# REGIONAL GREENHOUSE GAS INITIATIVE STRATEGIC FUNDING FUNDING



DEVELOPMENT AUTHORI



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## **EXECUTIVE SUMMARY**

The RGGI Strategic Funding Plan: Years 2023 through 2025 will support Governor Phil Murphy's commitment to reducing greenhouse gas emissions and vision for New Jersey's clean energy future. The 2023 Plan identifies initiatives that will be funded by RGGI auction proceeds and outlines how these investments will achieve emissions reductions, clean energy goals, and environmental justice priorities over the three-year period from 2023 through 2025. The agencies will sponsor the following funding initiatives:

#### Initiative 1: Accelerate Healthy Homes and Building Decarbonization

- Sponsors: NJBPU and NJEDA
- Description: Funding will accelerate the pace of decarbonization of buildings in the state through investing in projects and programs that promote building electrification, and reduce energy consumption, energy burden, and overall emissions from the building sector, including workforce readiness to build, install, repair, and maintain the technologies critical to meeting these goals. This initiative will also support the replacement, repair, and retrofit of refrigerants in chillers and refrigeration systems, phasing out the use of highly warming refrigerants.

#### Initiative 2: Catalyze Clean, Equitable Transportation

- Sponsors: NJDEP, NJBPU, NJEDA
- Description: The agencies will continue to drive the transition to electric transportation throughout the State, with a focus on electrifying light, medium and heavy-duty vehicles benefiting environmental justice communities. The agencies will also utilize funding to grow New Jersey's electric vehicle charging infrastructure.

#### Initiative 3: Strengthen New Jersey's Forests & Initiative 4: Promote Blue Carbon in Coastal Habitats

- Sponsor: NJDEP
- Description: These two initiatives will focus on protecting and enhancing the State's tidal marshes and forests to ensure their continued role in sequestering carbon. Funding will be dedicated to projects and programs that support conservation and restoration of both private and public lands.

The New Jersey Department of Environmental Protection (NJDEP), the New Jersey Economic Development Authority (NJEDA), and the New Jersey Board of Public Utilities (NJBPU), are designated by law to distribute RGGI proceeds. These state agencies must invest the proceeds in projects and programs that comply with the statutory requirements of the Global Warming Solutions Fund Act and the NJDEP's Global Warming Solutions Fund Rule. The 2023 Plan reflects public feedback received through various outreach channels and mechanisms during the plan's development which included: an online feedback survey, an online comment form, a new digital prioritization tool, four public webinars, and a hybrid, in-person public meeting.

## **INTRODUCTION AND BACKGROUND**

New Jersey will invest its Regional Greenhouse Gas Initiative (RGGI) auction proceeds in programs and projects designed to help meet the State's climate, clean energy, and environmental justice goals. The RGGI Strategic Funding Plan: Years 2023 through 2025 (hereafter referred to as the Plan or 2023 Plan) will support Governor Phil Murphy's commitment to reducing greenhouse gas emissions and vision for New Jersey's clean energy future. The Plan identifies initiatives that will be funded by RGGI auction proceeds and outlines how these investments achieve emissions reductions, clean energy goals, and environmental justice priorities. While supporting transformational changes in energy systems that are necessary to avoid further adverse impacts from climate change, these strategic investments will also support New Jersey communities that have been disproportionately impacted by pollution, improving their environmental conditions, and ensuring that they have equal access to the clean energy economy.

Since the publication of the previous plan, continued actions by the state of New Jersey and the United States government, such as the Inflation Reduction Act, have accelerated progress on greenhouse gas reduction. New Jersey's investment of RGGI auction proceeds will drive State action to complement federal investment. The initiatives in this Plan are a roadmap for reducing greenhouse gas emissions, improving health outcomes, creating jobs, and accelerating New Jersey's green economy. Collectively these efforts are bolstering the development of sustainable infrastructure and technologies, fostering resiliency, and charting a course for a more environmentally friendly future for both New Jersey and the entire country.

This Plan covers a three-year period, from 2023 through 2025. The New Jersey Department of Environmental Protection (NJDEP), the New Jersey Economic Development Authority (NJEDA), and the New Jersey Board of Public Utilities (NJBPU), are designated by law to distribute RGGI proceeds. The Plan also ensures cross-agency collaboration to leverage funding in support of other statewide strategic efforts, including those identified in the <u>State Economic Development Plan</u>, the <u>Energy Master Plan</u>, the <u>Global Warming Response Act 80x50 Report</u> and the <u>Electric Vehicle Law</u>. Finally, although a new funding plan is required every three years, the agencies may revisit this Plan sooner, and each subsequent funding plan will summarize project and program spending and results achieved during the prior strategic funding period.



## **PUBLIC ENGAGEMENT**



#### At A Glance

The 2023 Plan reflects the voices of New Jerseyans across the state who provided feedback through various outreach channels. The New Jersey Department of Environmental Protection (NJDEP), New Jersey Economic Development Authority (NJEDA), and New Jersey Board of Public Utilities (NJBPU) utilized a multifaceted approach for gathering meaningful public input for the 2023 Plan, acknowledging the strain that the COVID-19 pandemic had on conducting in-person public events. In June 2022, the agencies kicked off engagement efforts with a fully virtual event and employed new outreach mechanisms to expand reach and responses from the public. The commentary from the outreach in June 2022 informed the agencies' priorities for climate change reduction strategies and directly influenced the 2023 Scoping Document. The agencies released the 2023 Scoping Document for public feedback in April 2023 and held an additional 4 public meetings in accordance with the regulatory requirements (detailed below). These meetings were a combination of virtual and hybrid events, based on a public survey that was conducted to gauge the public's preferences. The results from those public events aided the development of this RGGI Strategic Funding Plan.



#### **Regulatory Requirements**

The <u>Global Warming Solutions Fund Rule (N.J.A.C. 7:27-D)</u> requires the NJEDA, NJBPU and NJDEP to host at least 4 public meetings – at least one joint public meeting and at least one agency-specific public meeting per agency – to gather meaningful and diverse input from stakeholders.

#### **Target Audience**

The 2023 Plan stakeholder meetings were open to all members of the public. The agencies targeted outreach efforts to individuals and entities who were potentially eligible to apply and receive funding through the Plan. This included but was not limited to businesses and commercial entities, municipalities, counties, school boards, residents, low-to-moderate income residents, natural resources and conservation organizations and environmental justice communities. Outreach was made through state email listservs, social media accounts and direct email invitations. The agencies also utilized local government connections to send outreach materials through their channels to increase reach. A Community Toolkit was created to assist these entities in promoting the stakeholder events and tools. The toolkit included social media posts, flyers, and email templates.

#### **Public Engagement Approach**

Since 2019, there have been expansive changes in public engagement techniques, with events predominantly being held virtually. The COVID-19 pandemic transformed public engagement methods, familiarizing large swaths of the population with virtual engagement tools. The 2022-2023 public engagement efforts capitalized on this shift to a virtual environment. The public engagement approach consisted of two phases: a preliminary public webinar in 2022 to kick off the outreach process and a responsive series of public events in April 2023 to receive feedback on the 2023 RGGI Scoping Document. The Scoping Document served as a formal proposal outlining the regulatory requirements for RGGI funding, as well as initial funding concepts. The Scoping Document provided a transparent narrative about the goals, objectives, and funding priorities prior to the creation of the final funding plan, encouraging deeper engagement with the public. Following the release of the Scoping Document, the agencies held three topically focused webinars and a fourth hybrid event discussing all proposed initiatives. At these events, the agencies collected input on the proposed funding priorities, to inform this Plan.

#### 2022 Public Engagement

The goal for the first phase of outreach was to gather, diversify, and expand the reach of our stakeholders. The agencies developed an engagement webpage, held a virtual webinar, launched an online voting tool with the support of the Office of Innovation, and provided several other outlets of communication online. Public engagement was radically increased, compared to 2019 engagement efforts, due to the enhanced accessibility and ease of these new virtual tools.

#### Engage Page

The agencies developed a new webpage dedicated to promoting engagement for the 2023 Plan. The Engage Page acted as a landing page for all relevant information on how to participate in public engagement. Viewers were provided background information on the process, an engagement timeline, and were directed to the register to the virtual events, utilize online tools, surveys, and a comment form.

#### **Public Webinar**

The agencies held a public informational webinar on June 9, 2022. The webinar provided an overview of the state's involvement in the RGGI program as well as the investments made and planned from the previous strategic funding plan (2020-2022). The webinar also introduced and demonstrated the online public engagement tool, called "Your Climate Solutions Ideas" and launched the 30-day public comment period to submit input on initial funding priorities. The webinar had over 180 attendees in the live meeting and more than 600 views on <u>YouTube</u>.

#### "Your Climate Solution Ideas"

The agencies collaborated with the New Jersey Office of Innovation to develop the "Your Climate Solution Ideas" tool. This tool allowed the public to vote on 100+ potential funding ideas for RGGI investments. At the end of the 30-day public comment period, over 241,000 votes were collected from approximately 6,000 New Jerseyans across the state. Some of the top scoring ideas included "wetland and forest restoration in areas where NJDEP has bought out homes damaged or destroyed in major flood events;" "funding projects that improve city blocks by adding trees, improving energy efficiency, and bringing properties up to code;" and "funding projects that improve and expand commuter trains, electric buses, and ferry services to reach more New Jersey communities." <u>This feedback</u> informed development of the 2023 Scoping Document and was the foundation for this Plan.

#### "Your Climate Solution Ideas" Demographic Survey

To better understand the reach of the "Your Climate Solutions Ideas" tool, the agencies embedded an optional demographic survey below the tool. The survey received 1,945 responses. Survey respondents participated from 79% of the municipalities in New Jersey.<sup>1</sup> The survey results suggest there is an opportunity to enhance future RGGI public outreach to black, indigenous and people of color, along with younger residents of New Jersey.

#### **2023 Public Engagement**

Building on the outreach conducted in 2022, the agencies held four public events following the release of the 2023 RGGI Scoping Document. The agencies also launched a survey tool and collected public comments via an online webform.

#### Three Webinars and a Hybrid Event

As required by Global Warming Solutions Fund Rule, the three agencies hosted 4 public events: 3 topically focused virtual webinars and one hybrid event covering all proposed initiatives.



Each webinar was hosted by one of the agencies, and the hybrid event was jointly hosted by the agencies. The events utilized various methods to collect feedback from the public, including online Microsoft Team Polls, a facilitated public comment session, and an online survey. The public also submitted feedback via a comment form on the RGGI website and through email submissions. The materials from each workshop, as well as a recording of the webinar, are posted on the State's RGGI Engage page. In total, nearly 150 individuals representing a diverse array of organizations and areas of interest, including municipalities, unions, environmental groups, environmental justice communities, transportation planning, energy use, and natural resources conservation organizations, attended the events.

## All Topics

#### RGGI Hybrid All Topics Event, NJIT, Newark NJ



142 INDIVIDUALS REPRESENTING DIVERSE INTERESTS ATTENDED THE 2023 RGGI PUBLIC EVENTS

#### **Online Survey Results**

The agencies published an online survey to encourage asynchronous engagement. This allowed for more detailed feedback to be submitted outside of the webinars and hybrid event. There was a total of 56 survey responses providing input on the prioritization of each initiative for funding, as well as in-depth comments with additional context.

<sup>&</sup>lt;sup>1</sup> Responses were from 444 (out of 565) municipalities in New Jersey.

### **PUBLIC PRIORITIES**

## NJ RGGI 2022-23 PUBLIC ENGAGEMENT FACTSHEET



5 Public Webinars 397 Attendees Total



56 Responses to the Initiative Feedback Survey



241,000 Votes 6,000+ Voter Sessions



50 Social Media Posts 188,669 Impressions



### **MAJOR TAKEAWAYS**

#### **Building Decarbonization**

Feedback indicated that the agencies should develop building electrification programs to reduce energy utilization, such as heat pump installation in low-to moderate-income residential properties and implementation of the Whole House Pilot.

#### **Transportation Electrification**

Initial feedback from public participants in June 2022 indicated a greater public priority in funding enhancement and electrification of public transportation. Comments received from public stakeholders in 2023 were more varied, focusing on the need to electrify medium and heavy-duty vehicles, support for the build out of EV charging infrastructure, and improve public transportation.

#### **Carbon Sequestration**

Public feedback indicated that funding initiatives focused on carbon sequestration were of the highest priority. Comments centered on the importance of the co-benefits provided from investment in urban forest and tidal wetlands restoration. The public also advocated for RGGI funds to be a force multiplier, building on other sources of funding for forest and wetland restoration projects. Emphasis was placed on incentivizing projects on private lands and implementing public lands restoration projects that can serve as examples for private lands.

#### Highly Warming Refrigerants

This funding initiative garnered the fewest number of comments from the public. Comments received focused on the interest in funding assistance for new ultra-low GWP systems and incentives for refrigerant leak detection systems.

# LEGAL AND REGULATORY FRAMEWORK FOR THE INVESTMENT OF RGGI PROCEEDS

In 2008, the Legislature passed the Global Warming Solutions Fund Act (P.L. 2008, c. 340), enabling the state to participate in a CO<sub>2</sub> emission trading program and establishing the Global Warming Solutions Fund (hereafter referred to as the Fund). Auction proceeds from the sale of RGGI allowances at quarterly auctions are deposited into the Fund and are available to state agencies for investment. State agencies receiving from the Fund must comply with the requirements of the Global Warming Solutions Fund Act and the NJDEP's Global Warming Solutions Fund Rule. These statutory requirements define specific funding programs areas, allocations, and requirements by each agency, along with mandating the creation of a triennial strategic funding plan to collaboratively guide the agencies investments.



#### **Program Areas, Funding Allocations and Program Requirements**

The state agencies receiving moneys from the Fund have legislatively mandated funding allocations and programmatic areas of focus. Funding is allocated by percentage to each agency and its investment is dictated by specific "funding lanes". These lanes set clear boundaries about each agency's target funding recipients and the types of projects and programs their agency's proceeds can fund. Projects and programs receiving funds under a sponsored initiative must align with the distributing agency's programmatic requirements. However, the agencies have discretion in the level of funding they can devote to specific projects and programs and are not required to fund all the program types prescribed by the Global Warming Solutions Fund Act.

#### Summary of Agency Funding Lanes

	EDA	BPU	DEP	
PROGRAM AREAS	Commercial, Institutional & Industrial Entities	Low Income & Moderate Income Residential Sector	Local Governments	Forests Tidal Marshes
FUNDING ALLOCATION	60%	20%	10%	10%
ELIGIBILITY	PROGRAMS TO SUPPORT:	PROGRAMS TO:	PROGRAMS TO: Plan, develop and	PROGRAMS TO: Enhance the
CRITERIA	<ul> <li>End-use energy efficiency projects.</li> <li>New, 'state of the art', efficient electric generation facilities.</li> <li>Combined heat and power production and other high efficiency electric generation facilities.</li> <li>Innovative carbon emissions abatement technologies.</li> <li>Development of qualified offshore wind projects.</li> </ul>	<ul> <li>Reduce electricity demand.</li> <li>Reduce costs to electricity customers.</li> <li>Support state electric vehicle goals.</li> <li>With a focus on urban areas, and includes efforts to address heat island effect and reduce impacts on ratepayers attributable to the implementation of Global Warming Response Act.</li> </ul>	<ul> <li>implement measures to reduce greenhouse gas emissions including, but not limited to assistance to conduct and implement:</li> <li>Energy efficiency.</li> <li>Renewable energy.</li> <li>Distributed energy programs.</li> <li>Land use planning (where results are a measurable reduction of greenhouse gas emissions or energy demand).</li> </ul>	stewardship and restoration of State's forests and tidal marshes that provide opportunity to sequester or reduce greenhouse gas emissions.

#### **Economic Development Authority**

Sixty percent of the Fund is allocated to NJEDA, and must be used to support one or more of the following: end use energy efficiency projects; new "state of the art" efficient electric generation facilities; combined heat and power production and other high efficiency electric generation facilities (such as fuel cells or other zero carbon fuel sources); investment in the development of innovative carbon emissions abatement technologies with significant carbon emissions reduction or avoidance potential; and develop qualified offshore wind projects and manufacturers of equipment associated with those offshore wind projects. As further mandated by statute, the eligible recipients of NJEDA's funding are limited to Commercial, Institutional and Industrial Entities.

#### **Board of Public Utilities**

Twenty percent of the Fund is allocated to NJBPU and must be used to support one or more of the following: reduce electricity demand; reduce costs to electricity consumers; reduce impacts on ratepayers; result in a measurable reduction in energy demand; and support state electric vehicles goals. NJBPU's funding also mandates a focus on urban areas, including efforts to address the heat island effect. As further dictated by statute, the eligible recipients of NJBPU's funding are limited to the low- and moderate-income residential sector.

#### **Department of Environmental Protection**

The final 20% of the Fund is allocated to NJDEP and is further split between two programs: local governments and stewardship and restoration of forests and tidal marshes.

#### **Local Government**

Ten percent of the NJDEP's allocation from the Fund must be used to support local government efforts to plan, develop, and implement measures that reduce greenhouse gas emissions. These projects and programs can provide technical assistance, grants, or other forms of assistance to conduct and implement energy efficiency, renewable energy, and distributed energy programs; and/or land use planning where the grant or assistance results in a measurable reduction of the emission of greenhouse gases or a measurable reduction in energy demand. Local government is defined in the Global Warming Solutions Fund Rule as one or a cooperating combination of the entities defined as a contracting unit under the Local Public Contracts Law, a board of education under the Public-School Contracts Law, or a county college under the County College Contracts Law. Eligible entities include municipal and county governments, public authorities, public schools, and county colleges.

#### **Carbon Sequestration in Forests and Tidal Marshes**

The NJDEP's remaining 10% of the allocation from the Fund must be used to oversee efforts to enhance the stewardship and restoration of the state's forests and tidal marshes<sup>2</sup>, which provide important opportunities to sequester or reduce greenhouse gases. The percentage of funding allocated to forests versus tidal marshes is not defined in either the Global Warming Solutions Fund Act or NJDEP's corresponding rule and is at the discretion of the Commissioner.

Projects receiving funding for carbon sequestration fall under two categories: terrestrial carbon sequestration and blue carbon. Blue carbon refers to carbon sequestration in coastal habitats, such as tidal marshes and seagrass meadows. These systems sequester more carbon per unit area than terrestrial forests and the carbon can be stored for millennia. However, these ecosystems are vulnerable to sea-level rise resulting from climate change.

#### Strategic Funding Plan Requirements

To better coordinate the use of the Global Warming Solutions Fund, the three state agencies receiving funding must work collaboratively to develop triennial Strategic Funding Plans. The objective of these plans is to align investments across the agencies to best meet New Jersey's clean energy and greenhouse gas reduction goals. This not only allows the agencies to address common goals via RGGI investments but helps to align spending with other state strategic climate efforts (e.g. the Global Warming Response Act 80x50 report and the 2019 Energy Master Plan.

A new strategic funding plan must be released at a minimum every three years, although the state agencies have the option to revisit this sooner if there is a need. Each plan must identify the initiatives each state agency will sponsor over that three-year period. Additionally, following the release of the 2020 Plan, each subsequent funding plan must summarize project and program spending from the prior strategic funding period.

#### **Priority Ranking System**

The NJDEP's Global Warming Solutions Fund Rule defines an initiative as "a funding strategy predicted to advance one or more of the objectives listed in N.J.A.C. 7:27D-2.2, which the agencies have identified as critical." In layman's terms, initiatives are broad areas of focus that seek to strategically address a well-defined issue or need and advance one or more of the six objectives defined in the Global Warming Solutions Fund Rule. In each strategic funding plan released, the state agencies must rank all initiatives against six core objectives.

<sup>&</sup>lt;sup>2</sup> This is interpreted as all the forests and tidal marshes within New Jersey, not just those that are management and/or owned by the State of New Jersey.

### Six Objectives Defined in the Global Warming Solutions Fund Rule

**0**] A net reduction in greenhouse gas emissions or a net sequestration of carbon;

**02** Significant reductions in greenhouse gas emissions, reduction of impacts on ratepayers, and a significant contribution to the achievement of the State's 2050 Global Warming Response Act limit, relative to the cost of the project or program;

**03** Reduction in energy use;

**04** Be directly responsive to the recommendations submitted by the Department to the Legislature pursuant to the Global Warming Response Act;

**05** Provide co-benefits; and

**U6** Be directly responsive to the negative effects on human health and the environment in communities that are disproportionately impacted by the effects of environmental degradation and climate change.

Specifically, every initiative in this Plan ranks the importance of each objective as either "critical" or "beneficial" where critical means necessary, and beneficial means tending to help, but not necessary. In addition, each of these six objectives must be ranked critical to at least one of the initiatives, and together, the initiatives in this Plan rank every objective critical. <u>Appendix A</u> at the end of this plan outlines the state agencies' guidelines for the objectives, providing insight into how the agencies interpreted the language of the objectives when making their ranking determinations.

