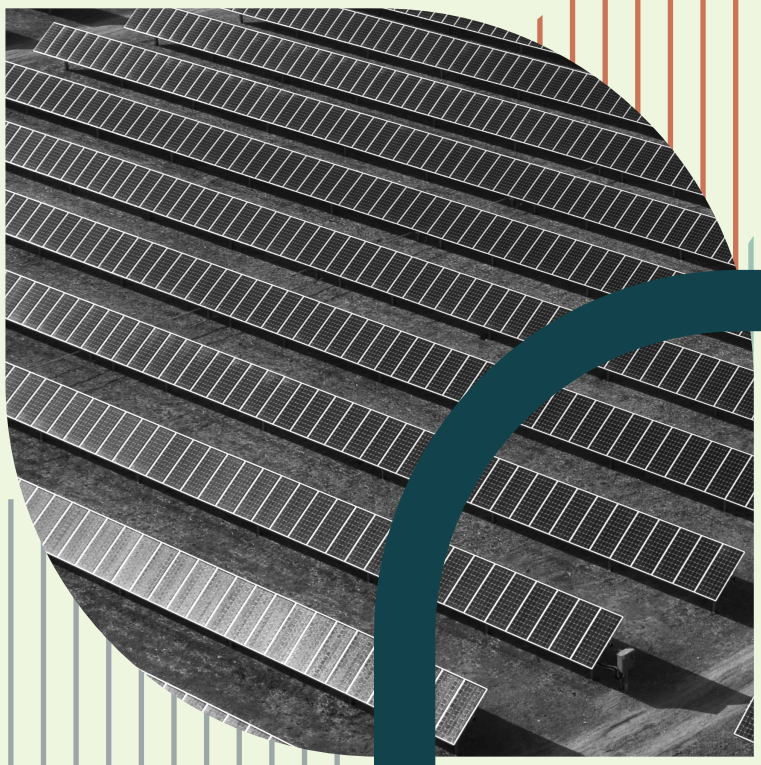
CAPR NO. 349

Metropolitan Milwaukee Priority Pollution Reduction Action Plan



SOUTHEASTERN WISCONSIN
REGIONAL PLANNING COMMISSION

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COMMUNITY ASSISTANCE PLANNING REPORT
NUMBER 349

METROPOLITAN MILWAUKEE PRIORITY POLLUTION REDUCTION ACTION PLAN

Prepared by the
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INTRODUCTION

Climate Pollution Reduction Grant Program Overview

The action plan is the first deliverable prepared with funding from the U.S. Environmental Protection Agency's Climate Pollution Reduction Grant planning program. The plan encompasses the four-county Milwaukee Metropolitan Statistical Area (MSA), comprised of Milwaukee, Ozaukee, Washington, and Waukesha Counties. Future deliverables include a Comprehensive Climate Action Plan by June 2025, and a Status Report due by May 2027. The purpose of this action plan is to identify baseline greenhouse (GHG) emissions, identify priority strategies to reduce these emissions, quantify the emissions benefits of the priority strategies, analyze impacts to low-income and disadvantaged communities, and summarize stakeholder engagement.

Approach to Developing the Priority Pollution Reduction Action Plan

The foundational document for this action plan is the Milwaukee Climate and Equity Plan, adopted on June 23, 2023, which provides the vision for climate action in Milwaukee.[1] The plan has two primary objectives: 1) establishing a joint City-County goal of a 45 percent reduction of county-wide GHG emissions by 2030 and carbon neutrality by 2050, and 2) improving racial and economic equity by creating green jobs that pay a minimum of $40,000 per year and focusing recruitment on people of color. The plan is the direct outgrowth of over three years of public discussions and planning through the City-County Taskforce on Climate and Economic Equity. Community members played an important role in developing Milwaukee's Climate and Equity Plan and work continues to amplify the voices of residents.

The Milwaukee Climate and Equity Plan outlines 10 Big Ideas for Action with strategies that can be achieved in collaboration among government agencies, business, community-based organizations, and numerous other partners. The opportunity provided through the Climate Pollution Reduction Grant (CPRG) program continues to foster and expand these partnerships to pursue transformative change that results in significant GHG reductions, equitable development, and improved public health. This action plan encompasses the robust public engagement effort conducted as part of the Milwaukee Climate and Equity Plan.

Contributing agencies to the Priority Pollution Reduction Action Plan include the four counties in the Milwaukee MSA and those communities that have signed a letter of support for the grant (see Map 1).

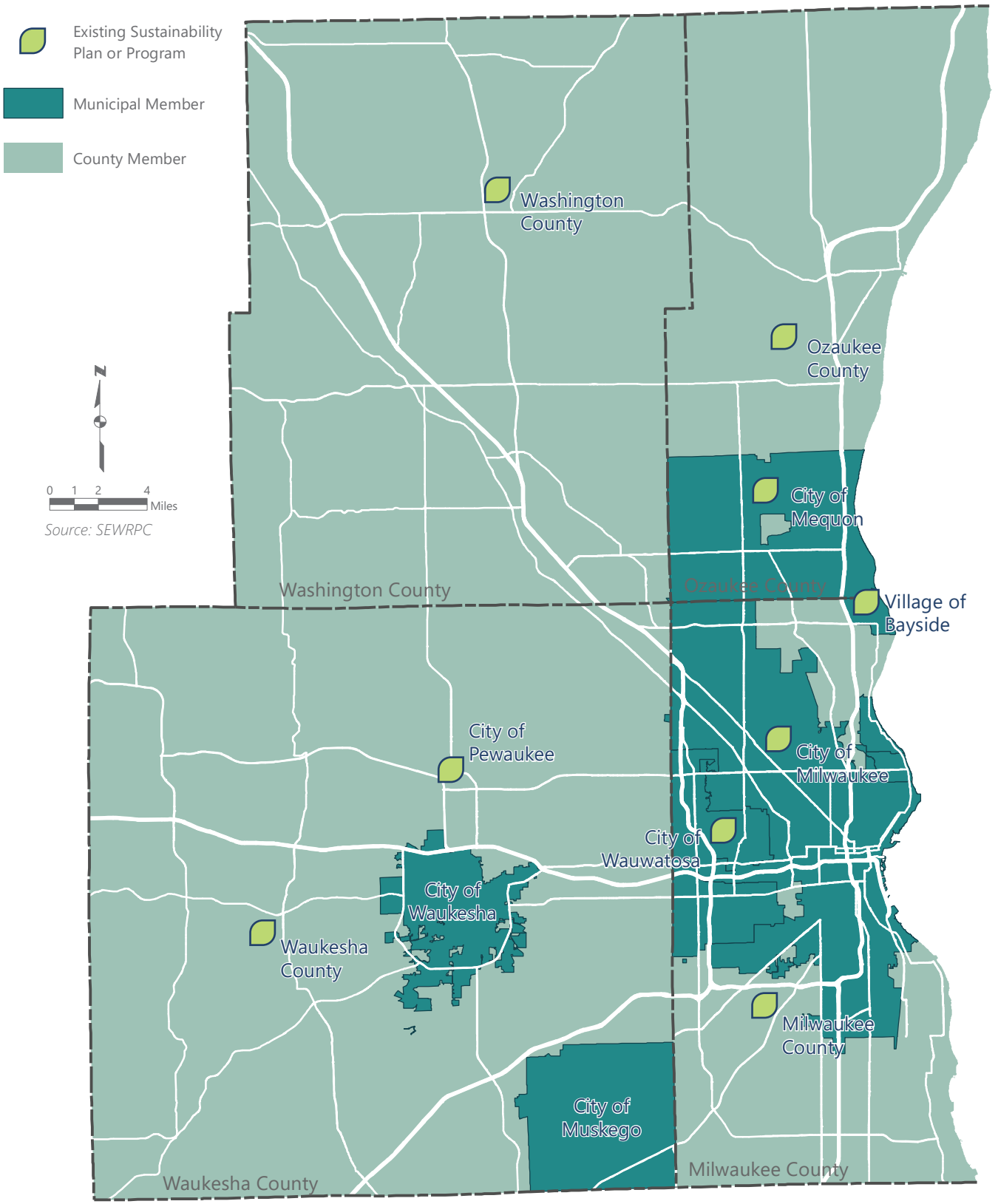
- Milwaukee County
- Ozaukee County
- Washington County
- Waukesha County
- City of Milwaukee
- City of Mequon
- City of Muskego
- City of Waukesha
- City of Wauwatosa
- City of West Allis
- Village of Bayside
- Village of Shorewood
- Village of Whitefish Bay
- Milwaukee Metropolitan Sewerage District
- Office of Sustainability and Clean Energy

Multiple meetings were held with coordinating workgroup members to discuss the planning process, identify priority measures, and share draft materials. A survey was conducted in December 2023 to gather information on each communities' levels of interest in potential priority measures. A meeting was also held that provided an opportunity for all municipalities within the Milwaukee MSA to learn about the grant and become engaged in the planning process.

In addition to the municipalities supporting the planning effort, state and regional partnerships contributed to the plan and assisted the team with identifying GHG inventory data, connections with statewide organizations, and priority strategies. Specifically, these partners included the University of Wisconsin – Milwaukee, the Waukesha County Green Team, the Wisconsin Department of Natural Resources, and the Wisconsin Local Government Climate Coalition.

[1] *City of Milwaukee, "Climate and Equity Plan," 2022, accessed December 22, 2023, city.milwaukee.gov/climate/Climate-Plan.*

Map 1
Coordinating Workgroup Members and Selected Sustainability Programs



During the development of the action plan, Commission staff shared information and gathered input with organizations that represent low-income populations and people of color including the Environmental Justice Task Force and the Commission's nine Community Partners. The Community Partners include Common Ground, Ethnic and Diverse Business Coalition, Hmong American Friendship Association, Independence First, Milwaukee Urban League, Renew Environmental Public Health Advocates, Inc., Southside Organizing Center, and the Urban Economic Development Association of Wisconsin. These initial discussions provided the project team with insight regarding priorities, on-going activities, and opportunities for future engagement that will be explored in future planning phases.

GREENHOUSE GAS INVENTORY

Introduction

The following greenhouse gas (GHG) inventory was completed by Commission staff with oversight provided by the City of Milwaukee's Environmental Collaboration Office (ECO) and ICLEI. The goal of this high-level inventory is to increase awareness about the sources of climate pollution and help inform the identification of priority strategies. This inventory acknowledges the previous work conducted during development of the Milwaukee Climate and Equity Plan, including 2018 inventories developed by the City of Milwaukee and Milwaukee County during the preparation of the Climate and Equity Plan. The City of Milwaukee's community wide GHG inventory found that 76 percent of GHG emissions are associated with residential, commercial, and industrial sector energy uses. The largest contributor in the City of Milwaukee is Industrial Energy Consumption with 35 percent of emissions. However, the inventory noted that there may be some uncertainty as to the appropriate categorization of industrial and commercial sources. When viewed collectively, commercial and industrial sectors accounted for more than 45 percent of the City of Milwaukee's GHG emissions in the 2018 GHG inventory.

Methodology

The GHG inventory conducted for the Priority Pollution Reduction Action Plan was developed utilizing publicly available data from the U.S. Environmental Protection Agency's National Emissions Inventory (NEI), the Facility Level Information on Greenhouse Gases Tool (FLIGHT), and the Energy Information Agency's statewide energy datasets. Landfill emissions were calculated based on the Wisconsin Department of Natural Resources 2022 annual tonnage report, which indicated the volume of waste sent to major landfills within the MSA. On-road emissions were calculated using the U.S. EPA's Motor Vehicle Emissions Simulator (MOVES) based on origin-destination travel data prepared by Commission staff. Data from each source is summarized below:

- The NEI data is reported at the County level and includes tons of emissions related to the following sources: non-road mobile, locomotives, and marine vessels. Commission staff utilized ICLEI's NEI Data Retrieval Tool to identify emissions by fuel used.

- The EIA statewide datasets were downscaled to the County level using households and commercial jobs by county and included energy estimates for the regional and counties by energy source and usage. Downscaling was done using a spreadsheet tool from ICLEI that generated energy estimates by County.

- The FLIGHT tool is an interactive website and map that provides GHG emissions for industrial processes by facility.

- The MOVES model estimates emissions for mobile sources for criteria air pollutants, greenhouse gases, and air toxics.

The data were compiled in the Inventory Module within ICLEI's ClearPath tool, which performs inventories consistent with the Local Government Operations Protocol and the U.S. Community Protocol. The Inventory Module has output formats that are continually updated to meet the major reporting requirements, such as the United Nations Intergovernmental Panel on Climate Change and the Global Covenant of Mayors. This GHG inventory provides the basis for emissions forecasting and informs the priority strategies contained within this document.

Findings

The community-wide inventories provide emissions by sector for the four-county MSA and each county. As shown in Table 1 and Figure 1, the largest contributor in the Milwaukee MSA and each county is transportation and mobile sources, and the second largest contributor is residential energy. Figures 2 through 6 provide the breakdown of GHG emissions by sector for the Milwaukee MSA and each county. Key takeaways and notes include the following:

- As noted in the Milwaukee Climate and Equity Plan, while emissions nationwide have shown that transportation is the largest source of GHG emissions, in more urban counties, the built environment (commercial and residential energy use) continues to be the major source of emissions. For example, in Milwaukee County, commercial and residential energy resulted in 59 percent of the GHG emissions by sector. By contrast, in Ozaukee, Washington, and Waukesha Counties, GHG emissions from combined residential and commercial energy use are about the same as GHG emissions from transportation sources (about 45 percent).

- Milwaukee County's largest GHG emissions contributors are transportation and mobile sources at 37 percent and residential energy at 32 percent.

- The largest GHG emissions contributor for the counties of Ozaukee, Washington, and Waukesha is transportation at 45 percent, 52 percent, and 47 percent, respectively.

- U.S. EPA data from the FLIGHT data tool was utilized to gather emissions data for Industrial processes. Facilities that emit 25,000 metric tons or more per year of GHGs are required to report their emissions to EPA. Therefore, industrial process data was included for sources in Milwaukee and Ozaukee Counites and resulted in 2 percent and 11 percent of GHG emissions, respectively.

- Emissions from solid waste were based on 2022 landfill tonnages reported to the Wisconsin Department of Natural Resources. Landfill data was available for sources in Milwaukee and Waukesha Counties. GHG emissions from solid waste sources in Milwaukee and Waukesha Counties resulted in 2 percent and 5 percent, respectively.

Next Steps

The GHG inventory provides a preliminary quantification of sources and associated emissions. The Comprehensive Climate Action Plan will include a more robust inventory of emissions and sinks for each sector, including localized data for those municipalities that have signed a letter of support for the CPRG Program in the Milwaukee MSA.

