

Fueling the Green Economy

Workplan

Section 1: Overall Project Summary and Approach

a. Description of GHG Reduction Measures

The proposed greenhouse gas (GHG) reduction measures, outlined in the Priority Climate Action Plan (PCAP), aim to address emissions from buildings in the Greater Boston Metropolitan Statistical Area (MSA). These measures focus on building decarbonization, promoting energy efficiency, and transitioning to renewable energy sources. Proposed GHG emission reductions are consistent with the goals of the EPA by describing the proposed measures and geographic area where the measure can be implemented; listing ambitious measures that will achieve significant cumulative GHG reductions through 2030 and 2050; conducting a low-income and disadvantaged communities benefits analysis; implementation details include a detailed timeline with milestones, funding mechanism, workforce development opportunities, successful projects, and policy priorities. The proposed GHG reduction measures in the application based on the presented information include the following:

B1. Building Decarbonization Technical Assistance

Description of the Proposed Measure

Comprehensive decarbonization of existing buildings is a complex process and requires detailed planning and coordination. Many barriers further complicate retrofitting buildings, including lack of knowledge of decarbonization measures and potential costs, building ownership, uncertainty about technology performance, unclear or limited pathways to obtain financial incentives, and physical and structural barriers (e.g., roof replacement). Building owners often receive confusing or conflicting information from service providers and encounter challenges understanding and accessing incentive programs, which can limit interest in or ability to move forward.

Existing incentive programs, such as Mass Save and New Hampshire Saves (NHSaves) utility programs, provide significant incentives for some decarbonization measures but have historically underserved renters, low-to-moderate income households, and affordable housing. Nonparticipants tend to have lower trust in programs perceived as government led, fear of energy scams, and prioritize immediate needs over long-term investments. Municipalities seeking to engage historically underserved populations in decarbonization efforts must confront the impact of discriminatory policies and predatory programs. Municipalities must also build trusted, long-term relationships with community-based organizations who are already delivering services (e.g., fuel assistance) and may be able to connect residents more effectively with programs. Additionally, multifamily buildings (particularly affordable housing) with large numbers of renters have limited agency to pursue decarbonization, and engagement with landlords has historically been challenging (pg. 56).

Recommendations

- Deliver building decarbonization technical and planning assistance to building owners, especially multifamily and affordable housing owners, through establishing new efforts (e.g., energy

coaching, community liaisons, community-based outreach programs).

- Coordinate with and build on existing technical assistance efforts (e.g., community action agency programs, Mass Save Community First Partnership, NH Saves), resource platforms, and communities of practice, such as the forthcoming Massachusetts Building Decarbonization Clearinghouse and New England Onsite Energy Assistance Partnership.
- Use key communication pathways to conduct outreach on the various benefits of building decarbonization and incentive program opportunities, as well as increase enrollment in subsidized electricity rates and heating assistance programs.

Geographic Description

This measure is applicable in all municipalities and additional resources should be directed and tailored to LIDAC communities, particularly in those with high rental rates and language access needs.

Emissions Reductions

270,875-320,125 MTCO₂e/year: The estimated emissions reductions are based on a 10-30% increase in energy savings based on Mass Save incentive data.

LIDAC Benefits Analysis

- Reduces Cost of Living: Reduces household energy costs.
- Reduces Environmental and Public Health Burdens: Improves indoor air quality and mental health by reducing stress and anxiety associated with energy costs.
- Creates Economic and Job Benefits: Opportunity to increase local jobs and training programs.

Implementing Agencies and Partners

- Municipalities, municipal light plants
- RPAs/RPCs
- Public housing authorities and privately-owned subsidized housing developers/owners
- Utility program administrators and regulators overseeing energy efficiency programs.
- State agencies such as the Massachusetts Clean Energy Center
- Building trade unions and training institution partners
- Local and regional community-based organizations

Implementation Timelines

- Year 1-2: Work with state and regional agencies to identify existing building decarbonization technical assistance accessible to building occupants and owners; develop supplemental local or regional technical assistance programs; identify local partners to support technical assistance, outreach, and education efforts, especially to environmental justice/LIDAC communities.
- Year 2-3: Implement technical assistance programs; consider targeting specific sectors with different outreach strategies.

- Year 3+: Refine technical assistance based on lessons learned from engagement and new technical assistance platforms; broaden reach through additional partners and sectors.

Metrics to Track Progress

- Participation of low- and moderate-income residents in building decarbonization programs facilitated by municipal engagement.
- Number and strength of partnerships.
- Expansion of local/regional technical assistance to support building decarbonization.
- Residents and businesses engaged by technical assistance programs.

B3. Net-Zero Municipal Buildings

Description of Proposed Measure

Municipal buildings offer a clear pathway for GHG reductions as municipalities own their buildings and can model and inspire similar action by others in the community and invite the public to see elements of their updated buildings. Through a 20% reduction in energy use at local government buildings nationwide, local governments could save almost \$4 billion annually, potentially reducing costs for taxpayers.

Recommendations

- Develop and implement plans (through the Massachusetts Climate Leaders Communities certification) to transition to new and existing municipal buildings to net zero buildings through weatherization, building electrification, and renewable energy deployment.
- Establish a regional or state technical assistance program (prioritizing LIDAC communities) and municipal community of practice to support decarbonization transition planning and implementation, including legal support on tax credits and direct pay assistance and support to identify financial instruments to reduce the cost of electrification.

Geographic Description

This measure is applicable to all municipalities in the MSA with a focus on affordable rental housing in LIDAC communities. Public buildings located in and serving LIDAC communities should be prioritized to support communities with limited resources.

Emissions Reductions

39,933 to 59,900 MTCO₂e/year: The estimated emissions reductions are based on a municipal building reduction of 10-15%.

LIDAC Benefits Analysis

- Reduces Environmental and Public Health Burdens: Improves indoor air quality and can reduce heat stress/exposure in buildings open to the public.

- Creates Economic and Job Benefits: Building retrofits provide increased training and opportunities for good jobs, lowers energy bills for municipalities, saving on costs, and reducing long-term maintenance.
- Improves Community Resilience to Climate Impacts: Improves resilience of community facilities often used for emergency shelters, cooling centers, and other critical services; allows buildings to maintain heating and cooling longer in the case of a power outage.