The Global Warming Solutions Fund Rules further clarify that "an agency shall not provide funding from the Global Warming Solutions Fund, unless the program or project includes, in its design, a requirement that the critical objectives that are expected to be advanced by the program or project are measurable and verifiable for the duration of the program or project" (N.J.A.C. 7:27D-2.6). The methods used need to be sufficient to allow for an assessment of baselines, quantitative goals and quantities of reductions or sequestration resulting from or expecting to result from the project or program it is measuring. Measurements must also include an estimate of uncertainty associated with the calculations. The method(s) used must incorporate existing, scientifically accepted greenhouse gas emissions accounting protocols and other existing or otherwise readily available information, such as records of fuel or electricity use.

#### **Initiative Selection**

Each state agency that receives an allocation from the Fund must sponsor one or more of the initiatives in the strategic funding plan. Each strategic funding plan must describe the information and materials used to evaluate initiatives. Materials and resources used to evaluate initiatives can include, but are not limited to, the level of greenhouse gas emissions by sector, the level of anticipated funding from CO<sub>2</sub> allowance auctions, existing technology and its market penetration in New Jersey, resilience and mitigation planning and management approaches, input from public engagement and academic research findings.

## **2023 PLAN PRIORITIES**

Photographer/ NJ Governor's Office



Since the publication of the first Strategic Funding Plan, significant state actions have taken place that provide additional guidance on how RGGI proceeds should be invested. These include:

- 1. Statewide EVSE Ordinance (P.L. 2021, c.171.)
- 2. Executive Order 274
- 3. Advanced Clean Truck and Fleet Reporting Rules (N.J.A.C. 7:27-31; N.J.A.C. 7:27-33)
- 4. Greenhouse Gas Monitoring & Reporting Rule (GHGMR)
- 5. Executive Order 316 and the Governor's Clean Buildings Working Group
- 6. Natural & Working Lands Strategy (NWLS)

These actions, taken together frame how New Jersey will prioritize the reduction of greenhouse gas emissions. In addition, they are all, in effect, directives for state agencies to align their resources towards the transformation of New Jersey's clean energy economy with a focus on benefits in environmental justice areas.

#### Statewide EVSE Ordinance (P.L. 2021, c.171.) July 2021

Established new zoning standards and amends Municipal Land Use Law (MLUL) to streamline permitting for electric vehicle charging stations.

#### Advanced Clean Truck and Fleet Reporting Rules (N.J.A.C. 7:27-31; N.J.A.C. 7:27-33) December 2021

Required manufacturers of vehicles more than 8,500 pounds to participate in a credit/deficit program and set a one-time reporting requirement to obtain information about the in-state operation of fleets of vehicles over 8,500 pounds. These rules are intended to increase the percentage of zero-emission vehicles sold in New Jersey and inform future decisions concerning emissions reductions in the transportation sector.

#### Executive Order 316 February 15, 2023

Murphy's EO 316 established a target to install electric space heating and cooling and water heating systems in 400,000 dwellings and 20,000 commercial properties and public facilities. The EO sets a target to make 10% of all low-tomoderate income properties electrification-ready by 2030. Additionally, the E.O 316 has directives to develop a Buildings Roadmap, align existing state programs for building electrification, and develop incentives for voluntary enhanced building standards. It also calls for the creation of a Clean Buildings Work Group.

#### Executive Order 274 November 10, 2021

Established an interim greenhouse gas reduction target of 50% below 2006 levels by the year 2030 and directed the Office of Climate Action and the Green Economy to coordinate with state agencies to further develop and implement the objectives and strategies detailed in the Energy Master Plan (EMP) and Global Warming Response Act (GWRA) 80x50 Report. At the time of writing this Plan, both the EMP and GWRA 80x50 Report are undergoing updates. These will provide comprehensive insight into meeting the state's climate and clean energy goals.



#### Greenhouse Gas Monitoring & Reporting Rule (GHGMR) April 22, 2022

In 2022, the NJDEP amended the emission statement rules, N.J.A.C. 7:27-21, to require sources of methane with a potential to emit 100 tons or more annually to report their emissions. The Department also adopted N.J.A.C. 7:27E to include additional methane reporting requirements for gas public utilities, as well as reporting requirements for users of halogenated gases.

#### Natural & Working Lands Strategy (NWLS)

The Natural Working Lands Strategy aims to provide recommendations to improve carbon sequestration across a variety of natural and working land types such as forests, agricultural lands, grasslands, wetlands, developed lands, and aquatic resources/habitats. The Strategy is set for release in early 2024.

## RGGI FUNDING INITIATIVES (2023 – 2025)

The NJDEP, NJEDA and NJBPU will fund four initiatives during the next three-year RGGI funding period. Each agency must sponsor (i.e., provide RGGI funds for programs or projects within) at least one initiative. For the 2023 Plan, the agencies decided on the following initiatives and sponsorship based on the recent state actions discussed above; previous funding priorities; the legislative mandates of the Global Warming Solutions Act; and public feedback collected during the 2022-2023 public stakeholder engagement process described above. They meet the agency-specific requirements, have at least one objective ranked critical, and are supported by data and research showing programs and projects under these initiatives would benefit the State's efforts to meet its greenhouse gas reduction goals.

#### Initiative 1: Accelerate Healthy Homes and Building Decarbonization

- Sponsor: NJBPU & NJEDA
- Description: Funding will accelerate the pace of decarbonization of buildings in the state through investing in projects and programs that promote building electrification, and reduce energy consumption, energy burden, and overall emissions from the building sector, including programs that promote workforce readiness to build, install, repair, and maintain the technologies critical to meeting these goals. This initiative will also support the leak detection, replacement, repair, and retrofit of refrigerants in chillers and refrigeration systems.

#### Initiative 2: Catalyze Clean, Equitable Transportation

- Sponsor: NJDEP, NJBPU, NJEDA
- Description: The agencies will continue to drive the transition to electric transportation throughout the State, with a focus on electrifying light, medium and heavy-duty vehicles benefiting environmental justice communities. The agencies will also utilize funding to grow New Jersey's electric vehicle charging infrastructure.

#### Initiative 3: Strengthen New Jersey's Forests and Initiative 4: Promote Blue Carbon in Coastal Habitats

- Sponsor: NJDEP
- Description: These two initiatives will focus on protecting and enhancing the State's tidal marshes and forests to ensure their continued role in sequestering carbon. Funding will be dedicated to projects and programs that support conservation and restoration of both private and public lands.











# INITIATIVE ONE: ACCELERATE HEALTHY HOMES AND BUILDING DECARBONIZATION

#### Trenton, NJ (Source: NJDEP, Getty Images)



Initiative One aims to accelerate the pace of decarbonization of buildings in the state by strategically investing in projects and programs to increase building electrification and reduce energy consumption, energy burden, and overall emissions from the building sector. This includes funding projects and programs that create measurable reductions of highly warming greenhouse gas emissions associated with the use of <u>hydrofluorocarbons (HFCs)</u> in refrigeration and air conditioning equipment. According to the NJDEP's <u>New Jersey Greenhouse Gas Inventory</u>, buildings currently are the second highest source of greenhouse gas emissions in the state. These emissions are primarily associated with the combustion of fossil gas in space and water heating.<sup>3</sup> In addition, HFC emissions from refrigeration and air conditioning account for 6% of the State's greenhouse gas inventory. <sup>4</sup> HFCs are considered a climate "super pollutant" because these greenhouse gases have hundreds to thousands of times the heat trapping power of carbon dioxide (CO<sub>2</sub>) and are the fastest growing source of greenhouse gases both internationally and in New Jersey.<sup>5</sup> Existing building stock will continue to be a significant source of greenhouse gas emissions without decisive action. It is estimated that 80% of buildings that will be around in 2050 already exist today.<sup>6</sup> Equipped with this understanding, New Jersey recognizes the need to reduce emissions from the built environment.

Governor Murphy's administration has prioritized the call for clean and efficient buildings by signing the Clean Energy Act, which restructured the state's energy efficiency programs setting annual efficiency targets and establishing benchmarking programs to measure the energy and water performance of buildings. In 2020 the Energy Master Plan and the Global Warming Response Act 80x50 reports were released, outlining the need to dramatically increase energy efficiency, electrify space and water heating and phase down the use of highly warming refrigerants.

<sup>5</sup> NJDEP. Climate Basics. <u>https://www.nj.gov/depov/dep/climatechange/basics.html</u>.

<sup>&</sup>lt;sup>3</sup> NJDEP (2020). <u>New Jersey Global Warming Response Act 80x50 Report</u>.

<sup>&</sup>lt;sup>4</sup> NJDEP 2022. New Jersey Greenhouse Gas Inventory 2022 Mid-Cycle Update Report. <u>https://dep.nj.gov/wp-content/uploads/ghg/2022-ghg-inventory-mcu\_final.pdf</u>.

<sup>&</sup>lt;sup>6</sup> McKinsey & Company (2021). Call for action: Seizing the decarbonization opportunity in construction.

Further, New Jersey passed an HFC law (P.L. 2019, c.507), joining five other states to establish a timeline for phasing out specific HFCs in new equipment and products. In June of 2022, New Jersey adopted the Greenhouse Gas Monitoring and Reporting Rule (N.J.A.C 7:27E) which established annual refrigerant usage reporting requirements for facilities such as grocery stores, ice rinks, refrigerator warehouses, and other industrial applications to aid in this phase-down. More recently Governor Murphy signed Executive Order 316 (EO 316)establishing an ambitious target to install electric space heating and cooling and water heating systems in 20,000 commercial properties and 400,000 homes by 2030. The Executive Order sets an additional 2030 target to make 10% of all low-to-moderate income properties electrification-ready. Furthermore, EO 316 has directives to develop a Buildings Roadmap, launch a Clean Buildings Workgroup, align existing state programs for building electrification, and develop incentives for voluntary enhanced building standards. The Accelerate Healthy Homes and Building Decarbonization initiative is responsive to these directives to pair building electrification with onsite power generation, storage, and smart load controls in order to reduce utility bills and carbon emissions."<sup>7</sup> This initiative is also responsive to the Global Warming Response Act 80x50 Report recommendations that the state develop an "incentive program to facilitate the early adoption of HFC alternatives through an established funding source."<sup>8</sup>

Cost is a major barrier when upgrading homes and businesses to reduce carbon emissions and transition to ultra-low commercial refrigeration systems or chillers. Funding the incremental costs to switch heating fuels and shift to new, ultra-low global warming potential (GWP)<sup>9</sup> refrigeration systems is necessary to accelerate the installation of these systems. Since many new refrigeration appliances sold today utilize HFCs and will have an average product lifetime of about 15-20 years, New Jersey has a window of opportunity to incentivize the replacement and retrofit of older systems with those that use low and ultra-low-GWP refrigerants.<sup>10</sup> Additional energy reduction benefits will be realized through this initiative because new refrigeration systems that use ultra-low refrigerants are more energy efficient than existing systems.<sup>11</sup>

Beyond upfront cost, other challenges include workforce availability, apportionment of incentives between landlords and renters, lack of familiarity with low-GWP refrigerants, and infrastructure constraints, such as electrical capacity in buildings. These challenges are especially acute for the state's low-income households, and residents of under-resourced communities. These households also often have the greatest need for building retrofits, as they are more likely to live in buildings that have minimal insulation, air gaps, and inadequate heating and cooling systems that are not well equipped to protect occupants from extreme weather. Funding dedicated to this initiative can address these constraints and accelerate emission reductions in New Jersey's businesses and homes.

#### Agency Sponsorship

Both the NJBPU and NJEDA will fund programs and projects under this initiative to improve the performance of the state's building stock. NJBPU will dedicate 75% of its funding to existing and new energy efficiency and residential building decarbonization programs. This will include developing building electrification and energy efficiency programs to reduce energy utilization, such as heat pump installation in low-to-moderate income residential properties, funding the <u>Whole</u> <u>Home Pilot Program</u>, exploring opportunities to build upon existing efficiency programs, such as benchmarking, and investing in workforce readiness to build, install, repair, and maintain technologies critical to meet decarbonization goals.

NJEDA will dedicate approximately 44% of its funding to energy efficiency, clean energy, and building decarbonization projects in the commercial, industrial, and institutional sectors, including investing in the workforce readiness necessary to support these projects. This also includes funding for phasing down highly warming refrigerants. NJEDA will fund HFC

<sup>&</sup>lt;sup>7</sup> NJBPU (2020). <u>2019 New Jersey Energy Master Plan Pathway to 2050</u>.

<sup>&</sup>lt;sup>8</sup> NJDEP (2020). New Jersey Global Warming Response Act 80x50 Report.

<sup>&</sup>lt;sup>9</sup> Global Warming Potential is a measure of how much energy the emissions of 1 ton of a gas will absorb over a given time relative to the emissions of 1 ton of CO<sub>2</sub>. The larger the GWP, the more that a given greenhouse gas warms the Earth comparted to CO<sub>2</sub>. The GWP referenced on this page is based on a 100-year scale (GWP<sub>100</sub>), <u>https://dep.nj.gov/ghg/about/</u>.

<sup>&</sup>lt;sup>10</sup> California Air Resource Board (2017). <u>Short-Lived Climate Pollutant Reduction Strategy</u>, p93.

<sup>&</sup>lt;sup>11</sup> California Air Resource Board (2017). <u>Short-Lived Climate Pollutant Reduction Strategy</u>, p95.

reduction within a number of different possible implementation models including funding ultra-low GWP commercial refrigeration systems or chillers at new facilities and retrofitting and replacing existing systems located in overburdened communities. Funding may also support leak detection and repair of commercial-grade refrigeration systems. NJDEP will assist in program design and implementation. Projects and programs under this initiative will encourage the adoption of ultra-low GWP systems and the repair of leaking refrigeration systems at commercial, industrial, and institutional facilities.

NJEDA's programs are expected to use a cost-effective combination of grants, loans, and other financing mechanisms to fund projects that reduce greenhouse gas emissions through fuel switching and beneficial electrification. Projects will include financing beneficial electrification, renewable energy, distributed energy resources, and energy efficiency projects. NJEDA will also dedicate funding for workforce development programs to enable building decarbonization projects.

#### **Priority Ranking**

Agencies have ranked five objectives as critical for Initiative One:

- A net reduction in greenhouse gas emissions or a net sequestration of carbon;
- Significant reductions in greenhouse gas emissions, reduction of impacts on ratepayers, and a significant contribution to the achievement of the State's 2050 Global Warming Response Act limit, relative to the cost of the project or program;
- Be directly responsive to the recommendations submitted by the NJDEP to the Legislature pursuant to the Global Warming Response Act;
- Provide co-benefits; and
- Be directly responsive to the negative effects on human health and the environment in communities that are disproportionately impacted by the effects of environmental degradation and climate change.

### INITIATIVE 1: ACCELERATE HEALTHY HOMES & BUILDING DECARBONIZATION

Priority Rankings				
Initiative 1				
С				
С				
С				
С				
С				
BPU				

These objectives will be used to rank all projects and programs applying for funding from the agencies sponsoring this initiative. Agencies may also include agency-specific criteria for selecting projects and programs. Details about satisfying the critical objectives and additional criteria will be provided in grant and financial aid guidelines released by each agency.

#### **Public Input and Community Voices**

This Initiative is responsive to the initial public input received during the 30-day comment period in June-July 2022, in which the public ranked three building, renewable energy, and energy efficiency related ideas in the top 20 out of 151 options.<sup>12</sup>

Projects and programs focusing on highly warming greenhouse gas HFC reductions are also responsive to the initial public input received during the 30-day comment period in June-July 2022. The public ranked an idea about HFC reductions favorably among climate solution ideas considered in the buildings sector.<sup>13</sup>

<sup>&</sup>lt;sup>12</sup> New Jersey Department of Environmental Protection; New Jersey Board of Public Utilities; New Jersey Economic Development Authority. (2022). *Your Climate Solution Ideas Results*, can be viewed at <u>https://www.nj.gov/rggi/docs/rggi-aoi-results.pdf</u>.

<sup>&</sup>lt;sup>13</sup> New Jersey Department of Environmental Protection; New Jersey Board of Public Utilities; New Jersey Economic Development Authority. (2022). *Your Climate Solution Ideas Results*, can be viewed at <u>https://www.nj.gov/rggi/docs/rggi-aoi-results.pdf</u>.

During the Spring of 2023 public feedback period, meeting participants felt that this Initiative should be a priority for inclusion in the final plan.<sup>14</sup> Specifically, respondents felt that the most important NJBPU funding program or project under this initiative is to "develop building electrification programs to reduce energy utilization, such as heat pump installation in low- to moderate-income residential properties." Respondents also felt that the most important NJEDA funding program and project was to "finance beneficial electrification, renewable energy, distributed energy resources, or energy efficiency projects in commercial, industrial, and institutional buildings."

When NJDEP collected public feedback on the scoping document in the spring of 2023, meeting participants felt that phasing down highly warming refrigerants should also be a priority.<sup>15</sup> Respondents felt that the most important NJEDA funding program or project related to this effort was to "Fund the incremental costs of replacing high-GWP commercial refrigeration systems or chillers with ultra-low GWP refrigerants in projects located in environmental justice communities".

"Transitioning to lower or zero GWP systems could be \$500,000 or more per store. **Funding assistance for new or retrofit systems** with low GWP would help NJFC members make this transition, especially food retailers who have many stores with older systems."

> Trade association of food retailers in New Jersey

"The more we can **incentivize beneficial electrification** the better positioned we are for full electrification of our homes and businesses and the quicker we can do it."

– NJ chapter of environmental non-profit organization

*Electrification, coupled with energy efficiency measures, provide customers long-term cost savings.* 

 NJ nonpartisan, non-profit environmental organization

"For ultra-low refrigerants, the only currently viable solutions are CO<sub>2</sub>, Propane, and Ammonia which all require replacement of all the existing refrigeration equipment, display cases, etc."

> NJ-based retail, supermarket cooperative

"For newly constructed grocery stores, **funding to offset the cost** difference of choosing an ultra-low system would be welcomed."

- NJ-based retail, supermarket cooperative

<sup>&</sup>lt;sup>14</sup> NJ Department of Environmental Protection, NJ Economic Development Authority, NJ Board of Public Utilities RGGI Public Webinar: Buildings, Grid, and Refrigerants, held on April 13<sup>th</sup> 2023. Meeting recording can be viewed at <a href="https://youtu.be/MHGOeudxkCc">https://youtu.be/MHGOeudxkCc</a>. Poll question posed was: "Using a scale of low to high (1 being "low" and 5 being "highest priority") how would you prioritize this funding initiative?
<sup>15</sup> NJ Department of Environmental Protection, NJ Economic Development Authority, NJ Board of Public Utilities RGGI Public Webinar: Buildings, Grid, and Refrigerants, held on April 13<sup>th</sup> 2023. Meeting recording can be viewed at <a href="https://youtu.be/MHGOeudxkCc">https://youtu.be/MHGOeudxkCc</a>. Poll question posed was: "Using a scale of low to high (1 being "low" and 5 being "highest priority") how would you prioritize this funding initiative?

# INITIATIVE TWO: CATALYZE CLEAN, EQUITABLE TRANSPORATION



All Electric Bus at Newark Liberty International Airport (Source: Newark Airport)

Initiative Two seeks to continue the work started in the prior strategic funding plan by accelerating transportation electrification with a focus on reducing emissions from transportation sources in overburdened communities. As noted in the 2020 Plan, the largest source of emissions within the transportation sector are passenger cars. However, medium- and heavy-duty vehicles emit more on a per vehicle basis and their emissions especially impact New Jersey's overburdened communities. Medium and heavy-duty vehicles include those used for transporting people, such as jitneys and buses, as well as cargo and freight-moving vehicles that regularly operate on roads in or around disproportionately impacted communities (e.g., sanitation, delivery and drayage trucks). Off-road equipment (e.g., cargo moving equipment at ports and airports) also tend to have higher emissions than on-road vehicles and operate in concentrated geographic areas, thereby increasing localized pollution. Prioritizing RGGI proceeds for continued light-, medium-, and heavy-duty vehicle electrification programs is necessary to continue to reduce emissions from the transportation sector, the largest source of greenhouse gas emissions in the State. As of December 2022, there were 91,515 registered electric vehicles in the State with nearly 2,000 publicly available Level 2 charging ports and almost 1,000 publicly available fast charging ports. This represents 1% of the progress necessary to meet emission reduction goals (as identified in the 80x50 report) for transportation.

New Jersey's environmental justice communities are negatively impacted by the current transportation sector in several ways. These communities rely more heavily than others on public transportation, so tailpipe pollution from diesel buses impacts them both as bus passengers and by living and working in proximity to these bus routes. Even when they drive passenger vehicles, these tend to be older model year vehicles with higher emissions rates. New Jersey's urban neighborhoods are surrounded by major highways and other substantial roadways that are heavily travelled, both by cars and trucks. Finally, the proximity of many of these neighborhoods to the State's port system, the largest on the eastern seaboard, brings additional emissions from trucks, most of them diesel-fueled, moving freight in and out of the ports, as well as from cargo handling equipment within the ports themselves.

