RGGI Funds in Action:

Insights into the Allocation of RGGI Proceeds
Winter 2024





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Acknowledgements

Acadia Center would like to thank our coalition partners for their review and insights in developing this report, especially Larry Chretien from Green Energy Consumers Alliance, Dr. Mark Mitchell of the Connecticut Equity and Environmental Justice Advisory Council (CEEJAC), and Emma Bast from Citizens for Pennsylvania's Future for their input regarding the data needed to best assess impacts of RGGI on environmental justice communities.

Executive Summary

Overview

The Regional Greenhouse Gas Initiative (RGGI) is a market-based, cap-and-invest greenhouse gas reduction program across 10 states in the Northeast and Mid-Atlantic, designed to limit the amount of carbon dioxide (CO₂) pollution from electricity generating plants in the region. Since 2008, RGGI has been a pioneer of multistate climate policy, generating \$8.3 billion in proceeds for participating states. It also represents the United States' first multi-state program designed to reduce climate change-causing pollution from power plants and has provided a wealth of lessons to be incorporated into the next generation of climate policies. Acadia Center has worked extensively on the RGGI program from its inception up to the current day, including our 2023 report RGGI: Findings and Recommendations for the Third Program Review.

RGGI proceeds are used by participating states to fund programs that advance clean energy, reduce emissions, and save consumers energy and money. For the purpose of implementing and refining an efficient program that combats climate in an equitable manner, it is essential to understand at a more granular level the distribution and effects of RGGI proceeds, particularly with respect to the sectors and populations that benefit from their investment. To date, despite adoption of some state and federal commitments around the equitable allocation of clean energy programs (such as the Biden-Harris Administrations' Justice40 commitment), RGGI states have not collectively committed to program-wide goals regarding equitable distribution of proceeds, and data on this topic is limited and scattered in its availability.

Acadia Center conducted an in-depth review of both reports published by RGGI, Inc. and reports authored by state agencies to analyze the historical trends and patterns in the spending of proceeds generated through RGGI. The Report is divided into three parts:

- Part 1 Analysis of Proceeds Generation and Spending Informed by RGGI Proceeds Reports Published by RGGI, Inc.: Provides an overview of the proceeds spending and general categories of the allocation of proceeds among participating states.
- Part 2 Analysis of Proceeds Spending Informed by State Agency Reporting on RGGI Funds: Offers insights into how each state utilizes its share of RGGI proceeds (see Table 2 for complete list) and investigates how each state agency defines environmental justice (see Table 3 for complete list).
- Part 3 Analysis of RGGI Proceeds Invested into Energy Efficiency Informed by RGGI, Inc. and State Agency Reporting: Provides additional context on the implementation and impact of energy efficiency programs funded by RGGI proceeds (see Table 4 for complete list).

This Report dives into the details of RGGI proceeds generation, spending, and reporting, aiming to show where investments are currently going toward and how these allocations contribute to reducing emissions and remedying inequitable impacts. It also identifies where gaps persist in RGGI states' deployment of program proceeds and offers recommendations on RGGI proceeds investments including environmental justice prioritization, improved reporting, and enhanced governance structures.

Recommendations for RGGI Proceeds Allocation and Reporting

This Report makes several recommendations for the RGGI states to consider and adopt as they evaluate how to improve RGGI proceeds investment and reporting as the program evolves and the growing need for energy equity and environmental justice (EJ) becomes more widely recognized. The Report provides recommendations for enhancing governance structures around RGGI and within participating states.

Specifically, Acadia Center recommends that the RGGI states take collective and individual actions regarding the equitable allocation of proceeds during and after the Third Program Review, which is currently underway and projected to conclude by Spring of 2025. This is a vital opportunity, and indeed a mounting imperative, to refine the program and make every process more transparent and equitable, including the allocations and spending of proceeds – especially in the context of other expanded carbon policies (e.g., programs covering sectors of the economy beyond solely power generation) the region may consider in the future.

Recommendations for RGGI Proceeds Investment:

- Establish a requirement that a minimum of 40%-50% of RGGI proceeds are invested in EJ and other underserved communities, setting a value that does not change even if other RGGI funds are raided/diverted.
- Clearly articulate how EJ communities are being defined across all RGGI states, as highlighted by the Acadia Center's RGGI Report from 2023.
- Invest in energy efficiency and other clean energy measures as soon as possible to avoid lengthy gaps between auctions and committed/realized investments, address existing energy burdens, and lockin higher lifetime energy and emissions savings.
- Establish a system with either public comment periods or Requests for Information (RFI) periods on allocation plans to solicit input from a wide range of stakeholders, with a particular focus on EJ communities, enabling better informed and more equitable investment decisions.
- As States receive a significant amount of proceeds from recent, unprecedentedly high auction pricing, States must follow an open, transparent process to decide on how those new funds are spent, ensuring that new funds are directed toward EJ and equity priorities.

Recommendations for RGGI Proceeds Reporting by RGGI, Inc. and States

- Both RGGI, Inc. and individual states should provide more frequent and robust reporting, ideally no longer than a year between reports, to enable better real-time program analysis.
- Enhance transparency by publishing detailed breakdowns of proceed allocations going toward EJ and equity priorities for each state, including low-income households. This could be done from both RGGI, Inc.'s reports and state agencies' reports on RGGI spending.
- Transparently track whether programs identified as providing EJ community investments are effective and meeting their goals.
- Produce more detailed and timely reporting at the state level, building on the existing reports some states currently produce on their RGGI spending.

Provide more granular reporting on key sectors receiving RGGI funding, including and especially energy efficiency investments.

Recommendations for Enhancing Governance Structures:

- RGGI, Inc. should summarize and publish relevant recommendations from states' Environmental Justice and Equity Advisory Boards, with regular updates.
- Participating states should provide regular updates on the activities and outcomes of their Equity Advisory Boards, even if no specific recommendations are forthcoming.
- RGGI, Inc., could facilitate knowledge-sharing and best practices among participating states regarding the operation of Equity Advisory Boards.

Strategic and transparent management of RGGI proceeds is crucial to maximizing the program's impact on emissions reductions and delivering benefits to underserved communities. Implementing the recommended actions will enhance the effectiveness of the RGGI programs and promote greater accountability, transparency, and community engagement in the allocation of proceeds, building trust in the program and future policies that may emulate elements of the RGGI model.

Introduction

The Regional Greenhouse Gas Initiative (RGGI) stands as a pivotal program in addressing climate change and fostering regional cooperation in the United States. RGGI also serves as a landmark cooperative effort among currently 10 Northeastern and Mid-Atlantic states to reduce greenhouse gas emissions from the power sector. This Report analyzes RGGI's historical and current proceeds spending, gaining insights on proceeds spending trends. Furthermore, it highlights the importance of the transparency in proceeds spending reporting, especially concerning Environmental Justice (EJ) initiatives. ⁱⁱ This section also draws upon findings from The Analysis Group's 2018-2020 report, iii emphasizing RGGI's economic impact and the emerging equity-focused practices within member states.

RGGI's Proceeds Spending and Impact

In recent years, RGGI's total proceeds trajectory has been rapidly increasing, propelled by rising auction clearing prices. ^{iv}These proceeds, generated through auctioning of allowances, have significant potential for funding environmental and community initiatives. Also, the higher observed allowance prices in 2022, 2023, and early 2024 mean that the RGGI program is sending a stronger market incentive to reduce emissions from fossil fuel power generation and increase reliance on electricity generation from carbon-free sources.

The Memorandum of Understanding (MOU) is the foundational agreement among RGGI states that establishes the rules and structure for how RGGI operates. The most recent MOU from 2017 does not address justice or equity, however it does specify that 25% of proceeds spending should be to benefit "ratepayers." For this provision and across the MOU, each state maintains control over its share of funds, and investment decisions are influenced primarily by state agencies.

The Analysis Group report vi highlights the economic benefits and equity impacts of RGGI spending during the 2018-2020 compliance period. They found that over a period of 12 years (2008-2020) RGGI contributed to a 46% decline in CO₂ emissions from power generation in the region and resulted in economic benefits including \$5.7 billion in net economic gains and \$3.8 billion raised in allowance proceeds. Their findings highlight how the investment of proceeds has had a widespread positive impact across the region.

Acadia Center conducted an in-depth review of both reports published by RGGI, Inc. and reports authored by state agencies to analyze the historical trends and patterns in the spending of proceeds generated through RGGI. The review reports fall into three main categories:

- Analysis of Proceeds Generation and Spending Informed by RGGI Proceeds Reports Published by RGGI, Inc.: Provide an overview of the proceeds spending and general categories of the spending of proceeds among participating states, the latest available report is from 2022. vii
- Analysis of Proceeds Spending Informed by State Agency Reporting on RGGI Funds: Offer insights into how each state utilizes its share of RGGI proceeds to fund various initiatives tailored to their specific needs and priorities (see Table 2 for complete list). And understand how each state agency defines EJ (see Table 3 for complete list).
- Analysis of RGGI Proceeds Invested into Energy Efficiency Informed by RGGI, Inc. and State **Agency Reporting:** Provide additional context on the implementation and impact of energy efficiency programs funded by RGGI proceeds (see Table 4 for complete list).

By synthesizing data from these diverse sources, Acadia Center developed a nuanced understanding of the utilization and effectiveness of RGGI proceeds in advancing a wide range of climate, energy and equity goals across the region.

Importance of Transparency for Proceeds Spending

RGGI proceeds to deliver economic, environmental, and health benefits, therefore it is important to understand where these funds are spent. There is an opportunity for states to enhance their reporting effort, particularly focusing on investments in EJ communities. It is especially important to ensure equitable distribution of the program benefits: within each state, program funds could be strategically distributed with consideration of the particular demographic and socioeconomic makeup of different communities and their needs. Such a spending strategy could draw inspiration from recent federal initiatives such as President Biden's Executive Order 13985, which introduced the Justice 40 initiative. The Justice 40 Initiative is trying to foster collaboration between federal agencies, including the EPA and state and local authorities.