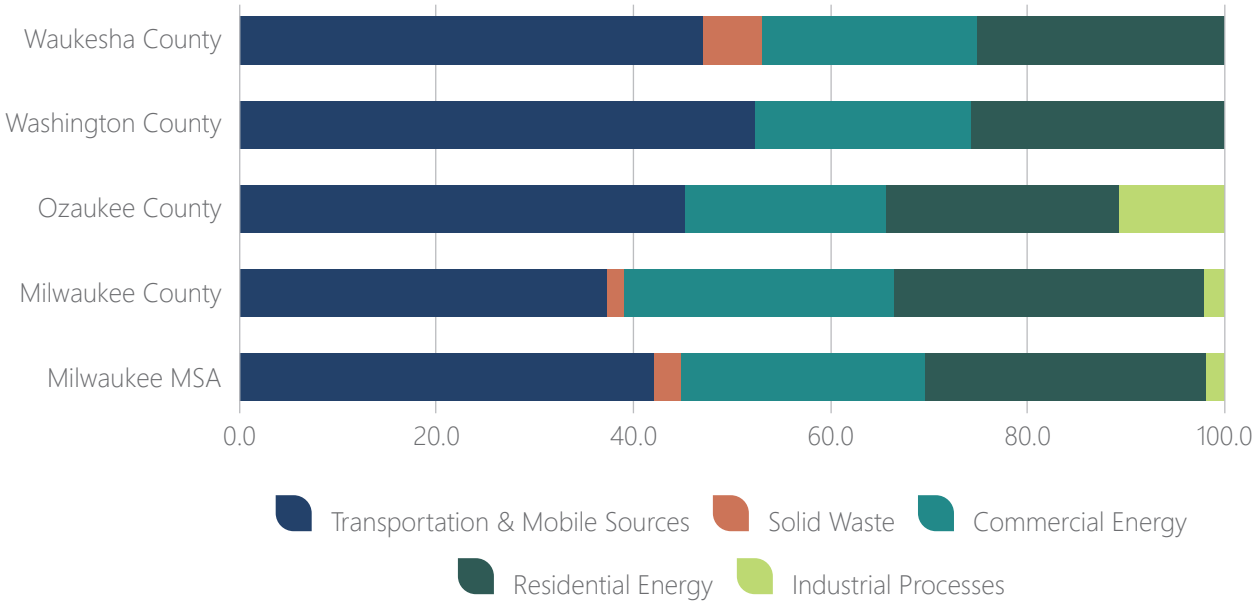
Table 1
Percent of GHG Emissions by Sector and Jurisdiction

Sector	Milwaukee MSA	Milwaukee County	Ozaukee County	Washington County	Waukesha County
Transportation & Mobile Sources	42.2	37.3	45.3	52.4	47.1
Solid Waste	2.7	1.8	0.0	0.0	5.9
Commercial Energy	24.8	27.5	20.5	21.9	21.8
Residential Energy	28.5	31.5	23.5	25.7	25.1
Industrial Processes	1.8	2.0	10.7	0.0	0.0

Note: Percentages may not equal 100 due to rounding.

Source: U.S. Environmental Protection Agency, U.S. Energy Information Agency, ICLEI, and SEWRPC; Revised 4/2024

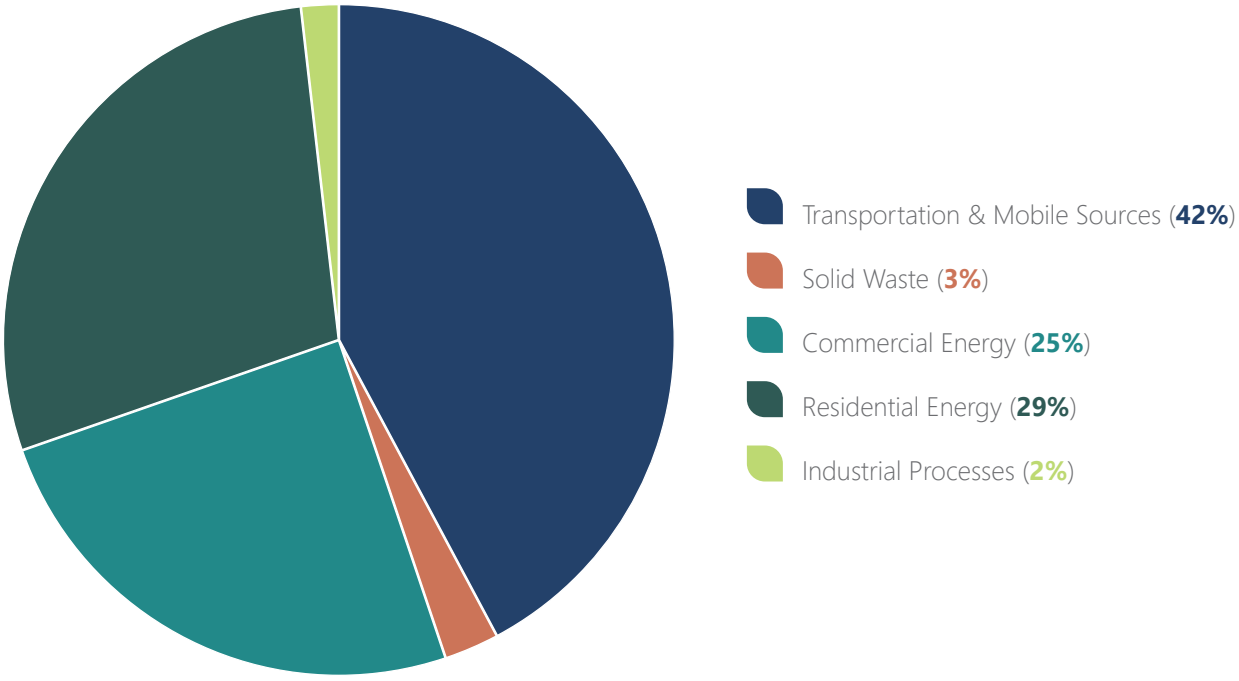
Figure 1
Percent of GHG Emissions by Sector and Jurisdiction



Note: Percentages may not equal 100 due to rounding.

Source: U.S. Environmental Protection Agency, U.S. Energy Information Agency, ICLEI, and SEWRPC; Revised 4/2024

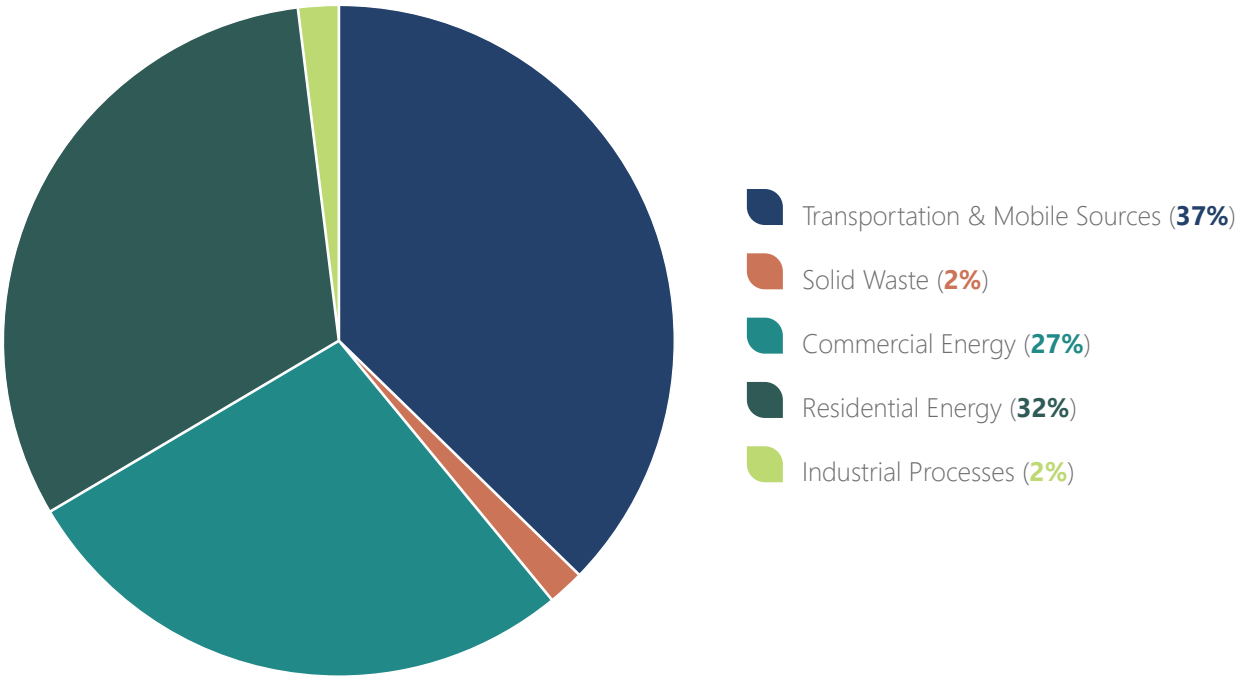
Figure 2
Milwaukee MSA: Percentage of GHG Emissions by Sector



Note: Percentages may not equal 100 due to rounding.

Source: U.S. Environmental Protection Agency, U.S. Energy Information Agency, ICLEI, and SEWRPC; Revised 4/2024

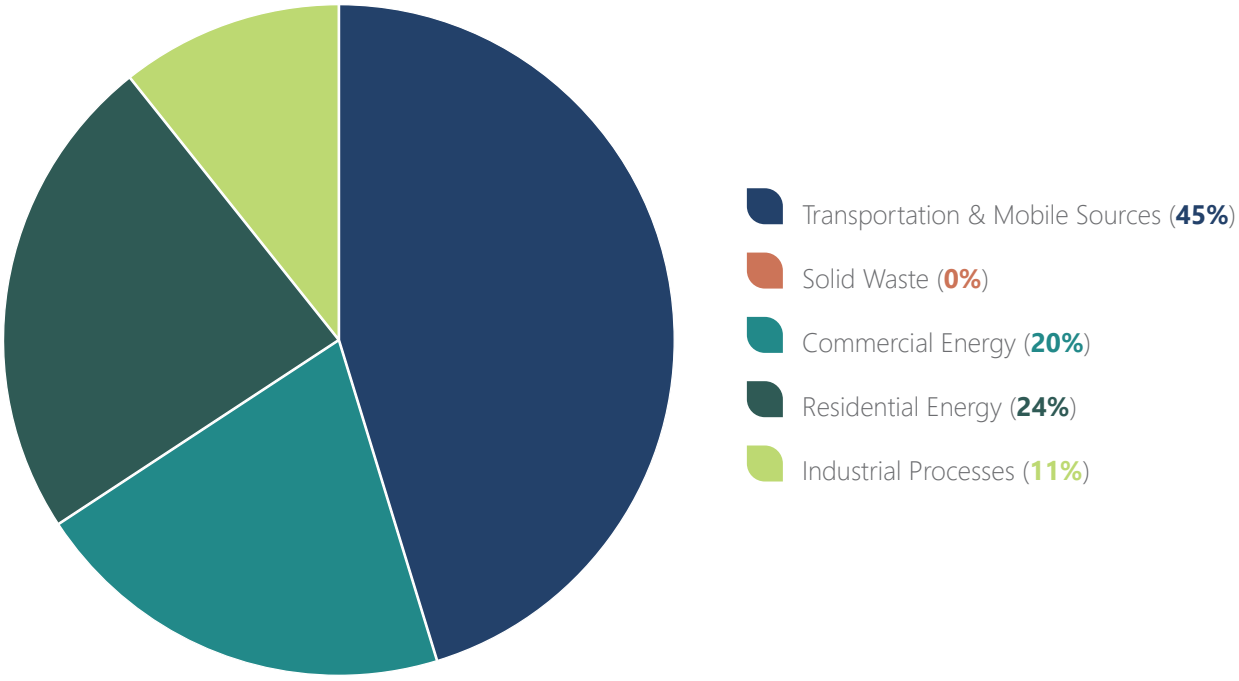
Figure 3
Milwaukee County: Percentage of GHG Emissions by Sector



Note: Percentages may not equal 100 due to rounding.

Source: U.S. Environmental Protection Agency, U.S. Energy Information Agency, ICLEI, and SEWRPC; Revised 4/2024

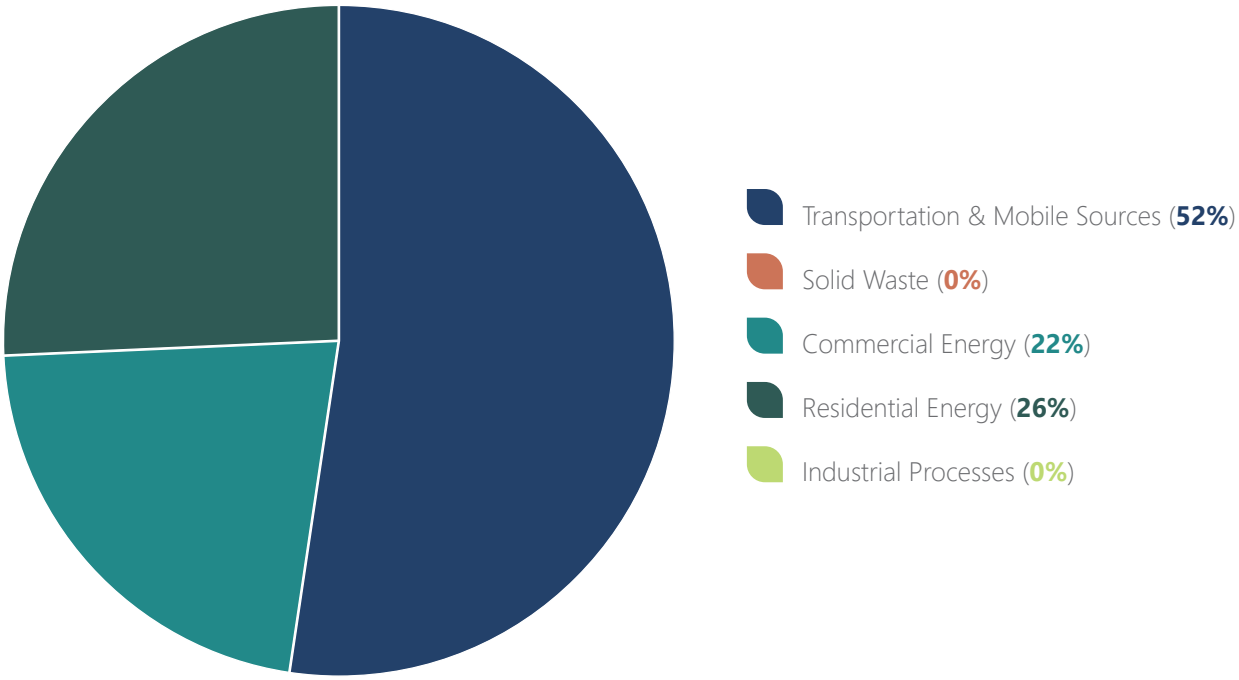
Figure 4
Ozaukee County: Percentage of GHG Emissions by Sector



Note: Percentages may not equal 100 due to rounding.