Implementing Agencies and Partnerships

- Municipalities
- RPAs/RPCs
- Massachusetts Public School Districts, New Hampshire School Boards and New Hampshire Public Charter Schools
- State agencies, such as Massachusetts School Building Authority, Massachusetts Clean Energy Center
- Utility program administrators
- Community-based organizations
- Trade unions, training institutions

Implementation Timeline

- Year 1-2: Municipalities complete decarbonization roadmaps (in Massachusetts, as part of the state's Green Communities Climate Leader Communities Program) and RPAs/RPCs develop a related community of practice for municipalities to share challenges and learnings.
- Year 3: Municipalities and RPAs/RPCs work with partners to launch a dedicated technical assistance program for municipalities.

Metrics to Track Progress

- Increase in square feet and number of net zero municipal buildings.
- Increase in square feet and number of net zero municipal buildings in LIDAC communities.
- Technical assistance delivered to municipalities with LIDAC communities.
 - a. Demonstration of Funding Need
 - Applicants must demonstrate a strong need for CPRG implementation funding that is unmet by other funding sources. Applicants should explain if and how they have explored the availability of other federal and state grants, tax incentives, and other funding sources to implement their GHG reduction measures and why these sources are not sufficient.
- The application should include a list of federal and non-federal funding sources that the applicant has applied for, secured, and/or will secure to implement GHG reduction measures.
- For GHG reduction measures for which the applicant has secured partial funding, they must explain why CPRG funds are needed.

To best implement these metrics for our region we have structured a multifaceted project. The overarching goal is to get OCPC communities on track for Net Zero work. The first piece will be creating a GHG Inventory and tracking tool for the entire region. This will encompass all 17 communities and can be broken down into individual towns to guide the next actions. Then the project team will partner with 5

of the OCPC communities with a priority on municipalities with LIDAC or EJ communities, to create a municipal-specific Net Zero Action Plan. A Net Zero action plan will include an evaluation of energy reduction initiatives taken so far, through the Massachusetts program Green Communities, where there are existing gaps in municipal building energy reduction and how the town can promote energy reduction to homeowners. As stated in the attached community workforce agreement from the Brockton and Vicinity building trades all the participating communities must require the labor standards therein in the contractor selection process for implementation projects stemming from the Action Plan. In doing so we will set a floor of good job creation standards and ensure that we maximize Inflation Reduction Act savings. To increase implementation on these projects and many more to follow, the project will anticipate having an intern for Fall, Spring, and Summer semesters from local universities to promote local energy reduction and reimbursement programs to homeowners. Through our partnership with Brockton and Vicinity Building Trades Council and Massachusetts Building Trades Unions, this project aims to ensure that all implementation stages happening meet their work standards and that funding goes to expanding opportunities for those looking to join MBTU through funding to Building Pathways South, a registered pre-apprenticeship program.

b. Demonstration of Funding Need

CPRG funds are needed as the Old Colony Planning Council (OCPC) is a nonprofit agency that relies on grant funding to implement projects for the region. While the development and creation of the PCAP was completed in partnership with MAPC, OCPC would require additional funding to fully implement the requested GHG reduction measures within our designated 17 communities. We have explored additional funding needs through many state and federal programs to address GHG reduction measures including the Massachusetts Green Communities and Municipal Vulnerability Preparedness (MVP) programs for the region. OCPC has over 50 years of demonstrated experience with grant programs including grant administration.

c. Transformative Impact

The impact of this project looks to have expanded past the initial five years of this project. There are evident gaps in applicable reductions for OCPC municipalities. This work looks to provide needed assistance for communities to reevaluate their next steps towards lowering emissions in both municipal buildings and after reevaluating the larger GHG inventory in communities working to assist homeowners. Through the review of bylaws, current energy provider contracts, and public education, lowering emissions will span past the municipal buildings and into the larger community.

Working off of existing materials produced by the Metropolitan Area Planning Council (MAPC) including “[Municipal Net Zero Playbook](#)” and “[Community GHG Inventory](#)” as tools to implement as part of meeting the PCAP’s objectives. The initial step of drafting a GHG Inventory on an RPA scale will help identify future areas for needed work throughout the region. One might assume outside of building energy, our regional GHG Inventory will identify emission concerns in industrial space that will help us target future efforts. Then bringing these measurements back to the towns as a way for them to scale Net Zero Action Plan’s towns will identify a range of ways to lower carbon emissions immediately and long term.

By working with 5 potential communities, we anticipate recapping our experience and drafting a streamlined process to help future communities achieve the same plans or take intermediate steps.

While we do intend large emission reductions from the work identified in this grant, the grant outlines years of work ahead to be achieved with the larger potential of GHG reductions. This project will take an inventory of the entire region, but it will have a large focus on 5 of our 17 communities. This limited number allows us to pay attention to detail and leaves the potential for the other 12 communities to join. If the project assumes a reduction of 25,663 MTCO₂e at 5 communities annually, at a full 17 communities taking the initiative there is an anticipated reduction of 87,254.2 MTCO₂e annually.

As stated in the attached community workforce agreement from the Brockton and Vicinity Building Trades union all the participating communities must require the labor standards therein in the contractor selection process for implementation projects stemming from the Action Plan. In doing so we will set a floor of good job creation standards and ensure that we maximize Inflation Reduction Act savings. Simultaneously, we are expanding outreach and opportunity through the Building Pathways South apprenticeship program.

