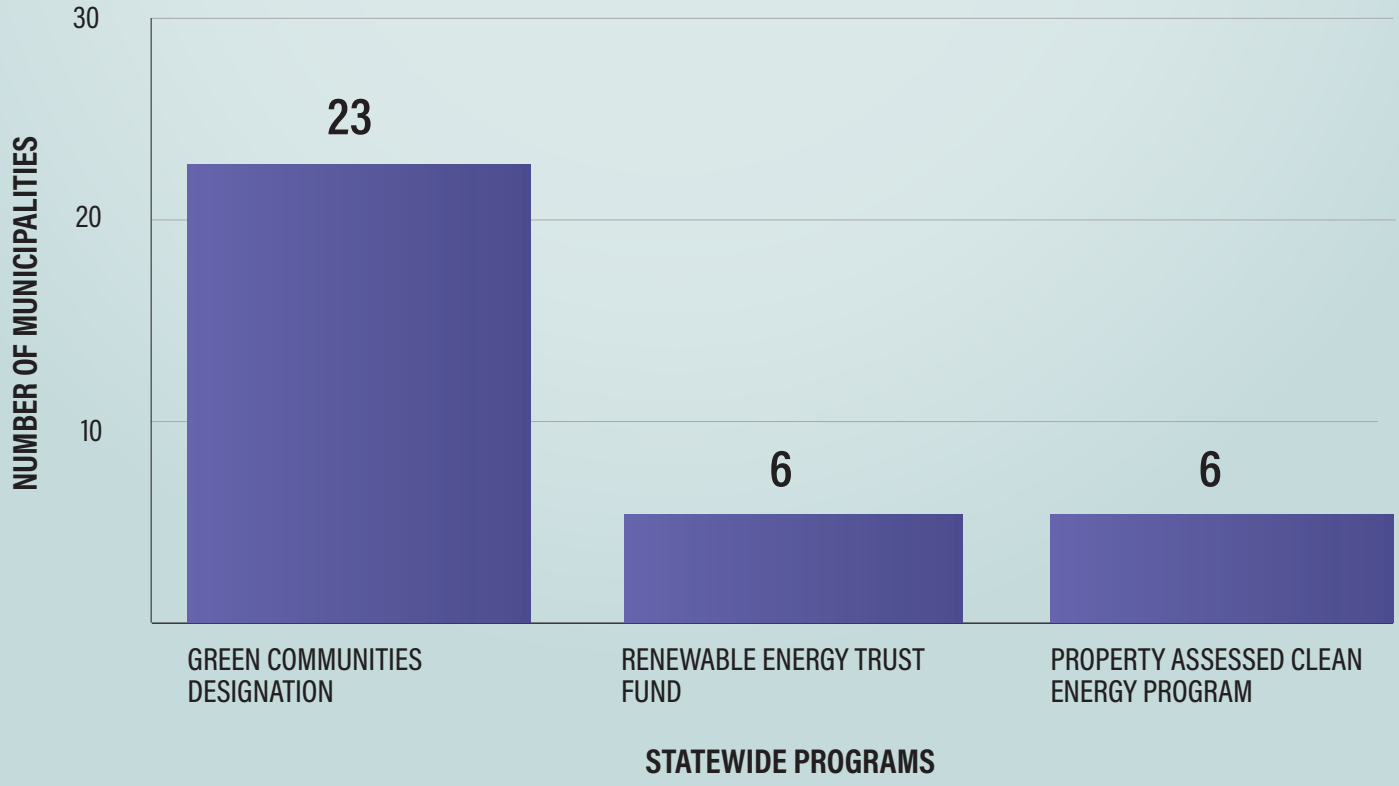
73 MCAN did not provide partial points for MLPs that were in the process of receiving the Green Communities designation.

communities' participation in statewide programs. Legislative action should be taken to eliminate these obstacles.

Participation in the RETF was considerably lower. Only six MLPs had signed contracts to participate as of this report's publication. No indications were given that additional MLPs intended to participate in the RETF in the near future.