Accelerating the use of electrified transportation in and around these communities is key to achieving the State's environmental justice goals. This initiative's intention to prioritize transportation solutions in environmental justice areas aligns with the <u>New Jersey Environmental Justice Alliance's (NJEJA) request</u> for New Jersey to prioritize emission reductions for the parts of the state with the greatest needs in accordance with the state's Environmental Justice Executive Order 23. NJEJA goes on to request that New Jersey invest in multiple electric modes of transportation such as public transit buses and trucks, private fleets, such as sanitation and delivery trucks, public fleets (local, county, and state vehicles), and alternative modes of transportation like electric scooters and ride-share programs. Prioritizing RGGI proceeds for this initiative will help ensure system-level approaches that are expedient, efficient, and effective means to achieving transportation equity.

Since the publication of the 2020 Plan, New Jersey has taken major steps towards pursuing its transportation electrification goals. Governor Murphy signed the Statewide EVSE Model Ordinance Law (P.L. 2021, c.171.) in July 2021, which streamlines permitting for electric vehicle charging stations and ensures that new parking lots, parking garages, and multi-unit dwellings are "charger ready." In December of 2021, the NJDEP adopted the <u>Advanced Clean Truck and Fleet</u> <u>Reporting rules</u> which require manufacturers of vehicles more than 8,500 pounds to increase the number of electric vehicles produced and delivered and sets a one-time reporting requirement for the in-state operation of vehicle fleets. These rules are intended to increase the percentage of zero-emission vehicles sold in New Jersey and inform future regulatory options.

The agencies have continued their collaborative work in the <u>New Jersey Partnership to Plug-in</u>. Collectively, they have launched several incentive programs some of which include: NJDEP's grants for electric vehicle chargers along major corridors, at multi-unit dwellings (MUDs), workplaces and for fleets under the longstanding It Pay\$ to Plug In program; NJDEP's diesel fleet modernization program which funds Class 2b-8 electric vehicles and charging stations; NJDEP's eMobility grants; NJBPU's Charge Up NJ program; NJBPU's EV charging grant program for MUDs and tourist attractions; NJBPU's clean fleet program, which provides grants for government owned light-duty EVs and chargers; utility-run programs to support the development of EV infrastructure and adoption in their service territories; and NJEDA's New Jersey Zero-emissions Incentive Program (NJ ZIP).<sup>16</sup> Several of these programs are funded fully or partially with New Jersey's RGGI auction proceeds.

#### Agency Sponsorship

The NJDEP will dedicate all 10% of its local government funding to continue the strategies in the previous Plan's Clean and Equitable Transportation Initiative, particularly the replacement of diesel-fueled medium- and heavy-duty vehicles and non-road equipment with electric powered in environmental justice communities. County and municipal governments own and operate medium- and heavy-duty vehicles involved in numerous community services, including garbage collection, student transport, and senior transport. In addition, many privately owned vehicles provide services to local governments and their residents. Electrifying these vehicles will benefit sensitive populations. Also, understanding that the mobility needs of environmental justice communities differ from residents in other communities, NJDEP will pursue funding strategies that bring clean transportation options to underserved communities. These could include electric ride sharing and ride hailing, as well as electric transit buses, along with associated charging hubs.

The NJEDA will dedicate approximately 56% of its funding allocation to continue supporting transportation decarbonization. NJEDA anticipates expanding NJ ZIP into a multi-year program supporting the deployment of electric medium- and heavy-duty vehicles by commercial, institutional, and industrial establishments. NJEDA expects to use a cost-effective combination of grants and/or loans to fund vehicle purchases and target them to specific vehicle types, as well

<sup>&</sup>lt;sup>16</sup> New Jersey Electric Vehicle & Charging Infrastructure Incentives Summary <u>https://dep.nj.gov/wp-</u>

<sup>&</sup>lt;u>content/uploads/drivegreen/pdf/incentivesummary.pdf</u>. State Incentives to Drive Green <u>https://dep.nj.gov/drivegreen/affordability-incentives/#charge-up-new-jersey</u>.

as vehicle use cases, that can cost-effectively reduce emissions in environmental justice communities. NJEDA may also target funding to support technology innovation or pilot grant programs, such as clean hydrogen.

In addition, NJEDA intends to use this funding to promote the development of medium- and heavy-duty electric vehicle supply chain activities in New Jersey. In this way, RGGI funding can support not only the deployment of more mediumand heavy-duty electric vehicles in the state, but it can also help enable the State to play an important role in the production and marketing of these vehicles for sale both within and outside of New Jersey. This will drive the creation of well-paying jobs, thereby helping to realize the Murphy Administration's goal of a stronger and fairer New Jersey economy.

The NJBPU expects to use 25% of its RGGI funds to develop new or enhance existing programming enabling low- and moderate-income households, particularly those in environmental justice communities, to participate in and benefit from State efforts to improve access to clean transportation. Such targeted programming will put clean transportation options within reach of low- and moderate-income households, both economically and geographically. It will also complement existing State efforts to install electric vehicle charging infrastructure throughout the state, including in urban areas and at multi-unit dwellings. Finally, NJBPU's programs, in tandem with programming from NJEDA and NJDEP, will drive a concerted effort to reduce air pollutants in overburdened communities.

#### **Priority Ranking**

Agencies have ranked five objectives as critical for Initiative Two:

- A net reduction in greenhouse gas emissions or a net sequestration of carbon;
- Reduction in energy use;
- Be directly responsive to the recommendations submitted by the NJDEP to the Legislature pursuant to the Global Warming Response Act;
- Provide co-benefits; and
- Be directly responsive to the negative effects on human health and the environment in communities that are disproportionately impacted by the effects of environmental degradation and climate change.

These objectives will be used to rank all projects and programs applying for funding from the agencies sponsoring this initiative.

#### INITIATIVE 2: CATALYZE CLEAN, EQUITABLE TRANSPORTATION



Agencies may also include agency-specific criteria for selecting projects and programs. Details about satisfying the critical objectives and additional criteria will be provided in grant and financial aid guidelines released by each agency.

#### **Public Input and Community Voices**

Transportation related projects and programs are responsive to the initial public input received during the 30-day comment period in June-July 2022, in which the public ranked 3 transportation related ideas in the top 20 out of 151 options. When collecting public feedback on this initiative in the Spring of 2023, public meeting participants felt this initiative should be a priority for inclusion in the plan.<sup>17</sup> The transportation initiative received the most comments via the online feedback survey. Respondents felt that the most important NJDEP funding program or project under this initiative is to "electrify vehicles owned by local government or that provide services to local residents, such as garbage trucks, school buses, and municipal fleet vehicles." Respondents also felt that turning the NJ ZIP program into a multi-year

<sup>&</sup>lt;sup>17</sup> NJ Department of Environmental Protection, NJ Economic Development Authority, NJ Board of Public Utilities RGGI Public Webinar: Clean Transportation, held on April 4<sup>th</sup>, 2023. Meeting recording can be viewed at <a href="https://youtu.be/HD-XuNe8vq0">https://youtu.be/HD-XuNe8vq0</a>. Poll question posed was: "Using a scale of low to high (1 being "low" and 5 being "highest priority") how would you prioritize this funding initiative?"

program and promoting the adoption of light and medium-and-heavy duty electric vehicles are the most important NJDEP and NJEDA projects the agencies could fund under this initiative.

Overall, the public comments and feedback received on this initiative focused on the success of the NJ ZIP program, the need for funding to electrify public transit, and the need for financing and incentives for charging infrastructure for developers. Other commenters felt too much emphasis was being placed on electrifying vehicles as a transportation sector emissions reduction strategy; programs and projects that reduce vehicle miles travelled (VMT) are also cost effective and important. Investing New Jersey's RGGI proceeds in medium and heavy-duty transportation electrification will provide the greatest greenhouse gas, criteria and toxic air pollution reductions in New Jersey's environmental justice communities and furthers critical objective 5 of the Global Warming Solutions Fund Act.

The NJ ZIP program has been a clear success and the ned to ramp up the program through extending is paramount, we need to ensure we have a diversity of fleets, especially in urban centers, that are starting to electrify."
citizen-based, NJ environmental advocacy organization
"If we want the public and business to invest in vehicle electrification, the infrastructure must be there to support it. The [EV support] infrastructure comes first."
NJ chapter of environmental non-profit organization

## **INITIATIVE THREE: STRENGTHEN NEW JERSEY'S FORESTS**

New Jersey Forest Lands (Source: NJDEP, Getty Images)



Initiative Three continues to focus on strengthening New Jersey's forests and urban forests. Forests play a critical role in the carbon cycle serving as a stock of sequestered carbon and continually removing and storing additional carbon from the atmosphere. Additionally, urban and community forests contribute to demand side energy reductions by providing shade and reducing the need for air conditioning, avoiding emissions, and are among the top five in carbon gain potential for natural climate solutions in New Jersey.<sup>18</sup> Collectively, the State's natural resources sequester the equivalent of 8.1 million metric tons CO<sub>2</sub>, approximately 8% of the State's total greenhouse gas emissions each year. While terrestrial carbon sequestration regularly occurs in nature, there are human actions that can enhance or impede the carbon sequestration capacity of land and its ability to mitigate the effects of climate change. Changes in our land use can contribute to changes in carbon storage, causing the release of greenhouse gases. To meet the State's greenhouse gas reduction goals, New Jersey needs to, at a minimum, maintain and if possible, increase, the amount of carbon sequestered in its natural sinks by managing them in order to protect and maintain their beneficial role in the carbon cycle.

Since publication of the 2020 Plan, NJDEP has taken several major actions towards enhancing the State's forest resources. In December of 2020, the NJDEP released its <u>State Forest Action Plan</u> which sets out a road map to manage the State's two million acres of forested lands over the next ten years. The plan includes key findings about the impacts of climate change and establishes carbon budget goals for New Jersey's forests which include the need to diversify forest carbon resources, promote resilient ecosystem function, enhance carbon sequestration, and prevent forest resources from becoming a net carbon emitter. More recently, the NJDEP also held stakeholder events in the Spring of 2023 to collect feedback on the <u>Natural and Working Lands Strategy (NWLS) Scoping Document</u> and plans to release the final Natural and Working Lands Strategy later in early 2024. This strategy will guide the State's efforts to mitigate the effects of climate change through the protection, restoration, and strategic management of New Jersey's natural and working lands, identifying both near- and long-term priorities for action across numerous land types. Taken together, these plans will inform the State's future carbon sequestration efforts.

<sup>&</sup>lt;sup>18</sup> U.S. Climate Alliance. Natural and Working Lands Learning Lab, New Jersey Team Summary of Findings and Recommendations. (July 2018)

The NJDEP has also continued to support local stewardship and effective management of trees, forest ecosystems and open space in urban communities through the Urban and Community Forestry Program. The program has invested \$2.4 million in grants from 2020-2022. The Green Acres Program has also invested \$80.5 million in public parks over that same time period.<sup>19</sup> The Department has attempted to create programs that are complementary and fill gaps in these existing funding programs. Pursuant to one of the recommendations identified in the <u>80x50 Report</u> carbon sequestration chapter, the Department launched the <u>Natural Climate Solutions Grant Program</u> in May of 2022. This program funds on the ground implementation of 'shovel-ready' urban forest canopy enhancement, reforestation and afforestation projects using RGGI proceeds. In April of 2023, the NJDEP in partnership with Sustainable Jersey launched its <u>Trees for Schools grant program</u>. This program, funded by RGGI auction proceeds, will cover the cost of planting trees on the campuses of New Jersey public schools, county colleges, and state colleges and universities. New Jersey's Strengthening Forests funding initiative in the 2023 Plan will continue and expand on these efforts.

#### Agency Sponsorship

The NJDEP will dedicate a portion of its 10% of RGGI proceeds that is allocated for Tidal Marshes and Forests, towards funding this terrestrial carbon sequestration initiative. The NJDEP anticipates offering funding via the Natural Climate Solutions grant program, tailoring eligible project types to maximize complementary funding streams and public feedback collected. Funding programs will be aligned to support urban and community forestry in overburdened communities, promote stewardship, conservation, and management of privately held forests and seek to increase reforestation and management of forests on public property. Any funding allocated to this initiative would be governed by the mandates outlined under the Forest Stewardship Act at P.L. 2009, Chapter 256, C.13:1L-33.

#### **Priority Ranking**

The agencies have ranked three objectives as critical for this initiative:

- A net reduction in greenhouse gas emissions or a net sequestration of carbon;
- Be directly responsive to the recommendations submitted by the Department to the Legislature pursuant to the Global Warming Response Act; and
- Provide co-benefits.

These objectives will be used to rank all projects and programs applying for funding from the agencies sponsoring this initiative. Agencies may also include agency-specific criteria for selecting projects and programs. Details about satisfying the critical objectives and additional criteria will be provided in grant and financial aid guidelines released by each agency.

### INITIATIVE 3: STRENGTHEN NEW JERSEY FORESTS

Thorny Kunkings	
Objectives	Initiative 3
<b>1.</b> A net reduction in greenhouse gas emissions or a net sequestration of carbon;	С
<b>2.</b> Significant reductions in greenhouse gas emissions, reduction of impacts on ratepayers, and a significant contribution to the achievement of the State's 2050 Global Warming Response Act limit, relative to the cost of the project or program;	
<b>3.</b> Reduction in energy use;	
<b>4.</b> Be directly responsive to the recommendations submitted by the Department to the Legislature pursuant to the Global Warming Response Act;	С
5. Provide co-benefits; and	С
<b>6.</b> Be directly responsive to the negative effects on human health and the environment in communities that are disproportionately impacted by the effects of environmental degradation and climate change.	
Agency Sponsorship	AND A DECEMBER OF A DECEMBER O

<sup>&</sup>lt;sup>19</sup> NJ DEP Division of State Parks, Forests & Historic Sites (2023). <u>https://dep.nj.gov/wp-content/uploads/greenacres/pdf/stakeholder-presentation-september-2022.pdf</u>

#### **Public Input and Community Voices**

Projects and programs focusing on terrestrial carbon sequestration are responsive to the initial public input the agencies received during the 30-day comment period in June-July 2022. The public ranked five terrestrial carbon sequestration concepts in the top 20 out of 151 ideas.<sup>20</sup>

When collecting public feedback on this initiative in the Spring of 2023, public meeting participants felt this initiative should be a priority for inclusion in the plan.<sup>21</sup> The agencies received several comments on forests funding initiatives through its online survey tool. Comments generally focused on continuing to prioritize reforestation efforts on public land and for these efforts to serve as statewide demonstration projects for forest land stewardship. Respondents also highlighted the need to incentivize restoration and afforestation on private lands.

"With some funding, private landowners could probably accomplish more with less [RGGI] money spent."

New Jersey forest landowner

"Public land reforestation projects could serve as a tangible example to private land stewardship by piloting, innovative conservation projects. Further on the ground implementation of these efforts, forests, and natural features, especially with increased invasive pest pressures, are areas that require intensive management.

> New Jersey Department of Agriculture staff

"By strengthening NJ's forest not only are we potentially increasing our natural carbon sink, we are solidifying wildlife habitat, increasing resiliency to climate change threats for decades if not centuries, clean[ing] our air, our water and [increasing] availability of nature for the public which highly benefits mental health and improves our connection to our environment."

– NJ chapter of environmental non-profit organization

"Urban forests, in addition to street trees are needed to **help reduce heat island effect** and **improve the quality of life** for residents."

– New Jersey Resident

<sup>&</sup>lt;sup>20</sup> New Jersey Department of Environmental Protection; New Jersey Board of Public Utilities; New Jersey Economic Development Authority. (2022). Your Climate Solution Ideas Results, can be viewed at <u>https://www.nj.gov/rggi/docs/rggi-aoi-results.pdf</u>.

<sup>&</sup>lt;sup>21</sup>NJ Department of Environmental Protection, NJ Economic Development Authority, NJ Board of Public Utilities, RGGI Public Webinar: Carbon Sequestration, held on April 18<sup>th</sup>, 2023. Meeting recording can be viewed at <u>https://youtu.be/cEmp1A9K7no</u>. Poll question posed was: "Using a scale of low to high (1 being "low" and 5 being "highest priority") how would you prioritize this funding initiative?"

# INITIATIVE FOUR: PROMOTE BLUE CARBON IN COASTAL HABITATS

#### Barnegat Bay, New Jersey (Source: NJDEP))



This initiative seeks to promote, protect, and maintain the beneficial role of New Jersey's tidal marshes in the carbon cycle. "Blue Carbon" is the carbon stored by soils and plants in marine ecosystems such as salt marshes, tidal wetlands, and seagrass beds. These habitats are particularly important in the fight against climate change.<sup>22</sup> Blue Carbon efforts are focused on these systems in saltier waters, as soil chemistry in their freshwater counterparts produces methane – a powerful greenhouse gas (GHG) that offsets the benefits of sequestered carbon.<sup>23</sup> Although salt marshes cover only a small percentage of the United States, it has been estimated that they account for 21% of the carbon sequestered by ecosystems.<sup>24</sup> New Jersey has an estimated 191,178 acres of Blue Carbon resources.<sup>25</sup> However, as these ecosystems are degraded and lost, their carbon sink capacity declines, and existing stored carbon rereleased.<sup>26</sup> Modeling shows that between 9 and 19% of the State's existing salt marshes could be lost by 2050 due to sea level rise.<sup>27</sup> Furthermore, 67% of New Jersey's shoreline is highly vulnerable to erosion.<sup>28</sup> To meet the state's 2050 goal of 80% reduction in greenhouse gases below 2006 levels, these valuable natural features must be restored and protected.

<sup>&</sup>lt;sup>22</sup> Howard, H. (2014). Coastal Blue Carbon: Methods for assessing carbon stocks and emissions factors in mangroves, tidal salt marshes, and seagrasses. Conservation International, Intergovernmental Oceanographic Commission of UNESCO, International Union for Conservation of Nature.: Arlington, Virginia, USA.

<sup>&</sup>lt;sup>23</sup> Poffenbarger, H. J., Needelman, B. A., & Megonigal, J. P. (2011). Salinity influence on methane emissions from tidal marshes. Wetlands, 31(5), 831-842.

<sup>&</sup>lt;sup>24</sup> Nellemann, Christian, and Emily Corcoran, eds. Blue carbon: the role of healthy oceans in binding carbon: a rapid response assessment. UNEP/Earthprint, 2009.

<sup>&</sup>lt;sup>25</sup> Based on land cover calculations completed by the NJDEP Bureau of GIS, January 2020.

<sup>&</sup>lt;sup>26</sup> Lovelock, Catherine; Fourqurean, James; and Morris, James. (2017). Modeled CO2 Emissions from Coastal Wetland Transitions to Other Land Uses: Tidal Marshes, Mangrove Forests, and Seagrass Beds. Frontiers in Marine Science.

<sup>&</sup>lt;sup>27</sup> Lathrop, R. (2019). Documentation for the New Jersey Coastal Marsh Change Maps (2019 Version) which can be viewed through https://www.njfloodmapper.org/

<sup>&</sup>lt;sup>28</sup> New Jersey Department of Environmental Protection. New Jersey Coastal management Program Section 309 Assessment & Strategy 2016-2020.

Tidal wetlands also provide numerous co-benefits including increased resiliency of coastal communities to storm surge and flooding, and habitat for wildlife. Tidal wetlands can buffer communities from flooding, protect communities from storm surge and damage, and filter water for enhanced quality. One study found that \$625 million in storm damage was prevented by tidal marshes during Hurricane Sandy.<sup>29</sup> Tidal wetlands also provide essential nursery habitat for over 75% of New Jersey's important fish species.<sup>30</sup>

Since publication of the 2020 Plan, NJDEP has taken several major actions towards enhancing the state's existing blue carbon sinks. The <u>Natural Climate Solutions Grant Program</u> was launched in May of 2022. This grant program funds projects that enhance and restore New Jersey's coastal habitats such as living shorelines and restoration of tidal salt marsh and submerged aquatic vegetation. In December of 2022, the NJDEP developed and released its <u>Wetland Program Plan</u> 2023-2027 which includes several core objectives and actions specific to tidal wetland restoration and increasing blue carbon sequestration. NJDEP also held stakeholder events in the Spring of 2023 to collect public feedback on the <u>Natural and Working Lands Strategy (NWLS) Scoping Document</u> which will be released in early 2024. This strategy aims to mitigate the effects of climate change through the protection, restoration, and strategic management of New Jersey's natural and working lands. This blue carbon funding initiative will continue and expand on these efforts.

#### Agency Sponsorship

The NJDEP will dedicate a portion of the 10% of RGGI proceeds allocated for Tidal Marshes and Forests towards blue carbon initiatives. The NJDEP anticipates offering funding via the Natural Climate Solutions grant program to support the creation, restoration, protection, and enhancement of New Jersey's blue carbon sinks, such as salt marshes, seagrass beds and living shorelines. Projects may focus on protecting sequestered carbon from erosion and re-emission, as well as protecting undeveloped upland areas that will become salt marshes as sea level rises (land lying higher than where tidal flooding currently occurs). NJDEP will also seek to align funding for wetland and forest restoration with areas where the state has bought out homes damaged or destroyed in major flood events, leveraging funds from Blue Acres program, Federal NOAA grants, and other blue carbon grant funding sources.