Section 2: Impact of GHG Reduction Measures

a. Magnitude of GHG Reductions from 2025 through 2030

Stationary energy was the highest contributor to GHG emissions through both combined energy uses in residential housings and commercial and industrial buildings. This was aligned with the state's breakdown of GHG emissions which encompassed the breakdown of residential commercial and industrial. Residential was almost equivalent at 27% to the commercial and industrial use at 32%. By creating a multilevel approach, we can rapidly reduce GHG emissions in the RPA. Expanding educational services to residents will allow them to get better information and have a starting point close to home. Then working with towns and cities to reduce their energy needs and create plans that allow residents to reduce their demand through zoning will create positive feedback to the community. However, none of this work can be implemented without the work of trade employees in our communities. Increasing the demand for work when there is already a significant need for more staff will not be sustainable for the region. Advancing job training with Building Pathways South and mandating apprenticeships on active work will expand the capacity to service towns and homeowners. Between 2025 and 2030 through this initiative, we intend to reduce local carbon dioxide emissions **by 25,663 to 31,600** per year between 2025 and 2030. The following analysis describes the use of the Greater Boston PCAP as a guide for our calculations. OCPC holds 8% of the total population and 10% of the towns and cities for this MSA.

Throughout the Old Colony Planning Region, we have seen many barriers towns face while working to reduce carbon emissions in their buildings. From delays in materials and construction to a lack of town staff, there are many hurdles a town may face. Additionally, current zoning across the region is not conducive to decarbonizing technology. While many reports have been recently pieced together by the Commonwealth of Massachusetts and Metropolitan Area Planning Council including a PCAP from both entities and a combined effort in creating the “Roadmap to Decarbonization” the 17 communities that embody the OCPC RPA do not have the technical or financial resources at this time to implement the work.

Using a combined Net Zero Buildings in Municipalities, the Greater Boston PCAP estimates GHG Emissions Reductions between 39,933 to 59,900 MTCO₂e/year. The estimated emissions reductions are based on a municipal building energy reduction of 10% to 15%. OCPC holds 17 of the 167 communities in the PCAP, approximately 10% of communities. By increasing financial assistance to Net Zero Buildings, we can anticipate a minimum reduction of **3,993 to 5,990 MTCO₂e per year**.

While 15 of our 17 communities are a part of the Massachusetts Green Communities initiative, it limits how much work they can do at a given time. This program, while administered by our RPA, does not give us the capacity needed to work on one with each community and help fill gaps in staffing and training. Without further funding our communities cannot reach the needed Net Zero goals.

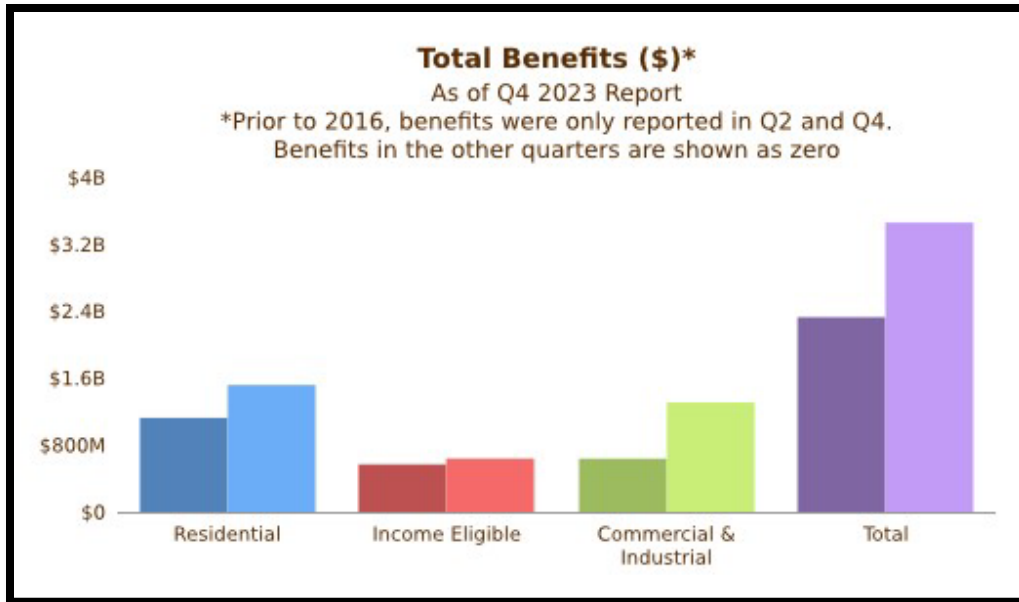
The Green Communities program in the Commonwealth of Massachusetts has also helped us identify a local need for more trade workers. All these efforts will be paired with the direct advancement of training to advance the capabilities or hiring potential of local companies. By working with Massachusetts Building Trades Union (MBTU), Local IBEW 223, Brockton, and Vicinity Building Trades union partners we will directly fund one million dollars into training existing and new potential employees. Located in the heart of a LIDAC community, our office in Brockton regularly hears from local hiring agencies about the need for training. Based on these efforts, we know there is no shortage of work to be done but a limit to the number of people able to work with towns.

The Greater Boston PCAP estimates a GHG emissions reduction of 270,875 to 320,125 MTCO₂e per year from increased technical assistance alone. The estimated emissions reductions are based on a 10-30% increase in energy savings based on Mass Save incentive data. Creating an expansion in both educational materials and outreach for individual households and rental buildings to be retrofitted with carbon reduction technology would allow for a large net reduction of energy usage. We anticipate with the creation of Net Zero Plans for our communities that there will be community-wide conversations about what individual homeowners can do to lower emissions while reducing costs, and determining from the public what the towns can do to reduce hurdles for home and business owners to install net-zero technology such as solar panels. Creating technical assistance and education to reach often missed communities including non-English speakers and rental properties will expand the potential for reduction anticipated in our communities. From a population stance, OCPC holds roughly 8% of the population in the Greater Boston PCAP, meaning they have the potential to create reductions in the region of approximately **21,670 to 25,610 MTCO₂e** per year.

b. Magnitude of GHG Reductions from 2025 through 2050

Through this initiative, 2025 and 2030, we intend to reduce local carbon dioxide emissions by 25,663 to 31,600 per year between 2025 and 2030. Moving beyond 2030-2050 we will anticipate seeing an additional reduction of 20,946 per year totaling **46,609-52,546 MTCO₂e**. OCPC holds 8% of the total population and 10% of the towns and cities for this MSA. Moving beyond the initial impact we anticipate that reductions will increase from 2030 through 2050 as more projects are implemented. Post the completion of Net Zero planning with communities we intend to see a direct impact in municipal energy reduction as they can complete more projects each year. Having simultaneously spent that time reducing barriers for homeowners we project an increase in at-home solar and an uptick in state incentives being used through the Mass Saves program.