The imperative for equitable spending of proceeds becomes even more evident given the disproportionate air quality impact of RGGI-regulated power plants, as highlighted in Acadia Center's 2023 RGGI Report. viii. To date, RGGI and its member states have yet to adopt a Justice40-style commitment or provide comprehensive tracking and reporting mechanisms for proceeds or benefits spending, especially for EJ Communities although some recent reporting improvements have been made through the latest RGGI, Inc. report in summer 2024.

Part 1 – Analysis of Proceeds Generation and Spending Informed by RGGI Proceeds Reports Published by RGGI, Inc

The first section of the report explores how funds from the RGGI auctions are allocated and used, based on the reports published by RGGI, Inc. These reports provide a general overview of how money is divided among different investment initiatives and recipients. Through analyzing these reports, we can understand how the various projects focused on aiding energy transition are prioritized.

RGGI Aggregated Proceeds Spending by Investment Category

RGGI, Inc. proceeds reports track expenditures in distinct high-level investment categories, including Energy Efficiency, Direct Bill Assistance, Beneficial Electrification, Greenhouse Gas Abatement, Clean & Renewable Energy, Administration, and RGGI, Inc. A more granular breakdown of spending within these relatively broad categories is not provided by RGGI, Inc. The high-level descriptions of each spending category provided by RGGI, Inc. are summarized in Table 1 below.

Table 1. Definitions of Investment Categories from RGGI, Inc.'s Proceeds Report (2022)ix

| Spending | Definition provided in RGGI, Inc. Reports | | |
|--------------------------------|---|--|--|
| Category | | | |
| ENERGY EFFICIENCY | "Programs designed to improve energy efficiency by reducing overall energy use without degrading functionality. This includes programs directed at assisting low-income families and small businesses. Program costs include evaluation and measurement. Examples: home energy audit programs, home and building weatherization, energy efficient appliance or industrial equipment rebate programs, compact fluorescent light bulb programs, and energy efficiency workforce training programs." | | |
| DIRECT BILL ASSISTANCE | "Programs providing energy bill payment assistance, including direct bill assistance to low-income ratepayers. Program costs include evaluation and measurement." | | |
| CLEAN & RENEWABLE ENERGY | "Programs directed at accelerating the deployment of renewable or other non-carbon emitting energy technologies. Program costs include evaluation and measurement. Examples include incentives for residential solar panels, financing of commercial renewable energy projects through green banking, research and development of new energy technologies." | | |
| GHG ABATEMENT | "Programs promoting the research and development of advanced energy technologies, the reduction of vehicle miles traveled, the reduction of emissions in the power generation sector, tree-planting projects designed to increase carbon sequestration, other initiatives to reduce greenhouse gases, and climate adaptation and community preparedness initiatives. Some projects can support multiple functions, such as natural area restoration that also serves flood mitigation planning purposes. Program costs include evaluation and measurement." | | |
| BENEFICIAL ELECTRIFICATION | "Programs designed to reduce fossil fuel consumption by implementing or facilitating fuel- switching to replace direct fossil fuel use with electric power. Examples include incentives for electric vehicles and home appliances, and installation of electric vehicle infrastructure. Program costs include evaluation and measurement." | | |

Figure 1 below illustrates the aggregated spending of proceeds from all RGGI States as shown in the annual reports published by RGGI, Inc. from 2019 to 2022 across five key categories. The table excludes the spending categories of "Administration" and "RGGI, Inc." xi due to their relatively consistent level of spending across years and the fact that these categories only account for 5-7% of total proceeds.

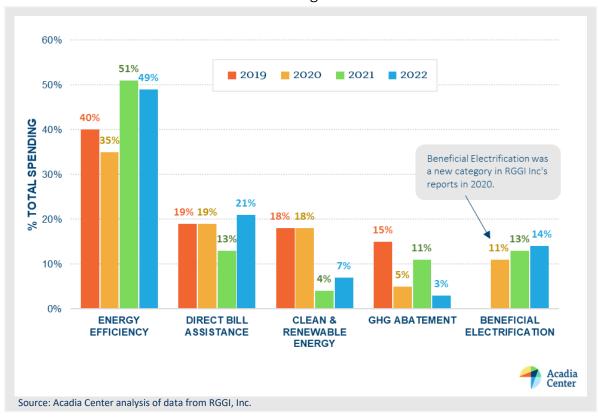


Figure 1. Percent of Total RGGI Proceeds Spending by Select Investment Categories: 2019-2022

Figure 1 above highlights several key takeaways:

- Across the 4-year period, Energy Efficiency consistently emerges as the top category for investments, accounting for 35%-51% of total proceeds spent in each of the four years. The two most recent years (2021 and 2022) have seen roughly half of all program spending allocated to Energy Efficiency.
- Direct Bill Assistance was the second largest spending category across the 4-year period, accounting for 13%-21% of total spending per year. The percentage level of direct bill spending underwent a noticeable drop in 2021, dropping to the lowest level in the four-year period.
- The third largest spending category over the 4-year period, Clean & Renewable Energy, saw a relatively constant investment level in percentage terms over the 2019-2020 time period (18%), but also saw a significant decrease relative to those levels in 2021 and 2022.
- GHG Abatement, which functionally serves as an "Other" category for RGGI proceeds investment, saw 8% of total spending over the four-year period and significant fluctuations in percentage sending levels, falling in the 5-15% range over the four-year period.

Lastly, Beneficial Electrification, a new spending category introduced in 2020, saw a moderate uptick from 11% to 14% in the 2020-2022 time period. The introduction of this new category at least partially explains declines, in percentage terms, of total proceeds allocated to Clean & Renewable Energy and GHG Abatement in the 2020-2022-time window relative to 2019. Notably, despite the introduction of the Beneficial Electrification category, Energy Efficiency saw its highest level of percent investment in 2022.

RGGI Aggregated Proceeds Spending by Recipient Type

In addition to providing a breakout of RGGI proceeds by spending category, as described above, the RGGI, Inc. reports also provide data on proceeds investment by recipient type, as shown in Figure 2 below. The proceeds are categorized into eight recipient types. As presented in Figure 2 below, each year does not sum to 100% because the Administration and RGGI, Inc. categories were excluded from the graph.

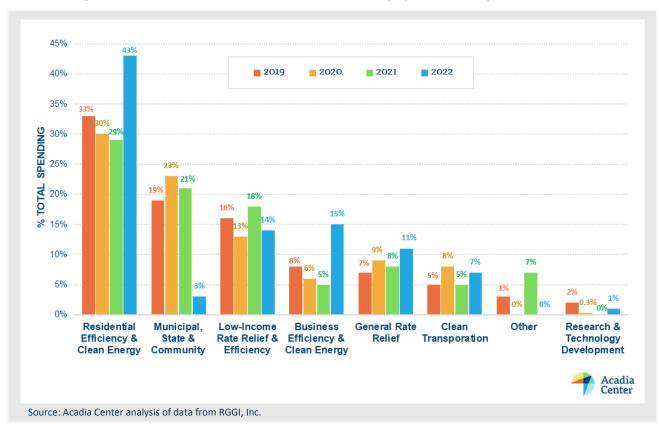


Figure 2. Percent of Total RGGI Proceeds Spending by Recipient Type: 2019-2022

Figure 2 above highlights several key takeaways:

During the 2019-2021 period, Residential Efficiency & Clean Energy accounted for between 29-33% of overall spending, but this figure surged to 43% of overall spending in 2022. A similar trend can be observed for Business Efficiency & Clean Energy, with 5-8% overall spending in the 2019-2021 period followed by a dramatic jump to 15% in 2022.

Conversely, the most dramatic decline in proceed investment spending took place in Municipal, State & Community- with a decrease from 21% of overall spending in 2021 to 3% in 2022. Notably, Low-Income Rate Relief & Efficiency shows no clear trend across the 4-year period, ranging from 13-18% of total spending, but the decline from 18% in 2021 to 14% in 2022 is concerning.

RGGI Proceeds Spending on Environmental Justice and Equity Programs

One of the core goals of RGGI proceeds investments – beyond reducing GHG emissions – should be providing direct benefits to EJ and other underserved communities. The most recent 2022 RGGI Proceeds Report (released summer 2024) made a significant advancement in transparency by providing a breakdown of investments directed toward EJ communities for the first time. Based on the summation of individual state reporting, the RGGI, Inc. report estimates that EJ and equity investments totaled approximately 30% of all RGGI proceeds invested by participating states in 2022. Acadia Center has been calling on RGGI, Inc. to include this data for several years, and we commend RGGI, Inc. on this initial effort to present this critical data. The 30% figure represents a region-wide total, rather than state-by-state compliance. It is also a twoyear-old figure at the time of publication of this report. Figure 3a below, pulled directly from the 2022 RGGI Proceeds Report, provides a more granular breakdown of both the 30% of total RGGI proceeds investments going towards EJ and equity programs (as defined in the RGGI, Inc. Report) broken down by category (pie chart on left) and recipient type (pie chart on right).

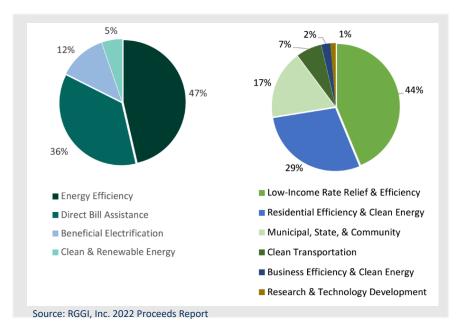


Figure 3a. Screenshot of 2022 RGGI EJ Investments by Category and Recipient Type

Figure 3b below presents this data in a slightly different way – showing the breakdown of EJ and equity investments in terms of the percent of total RGGI investments going to each category or recipient type, with both columns summing to 30%.