#### **Priority Ranking**

The agencies have ranked three objectives as critical for this Initiative:

- A net reduction in greenhouse gas emissions or a net sequestration of carbon;
- Be directly responsive to the recommendations submitted by the Department to the Legislature pursuant to the Global Warming Response Act; and
- Provide co-benefits.

These objectives will be used to rank all projects and programs applying for funding from the agencies sponsoring this initiative. Agencies may also include agency-specific criteria for selecting projects and programs. Details about satisfying the critical objectives and additional criteria will be provided in grant and financial aid guidelines released by each agency.

#### INITIATIVE 4: PROMOTE BLUE CARBON IN COASTAL HABITATS *Priority Rankings*

Initiative 4
С
С
С

 <sup>&</sup>lt;sup>29</sup> Narayan S, Beck MW, Wilson P, Thomas CJ, Guerrero A, Shepard CC, Reguero BG, Franco G, Ingram JC, Trespalacios D. 2017. The Value of Coastal Wetlands for Flood Damage Reduction in the Northeastern USA. Scientific Reports 7:9463 DOI:10.1038/s41598-017-09269-z
 <sup>30</sup> National Ocean Service. What is a Salt Marsh? National Oceanic and Atmospheric Administration, U.S. Department of Commerce, 2018. https://oceanservice.noaa.gov/facts/saltmarsh.html.

- New Jersey resident

#### **Public Input and Community Voices**

are endangered."

Projects and programs focusing on blue carbon and tidal wetlands restoration are responsive to the initial public input received during the 30-day comment period in June-July 2022. The public ranked three blue carbon ideas in the top 20 out of 151 ideas.<sup>31</sup>

When collecting public feedback on this initiative in the Spring of 2023, public meeting participants felt this initiative should be a priority for inclusion in the plan.<sup>32</sup> The agencies received several comments on blue carbon funding initiatives through its online survey tool. Comments generally focused on the many benefits of investing in carbon sequestration in coastal areas, the importance of the role of shellfish and oyster reef establishment in blue carbon projects, and the desire to see the NJDEP leverage funds from other sources, including from the Natural Resources Conservation Service (NRCS), United States Fish and Wildlife Service (USFWS), and National Marine Fisheries Service (NMFS) when implementing programs and selecting projects. Prioritizing the funding of wetland restoration in areas where NJDEP has bought out homes damaged or destroyed in major flood events or on other state-owned coastal lands also appeared to resonate with public participants.

"Action to maximize value on the lands the state has purchased has to be a high priority [...]

There is also a need to identify and **implement projects that bring multiple benefits** of carbon sequestration and resilience along with enhancing habitats for native species, especially those that

<sup>31</sup> New Jersey Department of Environmental Protection; New Jersey Board of Public Utilities; New Jersey Economic Development Authority. (2022). *Your Climate Solution Ideas Results*, can be viewed at https://www.nj.gov/rggi/docs/rggi-aoi-results.pdf.

<sup>32</sup> NJ Department of Environmental Protection, NJ Economic Development Authority, NJ Board of Public Utilities, RGGI Public Webinar: Carbon Sequestration, held on April 18<sup>th</sup>, 2023. Meeting recording can be viewed at <u>https://youtu.be/cEmp1A9K7no</u>. Poll question posed was: "Using a scale of low to high (1 being "low" and 5 being "highest priority") how would you prioritize this funding initiative?"

## **PRIORITY RANKING SUMMARY**

NJDEP's Global Warming Solutions Fund Rule requires that every objective must be ranked critical by at least one initiative, and each initiative must have at least one objective ranked as critical. The four initiatives in the Plan meet this requirement, collectively ranking all six objectives as critical. It is important to note that the agencies must evaluate the degree to which each program or project is also predicted to advance the beneficial objectives. When choosing between two projects that are predicted to advance the critical objectives equally, then it is the project or program with the ability to advance the beneficial objectives more that will be given priority for funding.



#### **Objectives**

**1.** A net reduction in greenhouse gas emissions or a net sequestration of carbon;

2. Significant reductions in greenhouse gas emissions, reduction of impacts on ratepayers, and a significant contribution to the achievement of the State's 2050 Global Warming Response Act limit, relative to the cost of the project or program;

**3.** Reduction in energy use;

4. Be directly responsive to the recommendations submitted by the Department to the Legislature pursuant to the Global

5. Provide co-benefits; and

6. Be directly responsive to the negative effects on human health and the environment in communities that are disproportionately impacted by the effects of environmental degradation and climate change.

## **ANTICIPATED CO-BENEFITS**

New Jersey anticipates a myriad of co-benefits beyond the greenhouse gas reductions from the investment of the RGGI auction proceeds in the years 2023-2025. Efforts to electrify the transportation sector and increase clean and equitable transportation options will significantly reduce criteria and other toxic air pollutants generated by internal combustion engines. On-road sources are the largest contributor to nitrogen oxides (NOx), one of the components needed to produce ground-level ozone, and all five of the transportation generated air toxics of concern are carcinogenic.<sup>33</sup> In fact, emissions from diesel fuel combustion pose the highest cancer risk of all air toxics in New Jersey. The investment of RGGI funds to deploy electric transportation will support better air quality and health outcomes throughout the State.

Efforts to increase energy efficiency and decarbonize New Jersey homes and commercial buildings will also yield significant co-benefits. Funding the expansion of the Whole House program will create healthier homes in overburdened communities by funding repair or replacement of existing deficient infrastructure and installation of new, energy-efficient weatherization features and building shell improvements. These efforts will reduce residents' exposure to both harmful concentrations of indoor air pollutants as well as other indoor health hazards like lead, asbestos, mold, and pests.<sup>34</sup> Reducing high-GWP refrigerants in the State's commercial facilities and other building decarbonization efforts will also increase energy efficiency, resulting in reductions in criteria and other toxic air pollutants from avoided-energy that would have been generated by fossil fuel sources. Collectively, these air pollutant reductions contribute to measurable community health benefits, while also having the potential to lower energy bills. Additionally, the use of distributed energy resources will provide greater community resiliency as commercial facilities may be able to provide more essential services during grid outages.

RGGI investment in tidal marshes and seagrass beds will also support statewide resiliency efforts by buffering coastal communities from storms, filtering water and providing habitat for recreationally and commercially important fishes and birds.<sup>35</sup> Trees in urban settings reduce ambient temperatures and help decrease energy use by directly shading buildings and mitigating urban heat island effects.<sup>36</sup> Afforestation, the process of establishing trees on land that has lacked forest cover for a very long period of time or land that has never been forested, and reforestation, the practice of reestablishing forest cover either naturally or artificially, not only expand the overall terrestrial carbon pool but also provide numerous ecological benefits including flood storage capacity, flood velocity reduction, enhanced ground-water recharge, nutrient and sediment control, increased habitat connectivity for wildlife, and recreational opportunities.<sup>37</sup> Protecting these natural resources can also avoid habitat loss, fragmentation, and the introduction of invasive species.<sup>38</sup> In addition, forests and trees play an important role in capturing rainfall, replenishing and cleaning our water supply and providing evaporative cooling, helping to cool the atmosphere.<sup>39 40 41</sup>

<sup>&</sup>lt;sup>33</sup> https://www.nj.gov/dep/airtoxics/nataest14.htm

<sup>&</sup>lt;sup>34</sup> https://www.njcleanenergy.com/files/file/Library/6 17 22 GHH-NJ-Report-Final-revised.pdf, p16.

<sup>&</sup>lt;sup>35</sup> <u>https://oceanservice.noaa.gov/news/nov16/marsh-baseline.html</u>

<sup>&</sup>lt;sup>36</sup> Nowak, D. A. (2016). Residential building energy conservation and avoided power plant emissions by urban and community trees in the United States. Retrieved from https://www.fs.fed.us/nrs/pubs/jrnl/2017/nrs\_2017\_nowak\_001.p

<sup>&</sup>lt;sup>37</sup> NJ State Forest Action Plan (2020), p73, <u>https://nj.gov/dep/parksandforests/forest/njsfap/docs/njsfap-final-12312020.pdf</u>.

<sup>&</sup>lt;sup>38</sup> New Jersey Division of Fish and Wildlife. (2019). Connecting Habitat Across New Jersey (CHANJ): Guidance Document, Version 1.0.

<sup>&</sup>lt;sup>39</sup> U.S. Environmental Protection Agency. (2008). U.S. Environmental Protection Agency. Reducing urban heat islands: Compendium of strategies. Draft. https://www.epa.gov/heat-islands/heat-island-compendium.

<sup>&</sup>lt;sup>40</sup> Water Evaporated from Trees Cools Global Climate (2011). Carnegie Science. <u>https://carnegiescience.edu/news/water-evaporated-trees-</u> <u>coolsglobal-climate</u>.

<sup>&</sup>lt;sup>41</sup> Center for Watershed Protection. Forests and Drinking Water. <u>https://www.cwp.org/forests-and-drinking-water/</u>

## **APPENDIX A: GUIDELINES FOR THE OBJECTIVES**

Every initiative in the Strategic Funding Plan must rank the importance of each objective as either critical or beneficial, where critical means necessary and beneficial means tending to help, but not necessary. If the agencies rank an objective as critical to their sponsored initiative, any spending associated with that initiative must be predicted to provide measurable and verifiable benefits towards furthering that objective. To provide further clarity about what "critical" means for each objective, the agencies developed the following guidelines:

#### 1. A net reduction in greenhouse gas emissions or a net sequestration of carbon;

In accordance with N.J.S.A. 26:2C-37 (the Global Warming Response Act), greenhouse gases are carbon dioxide, nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride and any other gas or substance determined by the Department of Environmental Protection to be a significant contributor to global warming. Revisions to the Global Warming Response Act signed by Governor Murphy on July 23, 2019 further states that while carbon dioxide is the primary and most abundant greenhouse gas, other greenhouse gases known as short-lived climate pollutants, including black carbon, fluorinated gases, and methane, create a warming influence on the climate that is many times more potent over a shorter period of time than that of carbon dioxide, and have a dramatic and detrimental effect on air quality, public health, and climate change; and that reducing emissions of these pollutants can have an immediate beneficial impact on climate change and public health.

A net reduction in greenhouse gas emissions is when the balance of greenhouse gas emissions is less due to the implementation of a project or program funded under a selected initiative. In the absence of the project or program occurring, overall greenhouse gas emissions would have been greater. Similarly, a net sequestration of carbon is when the balance of carbon stored/captured is greater due to the implementation of a project or program funded under a selected initiative.

# 2. Significant reductions in greenhouse gas emissions, reduction of impacts on ratepayers, and a significant contribution to the achievement of the State's 2050 Global Warming Response Act limit, relative to the cost of the project or program;

This Objective weighs various benefits (i.e., reduction in greenhouse gas emissions, ratepayer impacts) against the relative cost of the program to determine cost-effectiveness. Cost-effectiveness is defined as the total cost (including administrative costs and the amount of cost share (if applicable)) of a project or program funded under a selected initiative divided by the specific benefits (either carbon dioxide equivalent (or  $CO_2e^{42}$ ) emissions avoided or ratepayer savings) over the effective lifetime of a project or program funded under a selected initiative.

A reduction in impacts on ratepayers is defined as avoided or reduced cost of utility (gas or electric) relative to the cost of a project or program funded under a selected initiative.

A program or project implemented under an initiative that has a "significant reduction in greenhouse gas emissions" or a "significant contribution to the achievement of the State's limit of greenhouse gas reductions of 80% below 2006 levels by 2050" would need to result in a net greenhouse gas emission reduction that is large enough to affect the state's greenhouse gas inventory.

Projects will be evaluated based on their ability to cost effectively achieve reductions in greenhouse gas emissions or their ability to reduce impacts on ratepayers.

<sup>&</sup>lt;sup>42</sup> CO<sub>2</sub>e is a standard unit for measuring carbon footprint, by expressing the impact of various greenhouse gases on the climate. It describes, for a given mixture and amount of greenhouse gases, the amount of CO<sub>2</sub> that would have the same global warming ability, when measured over a specified period (e.g., 100 years).

#### 3. Reduction in energy use;

A reduction in energy use is defined as a decrease in the number of British Thermal Units (BTUs) or Megawatthours (MWh) consumed by a project or program funded under a selected Initiative, with the outcome of transitioning away from carbon-intensive energy sources.

Any activity that requires energy to produce work (e.g. moving a car from point A to point B, or thermal heating) can be measured using two attributes:

1) Carbon intensity of the fuel used to create energy, a measure of how much carbon per unit volume of the fuel is required. When combusted, the fuel releases its carbon content as CO2; and,

2) Energy intensity, a measure of energy efficiency, of the activity to produce a given unit of work (e.g. kWh required to run the dishwasher once or miles per gallons).

In the absence of the project or program occurring, energy use would have been greater.

4. Be directly responsive to the recommendations submitted by the Department to the Legislature pursuant to the Global Warming Response Act;

The project or program funded under a selected initiative fulfills one of the recommendations or related actions outlined in the <u>New Jersey's Global Warming Response Act 80x50 Report.</u>

#### 5. Provide co-benefits; and

Co-benefits are defined as social, economic and/or environmental benefits that will be realized due to the implementation of the project or program funded under a selected initiative beyond the primary benefit of greenhouse gases reduced, energy saved or increase in carbon sequestration. Co-benefits include, but are not limited to, creating job opportunities, reducing criteria air pollutants and/or air toxics, improving health outcomes and lowering healthcare costs, water quality and stormwater protection, improving or restoring natural habitats, reducing cost to electricity and natural gas consumers, improving local electric system reliability and contributing to regional initiatives to reduce greenhouse gas emissions.

## 6. Be directly responsive to the negative effects on human health and the environment in communities that are disproportionately impacted by the effects of environmental degradation and climate change.

The background document to the NJDEP's Global Warming Solutions Fund rulemaking proposal highlighted Executive Order No. 7's directive as a key Objective for directing RGGI proceeds; however, the rulemaking did not contain a definition or method for identification of the communities referred to in the Objective. Instead, the background pointed to the ongoing effort under <u>Executive Order No.23</u> which calls for all Executive branch departments and agencies to integrate environmental justice considerations into government decision-making. To support this effort NJDEP released <u>Furthering the Promise: A Guidance Document for Advancing Environmental</u> Justice Across State Government in September of 2020. This guidance document can be used by the state agencies to assist in identifying New Jersey's most overburdened communities, a term defined by the New Jersey Environmental Justice Law, N.J.S.A. 13:1D-157. NJDEP also released an interactive mapping tool, <u>EJMAP</u>, which allows users to view overburdened communities and the environmental and public health stressors impacting these communities. The tool is primarily designed to assist NJDEP is implementing the Environmental Justice Law but has broad applicability for use by all executive branch departments and agencies in growing the State's understanding of where communities disproportionally impacted by environmental degradation and climate change are so that agencies can define solutions that deliver justice.

# APPENDIX B-1: 2020 FUNDING PLAN OUTCOMES REPORT

#### 2020 RGGI Strategic Funding Plan

The RGGI Strategic Funding Plan: Years 2020 through 2022 was published in 2020 and was preceded by a public input period in November and December of 2019 where the NJDEP, NJEDA and the NJBPU held four in-person public workshops and one online webinar to collect feedback on the initiatives outline in the 2019 Scoping Document. The four initiatives included in the 2020 plan were: (1) Catalyzing Clean and Equitable Transportation; (2) Promoting Blue Carbon in Coastal Habitats; (3) Enhancing Forests, and Urban Forests; and (4) Creating a New Jersey Green Fund. These four initiatives were selected to be responsive to the directives of three core 2020 state actions the Electric Vehicle Bill, which set aggressive goals for New Jersey electric vehicle sales and public charging stations, the 2019 Energy Master Plan (EMP), which defined a path forward for decarbonizing New Jersey's energy sectors and Executive Order 100, which launched New Jersey Protecting Against Climate Threats (NJ PACT), a suite of greenhouse gas reporting and reduction rules. The selected initiatives were also informed by the feedback collected during the 2018 RGGI rulemaking process.





#### Investment of Proceeds

As a result of the quarterly RGGI auctions and fixed price allowance sales between 2020 and 2022 the agencies received proceeds totaling just over \$372 million. Funding was split between the agencies with NJEDA receiving a total of \$212.8 million, NJBPU \$75.9 million and NJDEP \$83.3 million. As of May 2023 New Jersey has committed \$279.7 million in RGGI proceeds to projects and programs that fall within the four funding initiatives outlined in the 2020 Plan. To date, 90% of the 2020-2022 RGGI project funding was committed to the Clean and Equitable Transportation Initiative, 6% to the Blue Carbon Initiative, 3% to the Forestry Initiative, and 0.3% to the Green Bank initiative. \$186.5 million in projects have been selected for funding to date of which 39% will fund projects in the commercial/industrial sector, 28% in local governments, 23% in the residental sector and 10% in the institutional sector. Projects have been selected for funding in 81 municipalities and 19 counties across the State.

New Jersey's 2020 RGGI Strategic Funding Plan

#### New Jersey's 2020 – 2022 RGGI Funding and Investment Summary

New Jersey's Global Warming Solutions Fund Act (GWSFA) established specific funding allocations for each agency from the proceeds the State receives from quarterly auctions and other fixed-price sales of CO<sub>2</sub> allowances in its CO<sub>2</sub> Budget Trading Program (N.J.A.C. 7:27C). Administrative costs follow a different allocation and are described in the Administration Costs section of this Appendix.



#### Total 2020-2022 RGGI Proceeds for Projects and Programs:

\$342.3M



#### Funding Dedicated to Projects by Investment Sector

### Total 2020-2022 RGGI Funding Dedicated\* to Projects: \$187,039,950



## Funding Committed or Dedicated to Projects and Programs by Initiative

Total 2020-2022 RGGI Funding Committed\*\* to Projects or Programs: **\$266,515,881** 



\*Total Funding "Dedicated" to Projects refers to total dollar amount of all RGGI projects selected for funding by the Agencies.

\*\*Total Funding "Committed" to projects or programs refers to the total dollar amount of RGGI funding that has been committed for all existing or upcoming funding programs, but Agencies have not necessarily selected projects that will receive those funds yet.
### 2020 Funding Initiatives Priority Rankings Summary

NJDEP's Global Warming Solutions Fund Rule requires that every objective must be ranked critical by at least one initiative, and each initiative must have at least one objective ranked as critical.<sup>43</sup> These objectives are used to rank all projects and programs applying for funding from the agency(s) sponsoring each initiative. The agencies may also include agency-specific criteria for selecting projects and programs. Details about satisfying the critical objectives and additional criteria are provided in grant and financial aid document guidelines are released by the agencies for their specific programs. See funding program information on pages 62-74 of this appendix for more details.

	Initiative 1 Catalyze Clean, Equitable Transportation	Initiative 2 Promote Blue Carbon in Coastal Habitats	Initiative 3 Enhance Forests and Urban Forests	Initiative 4 Create a New Jersey Green Bank
Objectives		_	_	100
<ol> <li>A net reduction in greenhouse gas emissions or a net sequestration of carbon;</li> </ol>	С	С	С	С
2. Significant reductions in greenhouse gas emissions, reduction of impacts on ratepayers, and a significant contribution to the achievement of the State's 2050 Global Warming Response Act limit, relative to the cost of the project or program;	В	В	С	С
3. Reduction in energy use;	С	В	В	В
<ol> <li>Be directly responsive to the recommendations submitted by the Department to the Legislature pursuant to the Global Warming Response Act;</li> </ol>	С	В	В	В
5. Provide co-benefits; and	С	С	С	В
<b>6.</b> Be directly responsive to the negative effects on human health and the environment in communities that are disproportionately impacted by the effects of environmental degradation and climate change.	C	В	В	В
Agency Sponsorship	🔇 📴 NJ EDA	۲	٢	NJ EDA
			K E	C = Critical B = Beneficial

#### Initiative One: Catalyze Clean, Equitable Transportation Outcomes

Initiaive One sought to accelerate transportation electrification in the State, focusing on reducing emissions from transportation sources in communities disproportionately impacted by the effects of environmental degradation and climate change. The agencies ranked five objectives as critical for this initiative: (1) a net reduction in greenhouse gas emissions or a net sequestration of carbon; (3) reduction in energy use; (4) be directly responsive to the recommendations submitted by the Department to the Legislature pursuant to the Global Warming Response Act; (5) provide co-benefits; and (6) be directly responsive to the negative effects on human health and the environment in communities that are disproportionately impacted by the effects of environmental degradation and climate change.<sup>44</sup>

Over \$162 million in auction proceeds have been dedicated to the electrification of medium- and heavy-duty vehicles in the local government, institutional, and commercial sectors; expanding the state's electric vehicle charging infrastructure network; and e-mobility projects that increase access to equitable, clean transportation options in New Jersey's overburdened communities. In total 182 projects have been selected for funding via the NJDEP-administered Medium and Heavy-Duty Electric Vehicle grant program, the e-mobility program, and the NJEDA's NJ ZIP program. These projects are predominantly located in Newark, Passaic, Lakewood Township, Egg Harbor Township, Elizabeth City, Jersey City, East

<sup>43</sup> N.J.A.C. 7: 27D Global Warming Solutions Fund, <u>https://www.nj.gov/dep/aqes/docs/njac7\_27d.pdf</u>.
 <sup>44</sup> <u>https://www.nj.gov/rggi/docs/rggi-strategic-funding-plan.pdf</u>, p 11.