MCAN observed a similarly low level of participation in the PACE program, with only six municipalities served by MLPs opting in. However, low levels of participation were likely due in part to the program being relatively new. Increased participation is expected as MLP staff and municipal officials become more aware of the program's benefits.

FIGURE 16 PARTICIPATION IN STATEWIDE PROGRAMS



MCAN's Recommendations for Developing Strong Local Policies for Climate Mitigation and Clean Energy

MCAN recommends that MLP staff, light boards, MLP associations, state officials, and advocates consider taking the following steps to establish strong local policies supporting action on climate mitigation and clean energy in MLP districts:

1. **Work with towns to establish climate action plans**
   - Work with town government and community members to implement climate action plans
   - Conduct an inventory of MLP emissions and develop a long-term plan for reducing emissions to net zero by or before 2050

Developing a roadmap that outlines specific actions MLPs and other town agencies should take to reduce greenhouse gas emissions is a widely accepted approach to facilitate a timely clean energy transition. MCAN encourages MLPs and town governments within MLP districts to collaborate on developing such plans. During the development phase, MCAN encourages MLPs to engage residents and other stakeholders in their districts. In particular, MLPs should actively engage with low-income residents, communities of color, non-English speaking residents, and renters to ensure that these groups' needs are being met by these climate action plans and that the plans specifically alleviate all disproportionate burdens on these communities.

2 Participate in statewide programs focused on increasing efficiency and transitioning to clean energy

- Work with towns to attain Green Community Designation
- Participate in the Renewable Energy Trust Fund (RETF)
- Opt into the Property Assessed Clean Energy (PACE) program

Green Community Designation comes with numerous benefits and provides access to resources that help communities increase their energy efficiency and transition to clean energy.[74] MCAN encourages all MLPs to work with municipalities in their territories to achieve Green Community Designation.

The RETF is another state program that can significantly enhance an MLP's capacity to transition to clean energy. In particular, being a part of the RETF makes MLPs eligible for grants and programs offered by the Massachusetts Clean Energy Center (MassCEC).[75] MassCEC offers more than 25 programs and incentives that promote renewable energy, energy efficiency, and electrification for residents, businesses, nonprofits, and local governments. These programs are useful supplements to the host of programs that MLPs already offer to their customers and would support MLP districts in transitioning to a net zero future.

Finally, the PACE program is a relatively new and potentially immensely beneficial program that can help MLPs and municipalities increase energy efficiency and expand the use of clean energy among commercial buildings and multi-family housing. Through this program, property owners can finance energy efficiency upgrades and renewable energy adoption through a betterment assessment and lien on their property, thereby enabling them to have a longer payback period and to receive other financial benefits.[76, 77] These aspects make such projects more financially feasible and provide a powerful incentive for local commercial and industrial actors to make necessary energy efficiency and clean energy upgrades. Furthermore, with Mass Development serving as the primary program administrator, there are few financial or administrative costs associated with opting in. Given the PACE program's overwhelming benefits and minimal costs, as well as a general lack of commercial energy efficiency programs in MLP communities, MCAN strongly recommends that all municipalities served by MLPs adopt this program.

Reduce barriers for MLPs to participate in statewide programs

74 "Becoming a Designated Green Community" (Green Communities Division), accessed May 26, 2021, https://www.mass.gov/guides/becoming-a-designated-green-community.

75 "Municipal Lighting Plant Communities" (Massachusetts Clean Energy Center, January 17, 2020), https://www.masscec.com/municipal-lighting-plant-communities.

76 "Massachusetts Launches Financing Program for Energy Improvements to Commercial, Industrial, AND Multifamily Buildings," MassDevelopment, July 28, 2020, https://www.massdevelopment.com/news/massachusetts-launches-financing-program-for-energy-improvements-to-commercial-industrial-and-multi-family-buildings.

77 "Property Assessed Clean Energy (PACE)," MassDevelopment, accessed August 2021, https://www.massdevelopment.com/pace.