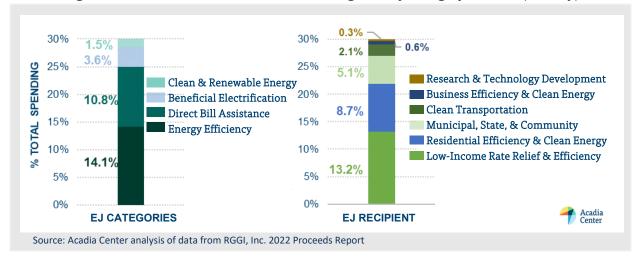


Figure 3b. 2022 RGGI EJ Investments Totaling 30% by Category and Recipient Type

Assuming this data on EJ and equity investments is accurate (and acknowledging that it is a complicated accounting exercise given varying definitions of EJ and Equity-related investments across states), it represents a notable win for advocacy efforts aimed at addressing long-standing equity concerns. However, the aggregated data on EJ investments lacks granularity, including a breakout of EJ investment at the individual state level to determine whether each state's approach aligns with the broader goals of EJ and effective use of proceeds. As a result, it's quite possible there is significant variation across states in the level of overall proceeds allocated to EJ investments, with a few states significantly bringing up the overall average. For example, New Jersey reports that 93% of its RGGI proceeds are being spent on programs benefiting EJ communities. This highlights a key challenge: the lack of consistent, detailed reporting across all RGGI states makes it difficult to gain a comprehensive understanding of the actual impact on EJ communities within each state.

While we applaud RGGI, Inc. for taking steps to enhance transparency, particularly while the Third Program Review is still ongoing, further clarity is needed. EJ advocates and communities continue to push for more detailed information on how funds are allocated and who benefits from these investments. We encourage RGGI, Inc. to build on its progress by providing more specific information on the categories for EJ funding. However, RGGI, Inc. can't do this alone. Acadia Center acknowledges that completing this task will require the provision of more granular data from state agencies and program administrators responsible for allocating and deploying proceeds investments. Ideally, more granular data would include a clear breakdown of who is receiving the proceeds, how funds are allocated, and what measurable outcomes are being achieved for EJ communities across all participating states. Increased transparency and standardized reporting will help ensure that RGGI proceeds truly support the communities most affected by environmental and economic injustices.

Acadia Center explored if a more granular understanding of EJ and low-income spending of RGGI proceeds could be developed based on the available data from RGGI Inc. For example, combining findings from Figure 1 and Figure 2 above reveals interesting insights that are not apparent when looking at either graph individually. For example, in Figure 2, the Low-Income Rate Relief & Efficiency (as presented in the RGGI Inc. reports) combines two very different types of spending, so it's not possible to determine specific trends in

either category (low-income energy efficiency versus low-income rate relief). Figure 1 highlights total Direct Bill Assistance spending but does not indicate what portion of that spending is allocated towards low-income customers versus general rate relief for all customers. However, piecing together these data points across graphs, Acadia Center was able generate a more granular breakdown of RGGI proceeds spending targeted at low-income residents, broken down by spending on energy efficiency versus direct bill assistance, as presented in Figure 4 below.

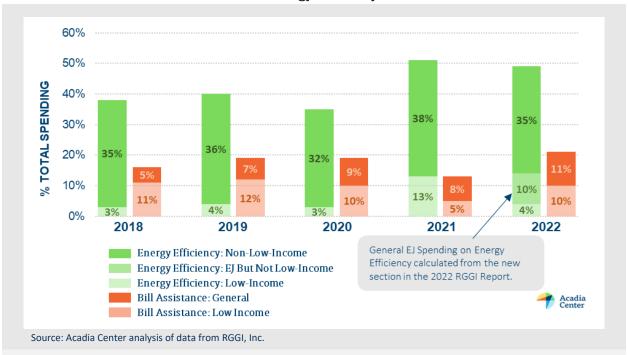


Figure 4. Percent of Total RGGI Proceeds To Low Income Bill Assistance & Energy Efficiency: 2018-2022xii

Important Note About Figure 4: Taking the year 2022 as an example, Figure 4 above shows investments in lowincome energy efficiency only accounting for 4% of all RGGI proceeds spending in 2022. From the Investment of RGGI Proceeds in 2022 report we know that "Low-Income Rate Relief & Efficiency" accounted for 14% of total spending in 2022, and we can easily deduce that low-income rate relief accounted for 10% of total 2022 spending. Thus, 14% - 10% = 4% of all 2022 RGGI spending went towards low-income residential energy efficiency, according to RGGI Inc. data. However, Figure 3 above, pulled directly from the same RGGI Inc. report, states that 47% of all RGGI investments in 2022 categorized as EJ went to "Energy Efficiency". Since we know, according to RGGI Inc., that approximately 30% of all RGGI spending in 2022 went towards EJ investments, 47% x 30% =14% of all 2022 RGGI spending went towards EJ energy efficiency according to RGGI Inc. data. Or, in other words, 10% of all RGGI spending in 2022 was categorized as EJ energy efficiency spending but not categorized at low-income energy efficiency spending. Without a clear breakdown of what investments are being categorized as "EJ EE" versus "lowincome EE" it's difficult to comment on this topic. 2022 was the first year RGGI Inc. provided an overall estimate of EJ spending and a breakdown by category and recipient type, but presumably years 2018-2021 also have spending that could be categorized as "EJ EE" but does not fall into the definition of "low-income residential EE". One can imagine energy efficiency investments that could reasonably be classified as EJ but not low-income residential – for example energy efficiency improvements to municipally-owned buildings or small businesses in disadvantaged communities. However, this ambiguity in the categorization further emphasizes the need for better data and documentation of methodology in calculating these RGGI proceeds investments.

Figure 4 above highlights several key takeaways:

- Across the 5-year period (2018-2022), on average, the percent of annual RGGI proceeds investment allocated to low-income rate relief (9.6%) is 1.8X higher than the percent of annual investment in low-income energy efficiency (5.4%). This is somewhat concerning given the shortterm beneficial nature of bill assistance versus the long-term beneficial nature of energy efficiency investments, as discussed in greater detail in Part 3 of this report. In the most recent year, 2022, spending on low-income rate relief (\$39.2 million) outpaced spending on low-income energy efficiency (\$15.7 million) by a factor of 2.5X.
- There is no clear trend over time in the percentage of total annual RGGI spending going towards low-income energy efficiency. Four of the five years fall into the narrow 3-4% range, and the sudden spike in 2021 up to 13%, followed by a sharp decline to 4% in 2022, is difficult to explain. However, because overall annual RGGI proceeds generation and investment has increased dramatically in recent years, particularly 2021 and 2022, these low percentages still translate to relatively high dollar investment totals in recent years. For example, in 2022, RGGI states spent \$15.7 million of RGGI proceeds on low-income energy efficiency, compared to a 2018-2020 annual average spend rate of \$7.3 million.
- Figure 4 also raises questions about the percentage of total RGGI energy efficiency spending targeted towards low-income residents. In four of the five years, the percentage of total RGGI energy efficiency spending going towards low-income homes fell in a relatively narrow band of 8-10%. The one exception, 2021, saw 25% of total energy efficiency spending reaching low-income residents, but this figure dropped down to 8% in 2022.
- Conversely, there does appear to be a fairly clear negative trend in the percentage of total RGGI spending on direct bill assistance that is specifically targeted at low-income households. For example, in 2018 and 2019 respectively, 69% and 63% of total bill assistance went to low-income households. However, in 2021 only 38% of total bill assistance was earmarked for low-income residents. While this figure increased somewhat in 2022 (48%), it's still well below 2018 and 2019 levels.

Direct bill assistance, even when strictly directed to low-income residents, is not necessarily the most costefficient, long-term investment to reduce energy burdens in EJ and other underserved communities. While bill assistance can provide some level of near-term, temporary financial relief for some customers, unlike targeted deployment of energy efficiency improvements in EJ communities, it does not provide the lasting bill reduction impacts and associated co-benefits including improved indoor air quality, associated health improvements, and increases in thermal comfort of occupants.

One limitation of how RGGI, Inc. currently provides data on investments by recipient type is that it only provides aggregated data for all RGGI states, opposed to a state-by-state breakdown of investments by recipient type. Thus, comparisons of spending by recipient type are not possible across RGGI states using the RGGI, Inc. data. Acadia Center flags this as a specific area of data reporting that could be improved that would enable stakeholders to better understand the spending of proceeds and assess the program's effectiveness for

each state. Additionally, more granular data on the level of RGGI investments reaching disadvantaged communities would also be incredibly valuable.

RGGI Aggregated & State-Level Proceeds Generation vs. Proceeds **Spending**

Through in-depth review of the yearly reports provided by RGGI, Inc., Acadia Center examined the spending and utilization of RGGI proceeds funds over time and by high-level initiative, as categorized in the RGGI, Inc. reports. By understanding how proceeds have been utilized over time and assessing recent shifts in proceeds spending, we can better assess the effectiveness of investments in various initiatives and prioritize areas for future funding.