Orange, Trenton, and Paterson. Collectively, the projects selected to date will reduce over 334,000 metric tons of carbon dioxide equivalent (MTCO<sub>2</sub>e), more than 3.2 million pounds (lbs) of co-pollutants and avoid more than 5.1 trillion British thermal units (TBtu)<sup>45</sup> across their lifetimes, signifying notable emissions and energy savings. Further, these projects are directly responsive to four of the five primary transportation sector recommendations outlined in the Global Warming Response Act 80x50 Report pursuant to critical objective four.<sup>46</sup> In order to ensure selected proposals meet the requirements of objectives (1), (3), (5), and (6), DEP-administered transportation project proposals were evaluated against the selection criteria outlined in the Volkswagen Beneficiary Mitigation Plan.<sup>47</sup> All DEP and BPU projects selected for funding under the transportation initiative were located within Overburdened Communities (OBC) as defined by New Jersey's Environmental Justice Law, N.J.S.A. 13:1D-157, which classifies an overburdened community as a US Census Block Group where at least 35% households are low-income; or at least 40% of residents identify as minority or as members of a State recognized tribal community; or where at least 40% of households have limited English proficiency.<sup>48</sup> Similarly, the NJ ZIP projects collect vehicle data and expected mileage during the application process to estimate the lifetime expected GHG and co-pollutant emissions avoided and energy use reduction benefits from selected projects.<sup>49</sup> Additionally to ensure NJEDA transportation initiative projects are responsive to objective (6), phase one of the NJ ZIP program selected applications from the greater Camden, Newark, New Brunswick, and greater Shore areas.<sup>50</sup> Applicants approved for vouchers had to have their business or institution's vehicle(s) remain domiciled in one of the gualifying overburdened communities or commit to driving 50% or more of the vehicle miles within a qualifying OBC. NJ ZIP phase two was launched statewide and incorporates a 10% voucher funding bonus for vehicles committing to drive 50% or more vehicle miles in NJ overburdened communities for 3 or more years.<sup>51</sup>

Further, NJDEP estimates that these investments are cost effective at approximately \$488 per metric ton of carbon dioxide equivalent avoided. This supports that the projects are responsive to beneficial objective (2) and will produce significant reductions in emissions relative to the cost of the program.

<sup>51</sup> <u>https://www.njeda.com/njzip/#4</u>

<sup>&</sup>lt;sup>45</sup> This estimate of total energy use avoided benefit is only inclusive of 141 projects selected prior to March 17<sup>th</sup>.

<sup>&</sup>lt;sup>46</sup> Transportation sector recommendations that funded projects are directly responsive to include: (1) "Implement legislative, regulatory and programmatic reforms to facilitate a rapid and complete transition away from fossil powered vehicles, ensuring average adoption rates of at least 111,000 new electric vehicles annually through 2025 with continued increasing adoption rates until all new sales of light-duty cars, SUVs, and trucks are electric by 2035"; (2) "Implement a long-term infrastructure program dedicated to constructing a statewide electric vehicle charging network"; (3) "Develop incentives for county and local governments to lead by example by electrifying their vehicle fleets"; and (4) "Identify funding and financing mechanisms to convert medium- and heavy-duty vehicles to electric". <a href="https://www.nj.gov/dep/climatechange/docs/nj-gwra-80x50-report-2020.pdf#page=31">https://www.nj.gov/dep/climatechange/docs/nj-gwra-80x50-report-2020.pdf#page=31</a>

<sup>&</sup>lt;sup>47</sup> <u>https://dep.nj.gov/wp-content/uploads/vw/pdf/bmpfinal.pdf</u>, p.13-14.

<sup>&</sup>lt;sup>48</sup> New Jersey Environmental Justice Law, N.J.S.A. 13:1D-157, <u>https://dep.nj.gov/wp-content/uploads/ej/docs/ej-law.pdf</u>.

<sup>&</sup>lt;sup>49</sup> Estimates of the lifetime emissions and energy use reduction benefits associated Medium and Heavy-Duty electric vehicle projects are derived using Argonne National Laboratory's Alternative Fuel Life-Cycle Environmental and Economic Transportation (AFLEET) Tool and USEPA's Diesel Emissions Quantifier (DAQ). DEP methodology is available upon request.

<sup>&</sup>lt;sup>50</sup> Greater shore areas were defined as the overburdened communities within or intersected by a line set at a 10-mile distance from New Jersey's eastern Atlantic shore, spanning approximately from Sandy Hook Bay to Delaware Bay. See <u>https://www.njeda.com/njzip/</u> for specific communities that were eligible for Phase 1 funding.

#### RGGI Strategic Funding Plan

Years 2023 through 2025

Catalyze Clean, Equitable Transportation 2020-22 Cumulative Outcomes <sup>52</sup>		GWSFA Critical Objective	GWSFA Beneficial Objective
Funding dedicated to projects	\$162,960,399		
Number of projects funded	182		
Estimated Lifetime CO <sub>2</sub> e Avoided (MT)	334,083	Objective 1	
Estimated Cost Effectiveness (\$/MT CO <sub>2</sub> e Avoided)	\$488		Objective 2
Estimated Lifetime Energy Use Avoided (MMBTU)	5,155,635 <sup>53</sup>	Objective 3	
Percent of projects responsive to GWRA 80x50 Report Recommendations	100%	Objective 4	
Estimated Lifetime Co-pollutants Avoided (lbs.) <sup>54</sup>	3,299,895	Objective 5	
Percent of funding to Overburdened Communities	100%	Objective 6	

Medium-duty electric ambulance featured during a DEP EV ride and drive event in Holmdel, NJ in 2022



## GHG BENEFIT SNAPSHOT

Lifetime greenhouse gas emissions avoided from NJ RGGI Transportation investments are equivalent to:

> **38 million** Gallons of gasoline consumed

taking:

**74,000** 

Gas-powered passenger vehicles off the road for one year



<sup>&</sup>lt;sup>52</sup> All cumulative funding outcome estimates are as of March 17, 2023. Data from projects that continue to be selected and funded using NJ 2020-2022 RGGI funds will be evaluated and updated in a future report.



<sup>&</sup>lt;sup>53</sup> This total does not include the energy use avoided from 34 projects selected in March 2023. Once estimated those benefits will be added to the dashboard and included in a future report.

<sup>&</sup>lt;sup>54</sup> Co-pollutants here refers to the sum of the estimated net total benefits of NO<sub>x</sub>, SO<sub>x</sub>, PM<sub>2.5</sub>, PM<sub>10</sub>, VOC, and CO avoided in pounds over the 15-year lifetime of selected projects.

### Initiative Two: Promote Blue Carbon in Coastal Habitats Outcomes

Initiative Two sought to promote, protect and maintain the beneficial role of New Jersey's tidal marshes in the carbon cycle. Blue Carbon ecosystems, such as salt marshes, tidal wetlands, seagrass beds and mangroves, are particularly important in the fight against climate change. The agencies ranked two objectives as critical for this initiaive: (1) a net reduction in greenhouse gas emissions or a net sequestration of carbon; and (5) provide co-benefits.<sup>55</sup>

Over \$17 million in auction proceeds has been dedicated to five blue carbon projects via NJDEP's Natural Climate Solutions arant program (See page 74 of this Appendix). This grant program funds projects that create living shorelines, restore tidal salt marsh vegetation and submerged aquatic vegetation. In total 5 projects have been selected for funding via the program. The projects are located in the coastal communities of the Delaware Bayshore in Cumberland County and coastal communities in Ocean County. Collectively, the projects selected to date are estimated to sequester more than 23,000 metric tons of carbon dioxide equivalent (CO<sub>2</sub>e) over their lifetimes and will restore 156 acres of New Jersey tidal salt marsh. In order to ensure that selected projects met critical objective (1) of producing a net sequestration of carbon, the NJDEP estimated the carbon sequestration potential of proposals and scored them using an evaluation system that weighted carbon sequestration among the highest of ten criteria.<sup>56</sup> The program also requires projects to establish a conservation restriction and/or maintenance agreement that ensures the preservation of the project and the benefits it provides. Further, based on NJDEP estimates, investment in these projects will achieve carbon sequestration at a rate of approximately \$738 per metric ton of carbon dioxide equivalent. Cost effectiveness is weighted higher in the evaluation criteria as well. Cost effective projects are those that provide the greatest carbon sequestration benefit at the lowest cost which is responsive to beneficial objective (2). Further, these projects are directly responsive to one of the six primary carbon sequestration sector recommendations outlined in the Global Warming Response Act 80x50 Report pursuant to beneficial objective (4).<sup>57</sup> The co-benefits provided by blue carbon projects were also weighted higher among proposal scoring criteria to ensure initiative funding furthered critical objective (5). Expected co-benefits are described in more detail in the Cumulative Estimated Co-benefits section of this Appendix. Additionally, to ensure blue carbon initiative projects are responsive to beneficial objective (6), Natural Climate Solutions grant proposals located in or benefiting New Jersey OBC were given more points in the evaluation process.

<sup>&</sup>lt;sup>55</sup> <u>https://www.nj.gov/rggi/docs/rggi-strategic-funding-plan.pdf#page=14</u>

<sup>&</sup>lt;sup>56</sup> https://www.nj.gov/dep/climatechange/docs/natural-climate-solutions-grant-program.pdf#page=28

<sup>&</sup>lt;sup>57</sup> Carbon sequestration sector recommendations that funded projects are directly responsive to include: (6) "Monitor sequestration results of current pilot blue carbon projects and utilize data to inform future project selection criteria." The blue carbon projects selected for funding through the NCS program are the first living shorelines and tidal salt marsh restoration projects with the primary purpose of sequestering carbon that NJDEP has funded to date. The program requires monitoring and adaptive management and will collect and utilize data from projects to inform future project selection. <u>https://www.nj.gov/dep/climatechange/docs/nj-gwra-80x50-report-2020.pdf#page=169</u>, p 147.

### RGGI Strategic Funding Plan

Years 2023 through 2025

**GWSFA Beneficial** 

**GWSEA** Critical Objective

Promote	Blue Carbon	
2020-22	Cumulative Outcomes	

2020-22 Cumulative Outcomes 58			Objective
Funding dedicated to projects	\$17,608,091		
Number of projects funded	5		
Estimated Lifetime CO <sub>2</sub> e Sequestered (MT)	23,858	Objective 1	
Avg. \$/MT CO <sub>2</sub> e Sequestered	\$738		Objective 2
Estimated Lifetime Energy Use Avoided (MMBTU)	N/A		Objective 3
Percent of projects responsive to GWRA 80x50 Report Recommendations	100%		Objective 4
Tidal salt marsh to be restored (acres)	156	Objective 5	
Percent of funding to Overburdened Communities	33%		Objective 6

Example of a living shorelines project. (Source: NJDEP NCS webpage)



Blue carbon cycle



## GHG BENEFIT SNAPSHOT

Greenhouse gas emissions avoided from NJ RGGI Blue Carbon investments are equivalent to:

taking:



Gas-powered passenger vehicles off the road for one year



<sup>&</sup>lt;sup>58</sup> All cumulative funding outcome estimates are as of March 17, 2023. Data from projects that continue to be selected and funded using NJ 20-22 RGGI funds will be evaluated and updated in a future report. Carbon sequestration projects use a 27-year project lifetime. Estimates were derived from data collected from selected NCS blue carbon project proposals using a blue carbon calculator tool drafted by NJDEP Division of Science and Research. DEP methodology is available upon request.

### Initiative Three: Enhancing Forests, and Urban Forests Outcomes

Initiave Three focused on enhancing New Jersey's forests and urban forests. Agencies ranked three objectives as critical for initiative three in the 2020 plan: (1) a net reduction in greenhouse gas emissions or a net sequestration of carbon; (2) significant reductions in greenhouse gas emissions, reduction of impacts on ratepayers, and a significant contribution to the achievement of the State's 2050 Global Warming Response Act limit, relative to the cost of the project or program; and (5) provide co-benefits.<sup>59</sup>

Over \$6 million dollars in auction proceeds was dedicated to 9 projects via the NJDEP's Natural Climate Solutions grant program (See page 73 of this Appendix) which funds terrestrial carbon sequestration projects like afforestation, reforestation, and urban tree planting with special consideration given to New Jersey's overburdened communities. The projects are located in Newark, Trenton, Atlantic City, Princeton, Linden, Kearny, Berkeley Heights and Readington. Collectively, the projects selected to date will sequester more than 8,000 metric tons of carbon dioxide equivalent (CO<sub>2</sub>e), plant more than 16,000 trees, and restore 56 acres of forest. In order to ensure that selected projects met critical objective (1) of producing a net sequestration of carbon, the NJDEP estimated the carbon sequestration potential of received proposals and scored them using an evaluation system that weighted carbon sequestration among the highest of ten criteria.<sup>60</sup> The program also requires each project to establish a conservation restriction and/or maintenance agreement that ensures the preservation of the project and the benefits it provides. Cost effectiveness is weighted higher in the evaluation criteria as well. Cost effective projects are those that provide the greatest carbon sequestration benefit at the lowest cost which is directly responsive to critical objective (2). NJDEP estimates that investment in these projects will sequester carbon at a cost of approximately \$762 per metric ton of CO<sub>2</sub>e. While these projects are not directly responsive to any of the six primary carbon sequestration sector recommendations outlined in the GWRA 80x50 Report, they are directly responsive to two of the primary carbon sequestration pathways outlined in the report and therefore are responsive to beneficial objective (4).<sup>61</sup> The co-benefits that green carbon forestry projects selected in the grant program will provide were also weighted higher among proposal scoring criteria. Additionally, to ensure the projects are responsive to beneficial objective (6), grant proposals located in or benefitting New Jersey OBC were given more points in the evaluation process and location in an OBC was weighted higher among the ten other evaluation criteria.

The NJDEP has also committed an additional \$2.5 million in RGGI funds under this initiative to plant trees on New Jersey school campuses through the *Trees for Schools grant program* which launched in the spring of 2023 (See page 65 of this Appendix). This program, in collaboration with The College of New Jersey (TCNJ) and Sustainable Jersey, commits funding to plant trees on school campuses with a special priority given to schools in New Jersey's overburdened communities. Pursuant to the objective (6), which is ranked as beneficial for this initiative, the program is allocating 40% of available grant funds to qualified projects that are in or partially located in census blocks that are characterized as an OBC. The program will also give additional points in the selection process to applications that are located in overburdened areas within municipalities that have been identified as being severely impacted by a lack of tree cover and a high percentage of impervious surface.<sup>62</sup> Additionally, in order to ensure that selected projects meet the critical objectives of (1) producing a net sequestration of carbon and (5) providing co-benefits, the DEP will estimate the carbon sequestration potential of proposals and score them using an evaluation system that weights carbon sequestration among the highest of ten criteria. The program is accepting applications until July 13<sup>th</sup>, 2023 with plantings to occur in spring 2024. Cost effectiveness is also weighted higher in the evaluation criteria. Cost effective projects are those that provide the greatest carbon sequestration benefit at the lowest cost which is directly responsive to critical objective (2). Because the program has not selected projects for funding yet, program outcomes are not included in the cumulative outcomes table below.

<sup>&</sup>lt;sup>59</sup> <u>https://www.nj.gov/rggi/docs/rggi-strategic-funding-plan.pdf#page=15</u>

<sup>&</sup>lt;sup>60</sup> https://www.nj.gov/dep/climatechange/docs/natural-climate-solutions-grant-program.pdf#page=28

<sup>&</sup>lt;sup>61</sup> While the carbon sequestration sector recommendations do not explicitly include incentives for reforestation, afforestation or urban forest enhancement projects, the NCS projects are directly responsive to the 80x50 report's primary sequestration pathways: (1) "Reforestation," and (2) "Avoided conversion of natural lands". https://www.nj.gov/dep/climatechange/docs/nj-gwra-80x50-report-2020.pdf#page=169, p 147.

<sup>&</sup>lt;sup>62</sup> For further details on project classification and scoring under these criteria, see Selection Process section of the <u>Application Package</u>, p 16.

#### RGGI Strategic Funding Plan

Years 2023 through 2025

Forests, and Urban Forests 2020-22 Cumulative Outcomes <sup>63</sup>		GWSFA Critical Objective	GWSFA Beneficial Objective
Funding dedicated to projects	\$6,741,460		
Number of projects funded	9		
Estimated Lifetime CO <sub>2</sub> e Sequestered (MT)	8,852	Objective 1	
Avg. \$/MT CO₂e Sequestered	\$762	Objective 2	
Estimated Lifetime Energy Use Avoided (MMBTU)	N/A		Objective 3
Percent of projects responsive to GWRA 80x50 Report Recommendations	100%		Objective 4
Estimated Trees to be planted	16,982	Objective 5	
Forest to be restored (acres)	56	Objective 5	
Percent of funding to Overburdened Communities	86%		Objective 6

Tree planting event at Morris Avenue Early Childhood Learning Center in Long Branch, NJ to launch the Trees for School Grant Program



Green carbon cycle



## GHG BENEFIT SNAPSHOT

Greenhouse gas emissions avoided from NJ RGGI Green Carbon investments are equivalent to:

taking:



Gas-powered passenger vehicles off the road for one year



<sup>&</sup>lt;sup>63</sup> All cumulative funding outcome estimates are as of March 17, 2023. Data from projects that continue to be selected and funded using NJ 20-22 RGGI funds will be evaluated and updated in a future report. Carbon sequestration projects use a 27 year project lifetime. Estimates were derived from data collected from selected NCS green carbon project proposals using i-Tree Planting Calculator and carbon estimates from the Forest Vegetation Simulator (FVS). DEP methodology is available upon request.

### Initiative Four: Create a New Jersey Green Fund Outcomes

Initiative Four, sponsored by the Economic Development Authority (NJEDA), sought to increase the pace of clean energy investment and job growth across the State by creating a New Jersey Green Bank which the National Renewable Energy Laboratory (NREL) describes as an institution that helps secure low-cost capital for clean energy projects at favorable rates and terms for both traditional and underserved markets.<sup>64</sup> The NJEDA utilized RGGI funds to contract with the Coalition for Green Capital, a nonprofit organization, to provide initial consulting services to support the design of a statewide green financing mechanism called the New Jersey Green Fund. While these services have helped to inform future plans, the New Jersey Green Fund is in its early incubation stages. The NJEDA anticipates structuring the Green Fund to accelerate the growth of an equitable clean energy economy in the Garden State. Similar to green banks across the country, the Green Fund will specifically work on projects that are cost effective and leverage private capital. Much of the NJEDA RGGI funds for this initiative have been reallocated towards Initiative One: Catalyze Clean Equitable Transportation via the NJ ZIP program, as a first market engagement in advancing these goals. To complement the RGGI funds and accelerate the growth of the Green Fund, the state's 2024 fiscal budget provided an additional \$40 million for the Green Fund.

New Jersey Green Fund 2020-22 Cumulative Outcomes <sup>65</sup>		GWSFA Critical Objective	GWSFA Beneficial Objective
Funding dedicated to projects	\$700,000		
Number of projects funded			
Estimated Lifetime CO <sub>2</sub> e Avoided (MT)		Objective 1	
Avg. \$/MT CO₂e Avoided		Objective 2	
Estimated Lifetime Energy Use Avoided (MMBTU)			Objective 3
Percent of projects responsive to GWRA 80x50 Report Recommendations	0%		Objective 4
Estimated Co-benefits provided			Objective 5
Percent of funding to Overburdened Communities	0%		Objective 6

<sup>&</sup>lt;sup>64</sup> <u>https://www.nrel.gov/state-local-tribal/basics-green-banks.html</u>

<sup>&</sup>lt;sup>65</sup> All cumulative funding outcome estimate are as of March 17, 2023. Data from projects that continue to be selected and funded using NJ 20-22 RGGI funds under this initiative will be evaluated and updated in a future report.

### Administration Funding Allocations

New Jersey uses a portion of its RGGI proceeds to fund the administration of the program itself which includes funding RGGI Inc. and staff involvement in RGGI program implementation, as well as the administration costs associated with creating and managing grant and incentive programs that utilize RGGI funding. Each agency receives 2% of RGGI proceeds for the administrative costs of their RGGI programs. The DEP receives an additional 2% of administration funds because it implements and oversees facility compliance with New Jersey's CO<sub>2</sub> Budget Trading Program and pays RGGI Inc. directly for New Jersey's participation in the program. RGGI Inc. is the 501(c)(3) non-profit corporation created to support the development and implementation of the Regional Greenhouse Gas Initiative as a cooperative effort among states to reduce greenhouse gas emissions.

#### New Jersey RGGI 2020-22 Administration Funding Allocation by Agency

NJDEP	\$14.9 M
NJBPU	\$7.4 M
NJEDA	\$7.4 M
Total Admin	\$29.8 M

### **Cumulative Estimated GHG Benefits**

As a result of investments made from New Jersey's RGGI Strategic Funding Plan for the years 2020-2022, State agencies estimate that over the lifetime of the projects funded the State will avoid a total of 334,083 metric tons of CO<sub>2</sub>e and sequester a total of 32,710 metric tons of CO<sub>2</sub>e. Taken together, the potential greenhouse gas emissions reduction benefit of investments to date are equivalent to taking about 82,000 gas-powered vehicles off the road for one year or not charging over 44 billion smartphones.