3

- Ensure there are no additional barriers to MLP towns attaining Green Community status
- Reduce the barriers and requirements for MLP participation in the Renewable Energy Trust Fund (RETF)
- Develop new state-sponsored programs to support MLPs in addressing climate change and increasing energy efficiency

Statewide environmental programs should seek to reduce unnecessary barriers to MLP communities' participation. Enabling MLP districts and municipalities within those districts to join existing state programs quickly and easily will enhance our ability to meet the Commonwealth's climate targets while ensuring that no community is left behind. As two highly beneficial programs, removing barriers to MLPs' participation in the Green Community program and the RETF is particularly important.

With respect to the Green Community program, unnecessary barriers exist for communities in MLP districts that serve multiple municipalities. Specifically, requirements are imposed which mandate that, if an MLP municipality wishes to become a Green Community, *the entire MLP* district must adopt a renewable energy charge. However, because other municipalities in the MLP may (1) not wish to be a Green Community or (2) have already received the designation without adopting the charge because part of the region is served by an IOU (which automatically imposes a renewable energy charge), such municipalities are not realistically able to receive the designation. To ensure that all municipalities have access to this program, the law must be changed to ensure that municipalities in MLP districts can adopt a renewable energy charge and obtain the Green Community Designation regardless of the status of other municipalities in their district.

Given that participation of MLPs is so low in the RETF, efforts should also be made to identify and reduce any unnecessary barriers keeping MLPs from participating. While there may be others, one way to lower barriers for MLPs is to remove or relax the requirement that MLPs must stay in the RETF in perpetuity once they join. A more flexible form of membership could allow MLPs who are not able to commit to indefinite membership an opportunity to contribute to and benefit from the RETF. In general, MCAN recommends that state officials and the state legislature enable MLPs to participate in all new and existing programs

that support local municipalities in transitioning to clean energy or in enhancing energy efficiency. Further, we support efforts to remove unnecessary barriers that inhibit MLPs' participation in these programs. Although MLPs are independent utilities focused on addressing the needs of their communities, the state has a responsibility to ensure that those communities are not being left behind.

Conclusions

The policy context within which MLPs and municipalities seek to advance the energy transition and increase energy efficiency substantially shapes potential community progress. Whether implementing climate action plans, participating in statewide programs, or developing other policy tools that enhance climate mitigation objectives, MLPs, municipalities, state agencies, legislators, and advocates should strive to enhance MLPs' policy contexts. This way, MLP staff will have resources at their disposal and a clear direction that enables an effective energy transition for their communities. These efforts will promote long-term and effective change that brings us closer to an equitable clean energy future.

MLP POLICY CONTEXT RECOMMENDATIONS

1 WORK WITH TOWNS TO ESTABLISH CLIMATE ACTION PLANS	RELEVANT ACTORS
• Work with town government and community members to implement climate action plans	LIGHT BOARDS MLPs MUNICIPAL GOVERNMENT
• Conduct an inventory of MLP emissions and develop a long-term plan for reducing emissions to net zero by or before 2050 programs and investments	LIGHT BOARDS MLPs MUNICIPAL GOVERNMENT
2 PARTICIPATE IN STATEWIDE PROGRAMS FOCUSED ON INCREASING EFFICIENCY AND TRANSITIONING TO CLEAN ENERGY	**RELEVANT ACTORS**
• Work with towns to attain Green Community Designation	LIGHT BOARDS MLPs MUNICIPAL GOVERNMENT
• Participate in the Renewable Energy Trust Fund (RETF)	LIGHT BOARDS MLPs
• Opt-in to the Property Assessed Clean Energy (PACE) program	LIGHT BOARDS MLPs MUNICIPAL GOVERNMENT
3 REDUCE THE BARRIERS FOR MLPS TO PARTICIPATE IN STATEWIDE PROGRAMS	**RELEVANT ACTORS**
• Ensure there are no additional barriers to MLP towns attaining Green Community status	LEGISLATURE DOER
• Reduce the barriers and requirements for MLP participation in the Renewable Energy Trust Fund (RETF)	LEGISLATURE DOER
• Develop new state-sponsored programs to support MLPs in addressing climate change and increasing energy efficiency	LEGISLATURE DOER