

Climate Pollution Reduction Grants – Implementation Grants General Competition

Decarbonize Chicagoland! Coalition Work Plan

1. OVERALL PROJECT SUMMARY AND APPROACH

a. Description of GHG Reduction Measures

Summary

The City of Chicago (City), through its Department of Environment (City DOE), is applying as lead applicant for the Decarbonize Chicagoland! Coalition (the Coalition), a CPRG Implementation Grants General Competition Coalition of the City and Cook County, Illinois (Cook County). Our application seeks \$197,971,197 in CPRG funds to implement ambitious but achievable measures in three sectors: industrial, public buildings, and waste. Each measure is identified, as described later in the Work Plan, as a Priority Measure in the Chicago MSA's Priority Climate Action Plan (PCAP) as submitted to the US EPA by the lead organization, the Metropolitan Mayors Caucus (MMC).

Our proposed measures are:

- Industrial decarbonization assistance program in Chicago, Cook County and suburban DuPage County, combining incentives to businesses with expanded versions of Chicago/Cook pollution prevention and energy efficiency assessments, targeting small to medium-sized facilities;
- The first comprehensive effort for replicable decarbonization work in community-facing Chicago/Cook public buildings, focused on branch libraries, public schools, community buildings and public housing;
- A comprehensive food waste prevention and diversion program for the City, the County, and surrounding regional counties, generating substantial GHG reductions through targeted interventions building on recent local momentum in this area and work by community partners.

Overall Decarbonize Chicagoland! Project and Coalition Features

Energized by our respective recent experience implementing COVID-19 pandemic recovery programs, including with significant federal investments through the American Rescue Plan, the City and Cook County are now excited to submit this first-of-its-kind proposed coalition for CPRG funding consideration. As the third largest city in the U.S. and second largest county (the largest population served in a single county between America's coasts), our approach offers significant, durable cumulative greenhouse gas (GHG) reductions, the vast majority located in or to the benefit of low-income and disadvantaged Chicago/Cook communities. We have coordinated extensively and are partnering, as our implementation approach, with key independent City and County agencies, surrounding regional partner agencies, the State of Illinois, community stakeholders and technical collaborators. We also highlight the following features, thematic throughout this Work Plan:

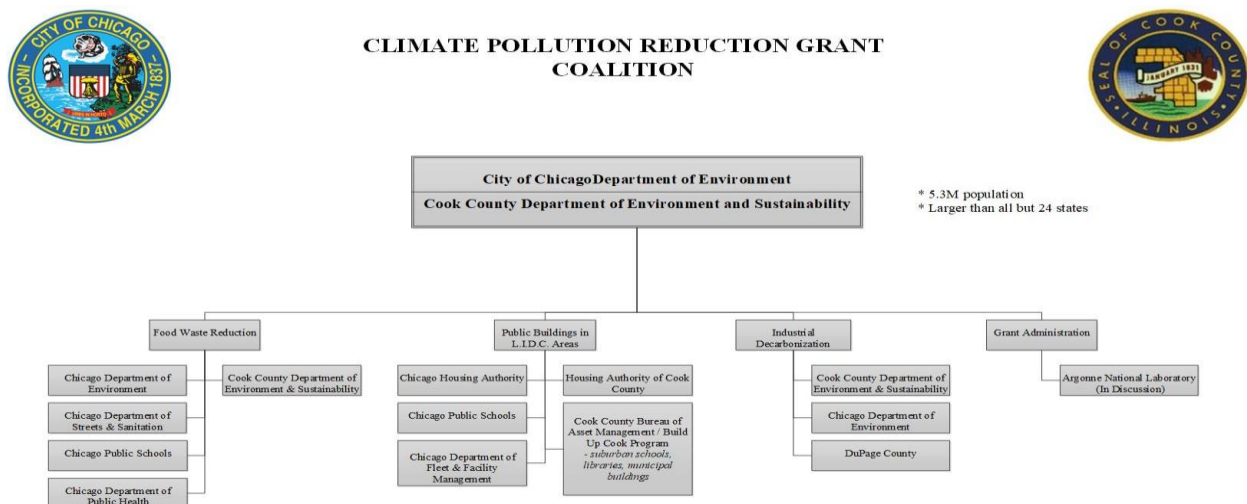
- In each of our three focus sectors, we build on existing human and physical infrastructure in Chicago/Cook - existing City or County programs, existing community partnerships and existing facility-level energy data and/or cost estimates, allowing for immediate, hit-the-ground-running implementation in October 2024.
- We focus on measures in sectors that are important GHG emissions contributors according to the Chicago MSA PCAP but that are not currently subject to GHG regulatory reduction strategies at the City/County, State of Illinois or federal levels. Our selected sectors also are not as likely to see significant near-term GHG reductions primarily from market transformation.
- Our Coalition is a "ground-floor" Coalition of experienced local governments and agencies, each with direct responsibility for the proposed measures, whether it is a program such as expanded waste diversion or a decarbonized piece of equipment in one of our public facilities. This will allow for faster, more certain implementation compared to a strategy relying on extensive

indirect implementation. The structure also maintains the benefits of a scalable, global approach, driving results that can be transformationally replicated, through the City’s overall program management and engagement with key regional assets like research institutions.

- While the City and the County have extensive histories of climate mitigation ambition, we also face significant fiscal pressures, especially as ARPA and associated pandemic funding sunsets, making it highly unlikely these measures could be implemented without CPRG.
- Chicago and Cook County have extensive community needs with a high number of LIDAC census tracts within our boundaries. We have redoubled our commitment to equitable community benefits, jobs and approaches to decarbonization, aligned with the Justice40 commitment.

The City affirmatively states that it will submit a Coalition Memorandum of Agreement signed by itself and Cook County no later than July 1, 2024. The City will provide central grantee oversight and management functions in its Department of Environment, with assistance from its Office of Budget and Management. Within each particular measure, City and/or Cook County staff will provide program delivery or management/oversight of program delivery by subrecipients or program participants.

The chart below summarizes the Decarbonize Chicagoland! structure and key partners.



Our coalition structure is integral to why we are proud to share this application with the US EPA. The City is a municipality within Cook County but, for provision of environment and energy, most programs operate separately and in parallel, with the Cook County Department of Environment and Sustainability (CCDES) serving Cook County outside of Chicago, including 134 suburban municipalities. For the first time that any Coalition key personnel can remember, this Work Plan proposes harnessing the individual strengths of each entity to achieve greater economies of scale, impact and community benefit, cutting across jurisdictional lines. Because each has existing staff and programs that can be immediately convened through a Decarbonize Chicagoland! program management and implementation team, a powerful engine that would normally take years to build out will be launched within the first year of the award term. The overall theme of our particular approach can be summarized as “diverse approaches and partners harvesting overall project success together.” Examples of this theme follow in our descriptions of measures – distinct programmatic approaches by the City, County or partner-associated agency made more effective by the central Coalition assistance and management that only the CPRG opportunity can provide.

Industrial Decarbonization Measure

Features, Tasks and Milestones: Funding for assessments and grants to industrial facilities for: **Energy Efficient Equipment, Renewable Energy, Electrification, Refrigerant System Replacement** grants to small and medium-sized facilities in Chicago, Suburban Cook and DuPage County (a subrecipient on this measure). Cook County's Businesses Reducing Impact on the Environment (BRITE) program, the City of Chicago's Pollution Prevention Program with the University of Illinois at Chicago's Energy Resources Center (ERC) and DuPage County's Sustainable DuPage technical assistance program provide strong platforms on which to build. The Chicago and Cook County programs already provide free pollution prevention assessments, but available funding does not begin to meet the need for implementation. Assessments identify the most effective pollution reduction opportunities focusing on energy and water use reduction, waste diversion, and toxic chemical use reduction.

The first component is voluntary assessments. While the program will serve all industry types, initial outreach will focus on food and beverage and metal manufacturers in LIDAC census tracts. The second component is grants for decarbonization projects such as energy efficiency, process electrification, refrigeration system replacement, and on-site renewable energy. Cook County's BRITE program works with the Chicago Urban League to disburse grants (up to \$300,000) for implementation, and for outreach and business support. Pollution prevention engineers support businesses to identify financial incentives such as utility rebates. GHG reporting for CPRG would be pro-rated to account for other incentives.