Source: U.S. Environmental Protection Agency, U.S. Energy Information Agency, ICLEI, and SEWRPC; 1/2024

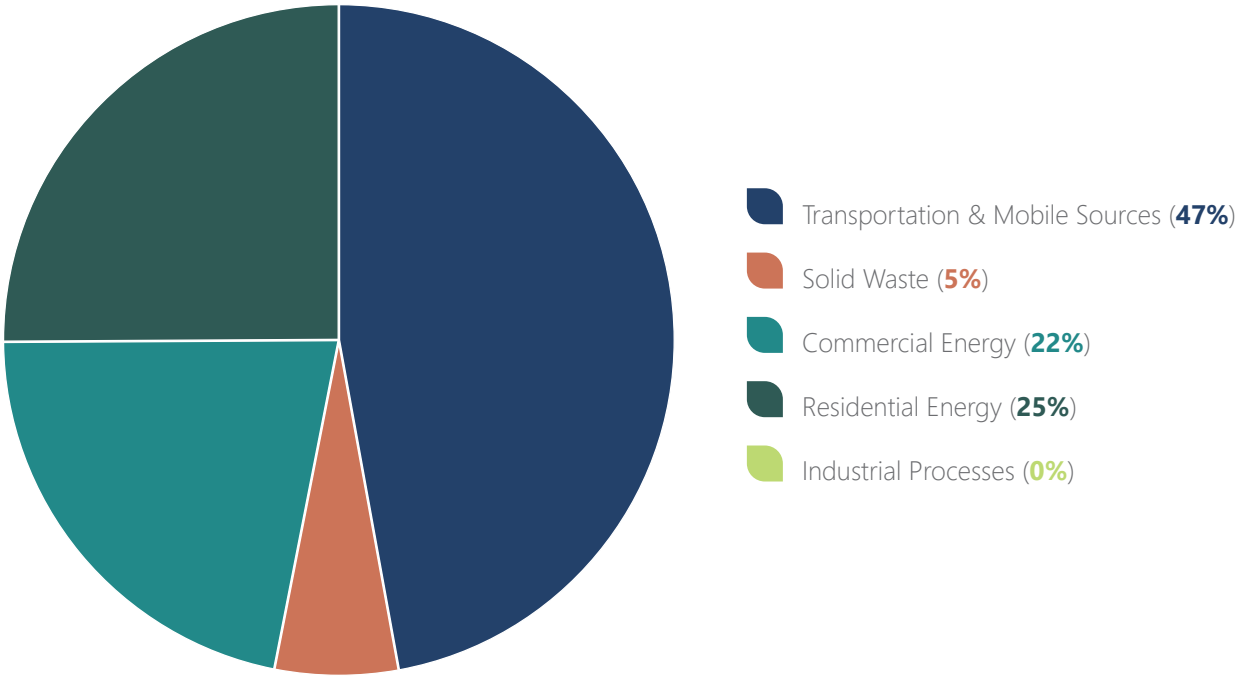
Figure 5
Washington County: Percentage of GHG Emissions by Sector



Note: Percentages may not equal 100 due to rounding.

Source: U.S. Environmental Protection Agency, U.S. Energy Information Agency, ICLEI, and SEWRPC; 1/2024

Figure 6
Waukesha County: Percentage of GHG Emissions by Sector



Note: Percentages may not equal 100 due to rounding.

Source: U.S. Environmental Protection Agency, U.S. Energy Information Agency, ICLEI, and SEWRPC; 1/2024

POLLUTION REDUCTION MEASURES

The following priority GHG reduction measures focus on strategies that can achieve significant GHG reductions based on Milwaukee's Climate and Equity Plan and associated stakeholder input and outreach to counties and municipalities within the Milwaukee MSA. The strategies include:

- Increase building energy efficiency and solar for public sector and commercial buildings. Strategies to achieve this include a commercial building resource center that can be used to support voluntary programs and/or commercial building energy policy and direct funding for municipal energy efficiency projects.
- Increase adoption of electric, hybrid, and clean fuel vehicles in municipal fleets and develop a regional public charging network.
- Establish a program for regional sustainability assistance, including shared sustainability staff for participating communities to embed climate pollution reduction practices in local governments.
- Contribute to greening the grid through utility scale solar, including funding for programs that allow municipal and county governments to subscribe to large scale projects.
- Implement Complete Streets principles, including improved and expanded bicycle networks and facilities.
- Build new, affordable, net zero housing.

Although many participating municipalities have existing pollution reduction or sustainability policies, to varying degrees, this has been the first effort to create a regional program in Southeastern Wisconsin. Measures were vetted through various outreach methods including working with a core group of municipalities, the Region's Environmental Justice Task Force, and Community Partners. The stakeholder involvement process is discussed in more detail in the outreach section. The Milwaukee Climate and Equity Plan includes additional strategies within the 10 Big Ideas that will be further explored in the Comprehensive Plan, such as healthy home energy upgrades, protecting and restoring nature in the city, and expanding the role of resilience ambassadors to help educate, adapt, mitigate, and prepare for the impacts of climate change on people and infrastructure. Further, VISION 2050 includes several recommendations that would be anticipated to reduce GHG emissions in the future such as encouraging sustainable and cost-effective growth; preserving the Region's most productive farmland and primary environmental corridors; encouraging more compact development; significantly improving and expanding public transit, including adding rapid transit and commuter rail, and improving and expanding local and express transit services; and enhancing the Region's bicycle and pedestrian network.

The following images summarize the estimated combined GHG reductions from the strategies and measures described in this section. The reductions were quantified using ICLEI's ClearPath Planning and Forecasting tools for 2030 and 2050. For the purposes of forecasting for this priority plan, GHG emissions reductions were estimated for the entire Milwaukee MSA. Based on the initial forecasts and list of priority strategies, it is estimated that GHG emissions would be reduced by approximately 30 percent in 2030 with the implementation of the priority strategies. At the time of this writing, there is some uncertainty regarding a few assumptions utilized in the estimated GHG reductions, which will be further refined in the Comprehensive Plan. As shown in Figure 7, in 2030, 55 percent of the reductions would occur within the commercial energy sector, 25 percent of the reductions would occur from the residential energy sector, and 20 percent would occur from the transportation and mobile sources sector. Emissions forecasts for the year 2050 were also conducted using ClearPath and the reductions are shown in Figure 8. This figure depicts the decrease in GHG emissions by sector between 2022 and 2050, with a significant decrease through 2030 in the commercial, residential, and transportation sectors. It is anticipated that the Comprehensive Plan will provide more detailed targets and forecasts by strategy using local energy data and assumptions. The Priority Plan is a first step in assessing and developing GHG targets, which will be further analyzed in the Comprehensive Plan. The following strategies seek to align with the U.S. Climate Alliance's goals, which Wisconsin is a member, to reduce collective GHG emissions at least 50 percent below 2005 levels by 2030. In addition, these strategies align with the joint City of Milwaukee and Milwaukee County goal to reduce county-wide GHG emissions 45 percent by 2030 and attain carbon neutrality by 2050.

The following section contains a description of each reduction measure, GHG emissions reductions, benefits, metrics, funding sources, and implementation milestones. A discussion of existing plans or organized stakeholder groups is included, as applicable.

Increase Building Energy Efficiency and Solar for Public Sector and Commercial Buildings

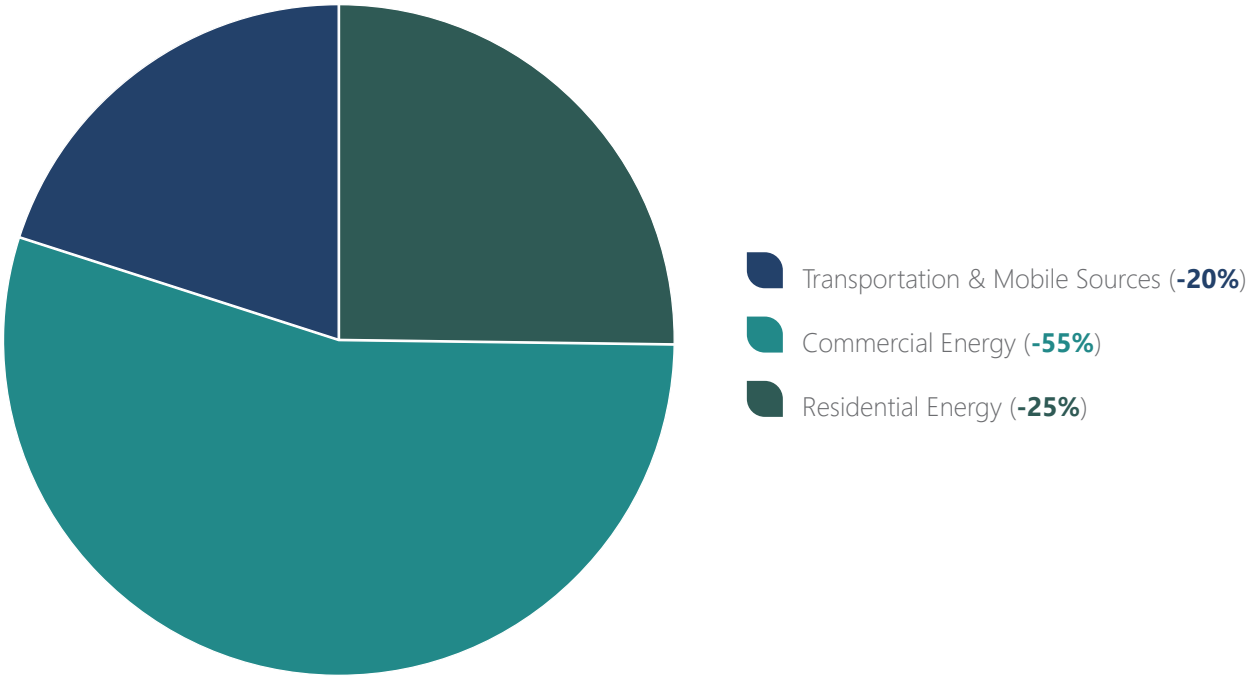
This strategy creates a foundation to reduce GHG emissions from the building sector through energy efficiency, solar installations, dissemination of information, and a benchmarking policy. Activities under this strategy include:

1. Lead by example programs that focus on energy efficiency in municipal facilities.

2. A regional commercial building resource center that can be used to support voluntary programs and/or commercial building energy policy and direct funding for municipal energy efficiency projects.

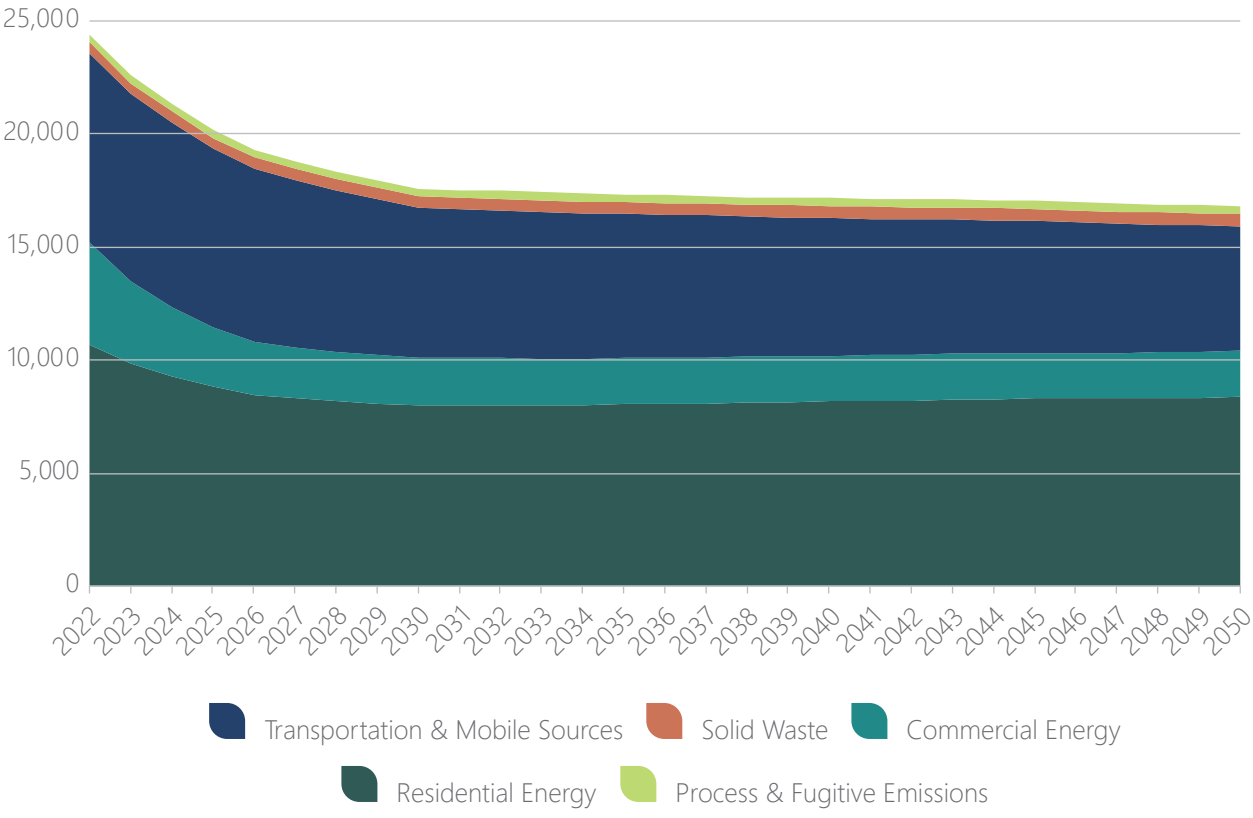
This approach has multiple levels to allow all municipalities in the MSA to begin reducing emissions from buildings. Some members of the Coordinating Working Group expressed interest in targeting municipal buildings first, while initiating a conversation about energy-efficiency updates in the private sector. The City of Milwaukee, which has already piloted a voluntary benchmarking program, is prioritizing a benchmarking policy, Building Performance Standard, and improved financing for smaller commercial buildings. There are many advantages to regional coordination on a building decarbonization strategy, including cost sharing and consistency for the business sector.