### **Cumulative Estimated Co-Benefits**

In New Jersey's RGGI Strategic Funding Plan for the years 2020-2022, State agencies anticipated numerous co-benefits beyond greenhouse gas reductions from the investment of the RGGI auction proceeds.<sup>66</sup> Co-benefits refer to other positive side effects associated with policies or measures. Co-benefits are considered a win-win for communities, as they range from better air quality, less waste, protected natural resources, improved health and a stronger economy. Looking at climate change mitigation efforts holistically builds the case for strong climate action, demonstrating that these actions, in many cases provides even greater benefits than avoided air pollution alone. Overall, as of publication of this report, New Jersey State agencies' investment of RGGI auction proceeds from Strategic Funding Plan years 2020-2022, is estimated to avoid over the project lifetime: <sup>67</sup>



Additionally, investment of RGGI 2020-2022 auction proceeds in natural carbon sequestration projects in the State are estimated to result in: <sup>68</sup>



#### **Energy Use**

Efforts to electrify New Jersey's transportation sector through RGGI auction proceeds investment under Initiative One: Catalyze Clean, Equitable Transportation from the years 2020-2022 will avoid approximately 5.1 trillion BTUs in energy use by incentivizing the purchase of electric vehicles which consume less energy than fossil fuel-powered vehicles with internal combustion engines. This total does not include the energy use avoided from 34 electric vehicle projects selected in March 2023. Once estimated those benefits will be added to the dashboard and included in a future report.

<sup>&</sup>lt;sup>66</sup> <u>https://www.nj.gov/rggi/docs/rggi-strategic-funding-plan.pdf#page=21</u>

<sup>&</sup>lt;sup>67</sup> Estimates are aggregated total of all project benefits calculated using an estimated 15-year lifetime.

<sup>&</sup>lt;sup>68</sup> Estimates are aggregated total of all project benefits calculated using an estimated 27-year lifetime.

#### Energy use avoided from NJ RGGI investments are equivalent<sup>69</sup> to the energy used by:



Estimates of the energy use avoided from the trees that will be planted through projects receiving 2020-2022 RGGI funds are not included in the total benefits reported above. These benefits may be assessed at the completion of those projects and reported in a future report.

#### **Avoided Criteria & Toxic Air Pollutants**

Transportation project investments from the 2020-2022 funding plan are also estimated to avoid the release of over 3 million pounds of criteria and other toxic air pollutants that include nitrous oxides (NOx), particulate matter (PM10), fine particulate matter (PM2.5), volatile organic compounds (VOC), and carbon monoxide (CO) which improves air quality and results in associated health benefits.

Estimated cumulative criteria and toxic air pollutants avoided over lifetime of RGGI projects selected for funding. These project benefits do not yet include the eMobility projects that have been selected as details for those projects are still being determined.

#### Lifetime Criteria and Toxic Air Pollutants Avoided (Lbs.)

NO <sub>x</sub>	1,563,006
PM <sub>10</sub>	4,368
PM <sub>2.5</sub>	81,413
VOC	185,685
СО	1,501,907
SO <sub>x</sub>	-36,484
Net total pounds avoided	3,299,895

As a result of these projects, sulfur oxide (SOx) emissions are estimated to increase by about 36,000 pounds over the 15year project lifetime. This is because the fossil-fuel powered power plants that make up a portion of electric grid will see an increase in load to charge the electric vehicles being funded by these investments. These power plants (notably the natural gas-powered plants) release more SOx from producing the energy needed to charge the electric vehicles than is produced from the diesel or gasoline internal combustion engine that the electric vehicle is replacing. This net increase in SOx emissions from the investment in electric vehicle projects emphasizes the need to transition the electric grid to cleaner and more renewable energy sources.

Estimates of the toxic air pollutants avoided from the trees that will be planted through projects receiving 2020-2022 RGGI funds will be assessed at the completion of those projects and reported in a future report.

#### **Health Benefits**

Using the US Environmental Protection Agency's CO-Benefits Risk Assessment Health Impacts Screening and Mapping Tool (COBRA) state agencies estimate that as a result of the investments made using 2020-2022 RGGI auction proceeds, New

<sup>&</sup>lt;sup>69</sup> All emissions equivalency calculations were done utilizing the EPA Greenhouse Gas Equivalencies Calculator at: <u>https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator</u>

Jerseyans will avoid somewhere between \$10 and \$23 million in health-related costs. COBRA calculates reductions in expected health endpoints<sup>70</sup> associated with emissions reductions and attaches a monetary value to those avoided health outcomes. RGGI investments in transportation electrification are also estimated to reduce asthma exacerbation, minor restricted activity days, and days of work lost by New Jersey residents as a result of the associated reductions in criteria and toxic air pollutants over the 15-year lifetime of these projects.<sup>71</sup>

#### Social Cost of Carbon

The social cost of carbon is an estimate, in dollars, of the global economic damage that would result from emitting one additional ton of carbon dioxide into the atmosphere in a given year. The agencies estimate that roughly \$20 million in global damages will be avoided as a result of the investments of 2020-2022 RGGI proceeds to date into climate change mitigation projects.<sup>72</sup>

The estimate of climate change damages is inclusive of changes in net agricultural productivity, human health, property damages from increased flood risk and changes in energy system costs, such as reduced costs for heating and increased costs for air conditioning. The dollar value reported above is therefore the estimate of the total global economic costs avoided from New Jersey's investment of RGGI auction proceeds into climate mitigation projects and programs as of March 2023 over a 15-year lifetime for greenhouse gas avoiding projects and a 27-year lifetime for carbon sequestration projects.

	NUIIDEI	01110	GUISI	IUVIUI	ing Do				
Restores/Enhances Priority Community Green Space								12	
Creates New Outdoor Recreation Space			6						
Creates an aesthetic benefit						9			
Increases Public Safety and/or Resilience									13
Improves opportunities for swimmable and drinkable water		5							
Provides or retains historical and cultural value				7					
Enhances habitat connectivity						9			
Reduces urban heat island effect							10		
Promotes Tree Equity				7					
Addresses priorities in the Forest Action Plan or Wildlife Action Plan					8				
Ecosystem resilience for threatened species	2								

## Other Environmental Co-benefits Number of Projects Providing Benefit

<sup>&</sup>lt;sup>70</sup> Health endpoints are adverse health outcomes (e.g., heart attacks, asthma attacks, hospitalizations) used for evaluating quantitative or qualitative health impacts from air pollution exposure. <u>California Air Resources Board Updated Health Endpoints Bulletin</u> (2022).

<sup>&</sup>lt;sup>71</sup> Health benefits from reductions in NO<sub>x</sub>, PM<sub>2.5</sub>, VOC, SO<sub>x</sub> were derived from the web version of EPA's COBRA tool. This version of COBRA does not estimate health outcomes for reductions in PM<sub>10</sub> or CO, so those reductions are left out of this analysis. COBRA can be accessed at <u>https://www.epa.gov/cobra</u>.

<sup>&</sup>lt;sup>72</sup> SC-GHG estimates for reductions in CO<sub>2</sub> and N<sub>2</sub>O included here are derived from the Interagency Working Group on Social Cost of Greenhouse Gases' Technical Support Document: Social Cost of Carbon, Methane, and Nitrous Oxide - Interim Estimates under Executive Order 13990 (available at: <u>https://www.whitehouse.gov/wp-content/uploads/2021/02/TechnicalSupportDocument\_SocialCostofCarbonMethaneNitrousOxide.pdf</u>). It is intended to represent an estimate of the total global economic costs avoided from NJ's investment of RGGI auction proceeds into climate mitigation projects and programs as of March 17, 2023 over a 15-year project lifetime.

#### **Jobs Created**

The agencies' investment of RGGI proceeds into transportation projects and the state's clean energy economy likely had a positive effect in driving new investments and creating new jobs. As of publication of this report the agencies do not have enough data to estimate an accurate figure for new, New Jersey-based jobs created from these investments. However, the agencies intend to reevaluate jobs created from RGGI investments in future reports.

#### NJ RGGI Climate Investments Dashboard

Detailed information on selected projects can be found on the <u>New Jersey RGGI Climate Investments Dashboard</u>. This dashboard is periodically updated as projects are selected and publicly announced.



This Dashboard is subject to periodic revision and update. The dashboard shows the most up-to-date available data estimates for the investment of RGGI auction proceeds. Note that data availability can lag between administering programs funding announcements and inclusion in this dashboard. The data may also differ slightly from other summary reports due to variances in reporting methodologies and ongoing revisions. Data is added at the time of award and values are subject to change after project implementation.

# CATALYZE CLEAN, EQUITABLE TRANSPORTATION NJ ZERO-EMISSIONS INCENTIVES PILOT PROGRAM

#### FUNDING & ADMINISTERING AGENCY: NJEDA

## **Cumulative Funding**

How much funding has the program received? \$92.7 million.

How much has gone to projects? \$40.3 million in Phase 1.

## **Program Description**

#### What types of projects are funded?

Vouchers for new, class 2b to class 6 medium and heavy-duty electric vehicles. Phase 2 of the pilot includes class 8 vehicles.

**Cumulative Outcomes** 

#### How to access funds?

Apply at EDA's NJ ZIP program website.

#### Who receives funds?

Businesses and organizations driving and operating in New Jersey. Bonuses are given to small businesses; women, minority-, and veteran-owned businesses; vehicles that are manufactured in New Jersey; small businesses that scrap their eligible gas- or diesel-powered medium- and heavy-duty vehicles.

## How does the program target funds and provide benefits to Overburdened Communities?

In addition to giving bonuses to applicants following the above criteria, applicants are required to drive 75% of the time in NJ and are awarded additional bonuses if they opt to drive more than 50% of VMT in a NJ overburdened community (as defined in N.J.S.A. 13:1D-157). Phase 1 focused vouchers on vehicles that that will operate in the greater Camden, Newark, New Brunswick, and greater Shore areas.



## 

Other areas of New Jersey

0%

 $^1$  Co-pollutants are the net total of NOx, SOx, PM\_{2.5}, PM\_{10}, VOC, and CO reductions as a result of projects.

 $^{\rm 2}\,$  All selected projects indicated that they would drive at least 50% of miles in a NJ OBC.

## **PROJECT SPOTLIGHT**

#### **ENAT Transportation & Logistics Electric Delivery Vehicles**

**ENAT Transportation & Logistics**, located in Ridgefield Park, was one of the first businesses approved for support under the program and one of the first NJ ZIP awardees to receive its vehicles, and is on its way to transitioning its entire commercial fleet to electric vehicles within the next five years.

Through NJ ZIP vouchers totaling \$407,000, ENAT was able to purchase an electric medium-duty pickup truck and three electric delivery step vans for their fleet. The new vehicles are estimated to avoid a total of 413 metric tons of CO<sub>2</sub> emissions, 260 pounds of NOx emissions, and avoid the use of 3,919 MMBtu of energy over the course of a fifteen-year vehicle lifetime.

"NJ ZIP is a fantastic resource for small businesses like mine to afford transitioning to an electric fleet as we strive to reduce our carbon footprint and the additional bonus it provides gives woman-owned minority businesses, like mine, the opportunity for progress," said Vanessa Abad co-founder and owner of ENAT Transportation & Logistics. "The additional \$40,000 in bonuses we received for being a minority and womenowned small business has allowed us to compete with other transportation companies in an industry that has traditionally been operated by men."



ENAT Transportation & Logistics is also currently working with Bergen Community College to serve as a location to house their zero-emission vehicles as part of the Bergen Community College Business Accelerator. GreenPower Motor Company is an authorized vendor under NJ ZIP from which ENAT Transportation & Logistics procured their vehicles.

NJ ZIP is now accepting voucher applications for Phase 2 of the program. In this phase the **application is open** to purchasers and vendors registered across the state of New Jersey.



## CATALYZE CLEAN, EQUITABLE TRANSPORTATION NJDEP MEDIUM & HEAVY-DUTY VEHICLE ELECTRIFICATION PROGRAM

#### FUNDING & ADMINISTERING AGENCIES: NJBPU, NJDEP, NJEDA

## **Cumulative Funding**

How much funding has the program received? \$106.2 million

How much has gone to projects? \$106.2 million

## **Program Description**

20%

#### What types of projects are funded?

The incremental costs of purchasing new, medium- and heavy-duty electric vehicles including school buses, garbage trucks, transit, and shuttle buses along with associated charging stations.

#### How to access funds?

The Department identified project proposals through a series of open solicitations. Funding awards were announced on February 16, 2021, November 10, 2021, April 21, 2022, August 9, 2022, and March 17, 2023. More details about the awarded projects can be found here.

#### Who receives funds?

Local governments and contractors that provide services to residents. Through a memorandum of understanding (MOU) with the other agencies, DEP also awards EDA and BPU RGGI proceeds for commercial/industrial, institutional, and residential sector entities in accordance with the NJ GWSF Act.

#### How does the program target funds and provide benefits to Overburdened Communities?

Priority is given to projects in overburdened communities, (as defined in (N.J.S.A. 13:1D-157), that demonstrate the best greenhouse gas cost effectiveness.



## **PROJECT SPOTLIGHT**

### The City of Newark Electric Garbage Trucks

Through multiple awards, NJDEP awarded **the City of Newark** a total of \$4,536,724, which will fund 8 electric garbage trucks and 2 direct current fast charging stations. Of the total project cost (\$5,658,000 for vehicles and chargers), 80% will be awarded by NJDEP from RGGI proceeds.

This project was selected for funding in 2022 and is located in and will benefit the City of Newark. It is intended to serve the Local Government sector under the "Catalyze Clean, Equitable Transportation" Initiative of the RGGI Strategic Funding Plan 2020-2022.

Jonathon Gordon, Climate Action Coordinator for the City of Newark noted, "The City of Newark is dedicated to bringing fiscally responsible innovations in services and technology to its residents, while improving efficiency and sustainability."

Gordon goes on to say that Newark has been disproportionately impacted by its legacy of industry, its close proximity to Newark Airport, Port Newark, and a vast roadway network which contribute to the highest asthma rate in the state.

The NJ DEP estimates that as a result of the investment in these vehicles, New Jersey will avoid 9,269 metric tons of greenhouse gas emissions, 28,260 pounds of criteria and other toxic air pollutants, and 498,090 MMBTUs of energy use.

## Example of the electric garbage trucks that Newark will purchase with RGGI funds.



## CATALYZE CLEAN, EQUITABLE TRANSPORTATION E-MOBILITY PROGRAM

#### FUNDING & ADMINISTERING AGENCIES: NJBPU, NJDEP

## **Cumulative Funding**

How much funding has the program received? \$16.2 million

How much has gone to projects? \$16.2 million

## **Program Description**

#### What types of projects are funded?

Electric mobility or "eMobility" solutions like carshare, rideshare, and ride hailing services provide additional modes of transport for residents in underserved areas, who often don't own a personal vehicle and rely on public transportation. eMobility will help ensure they have access to and can benefit from the advantages of clean vehicle technology.

#### How awardees accessed funds?

Grantees visited the program website at <u>https://dep.nj.gov/drivegreen/emobility/</u> and completed the <u>eMobility Proposal Form</u>.

#### Who received funds?

New Jersey public and private entities implementing eMobility projects to benefit residents of an underserved community.

## How does the program target funds and provide benefits to Overburdened Communities?

All selected proposals are located in Overburdened Communities (as defined in <u>N.J.S.A. 13:1D-157</u>). eMobility services will be dedicated to the people living and working in these communities.

### **Cumulative Outcomes**

48 Electric Vehicles funded39 Level 2 EV Chargers funded34 Direct Current Fast Chargers funded

#### Lifetime Expected Benefits

Funded projects are estimated to avoid:

Project details are still being finalized. Lifetime benefits from selected projects cannot yet be estimated.

#### **Funding Distribution**

\$16.2 million to Overburdened Communities (OBCs)





## **PROJECT SPOTLIGHT**

### **GoTrenton!** eMobility Pilot

Through this eMobility pilot project, called "GoTrenton!," **Isles, Inc**. is currently working with Circuit, an eMobility company, to provide clean transportation around the City of Trenton through an on-demand and fixed route rideshare service as well as an electric shuttle service to warehouse jobs outside of the city.

The project will include the purchase of neighborhood electric vehicles (NEVs) which are smaller, short range electric vehicles that will be used as part of the rideshare.

"Increasing equitable access to clean transportation, generating new jobs and improving the air quality for Trenton residents are the primary goals of GoTrenton!," says Katharina Miguel a Clean Energy Advocate with Isles Inc.

"An electric vehicle rideshare and Mercer County Workforce van service will provide safe and affordable transportation choices for Trentonians to get to work, shopping and services. It will make our city more thriving and resilient."

GoTrenton, received a grant of \$883,000 through DEP's first eMobility solicitation. The program is in its final planning stages and expects to launch in 2023.

Example of the neighborhood electric vehicles (NEVs) that will operate in Trenton rideshare as a result of the pilot project.



## PROMOTE BLUE CARBON IN COASTAL HABITATS NATURAL CLIMATE SOLUTIONS GRANT PROGRAM

#### FUNDING & ADMINISTERING AGENCY: NJDEP

## **Cumulative Funding**

How much funding has the program received? \$17,608,091

How much has gone to projects? \$17.608.091

### **Program Description**

#### What types of projects are funded?

On-the-ground implementation of blue carbon projects include living shorelines, tidal salt marsh vegetation restoration, and submerged aquatic vegetation restoration.

#### How to access funds?

NJDEP issued a Request for Proposal for the Natural Climate Solutions Grant Program in May of 2022. Funding awards were announced January 18, 2023.

Organizations can find more details about the program and get updated when the next round funding becomes available at NJDEP's NCS program website.

#### Who receives funds?

State, county, and local government units within New Jersey, including State government agencies or school boards; New Jersey universities and colleges; Interstate agencies of which New Jersey is a member; Private landowners owning property in New Jersey; Nonprofit organizations authorized to operate in the State of New Jersey.

#### How does the program target funds and provide benefits to Overburdened Communities?

Applications that are from a New Jersey Overburdened Community (OBC) (as defined in N.J.S.A. 13:1D-157), or demonstrate that their projects will provide a direct benefit to an OBC are given higher scores.



### **Cumulative Outcomes**

5 Projects Awarded

Lifetime Expected Benefits<sup>1</sup>

23,858 MT CO<sub>2</sub>e sequestered

156 acres of tidal wetlands restored

#### **Funding Distribution**





<sup>1</sup> Estimates use project lifetimes of 27 years (out to 2050).

<sup>2</sup> The program uses the definition of Overburdened Communities from NJ P.L.2020, c.92.

## ENHANCING FORESTS AND URBAN FORESTS NATURAL CLIMATE SOLUTIONS GRANT PROGRAM

#### FUNDING & ADMINISTERING AGENCY: NJDEP

## **Cumulative Funding**

How much funding has the program received? \$6,741,460

How much has gone to projects? \$6,741,460

### **Program Description**

#### What types of projects are funded?

Green carbon projects such as forest and woodland restoration, and urban forest canopy and water quality enhancement.

#### How to access funds?

NJDEP issued a Request for Proposal for the Natural Climate Solutions (NCS) Grant Program in May of 2022.

Funding awards were announced January 18, 2023. Organizations can find more details about the program and get updated when the next round funding becomes available at NJDEP's <u>NCS program website</u>.

#### Who receives funds?

State, county, and local government units within New Jersey, including State government agencies or school boards; New Jersey universities and colleges; interstate agencies of which New Jersey is a member; private landowners owning property in New Jersey; and nonprofit organizations authorized to operate in the State of New Jersey.

## How does the program target funds and provide benefits to Overburdened Communities?

Applications that are from a New Jersey Overburdened Community (OBC) (as defined in N.J.S.A. 13:1D-157), or demonstrate that their projects will provide a direct benefit to an OBC are given higher scores in the review of submitted proposals.



## **PROJECT SPOTLIGHT**

### Throwin' Shade: Greening the Capital City & Restoring Marsh at the Mouth of the Maurice River

On January 18th, 2023, NJ DEP Commissioner Shawn LaTourette announced the recipients of 14 grants for new projects that would enhance New Jersey's natural carbon sinks at a press event in Mill Hill Park in Trenton.

Funding provided to New Jersey Conservation Foundation for their "Throwin' Shade: Greening the Capital City" project will allow the organization to plant a total of 1,000 trees in Trenton to enhance the city's urban tree canopy and sequester more than 1,180 metric tons of CO<sub>2</sub>e by 2050.

"This grant is an investment in our city's green infrastructure and its people. We now have an opportunity to not only plant trees, but also engage the community in the long-term care that will ensure these trees thrive for the benefit of future generations," said New Jersey Conservation Foundation Co-Executive Director Jay Watson.