Tasks and milestones include program design finalization, subrecipient agreements, contracts for disbursing funds and conducting assessments, verification of project implementation by site visits, and measurement of GHG data and spending to create monthly GHG reduction and financial reports. The tasks and milestones that reduce GHG emissions by 2030 include 1) increasing energy efficiency and electrification (or other non-fossil fuel based technology) of heating/cooling and ventilation, lighting, envelope, appliances, etc. to reduce GHG emissions by 10% (646,960.14 MTCO₂e reduction), 2) replacing high Global Warming Potential (GWP) fluorinated gas refrigeration systems with natural refrigerant systems at 571 small grocery stores/supermarkets in Chicago, Cook County, and DuPage County (1,021,187.82 MTCO₂e reduction, and 3) increasing on-site renewable energy by installing solar arrays at 15 industrial facilities and 224 small commercial facilities (17,345.28 MTCO₂e reduction).

Assumptions and Risks: The City of Chicago, Cook County, and DuPage County serve 1,142 grocery stores and 2,041 industrial facilities. Based on our estimated GHG reduction savings, an average grocery store may save 1,788.42 MTCO₂e by replacing refrigeration systems with natural refrigeration systems, while an average industrial facility may save 3,039 MTCO₂e from energy efficiency upgrades. Based on these averages, a total of 571 grocery stores and 204 industrial facilities would need to be assessed and use grant funding to complete GHG reducing projects to reach the GHG reduction projections. This number of assessments and grant disbursements within 5 years may be a heavy lift. However, this measure reduces risk by building on existing programs in all three jurisdictions. Other risks include errors in the analysis of equipment/utility energy data and assumptions of GHG emissions/energy data from existing equipment. Hiring contractors for energy efficiency, renewable energy, and natural refrigeration installations and maintenance will depend on the bandwidth and skillset of current contractors. Additional contractor training may be required.

Roles of Coalition Members: **City of Chicago:** overall program reporting and expand existing program to include grants. **Cook County:** expand existing program and assist DuPage County on program design.

How Measure Relates to PCAP, Why Selected, How it will Lead to CPRG Success: Relates to Chicago MSA PCAP sections and measures: 1) 10.1.4 Optimize Building Energy - BE3 - Measures 1, 2, and 6, 2)

10.1.4 Optimize Building Energy - BE3 - Measure 5 DE2, and 3) 10.1.1 Decarbonize Energy Source - DE2 Measure 2. The industrial sector is difficult to decarbonize, due to a diversity of processes and operations. Industry is key to the Chicago region's economy, with many small and medium-sized operations. Per 2020 EPA NEI data, 52,527,832.03 MTCO₂e is generated by industrial facilities across the Chicago MSA, and 5,690,960.14 MTCO₂e is generated by such facilities in Chicago, Suburban Cook, and DuPage County. The activities (energy efficiency, electrification, renewable energy and refrigerant system replacements) were chosen because of their high impact on reducing GHG emissions. Outreach will focus primarily on LIDAC areas to reduce co-pollutants and to reach minority-owned businesses. 68% of businesses assessed to date in the BRITE program were in LIDAC communities.

Public Buildings Energy Retrofit and Decarbonization Measure

Features, Tasks and Milestones: This measure will result in at least 66 public building retrofits with an emissions reduction of 66,851 MTCO₂e from 2025-2030 and 317,149 MTCO₂e from 2025-2050. Partner agencies represent key types of community-facing public buildings. This funding will allow each public sector agency to jumpstart the transition from traditional energy efficiency to whole-building electrification and result in emissions reductions that will increase each year as our local electric grid continues to meet its decarbonization targets on a pathway to being 100% carbon neutral by 2050. Sharing best practices on public buildings of different sizes/types can offer lessons learned for the surrounding business community, while also educating constituents on the benefits of electrification and the myriad local, state and federal incentives available in all building sectors. All public buildings in this program will be located within LIDAC communities. Prioritizing equity through site selection and deliberate decision-making sends a clear message to impacted constituents that climate action and the resulting direct and indirect impacts are just and equitable environmental benefits that all people deserve.

Chicago Public Library Electrification Retrofit Program – 7 neighborhood libraries Chicago Department of Fleet and Facility Management and Department of Environment. Funding will allow the City to hire a general contractor to retrofit selected library sites. Measures will include: Lighting, Air Sealing and Insulation, Air source heat pumps or Variable Refrigerant Flow as recommended by Argonne National Laboratory, Optimization of Controls, Fans and Motors, Upgrade electrical service when necessary, and will be fully offset with onsite solar, which due to limited rooftop space, may not have been possible without the high efficiency electrification of the site. Both during and after construction, other non-construction activities will play an important role in this segment of the project. Chicago Public Library will engage surrounding communities at each site by developing communications for patrons and the community, with support from the City DOE. The City DOE will support the Department of Fleet and Facility Management in paperwork for local utility incentives and Inflation Reduction Act (IRA) direct pay.

Chicago Housing Authority (CHA) – Public Housing Electrification Project—approximately 29 low-rise campus buildings and 3 mid-rise elevator buildings with approximately 474 units. This element comprises retrofits at buildings serving families and seniors in LIDAC communities. Construction measures for each building type include: 1) Family Campuses: Remove central hydronic boiler/steam and install individual ductless air source heat pumps; 2) Elevator Buildings: Remove central hydronic boiler and install variable refrigerant flow system, Remove gas water heaters and install central heat pump water heater, Replace shared commercial gas dryers with shared commercial heat pump dryers, Replace gas stoves with induction stoves, Upgrade electrical service if necessary, air sealing and insulation, if appropriate. CHA will engage its tenants prior to construction, during and after in order to make tenants aware of the upgrades and benefits of high-performing buildings, both to tenants and to

the community. These communications will also be critical in managing tenant expectations, which is essential to the success of an electrification retrofit in which tenants remain onsite. CHA will submit all documentation and paperwork for local utility incentives and state energy offices, IRA, and home energy rebates.

Chicago Public Schools – Resiliency Network Energy Efficiency and Electrification Project: 5 high schools. Chicago Public Schools (CPS) recently started to transform the district’s largest, and most used, facilities into a Resiliency Center Network. These schools will continue to operate during extreme weather conditions and natural disasters because of renewable energy and efficient building operating systems. In times of need, these facilities will be resource centers while providing shelter, warmth or cooling, clean water and other support for the community. A group of 22 schools were identified; High schools, as the biggest facilities in the district’s portfolio with the largest conditioned space to provide shelter and support during times of need; Equitable distribution with at least one school located in each of the District’s sixteen planning areas; Priority to schools that meet both the EJScreen and the CEJST criteria reflected by the Justice40 Initiative to ensure those communities, typically impacted the hardest by extreme conditions and disasters, have the additional support and resources they need. Five of those 22 schools were selected for the CPRG program, all of which qualify for Justice40 and have facility energy efficiency assessment reports completed by the local utility that identified and quantified proposed projects. Measures include: LED lighting upgrades and occupancy controls, Building Automation Systems (BAS) upgrades, expansions and optimization including replacement of outdated pneumatic control systems, Electrification of facility heating with Geothermal and Air Source Heat Pump systems, Upgrade electrical service when necessary. CPS will engage its students, faculty, staff and communities with communications on projects. CPS will provide training and professional development to staff on upgrades, and incorporate place-based learning and clean energy career pathways for students. CPS will also submit all documentation and paperwork for local utility incentives and IRA direct pay submissions.

Cook County Public Buildings Energy Efficiency and Electrification Program- Build Up Cook: – retrofits at 13 sites. Cook County Bureau of Asset Management (BAM)’s Build Up Cook Program currently works to make capital infrastructure improvements in municipalities with limited staff capacity and fiscal resources. CPRG funding would expand the program to address energy efficiency and electrification in public-serving facilities, such as village or city halls, public libraries, public schools, and community centers. A municipality prioritization tool was developed to rank Cook County municipalities based on need, past investment and proximity to one another. The Build Up Cook program identified 26 communities to participate. All of the Build Up Cook communities have LIDAC census block groups located within them and all of the public facilities supported in this program will be located within a LIDAC census block group. Building energy assessments will be completed on facilities to determine those with the greatest emissions reduction potential. Two schools and eleven other community facilities such as public libraries, village halls, community centers, etc. will have energy efficiency and electrification upgrades including LED lighting and occupancy controls, Building Automation Systems, Air sealing and insulation, electrification of facility heating with geothermal and air source heat pumps, optimization of controls, fans and motors, and upgrades of electrical service as needed. Cook County DES/BAM will engage patrons and surrounding communities at each site, so they are aware of the improvements that are being made within their communities. BAM will prepare paperwork for local utility incentives and Inflation Reduction Act direct pay submissions.