The Mass Saves Program last year funded \$1.3 million into residential education for electric incentives and millions of dollars in incentives for homeowners. Despite their enormous success, they are not reaching their maximums from year to year. In 2023, they estimated an adjusted gross lifetime electric savings of 300,895 MWh and a Lifetime avoided 223,060 CO₂eMT from residential electricity alone. By locally investing an additional \$100,000 a year into public education on incentive products we can anticipate seeing a 7% reduction, roughly 17,158, CO₂eMT, through resulting implementations.



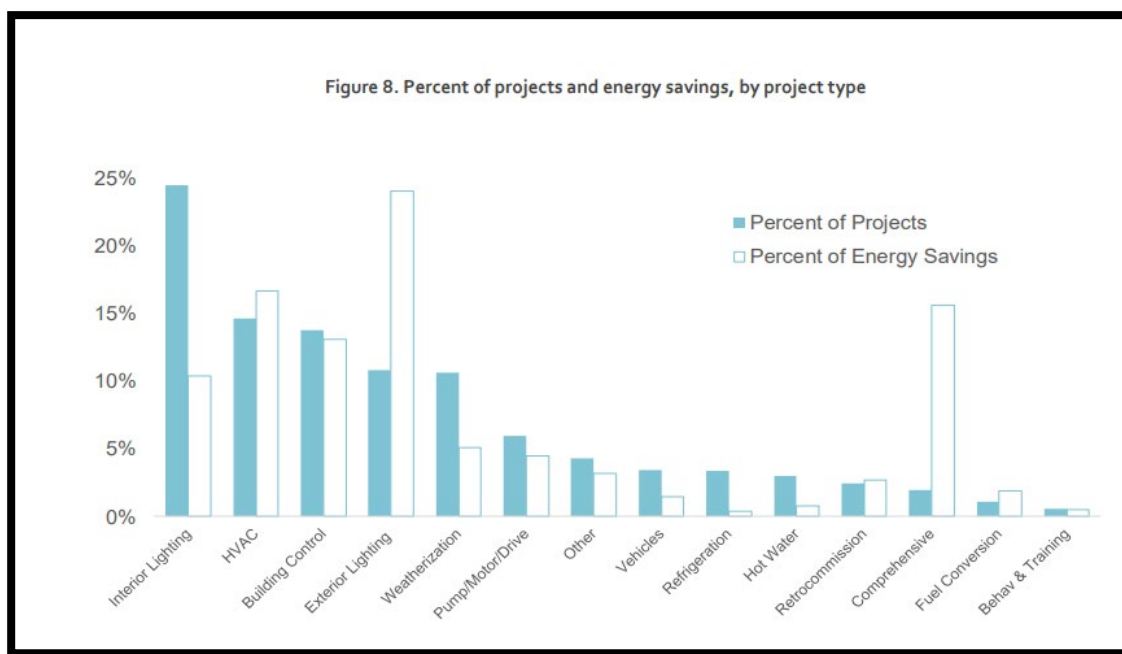
Green Communities in Massachusetts overall, have reduced their energy use by 11% or 1.1 million MMBtus since town baselines. The reductions total enough energy to power and heat more than 8,400 Massachusetts homes or 13.7 million dollars as of the 2017 progress report. This work has prevented 87,500 MTCO₂e in total emissions across 210 communities. By expanding Net Zero energy planning in the OCPC region our Green Communities will be able to take larger initiatives in their annual competitive grants. 27 green communities have reached 20% energy reduction usage in under 10 years. Unfortunately, none of these communities are within the OCPC region, showing an explicit need to improve strategies for our local towns. The average timeframe of this initiative was 6 years. By 2031 our initial 5 pilot communities can see reductions of 20-30% in energy usage in municipal buildings. At 11% reduction a community would reduce 416.7 MTCO₂e emissions and at 20% would equate to 757.6 MTCO₂e emission reduction. After 2030 we would anticipate a minimum of 5 communities at 20% totaling an annual prevention of 3,788 MTCO₂e emission reduction in addition to prior measures.

c. Cost Effectiveness of GHG Reductions

When considering the magnitude of the work that needs to be done, we anticipate that the bulk of tasks will be performed within the first half of the grant time frame. Setting towns up for success with updated GHG Inventories, an assessment of municipal needs, and a Net Zero Action Plan is going to put towns in a position to start implementation projects before 2030. With our estimated reduction within the first 5 years totaling 25,663 MTCO₂e per year or 128,315 MTCO₂e for 5 years and a project cost of \$5,458,261, we calculate a total of \$42.54 per 1 MTCO₂e.

Additional factors to consider when determining cost-effectiveness are the long-range implications of these projects. As communities set off to implement their action plans their annual GHG emission reductions will reduce year after year. This project will start with 5 towns in our region but will also create a streamlined process that will allow our other 12 communities to follow suit.

Both the Net Zero Action Plans and the drafted implementation of this project work with Brockton and Vicinity Building Trades Union to stimulate the local economy and ensure that labor union standards including prevailing wages and minority workers are prioritized in contracting. Work agreements include the standards outlined in the Inflation Reduction Act communities can anticipate seeing cost reductions in projects.



d. Documentation of GHG Reduction Assumptions (Technical Appendix)

Section 3: Environmental Results—Outputs, Outcomes, and Performance Measures- LAURIE

a. Expected Outputs and Outcomes

The Net Zero Action Plan has two ways of lowering GHGs for communities. The first is to retrofit municipal buildings as much as possible. The second is to implement planning practices and educational materials that make it easier for residents in the community to take on these same initiatives. Due to the volume of property owners in a given town in comparison to municipal buildings, this will carry the weight of actual GHG emission reductions. If the project assumes a minimum reduction of 25,663 MTCO₂e at 5 communities annually, at a full 17 communities taking the initiative there is an anticipated reduction of 87,254.2 MTCO₂e annually. These metrics view the combined measures of municipal building reductions and anticipated changes from property owners. While the volume of GHG reductions falls outside of municipal control, it is the municipalities responsibility to reduce barriers for homeowners. The property owner metrics are following the assumptions made in the PCAP using MassSaves 10-30% range in reductions based on incentives.