Figure 7
Milwaukee MSA: Percent CO_2e Reductions by Sector Between 2022 and 2030



Source: U.S. Environmental Protection Agency, U.S. Energy Information Agency, ICLEI, and SEWRPC; 1/2024

Figure 8
Milwaukee MSA: GHG Reduction Projections 2022-2050 (Metric Tons CO_2e '000)



Source: U.S. Environmental Protection Agency, U.S. Energy Information Agency, ICLEI, and SEWRPC; 1/2024

Municipalities can demonstrate energy and environmental leadership on building upgrades such as lighting improvements, improved insulation, and better HVAC systems. Serving as a resource for both municipal governments and building owners in the private sector, a regional commercial building resource center would equip interested building owners with the tools, training, and information on energy tax credits to make improvements and investments on their buildings. A resource center that serves the whole region could promote the importance of energy efficiency, help building owners set energy efficiency goals, advise building owners on market-ready energy efficiency technologies, help owners benchmark their energy use using EPA's Portfolio Manager tool, and access and understand PACE financing, state rebates, and federal tax credits.

Since 2015, Milwaukee has been a leader in advocating for energy efficiency among commercial buildings. The City's Better Buildings Challenge, modeled after the U.S. DOE's national challenge, enrolled over 133 commercial buildings in a voluntary benchmarking program. Voluntary benchmarking programs are a great first step in helping building owners start to think more systemically about energy efficiency as a strategy for their operations.

However, voluntary programs by their nature only reach the most motivated and can lose momentum after the first few years. More sustained programs on climate pollution reduction in the commercial building sector may require states or communities to adopt policy.

A commercial building benchmarking policy would seek to improve energy efficiency in commercial buildings by requiring covered building owners to track and report their energy use. These policies also make building performance more visible in the marketplace, empowering consumers to more easily understand how buildings are performing and incentivize building efficiency, resulting in market transformation. The Milwaukee Climate and Equity plan recommends a phased in approach to commercial building performance standards to give building owners an opportunity to benchmark properties and plan for improvement projects. Other municipalities can follow Milwaukee's model if they choose after pursuing their own stakeholder engagement timeline.

GHG Emissions Reductions

Buildings are positioned to have an enormous impact on the environment and climate change. The U.S. Green Building Council reports that, at 41 percent of total U.S. energy consumption, buildings out-consume the industrial (30 percent) and transportation (29 percent) sectors.[2]

Cities that have implemented benchmarking policies report a 2.4 percent average annual energy saving improvement for the next three years, or a total of 7.2 percent savings. Commercial building energy consumption accounted for 25 percent of CO2 emissions in the Milwaukee MSA. Based on the City of Milwaukee's 2018 Greenhouse Gas Emissions Inventory, a benchmarking policy could mean an approximate decrease of 54,536 tons of greenhouse gas emissions annually.[3]

Benefits

Reducing energy use in municipal and commercial buildings through energy retrofits can be expected to reduce GHG emissions, improve indoor temperature control, reduce exposure to air pollution, and lower energy bills. Energy-efficient buildings are sealed and ventilated to prevent ambient air pollution and excessive moisture from entering openings. Enhanced ventilation can improve the indoor environment, reducing airborne contaminants such as particulate matter.[4] Economic benefits include increasing buildings asset value and encouraging the development of energy efficiency service markets.

Building upgrades and new building developments create jobs in construction, HVAC (heating, ventilation, and air conditioning), plumbing, electrical, and engineering. However, this growing demand for energy efficiency improvements will require a larger workforce than currently exists. This strategy will support the creation of energy efficiency jobs that advance social equity through inclusive training programs and

[2] *National Trust for Historic Preservation, "The Greenest Building: Quantifying the Environmental Value of Building Reuse," 2011.*

[3] *City of Milwaukee, "Climate and Equity Plan," 2022.*

[4] *"Healthy Buildings," ACEEE, accessed January 23, 2025, aceee.org/topic/indoor-air-quality.*

resources. Growing the total number of jobs in this field provides an opportunity to diversify the workforce while offering higher, family-supporting wages. Raising wages and upskilling workers in this industry will result in more consistent and higher-quality work for consumers.

An equitable workforce plan that engages training providers, employers, and government agencies will be critical to the success of this strategy. Technical expertise and other resources necessary for training and development can be provided by local and regional educational organizations such as the University of Wisconsin system, Milwaukee Area Technical College, Waukesha County Technical College, Moraine Park Technical College, In addition, Workforce Development Boards and local chapters of organizations such as the American Society of Heating, Ventilation, Refrigeration, and Air- Conditioning Engineers (ASHRAE) and the U.S. Green Building Council can also assist with expanding access to training and resources to this growing workforce.

Milwaukee County has made $9.2 million in energy efficiency improvements at 82 County facilities under performance contracts.[5] The County also completed an airside HVAC retro-commissioning at MKE Mitchell International Airport to save 660,000 kWh of electricity and 200,000 therms of natural gas per year.

Credit: VISIT Milwaukee

Local ordinances requiring large commercial buildings to annually benchmark and report their energy use raises building owners' awareness of efficiency options, which may result in behavior and operational changes that create low-cost reductions in energy consumption.[6] Cities across the country are establishing new policies to reduce carbon emissions from commercial buildings while reducing energy bills and creating local jobs.

Existing Tools and Efforts

The following list summarizes related efforts underway in the Milwaukee MSA that can be leveraged as work progresses under this strategy.

- Milwaukee County has an online energy dashboard on energy data for county operations[7] and has committed to achieving carbon-neutral facilities and operations by 2050. Roughly 64 percent of Milwaukee County government's carbon emissions were from building operations in 2022.
- The City of Milwaukee is developing a policy for buildings of a certain size to report energy use that is currently in a stakeholder engagement phase.
- In January of 2022, Mayor Cavalier Johnson signed Milwaukee on to the White House Council on Environmental Quality's National Building Performance Standards Coalition, a nation-wide group of governments that have committed to inclusively design and implement equitable building performance standards and complementary programs and policies, working to advance legislation and/or regulation, with a goal of adoption by Earth Day, 2024.
- Goals set by the Milwaukee Metropolitan Sewerage District (MMSD) related to increasing renewable energy use and reducing their carbon footprint in their administration buildings and water reclamation facilities will help the Milwaukee MSA meet GHG reductions and serve as a best practice for the Region.[8]
- The Waukesha County Sustainability Plan includes actions to continue monitoring and benchmarking energy consumption at County facilities and pursuing LEED-EB practices and procedures that improve existing building performance.[9]

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[5] *Milwaukee County, "Climate Action 2050 Plan Emissions Assessment Report," 2023.*

[6] *Mims, Natalie, Schiller, Steven R., Stuart, Elizabeth, Schwartz, Lisa, Kramer, Chris, and Faesy, Richard, 2017, "Evaluation of U.S. Building Energy Benchmarking and Transparency Programs: Attributes, Impacts, and Best Practices," doi.org/10.2172/1393621.*

[7] *"Energy Dashboard," Milwaukee County Office of Sustainability, accessed February 12, 2024, county.milwaukee.gov/EN/Administrative-Services/Facilities-Management/Sustainability/Energy-Dashboard.*

[8] *"Sustainability," MMSD, accessed February 28, 2024, mmsd.com/what-we-do/sustainability.*

[9] *Waukesha County, "Waukesha County Sustainability Plan, 2018.*

- The City of Pewaukee Sustainability Plan recommended partnering with Focus on Energy to explore the potential for the installation of solar panels on existing facilities and expanded Department of Public Works garage, with installation approved in November 2023.[10]

- The City of Wauwatosa committed to reducing municipal emissions to 50 percent of 2010 levels by 2030, sourcing at least 25 percent of all energy from local renewable sources by 2025 and achieving municipal and community carbon neutrality by 2050. The City installed solar panels on City Hall and the Public Works building. Solar panels are planned to be installed on the Police Department and Hart Park buildings.[11]

- The statewide Focus on Energy Program assists residents, communities, and businesses find energy cost-savings and environmental energy alternatives. This program offers rebates for energy efficiency projects in existing buildings and helps to find incentives, rebates, and savings related to the installation of alternative energy sources such as solar panels.

The City of Milwaukee Better Buildings Challenge

The City of Milwaukee has been involved with the Better Buildings Challenge through the U.S. Department of Energy since 2012, including a showcase project with the Milwaukee Central Library. In 2013, the city created the PACE Financing Program as an implementation model for other cities to replicate. In 2016, the city launched the Better Buildings Challenge which leveraged funding from the Department of Energy to bring together the resources a building needs to develop an energy efficiency project.

During the challenge period, the City completed 133 free energy assessments, engaged 200 buildings in a pledge to reduce energy use by 20 percent, and saved 16.52 million kilowatt-hours and 408,838 therms annually.[11] The program included benchmarking in the ENERGY STAR Portfolio Manager®, free energy assessments to buildings, and consultation on next steps for building owners. Staff are evaluating funding opportunities to continue and expand the program.

Metrics for Tracking Progress

Potential outcomes that could be measured to track progress include:

- kWh of electricity and therms of natural gas saved per year
- Dollars saved per year
- Tons of pollution (GHGs and co-pollutants) reduced over the lifetime of the measure
- Tons of pollution (GHGs and co-pollutants) reduced annually
- Number of renewable energy installations
- Number of energy audits being conducted in buildings subject to the ordinance
- Compliance rates among buildings subject to the ordinance
- Building specific metrics including energy reductions and cost savings
- Contractors' use of benchmarking information to expand their business offerings

[10] *City of Pewaukee, "Propelling Pewaukee: A Sustainability Plan," 2020.*

[11] *"Sustainability," City of Wauwatosa, accessed January 23, 2024, wauwatosa.net/discover-tosa/sustainability.*

[12] *"Better Buildings Challenge-Milwaukee," City of Milwaukee, accessed February 13, 2024, city.milwaukee.gov/PACE/BBC.*

- Market transformations, including consumer awareness and demand for benchmarking information and efficient buildings, may be tracked through sales patterns and valuations for efficient versus less efficient buildings[13]

Funding Sources and Implementation Milestones

Potential funding programs include the following:

- In 2018, Milwaukee County joined Property Assessed Clean Energy (PACE) Wisconsin, a statewide program that helps commercial property owners obtain low-cost, long-term, private loans for energy efficiency, renewable energy and water conservation improvements.

- Commercial properties in the City of Milwaukee can take advantage of private capital through the Property Assessed Clean Energy Financing (PACE) Program to fund sustainability projects that improve property value, net operating income, and occupant comfort. PACE Financing is available for up to 30 years and can provide 100 percent project financing up to 20 to 30 percent of property value. The City of Milwaukee's PACE Financing Program is a public-private partnership that leverages private capital to supply upfront funding for the improvements and collects payments through a voluntary municipal special charge. The special charge is attached to the property, not the owner, and is paid back through a direct billing system over time. Commercial buildings in other communities can access PACE financing through PACE Wisconsin.

- In Milwaukee, the statewide Focus on Energy Program offers rebates for energy efficiency projects in existing buildings. Offerings include specialized energy advisors to help building owners and managers identify ways to reduce energy use in commercial buildings.

Initial milestones in establishing a benchmarking ordinance would include stakeholder engagement with commercial real estate community and other affected stakeholders, development of a draft benchmarking ordinance, and creating a reporting system for building managers to track energy performance. Key stakeholder groups include the Wisconsin Local Government Climate Coalition, Wisconsin Advisory Council on Building Sustainability, University of Wisconsin-Milwaukee, and Milwaukee Area Technical College, as well as the local chapters of organizations like ASHRAE and the U.S. Green Building Council (USGBC). For subsequent performance standard policies beyond benchmarking and transparency, municipalities will need to collaborate with the stakeholders listed above as well as elected officials to update building codes and regulations to allow municipalities to enact and enforce stretch energy codes, which are currently being studied in Wisconsin.[14] A regional staff person could support implementation of a commercial building benchmarking program through tasks such as researching energy efficiency initiatives, facilitating discussions with the public and elected officials, applying for funding, community outreach, and serving as a resource for public and private entities seeking to pursue sustainability activities.

[13] *Mims, Natalie, et al., 2017, "Evaluation of U.S. Building Energy Benchmarking and Transparency Programs."*

[14] *"2023 Wisconsin Assembly Bill 825," State of Wisconsin 2023-2024 Legislature, 2023.*

Increase Adoption of Electric, Hybrid, and Clean Fuel Vehicles in Municipal Fleets and Develop a Regional Public Charging Network

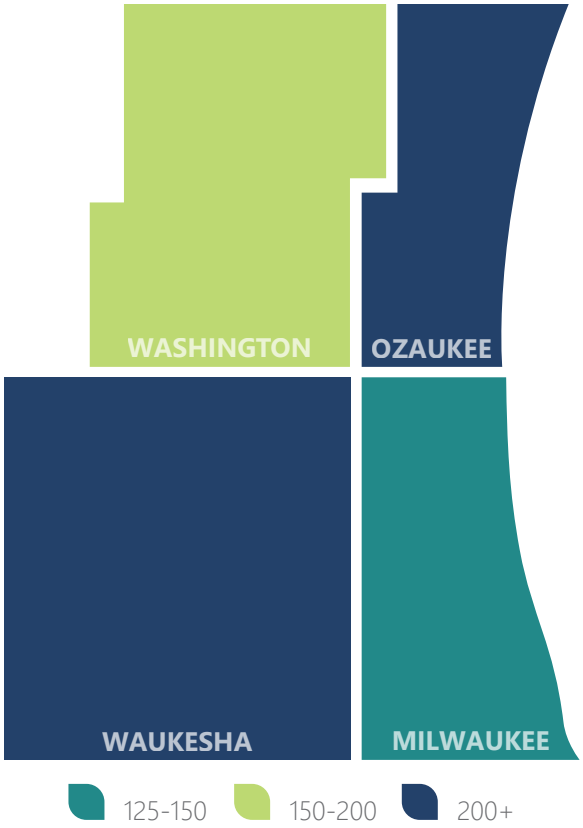
This strategy supports the adoption and transition to electric vehicles (EVs) would improve air quality and reduce greenhouse gas emissions in the MSA. Activities under this strategy include:

1. Lead by example programs to increase the share of electric light-, medium-, and heavy-duty vehicles in municipal and transit fleets, including battery electric buses; and

2. The development of a regional charging network to support anticipated growth of electric vehicle registrations in Wisconsin.

The City of Milwaukee has passed an ordinance requiring the purchase of low-emission hybrid or electric vehicles when cost-effective and practical. This or similar policies could be adopted by communities throughout the metropolitan area. However, funding and additional planning will be needed to implement the ordinance. Communities can benefit from federal funds to cover the marginal up-front cost of clean vehicles, as well as funding for EV charging infrastructure for municipal fleets.

Figure 9
Uptake of Hybrid and Electric Vehicles in the Milwaukee Metro MSA in 2021



EV ownership in Wisconsin tends to be concentrated within metro areas. In the MSA, **Ozaukee and Waukesha Counties have over 200 hybrid and electric vehicles** owned per 10,000 residents.