Housing Authority of Cook County (HACC) – Public Housing Energy Efficiency and Electrification Project: – measures in 10 buildings in LIDAC communities. HACC has identified significant opportunities

for energy efficiency and electrification that coincide with their extensive list of end-of-life equipment replacements and needed building repairs at 10 potential buildings, totaling nearly 1,000 units in a mix of family campus low-rise buildings to 10-story, 100 unit+ buildings. These necessary upgrades and building improvements will pair perfectly with the receipt of the CPRG funding. Construction may include: Remove central hydronic boiler/steam gas removal and install individual Air Source Heat Pumps, Remove central hydronic boiler to Variable Refrigerant Flow, Remove gas water heater and install central Heat Pump Water Heater, Replace shared commercial gas dryers with shared commercial Heat Pump Dryers, Induction stoves, Upgrade electrical service and air sealing an insulation, if necessary. With help from DES, HACC will engage residents and the surrounding community so they can learn from the improvements. HACC will apply for appropriate utility and federal incentives to stretch the funding.

Tasks and Milestones: Year 1: Staff hired; procurement processes underway; completion of 2 libraries, LED lighting at 3 schools, 11 CHA buildings completed, all County public sector and housing buildings selected; Year 2: completion of 3 more libraries, BAS and electrification at 5 schools, 13 CHA buildings, 4 suburban government sites and 4 suburban public housing sites; Year 3: remaining libraries and schools completed; completion of 6 CHA, 4 suburban government and 3 suburban public housing sites; Year 4: completion of 1 CHA building, 3 suburban government and 3 suburban public housing sites; observation and documented savings/progress at completed projects; Year 5: all remaining sites completed.

Assumptions and Risks: The first pressure point is around design or measures based on analysis of energy data and existing equipment. Any miscalculations in engineering can cause performance problems or over-sizing of future equipment. The installation of designed measures is also a friction point where plans and equipment are installed or executed by skilled labor. Any communication or practical issues here can also lead to system underperformance or frequent maintenance. Supply chain issues are a major concern for the acquisition of all the required materials and long-lead items, many of which are manufactured overseas. The delays in equipment fulfillment could impact reduction goals as they are most reliant on electrical and large industrial supplies. Labor shortages can also be a challenge that can also impact pricing as well as schedule. To mitigate these issues, we will make an equipment and materials list early in the process and order as early as possible in the process.

Roles of Each Coalition Member: City of Chicago will coordinate all Chicago “sister agencies” and will initiate a peer learning network for all public agencies, City and County, participating in this CPRG public buildings program, led by a measure project manager in City DOE. Cook County will coordinate work at the Housing Authority of Cook County and directly implement the Build Up Cook assistance program for less-resourced municipalities.

How Measure Relates to PCAP, Why Selected, How it Will Lead to CPRG Success: The public building energy retrofit and decarbonization measure relates to PCAP Section 10.1.1 Decarbonize Energy Source - DE2 and Section 10.1.4 Optimize Building Energy – BE3 and BE4 Measures. The measures include multi-family residential, libraries, schools and other auxiliary public buildings. This measure was chosen because commercial and residential buildings make up a significant portion of the region’s GHGs (23.1 and 18.7%) and this will directly support LIDAC communities with limited funding for improvements to public buildings that would not be able to occur otherwise. This program is replicable and can be “scaled up” across public facilities within the various partners’ portfolio of buildings as well as beyond these partners to additional jurisdictions, creating a network and roadmap to share what is learned beyond 2030.

Food Waste Prevention & Diversion Program (FWPDP) Measure

Features, Tasks and Milestones: This measure will reduce 628,871.16 MTCO₂E from 2025- 2030 and 3,933,179.96 MTCO₂E from 2025-2050. In addition, from 2025-2030, this measure will prevent over 50,000 tons of wasted food, recover 15,000 tons for redistribution to feed people in need, collect and compost 189,542 tons of food, collect and anaerobically digest 615,000 tons of food, and generate approximately 2,800,000 MMBtu per year of Renewable Natural Gas (RNG).

Grant Program for Large Food Waste Generators, City of Chicago, Dept. of Environment The City of Chicago DOE will create and manage a \$5.2M grant program for the region's largest food waste generators. Large food waste generators in IL EPA Region 2 (that are also located within the MSA/PCAP) include local colleges/universities, sports & entertainment stadiums, theaters, hospitals, and multi-unit/commercial properties. The grant program is designed to help these entities implement new or improved: (1) food waste prevention strategies; (2) organic composting programs; (3) food donation programs; and (4) other related food waste best practices. This strategy will help divert salvageable food items that would have originally been sent to the landfill to the region's network of 700+ food pantries, soup kitchens, shelters, and community programs. The DOE will prioritize funding to entities that can document large amounts of food currently being landfilled.

Grant Program for Large Grocery Chains & Independent Food Retailers: City of Chicago, Dept. of Public Health The City of Chicago will create and manage a \$1M grant program for the region's retail grocery stores, including large grocery chains or independent food retailers. The grant program is designed to help these entities implement new or improved: (1) food waste prevention strategies; (2) organic composting programs; (3) food donation programs; and (4) other related food waste best practices. This strategy will help divert salvageable food items that would have originally been sent to the landfill to the region's network of 700+ food pantries, soup kitchens, shelters, and community programs. The City will prioritize entities that document large amounts of food currently being landfilled. Additional considerations will be given to entities that serve and/or are located in LIDAC communities.

Grant Program for Local Governments within IL EPA Region 2: Cook County Dept. of Environment & Sustainability. Currently, 260 out of 349 municipalities in IL EPA Region 2 (within the MSA/PCAP) have no food scrap composting related program for their residents or businesses (i.e., commingled yard waste and food scrap composting programs, a standalone food scrap composting program, etc.). Cook County will create and manage a \$5.2 million grant program to help local governments within IL EPA Region 2-MSA/PCAP (Counties of Cook, DuPage, Grundy, Kane, Kendall, Lake, McHenry, and Will) further their food waste prevention, diversion, and recovery projects by covering some of the costs associated with establishing or expanding: (1) education/outreach campaigns to prevent food from going to waste by growing, buying, and preparing only what is needed; (2) community based food scrap composting drop-off sites; (3) curbside food composting programs (ex. commingled yard waste and food scraps or standalone food scrap composting programs); (4) food recovery and assistance programs to support homeless shelters/soup kitchens/food pantries, etc.; (5) special food collection events; and, (6) infrastructure for food diversion and recovery programs (ex. compost dumpsters/carts/bins, green vehicles to transport food to anaerobic digesters or homeless shelters, etc.).

Residential Curbside Food Scrap Collection Program: City of Chicago Dept. of Streets & Sanitation. The City of Chicago will create and manage the City's first ever residential curbside food scrap collection program for households served by the Department of Streets & Sanitation (DSS). This project will offer curbside food scrap hauling and composting service at no cost to residents; residents will receive a kitchen pail and pail liners to make it easy to participate. The 60 food scrap collection routes selected

will ensure robust representation in LIDAC areas and broad geographic coverage informed by participation levels in the city's existing Food Scrap Drop-Off Program. DSS commits to establishing at least 40% of the routes (24 routes) in LIDAC tracts. The goal is to reduce GHGs by diverting household food waste from landfills for composting locally. The 5-year project would include one year of procurement and program design, followed by 4 years of operating 60 curbside food scrap routes for households living in 1-4-unit buildings. Participation will be voluntary and at no cost. With 60 routes, DSS estimates 4,500 households will opt-in. The compost produced will be available to participating residents as an incentive and to boost Chicago's circular economy. This program will include education and outreach to Chicagoland residents about food waste prevention and this new curbside food scrap collection program.

Anaerobic Digester, Workforce & Community Programs & Operations, City of Chicago: Dept. of Environment There is only one active permitted IL EPA food waste anaerobic digester in Cook County, the Green Era Campus in Chicago's Auburn Gresham neighborhood. An additional food waste anaerobic digester is needed to process the projected 615,000 tons of new food scraps that will be collected and digested between 2025-2030. The DOE will select a partner with an active IL EPA permitted food waste anaerobic digester in the City of Chicago. This partnership will include the DOE providing funds to the entity to purchase, install and operate a new anaerobic digester in Chicagoland to convert the food scraps currently being landfilled in the region into Renewable Natural Gas (RNG) and compost. This project will also fund workforce development and community engagement. The DOE is confident in being able to implement this project expeditiously (i.e., to purchase, install and operate a new anaerobic digester within 1 year of receiving CPRG funding). The region's only active permitted food waste anaerobic digester operator, the Green Era Campus, has a permit to add a second digester at its campus.

Districtwide School Composting Program, Chicago Public Schools. Chicago Public Schools (CPS) is committed to improving its usage of materials, reducing food waste, and making smart waste management policies easy to implement. CPS will use funding to implement a district-wide composting program to reduce and divert waste through improved production practices, increased composting recycling rates, and improved food redistribution practices.