| <i>Years</i> | <i>Expected Outputs and Outcomes</i> |
|---|--------------------------------------|
| 2025-2030 | 25,663 MTCO2e |
| 2030-2050 (5 Communities Only) | 46,609-52,546 MTCO2e |
| 2030-2050 (17 Engaged Communities) | 87,254.2 MTCO2e |

| <i>Reduction Measure</i> | <i>Outcome</i> |
|---|--|
| GHG Inventory | Creating a GHG inventory is an initial step in creating an action plan. Direct emission reductions can be determined by action plan results. Long-term reductions can be anticipated as new projects derive from the results. Potential Emissions Range. |
| Initial 5 Action Plans | 3,788 MTCO2e from municipal building reductions alone |
| Full 17 Action Plans | 12,879 MTCO2e from Municipal building reductions alone |
| Community Outreach Implementation Projects | 21,670 MTCO2e reductions created by the Net Zero Action Plan for non-municipal buildings |

b. Performance Measures and Plan

The most visible measure of the plan is to see the completion of 5 Net Zero Action Plans completed and publish ready within the first three years and a GHG Inventory done by the contracted company. There are many more measures to track overtime as outlined in the PCAP and specific to project goals. In addition to actual GHG reductions, the following table outlines additional measures of equity and community impact.

| <i>Measures for Net Zero Action Plans</i> | <i>Tracking Method</i> |
|--|--|
| Committing to and completing the Net Zero Action Plan by no later than year 3 and the number of implementation projects to follow in years 4 and 5. | Quarterly Reporting from OCPC |
| Increase in square feet and number of net zero municipal buildings. | Annually by town contact OCPC |
| Increase in square feet and number of net zero municipal buildings in LIDAC communities. | Annually by town contact OCPC |
| Technical assistance delivered to municipalities with LIDAC communities. | Quarterly from OCPC |
| Increase in energy percentage reduction based on Green Communities baseline | Green Communities Annual Report |
| Community workforce agreement labor standards adherence. | RFP/RFQ |
| <i>Measures for Community Outreach</i> | <i>Tracking Method</i> |
| Participation of low- and moderate-income residents in building decarbonization programs facilitated by municipal engagement. | Outreach Attendance |
| Number and strength of partnerships. | OCPC Reporting and Mass Saves Annual Reporting |

| | |
|---|-----------------------------|
| Increase in MassSave incentive usage by residents within the region. | Mass Saves Annual Reporting |
| Residents and businesses engaged by technical assistance programs. | Outreach Attendance |
| Building Pathways South pre-apprenticeship program expansion. | Outreach Attendance |

c. Authorities, Implementation Timeline, and Milestones

Year 1:

During the first year, we anticipate completing the initial hiring for a full-time staff member within our office to go through the process with our selected towns. To prevent delays in work, current staff will begin contracting with the five initial communities and creating an RFP for the GHG Inventory work. OCPC will create a steering committee of local partners from within the region who work on a range of topics including climate and resiliency, education, local business, labor union representatives, minority representation, and hiring agencies. The steering committee will work with OCPC as a sounding board for the ongoing initiatives. OCPC will work with local universities to find an intern for the upcoming semester. To sustain the internship, we will make sure we keep in contact with the university to ensure that new students get an opportunity each semester. The intern will work alongside OCPC staff to create outreach for residents that support GHG reductions from this project and larger state initiatives.

After subcontracting to complete the GHG Inventory we will anticipate having a tool or database structure completed within the first two quarters and the input of data for the 5 key towns within the following two.

Within the first year, upon completing contracting, each town will be expected to review their Green Communities projects and work with OCPC staff to create an inventory of known projects for municipal buildings moving forward. OCPC staff will also interview various departments and meet with the steering committee created by each town.

Year 2:

The GHG Inventory tool will apply to the initial 5 communities and will be used to support and guide the selection process of addressing priority projects for the town, whether that be edits to zoning, bylaws, or current building retrofits. The second year will be spent building out what is the “Road Map” for a Net Zero community. These decisions will be made based on data created from the tool, research, and conversations with town staff, boards, and community members. Creating initiatives for the town that are deployable and supported will ensure success. Net Zero plans will anticipate having a list of duties that the town is responsible for, a comprehensive plan for the planning board to enact over time, education for property owners as energy consumers, and using labor union standards for town implementation work. Students in internships can help towns deploy educational materials, create branding, and outreach to increase community understanding and support of the Action Plan.

Due to the communities being already a part of the state initiative Green Communities, while they are finalizing their plans they can start applying for implementation during competitive grant rounds. These projects and their impacts are tracked through required annual reporting.

The GHG Inventory database will expand at this time and be populated with all 17 communities and be able to show summarized data for region-wide impacts. This step will prepare us for year three when we convert the data to be publicly accessible.

Year 3:

This will be the year of creating a transition from planning to implementing. Having identified all key projects that the community would like to accomplish, the towns will now work with OCPC staff to prioritize and draft implementation either through grant writing to fund installation and construction projects or an agreement between OCPC including drafting RFQ/RFP reflecting in the community workforce agreement. Other work may include bylaw writing within OCPC or assisting with contacting another agency.

Having a full GHG Inventory completed by the end of year two, the initial trends report will be shareable for other communities as a tool for their planning, or to join the larger initiative moving forward. OCPC can also identify new regional strategies with trends identified.

Year 4-5

Years 4 and 5 will continue with technical assistance for implementation. Towns can work with OCPC to implement strategies they have determined within the plan. Assistance can vary from grant applications to networking or outreach, and bylaw writing.