Source: Wisconsin Department of Transportation

Nationally, the transportation sector creates more than a third of GHG emissions, making it the single largest contributor to climate change in the U.S. Reducing greenhouse gas emissions from the transportation sector is critically important to combating climate change, and a combination of consumer demand and federal mandates have the automotive industry is shifting towards EVs as well. A 2022 report by the Wisconsin Policy Forum found that hybrid and electric vehicle registrations are increasing rapidly. Registrations of electric and hybrid vehicles increased from 44,178 in 2013 to 102,492 in 2021, an increase of 132 percent.[15] The Wisconsin Electric Vehicle Infrastructure Plan projects that electric light-, medium-, and heavy-duty vehicles will increase from 0.1 percent (13,893 EV registrations) of the existing registered fleet to 31 percent (1.9 million EV registrations) of the total fleet in 2050.[16] This creates a need for charging infrastructure currently lacking in the state and region.

Municipal governments can raise public awareness of the benefits of clean energy technologies, improve air quality, reduce greenhouse gas (GHG) emissions by transitioning fleets, including transit vehicles, to electric vehicles (EVs). This strategy also includes efforts to develop a regional charging network with stations equitably distributed throughout the region, most likely through public-private partnerships to design, build, and operate the network. In addition, these activities would help establish regionwide model EV infrastructure citing policies.

[15] *Wisconsin Policy Forum, "Electric, Hybrid Vehicle Registrations Surge," 2022, accessed January 23, 2024, wispolicyforum.org/research/electric-hybrid-vehicle-registrations-surge.*

[16] *Wisconsin Department of Transportation, "Wisconsin Electric Vehicle Infrastructure Plan," 2023, accessed January 23, 2024, wisconsindot.gov/Pages/projects/multimodal/electrification.aspx.*

GHG Emissions Reductions

In the City of Milwaukee specifically, the 2018 Community Greenhouse Gas Emissions Inventory shows transportation made up 21 percent of emissions. Analysis for the Climate and Equity Plan found that Milwaukee can achieve 45 percent greenhouse gas emissions reductions by 2030 with 5 percent of emissions reductions from electrification of transportation.

Countywide, transportation made up 42 percent of emissions, the largest category of emissions. In the Milwaukee MSA, transportation and mobile sources comprised 32 percent of greenhouse gas emissions. Therefore, shifting our fuel sources from gasoline and diesel to electricity and alternative fuel sources, like renewable natural gas for heavy duty vehicles, is also critical to reduce greenhouse gas emissions from the transportation sector.

Benefits

A region-wide transition to electric vehicles (EVs) will help reduce local air pollution, which disproportionately impacts communities of color and underserved communities. Replacing gasoline-powered cars with EVs saves energy and reduces greenhouse gas emissions, regardless of the energy-source used to charge the EVs. Gasoline-powered vehicles also produce emissions when idling, whereas EVs can be on and stationary without producing emissions. Therefore, EVs improve air quality and associated respiratory and cardiovascular health. As the MSA's electric grid is increasingly run from renewable energy resources, the electrification of transportation will become even cleaner. On a global scale, the electrification of transportation is well underway.

CONNECT 1, the region's first bus rapid transit route operates with battery electric buses. Milwaukee County Transit System (MCTS) has begun the environmental review and design process to deploy a second bus rapid transit service along the 27th Street corridor.

Credit: MCTS

According to Clean Jobs Midwest, the Milwaukee Metropolitan area has a total of 18,574 clean energy jobs and Wisconsin has 69,343. Advanced transportation jobs within this workforce account for 7 percent of the total, suggesting that the state has a solid track record of clean energy employment with room for transportation-specific clean energy jobs to grow. A prime example is the opportunity for more skilled electricians to help install and build out Milwaukee's EV charging network. Electricians represent a specific pathway to a well-paying, skilled job without a college degree requirement. Other job opportunities include program and project managers with utilities and private installation companies, sales representatives, and technicians that provide training and maintenance.

Existing Tools and Efforts

The following table identifies current and future programs that can be further developed and explored within this strategy:

Table 2
Current and Future Electric Vehicle Programs

Increase the Share of Electric Light-, Medium-, and Heavy-Duty Vehicles in Municipal Fleets
1. The City of Milwaukee signed an ordinance in March 2023 to buy electric or hybrid vehicles when adding or replacing vehicles in the city's fleet.[a] The ordinance may serve as a model for other communities to adopt.
2. The City of Milwaukee has begun the process of transitioning its municipal fleet from traditional internal combustion engine vehicles to those powered by alternative fuels, EVs, or hybrids. The Milwaukee Police Department (MPD), with the help of ECO, purchased 10 hybrid Police Interceptors to pilot in 2020. The vehicles have increased miles per gallon over 50 percent and reduce emissions per mile 35 percent. MPD has ordered 30 more hybrids to use as primary vehicles moving forward.
3. The City of Pewaukee and Waukesha County Sustainability Plans recommend evaluating hybrid and electric vehicles when purchasing new vehicles. Waukesha County has set a goal to reduce gas and diesel consumption by 10 percent using alternative fuels and vehicles.
Increase the Share of Electric Light-, Medium-, and Heavy-Duty Vehicles in Transit Fleets
1. Milwaukee County transit and vehicle fleets accounted for 35 percent of total emissions for the county in 2022. Milwaukee County Transit System (MCTS) has converted buses to ultra-low sulfur diesel fuel and deployed 11 battery electric buses along CONNECT 1, the first bus rapid transit line in the Region. Current supply chain issues related to battery electric buses have presented challenges to procuring additional buses in the short term, however, MCTS is committed to achieving Milwaukee County's climate and equity goals and continues to research future options.[b]
2. Ozaukee County Transit has procured hybrid vehicles for its Shared-Ride Taxi fleet that have saved over $15,000 in fuel costs annually, increased the miles per gallon of their sedans to 50 mpg, and reduced gasoline consumption by 8,000 gallons annually.
Develop a Regional Charging Network
1. In June 2023, the City of Milwaukee completed an EV Preliminary Electric Vehicle Readiness Plan in coordination with WisDOT and the State's National Electric Vehicle Infrastructure Program. The Plan is an outgrowth of the Milwaukee Climate and Equity Plan and provides an analysis of actions necessary to facilitate the shift from fossil fuels to alternative fuel sources. The City of Milwaukee did not receive funding through the FY2022-2023 Charging and Fueling Infrastructure (CFI) Program and will consider future funding opportunities to build out the proposed "Vehicle Recharging Options Of Milwaukee (VROOM!) Project.[c] In addition, the EV Readiness Plan could serve as a resource for the Region to plan for future electric vehicle charging infrastructure.
2. On January 12 2024, the Wisconsin Department of Transportation's Wisconsin Electrification Initiative released a Request for Proposals to begin the grant selection process for charging stations in Wisconsin. The grants are intended for the private sector to complete construction on a network of electric vehicle charging stations. The grants are intended for the private sector and could fund work necessary to prepare a site to receive chargers, minor upgrades to utilities, purchasing and installing chargers, and five years of operating and maintenance costs. Applications are due April 1, 2024.

[a] *"Chapter 310-18. Purchase of Low- and Zero-Emission Vehicles," City of Milwaukee, Department of Administration, 2023.*

[b] *Milwaukee County and MCTS will continue to evaluate alternative fuels, but significant infrastructure investment will be needed before the adoption of any transit-related technology. Alternative fuel vehicles are almost double the price of a regular clean diesel bus. Therefore, the adoption of new transit vehicle technology will require significant funding increases.*

[c] *City of Milwaukee, "Preliminary Electric Vehicle Readiness Plan," 2023, accessed January 16, 2024, city.milwaukee.gov/ImageLibrary/Groups/cityGreenTeam/images/MKEPreliminaryEVReadinessPlan06.27.23Final.pdf.*

Source: SEWRPC; 2/2024

Metrics for Tracking Progress

Potential outcomes that could be measured to track progress include:

- Number of hybrid or electric vehicles purchased annually
- Number of EV chargers within the Milwaukee MSA
- Dollars saved per year
- Tons of pollution (GHGs and co-pollutants) reduced over the lifetime of the measure
- Tons of pollution (GHGs and co-pollutants) reduced annually
- Number of EV charging stations located in census block groups comprised of low-income households and persons of color
- Total kwh from all charging stations
- Number of unique users; number of sessions at charging stations

Funding Sources and Implementation Milestones

Several funding sources that support EV adoption are available to transit operators and public agencies:

- The Federal Transit Administration's (FTA) Grants for Buses and Bus Facilities and Low- and No-Emission (Low-No) Vehicle program provides federal funding for transit agencies to buy and rehabilitate buses and vans and build and modernize bus facilities. The Bipartisan Infrastructure Law provides nearly $2 billion through FY 2026 for the program.
- FTA Low-No program makes funding available to help transit agencies buy or lease American-built low- or zero-emission vehicles, including buses and vans; make facility and station upgrades to accommodate low- or zero-emission vehicles; and purchase supporting equipment like chargers for battery electric vehicles. The Bipartisan Infrastructure Law provides $5.5 billion through FY 2026 for the Low-No Program – more than six times greater than the previous five years of funding combined.
- For recipients of funding for zero-emission projects, free technical assistance by the Joint Office of Energy and Transportation is available to support transit agencies' shift to low- or zero-emission transit vehicles. For more information, visit RideElectric.gov.

The State of Wisconsin received approval from the Federal Highway Administration for its 2022 Electric Vehicle Charging Infrastructure Plan to expand its electric vehicle charging stations under the National Electric Vehicle Infrastructure (NEVI) program. As a result, Wisconsin is eligible to receive approximately $78 million in NEVI formula funds over five years beginning in Federal Fiscal year 2023. The Bipartisan Infrastructure Law includes $7.5 billion to build out a national network of EV charging stations. The National Electric Vehicle Infrastructure (NEVI) Program lays the groundwork for formula funding designation and use. The NEVI program focuses on expanding the electric vehicle charging system along federally designated Alternative Fuel Corridors (AFCs). Currently, in the Milwaukee MSA, these include I-94, I-43, and I-41.

There are currently two bills under consideration by the Wisconsin State Legislature, with one exempting EV charging stations from regulation as a public utility and the second bill allowing WisDOT to administer nearly $80 million in federal grants to help businesses construct charging stations over the next five years. As of this draft, both bills passed in the Senate and are under consideration by the Assembly.

Establish a Program for Regional Sustainability Assistance

This strategy would include a shared sustainability staff for participating communities to embed climate pollution reduction practices in local governments. A shared service model for sustainability assistance in the four-county MSA would allow for greater coordination and collaboration on sustainability initiatives

and grant opportunities. Most counties or municipalities in the MSA do not have dedicated staff or rely on volunteer community members to support sustainability programs. A regional staff person would support municipalities' commitments in existing sustainability plans and help to bridge future efforts. Potential responsibilities for this type of position could include researching energy efficiency initiatives, facilitating discussions with the public and elected officials, applying for funding, community outreach, and serving as a resource for public and private entities seeking to pursue sustainability activities.

GHG Emissions Reductions

Although specific GHG reductions cannot be attributed to a position, the initiatives supported by this shared staff person would be anticipated to result in a reduction in GHGs. Specifically, staff assistance that supports building retrofits, assists with commercial building benchmarking, and other sustainability focused efforts would help the Milwaukee MSA reduce GHG emissions and other air pollutants.

Benefits

Providing resources and improving coordination among municipalities is a form of climate adaptation or resilience. A shared staff can connect the dots between policy and programs that can support, encourage, and inspire large-scale action, particularly in areas that are underserved or at-risk.

Existing Tools and Resources

The following list provides examples of existing groups and resources that can be leveraged and connected under the shared sustainability staff strategy.

- The City of Milwaukee and Milwaukee County have dedicated departments focusing on climate and sustainability work. The City of Milwaukee Environmental Collaboration Office and the Milwaukee County Office of Sustainability work on a range of sustainability projects and have capacity to pursue state and federal funding sources.

- The City and County of Milwaukee formed the City-County Task Force on Climate and Economic Equity in 2019 for the purpose of making recommendations on how to address the ongoing climate crisis, ensure Milwaukee meets its obligations to reduce greenhouse gas emissions as much as is determined necessary by scientists, and mitigate racial and economic inequity through "green" jobs.[17]

- The Waukesha County Green Team is a voluntary group of residents working towards sustainable practices and development within Waukesha County. This group could provide education and action on projects within Waukesha County.

- The Village of Bayside and the City of Pewaukee have sustainability plans that task various departments with achieving tasks.

- VISION 2050, the region's long-range transportation and land-use plan includes numerous recommendations to sustainably develop our region such as encouraging sustainable and cost-effective growth, preserving the most productive farmland, encouraging more compact development, improving and expanding public transit, and enhancing bike and pedestrian networks.

Funding Sources and Implementation Milestones

In the Milwaukee metro area, only the City of Milwaukee and Milwaukee County staff fully dedicated to environmental sustainability and climate pollution reduction. Most smaller communities to date have not had the financial wherewithal to fund a full-time position. Given challenges to raising local funds, a pooled resource would allow local governments to share staff while benefitting from the collaborative elements this potential position. Federal funds through CPRG could help fund shared sustainability staff to implement projects and demonstrate the value to participating local communities. Longer term, local governments will be in a better position to share local funds to sustain these shared positions and collaborative efforts on climate pollution.

[17] *City-County Task Force on Climate and Economic Equity, "Preliminary Report," 2020.*

Contribute to Greening the Grid Through Utility Scale Solar

This strategy would include funding for programs that allow municipal and county governments to subscribe to large scale projects that employ utility scale solar to power municipal operations in coordination with We Energies as the Milwaukee MSA's sole public electric utility. The City of Milwaukee negotiated a "Renewable Pathway Program" with We Energies, where cities can elect to work with the utility to build large scale solar to meet climate goals. It is paid through a marginal "on-bill" charge and the City keeps the renewable energy credits. Other municipalities could follow a similar model.

In February 2024, the City of Milwaukee is advancing 11 MW of solar projects to offset 25 percent of the electricity use in general city operations, with a goal of achieving 100 percent clean electricity in municipal operations by 2030. The City and other communities can use this new option to credibly establish and achieve a major shift towards renewable energy to power their operations.