Tasks and milestones: Year 1: Staff hired; procurement processes completed; grant programs designed, launched, awarded and approved; food prevention campaigns launched; Year 2-5: implementation of grant programs, opening of new anaerobic digester; implementation of district wide school composting program started; implementation of citywide curbside composting program; routine monitoring, support and reporting for grant award winners and government partners.

Assumptions and Risks:

260 out of 349 municipalities in IL EPA Region 2 (within the MSA/PCAP) have no food scrap composting related program for their residents or businesses (i.e., commingled yard waste and food scrap composting, standalone food scrap composting program or drop-off sites, composting collection events). The grant programs in this proposal (*\$5M for local governments, \$5M for large food waste generators, and \$1M for large grocery chains*), will not be able to fund all the municipalities and businesses in IL EPA Region 2. To address not being able to support all of the regions municipalities and businesses with the proposed grant programs, the Coalition will focus its efforts on two strategies: (1) design and implement grant programs to target the region's largest food waste generating municipalities and businesses to achieve the GHG reduction goals set-out in this grant proposal; (2) engage other partners to develop and support various legislative and policy efforts to encourage, incentivize, and/or require certain entities to implement certain zero waste related practices that will

prevent food waste, recover edible food, and divert food from landfills. These legislative and policy efforts will be directed at state, county, and municipal governments and will not be carried out with federal funds. The goal of all these efforts is to decrease food scraps going to landfills and reduce carbon emissions. Efforts will ensure that legislation and policy ideas consider the impacts to LIDAC and environmental justice (EJ) communities. Efforts will be made to complement and expand funding for the programs that will be established in this proposal.

Roles of Each Coalition Member: City of Chicago: will manage the implementation of the FWPDP, coordinate efforts across all Chicago departments and agencies. Cook County: will manage the grant program for the municipalities and counties in IL EPA Region 2-within the MSA/PCAP.

How Measures Relate to PCAP, Why Selected, How it will Lead to CPRG Success.

FWPDP measures relate to Chicago MSA PCAP section and measure: 10.1.13 Manage Water and Waste Sustainably - W3- "Measure: Divert nearly 20% of food waste generated in Cook County annually (over 311,000 tons) by establish food waste reduction, collection, and anaerobic digestion programs." The FWPDP was designed by grassroots leaders from around the state to address the IL EPA Region 2 landfill capacity crises and the growing demand from residents to divert food from the standard municipal waste stream. The FWPDP will reduce 628,871.16 MTCO2E by 2030, prevent 51,200 tons of wasted food, recover 15,000 tons for redistribution to feed people in need, collect and compost 189,542 tons by 2030, install and open a new anaerobic digester for the region by 2026, and collect and anaerobic digest 615,000 tons of food scraps by 2030.

Why Measures Are Priorities and Meet the Goals of CPRG

The proposal implements three ambitious measures to achieve significant reductions in GHGs by 2030 and beyond, focusing on sectors that produce significant portions of the region's GHGs (Industrial, 28.9%; Commercial/Residential Buildings, 23.1 and 18.7%) or have a particularly strong impact on smaller GHG sectors (Food Waste); achieve substantial community benefits, particularly in LIDAC areas, furthering EJ and Justice40 goals by reducing co-pollutants from industry, providing opportunities for job training and placement, and helping LIDAC communities with limited fiscal and staff capacity access funding for improvements to public buildings; complement other funding sources to maximize these GHG reductions and community benefits by filling gaps in existing programs and funding sources (Industrial Decarbonization, and Food Waste in particular) and building on and scaling up existing programs or shovel-ready plans (Cook County and Chicago's existing Industrial Pollution Prevention programs, Chicago Housing Authority (CHA's) and Chicago Public Schools (CPS) decarbonization program, Cook County's work to assist low income suburban communities to improve their waste pickup and recycling, and Cook County's Build Up Cook program that assists low income municipalities with capital investments); and pursue innovative policies and programs that are replicable and can be "scaled up" across multiple jurisdictions, fostering a culture of regional cooperation on GHG reduction across a very large and complex metropolitan area through direct collaboration and by modeling scalable measures.

The Coalition engaged in extensive conversations with others in the Chicago MSA who are developing applications for CPRG. The three measures we propose to address here are priorities in the Regional PCAP and were developed in close coordination with 1) State of Illinois CPRG Application, 2) Multi-State Midwest Industrial Application, 3) Several additional County-level applications from the MSA. The measures at the various levels do not overlap, but are complementary and address different geographies and measures (e.g., the State of Illinois pursuing heavy industry transportation

decarbonization and the Coalition focusing on industrial food and beverage sectors and smaller hard to reach businesses).

b. Demonstration of Funding Need

As described below, our Coalition is focused on three sectors where CPRG funding is uniquely necessary and essential to make GHG reduction progress in our region.

Our industrial decarbonization program focuses on small and medium-sized businesses that typically lack necessary capital on their own for equipment or process upgrades yielding GHG reductions. In addition, while there are certain other external funding sources that can be stacked by a facility to pay for those upgrades, there are not any funding sources we are aware of that can fund the overall operation of these industrial assistance programs by the City, Cook County, DuPage County and other partners, especially now that our existing funding sources like ARPA will be winding down. In the face of this funding gap, there is significant need to focus on industrial facilities. Chicago was also recently ranked as the 2nd worst city for air pollution in 2023 and can greatly benefit from criteria and hazardous air pollutant reductions associated with decarbonizing industrial processes. In the past, Cook County and Chicago have applied for grants to increase pollution prevention opportunities for businesses. In 2021, Cook County allocated \$10M in American Rescue Plan Act local discretionary funding to increase the funding of their Pollution Prevention Unit, which houses the County's BRITE Program. The \$10M from ARPA has quickly established an impactful pollution prevention program that has assessed over 30 businesses with identifying pollution reducing opportunities and providing grant funding for projects, including projects that can reduce GHG emissions. Cook County has also applied and received \$75,000 as a subrecipient of the EPA's Pollution Prevention Grant in 2022 to further assist BRITE Program staff with assessment training to expand services to more business types that have larger environmental footprints. Similarly, Chicago's industrial energy assistance program with UIC also relies on an expiring and relatively modest EPA Pollution Prevention Grant. However, the amount allocated from these funding sources have only been enough to help stand up these programs and reach a small percentage of industrial facilities that have potential to reduce more GHG intensive processes. To maximize the impact of this CPRG funding, we will first ensure the facility applies for any local utility energy efficiency or electrification incentives and also help the facility explore eligibility for any federal clean energy tax incentives.

Our food waste measure is a project that that our key personnel in this area have strategized about for years. There are over 8 million residents in this region who annually landfill over 808,000 tons of food scraps. But the region lacks the resources to provide adequate food waste prevention education and outreach and the necessary infrastructure and access to reduce these food scraps from being landfilled. However, without the initial funding spark CPRG would bring to launch this effort, we've been stymied for 2 major reasons - difficulty of increasing solid waste operating cost budgets to focus on a new area, food waste, that is outside the lens of how waste services traditionally function here and second, a relative lack of federal and state funding opportunities, certainly compared to other decarbonization sectors. For example, Cook County applied for the 2023 EPA SWIFR (Solid Waste Infrastructure & Recycling) grant opportunity to implement a comprehensive recycling and food composting program for the southern suburbs of the county. However, the EPA declined to fund the grant proposal. The City of Chicago's Department of Streets and Sanitation also applied unsuccessfully for a modest 2023 EPA SWIFR grant to implement a curbside composting program. While the Department can contribute Chicago Recovery Plan funding that has already been allocated for organic waste reduction, these funds are restricted to capital expenses and the City has not been able to move forward with a curbside

composting program due to lack of funding for labor and operations. Other local partners applied for the 2023 EPA REO (Recycling Education & Outreach) grant but were also unsuccessful. CPRG is the only funding opportunity we are aware of that has adequate funding levels to prove and implement this concept for our entire region. Using the five-year CPRG award, the City of Chicago, Cook County and its partners will develop revenue and local budgeting strategies to continue the implementation of the programs beyond the CPRG term, with public support for what will then be an established program.