"We believe this project can be transformative in our capital city where residents are experiencing disproportionate impacts of climate change. Urban neighborhoods are dealing with the 'heat island effect' that causes higher ambient temperatures than in suburban and rural areas."

Through a grant award of up to \$4.99 million, the American Littoral Society will restore 19.5 acres of tidal salt marsh using rock revetments at the tip of Basket Flats Marsh. The project will also create up to 3,500 feet of hybrid living shoreline breakwaters and oyster reefs that will protect over 4,300 linear feet of shoreline along Basket Flats and Northwest Reach. The project is estimated to sequester more than 13,000 tons of CO<sub>2</sub> emissions by 2050, and even more after that.

NJDEP Commissioner Shawn LaTourette holds press event announcing award of \$24.3 million for NCS Grants.



"New Jersey is Ground Zero for the impacts of climate change and harnessing the power of nature is the most effective response available to us," said Executive Director of the American Littoral Society Tim Dillingham. "Tidal marshes are masters at taking carbon out of the atmosphere and storing it safely away in the ground. They also provide critical habitat and provide protection against extreme wave action and flooding, enhancing the resiliency of our coastal communities. Our project takes place in one of the most vulnerable communities along the Delaware Bayshore," said Dillingham.

## **CREATE A NEW JERSEY GREEN FUND NEW JERSEY GREEN FUND**

#### FUNDING & ADMINISTERING AGENCY: NJEDA

## **Cumulative Funding**

How much funding has the program received? \$700,000

#### How much has gone to projects? Program has not yet launched.

## **Program Update & Description**

The Strategic Funding Plan for Years 2020-22 included Initiative Four: Create a New Jersey Green Bank which states:

"NJEDA will fund the capitalization of a new, statewide Green Bank to help to diversify financial sources and expand the overall level of private sector lending to meet the State's clean energy and climate goals, while at the same time enabling the creation of new jobs, enhancing economic equity and reducing energy costs for ratepayers in the State."

To further this goal, the EDA sought valuable information and feedback from stakeholders through a formal Request for Information (RFI) process.

Input was received from individuals and organizations that have an interest in how a Green Fund may be established and operate in the State, including lenders, businesses developing clean energy initiatives in New Jersey, trade associations, and environmental organizations.

In addition to the broader RFI, targeted market insight was obtained via contract with the Coalition for Green Capital, a nonprofit organization, who provided support for the design of a statewide green financing mechanism called the New Jersey Green Fund.

Through this effort the Green Fund will be structured to accelerate the growth of an equitable clean energy economy in the Garden State. Like green banks across the country, the Green Fund will specifically work on projects that are cost effective and leverage private capital. This approach helps ensure that private financing markets for similar projects will develop over time.





### WHAT IS A GREEN BANK?

A green bank uses public capital to mobilize more private investment into underserved green and resilient financing markets to fill market gaps. Green banks have the goal of enabling private capital partners to enter clean energy markets at scale without green bank assistance.

/lay 2020	EDA issues Request for Input on NJ Green Fund.					
nay 2020	CGC initiates green fund ecosystem study &					
ec 2020	strategy after competitive bid process.					
	EDA issues Request for Input on Bridge Financing.					
an 2022	NJ considers options for initial programs and					
/lay 2022	modes in which the Green Fund could be launched.					
1	US EPA releases framework for GHG reduction					
eb 2023	<sup>3</sup> fund which will provide competitive grants t					
	mobilize financing and leverage private capital for					
	clean energy and climate projects.					

## ENHANCING FORESTS AND URBAN FORESTS TREES FOR SCHOOLS GRANT PROGRAM

#### FUNDING & ADMINISTERING AGENCIES: NJDEP

## **Cumulative Funding**

How much funding has the program received? \$2.5 million

How much has gone to projects? Projects have not yet been selected.

### **Program Description**

#### What types of projects are funded?

Grants in the amount of \$10,000 to \$500,000 are available for schools to fund the costs associated with planning, site preparation, trees, planting, watering, monitoring, and related expenses over a three-year period.

The Trees for Schools program is a collaboration among the NJDEP, The College of New Jersey (TCNJ) and Sustainable Jersey.

#### How to access funds?

Eligible entities can apply <u>online</u> before July 13<sup>th</sup>, 2023.

#### Who receives funds?

New Jersey public school districts, county colleges, and state colleges and universities.

## How does the program target funds and provide benefits to Overburdened Communities?

Forty percent of the grant funding will be set aside for applicants located in overburdened communities (as defined by New Jersey's Environmental Justice Law (<u>N.J.S.A. 13:1D-157</u>), with preference given to schools with the lowest tree coverage and the highest coverage of impervious surface, such as paved areas, and buildings.

NJ DEP Commissioner, Shawn LaTourette plants a white oak tree with students from the Morris Avenue Early Childhood Learning Center in Long Branch to launch the grant program on Arbor Day 2023.





# CATALYZE CLEAN AND EQUITABLE TRANSPORTATION:

### FUNDING & ADMINISTERING AGENCIES: NJBPU

## **Cumulative Funding**

How much funding is available? \$16.1 million

How much has gone to projects? Projects have not yet been selected

## **Program Description**

#### What types of projects are funded?

Direct current fast chargers (DCFCs) with a capacity of 150 KW/hr or greater for community charging and private medium and heavy-duty electric vehicle fleets. The program complements the New Jersey Economic Development Authority's <u>NJ's Zero-Emission Incentive Program</u> ("N JZIP") to address barriers to EV acquisition especially for small, local businesses located in overburdened communities.

*Community Charging*: \$225,000 towards the purchase and installation of publicly accessible, dual-port, networked DCFCs.

*Private Fleet Charging*: \$175,000 toward the purchase and installation of dual-port, networked DCFC.

BPU's Office of Communications – EV Tourism Charger (Asbury Park, 7/25/2022)

#### How to access funds?

The program launched January 12, 2023, and the application window closed May 12, 2023. <u>MHD Charger Grant Program</u>.

#### Who receives funds?

Businesses and organizations driving and operating in New Jersey. Grant recipients in the community charging track must be located or operating within an Overburdened Community ("OBC"), as defined by New Jersey's Environmental Justice Law (N.J.S.A. 13:1D-157).

Grant recipients in the private fleet charging track must be participants in <u>NJ's Zero-Emission Incentive Program</u> ("NJZIP") that have received an environmental justice bonus or are located in an OBC.

## How does the program target funds and provide benefits to Overburdened Communities?

The Program is designed to encourage electrification of medium and heavy-duty vehicles by providing incentives for community chargers in OBC and for NJ ZIP voucher recipients that have received an environmental justice bonus or are located in an OBC.<sup>1</sup>



<sup>1</sup> Phase 1 of the pilot program focused vouchers for vehicles operating in the greater Camden, Newark, New Brunswick, and greater Shore areas.

## APPENDIX B-2: PROJECTS SELECTED FOR FUNDING 2020-2022

This appendix is included to satisfy the requirements of subsection 2.1C of the Global Warming Solutions Fund Act. The New Jersey Global Warming Solutions Fund Act (N.J.A.C. 7: 27D) subchapter 2.1C "Procedure for development of a strategic funding plan" the Strategic Funding Plan must contain information about each project and program that has received funding from the Global Warming Solutions Fund to the extent that such information is available and has not been reported in an earlier strategic funding plan. This information shall include, but not be limited to:

- 1. A description of the project or program;
- 2. The amount of money earmarked by the agency to fund the program or project, as well as the type and amount of economic aid awarded;
- 3. The sponsored initiative corresponding to the project or program;
- 4. To the extent feasible, an account of the measurable benefits the project or program reported for each critical objective it was predicted to advance;<sup>73</sup>
- 5. The status of the project or program.<sup>74</sup>

The tables below show all projects that have been selected to receive RGGI funds from the 2020-2022 strategic funding plan. The projects are organized by funding initiative and subsequent funding programs that fall within each initiative.

## Catalyze Clean, Equitable Transportation Initiative Programs and Projects

### NJDEP 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 MTCO₂e 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

<sup>&</sup>lt;sup>73</sup> Measurable benefits from projects and programs are addressed cumulatively.

<sup>&</sup>lt;sup>74</sup> N.J.A.C. 7: 27D <u>https://www.nj.gov/dep/aqes/docs/njac7\_27d.pdf.</u>

<sup>(1)</sup> Selected refers to the announcement of funding recipients prior to executing grant agreements or other financial agreements.

<sup>(2)</sup> Awarded refers to a financial obligation of appropriated funds. For some programs, this represents a contract with a grantee. For other programs, this is a transfer of funds to an administering agency.

<sup>(3)</sup> Completed indicates that a project has been implemented and all funding has been disbursed.

Belair Transport	CITY OF ORANGE TWP	7 electric school buses	\$2,517,500	BPU	Grant	Awarded	2021	1,753.8	N/A
Elizabeth Board of Education	ELIZABETH CITY	2 electric school buses	\$800,000	BPU	Grant	Selected	2021	1,658.8	N/A
Kearny Board of Education	KEARNY TOWN	2 electric school buses	\$645,324	BPU	Grant	Selected	2021	470.5	N/A
D&M Tours Inc.	PATERSON CITY	4 electric school buses - V2G	\$1,628,136	BPU	Grant	Selected	2021	1,002.2	N/A
Borough of Bergenfield	BERGENFIELD BORO	2 electric garbage trucks	\$1,282,863	DEP	Grant	Awarded	2021	3,659.3	N/A
City of Englewood	ENGLEWOOD CITY	2 electric garbage trucks	\$1,301,065	DEP	Grant	Selected	2021	3,659.3	N/A
City of Trenton	TRENTON CITY	2 electric garbage trucks	\$1,200,000	DEP	Grant	Awarded	2021	1,829.6	N/A
Elizabeth Board of Education	ELIZABETH CITY	2 box delivery trucks and 2 garbage trucks	\$1,578,477	DEP	Grant	Selected	2021	3,080.7	N/A
Township of Woodbridge	WOODBRIDGE TWP	3 garbage trucks	\$1,200,000	DEP	Grant	Awarded	2021	2,316.7	N/A
Toms River Township	TOMS RIVER TWP	1 electric garbage truck	\$562,000	DEP	Grant	Awarded	2021	1,810.6	N/A
Jackson Twp School District - Refuse Trucks	JACKSON TWP	2 electric garbage trucks	\$1,357,969	DEP	Grant	Awarded	2021	3,621.2	N/A
Township of Lakewood	LAKEWOOD TWP	1 electric truck	\$246,064	DEP	Grant	Awarded	2021	279.9	N/A
City of Newark	NEWARK CITY	2 electric refuse trucks	\$1,065,108	DEP	Grant	Selected	2021	2,321.4	N/A
Aldin Transportation Corporation	PATERSON CITY	6 electric buses	\$1,877,872	DEP	Grant	Selected	2021	8,534.3	N/A
George Dapper Inc.	TRENTON CITY	2 electric school buses	\$521,879	DEP	Grant	Awarded	2021	970.9	N/A
Jay's Bus Service	LAKEWOOD TWP	8 electric school buses	\$2,018,458	DEP	Grant	Selected	2021	7,789.6	N/A
Yeshivah Masoras Avos	LAKEWOOD TWP	1 electric school bus	\$252,307	BPU	Grant	Awarded	2021	422.4	N/A
United Talmudical Academy of Lakewood	LAKEWOOD TWP	1 battery electric school bus	\$285,723	BPU	Grant	Selected	2021	328.8	N/A
Leonia Board of Education	LEONIA BORO	7 electric school buses	\$1,815,501	BPU	Grant	Awarded	2021	1,973.5	N/A
First Student	EAST ORANGE CITY	6 electric buses	\$1,640,896	BPU	Grant	Selected	2021	1,264.6	N/A
Bogota Board of Education	BOGOTA BORO	1 electric school bus	\$290,699	BPU	Grant	Selected	2021	150.1	N/A

City of Pleasantville	PLEASANTVILLE CITY	3 electric vehicles	\$785,346	BPU	Grant	Selected	2021	338.4	N/A
Township of Weehawken	WEEHAWKEN TWP	Replace a 2004 Ford E-450 Shuttle Bus which is currently in use by its Senior Services and Housing Authority	\$349,900	BPU	Grant	Selected	2021	952.0	N/A
Holcomb Transportation, LLC	BELLMAWR BORO	6 electric school buses	\$1,615,844	BPU	Grant	Selected	2021	3,019.6	N/A
Paterson Fire Department	PATERSON CITY	1 electric utility truck	\$218,713	DEP	Grant	Selected	2022	531.2	N/A
Borough of Merchantville	MERCHANTVILLE BORO	1 electric garbage truck	\$192,500	DEP	Grant	Selected	2022	773.7	N/A
City of Newark	NEWARK CITY	2 electric refuse trucks	\$1,021,616	DEP	Grant	Selected	2022	2,321.4	N/A
Town of Secaucus	SECAUCUS TOWN	2 electric garbage trucks	\$702,000	DEP	Grant	Selected	2022	1,207.1	N/A
Township of Neptune	NEPTUNE TWP	1 electric rear loader	\$346,135	DEP	Grant	Selected	2022	773.7	N/A
Atlantic County Utilities Authority	PLEASANTVILLE CITY	1 electric waste collection truck	\$453,214	DEP	Grant	Awarded	2022	719.7	N/A
Township of Bloomfield	BLOOMFIELD TWP	2 electric dump trucks	\$467,500	DEP	Grant	Selected	2022	609.6	N/A
Township of Teaneck	TEANECK TWP	3 electric trucks	\$673,000	DEP	Grant	Selected	2022	686.8	N/A
Paterson Fire Department (Ambulance)	PATERSON CITY	2 electric ambulances	\$908,686	DEP	Grant	Selected	2022	474.9	N/A
City of Burlington	BURLINGTON CITY	1 electric truck	\$485,000	DEP	Grant	Selected	2022	121.9	N/A
City of Newark	NEWARK CITY	4 electric garbage trucks	\$2,450,000	DEP	Grant	Selected	2022	4,626.7	N/A
City of Perth Amboy	PERTH AMBOY CITY	2 electric garbage trucks	\$1,350,000	DEP	Grant	Selected	2022	1,829.7	N/A
City of Hoboken	HOBOKEN CITY	1 electric garbage truck and 1 electric shuttle bus	\$1,150,000	DEP	Grant	Selected	2022	987.7	N/A
Best Choice Transportation - West Orange (Type A)	WEST ORANGE TWP	Replacing two diesel school buses with two EV school buses	\$370,000	DEP	Grant	Selected	2022	459.7	N/A
Clifton Board of Education	CLIFTON CITY	Replacing three diesel school buses with three EV school buses, purchasing three electric chargers	\$479,825	DEP	Grant	Selected	2022	44.9	N/A
J. Carpiolin Transport LLC Newark/Paterson School District	LODI BORO	Replacing three diesel school buses with three EV school buses, purchasing three electric chargers	\$559,000	DEP	Grant	Selected	2022	501.5	N/A

Presidential Replacing two diesel school buses Transportation -LAKEWOOD TWP with two EV school buses, \$529,915 DEP Awarded 2022 584.6 N/A Grant Lakewood Schools installing two chargers **County of Passaic** PATERSON CITY 1 electric shuttle bus \$233,709.24 BPU Grant Selected 2022 326.6 N/A Waste Management **EWING TWP** of New Jersey, Inc. 2 electric garbage trucks \$858,300 EDA Grant Selected 2023 3,622.2 N/A (WM) 17.695.1 Coach USA PARAMUS BORO 11 electric buses \$3.000.000 EDA Grant Selected 2023 N/A **Builders First Source** 2023 GLOUCESTER CITY 2 electric forklifts \$117,835 EDA Selected 488.7 N/A Grant (Gloucester) **Builders First Source** 2 electric forklifts GLOUCESTER CITY \$124,646 EDA Grant Selected 2023 154.2 N/A (Gloucester City) Wall Township Public 2023 1,877.0 N/A Schools - In-Charge WALL TWP 8 electric school buses \$3,691,008 EDA Selected Grant Energy, Inc. Integrity EGG HARBOR CITY 6 electric school buses \$2,144,117 EDA Grant Selected 2023 1,503.8 N/A Transportation LAKEWOOD TWP 16 electric school buses \$5,640,000 EDA 2023 1,035.8 N/A Jay's Bus Service 2 Grant Selected Seman - Tov Bus NEPTUNE TWP 30 electric school buses EDA Selected 2023 7,518.2 N/A \$11,850,240 Grant Company East Windsor HIGHTSTOWN 4 electric school buses N/A **Regional School** \$1,669,208 EDA Grant Selected 2023 1.002.5 BORO District Jackson Twp School N/A JACKSON TWP 8 electric school buses \$3,434,416 EDA Grant Selected 2023 2.004.9 **District - School Bus** East Brunswick Public EAST BRUNSWICK 11 electric school buses \$4,722,322 EDA Grant Selected 2023 3,490.2 N/A Schools TWP Township of MAPLEWOOD N/A 3 electric school buses \$1,152,647 EDA Selected 2023 751.8 Grant Maplewood TWP Irvin Raphael, Inc. / EAST BRUNSWICK **Raphael Bus Service** 2 electric school buses \$1,701,030 EDA Grant Selected 2023 1,629.0 N/A TWP LLC Joshua Tours PASSAIC CITY 4 electric school buses \$985,819 EDA Grant Selected 2023 471.0 N/A Student 7 electric school buses N/A Transportation of WALL TWP \$1,663,929 EDA Grant Selected 2023 850.7 America, Inc. LAKEWOOD TWP 1 electric school bus \$356,000 EDA Selected 2023 N/A Klarr Transportation Grant 1,650.1 Leonia Board of LEONIA BORO 1 electric Type A bus \$166,712 EDA Grant Selected 2023 139.2 N/A Education Type A

Leonia Board of Education Type C	LEONIA BORO	1 electric Type C bus	\$547,935	EDA	Grant	Selected	2023	192.3	N/A
Weehawken Board of Education	WEEHAWKEN TWP	1 electric school bus	\$345,033	EDA	Grant	Selected	2023	117.1	N/A
Best Choice Transportation - West Orange (Type C)	WEST ORANGE TWP	1 electric school bus	\$546,615	EDA	Grant	Selected	2023	28,407.4	N/A
Bayhead	BAY HEAD BORO	1 electric street sweeper	\$710,000	EDA	Grant	Selected	2023	88.7	N/A
County of Somerset	SOMERVILLE BORO	1 electric shuttle bus	\$310,000	BPU	Grant	Selected	2023	104.5	N/A
Borough of Wallington	WALLINGTON BORO	1 electric shuttle bus	\$355,000	BPU	Grant	Selected	2023	418.0	N/A
Borough of Highland Park	HIGHLAND PARK BORO	1 electric truck	\$275,000	BPU	Grant	Selected	2023	88.7	N/A
Lawrence Township	LAWRENCE TWP	1 electric garbage truck	\$600,000	BPU	Grant	Selected	2023	232.1	N/A
Manchester Township Department of Public Works	MANCHESTER TWP	1 electric garbage truck	\$350,000	BPU	Grant	Selected	2023	1,733.8	N/A
Collingswood	COLLINGSWOOD BORO	1 electric dump truck	\$200,000	BPU	Grant	Selected	2023	122.5	N/A
Hamilton Township	HAMILTON TWP	1 electric dump truck	\$347,338	BPU	Grant	Selected	2023	1,700.1	N/A
Lawrence Township	LAWRENCE TWP	1 electric garbage truck	\$365,000	BPU	Grant	Selected	2023	80.3	N/A
County of Warren, NJ	BELVIDERE TOWN	3 electric trucks	\$880,000	BPU	Grant	Selected	2023	155.9	N/A
Princeton University Electric Shuttle	PRINCETON	1 electric shuttle bus	\$290,000	BPU	Grant	Selected	2023	326.7	N/A
Municipality of Princeton	PRINCETON	2 electric shuttle buses	\$750,000	BPU	Grant	Selected	2023	41,801.3	N/A
Princeton University - TigerTransit	PRINCETON	10 electric vehicles	\$5,500,000	BPU	Grant	Selected	2023	326.7	N/A
Delsea Regional School District	FRANKLIN TWP	10 electric school buses	\$4,323,020	BPU	Grant	Selected	2023	2,506.0	N/A
NJ DEP MHDEV Grant F	Program Subtotal		\$106,179,594					205,670.3	