GHG Emissions Reductions

Accelerating the switch to clean, renewable sources of energy such as solar and wind can reduce emissions from the electric power grid sector. Greening the grid accounts for 57 percent of the change needed to meet Milwaukee's 2030 emissions reduction goal. The shift to a clean, renewable electric grid also underpins other strategies like vehicle electrification.[18]

We Energies is a subsidiary of the WEC Energy Group and is an investor-owned utility with a service territory that covers the Milwaukee MSA. WEC Energy Group has outlined an overall climate strategy and progress within its portfolio.[19] We Energies has the stated commitment of a 60 percent reduction in carbon emissions by 2025 and an 80 percent reduction by the end of 2030.[20] In addition WEC Energy announced during their earnings call in October 2023 that it plans to eliminate coal as an energy source at the units in the City of Oak Creek by the end of 2023. As noted in the Milwaukee Climate and Equity Plan, despite these commitments, options should be considered that are smaller solar arrays that produce energy closer to where it will be used to serve either a single building or a microgrid. Distributed renewable energy systems can strengthen the resilience of communities through energy independence and can be deployed quicker than large central power plants.

Credit: Unsplash

Benefits

By substituting green power for conventional electricity, which is produced primarily by combusting fossil fuels and is responsible for nearly 33 percent of total U.S. energy-related GHG emissions, local governments and their communities can achieve significant energy, environmental, and economic benefits.[21]

[18] *City of Milwaukee, "Climate and Equity Plan," 2022.*

[19] *"Corporate Responsibility Report," WEC Energy Group, accessed January 24, 2024, wecenergygroup.com/csr/.*

[20] *WEC Energy Group, "Pathway to a Cleaner Energy Future," 2021.*

[21] *U.S. EPA, "Green Power Procurement: A Guide to Developing and Implementing Greenhouse Gas Reduction Programs," 2014, accessed January 30, 2024, www.epa.gov/sites/default/files/201706/documents/greenpowerprocurement508final.pdf.*

In addition to reducing emissions of GHGs, purchasing green power, which produces little or no toxic emissions can reduce the air quality impacts of electricity consumption. Fossil fuel combustion for electricity generation accounts for 67 percent of the nation's sulfur oxides (SOx) emissions and 23 percent of the nation's emissions of nitrogen oxides (NOx), both of which can lead to smog and acid rain.[22] In summary, this strategy is anticipated to result in the following benefits:

- Improving air quality and associated respiratory and cardiovascular health, in particular if this strategy led to the retirement of coal-fired power plants
- Job growth and creation in the solar energy field
- Reduction in cost of transmission lines paid for by all users when there are distributed renewable energy systems that provide energy closer to end users
- Reduction in vulnerability to extreme weather that may damage distribution lines responsible for heating or cooling buildings
- Reduction in energy burden for low-income households

Existing Tools and Efforts

The following list identifies current and future programs that can be further developed and explored within this strategy:

- The Milwaukee Shines Program has reduced permitting and other soft costs for solar, provided affordable financing to qualified homeowners, and supported bulk purchasing through a group buy program to bring down the total cost of solar.
- We Energies offers the Renewable Pathways Pilot Program through which the utility allows customers to purchase all or a portion of their energy requirements from renewable resources through a subscription in the program.

Metrics for Tracking Progress

Potential outcomes that could be measured to track progress include:

- Number of renewable energy installations
- Tons of pollution (GHGs and co-pollutants) reduced over the lifetime of the measure
- Tons of pollution (GHGs and co-pollutants) reduced annually

Funding Sources and Implementation Milestones

The Milwaukee Climate and Equity Plan lists renewable energy policy tools and their status in Wisconsin. The tools include community choice aggregation, community solar programs, green rates, net metering, net metering rates, renewable energy sleeve tariffs, renewable portfolio standards, third-party rooftop or ground-mounted solar energy systems, and virtual power purchase agreements. Some strategies are unavailable in Wisconsin or have not been tried to date. As such, communication and collaboration among municipalities, the Wisconsin Local Government Climate Coalition, the Public Service Commission will be an important process to determine the path forward. The Milwaukee Climate and Equity Plan also indicates an interest in working with We Energies through a Clean Energy Memorandum of Understanding or other means to facilitate the transition to a clean electric grid and better support the adoption of programs and policies to support electrification, energy efficiency, and renewable energy in the buildings and transportation sectors.

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[22] *U.S. EPA, "Quantifying the Multiple Benefits of Energy Efficiency and Renewable Energy: A Guide for State and Local Governments," 2018, accessed January 24, 2024, epa.gov/statelocalenergy/quantifying-multiple-benefits-energy-efficiency-and-renewable-energy-guide-state.*

Additional funding tools include:

- Milwaukee's PACE Financing Program leverages private capital that ties the financing to the property, rather than the owner and has financed over $40 million in projects in Milwaukee. This program supports energy efficiency or reliability improvements, which include energy storage, backup power generation improvements, or upgrades that facilitate participation in a microgrid.

- Significant new tax credits for solar energy as part of the Inflation Reduction Act are now available to make solar energy investments more cost effective. Local governments are eligible for these tax credits in the form of direct payments that can cover up to 70% of the project cost.

Implement Complete Streets Principles

Improvements to and expansion of bike infrastructure in the region may include protected bike lanes, green infrastructure along bike routes, expansion of the Bublr bikeshare program, bicycle signal enhancements, or bike racks. These improvements would encourage the use of biking, expand multimodal transportation, and address urban heat islands. For example, urban heat islands occur when natural land over is replaced with pavement, buildings, and other surfaces that absorb and retain heat. Green infrastructure, such as trees, green roofs, and vegetation, can help reduce urban heat island effects by shading building surfaces, deflecting solar radiation, and releasing moisture into the atmosphere.[23]

In the City of Milwaukee, the 2018 Community GHG Emissions Inventory shows that transportation made up 21 percent of emissions. Within the Milwaukee MSA, transportation made up 42 percent of emissions, the largest category of emissions. Increasing the use of transit, bikes, and pedestrian options is a critical part of reducing vehicle miles traveled (VMT), air emissions, and GHGs.

GHG Emissions Reductions

Walking and bicycling produce essentially no emissions and can replace trips taken by vehicles. As a result, encouraging use of these modes of transportation, would help improve air quality and reduce GHG emissions.

Benefits

Multiple studies have illustrated that walking and biking can make a measurable difference in reducing VMT. Results from a study for the Bureau of Transportation Statistics (BTS) demonstrate that it is possible to shift many short trips taken by car to walking or biking in the Milwaukee MSA. According to the BTS, in 2024, 50 percent of all trips were within three miles or less, and 28 percent of all trips were within one mile or less.[24] Three miles is equivalent to a 20-minute bike ride for the average adult, and one mile is equivalent to a 20-minute walk for the average adult. In addition to being more environmentally friendly, infrastructure for active modes of transportation is less costly to build and maintain, supports local business development, and creates more green jobs.

Bicycling infrastructure, especially protected bike lanes, lead to fewer fatalities and improve safety outcomes for all road users,[25] which is a priority for the City of Milwaukee and other communities in addressing reckless driving concerns.

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[23] *US EPA, Green Infrastructure and Climate Change: Collaborating to Improve Community Resiliency, www.epa.gov/sites/default/files/2016-08/documents/gi_climate_charrettes_final_508_2.pdf, (last accessed 1/30/2024).*

[24] *U.S. Department of Transportation, Bureau of Transportation Statistics, Trips by Distance, bts.gov/browse-statistical-products-and-data/covid-related/distribution-trips-distance-national-state-and, (last accessed 1/30/2024).*

[25] *Ferenchak, Nicholas N. and Marshall, Wesley E.,"Why cities with high bicycling rates are safer for all road users" Journal of Transport & Health, 2019, doi.org/10.1016/j.jth.2019.03.004.*

Existing Tools and Efforts

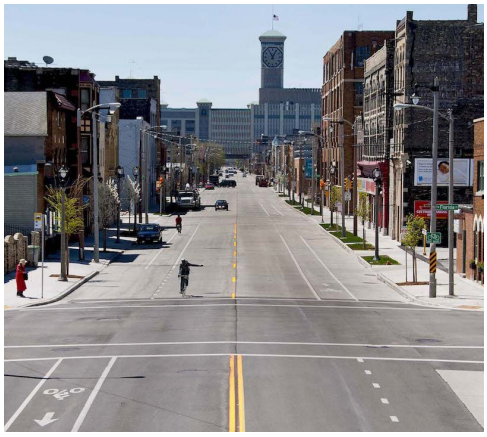
The following list summarizes related efforts underway in the Milwaukee MSA that can be leveraged as work progresses under this strategy.

- The City of Milwaukee has pledged to add 50 miles of new protected bike lanes by 2026.
- Washington County has a Bikeway and Trail Network Plan which emphasizes creating routes that serve schools, commercial areas, and employment centers to encourage alternative transportation.
- Waukesha County has a county-wide bike plan to guide off-road and on-road bicycle travel improvements in the County.
- VISION 2050 envisions a well-connected bicycle and pedestrian network that improves access to activity centers, neighborhoods, and other destinations in the Region. For example, VISION 2050 recommends an extensive on street bicycle network, a system of off-street bicycle paths, and enhanced bicycle facility corridors that connect multiple communities.

Metrics for Tracking Progress

Potential outcomes that could be measured to track progress include:

- Miles of protected and unprotected bike lanes
- Nonmotorized counts
- Total crashes involving pedestrians and bicyclists
- Crashes involving pedestrians and bicyclists resulting in a fatality or serious injury
- Funding allocation for bike infrastructure, including in relation to low-income and disadvantaged communities
- Number of green infrastructure projects adjacent to bike projects



Credit: Wisconsin Bike Fed

Funding Sources and Implementation Milestones

The City of Milwaukee has implemented several policies that could serve as best practices in the Milwaukee MSA. The strategies include developing a Complete Streets Policy, updating bike and pedestrian plans, dedicating parking-related revenue to support pedestrian and bicycle safety improvements, and exploring a parking cash out ordinance to require employers to offer employees the option to receive cash instead of free parking to incentivize other modes of travel.

Municipal budgets can provide funding for bike and pedestrian infrastructure. For example, the City of Milwaukee 2024 budget includes $500,000 for bike infrastructure.[26] State and Federal funding provides the majority of funding for transportation infrastructure, including the following resources:

- WisDOT provides financial assistance to create and improve bicycle and pedestrian facilities in Wisconsin.[27] Available funding programs include:
    - Transportation Alternatives Program
    - Safe Routes to School
    - Local Transportation Enhancements
    - Bicycle and Pedestrian Facilities Program
    - Congestion Mitigation Air Quality Improvement Program

[26] *City of Milwaukee, "2024 Proposed Plan and Executive Budget Summary."*

[27] *"Funding for bicycle and pedestrian facilities," Wisconsin Department of Transportation, accessed January 24, 2024, wisconsindot.gov/Pages/doing-bus/local-gov/astnce-pgms/aid/funding-bp.aspx.*

- The Federal Highway Administration (FHWA) maintains a table of potential funding opportunities for pedestrian and bicycle projects.[28] Selected programs that fund bicycle infrastructure include:

    - Active Transportation Infrastructure Investment Program
    - Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation (PROTECT) Program
    - Transportation Alternatives Program

Build New, Affordable, Net Zero Housing

The Regional Housing Plan recommends providing more safe, accessible, and affordable housing to all residents in the Region.[29] This strategy can help achieve this recommendation by increasing the supply of net zero new housing would provide an opportunity to build up a panelized or modular construction industry in the Region. This strategy could support year-round manufacturing jobs, reduce transportation costs of construction materials, and increase the number of new housing units built. The resulting housing units would reduce energy costs for residents and homeowners and increase housing supply in the region.

GHG Emissions Reductions

According to EPA, building on infill sites is a form of environmental conservation because it reduces pressure on outlying lands serving important environmental and ecological functions. Denser communities also support greater pedestrian-friendly areas and less driving. Overall, direct emissions from homes account for 31 percent of all GHG in the City of Milwaukee (2.4 million tons), according to the city's 2018 Community-Wide Greenhouse Gas Inventory. Within the Milwaukee MSA, residential energy accounts for 29 percent of greenhouse gas emissions. Therefore, efforts to reduce energy consumption in new homes would help decrease emissions from this sector while saving occupants money on their energy costs.

Benefits

New net zero homes combined with demand-side financing models can help address existing barriers to housing affordability and homeownership in Milwaukee and the region including rising interest rates and insufficient tax credit programs such as New Markets Tax Credits (NMTC) or Low-Income Housing Tax Credits (LIHTC).[30]

Additional benefits of modular construction include:

- Factory production resulting in lower costs for materials, labor, and waste while improving quality control and reducing the risk of weather-related delays.

- Standardization resulting in lower costs of design, engineering, and construction and a more efficient construction process.

- Reduced waste using just-in-time delivery to save on costs associated with storing and managing inventory on-site while reducing the amount of waste generated during construction.

- Energy efficiency through highly insulated, airtight, and well-sealed buildings, which can help to reduce energy consumption and improve overall energy efficiency. Modular construction can also make it easier to incorporate renewable energy technologies, such as solar panels, into the design and construction of the building.[31]

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[28] *FHWA, "Bicycle and Pedestrian Program," FHWA, accessed January 24, 2024, fhwa.dot.gov/environment/bicycle_pedestrian/funding.*

[29] *Southeastern Wisconsin Regional Planning Commission, "Regional Housing Plan," 2013, accessed January 25, 2024, sewrpc.org/SEWRPC/Housing.htm.*

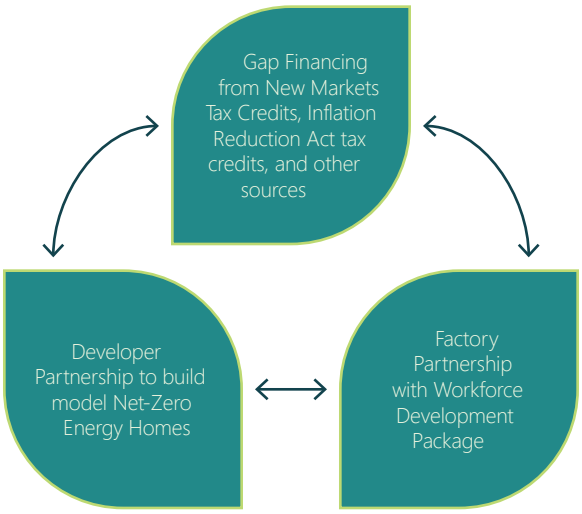
[30] *City of Milwaukee, "Zero-Energy Home Financing Plan," 2023, accessed January 25, 2024, city.milwaukee.gov/eco/Buildings-Energy/Net-Zero-Energy-Housing.*

[31] "*The City of Milwaukee Zero-Energy Home Financing Plan," page 30.*

Existing Tools and Efforts

The City of Milwaukee has identified a three-pronged approach (Figure 10) to build net zero energy homes in Milwaukee and kick-started the initiative with a $1 million ARPA investment and $25,000 EPA financing grant. In January 2023, The City of Milwaukee completed a Zero-Energy Home Financing Plan which describes an approach and implementation roadmap for demand-side financing that will allow low-to-moderate income households to purchase a net zero energy home. This plan could be a resource for municipalities in the Milwaukee MSA and Region as they pursue sustainability planning.