Finally, our public buildings measure seeks to create a replicable launching pad for public building electrification. It does so in the face of massive capital backlogs for critical facility needs. Our entire measure is built around community-anchored public buildings that both need to become carbon-free, healthy community resilience hubs but also are stuck far from that vision due to such capital spending pressures. For example, Chicago Public Schools faces a nearly \$4 billion critical facility needs gap and Chicago Housing Authority has over \$1 billion in five-year capital needs. To stretch public building decarbonization CPRG funding across the nearly 70 proposed buildings, the City, as Coalition lead, has worked with each public agency to integrate assumed stacking opportunities. Most importantly, these include utility incentives, federal direct pay clean energy tax incentives, Illinois solar incentives, and, for public housing, potential US DOE Home Energy Rebates depending on final Illinois program design. We eagerly await announcement of EPA's Greenhouse Gas Reduction Fund awardees and commit that CPRG would integrate into any opportunity GGRF offers to defray costs or extend low to no interest capital. Finally, each agency will cover any costs for state of good repair upgrades for CPRG measures.

c. Transformative Impact

The City of Chicago, Cook County and our partners view Decarbonize Chicagoland! as an opportunity for transformative change, positioned to drastically transform not just the local landscape but also set a **precedent** for municipal-level climate mitigation, and manufacturing business best practices in the region. Across all three measures, the core of the proposal is the focus on **equitable decarbonization**. The project partners envision a multi-faceted approach that not only targets key contributors to greenhouse gas emissions but also leverages unique opportunities to bolster the clean energy economy and invest in infrastructure and innovative clean energy solutions in LIDAC communities. Every proposed action is developed through an equity lens to drive deeper impacts in LIDAC communities across Chicagoland that are historically disinvested and are often impacted first and worst by the climate crisis.

Scalability is also an important priority of this endeavor. By developing and implementing scalable solutions, the project lays the groundwork for widespread adoption in Chicagoland and beyond. Through innovative technological advancements, particularly in difficult-to-decarbonize sectors like industrial, as well as the acceleration of anaerobic digestion for food waste (a **market transformation**) and low carbon technologies for buildings, the project showcases the power of technology to drive sustained, long-term solutions. These efforts not only reduce emissions but also enhance resource efficiency, bolstering the economic viability of decarbonization efforts. Additionally, by supporting the growth of the **green economy** in our LIDAC communities, the project drives local economic prosperity, positioning Chicagoland as a leader in the transition to a just, decarbonized future for our residents.

Decarbonize Chicagoland! embodies a paradigm shift towards a more sustainable and prosperous future, demonstrating the transformative power of **collective action** in addressing the greatest challenge of our time: the climate crisis. By fostering partnerships between local government, industry, research institutions, and community organizations, the project harnesses collective expertise to accelerate local progress. This project breaks down historic siloes that limit collaboration in the heavily fragmented Chicago area. Decarbonize Chicagoland! will move to a model that encourages cross-collaboration

through communication, shared messaging, best practice-sharing under one umbrella. Decarbonize Chicagoland! will offer a blueprint for collaborative transformational progress in the pursuit of our shared commitment to equitable decarbonization across many sectors.

2. IMPACT OF GHG REDUCTION MEASURES

a. Magnitude of GHG Reductions from 2025 through 2030

b. Magnitude of GHG Reductions from 2025 through 2050

CPRG Measure	GHG Reduction 2025-2030 (MTCO ₂ e)	GHG Reduction 2025-2050 (MTCO ₂ e)
Industrial	<u>1,685,493.24</u>	<u>8,427,466.18</u>
Public Buildings	<u>66,851.00</u>	<u>317,149.00</u>
Food Waste	<u>628,871.16</u>	<u>3,933,179.96</u>
Project total	<u>2,381,215.50</u>	<u>12,677,795.24</u>

Even though our public buildings measure may generate comparatively lower GHG reductions, our goal was a package of measures that meets all CPRG goals. There is little hope of equitably reducing built environment GHG emissions here without a catalytic investment like this to allow policymakers to lead by doing while creating a replicable model in key community-facing local agencies.

Durability of Measures: All three Measures in Decarbonize Chicagoland! will lead to ongoing GHG reductions long after the end of CPRG through capital investments with long useful lives and game-changing capacity building. The Decarbonize Chicagoland! industrial measure anticipates helping businesses install quality processes and energy efficiency equipment with a long useful life. The programs will train business staff in proper operations and maintenance of measures. Staff supporting the building energy measures will conduct a systematic analysis of potential failures, anticipated maintenance, and anticipated durability of the retrofit measures. Staff will provide O&M training for operators based on manuals and updating on maintenance will be conducted. Maintenance manuals will be required to be available in the location of the retrofit equipment. The food waste reduction measure builds long term capacity in the region's local governments to collect and manage food waste, as well as new systems for intercepting food from large food waste generators and others.

c. Cost Effectiveness of GHG Reductions

The Coalition has chosen measures to leverage the greatest GHG reductions possible. We are proposing 3 implementation measures that deliver the greatest reduction of GHG per dollar of investment while also meeting other CPRG goals. Based on the requested funding and the quantified GHG reductions from CPRG funding from 2025-2030, the cost effectiveness of this proposal is \$83.14/MTCO₂e.

The cost effectiveness of GHG reduction measures in the proposal is affected by several factors. The measures focus on decarbonizing buildings, businesses, and sectors that are hard to reach. Programs to decarbonize these areas and facilities require higher costs, but results in lower emissions and community benefits in places that may otherwise lack the staff expertise or fiscal capacity to access funding to implement emissions reduction measures.

d. Documentation of GHG Reduction Assumptions – See Technical Appendix

3. ENVIRONMENTAL RESULTS – OUTPUTS, OUTCOMES, AND PERFORMANCE MEASURES

a. Expected Outputs and Outcomes and

b. Performance Measures and Plan

Decarbonize Chicagoland! solicited the support of Argonne National Laboratory (Argonne) as a potential subaward recipient to design and implement an integrated GHG data collection system. The Labs have also participated in the development of existing energy models like AFLEET. Argonne will also work on research and granular data on existing building stock down to the level of each of the 752,000 building structures in the City of Chicago. Decarbonize Chicago! will work with Argonne to integrate all CPRG GHG data systems and analysis with other levels of state, multi-state or county-level CPRG Awards.

ACTIVITY	OUTPUT	OUTCOME	MEASURE OF PERFORMANCE
Ind. Decarb. A Measure A: Energy Efficient Industrial Facilities	Energy efficiency (EE) assessments at 204 facilities by 10/2029. EE equipment installation and non-fossil fuel based alternative equipment at 100 businesses by 10/2029. Train 25 EE contractors on how to install/maintain equipment at businesses	Industrial EE measures designed and installed at 100 facilities. Reduced energy usage and costs, GHG reductions, increased demand for EE workforce, workforce training, and worker health; reduction of Criteria Air Pollutants (CAPs) and Hazardous Air Pollutants (HAPs); reduction in NOx and VOMs reduces formation of Ozone (O3); reduces Chicago's O3 nonattainment designation; increased air quality	Number of assessments; Energy Audits/Reports produced; EE investments leveraged/EE projects completed; utility bill verification; GHG data; systems test-out reports; Annual Air Emission Reports for Scope 1 GHG emissions and air co-pollutant reduction monitoring
Ind. Decarb. B Replace high GWP F-gas refrigeration systems with natural refrigerant systems	Replace 571 high GWP refrigeration systems with natural refrigeration systems Train 25 refrigeration contractors on how to install/maintain equipment at businesses	Reduced GHG emissions from leaks/reduced leakage rates from new system installation/maintenance; more demand for natural refrigeration training; direct hazardous air pollutant emissions reductions from high GWP F-gas refrigerants; reduced energy use and costs from new refrigeration systems	Energy audits and reports produced; EE investments leveraged; Utility Bill verification; GHG data; systems test-out reports
Ind. Decarb. C. Increase on-site renewable energy at targeted facility types.	Energy Assessments and installation of on-site renewable energy at 15 industrial facilities and 228 small commercial facilities. Train 25 solar contractors	Reduced utility energy bill and energy plug load; reduced GHG emissions; reduced CAP and HAP emissions from utility energy produced using fossil fuel; enhanced competitiveness of sectors, increased demand for solar	# of assessments; # of installations of EE measures; contractor and consultant invoices; energy reports; business