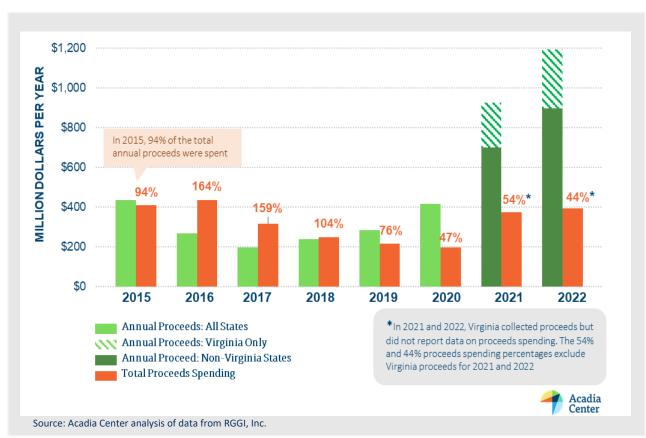


Figure 5. Proceeds Generated in Given Year vs Proceeds Spending in Given Year: 2015 - 2022

Figure 5 shows the generation and spending of RGGI proceeds in years 2015-2022, the most recent year for which data was available from RGGI, Inc. As highlighted by the graph, the amount of proceeds generated via RGGI auctions in a given calendar year is not necessarily equal to the level of proceeds spent in that year. In some years (e.g., 2016 and 2017), accumulated proceeds from prior years enables proceeds spending in the year to far outpace proceeds generated in that year, while in other years (e.g., 2020, 2021 and 2022) the level of proceed spending is significantly below the amount of proceeds generated in that year.

In the three most recent years for which data is available (2020-2022), RGGI states have only been spending amounts equivalent to approximately half (44%-54% xiii) of the revenues generated in each respective year. Impacts of the COVID-19 pandemic, including both supply chain disruptions and construction bottlenecks, could be partially responsible for some of this observed trend, particularly in 2020 and 2021. For example, states that spend a significant portion of RGGI proceeds on energy efficiency improvements that require on-site contractors to perform weatherization work may have experienced a significant drop in anticipated completed projects (and the spending to support those projects) or longer leadtimes for equipment installation and project completions, in part due to the public health emergency. However, the continuation of the low spending rate through 2022 suggests that other factors may also be at play. One potential explanation is that the total proceeds generated by RGGI surged in 2021 and 2022, relative to historic levels, and states, understandably, may not have been fully prepared to deploy this level of newfound revenue across their existing programs. For example, revenue generated by RGGI in 2022 (\$1.19 billion) was 4.2X greater than the level of revenue generated by the program just three years earlier (\$0.28 billion in 2019). Finally, it's important to note generally that it does take time to move program funding into the market, as funds first have to be 'committed' to a program and project before they are ultimately 'expended' at the time of payment, which can often be tied to when projects are actually completed.

Excluding Virginia, from 2008 - 2022, RGGI has generated \$5.37 billion in proceeds, but only 74% of those proceeds (\$3.96 billion) have been spent over the same time period. Focusing strictly on the 2020-2022 time period, this 'spend rate' is down to 48%, as \$2.01 billion of proceeds was generated in aggregate over the three-year period, but only \$0.96 billion was spent.

Looking ahead, it's imperative to ensure that the proceeds accumulated in 2020, 2021 and 2022 are spent on impactful programs in a timely manner, and this may require additional agency resourcing to be able to process a greater volume of proceeds and investments each year. Investing in energy efficiency sooner rather than later is crucial, particularly when this investment is concentrated on EJ communities, as it leads to more immediate benefits being deployed to residents and participating RGGI states. Optimizing spending strategies is essential to maximizing the impact of RGGI proceeds in combating climate change and advancing equitable outcomes.

As illustrated by Figure 6 below, the proceeds spending rate in a given year can fluctuate rather dramatically from year to year (e.g., Maryland, New York) and overall state-level spending rates range from consistently low (e.g., New Jersey) to consistently high (e.g., New Hampshire, Vermont).

180% 167% 2020 2021 2022 160% 140% % TOTAL SPENDING 120% 101% 100% 100% 99% 100% 78% 80% 63% 54% 60% 40% 20% СТ DE MA MD ME NH NJ NY RI VT Acadia Source: Acadia Center analysis of data from RGGI, Inc.

Figure 6. State-Level Percent of RGGI Proceeds Generated in Given Year That Were Spent in That Year: 2020-2022

While it is difficult to determine the core underlying reasons behind these trends – and the reasons likely vary on a state-by-state basis - it highlights the inconsistency in proceeds spending patterns across state and the large swings in proceeds spendings within states across years. State-level spending behaviors are likely influenced by factors such as state-specific priorities and program coordination, states' share of project-based investments vs. direct bill assistance, ability to quickly ramp up spending in response to increased proceeds revenue, and the residual impacts of the COVID-19 pandemic on budgetary planning and execution, among other factors.

GHG Emission Reduction Impact of RGGI Proceeds Spending

Acadia Center leveraged available data from the RGGI, Inc. Proceeds Reports to answer two key questions related to the GHG reduction impacts of RGGI proceeds investments:

- 1) On a year-to-year basis, what percent of overall RGGI proceeds are allocated to "emission reduction initiatives"? As defined here, emission reduction initiatives refer to proceed spending in the categories of Energy Efficiency, Clean & Renewable Energy, GHG Abatement, and Beneficial Electrification. This term excludes proceed spending on Direct Bill Assistance, Administration, and RGGI, Inc.
- 2) On a year-to-year basis, what is the cost-effectiveness of these emission reduction initiatives in terms of RGGI proceeds dollars spent per lifetime xiv short ton of CO₂ avoided? The lifetime CO₂ emission avoided data used by Acadia Center in this analysis was taken directly from the RGGI Annual Proceeds reports and was not derived from independent analysis by Acadia Center.

Figure 7 below summarizes these findings.

Figure 7. Reported CO₂ Lifetime Savings per Dollar of Proceeds Spent on Emission Reduction Initiatives and % of Total Proceeds Spending Allocated to Emission Reduction Initiatives: 2015-2022

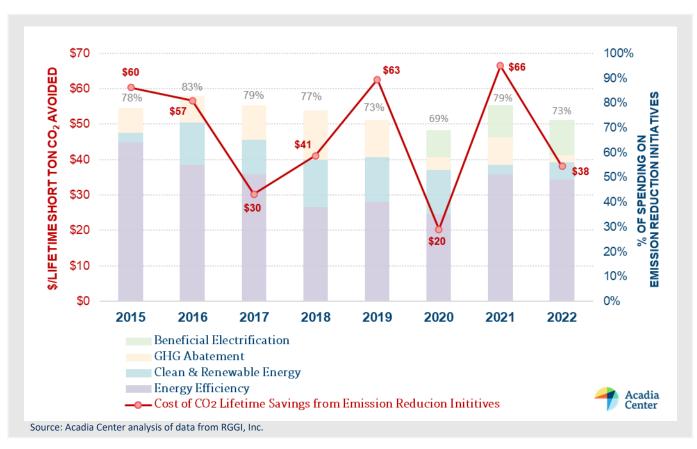


Figure 7 above illustrates that the percentage of total RGGI proceed spending allocated to emission reduction initiatives has remained relatively stable (69% - 83%) over the 8-year period. Simultaneously, Figure 7 shows that the \$/ton of lifetime CO₂ emission reductions achieved by this proceed spending has fluctuated significantly (\$20-\$66/ton CO₂ avoided), with some impacts of COVID-19 likely showing up in 2020 results. However, given the available data, it is difficult to fully discern what is driving this fluctuation in emission reduction cost-effectiveness, highlighting the need for more granular data to be made available to better understand the overall effectiveness of proceeds spending, both at an aggregated level and state level.

This type of information could be used to determine the relative cost-effectiveness of programs supported by RGGI proceeds and potentially inform more efficient spending of funds. Notably, if more granular data was available, this type of analysis could extend beyond just emission reduction cost-effectiveness and evaluate the effectiveness of investments in delivering other benefits (e.g., air quality improvements). More granular benefits data (e.g. fuel savings by fuel type) would also provide valuable insights into the specific impacts of proceeds investments and help to facilitate informed decision-making.

Part 1 - Recommendations for RGGI Proceeds Investment:

- Establish a requirement that a minimum of 40%-50% of RGGI proceeds be invested in EJ and other underserved communities: This recommendation aims to ensure a substantial and consistent spending of RGGI funds to EJ and underserved communities. Setting a fixed percentage, such as 40%-50%, for these investments will provide stability and prevent the funds from being diverted to other purposes, even if other RGGI funds are reallocated. This approach helps to guarantee that the most vulnerable communities receive a significant share of the proceeds, supporting their needs and addressing historical inequities.
- Clearly articulate how EJ communities are being defined across all RGGI states: It is essential to standardize and clearly communicate the criteria used to define EJ communities across the RGGI states, as emphasized by the Acadia Center's 2023 RGGI Report. By establishing a consistent definition, stakeholders can better understand and assess the impact of investments, ensuring that resources are directed to the communities most in need. This clarity will also enhance transparency and accountability in the spending process.
- Invest in energy efficiency and other clean energy measures as soon as possible: To maximize the benefits of RGGI proceeds, it is crucial to invest in energy efficiency and clean energy initiatives promptly. Avoiding lengthy delays between auction revenues and actual investments will help secure higher lifetime energy and emissions savings. Early investment also prevents missed opportunities for immediate improvements in energy performance and reductions in greenhouse gas emissions.
- Establish robust public comment periods on spending plans: Implementing extensive public comment periods for spending plans will facilitate community engagement and input. This process allows stakeholders, including local residents and advocacy groups, to provide feedback and contribute to more informed and equitable investment decisions. By incorporating diverse perspectives, states can better address the needs of their communities and enhance the overall effectiveness of their funding strategies.
- Allocate unprecedented high auction proceeds towards environmental justice and equity **priorities**: Given the potential influx of proceeds from unusually high auction prices, it is recommended that states prioritize spending these funds on EJ and equity initiatives. By focusing on these areas, states can address pressing needs and leverage the opportunity to make significant advancements in social and environmental equity, ensuring that the benefits of RGGI proceeds are equitably distributed and aligned with broader policy goals.
- **Timeliness of RGGI proceeds reporting:** It's important to highlight that the timeliness of the proceed spending reporting by RGGI, Inc. remains a point of concern, underscoring the need for enhanced transparency and accountability in funding matters. For example, as of September 2024, the most recent report on proceeds spending provided by RGGI, Inc. covers calendar year 2022. Timely reporting not only enhances stakeholders' understanding of resource allocation but also fosters trust and confidence in the integrity of RGGI's financial management practices.