Figure 10
Net-Zero Energy Housing Project Flow Chart



Source: City of Milwaukee Climate and Equity Plan

Metrics for Tracking Progress

The Zero-Energy Home Financing Plan outlines the following annual metrics to track over the next five years.

- Increased supply of affordable housing with a maximum factory potential capacity of 100 units/year (offered through the Housing Authority, tax credit housing, and low-cost direct sales)
- >90 percent decrease in annual resident utility bills
- >20 percent increase in housing ownership opportunities for residents. Fifty (50) new jobs annually (created by the entire delivery supply chain)
- Percent GHG emissions reductions from the housing sector
- Positive resident housing satisfaction ratings (comfort, livability, function)

Funding Sources and Implementation Milestones

The Zero-Energy Home Financing Plan includes an implementation roadmap which includes the following milestones: identifying an Advanced Building Construction (ABC) manufacturer, locating eligible vacant land, and assembling the funding partners. Other municipalities can leverage this roadmap for their own communities. The Financial Plan includes a funding strategy including the Community Development Financial Institutions Fund (CDFI Fund) Programs, Financing Programs for low- and moderate-income homebuyers, homeowner rebates and tax credits, Housing and Urban Development (HUD) Programs, and Tax Increment Financing.

BENEFITS ANALYSIS

The pollution reduction measures identified above have positive impacts on other areas of community life beyond carbon reduction. Table 3 identifies a list of co-benefits of each strategy within the framework of the three pillars of sustainability – economic, social, and environmental. The co-benefits include:

- Save costs – financial savings resulting from implementation of the reduction measure compared to business as usual, which may include utility savings for building owners or reducing energy burden
- Spur job growth and creation – supporting new and more family-supporting jobs
- Promote a green economy – making economic activity in the region more environmentally sustainable
- Enhance regional collaboration – facilitating connection and participation in programs or initiatives
- Improve transportation access – improving people's ability to obtain goods, services, and activities
- Enhance quality of place – improving the physical, aesthetic, or civic character of a place to encourage residents feel engaged in their communities
- Improve air pollution and public health – for example, reducing respiratory diseases due to improved air quality
- Improve climate resilience – improving the ability withstand and recover from climate events, for example, reducing the urban heat island effect
- Shift to more sustainable behavior - supporting lifestyle changes that reduce emissions

LOW INCOME AND DISADVANTAGED COMMUNITIES BENEFITS ANALYSIS

The purpose of this preliminary Low Income Disadvantaged Communities (LIDAC) benefits analysis for the Priority Pollution Reduction Plan is to ensure that the strategies are developed in consideration of the Justice 40 Initiative, which seeks to allocate 40 percent of the overall benefits of certain Federal investments to disadvantaged communities, and to ensure that meaningful engagement with individuals residing areas with high proportions of low-income households or considered disadvantaged is fully integrated into selecting and prioritizing strategies for the region.

This analysis utilizes the Climate and Economic Justice Screening Tool (CJEST), which identifies indicators of burdens that define a community as disadvantaged. Communities are considered disadvantaged if they are in census tracts that meet the thresholds for at least one of the tool's categories of burden, or if they are on land within the boundaries of Federally Recognized Tribes. The burdens are organized into categories such as risks from climate change, energy costs, life expectancy, housing costs, unemployment, and exposure to pollution. The tool also identifies socioeconomic burdens related to demographics and income. For example, the tool defines low income as those census tracts where household income is at or below 200 percent of the Federal poverty level, not including students enrolled in higher education. Based on these factors, the CEJST tool indicates if a community is disadvantaged on the CEJST map if it is in a census tract that is (1) at or above the threshold for one or more environmental, climate, or other burdens, and (2) at or above the threshold for an associated socioeconomic burden. Consistent with the grant requirements, this analysis refers to these areas and census tracts are generally referred to as Low-Income and Disadvantaged Communities, or LIDAC. Shown in Map 2, the four-county MSA has a total of 148 census tracts that meet the CJEST definition of being disadvantaged. Nearly all, 99 percent, are located within Milwaukee County. A list of disadvantaged communities in the Milwaukee Metro MSA is in Appendix A.

> "*The effects of climate change will touch every sector of public life, and will not affect residents equally. Milwaukee has pronounced racial disparities that will be exacerbated by the climate crisis.*"
>
> - City-County Task Force on Climate and Economic Equity Preliminary Report

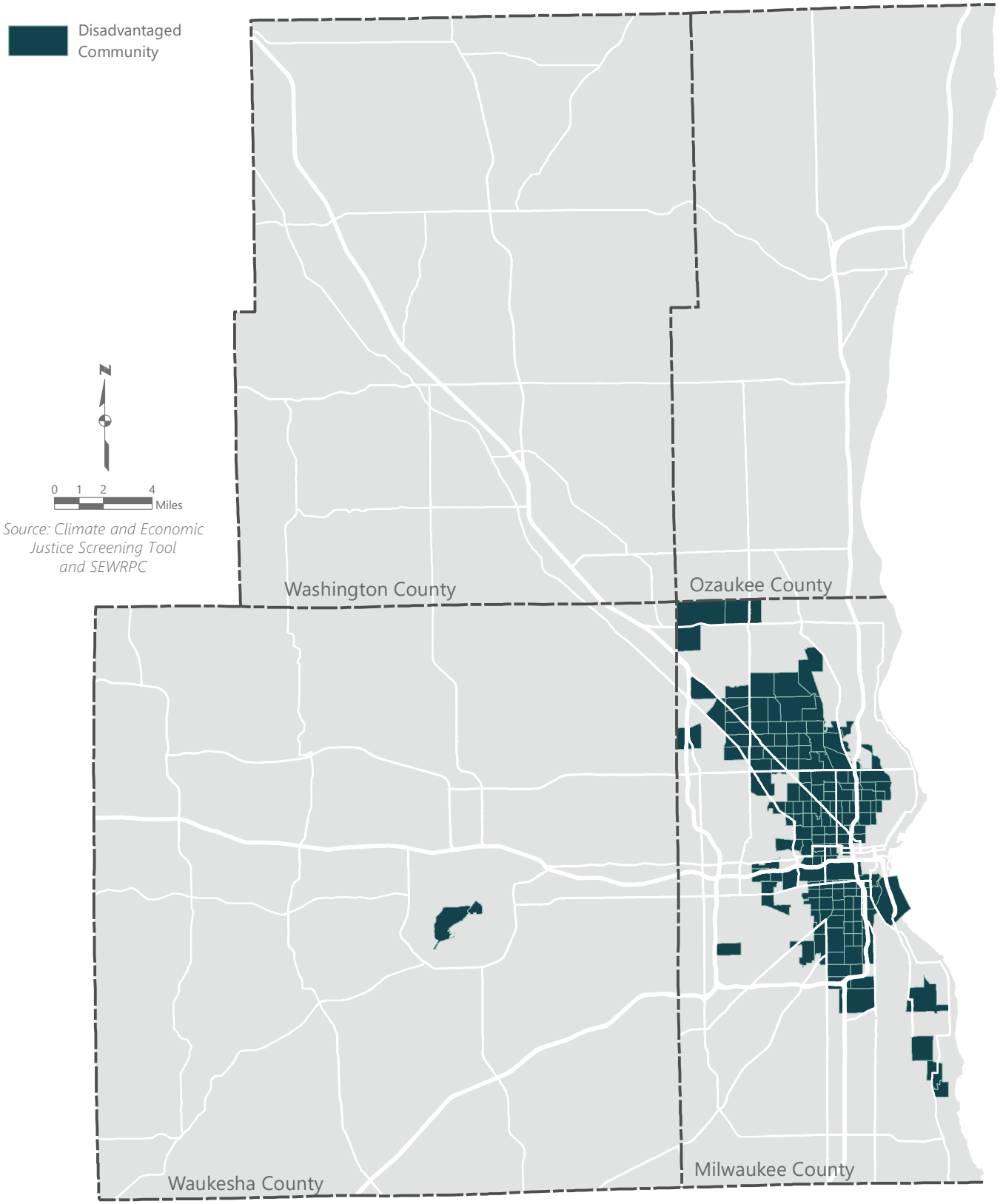
Table 3
Co-Benefits of Pollution Reduction Measures

Benefits		Public Sector & Commercial Building Strategies	Electric Vehicles & Charging Network	Regional Sustainability Assistance	Greening the Grid	Bicycle Network & Facilities	Net Zero Housing
Economic	Save costs	✓	✓	✓		✓	✓
	Spur job growth & creation	✓	✓	✓	✓		✓
	Promote a green economy	✓	✓	✓	✓	✓	✓
Social	Enhance regional collaboration	✓	✓	✓			
	Improve transportation access		✓			✓	✓
	Enhance quality of place	✓				✓	✓
Environmental	Improve air pollution & public health	✓	✓	✓	✓	✓	✓
	Improve climate resilience			✓	✓	✓	✓
	Shift to more sustainable behavior		✓	✓		✓	✓

Note: This table does not include all possible co-benefits of these measures. Staff will conduct a more thorough review of co-benefits and additional analysis to quantify co-benefits in the Comprehensive Plan phase.

Source: SEWRPC, 2/2024

Map 2
Disadvantaged Census Tracts in the Milwaukee MSA



Vulnerabilities

In the Midwest, the climate has warmed, and annual precipitation has increased since the first half of the 20th century.[32] These observed and projected changes have impacts on agriculture, natural resources, health and well-being, the built environment, transportation, and water quality and quantity. Simultaneously, Milwaukee's socioeconomic inequity has risen to extremes, both before and since the 2008 Great Recession.[33] This section will review the vulnerabilities of climate change to populations that are marginalized, underserved, and overburdened by pollution. Then, it will examine the anticipated co-benefits for LIDACs.

The Milwaukee County Climate Action 2050 Plan Vulnerability Assessment conducted a comprehensive vulnerability assessment based on eight Census-derived metrics (age, disability, education, language, people whose rent is 35 percent of their income, poverty, race/ethnicity, and unemployment). They reported high priority vulnerabilities in 1) heat waves and human health; 2) flooding in Menomonee River, Milwaukee River, Beaver Creek, and Lincoln Creek corridors; and 3) acute air quality hazards.

In general, communities whose infrastructure has experienced historic underinvestment, which describes 59 of the identified LIDAC tracts, may experience more substantial impacts of climate change. Vulnerabilities associated with increasing average and summer temperatures include extreme heat and heat-related illnesses, poor air quality, housing affordability, displacement and gentrification, and mobility access. As temperatures increase, extreme heat events are projected to become more common. Milwaukee County residents expressed concern over protecting vulnerable populations in extreme weather, in particular insufficient air conditioning in schools and homes. Densely developed urban areas—which is the consistent land use in most of the LIDAC census tracts—experience the urban heat island effect which worsens heat-related illnesses, leads to higher energy bills, and strains power grids during spikes in cooling demand.[34]

Changes in precipitation—drier summers and wetter winters—will also pose risks for disadvantaged communities. The Vulnerability Assessment notes that slow changes in climate patterns and averages can have long-term impacts on vulnerable communities. For example, more snow in the winter will increase the cost and burden of snow removal and management for communities, which may have a disproportionate impact on low-income households that have difficultly responding to increased costs. County survey respondents also shared concerns about impacts from extreme precipitation events to their daily lives, in particular transportation challenges and property damage.

Milwaukee has substantial racial disparities in income and employment. The median White family in Milwaukee earns almost double of an African American/Black family, as shown in Figure 11, and the unemployment rate for African American/Black residents is 9.3 percent compared to 1.9 percent for White residents.[35] These factors contribute to low homeownership rates among African American/Black residents (27.1 percent) compared to White residents (54.8 percent) and housing cost burden (60.2 percent for African American/Black residents compared to 40.2 percent for White). In addition, Milwaukee has an aging housing stock and a lack of affordable housing options, which exacerbates energy burden and climate resilience along racial lines.

Discussion of Co-Benefits

This section builds off Table 3 to explore co-benefits to LIDAC areas. It discusses how the measures impact some of the issues the Commission commonly discusses with community members such as housing, transportation access, and economic inequality. The Comprehensive Plan phase will allow for further vetting of these co-benefits and discussion about additional priority areas for LIDACs.

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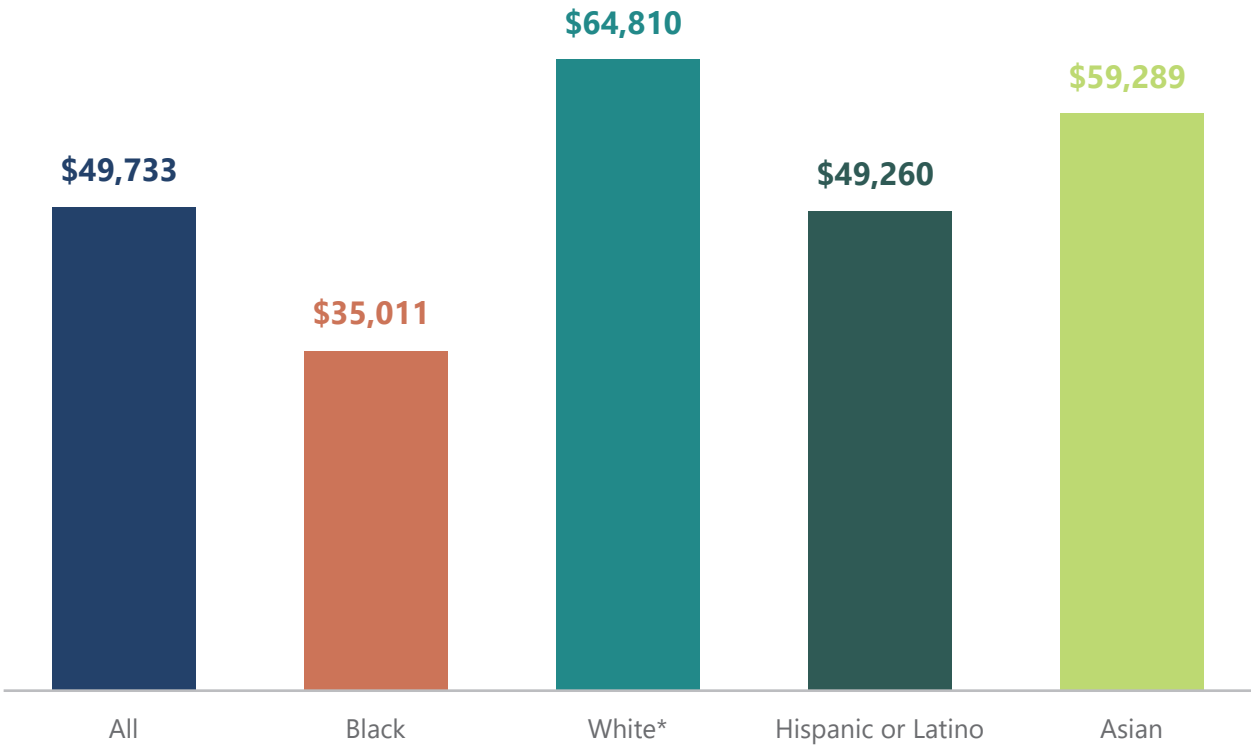
[32] *"Fifth National Climate Assessment, Midwest," U.S. Global Change Research Program, 2023, accessed February 13, 2024, nca2023.globalchange.gov/chapter/24.*

[33] *Preliminary Report. March 2020. City-County Task Force on Climate and Economic Equity.*

[34] *"Urban Heat Hot Spots," Climate Central, 2023, accessed February 13, 2024, www.climatecentral.org/climate-matters/urban-heat-islands-2023.*

[35] *"Citywide Data by Race/Ethnicity," City of Milwaukee, 2022, accessed February 13, 2024, experience.arcgis.com/experience/b030fad9229348739eae3178451b0651.*

Figure 11
City of Milwaukee Median Household Income in the Past 12 Months



**Not Hispanic or Latino*

Source: U.S. Census Bureau, 2018-2022 American Community Survey 5-Year Estimates; 2/2024

Improves Climate Resilience from Extreme Weather Events and Reduces Urban Heat Island Effect

Climate resilience describes the capacity or ability to anticipate and cope with shocks, and to recover from their impacts in a timely and efficient manner.[36] Based on this definition, improvements to public health, social and economic equity, and regional responsiveness would all advance climate resilience in LIDAC areas. All GHG reduction measures identified in this plan would contribute to a more resilient Region. For example:

- Green infrastructure along bicycle routes improves flood reduction, reduces the urban heat island effect, and provides relief to residents during heatwaves. Metrics developed for the Milwaukee County Vulnerability Assessment could serve as a guide for future green infrastructure improvements, along with community input.