	on how to install/maintain equipment at businesses	installation workforce development; more resilient energy grids	owner surveys; metered energy bills
Industrial Decarb.	Measure 1 cumulative outputs listed above	GHG Reduction 2025-30: 1,685,493.24 MTCO ₂ e; GHG Reduction 2025-50: 8,427,466.18 MTCO ₂ e	GHG data collection system designed by Argonne
Public Buildings Projects 1-5	Energy efficiency and electrification retrofits for 66 municipal and public housing buildings in Chicago/Cook County by 10/2029. Hire 4 new staff at Chicago and HACC	Energy efficiency and electrification measures installed at 66 public buildings; 4 new staff hired, building internal capacity; Lower energy and operating costs; lower GHG emissions; adoption by other agencies and municipalities	Assessments' design drawings; equipment invoices, contractor draw info; utility statements; GHG reduction data; Test-Out and modeling of measures
Public Buildings	Measure 2 cumulative outputs listed above	GHG Reduction 2025-30: 66,851.00 MTCO ₂ e; GHG Reduction 2025-50: 317,149.00 MTCO ₂ e	GHG data collection system designed by Argonne
Food Waste Measure A: One Large Food Waste Generators Investment	Form a network of the region's largest food waste generators (i.e., local colleges, stadiums, theaters, hospitals, multi-unit/commercial properties) to participate in the program. Award up to 50 grants.	Preventing 15,000 tons of food waste by 2030; collecting and composting 55,000 tons of food by 2030; collecting and anaerobically digesting over 225,000 tons of food by 2030; Food waste best practices implemented; improved circular economy; reduced public sector costs; new food waste workforce developed; improved food redistribution practices; source separation programs	# of participating businesses and organizations; compost shipping records; surveys and interviews with participating businesses
Food Waste Measure B: Retail Grocers	Form a network of the region's largest grocery chains and large independent food retailers where food waste is prevented, food is collected and composted, food is collected and anaerobically digested. Award up to 50 grants.	By 2030: preventing over 15,000 tons of food waste, collecting and composting 55,000 tons, collecting and anaerobically digesting 165,000 tons of food; increased compost vermiculture; lower costs of waste removal; grocer enhanced understanding of circular economy; improved food redistribution practices, source separation programs	# of grocers enrolled in program; records of lading; tons of compost created; donated food amounts; grocer surveys and interviews; amount of edible food recovered
Food Waste Measure C: Local	Establish network of local participating gov's. in each of the 8 counties in IL EPA Region 2. Collecting and	By 2030: preventing 15,000 tons of food waste, collecting and composting 55,000 tons of food, collecting and anaerobically digesting	Collection records; # of government partners; surveys and interviews with participating

Governments Program	composting food and collecting and anaerobically digesting food. Award between 35-65 grants.	over 225,000 tons of food; food waste best practices implemented; improved circular economy; reduced public sector costs; new food waste workforce developed; improved food redistribution practices, source separation programs, community-based circular economy	governments; shipping and logistics records
Food Waste Measure D: Residential Food Scrap Collection	25 staff hired. 12 trucks purchased. 60 food scrap collection routes established. Household outreach along routes to encourage participation. Carts, pails, pail liners purchased and distributed. Food waste prevention outreach to all Chicagoans	Preventing 1,200 tons of food waste by 2030; collect and compost 4,542 tons of food by 2030; 4,500 households participating in the food scrap program; 25 high-quality jobs created.	Tonnage of food waste collected; GHG reductions associated with food scraps composted; Number of households participating; Solicited input from households participating in program
Food Waste Measure E: School District-Wide Composting	600 schools participating in district wide composting.	Preventing 5,000 tons of food by 2030; collect and compost 20,000 tons of food by 2030 through collection systems and education; children and youth embrace and practice recycling, youth pursue careers in Circular Economy, Source Separation in lunchrooms, Sustainable Materials Management	# of tons of compost; # of classes on recycling; # of students receiving composting courses; # of schools involved after Yr 1; # of students active at each school; reductions in costs of waste disposal by district
Food Waste Measure F: Anaerobic Digester	1 new anaerobic digester installed by 1/2026. 400,000 tons of food waste inputs collected. Add 25 new green jobs in EJ communities. Provide job training for 250 residents in EJ communities.	2,800,000 MMBtu of Renewable natural gas produced by 2030; 25 green jobs added; 250 residents trained; Reduced waste to landfill; Innovative technology at scale in city, learning opportunities for community and public sector, scaling of source separation	RFPs; Digester design, purchase, installation by sub awardee; system testing & commissioning; bills; contractor invoices; permits; amt. of waste inputs collected; output monthly reporting
Food Waste	Measure 3 cumulative outputs listed above	GHG Reduction 2025-30: 628,871.16 MTCO ₂ E; GHG Reduction 2025-50: 3,933,179.96 MTCO ₂ E	GHG data collection system designed by Argonne
Community Engagement and Workforce Development for Measures	Community Engagement: Host 30-40 public meetings. Work with 1,000 community members in priority communities for	Community understanding of GHG reduction improved; implementation measures understood and supported by community; Safe food separation and Composting reduce community	Meeting announcements, web development. screen shots, sign-in sheets, inquiry logs, meeting agenda/minutes,

1-3 Industrial Decarb, Public Buildings and Food Waste	input. Create CPRG microsite and aim to have 50,000 visits. 50% of community engagement will be in priority communities. Workforce Development: Host 5 bidders seminars, 4 readiness seminars, and at least 10 workforce matchmaking events. Opportunities publicized to 1,000 potential workers.	food waste; youth and adults pursue training or jobs in green economy; meaningful jobs created.	Community engagement Pre- and post-surveys data and analysis, workforce training or employment placement inquiries or applications/hiring; completion or training or certificate programs; building Trades inquiries, applications, referrals to locals
All 3 Measures	City of Chicago submits Semi Annual Progress Reports and Final Report	Reports are completed.	GHG data collection reporting system designed by Argonne; grants reporting system

c. Authorities, Implementation Timeline, and Milestones

The City of Chicago has existing authority to implement all three of the proposed implementation measures. Once funding is received, the DOE will work with other City departments to issue subawards and initiate any direct City procurements using existing City procurement authority. Subawardees, including Cook County, also possess existing authority to implement their portion of implementation measures. Particular procurements may require board or other approval by sub awardees and the City will assess such processes with each sub awardee during initial months of implementation. Below are detailed charts of the implementation timeline and key milestones for each measure.

Industrial Decarbonization																													
Task	Partner	Milestone	gr	Yr 1				Yr 2				Yr 3				Yr 4				Yr 5									
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4						
Program Design	Chicago/Cook/Du Page	Program Design Finalized																											
Subrecipient Agreements	DuPage	Agreement signed																											
Staff Recruitment, Hiring, On-Boarding, CPRG Orientation	Chicago/Cook	Complete hiring process for additional required staff, and orientation to program goals/objectives																											
RFP or Subrecipient for contractor to disburse grant funding	Chicago/Cook/Du Page	Signed contract																											
RFP for additional assessment support	Chicago/Cook/Du Page	Signed contract																											
Assessments to identify decarbonization opportunities at businesses	Chicago/Cook/Du Page	Initial Sites selected																											
Measure A Implementation - Increase energy efficiency and electrification of heating, cooling and ventilation, lighting, envelope, appliances, and other components	Chicago/Cook/Du Page	50% of GHG reduction goal met by Year 3 Q4. Completion of Measure goal of 10% GHG reduction by Year 5 Q3.																											
Measure B Implementation - Replace high GWP F-gas refrigeration systems with natural refrigerant systems	Chicago/Cook/Du Page	50% of refrigerant system replacement goal met by Year 3 Q4. Completion of Measure goal of replacing 50% of facility refrigerant systems with natural refrigerants by Year 5 Q3.																											

- The City of Chicago will achieve 100% renewable energy by 2025 through a large-scale power purchase agreement. The City led the first equity-focused RFP for a power-purchase agreement that requires equity and labor provisions and a community benefits agreement that will generate new investments for Chicago residents.
- The City of Chicago manages the Climate Infrastructure Fund which provides grants from \$50,000 to \$250,000 to nonprofit organizations and small businesses for climate-related capital projects in three priority areas: EVs and charging, energy efficiency and clean energy, and green infrastructure. The fund prioritizes historically underserved communities and/or organizations that serve vulnerable populations for grant awards. To date, the City has released \$9.9m dollars in funding through this effort.
- Cook County set up a \$50m Equity Fund overseen by the Equity Fund Advisory TaskForce, to seek to reimagine and transform systems around justice, public safety, health, housing, economic opportunity, community development, social services and environmental justice to benefit Black, Indigenous and People of Color Communities.
- Cook County established a \$30m whole-home and deep energy/electrification retrofits program. Healthy Homes for Healthy Families is for residents earning up to 120% of area median income who reside in a high-risk zip code for pediatric lead poisoning or in a disadvantaged census tract defined by the federal government. The program aims to reach 600 homes by the end of 2026.

Community Benefits of Decarbonize Chicagoland!