With the GHG Inventory fully established at this point we will collaborate with the subcontractor to create ways to transfer management of the tool and data to OCPC. Reviewing inputs used, the tool can assist towns in seeing the impact their strategies have.

| Draft Timeline | | | | | | | | | | | |
|-------------------------|---|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Responsible Party | Task | Timeframe | | | | | | | | | |
| | | 2025 Q1 | 2025 Q2 | 2025 Q3 | 2025 Q4 | 2026 Q1 | 2026 Q2 | 2026 Q3 | 2026 Q4 | 2027 Q1 | 2027 Q2 |
| OCPC Manager | RFQ for GHG Inventory | | | | | | | | | | |
| OCPC Manager | Create Steering Committee | | | | | | | | | | |
| OCPC Manager | OCPC Hiring | | | | | | | | | | |
| OCPC Staff | Identify Communities 1-5 | | | | | | | | | | |
| OCPC Staff | Finalize Contract with Subcontractor for GHG | | | | | | | | | | |
| OCPC Staff | Contract Communities 1-5 | | | | | | | | | | |
| OCPC Intern | Creates Educational Materials and attends one outreach event | | | | | | | | | | |
| Building Pathways South | Annual Reporting | | | | | | | | | | |
| Steering Committee | Meet Quarterly until end of GHG Inventory | | | | | | | | | | |
| Subcontractor | Begins creating tool/database | | | | | | | | | | |
| Communities 1-5 | Assess Green Communities Progress | | | | | | | | | | |
| Subcontractor | Data Collection Communities 1-5 | | | | | | | | | | |
| Subcontractor | Report Initial Findings | | | | | | | | | | |
| Subcontractor | Data Collection Communities 6-17 | | | | | | | | | | |
| OCPC Staff | Provides initial planning outline | | | | | | | | | | |
| OCPC Staff | Meets with staff and creates in town committee | | | | | | | | | | |
| OCPC Staff | Begin bylaw review and local concerns through outreach | | | | | | | | | | |
| Communities 1-5 | The committee reviews data trend findings | | | | | | | | | | |
| Communities 1-5 | Town works with OCPC Staff to design needed actions | | | | | | | | | | |
| OCPC Staff | Final Action Plans Due | | | | | | | | | | |
| Subcontractor | Report Initial Findings | | | | | | | | | | |
| Responsible Party | Task | 2027 Q3 | 2027 Q4 | 2028 Q1 | 2028 Q2 | 2028 Q3 | 2028 Q4 | 2029 Q1 | 2029 Q2 | 2029 Q3 | 2029 Q4 |
| OCPC Intern | Creates Educational Materials and attends one outreach event | | | | | | | | | | |
| OCPC Staff | Provide Implementation Assistance and monitor adherence | | | | | | | | | | |
| Subcontractor | Educates OCPC and Steering Committee on how to best manage database moving forward. | | | | | | | | | | |
| Subcontractor | Continue to Update Data and Publish Trends | | | | | | | | | | |
| Steering Committee | Meets Annually | | | | | | | | | | |
| Building Pathways South | Annual Reporting | | | | | | | | | | |

Section 4: Low-Income and Disadvantaged Communities

a. Community Benefits

When designing GHG reduction measures for the Greater Boston Priority Climate Action Plan (PCAP), Low-Income and Disadvantaged Communities (LIDAC) communities were identified and considered. These communities represent diverse cultures, languages, businesses, institutions, and more within our region. The measures represented by Old Colony Planning Council (OCPC) both directly and indirectly benefit LIDAC communities as the result of a framework investing in priorities that include equity, cost of

living reductions, considering environmental and public health burdens, creating economic and job benefits, and improves community resilience to climate change. To be inclusive in our analysis, the proposed measures were considered through both the Climate and Economic Justice Screening Tool (CJEST) and the Environmental Justice Screening and Mapping Tool (EJScreen).

Centered on distributional equity, our proposed measures will ensure those that historically been impacted by climate change and environmental harms, have access to clean energy programs or policies. Additionally, we have considered the structural equity implications by examining clean energy systems and programs that are currently inequitable to LIDAC individuals and communities. Empowerment is a critical element in ensuring that marginalized groups will lead and benefit from procedural and structural change. OCPC will lead the effort to build distributional equity through the proposed GHG emission reduction measure of building decarbonization technical assistance. Residents and businesses in LIDAC communities often confront not only the impacts of discriminatory policies and programs but also uncertainty and lack of knowledge of decarbonization measures and potential costs. Direct benefits resulting from technical assistance will be building a trusted, long-term relationship with community-based organizations who are already delivering services and can connect with residents and businesses more effectively with programs.

OCPC, through the creation of a sustainability education program, will further facilitate the ability to create connections by providing educational material in partnership with entities such as MassSave, Community Action Agency Programs, and NH Saves to assist underrepresented LIDAC communities. Key communication pathways will be used to conduct outreach on the various benefits of building decarbonization and incentive program opportunities. This will result in an increase in enrollment in subsidized electricity rates and heating assistance programs. Additional benefits to LIDAC communities will be providing structural equity through Net-Zero Municipal Buildings (B3) GHG emission reductions. This measure will allow the improvement of energy systems and programs for low-income communities including resilience in community facilities and other buildings that provide critical services. Access to equitable and affordable retrofits will provide increased training and opportunities for good jobs and lower energy bills.

Residents in LIDAC communities tend to have less access to higher education, work in service-sector and blue-collar jobs, and experience lower wages and higher levels of unemployment and job instability. Many of the communities identified in the Greater Boston PCAP were historically industrial centers for the region that have experienced economic transitions and the loss of manufacturing and other places of employment. Within the 17-community OCPC region, the City of Brockton has been identified as a “Gateway City,” or a manufacturing community that transitioned to a technology-based economy, changing the workforce and availability of jobs. The implementation of both technical assistance for decarbonization and Net-Zero Municipal Buildings provides an opportunity for these communities to connect with local employers to increase job training. OCPC will partner with the Massachusetts Building Trades Unions, Local IBEW 223, and Brockton and Vicinity Building Trades Council to secure skilled labor to deliver retrofit and energy efficiency projects on time and under budget to create good, local union jobs with family-sustaining wages and benefits. Targeted workforce training will provide wraparound services in the climate sector for women, low-income, people of color, and English as a Second Language

communities. This will assist the overall objective of working with climate and clean energy employers to offer apprenticeships and job opportunities to our LIDAC communities.