Part 2 - Analysis of Proceeds Spending Informed by State Agency Reporting on RGGI Funds

Evaluation of Transparency Levels

RGGI, Inc. reports are not the only source of information related to state-level spending of RGGI funds. Some states also produce their own detailed reports on RGGI proceeds spending, separate from those published by RGGI itself. State-level reports have the capacity to provide a more detailed and granular understanding of how funds are being allocated within each state, allowing for a more detailed analysis of state-level spending by category and recipient type. These state-level reports can also follow reporting timelines determined by state agencies, which in some cases can be timelier than RGGI, Inc. reports, which often suffer from a reporting time lag.

State reports also offer a mechanism for accountability and transparency at a more local level, enabling stakeholders and the public to track the flow of funds and assess whether they are being used effectively to achieve policy goals. Comparison of multiple state-level reports also provides an opportunity to highlight best practices and potential areas of improvement across the ten RGGI states. By having comprehensive and detailed spending reports at both the state and regional levels, we can ensure that RGGI proceeds are being utilized efficiently, equitably, and in alignment with the overarching objectives of reducing emissions and advancing environmental justice.

Table 2 below represents the summary results of an Acadia Center literature review of state-level RGGI reports, specifically answering four key questions:

- 1) Does the state regularly issue its own yearly reports on RGGI proceeds spending within the state?
- 2) If yes to #1, are there categories of reported RGGI proceeds spending that are categorized in the statelevel report as EJ spending?
- 3) If yes to #2, do the state-level reports communicate the percentage of overall RGGI proceeds spending being allocated to these EJ categories?
- 4) Separately, does the state provide a public comment process that enables stakeholders to weigh in on the allocation of RGGI proceeds spending?

Table 2. RGGI Proceeds Transparency and Equity Assessment: State-Level Insights

| State | Regular Annual State Reports on Proceeds Spending | Reported EJ Spending Categories | Reported % of Proceeds Explicitly to Equity and EJ | Public Comment on Proceed Allocations |
|-------|---|---|---|--|
| CT | No yearly report ^{xv} | - | - | None |
| DE | No yearly report | - | - | None |
| ME | RGGI Annual Report (2020) | 1. EE Low Income Initiatives 2. Rate Relief Fund | 14% | None |
| MD | Strategic Energy Investment Fund Report (2022) | 1. LMI EE Grant Program 2. Low Income Solar Grant | - | None |
| MA | No yearly report | - | - | None |
| NH | RGGI Annual Report to Legislature (2022) | 1.Low Income Efficiency and Weatherization 2. Direct Bill Assistance | 1.05% towards EE LMI and Weatherization and 93% Direct Bill Assistance in 2022 ^{xvi} | None |
| NJ | RGGI Strategic Funding Plan (2023) and Funding Dashboard | Promote Blue Carbon in Coastal Habitats Enhance Forests and Urban Forests Catalyze Clean and Equitable Transportation | 93% | Public Comment Period for each 3- year plan |
| NY | New York State Regional Greenhouse Gas Initiative-Funded Programs by NYSERDA (2023) | 1. Residential PV Plus Storage 2. Community Heat Pump Systems 3. EmPower Plus 4. Disadvantaged Communities Schools/ Buildings 5. Multifamily Low Carbon Capital Planning 6. Electric Vehicle/Charge NY 7. Equity and Climate Transformation Research 8. Community Clean Energy 9. Healthy New Home Design & Construction Challenge 10. Clean Energy Workforce Development | 43% Total for post-2019/post CLCPA RGGI commitments ^{xvii} | Yearly stakeholder meeting on draft RGGI Operating Plan, w/ opportunity for public comments xviii |
| RI | RGGI Plan Documents (2023) | Residential LMI Solar Grant Agricultural Energy Grant Program Support the installation and operation of Air-Source Heat Pumps | 31% | Yearly Public Comments about the year's investments plan |
| VT | RGGI Annual Report (2022) | - | - | None |
| VA | No yearly report ^{xix} | - | | None |

Notably, Connecticut, Delaware, and Massachusetts lack reports on RGGI spending, suggesting a need for enhanced transparency in these states. Maryland does not have a specific report on RGGI spending, but all RGGI proceeds are directed to the Strategic Energy Investment Fund (SEIF) and according to the 2022 report, these funds are responsible for 65% of total SEIF funding. This highlights the importance of comprehensive reporting mechanisms to ensure accountability and transparency in the allocation of RGGI proceeds across participating states.

Five of the seven states that clearly articulate EJ spending categories include a category specifically targeted at low-income energy efficiency improvements. While Acadia Center supports these efforts, the level of funding allocated to these efforts remains concerningly low in some states (e.g., New Hampshire and Maine where these investment categories account for 15% or less of total RGGI proceeds spending).

New Jersey stands out for its commendable transparency efforts in RGGI proceed allocation. The New Jersey Department of Environmental Protection's (DEP's) public New Jersey RGGI Climate Investments Dashboard includes georeferenced investments categorized based on whether they target EJ or Non-EJ communities. This innovative approach not only enhances transparency but also facilitates accountability by providing a clear understanding of how RGGI funds are being invested to address EJ concerns. Additionally, New Jersey stands out as a model for effective engagement and community outreach in RGGI investment decisions. The state implemented robust outreach strategies, including public comment periods, community forums, and stakeholder engagement initiatives. These types of efforts can help to ensure that the public has a voice in determining how RGGI proceeds are allocated, including consideration of targeted investments in EJ communities.

Through their RGGI Climate Investments Dashboard and their RGGI Strategic Funding Plans, New Jersey also clearly communicates plans for RGGI proceeds spending, both at a higher investment sector and initiative level (Figure 8 below) and at a more granular level breaking out funding dedicated to individual projects (Figure 9 below). It's worth noting that both Figures 8 and 9 below include "committed" funding that has not necessarily been spent yet, potentially explaining New Jersey's very low percentages of RGGI proceeds generated in a given year that were spent in that year from 2020-2022, as reported by RGGI Inc. and summarized in in Figure 6 above.

Figure 8: New Jersey RGGI Strategic Funding Plan Funding and Investment Summary for 2020-2022 by Investment Sector and Initiative



Figure 9: New Jersey RGGI Strategic Funding Plan Appendix B-2: Projects Selected for Funding 2020-2022 Example Screenshot

| JDEP Medium and Heavy-Duty Electric Vehicle Grant Program | | | | | | | | | |
|---|-----------------------|---|------------------------|-------------------|----------------|-------------------|------------------|---------------------------------------|---|
| Receiving Entity | Location | Project Description | RGGI Funding Amount | Funding Agency | Type of Aid | Project Status | Year Selected | Est. Lifetime MTCO₂e Avoided | Est. Lifetime MTCO ₂ e Sequestered |
| Town of West New York | WEST NEW YORK TOWN | 2 electric garbage trucks, 2 electric shuttle buses | \$1,920,198 | BPU** | Grant | Selected | 2021 | 4,456.9 | N/A |
| Kean University | UNION TWP | 7 electric shuttle buses | \$1,950,000 | BPU** | Grant | Awarded | 2021 | 2,218.1 | N/A |
| Belleville Board of Education | BELLEVILLE TWP | 2 electric school buses | \$814,604 | BPU** | Grant | Awarded | 2021 | 769.9 | N/A |
| Township of West Orange | WEST ORANGE TWP | 2 electric shuttle buses | \$800,000 | BPU** | Grant | Selected | 2021 | 639.6 | N/A |
| Township of Woodbridge | WOODBRIDGE TWP | 2 electric shuttle buses | \$1,291,880 | BPU** | Grant | Awarded | 2021 | 2,509.7 | N/A |

Figure 9 above represents one screenshot from New Jersey's RGGI Strategic Funding Plan Appendix B-2, but that section of the report includes 14 pages of tables listing out nearly 200 individual projects funded by RGGI Proceeds. The New Jersey Department of Environmental Protection's RGGI Climate Investments Dashboard also offers more granular details on the specifics of these investments. Notably, all spending is georeferenced, providing a transparent view of where investments are directed. For instance, under Clean Transportation, funds are allocated to initiatives such as electrifying bus fleets in low-income communities and schools. Exploring the interactive map reveals detailed statistics about the communities benefiting from these clean

fleets, further emphasizing the targeted nature of the investments and their positive impact on disadvantaged areas.

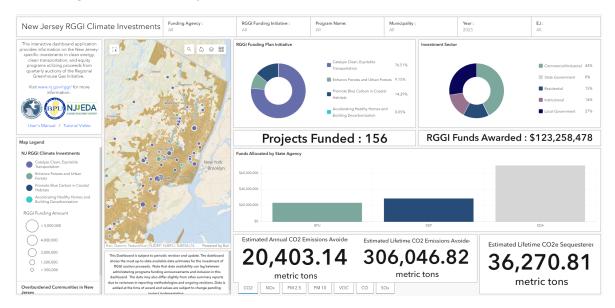


Figure 10: New Jersey RGGI 2023 Dashboard and Interactive Map Screenshot

This level of reporting provided by New Jersey should serve as a model for other states. If all RGGI participating states committed to this level of proceeds investment reporting, stakeholders would have a much clearer understanding of where RGGI proceeds are being invested and who is benefiting from these investments. This approach would enhance transparency and empower stakeholders to drive equitable and impactful climate action initiatives.