- **Improved Air Quality:** Decarbonization efforts lead to reduced emissions of Criteria Air Pollutants and Hazardous Air Pollutants, which are particularly harmful to public health. Low-income communities often bear the brunt of air pollution, leading to higher rates of respiratory illnesses and other health issues. By mitigating these pollutants through decarbonization activities, we can significantly improve air quality and enhance the health and well-being of residents in these communities, particularly in our LIDAC and EJ communities.
- **Job Creation and Economic Opportunities:** Transitioning to cleaner energy sources, implementing energy efficiency measures and moving to a circular economy create job opportunities, particularly in sectors like renewable energy, energy-efficient construction, and waste management. By focusing these initiatives in low-income communities, we can promote economic development and provide pathways to employment for residents. The program partners are committed to fostering workforce pathways in our priority communities by enabling contractual opportunities for MBE/WBE contractors and fostering employment opportunities for low-income workers.
- **Energy Cost Savings:** Decarbonization and energy efficiency measures in our public housing will result in reduced energy bills for residents, easing the financial burden on low-income households. Additionally, community-wide energy initiatives can lead to more stable energy costs and greater energy resilience, benefiting all residents, particularly those with limited financial resources.
- **Participant Benefits:** Honoring the value of lived experience and the diverse perspectives across the region, the Coalition will provide stipends to community participation for an agreed upon amount for stakeholders who demonstrate need to supplement their time and participation in the program.

Assessing Community Benefits:

The project management team, its technical adviser (discussions with Argonne National Lab underway), and the community engagement non-for-profit consultant partners will work to conduct an ongoing plan to assess community benefits over the 5-year commitment to the project. The team will conduct a comprehensive baseline assessment of air quality, energy consumption, public health indicators, and socioeconomic factors in targeted LIDAC communities. Furthermore, it will track the implementation of

decarbonization activities, including industrial decarbonization, building retrofits, and food waste diversion programs, within these communities. It will also use monitoring data to quantify reductions in CAP and HAP emissions resulting from decarbonization efforts. This analysis should include modeling techniques to estimate the health benefits associated with improved air quality and a cost-benefit analysis to evaluate the economic implications of decarbonization activities, including energy savings and potential revenue streams from job creation and economic development. The Lake Michigan Air Directors Consortium (LADCO) has agreed to be an unfunded partner to support strategies to drive criteria and hazardous pollutant emission reductions and the measurement thereof.

b. Community Engagement

The City of Chicago and Cook County have been facilitating community outreach and engagement for generations and will build on partners' outreach and community engagement work on existing climate plans, including the Priority Climate Action Plan. Robust stakeholder engagement in the recent creation of the Climate Action Plan for the Chicago Region, the 2022 Chicago Climate Action Plan, Northwest Indiana Climate Action Framework, and other climate planning referenced above provided a solid foundation for the development of the PCAP. The Climate Action Plan for the Chicago Region engaged 270 people from 175 organizations including 53 diverse municipalities in the Chicago region, of which 16 are EJ communities. The City of Chicago gathered input from 2,100 residents and Kane County has gathered input from 1,100 residents to create their respective climate action plans. Virtual town hall meetings engaged 25,000 participants.

Both the City and County have deepened their commitment to defining equity and engaging marginalized communities under-represented in decision-making processes. Chicago's outreach and community engagement work on the Chicago Climate Plan, the County and City American Rescue Plan Investments, and the Priority Climate Action Plan have laid a strong foundation for CPRG work. This steady cadence of input and feedback, including our efforts to stay closely connected to our EJ leaders and leadership from our sister agencies and partners has informed our decision to launch Decarbonize Chicagoland! For the purposes of aligning our top priorities for this proposal, the Coalition engaged in numerous conversations and planning meetings to finalize the top priorities for the region. This included:

- The City of Chicago participates in two working groups that represent frontline, EJ communities in Chicago. Both the City's Environmental Equity Working Group and the external IL Clean Jobs Coalition provided feedback and guidance on priorities for pollution reduction and decarbonization efforts. Members of both groups provided letters of support.
- City and County staff held meetings with the state-wide IL Food Scrap Coalition as well as other waste-advocates to finalize a scope of work consistent with community priorities.
- The City of Chicago and Cook County staff collectively engaged staff from regional agencies to align on priority initiatives and on a robust suite of measures to pursue for the project.
- Both the City and County participated in calls convened by the Chicago Metropolitan Agency for Planning to learn key takeaways from their and the MMC's PCAP process and to incorporate findings from their engagement work into the scope of our project.
- Over the course of several weeks, City and County staff have engaged in scores of one-on-one dialogues with key regional actors to both hear ideas and feedback and to ensure that there is alignment and broad support for the CPRG proposal. The City and County proudly have over 30 letters of support from local partners who enthusiastically support the proposed project.

As we embark on Decarbonize Chicagoland!, a 5-year effort to advance equitable decarbonization strategies in LIDAC communities throughout Chicagoland, it is imperative that our commitment remain as robust as ever. To ensure the success of these efforts and to uphold our principles of equity and inclusivity, a comprehensive community engagement strategy is essential. Our proposed strategy aims to foster meaningful participation, address barriers to engagement, and empower community members to continue to shape the scope and implementation of the project. To ensure that we are advancing a plan consistent with our values the City of Chicago will provide a subgrant of \$50,000 per year per measure (for all 3 measures) to a partner for community engagement and coordination with LIDAC communities.

Community Advisory Board (CAB)

One of the cornerstone elements of our community engagement strategy is the establishment of a Community Advisory Board (CAB). The CAB will serve as a representative body comprising diverse stakeholders from the target communities. Members will include local residents, community leaders, environmental advocates, representatives from local businesses, and experts in decarbonization and environmental justice. The CAB will provide a platform for community voices to be heard, ensure transparency, and facilitate two-way communication between the project team and the community.

Key functions of the CAB will include:

- **Community Representation:** Ensuring diverse representation and perspectives from the target communities.
- **Feedback and Input:** Soliciting feedback, insights, and recommendations from community members on decarbonization strategies and initiatives.
- **Advisory Role:** Providing guidance and recommendations to the project team based on community priorities and needs.
- **Communication Hub:** Serving as a conduit for information dissemination between the project team and the broader community.
- **Accountability:** Holding the project team accountable for addressing community concerns and ensuring equitable outcomes.

We recognize the importance of implementing strategies to eliminate barriers to participation on the CAB and ensure that information ties to the project is highly inclusive and accessible. Several approaches will be employed to overcome these challenges:

- **Community Partnership Building:** The City commits to hosting a minimum of 30 meetings and community interactions over the course of the 5-year grant and will ensure that at least 50% of those interactions take place in our priority communities. This may include offering training and capacity-building opportunities to empower community members to actively participate in decision-making processes.
- **Community Accessibility:** Public meetings and other project interactions will be hosted at convenient times and locations accessible to community members. Additionally, the City will commit to a public-facing microsite, dashboard, or another means of providing information and will commit to providing materials in multiple languages and formats to accommodate diverse literacy levels and accessibility needs.
- **Community Outreach and Education:** The City will utilize its partnerships with the contracted non-profit orgs to engage at least 1,000 residents in our priority communities. The City will also commit to providing educational workshops and resources to increase understanding of the project goals and strategies.
- **Resource Allocation:** Ensuring equitable distribution of resources and investments in underserved communities to support their active engagement in decarbonization efforts. This

may include funding for community-led initiatives, grants for local organizations, and support for community-driven projects.

5. JOB QUALITY

The City of Chicago and its sub-recipients will leverage Decarbonize Chicagoland! as an opportunity to further contribute to a robust green economy for the Chicago region. We will deploy a suite of strategies aimed at increasing opportunities for women, community residents, people of color, and other underrepresented groups access to trainings, apprenticeships contracting and other opportunities within this investment. In all, we believe that through this investment, the City of Chicago and our partners will generate a minimum of 900 new construction jobs.

Minority Business Enterprise (MBE) and Women Business Enterprise (WBE) Programs

The City of Chicago has strong MBE/WBE goals to help foster and support the success of this project. The City of Chicago (City) has established MBE/WBE programs for Construction and Non-Construction Contracts. Section 2-92-420 of its Municipal Code articulates the City's affirmative action policy and goal setting for MBE and WBE participation with respect to contracting for goods and services other than construction. Article VI of Chapter 2-92 of the MCC sets forth the City's affirmative action policy and goal setting for MBE and WBE participation with respect to contracts for construction.

MBE/WBE Participation Goals

The City of Chicago's overall goals are to award not less than 25 percent of the annual dollar value of all contracts for goods and services other than construction to qualified MBEs and 5 percent of the annual dollar value of such Contracts to qualified WBEs.