OCPC will continue to assess the avoided disbenefits to our communities through a dedicated dashboard and tracking system for all in our region. We will track the long-term data related to net-zero buildings working with our sustainability education program coordinator to ensure progress and goals are achieved. We will continue to work with our labor partners to track job creation and expansion in the clean energy sector in addition to those that may seek apprenticeship or pre-apprenticeship opportunities. Additionally, OCPC will continue to partner with the Metropolitan Area Planning Council (MAPC) to begin the development of a Comprehensive Climate Action Plan (CCAP) that will be completed by August 2025 followed by implementation and status updates in 2027. The CCAP will include identifying measures in additional sectors and both near-term and long-term emissions reduction priorities. This will include an updated GHG inventory to establish long-term GHG emissions projections and reduction targets, including expanding upon measures to include co-pollutant and workforce planning analyses.

b. Community Engagement

The community engagement strategy outlined in the proposal is robust and aims to ensure the active participation of low-income and disadvantaged communities throughout the development and implementation of GHG reduction measures. Targeted outreach efforts were to engage environmental justice/LIDAC communities, identifying and reaching out to those disproportionately affected by environmental issues. The strategy promotes the use of a wide variety of engagement techniques, including town hall meetings, focus groups, workshops, surveys, and one-on-one consultations, to create early, frequent, and continuing opportunities for community engagement. Transparency is highlighted through a clear and accessible planning process, providing opportunities for early risk mitigation, and addressing community concerns from the outset. Additionally, this includes provisions for holding community consultations and public input meetings to gather feedback on proposed GHG reduction measures, ensuring that community members have opportunities to voice their concerns and provide suggestions for improvement. Alongside, Building Pathways South will hold community engagement with the funding provided through this grant to enhance their capacity. This outreach will target women and people of color within the Old Colony Planning Council region for highly trained well-paying careers in building trade unions. Furthermore, we will continue to work to establish community work groups or advisory boards with representatives from low-income and disadvantaged communities to provide ongoing input and feedback. Lastly, advocates for including community-elected members on planning and project teams will be solicited to ensure that community voices are represented in decision-making processes. Overall, the approach is designed to foster meaningful dialogue, collaboration, and partnership with low-income and disadvantaged communities, prioritizing their needs and priorities throughout the project lifecycle.

Incorporation of Input from Low-Income and Disadvantaged Communities

We have taken significant steps to integrate input from low-income and disadvantaged communities into the development of GHG reduction measures. Specifically, to incorporate initiatives aimed at reducing carbon emissions while prioritizing equity and inclusion. For instance, the proposal emphasizes the importance of engaging with environmental justice/LIDAC communities and ensuring their participation

in building decarbonization programs. The need to provide technical assistance and outreach efforts tailored to these communities has been identified, acknowledging their unique challenges and priorities.

Moreover, the PCAP describes metrics to track progress, such as the participation of low- and moderate-income residents in building decarbonization programs facilitated by municipal engagement. This indicates a commitment to measuring the impact of the proposed initiatives on disadvantaged communities and adjusting strategies accordingly.

Continuous Engagement with Low-Income and Disadvantaged Communities

To ensure continuous engagement with low-income and disadvantaged communities throughout the life of the grant, our proposal emphasizes the importance of ongoing outreach and technical assistance programs tailored to the needs of these communities. For example, the document suggests refining technical assistance based on lessons learned from engagement and expanding reach through additional partners and sectors over time.

Furthermore, the proposal advocates for expanding and refining financial assistance programs to broaden support for comprehensive decarbonization approaches and increase accessibility. This includes establishing limited financial assistance programs to target underserved sectors, such as renters/landlords serving low- and moderate-income residents and ensuring that programs include mechanisms to avoid tenant displacement. Building Pathways South will hold community engagement with the funding provided through this grant to enhance their capacity. This outreach will target women and people of color within the Old Colony Planning Council region for highly trained well-paying careers in building trade unions.

Municipalities, coalitions of municipalities, and regional planning agencies play an important role in facilitating community engagement. This will include establishing community work groups or advisory boards made up of community members to provide ongoing input and feedback while emphasizing the importance of transparent planning processes and public input meetings to solicit feedback from diverse perspectives.

By incorporating input from low-income and disadvantaged communities into the program and outlining strategies for continuous engagement, the proposal demonstrates a commitment to equity and inclusion in the development and implementation of GHG reduction measures.

Section 5: Job Quality

To ensure that CPRG implementation grant funds and the implementation of GHG reduction measures generate high-quality jobs with a diverse, highly skilled workforce and support "high road" labor practices, several strategies can be employed:

Targeted Workforce Development Programs

Develop targeted workforce development programs aimed at providing training and skills development for individuals from underserved communities, including minorities, women, veterans, individuals with disabilities, and those from low-income backgrounds. Partner with community colleges, vocational schools, and training organizations to offer training programs specifically tailored to the needs of the green economy, such as renewable energy installation, energy efficiency retrofitting, and electric vehicle

maintenance. Building Pathways South will hold community engagement with the funding provided through this grant to enhance their capacity, enrollment, and impact on the community.

Equitable Hiring Practices

Implement equitable hiring practices that actively recruit and hire individuals from diverse backgrounds, including through targeted outreach efforts in underserved communities. Ensure that job postings are accessible and inclusive, with clear descriptions of job requirements and qualifications that focus on relevant skills and experience rather than unnecessary educational credentials.

The implementation projects derived from plans will adhere to the attached community workforce agreement encompassing but not limited to:

- Prevailing Wage
- Registered Apprenticeship
- Women and Persons of Color
- DEI
- Local Hire
- Pre-Apprenticeship.

Partnerships with Community-Based Organizations

Collaborate with community-based organizations (CBOs) that have strong ties to underserved communities to facilitate recruitment, training, and job placement initiatives. Provide funding and resources to support CBOs in their efforts to connect community members with job opportunities in the green economy.