State-by-State Assessment: EJ Investment Requirements and EJ **Definitions**

As discussed above, the most recent RGGI, Inc. Proceeds Report including both 1) An estimate of total RGGI proceeds being allocated towards EJ and equity investments and 2) A high-level breakdown of these investments by category and recipient type is definitely a step in the right direction. However, state-level reporting on EJ and equity investments is inconsistent and often lacks enough detail for stakeholders to critically examine the specific investments being prioritized. RGGI participating states must address, as a priority, the significant gap in the collection and dissemination of information that is needed to ascertain the amount of RGGI funding being invested in EJ communities. States must commit, through regulations or legislation, to direct RGGI funds towards investment in EJ communities and collect and make publicly available data confirming that these goals have been met. Without states taking this first, critical step related to data transparency, it is extremely challenging to comprehensively evaluate the extent to which RGGI funds are currently allocated to EJ communities and the ultimate effectiveness of the programs funded by those RGGI proceeds.

While several RGGI states allocate significant level of proceeds to various efforts with benefits that flow to EJ communities, as demonstrated in Table 2 above, New York is the lone RGGI participating state that by law requires a set percentage of total RGGI proceeds to be allocated to qualifying "disadvantaged communities" (a term defined by New York law). Without such laws in place, even states that currently deploy a large percentage of RGGI proceeds to support EJ-focused initiatives run the risk of future funding priorities shifting away from the current focus.

The CO₂ Allowance Auction Program regulations implemented by the New York State Energy Research & Development Authority (NYSERDA) reflect the provision of New York's Climate Leadership and Community Protection Act "that 40%, and no less than 35%, of the overall benefits from the investment of the CO₂ Allowance Auctions proceeds" will be realized in disadvantaged communities. ** To put this in context, in 2022, New York generated over \$287 million in RGGI proceeds and 40% of that figure would be just short of \$115 million. xxi

RGGI states employ different definitions of communities that have been disproportionately burdened by the fossil fuel economy and are targeted for policies to improve environmental conditions, see Table 3 below. In the Third Program Review, ideally, states would arrive at a common definition of an EJ community—if the state hasn't set its own definition—and establish a minimum allocation of proceeds for investment in EJ communities. Based on stakeholder discussions as of fall 2024, it does not appear likely that Third Program Review will address any equity issues, but even if states maintain differing definitions, they could agree on common concepts such as how to identify and define the populations targeted for direct investment, relative to current trends.

The states should be able to arrive at a commitment to levels of investment in these communities, and a standardized way to collect information on how proceeds are spent. Being able to track the impacts of RGGI in these targeted communities in a consistent manner is necessary even if the exact set of communities varies between states. Doing so would allow RGGI to report on spending at a regional level with the granularity of data necessary to identify whether proceeds are equitably invested in the communities targeted by the states.

To create its recommendation regarding the appropriate minimum allocation of proceeds for investment in EJ communities, Acadia Center looked to the stakeholder comments of the Northeast Regional members of the Climate Justice Alliance to RGGI of December 3, 2021. Specifically, that group of advocates recommended that:

"For RGGI to come close to being equitable, the level of investment should be at least proportional to the percentage of the population that meets the definition of 'overburdened and underserved' in each state. To ensure that investments actually reach the populations most in need of this funding, we request that the model rule specify that a minimum of 40%-50% of investments, not benefits from those investments, be allocated to our communities. This 40% mandate is in line with state and federal precedent. While RGGI revenue investments are decided by the individual participating states, there should be regional guidance to ensure there is equity across the region." xxiii

Many of the RGGI participating states have an established definition of environmental justice, distressed, overburdened, or disadvantaged communities – a critical first step in identifying potential areas for the allocation of RGGI funds to promote equity within the program. Table 3 provides a comprehensive overview of these definitions across RGGI states.

Table 3. Examination of EJ Community Definitions in RGGI Participating States

| State | Source | Definitions |
|-------|---|--|
| СТ | DEEP Environmental Justice and Mapping Tool | According to C.G.S. Section 32-9p, a "distressed municipality" should be based on "high unemployment and poverty, aging housing stock and low or declining rates of growth in job creation, population, and per capita income." The Department of Economic and Community Development (DECD) additionally includes 1) Level of per capita income, 2) % of population with high school degree and higher and 3) Per Capita Adjusted Equalized Net Grand List (AENGL) to arrive at its ranking, a measure of city or town wealth that is updated annually. |
| DE | <u>DNREC</u> <u>Environmental Justice</u> <u>Data and Mapping</u> | The Department of Natural Resources and Environmental Control (DNREC) has identified "Equity Focus Areas", defined as "Areas in Delaware that have higher minority populations living in poverty as compared to State averages." Additionally, DNREC has identified Limited English Neighborhoods and utilized the EJScreen Index to identify communities disproportionately impacted by twelve key environmental indicators. |
| ME | Maine Legislature Document No. 1621: An Act Regarding Environmental Justice | The Maine Legislature is currently in the process of developing a definition for "frontline communities." As currently drafted, this term refers to "those people and communities that experience the consequences of climate change first and to a greater degree than other people and communities." |
| MD | Department of the Environment - EJ Screening and Statute 1-701 | Maryland state law defines "overburdened communities" as "any census tract in which three or more of the following environmental health indicators are above the 75 th percentile statewide" and the full list of these 21 indicators can be found on the Maryland Department of Environment's Environmental Justice Screening Tool site. Additionally, state law defines "underserved communities" as "any census tract in which, according to the most recent U.S. Census Bureau Survey: 1. At least 25% of the residents qualify as low income; 2. At least 50% of the residents identify as nonwhite; or 3. At least 15% of the residents have limited English proficiency." |
| MA | OEJE Environmental Justice and Mapping Tool | The Massachusetts Office of Environmental Justice and Equity (OEJE) defines an "environmental justice population" as a neighborhood where one or more of the following criteria are true: 1. The annual median household income is 65 percent or less of the statewide annual median household income 2. minorities make up 40 percent or more of the population. 3. 25 percent or more of households identify as speaking English less than "very well". 4. Minorities make up 25 percent or more of the population and the annual median household income of the municipality in which the neighborhood is located does not exceed 150 percent of the statewide annual median household income. |
| NH | Department of Environmental Services Statement on Environmental Justice | The New Hampshire Department of Environment Services (NHDES) has not developed its own definition of an "overburdened community" and refers to the federal definition of environmental justice developed by the US EPA, stating "In the absence of state laws requiring consideration of EJ, NHDES will follow expanding federal EJ requirements and guidance." |

| NJ | P.L. 2020, Chapter 92 and NJ DEP EJ Map | P.L. 2020, Chapter 92 defines an "Overburdened community" as "any census block group, as determined in accordance with the most recent United States Census, in which: (1) at least 35 percent of the households qualify as low-income households; (2) at least 40 percent of the residents identify as minority or as members of a State recognized tribal community; or (3) at least 40 percent of the households have limited English proficiency." The law goes on to specify that, "The department shall update the list of overburdened communities at least once every two years." |
|----|--|---|
| NY | NYS Climate Act Mapping Tool and DAC Criteria | New York's Climate Act charged the Climate Justice Working Group (CJWG) with the development of criteria to identify "disadvantaged communities" (DACs) in the state. "The CJWG used 45 indicators to identify 35% of New York as DACsThe criteria include multiple indicators that represent the environmental burdens or climate change risks within a community, or population characteristics and health vulnerabilities that can contribute to more severe adverse effects of climate change." "On March 27, 2023 the Climate Justice Working Group voted to approve and adopt the final disadvantaged community criteria: 1. Establishment of specific census tracks (geographic areas): each census tract is scored based on relative burden, risk, vulnerability, or sensitivity. Specifically, the percentile ranks of the indicators for each census tract are combined to produce a value that measures a census tract's relative level of 'Environmental Burdens and Climate Change Risks,' as well as 'Population Characteristics and Health Vulnerabilities' relative to other tracts. Tracts with higher scores relative to (a) other tracts statewide; or (b) their region (New York City or Rest of State) were identified as DACs. 2. Households with annual income at or below 60% of State Median Income or are otherwise categorically eligible for low-income programs (i.e. Home Energy Assistance Program), are included in the criteria. These households can be located anywhere in the State." **XXIIII** **TACK** * |
| RI | Rhode Island Department of Environmental Management - Environmental Justice Policy | The Rhode Island Department of Environmental Management's (RIDEM's) Environmental Justice Policy defines an "Environmental Justice Focus Area" as "a census tract that meets one or more of the following criteria: 1. Annual median household income is not more than 65% of the statewide annual median household income; 2. Minority population is equal to or greater than 40% of the population; 3. 25% or more of the households lack English language proficiency; 4. Minorities comprise 25% or more of the population and the annual median household income of the municipality in the proposed area does not exceed 150% of the statewide annual median household income." |
| VT | Vermont General Assembly Act No. 154 | Vermont's General Assembly Act No. 154 defines an "Environmental justice focus population" as "any census block group in which: (A) the annual median household income is not more than 80 percent of the State median household income; (B) Persons of Color and Indigenous Peoples comprise at least six percent or more of the population; or (C) at least one percent or more of households have limited English proficiency." Vermont is also actively developing a mapping tool that will identify environmental justice focus populations, with an expected release in 2025. |
| VA | Article 12. Virginia Environmental Justice Act | Virgnia's Article 12. Virginia Environmental Justice Act defines an "Environmental justice community" as "any low-income community or community of color." |

Table 3 above provides a comprehensive overview of EJ definitions across RGGI states, serving as a critical first step in identifying potential areas for the allocation of RGGI funds to promote equity within the program. It also highlights the varying degrees of specificity and comprehensiveness in EJ definitions adopted by participating states. Notably, Maine and New Hampshire currently lack formal EJ definitions. Maine's definition remains ambiguous, as it was included in legislation related to integrated grid planning xxiv but has not been officially adopted by the Equity Subcommittee. xxv Despite efforts such as the passage of the bills like in Maine, which aimed to incorporate equity considerations into decision-making processes, delays in implementation have hindered the enactment of specific EJ definitions.