The City of Chicago's current aspirational goals are to award 26 percent of the annual dollar value of all construction contracts to qualified MBEs and 6 percent of the annual dollar value of all construction contracts to qualified WBEs. In order to achieve the City's overall construction and non-construction goals, each solicitation will identify contract specific MBE and WBE goals. For all projects under Decarbonize Chicago, the City hopes to exceed these goals by 10%

Workforce Development

The City of Chicago and Cook County will ensure that information regarding grant award opportunities are disseminated widely in communities of greatest need and that equity criteria are in place to ensure that projects within historically underserved communities are prioritized. To achieve this, the Coalition will solicit the help of the Chicago Cook Workforce Partnership (the Partnership), the largest public workforce development system in the nation, which collaborates with 2,000 employers; administers \$400,000,000 in funding and has placed over 70,000 individuals in employment.

The Partnership funds a variety of workforce agencies; partners with employers; places job seekers to skills training needed to secure sustainable employment; and connects people of all ages to full-time Good Jobs with career ladders, family living wages and benefits. The Partnership has dedicated programs and services for youth, adults and workers over the age of 50. The City of Chicago and Cook County will rely on The Partnership and other labor and workforce partners to support the development of high-quality jobs, employ strong labor standards, and draw from a diverse and highly skilled workforce.

Additional strategies to support workforce development include:

- The City of Chicago and Cook County will host at least five bidders seminars ahead of the release of major Decarbonize Chicagoland! RFPs to encourage MBE/WBE participation.
- The City of Chicago and Cook County will work with workforce partners to host four readiness seminars to identify key technical assistance content that is critically important for contractors to know to be successful in working on project-related contracts and subcontracts.
- The City of Chicago and Cook County will use communication channels and its public-facing interface to ensure that LIDAC and other priority communities are aware of every grant and award opportunity.
- The City of Chicago and Cook County will work with the Partnership and other agencies on at least ten workforce matchmaking events between contractors, subs and other partners to foster local hiring.
- The City of Chicago and Cook County will seek to include bid incentives and other equity-focused provisions, e.g. employment of apprentices, minority and female workers; community hiring and resident workforce requirements; and contract provisions that require minority- and women-owned business participation and local business participation.

Federal Compliance

The CPRG measures outlined in this proposal will be implemented with direct oversight and management by the City of Chicago, Cook County, and sub-award partners to ensure compliance with all regulatory requirements, Executive Orders and applicable statutes. Construction activities will be subject to prevailing wage requirements as determined by the U.S. Department of Labor under the Davis-Bacon Related Acts (42 USC §7614) authority. Certain projects that may be funded under this competition may be subject to domestic content sourcing requirements under the Build America, Buy America (BABA) provisions of the Infrastructure Investment and Jobs Act (IIJA) (P.L. 117-58, §§70911-70917).

6. PROGRAMMATIC CAPABILITY AND PAST PERFORMANCE

a. Past Performance

The City of Chicago, Cook County, and all Sub Awardees have significant past experience managing federal assistance agreements and a substantial track record of successfully managing and completing the federal assistance agreements that have been awarded. The city and county have robust pre- and post-award processes, sufficient staff to administer and monitor funds, and clear practices in place to ensure compliance and reporting are done on time and fully. The City of Chicago and Cook County manage millions of dollars of funding annually, with a majority of these awards coming from federal sponsors and in multi-institution collaborative projects. The City and County have robust relationships with the sub awardees, having worked together on previous funded and unfunded initiatives together. The following table details the past 5 major awards received by the City, including demonstration of compliance with reporting requirements and a track record of timely reporting:

Project Title	Funding Agency and Assistance Listing Number	Funding Agency Contact	Description	Status of Grant Management
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<u>Bridge Investment Program (BIP)</u> was awarded to the City of Chicago Department of Transportation	U.S. Department of Transportation (DOT) Assistance Listing 20.205	Chris Byars, USDOT, Chris.Byars@dot.gov	This \$144M was recently awarded for the rehabilitation of four movable bridges crossing the Calumet River	Grant execution was completed in January 2024.
<u>Energy Efficiency & Conservation Block Grant (EECBG)</u> was awarded to the City of Chicago Department of the Environment (DOE)	U.S. Department of Energy Assistance Listing 81.128	Tom Schultz, US DOE 240-848-8950 thomas.schultz@hq.doe.gov	This \$2.2M project is currently being implemented. Chicago DOE is coordinating five sub-projects, including installation of curbside public EV charging, community energy planning, and public facility energy assessments	US DOE formally awarded the grant earlier in 2024. City DOE is preparing to appropriate funds through action by its City Council expected in May 2024 and planning necessary procurements.
<u>Community Development Block Grants (CDBG)</u> is a regular entitlement awarded to the City of Chicago Department of Housing (DOH)	U.S. Department of Housing & Urban Development (HUD) Assistance Listing 14.259	Taylor Kiely, US HUD taylor.kiely@hud.gov	This FY23 \$75.05M project is an annual entitlement grant that is used to provide a wide array of services in public health, accessibility, housing, and human services.	The City of Chicago has provided regular reporting in compliance with federal HUD and local requirements.
<u>Airport Improvement Program (AIP)</u> is a regular entitlement awarded to the City of Chicago Department of Aviation (CDA)	Federal Aviation Administration (FAA) via U.S. Department of Transportation (DOT) Assistance Listing 20.106	Deb Bartell, FAA, deb.bartell@faa.gov	This \$14.2M annual project is an entitlement fund used to support key aviation infrastructure improvements \$ 10,817,793 at ORD \$3,427,004 at MDW	The Chicago Department of Aviation has provided regular reporting in compliance with FAA and USDOT requirements.
<u>American Rescue Plan Act State & Local Fiscal Recovery Fund (ARPA SLFRF)</u> for the City of Chicago Office of Budget & Management	United States Treasury (UST) State & Local Fiscal Recovery Fund Assistance Listing 66.039	N/A, quarterly reporting electronically	This \$1.9B award is a one-time block grant allocated to the City of Chicago during COVID-19. Funds have been allocated to Chicago Department of Public Health (CDPH), Department of Family & Support Services (DFSS)	The City has provided quarterly reports to Treasury on spend, program budgeting, and obligation status and has complied with local requirements and the federal Uniform Guidance (2 CFR 200)

b. Reporting Requirements

The City maintains a Grants Management and Reporting team of professionals who will develop a system for project reporting with key data collection and metrics. Project staff for Decarbonize Chicagoland! will be orientated to the system for reporting and receive training on inputs and data for programmatic, financial and technical reporting. The project team will work with grants management personnel to prepare internal and external monthly reports to EPA and also available on a public interface like a project microsite. The City of Chicago and Cook County will utilize their existing comprehensive accounting and management systems to move funding through organization auditing checks. Grant agreements and payments to subgrantees will proceed quickly and in compliance with EPA's Subaward Policy and the Automated Standard Application Payments (ASAP) and Proper Payment Draw General Term and Conditions of EPA Financial Assistance Agreements. The City of Chicago will:

- (1) Ensure subawards and contracted services are clearly identified in reporting to EPA;
- (2) Evaluate contractors and partner risk of noncompliance with Federal statutes, regulations, and other terms and conditions of the subaward to determine appropriate subrecipient monitoring;
- (3) Consider imposing specific conditions upon a funded entity, if appropriate;
- (4) Monitor the activities of the recipients to ensure funds are used for authorized purposes;
- (5) Employ monitoring tools, as necessary, to ensure proper accountability and compliance with program requirements and performance goals;
- (6) Verify that every subrecipient is regularly audited and provides sufficient reporting documentation;
- (7) Consider whether the results of the subrecipient's audits, on-site reviews, or other monitoring indicate conditions that necessitate adjustments to organizational practice or partnering obligations; and
- (8) Consider taking enforcement action against noncompliant subrecipients.

c. Staff Expertise

Please find staff resumes in the document - Project Team Combined_bios_CityofChicago.pdf
Decarbonize Chicagoland! will receive staff support from current employees and new hires from the Chicago Department of Environment and Coalition Partner the Cook County Office of Environment and Sustainability. Evidenced by the targets set forth in Chicago's 2022 Climate Action Plan, collaboration on the Illinois PCAP, and historic budget allocations for community-driven climate infrastructure investments, both the City of Chicago and Cook County are committed ambitious GHG reduction strategies while delivering meaningful short- and long-term benefits to communities in the region. The staff across both departments have diverse educational and professional experiences to support the execution of this comprehensive work plan. In addition to being subject matter experts, project team members value this historic opportunity to address legacy policy impacts related to climate injustice while investing in communities who have disproportionate burdens of exposure and risks. Parallel to the Project Development and Management staff will lead Financial Reporting and Management. The Chicago Office of Budget Management (OBM) will collaborate with the Directors to manage all financial reporting. The OBM staff in the Grant Operations Division includes Certified Public Accountants and staff with years of experience delivering complex reporting to Federal Agencies including the EPA.

7. **BUDGET:** See separately attached Budget Narrative and Budget Spreadsheet