## NJDEP eMobility Program

Receiving Entity	Location	Project Description	RGGI Funding Amount	Funding Agency	Type of Aid	Project Status	Year Selected	Estimated Lifetime MTCO2e Avoided	Est. Lifetime MTCO2e Sequestered
Zapp Electric, Inc.	NEWARK CITY	16 Zapp Charging Stations (Zapp is a ride share company that is going to install Direct Current fast charging stations in Newark to be used by their fleet of electric ride share vehicles) that will be publicly accessible as well as convenient for Newark airport.	\$1,970,240	BPU	Grant	Selected	2021	data is not yet available	N/A
lsles, Inc.	TRENTON CITY	2 DCFC Chargers, 2 Level 2 chargers, 1 electric shuttle bus and 4 neighborhood EVs to support local electric ride share and shuttle program	\$883,000	BPU	Grant	Selected	2021	data is not yet available	N/A
Township of Woodbridge	WOODBRIDGE TWP	1 electric shuttle to service residents within their community	\$104,000	BPU	Grant	Awarded	2021	325.8	N/A
Zapp Electric, Inc.	GLOUCESTER CITY	8 Zapp Charging Stations (Zapp is a ride share company that is going to install Direct Current fast charging stations in the Gloucester City area) that will be publicly accessible as well as convenient for Philly airport.	\$1,938,528	BPU	Grant	Selected	2021	data is not yet available	N/A
City of Jersey City	JERSEY CITY	4 electric light-duty vehicles, 4 level 2 chargers to build upon existing car sharing program.	\$600,000	BPU	Grant	Selected	2022	data is not yet available	N/A
Jersey Via	JERSEY CITY	3 DCFC and 15 Level 2 chargers	\$1,000,000	BPU	Grant	Selected	2023	data is not yet available	N/A
Zipcar	TRENTON CITY / Statewide	16 L2s chargers and 16 electric vehicles for eight electric car sharing locations throughout in OBC throughout the state.	\$1,792,000	BPU	Grant	Selected	2023	data is not yet available	N/A

Blink	TRENTON CITY / Statewide	5 DCFCs and 20 electric vehicles for one-way or round-trip electric vehicle carsharing services at subsidized rates in OBCs	\$7,500,000	BPU	Grant	Selected	2023	data is not yet available	N/A
Envoy	JERSEY CITY	2 L2s chargers and 2 electric vehicles for carsharing service near affordable housing units	\$422,287	BPU	Grant	Selected	2023	data is not yet available	N/A
	eMobility Program Subtotal		\$16,210,055					325.8	

## NJ Zero Emissions Incentive Pilot (NJ ZIP) Program

Receiving Entity	Location	Project Description	RGGI Funding Amount	Funding Agency	Type of Aid	Project Status	Year Selected	Estimated Lifetime MTCO2e Avoided	Est. Lifetime MTCO₂e Sequestered
Peerless Beverage Co.	UNION TWP	2 electric Delivery Straight Trucks	\$170,000	EDA	Grant	Completed	2021	478.2	N/A
Hamlett Management LLC	NEWARK CITY	1 electric Utility Cargo Van and 1 electric Medium Duty Pickup Truck	\$191,000	EDA	Grant	Awarded	2021	445.4	N/A
S Aly Corp	BELLMAWR BORO	5 electric Delivery Step Vans	\$500,000	EDA	Grant	Completed	2021	781.3	N/A
Marcelli Formaggi, LLC	CLIFTON CITY	1 electric Utility Cargo Van	\$93,750	EDA	Grant	Completed	2021	390.7	N/A
JP2018 LLC	EAST ORANGE CITY	5 electric Delivery Step Vans, 2 electric Specialty Dump Trucks, and 1 electric Regional Haul Freight Truck	\$784,000	EDA	Grant	Awarded	2021	5,027.1	N/A
Coley Consulting & Tax Services, LLC	EAST ORANGE CITY	1 electric Delivery Step Van	\$99,500	EDA	Grant	Completed	2021	312.5	N/A
Juan Kelmy Productions	GLOUCESTER TWP	1 electric Shuttle or Paratransit Bus and 1 electric Delivery Step Van	\$195,500	EDA	Grant	Awarded	2021	241.8	N/A
ENAT DELIVERIES LLC	NORTH BERGEN TWP	3 electric Delivery Step Van	\$305,250	EDA	Grant	Completed	2021	338.6	N/A
2407 Emergency Services	GLOUCESTER TWP	2 electric Utility Cargo Vans and 1 electric Light Duty Pickup Truck	\$230,250	EDA	Grant	Selected	2021	478.4	N/A
MLM Unlimited Enterprise	EAST ORANGE CITY	1 electric Utility Cargo Van	\$97,750	EDA	Grant	Completed	2021	150.5	N/A
JKMAK Investment Group	UNION CITY	1 electric Utility Cargo Van	\$97,750	EDA	Grant	Completed	2021	81.5	N/A

Newark Library	NEWARK CITY	2 electric Delivery Step Vans	\$150,000	EDA	Grant	Completed	2021	520.9	N/A
2407 Medical Billing LLC	GLOUCESTER TWP	1 electric Utility Cargo Van and 1 electric Light Duty Pickup Truck	\$153,500	EDA	Grant	Selected	2021	774.1	N/A
Supreme Green Team L.L.C.	EAST BRUNSWICK TWP	3 electric Utility Cargo Vans	\$239,250	EDA	Grant	Completed	2021	1,693.1	N/A
Paradise Flowers Distribution LLC	SOUTH AMBOY CITY	3 electric Utility Cargo Vans	\$305,250	EDA	Grant	Completed	2021	1,128.7	N/A
Zippo Communications LLC	BELLEVILLE TWP	2 electric Utility Cargo Vans	\$187,500	EDA	Grant	Completed	2021	501.7	N/A
Nexus Contracting	NEWARK CITY	1 electric Utility Cargo Vans	\$93,750	EDA	Grant	Completed	2021	1,116.2	N/A
ENAT Deliveries	RIDGEFIELD PARK VILLAGE	1 electric Light Duty Pickup Truck	\$101,750	EDA	Grant	Completed	2021	74.4	N/A
Kingbee EV Corp	MAPLEWOOD TWP	15 electric Utility Cargo Vans	\$1,125,000	EDA	Grant	Completed	2021	6,584.3	N/A
Office Penny LLC	PISCATAWAY TWP	3 electric Delivery Step Vans	\$293,250	EDA	Grants	Selected	2021	1,875.2	N/A
Patsez LLC	OLD BRIDGE TWP	2 electric Utility Cargo Vans	\$203,500	EDA	Grant	Completed	2021	1,254.2	N/A
Amigo transit LLC	JERSEY CITY	2 electric Shuttle/Paratransit Bus	\$191,500	EDA	Grant	Selected	2021	512.6	N/A
Eden Farm Fresh LLC	SOUTH RIVER BORO	1 electric Utility Cargo Van	\$101,750	EDA	Grant	Selected	2021	627.1	N/A
IRevive LLC	SOUTH RIVER BORO	1 electric Utility Cargo Van	\$97,750	EDA	Grant	Selected	2021	689.8	N/A
Old Village Farm LLC	MILFORD BORO	2 electric Delivery Step Van	\$203,500	EDA	Grant	Completed	2021	1,302.2	N/A
Asset Appraisal Inc.	BELMAR BORO	1 electric Utility Cargo Van	\$93,750	EDA	Grant	Selected	2021	50.7	N/A
Atlantic City Jitney Association (first 66 applicants)	EGG HARBOR TWP	97 electric "Jitney" Paratransit Buses	\$11,016,000	EDA	Grant	Selected	2021	7,705.4	N/A
Strange Trip Trucking Inc.	CHATHAM BORO	14 electric Regional Haul Freight Trucks	\$1,487,500	EDA	Grant	Awarded	2021	12,974.8	N/A
Java's Compost	WEST ORANGE TWP	1 electric Refuse Truck	\$101,750	EDA	Grant	Completed	2021	1,348.4	N/A
Atlantic City Jitney Association (45 applicants)	EGG HARBOR TWP	61 electric "Jitney" Paratransit Buses	\$7,006,500	EDA	Grant	Selected	2022	4,845.6	N/A
Wysccki Electric	PENNSVILLE TWP	2 electric Utility Cargo Vans	\$187,500	EDA	Grant	Completed	2022	451.5	N/A
Vet on Wheels	MONTCLAIR TWP	1 electric Utility Cargo Van	\$97,750	EDA	Grant	Completed	2022	182.5	N/A
Ignite One	BELLEVILLE TWP	8 electric Utility Cargo Vans	\$796,000	EDA	Grant	Selected	2022	2,382.9	N/A

Curly Willow LLC	GALLOWAY TWP	1 electric Utility Cargo Van	\$97,750	EDA	Grant	Completed	2022	250.8	N/A
Kim L Enterprises LLC	MATAWAN BORO	2 electric Utility Cargo Vans	\$195,500	EDA	Grant	Completed	2022	627.1	N/A
Suris Glam	UNION CITY	2 electric Delivery Straight Trucks	\$203,500	EDA	Grant	Completed	2022	956.5	N/A
Gerson Bakery & Cafe LLC	PASSAIC CITY	1 electric Delivery Straight Truck	\$93,750	EDA	Grant	Selected	2022	956.5	N/A
Atlantic City Jitney Assoication (19 applicants)	EGG HARBOR TWP	28 electric "Jitney" Paratransit Buses	\$3,222,000	EDA	Grant	Selected	2022	2,224.2	N/A
NightStar Blends Transport LLC	NEWARK CITY	1 electric Delivery Step Van	\$133,000	EDA	Grant	Selected	2022	1,432.5	N/A
Gerson Bakery & Cafe LLC	PASSAIC CITY	1 electric Delivery Straight Truck	\$93,750	EDA	Grant	Selected	2022	956.5	N/A
La Deliciosa LLC	PASSAIC CITY	2 electric Delivery Straight Truck	\$187,500	EDA	Grant	Selected	2022	430.4	N/A
Picco Partners LLC	MONTCLAIR TWP	3 electric Utility Cargo Van	\$281,250	EDA	Grant	Selected	2022	564.4	N/A
CHE NEWSPAPERS LLC	NEW BRUNSWICK CITY	1 electric Delivery Straight Truck	\$97,750	EDA	Grant	Completed	2022	143.5	N/A
Supreme Green Team LLC	EAST BRUNSWICK TWP	3 electric Regional Haul Freight Truck	\$387,000	EDA	Grant	Selected	2022	2,502.3	N/A
Bendita Arepa	PATERSON CITY	3 electric Utility Cargo Van	\$305,250	EDA	Grant	Selected	2022	752.5	N/A
JAZBELL TRANSPORTATION LLC	WARREN TWP	2 electric Delivery Straight Truck	\$199,000	EDA	Grant	Selected	2022	229.6	N/A
Tango Direct nj llc	FRANKLIN TWP	1 electric Delivery Straight Truck	\$125,000	EDA	Grant	Completed	2022	669.5	N/A
Atlantic City Jitney Assoication (19 applicants)	EGG HARBOR TWP	4 electric "Jitney" Paratransit Buses	\$458,000	EDA	Grant	Selected	2022	317.7	N/A
AutoVirtual LLC	MIDDLESEX BORO	10 electric Delivery Straight Truck	\$684,250	EDA	Grant	Selected	2022	11,716.7	N/A
D&S Management and Consulting	PASSAIC CITY	2 electric Delivery Straight Truck	\$199,000	EDA	Grant	Completed	2022	2,152.0	N/A
Fiozait-A	PASSAIC CITY	2 electric Delivery Straight Truck	\$187,500	EDA	Grant	Selected	2022	2,152.0	N/A
Pick & Send Transportation	HAMILTON TWP	2 electric Delivery Straight Truck	\$391,000	EDA	Grant	Selected	2022	2,343.3	N/A
Alerta Deliverties	ELIZABETH CITY	2 electric Delivery Straight Truck	\$199,500	EDA	Grant	Selected	2022	2,343.3	N/A
Daniela's Event Design & Party Rental LLC	FRANKLIN TWP	1 electric Utility Cargo Van	\$101,750	EDA	Grant	Completed	2022	250.8	N/A
	<b>PISCATAWAY TWP</b>	1 electric Delivery Straight Truck	\$97,750	EDA	Grant	Completed	2022	1,171.7	N/A
Sabor 3 Colores LLC	FISCALAWATIWF	I electric Derivery Straight Huck	<i>ŞJ</i> ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	LDA	Grant	compicted		_)_/ _//	

Eraso Landscape And Construction LLC	PISCATAWAY TWP	2 electric Utility Cargo Van	\$195,500	EDA	Grant	Completed	2022	376.2	N/A
D.I.A. Supermarket LLC	EAST ORANGE CITY	1 electric Delivery Straight Truck	\$97,750	EDA	Grant	Completed	2022	1,147.8	N/A
King Delicatessen LLC	BRIDGEWATER TWP	1 electric Delivery Straight Truck	\$97,750	EDA	Grant	Selected	2022	1,171.7	N/A
Garden Paper NJ Corp	UNION CITY	1 electric Delivery Straight Truck	\$99,500	EDA	Grant	Completed	2022	1,171.7	N/A
IPPsolar Transport LLC	MOONACHIE BORO	5 electric Delivery Straight Truck	\$500,000	EDA	Grant	Selected	2022	5,977.9	N/A
Industry Providers & Buyers LLC	JERSEY CITY	1 electric Utility Cargo Van	\$101,750	EDA	Grant	Selected	2022	313.5	N/A
Geoponica Greens LLC	CHESILHURST BORO	1 electric Delivery Straight Truck	\$97,500	EDA	Grant	Completed	2022	478.2	N/A
Variedades Pochtlan and Produce LLC	NEW BRUNSWICK CITY	1 electric Utility Cargo Van	\$101,750	EDA	Grant	Selected	2022	250.8	N/A
NAM Home Solutions	WEST WINDSOR TWP	1 electric Utility Cargo Van	\$97,750	EDA	Grant	Selected	2022	188.1	N/A
Dafer Tax & Accounting Services	FRANKLIN TWP	1 electric Utility Cargo Van	\$101,750	EDA	Grant	Completed	2022	250.8	N/A
Edison TexMex Deli LLC	EDISON TWP	1 electric Utility Cargo Van	\$97,750	EDA	Grant	Completed	2022	250.8	N/A
Carmona Home Instatllation Services	EDISON TWP	1 electric Utility Cargo Van	\$101,750	EDA	Grant	Selected	2022	313.5	N/A
LaGuelaGuetza Mexican Grocery LLC	NEW BRUNSWICK CITY	1 electric Utility Cargo Van	\$97,750	EDA	Grant	Selected	2022	250.8	N/A
Order and Ease LLC	LYNDHURST TWP	1 electric Utility Cargo Van	\$101,750	EDA	Grant	Selected	2022	376.2	N/A
Chic Massage LLC	NORTH BERGEN TWP	1 electric Utility Cargo Van	\$101,750	EDA	Grant	Selected	2022	150.5	N/A
Medallo Construction Inc	ENGLEWOOD CITY	1 electric Delivery Straight Truck	\$97,750	EDA	Grant	Selected	2022	358.7	N/A
NCP Painters LLC	HAWORTH BORO	2 electric Utility Cargo Van	\$203,500	EDA	Grant	Selected	2022	37.6	N/A
Adapa LLC	HASBROUCK HEIGHTS BORO	3 electric Delivery Step Van	\$318,750	EDA	Grant	Completed	2022	1,781.8	N/A
Urban Agriculture Cooperative	NEWARK CITY	1 electric Utility Cargo Van	\$93,750	EDA	Grant	Selected	2022	27.6	N/A
		1 electric Utility Cargo Van and 1	\$203,500	EDA	Grant	Selected	2022	1,093.6	N/A
Kronos Logistic LLC	ELIZABETH CITY	electric Delivery Straight Truck	<i>\$203,300</i>	LDN	e.u				

Cacao and Beyond L.L.P.	MONTVALE BORO	1 electric Utility Cargo Van	\$101,750	EDA	Grant	Selected	2022	501.7	N/A
Revive By Carolina Inc	ENGLEWOOD CITY	1 electric Delivery Straight Truck	\$99,500	EDA	Grant	Selected	2022	1,076.0	N/A
Revive By Carolina Inc	ENGLEWOOD CITY	1 electric Delivery Straight Truck	\$99,500	EDA	Grant	Selected	2022	1,147.8	N/A
La Oficina LLC	LODI BORO	1 electric Delivery Straight Truck	\$99,500	EDA	Grant	Selected	2022	1,076.0	N/A
OK Media Marketing	ROBBINSVILLE TWP	1 electric Delivery Straight Truck	\$97,750	EDA	Grant	Selected	2022	1,171.7	N/A
OK Media Marketing	ROBBINSVILLE TWP	1 electric Delivery Straight Truck	\$97,750	EDA	Grant	Selected	2022	1,076.0	N/A
Tu Supite Fritura Dominicana Bakery	PASSAIC CITY	1 electric Delivery Straight Truck	\$97,750	EDA	Grant	Selected	2022	1,076.0	N/A
Mundo Latino Pro service LLC	EDISON TWP	1 electric Utility Cargo Van	\$97,750	EDA	Grant	Selected	2022	250.8	N/A
Ordonez Property Management LLC	HIGHTSTOWN BORO	2 electric Delivery Straight Truck	\$195,500	EDA	Grant	Selected	2022	2,152.0	N/A
Diber Web Services LLC	NEWARK CITY	1 electric Delivery Straight Truck	\$97,750	EDA	Grant	Selected	2022	1,076.0	N/A
Pick & Send Transportation LLC	HAMILTON TWP	3 electric delivery straight truck	\$293,250	EDA	Grant	Selected	2023	3,228.1	N/A
Atlantic City Jitney Association	EGG HARBOR TWP	1 electric "Jitney" Paratransit Buses	\$112,500	EDA	Grant	Selected	2023	288.9	N/A
APM Terminals Elizabeth LLC	ELIZABETH CITY	2 electric Shuttle/Paratransit Bus	\$150,000	EDA	Grant	Selected	2023	3,154.5	N/A
Grupo La Providencia LLC	PASSAIC CITY	3 electric Utility Cargo Van and 1 electric Medium Duty Pickup Truck	\$407,000	EDA	Grant	Selected	2023	1,359.9	N/A
NJ Z	IP Program Subtotal		\$40,300,750					128,086.4	

## Enhance Forests and Urban Forests Initiative Programs and Projects

### Natural Climate Solutions 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 MTCO₂e Sequestered
City of Atlantic City	ATLANTIC CITY	Urban Forest Canopy/Water Quality Enhancement	\$759 <i>,</i> 000	DEP	Grant	Selected	2023	N/A	108.5
Berkeley Heights Environmental Commission	BERKELEY HEIGHTS TWP	Urban Forest Canopy/Water Quality Enhancement	\$721,325	DEP	Grant	Selected	2023	N/A	355.3
Town of Kearny	KEARNY TOWN	Urban Forest Canopy/Water Quality Enhancement	\$503,694	DEP	Grant	Selected	2023	N/A	418.1
City of Linden	LINDEN CITY	Urban Forest Canopy/Water Quality Enhancement	\$355,500	DEP	Grant	Selected	2023	N/A	903.2
New Jersey Conservation Foundation	TRENTON CITY	Urban Forest Canopy/Water Quality Enhancement	\$1,336,125	DEP	Grant	Selected	2023	N/A	1,181.0
City of Newark	NEWARK CITY	Urban Forest Canopy/Water Quality Enhancement	\$1,228,148	DEP	Grant	Selected	2023	N/A	328.0
Municipality of Princeton	PRINCETON	Forest Restoration	\$552,000	DEP	Grant	Selected	2023	N/A	3,386.1
Readington Township Environmental Commission	READINGTON TWP	Forest Restoration	\$250,000	DEP	Grant	Selected	2023	N/A	677.8
The Trust for Public Land	CAMDEN CITY	Urban Forest Canopy/Water Quality Enhancement	\$1,035,668	DEP	Grant	Selected	2023	N/A	1,494.0
NCS Grant Progra	m (Forests) Subtotal		\$6,741,460						8,852.2

## Promote Blue Carbon in Coastal Habitats Initiative Programs and Projects

### Natural Climate Solutions 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 MTCO₂e Sequestered
Township of Brick	BRICK TWP	Living Shorelines, Tidal Salt Marsh Vegetation Restoration	\$4,997,124	DEP	Grant	Selected	2023	N/A	5,861.3
American Littoral Society	MAURICE RIVER TWP	Living Shorelines, Tidal Salt Marsh Vegetation Restoration	\$4,999,946	DEP	Grant	Selected	2023	N/A	13,331.2
Partnership for the Delaware Estuary, Inc.	MAURICE RIVER TWP	Living Shorelines, Tidal Salt Marsh Vegetation Restoration	\$766,442	DEP	Grant	Selected	2023	N/A	109.2
The Nature Conservancy	OCEAN TWP	Living Shorelines, Tidal Salt Marsh Vegetation Restoration	\$1,846,470	DEP	Grant	Selected	2023	N/A	1,186.0
Township of Stafford	STAFFORD TWP	Living Shorelines, Tidal Salt Marsh Vegetation Restoration	\$4,998,109	DEP	Grant	Selected	2023	N/A	3,370.6
NCS Grant Pro	ogram (Blue Carbon) Subtotal		\$17,608,091						23,858.3

## Create a New Jersey Green Bank Initiative Programs and Projects

### New Jersey Green Fund

Receiving Entity	Location	Project Description	RGGI Funding Amount	Funding Agency	Type of Aid	Project Status	Year Selected	Est. Lifetime MTCO₂e Avoided	Est. Lifetime MTCO2e Sequestered
Coalition for Green Capital (CGC)	N/A – Washington, DC	Consulting services to support the design of a statewide green financing mechanism called the New Jersey Green Fund	\$700,000	EDA	Grant	Awarded	2021	N/A	N/A
NJ Green Fu	nd Program Subtotal		\$700,000						