Among the RGGI participating states, New York and Maryland stand out for having the most categories of indicators, with NY having 45 categories and MD having 21. The sheer number of indicators in the two states suggests a more comprehensive definition of "disadvantaged" (NY) and "overburdened" (MD) communities. Establishing these types of clear and robust EJ definitions tailored to the policymaking and demographic context of individual states is essential in guiding equitable allocation of funds and promoting environmental iustice.

Recommendations for Enhancing Impact delivered to EJ communities

- Clearly articulate how EJ communities are being defined.
- Establish a requirement that a minimum of 40%-50% of RGGI proceeds are invested in EJ and other underserved communities, setting a value that does not change even if other RGGI funds are raided.
- Evaluate how RGGI proceeds are being spent and adjust programs as necessary to ensure their minimum percentage allocation is achieved.
- Establish a requirement that members of EJ communities have meaningful participation in decisions regarding programs for investment.
- Transparently track whether programs identified as providing EJ community investments are meeting their quantitative metrics (e.g., energy bill savings, air quality improvements, workforce development trainings completed, etc.) and adjust programs as necessary to ensure the minimum percentage investment is achieved.
- Centralize all this information in a frequently updated public-facing report or dashboard that is easily accessible and understandable to a wide variety of stakeholders and utilizes standardized information, allowing aggregation of data across the RGGI region.

Part 3 – Analysis of RGGI Proceeds Invested into Energy Efficiency Informed by RGGI, Inc. and State Agency Reporting

RGGI investments in energy efficiency are extremely important in the fight against climate change and the transition to a sustainable energy future. Energy efficiency initiatives supported by RGGI funds play a crucial role in reducing consumer energy bills, reducing GHG emissions, improving indoor air quality and associated health outcomes, and improving thermal comfort of building occupants. In many cases, RGGI investments in energy efficiency prioritize initiatives that target disadvantaged communities, thereby addressing EJ concerns and promoting equitable access to clean energy solutions.

Figure 11 below shows the percentage of total RGGI funds by state allocated to energy efficiency from 2020-2022 using data from RGGI, Inc.'s allocation reports. This breakdown allows for an understanding of each state's prioritization of energy efficiency in recent years.

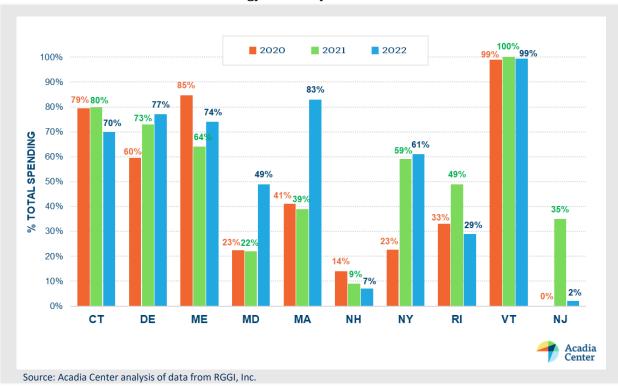


Figure 11. State-by-State Percent of Overall RGGI Annual RGGI Proceeds Spending to Energy Efficiency: 2020-2022xxvi

The above graph highlights both the extreme year-to-year fluctuations in energy efficiency allocations in some states (e.g. New York 2020-2021 or Massachusetts 2021-2022) and, conversely, the relatively stable level of proceeds allocation in others (e.g., Vermont). Connecticut, Delaware, Maine, and Vermont are the four states that consistently allocated at least half of their RGGI proceeds towards energy efficiency, while New Hampshire is the only state that did not reach a 30% energy efficiency proceed allocation level during the three-year period examined. Over the 8-year period energy efficiency accounted for 50% of total RGGI proceeds spending and 64% of the total lifetime CO₂ emission reductions from RGGI proceeds investments.

State-by-State Assessment: State Agency Quality of Reporting on Use of RGGI Proceeds in Energy Efficiency Programs

In addition to annual proceeds reports released by RGGI, Inc., another source of data for understanding how RGGI states are deploying RGGI proceeds in the funding of energy efficiency efforts is the state-level energy efficiency program reports. These reports play an important role in assessing the allocation and utilization of funds, and the success of the energy efficiency programs in the state. Table 4 below examines RGGI state's

energy efficiency reports, aiming to discern the percentage of each state's EE program budget derived from RGGI contributions.

Table 4. State-by-State Percent of Overall Energy Efficiency Program Budget Funded by RGGI Proceeds

| State | Agency & Report | RGGI mentioned in EE Reports: Yes or No | Percent of Total EE Budget from RGGI |
|-------|---|--|--|
| CT | EE Board Programs and Operations Report (2023) | Yes | 13% |
| DE | Energize Delaware Annual Report (2021-2022) | Yes | 64% |
| ME | Efficiency Maine Annual Report (FY 2023) | Yes | 27% |
| MD | Maryland Energy Administration Operating Budget (FY 2025) | Yes | 35% |
| MA | Mass Save Three-Year Energy Efficiency Plan (2022-2024) | Yes | 2% ^{xxvii} |
| NH | New Hampshire Statewide Energy Efficiency Plan (2021-2023) | Yes | 3% |
| NJ | RGGI-funded energy efficiency spending is not captured in financial and energy savings report produced by the New Jersey Board of Public Utilities xxviii | - | - |
| NY | No centralized report summarizing all RGGI EE spending xxix | - | ~25% |
| RI | RGGI-funded energy efficiency spending is not captured in the annual report produced by the Office of Energy Resources xxx | - | - |
| VT | Efficiency Vermont Triennial Plan (2024–2026) | - | - |
| VA | EE Board Programs and Operations Report (2023) | Yes | - |

Governance Structures and the Role of Equity Advisory Boards

RGGI operates within a complex governance structure that involves collaboration between participating states, RGGI, Inc. and various advisory bodies. The recent commitments of participating states to advance principles of equity and EJ should be fully integrated into the existing RGGI governance structure. Acadia Center is interested in further examination of the governance structures within RGGI, focusing on the role of the Equity Advisory Boards established by participating states. The document "Environmental Justice and Equity Advisory Boards of the Participating RGGI States" published by RGGI, Inc. for the Third program review provides a comprehensive list of the Equity Advisory Boards in each RGGI State. These advisory boards could serve as a channel for community involvement and public engagement and hold state agencies accountable for incorporating EJ priorities into RGGI proceeds spending decisions.

Transparency and Accountability

While the establishment of these Equity Advisory Boards shows a commitment to transparency and equity, there are questions about their recommendations and outcomes. Despite the publication of a list of advisory boards by RGGI, Inc., there has been no indication of concrete recommendations or actions resulting from their work. This raises questions about the effectiveness of these advisory boards in influencing policy outcomes within RGGI

Recommendations for Enhancing Governance Structures:

To address the current limitations and enhance the effectiveness of governance structures within RGGI, several recommendations are proposed:

- RGGI, Inc. should create a dedicated page or document summarizing recommendations from the Equity Advisory Boards for the Third Program Review. This would increase transparency and accountability by providing stakeholders with insight into the recommendations made by advisory boards.
- Participating states should be encouraged to provide regular updates on the activities and outcomes of their Equity Advisory Boards, even if no specific recommendations are forthcoming. This would ensure ongoing communication and engagement with impacted communities and stakeholders.
- RGGI, Inc. could facilitate knowledge-sharing and best practices among participating states regarding the establishment and operation of Equity Advisory Boards. This would help ensure consistency and effectiveness across jurisdictions.

Conclusions

The RGGI states have experienced substantial benefits from RGGI and RGGI proceed investments since 2008, the year the program launched. RGGI has significantly aided participating states in achieving their goals related to reduction in GHG emissions from the power sector, while simultaneously supporting economic growth. Because RGGI targets reducing GHG emissions from power plants, it can simultaneously be an effective vehicle to deliver reductions in criteria air pollutants and better outcomes to communities located near power plants. Funds generated by quarterly RGGI auctions provide a key opportunity for states to make targeted investments that advance clean energy goals while simultaneously benefiting the most disadvantaged communities. The findings in this report show the past trends in proceed allocation and give recommendations for areas for improvement in the process:

Availability of Funds: As of the end of 2022, Acadia Center found that there are significant levels of funds available for investment in emission reduction initiatives, which should be moved into the market swiftly to deliver benefits to residents and businesses.

- Effectiveness of Investments: RGGI has demonstrated that emission reductions can be achieved not only through the cap on power sector emissions but also through investments in carbon-reducing initiatives, particularly in energy efficiency.
- Effectiveness of Investments in EJ: There's a large need to evaluate the impact of RGGI investments on EJ communities, get input from the communities and make these investments a priority. To ensure a meaningful commitment to equity, we recommend at least 40% of RGGI proceeds be allocated towards EJ initiatives.
- **Enhancing Reporting Practices**: While RGGI reporting provides valuable insights, there is room for improvement in terms of timeliness, transparency, and a focus on equity.
- EJ Considerations: It is encouraging to note that most states have definitions for EJ communities, but there is variability in specificity across jurisdictions.
- Transparency and Accountability: State-level reporting is essential to increase transparency and provide stakeholders with a clear understanding of how RGGI proceeds are being utilized.
- Equity Advisory Boards: RGGI advisory boards could have more visibility and engagement with recommendations and best practices. These recommendations should be shared with all stakeholders and state agencies involved.

As the RGGI states review the program in this Third Program Review, we encourage the states and RGGI, Inc. to do more to ensure the program proceeds maximize the program's impact in reducing climate emissions and provide direct benefits to the communities most damaged by the health and economic harms of a fossil fuel economy.