Promotion of High Road Labor Practices

Encourage and incentivize employers to adopt "high road" labor practices that prioritize fair wages, benefits, and working conditions as outlined in the community workforce agreement. Provide guidance and support by including representation from local organized labor on implementation steering committees to municipalities and employers on best practices for employee training and engagement, living wage, workplace safety, and fair treatment.

Diverse Supplier Development

Promote diversity and inclusion in the supply chain by actively seeking out and contracting with minority-owned, women-owned, and other diverse suppliers for goods and services related to GHG reduction projects. Provide assistance and support to small and minority-owned businesses to help them navigate the procurement process and access opportunities in the green economy.

Apprenticeship and Mentorship Programs

The community workforce agreement the project creates will expand demand for registered building trades apprenticeship programs, providing hands-on training and career pathways for individuals entering the green workforce. Pair experienced workers with newcomers to the industry to provide guidance, support, and opportunities for skills development and career advancement. Simultaneously,

expanding the existing pre-apprenticeship pipeline with Building Pathways South will guide and mentor those seeking to enter the workforce in the region.

Monitoring and Evaluation

Implement monitoring and evaluation mechanisms to track the demographic composition of the workforce involved in GHG reduction projects. Regularly review hiring practices, employee demographics, and retention rates to identify areas for improvement and ensure that diversity and inclusion goals are being met. Monitoring will also include an Access and Opportunity Committee comprised of a Brockton and Vicinity Building Trades representative, a municipal representative, and a representative of the construction manager to ensure compliance with the outlined community workforce goals.

Community Engagement and Feedback

Engage with local communities and stakeholders to gather feedback on job creation and workforce development initiatives. Solicit input from community members, labor unions, and advocacy groups to ensure that GHG reduction projects are benefiting the broader community and promoting equitable economic opportunities. An ongoing evaluation of steering committee meeting goals as outlined in Section 3B, will ensure adherence. Monitoring will also include an Access and Opportunity Committee comprised of a Brockton and Vicinity Building Trades representative, a municipal representative, and a representative of the construction manager to ensure compliance with the outlined community workforce goals.

By implementing these strategies, CPRG implementation grant funds can support the creation of high-quality, sustainable jobs that contribute to both environmental sustainability and social equity.

Section 6: Programmatic Capability and Past Performance

a. Past Performance

OCPC has an experienced and capable staff comprised of over 50 years of extensive experience in planning (non-construction and construction), project development, management, administration, and implementation of both state and federal funding programs including EPA.

1. Active with EDA: 01-69-15329
EDA Data Dashboard/ Self-Assessment Tool to be created for each municipality within the county to quickly grab needed data.
Debra Beavin, MA EDR, 267-559-3385, dbeavin@eda.gov
2. Active with EDA: ED23PHI0G0029
East Bridgewater/Brockton Sewer Line Ext Project to expand Economic Development capacity into East Bridgewater through the addition of sewer in the town of East Bridgewater.
Megan Coll, EDA Project Engineer, 267-969-2937, mcoll@eda.gov
3. Active with EPA: Brownfields Assessment - OCPC EDD Commuter Rail Corridor (Grant Tracking Number GRANT13757379). This grant was recently awarded to OCPC under EPA-I-OLEM-OBLR22-09 – FY23 Guidelines for Brownfields Cleanup Grants.

Assisting communities with Phase 1 Assessments at known Brownfield sites in the region.

Paul Pietrinferni, Physical Scientist, EPA Region 1, 617-918-1585, pietrinfierni.paul@epa.gov

4. Active with EDA: OCPC Partnership Planning (GRANT13566292). This grant was awarded to OCPC under EDA-PHI-TA-PRO-2021-2006851 – Philadelphia FY 2021 – FY 2023 EDA Planning and Local Technical Assistance.

Facilitating economic development within the Old Colony Economic Development District.

Matthew Magargee US EDA Economic Development Specialist 215-518-8816

mmagargee@eda.gov.

5. Active with EDA: Regional Water Study (GRANT13779026). Awarded to OCPC under PWEAA2020 – FY 2020 EDA Public Works and Economic Adjustment Assistance Programs including CARES Act Funding.

Creating a regional water plan with 17 communities and other stakeholders in the region.

Matthew Magargee US EDA Economic Development Specialist 215-518-8816

mmagargee@eda.gov.

6. Closed with EDA: Old Colony Planning Council (GRANT13117882). This two-year grant was completed in 2022 under EDA-PHI-PL-PRO-2020-2006477 – Philadelphia EDD Invited C19 Supp. Previous work facilitating economic development within the Old Colony Economic Development District.

Matthew Magargee US EDA Economic Development Specialist 215-518-8816

mmagargee@eda.gov.

b. Reporting Requirements

All projects listed have maintained quarterly reporting and are in good standing. OCPC consistently applies for, is compliant with, and finalized reporting with federal grants under both the EDA and the EPA. Currently, on all active projects, there are no stalls in progress or issues regarding mandated reporting.

c. Staff Expertise

OCPC has been the recipient of several federal and state grants and agreements over the years, including the four noted above in the past three years as well as additional active grants with, for example, the federal Administration for Community Living (through the MA Executive Office of Elder Affairs) and Federal Highway Administration (through MA Department of Transportation). We have strong internal processes and controls to manage these awards. A lead is assigned to each project to ensure grant administration is completed on time and that work proceeds as per grant agreement, on time, and to budget. OCPC's finance team oversees all accounting and invoicing, monitoring expenses regularly. The departmental director and organizational executive director, at minimum, serve as peer reviewers for all outputs. OCPC has met reporting requirements for all grants and agreements within the past three years, producing outputs and outcomes as expected. For this project, the lead will be Rhiannon Dugan, Senior Planner, under the direction of department director, Laurie Muncy. Other key staff who may advise this project include Paul Umamo, Senior Grant Writer, Joanne Zygmunt, Senior Planner, Nicholas Giaquinto, Senior Economic Development Planner, Don Sullivan Department Manager of Economic Development. The project will later be staffed by a new hire and intern designated in the project budget and budget narrative. Staff resumes are included as attachments to this application.

Section 7: Budget

Please see the budget & budget narrative attachments.