End Notes

- vii Investments of Proceeds, RGGI, Inc. Reports available for the years 2015 through 2022 provide a comprehensive overview of proceeds distribution and investments across the RGGI member states. https://www.rggi.org/investments/proceeds-investments.
- viii For further insights into Acadia Center's research and analysis on environmental justice and equity considerations within the RGGI: https://acadiacenter.wpenginepowered.com/wp-content/uploads/2023/04/AC RGGI 2023 Layout R6.pdf
- ix The definitions of investment categories included in the table were directly copied from RGGI's proceeds reports to provide clarity on how funds are allocated. While these definitions serve as a useful reference, it is essential to critique their applicability and relevance in the current context. For instance, the emphasis on funding for traditional energy efficiency measures, such as fluorescent light bulbs, may not align with the evolving priorities of modern energy efficiency initiatives.
- *These definitions are directly sourced from The Investment of RGGI Proceeds in 2022 report. However, it's important to note that the language may be outdated and in need of revision. https://www.rggi.org/sites/default/files/Uploads/Proceeds/RGGI Proceeds Report 2022.pdf
- xi According to RGGI, Inc, the "Admin" category includes costs associated with administrative overhead expenses for all RGGI-funded programs, including both outsourced and in-house costs, while the "RGGI, Inc." supports and facilitates the implantation of the CO2 trading programs.
- xii Since 2016, RGGI Inc. has included in their annual Investment of RGGI Proceeds reports two pie charts (Charts 2 and 3) breaking out RGGI investments by category (e.g., "Energy Efficiency") and by recipient type (e.g., "Low-Income Rate Relief & Efficiency"). The 2021 Investment of RGGI Proceeds report was the first to include the recipient type description of "Low-Income Rate Relief & Efficiency". In prior years, this recipient type description was simply "Low-Income". In Figure 4, Acadia Center is making the assumption that the "Low-Income" recipient type (2018-2020 reports) and "Low-Income Rate Relief & Efficiency" recipient type (2021-2022 reports) in RGGI Inc.'s

 $^{^{}f i}$ The original ten RGGI states comprised of Connecticut, Delaware, Massachusetts, Maryland, Maine, New Hampshire, New Jersey, New York, Rhode Island, and Vermont. Initially, New Jersey participated in the RGGI program for its first three years but opted out at the conclusion of 2011. However, New Jersey later rejoined RGGI in 2020 and has taken part of the auctions ever since. In 2020, Virginia became a member of RGGI and participated in its first auction in 2021, but as of the start of 2024 Virginia is not participating in RGGI. Pennsylvania also joined RGGI in 2022 but has yet to engage in any auctions. Virginia and Pennsylvania are not factored into our economic analysis. As of 2024, Pennsylvania is unable to participate in RGGI due to a 2023 ruling by the Pennsylvania Commonwealth Court. PA's Governor Shapiro appealed the court's decision and now the appeals are pending before the PA Supreme Court.

 $^{^{}f ii}$ For the purposes of this Report, Acadia Center utilized the term environmental justice community (EJ community) to refer to environmental justice, frontline, and environmentally overburdened communities that have experienced disproportionate harm caused by the impacts of the fossil fuel economy.

iii The Analysis Group. The Economic Impacts of the Regional Greenhouse Gas Initiative on Northeast and Mid-Atlantic States.

iv Recent auction results have shown a significant increase in allowance prices. In the latest auction, held in September 2024, the clearing price for RGGI CO2 allowances reached \$25.75, representing an 85.9% increase compared to the previous year's auction in September of 2023, where allowances were priced at \$13.85. This upward trend in allowance prices reflects heightened demand for emissions allowances as states strengthen their climate goals and commit to more ambitious carbon reduction targets. These increased prices underscore the importance of RGGI as an effective tool for driving investment in clean energy and supporting environmental initiatives across the participating states.

v Regional Greenhouse Gas Initiative Memorandum of Understanding, RGGI, Inc. https://www.rggi.org/sites/default/files/Uploads/Design-Archive/MOU/MOU 12 20 05.pdf

vi The Economic Impacts of the Regional Greenhouse Gas Initiative on Northeast and Mid-Atlantic States, The Analysis Group. https://www.analysisgroup.com/Insights/cases/the-economic-impacts-of-the-regional-greenhouse-gas-initiative-on-northeast-and-on-northeast-anmid-atlantic-states/

Investment of RGGI Proceeds reports both include the cumulative investments in rate relief and energy efficiency directed at low-income residents in RGGI participating states.

- xiii As highlighted in Figure 5, the aggregated percentage of total RRGI revenue spent in a given year excludes revenues allocated to Viriginia for the years 2021 and 2022. This is a result of Virginia RGGI proceeds spending data not being made publicly available for those years. As described in The Investment of RGGI Proceeds in 2022 report, page 4, "While Virginia participated in RGGI from 2021 through 2023, the state was no longer participating during development of this report in 2024, and so VA investments are not reported here. For more information on investment of RGGI proceeds in Virginia, reach out to the VA Department of Environmental Quality."
- xiv Lifetime CO2 savings refers to the cumulative reduction in CO2 emissions over the lifetime of a product. For example, an air-source heat pump water heater running for 15 years.
- xv For more information Connecticut's Office of Legislative Research published a RGGI Auction Proceeds and C&LM Funds report in 2021. https://www.cga.ct.gov/2021/rpt/pdf/2021-R-0184.pdf
- xri 15% of RGGI EE funds go towards Low Income and Weatherization. In New Hampshire, the 2022 RGGI Inc. report indicated that 93% of proceeds (\$40,090,000) were allocated to direct bill assistance, while 7% (\$3,010,000) went to energy efficiency (EE). Legislation states in NH's 2022 RGGI Annual Report to the Legislature stated that it required the Commission to allocate 15% of the EE funds to the lowincome weatherization program, resulting in \$451,500 for low-income EE initiatives (7% x \$3,010,000 x 15%). This allocation represents 1.05% of the total EE spending for the year.
- xvii New York's Regional Greenhouse Gas Initiative Operating Plan Amendment for 2024, Appendix 2. https://www.nyserda.ny.gov/-/media/Project/Nyserda/Files/Researcher- and -Policy makers/Regional-Greenhouse-Gas-Initiative/2024-RGGI-Op-Plander- and -Policy makers/Regional-Greenhouse-- and -Policy makers/Regional-Greenhouse-- and -Policy makers/ReAmendment.pdf
- x^{viii} Information regarding New York's RGGI stakeholder meetings was obtained from documents available on NYSERDA's "RGGI Meeting and Planning Documents" website. https://www.nyserda.ny.gov/About/Funding/Regional-Greenhouse-Gas-Initiative/Useful-**Documents**
- xix Virginia does not have a state agency annual RGGI report available. We attempted to contact the Virginia Department of Environmental Quality (DEQ) for further information on proceeds spending but have not received a response as of the report's publication. However, according to information published by the Viriginia Conservation Network on their "Regional Greenhouse Gas Initiative (RGGI)" website 'The Clean Energy and Community Flood Preparedness Act directs 50% of RGGI revenue to low-income energy efficiency programs, 45% to the CFPF, and 5% to administrative costs." https://vcnva.org/issue/rggi-virginia/
- xx New York's Regional Greenhouse Gas Initiative Operating Plan Amendment for 2022, page 2 https://www.nyserda.ny.gov/-/media/Project/Nyserda/Files/Researcher- and -Policy makers/Regional-Greenhouse-Gas-Initiative/2022-RGGI-Op-Plander- and -Policy makers/Regional-Gas-Initiative/Ago-IniAmendment.pdf
- **xxi** RGGI Inc.'s "Cumulative Allowances and Proceeds" data for New York: https://www.rggi.org/auctions/auction-results
- xxii Northeast Environmental Justice and Climate Justice Region Wide Stakeholder Comments to RGGI, December 3, 2021, page 6. https://www.rggi.org/sites/default/files/Uploads/Program-Review/2021 Comments/Session2/CJA Public Comment 2021-12-03.pdf
- xxiii Definition from NY RGGI Op Plan stakeholder meeting slides (Dec. 2023)
- **xxiv** Maine Legislative Document H.P. 1251, item 3, from the 130th legislative session. https://www.mainelegislature.org/legis/bills/getPDF.asp?paper=HP1251&item=3&snum=130
- xxv Conservation Law Foundation. (n.d.). Maine's Environmental Justice Law. https://www.clf.org/blog/maine-environmental-justice-<u>law</u>/
- xxvi Figure 11 was developed using data provided by RGGI, Inc.'s Proceeds Reports (2020-2022), rather than state-level agency reports, to depict the allocation of funds across different categories.

xxvii The percentage breakdown for Massachusetts is not easily accessible in the available program reporting documents, however, Acadia Center reached out to the MassSave program consultant who calculated that for the planned program budget for 2019-2021 (the most recent years for which this data was readily available) RGGI accounted for approximately 2% of total planned funding sources.

xxviii In 2021, RGGI Inc. reported that New Jersey allocated 35% of its energy efficiency funding to initiatives that were aimed at reducing emissions and promoting clean energy. This included investments in the New Jersey Zero-Emissions Incentive Pilot Program (NJ ZIP), which supports the adoption of zero-emission medium and heavy-duty vehicles. And, funds were directed to the New Jersey Green Fund, a statewide financing mechanism designed to supporting cost-effective projects that leverage private capital.

xxix In New York, NYSERDA (FY 2023-2024) is not the sole administrator of Energy Efficiency (EE) programs; utilities also run significant EE initiatives. It's projected that all program administrators in New York may collectively spend around \$1 billion annually on EE programs. While RGGI funding is separate, if RGGI generates approximately \$250 million annually, it would contribute roughly 25% extra to core EE program budgets.

XXX In 2021, Rhode Island allocated 49% of its RGGI proceeds to energy efficiency initiatives, and 29% in 2022. These investments supported several key energy efficiency programs, including enhanced financial incentives for municipalities to convert streetlights to high-efficiency LED technology, continued funding for the Energy-Savings Trees program, and the advancement of the State Clean Energy Lead by Example program. Additional funding was provided to the Efficient Buildings Fund, which offers long-term financing for energy projects, and programs to support low- and moderate-income customers, such as the Zero Energy for the Ocean State (ZEOS) program.