- Improvements to energy efficiency in public buildings, such as schools and libraries, provide refuge for residents during heat events.

- Addition of new net zero homes addresses Milwaukee's aging housing stock, improving the resiliency of homes (e.g., basements and sewer system issues).

Reduces Energy Burden

Sixty-one of the region's disadvantaged tracts are in the 90th percentile or higher for energy burden and low income. The City of Milwaukee Net Zero Home Financing Plan found that households earning less than 50 percent of the county median income are 27 percent more energy cost burdened, meaning that energy burden is disproportionately experienced by lower income households. Measures that improve energy efficiency in municipal or commercial buildings can help protect consumers from the costs of adding new

[36] *"What is the difference between climate change adaptation and resilience?" The London School of Economics and Political Science, 2022.*

capacity to the system and from energy supply disruptions, volatile energy prices, and other reliability and security risks.[37] Furthermore, a commercial benchmarking policy may impact some multifamily apartment buildings of a certain size, reducing energy costs for renters. Net zero housing would also reduce energy bills and protect homeowners from rate spikes.

Job Growth and Creation

Existing climate action planning in the region emphasizes recruiting, training, and employing workers with family-supporting wages in green job sectors. Map 3 shows LIDAC tracts with unemployment rates above the regional average (3.9 percent). As the public and private sectors embrace new, green technologies, the region will create energy efficiency jobs that advance social equity through inclusive training programs and resources. The City of Milwaukee is actively engaged in workforce development planning for building net zero homes which would create an estimated 50 new jobs annually in the delivery supply chain, as well as other roles in manufacturing.

The Workforce Planning Analysis section in this plan and the Comprehensive Plan will expand on engaging with training providers, employers, and government agencies to ensure job growth and creation benefit low-income and high unemployment individuals.

Improves Access to and Quality of Mobility Services and Infrastructure

In the SEWRPC Region, 1 in 10 households do not have access to an automobile. In addition, these households are more likely to be minority or low income when compared to the overall proportion of the Region.[38] Therefore, access to safe, active modes of transportation is particularly important to low-income and minority households; these populations take 50 percent more walk trips than higher income individuals and have the greatest rate of bike trips, often using bikes to access employment. Multiple measures have positive co-benefits to mobility services and infrastructure, including:

- The addition of bicycle facilities and bicycle safety infrastructure (e.g., buffered bike lanes with green infrastructure) will improve transportation access and improve safety by managing driving speeds.

- Electric transit fleets are more fuel efficient than diesel buses and have fewer moving parts, potentially decreasing fuel and maintenance costs for transit agencies. Electric buses operate more quietly, producing less noise pollution, and have zero harmful tailpipe emissions, which will improve local air quality.

- The proposed bus rapid transit service along the 27th Street corridor, referred to as the North South Transit Enhancement project, will improve one of MCTS's most used routes with increased frequency to improve access to jobs, education, healthcare, and grocery stores, with a positive impact to health and economic opportunity.

- Net zero energy infill housing will allow people to live in existing neighborhoods while furthering density that continues to support bus lines and businesses.

Improves Air Pollution and Public Health

Air pollution disproportionately affects marginalized communities, which contributes to higher rates of respiratory diseases and other health issues. In the MSA, LIDAC tracts have high rates of asthma, with 92 tracts in the 90th percentile or higher for asthma and qualifying as low income. Improving air quality by transitioning to electrified vehicles and improving energy efficiency in buildings could improve equity across populations. Energy improvements to buildings would also improve indoor air quality and provide more comfortable, healthier living environments.

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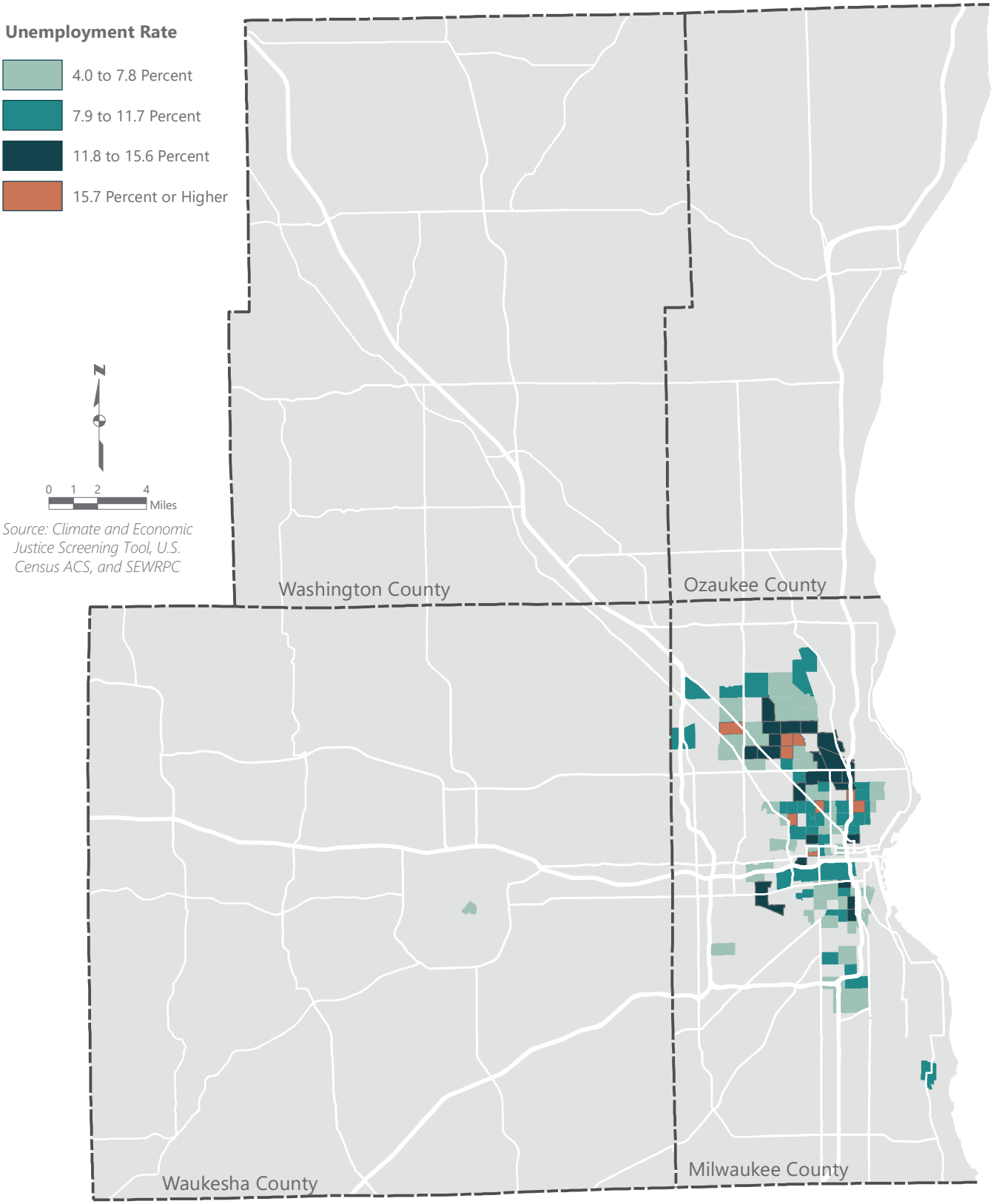
[37] *U.S. EPA, "Quantifying the Multiple Benefits of Energy Efficiency and Renewable Energy."*

[38] *Southeastern Wisconsin Regional Planning Commission, "Preliminary Draft Equity Analysis," 2024 Review and Update of VISION 2050, accessed January 26, 2024, sewrpc.org/SEWRPCFiles/Vision2050/VISION2050-2024Update-App6-EquityAnalysisPDFPrelDraft.pdf.*

Map 3
LIDAC Census Tracts With Above Regional Average (3.9 Percent) Unemployment Rates



Milwaukee's Climate and Equity Plan discusses existing racial and socioeconomic disparities in EV ownership. The city will use a multi-pronged approach to improve the benefits of EVs to LIDAC areas including prioritizing EV charging access in LIDAC areas and at multifamily units and promoting tax credits for buying EVs. The transition to EVs will also benefit people who are exposed to air pollution from transportation sources such as transit riders and the 49 LIDAC tracts that are at or above the 90th percentile for traffic proximity.

Improves Housing Affordability and Paths to Homeownership

The City of Milwaukee lacks affordable housing options, in particular for low-income households.[39] Of the LIDAC communities in the Milwaukee MSA, 87 tracts are at or above the 90th percentile for housing burden and are low income. COVID-19 has accelerated housing insecurity in Milwaukee, and city homeownership has declined by 14 percent in the past 15 years. Just 37 percent of housing units are owner-occupied (including multi-family), with the African American homeownership rate half that of white households. The Net Zero Plan intends to build housing that is affordable for households of four earning not more than 80 percent of the Milwaukee County median income. Stable housing and home ownership have social, economic, and health benefits like job stability and building financial equity.

Enhances Quality of Place

Measures that enhance quality of place in the region would improve the physical, aesthetic, and social aspects of a place that encourage civic engagement. In LIDAC areas, public spaces that may see positive impacts as a result of these GHG reduction measures include active transportation infrastructure like bike lanes or bus stops, public buildings like libraries, neighborhood streets, and workplaces.

As of February 2022, Milwaukee has approximately 2,000 vacant lots in many of its neighborhoods where dilapidated houses were razed. Net zero energy infill housing would have multiple positive effects for LIDAC areas including staving off displacement, improving the safety of neighborhoods, and increasing traffic to existing businesses and bus routes.

REVIEW OF AUTHORITY TO IMPLEMENT

The strategies discussed in this priority plan each include milestones for actions needed for implementation. A collaborating agency or other local government should have the authority to implement the strategy through a future project. However, in some cases, strategies may require action or authorization by a collaborating agency or other local government prior to local implementation. Although the Commission is not an implementation agency, staff can assist with data collection and analyses, as appropriate. Table 4 indicates the various roles and actions for each entity involved in strategy implementation. Continued collaboration will occur to build partnerships that move these strategies forward in the Milwaukee MSA to make impactful change in pollution reduction.

INTERSECTION WITH OTHER FUNDING

Commission staff reviewed additional funding opportunities under that Bipartisan Infrastructure Law (BIL) and Inflation Reduction Act (IRA) that could be leveraged to support the priority strategies and future actions identified through the CPRG Program. The following table (Table 5) summarizes the funding programs and websites where additional information is available. As the Comprehensive Plan is developed, this section will further highlight where funding gaps exist and where CPRG Programs and other funding could fill those gaps.

[39] "*Housing Needs and Demands.*" *City of Milwaukee, 2023, accessed February 8, 2024, experience.arcgis.com/experience/c3c8d339565c4ccab821f65433ee132f/page/2_-Housing-Needs%2FDemands.*

Table 4
Review of Authority to Implement

GHG Reduction Measure	Public Entities						Private Entities		
	Local		Areawide		State				
	Municipal	Transit Agency	Regional Planning Commission	We Energies	Wisconsin State Legislature	Public Service Commission	Businesses	Commercial Property Owners	Developers
Increase Building Energy Efficiency and Solar for Public Sector and Commercial Buildings	■	--	■	■	--	■	■ ■	■	■
Increase Adoption of Electric, Hybrid, and Clean Fuel Vehicles in Municipal Fleets and Develop a Regional Public Charging Network	■	■	■	■	■	■	■	■	■
Establish a Program for Regional Sustainability Assistance	■	--	■	--	--	--	--	--	--
Contribute to Greening the Grid through Utility Scale Solar	■	--	■	■	■	■	--	--	--
Implement Complete Streets Principles	■	■	■	--	--	--	--	--	--
Build New, Affordable, Net Zero Housing	■	--	■	--	--	--	--	--	■

Note:

■ = Primary entity or entities with implementing authority or entity involved in implementation.

■ = Supporting entity responsible for providing data, participating in advisory committees, or at the request of a primary agency, the conduct of a study in support of a plan recommendation.

■ = Enabling entity responsible for the enactment of laws to provide a primary agency the authority to implement a plan recommendation or participate

Source: City of Milwaukee and SEWRPC, 2/2024

Table 5
Pollution Reduction Funding Guide

Sector	Lead Agency	Funding Name	Website
Agriculture, Natural, and Working Lands	U.S. Department of Agriculture	Natural Resources Conservation Service	www.nrcs.usda.gov
	U.S. Department of Agriculture	Programs in the Local Food Supply Chain	www.ams.usda.gov/sites/default/files/media/FoodSupplyChainFactSheet.pdf
	U.S. Department of Agriculture	Regional Conservation Partnership Program	www.nrcs.usda.gov/programs-initiatives/rcpp-regional-conservation-partnership-program
Commercial and Residential Buildings	U.S. Department of Energy	Energy Champions Leading the Advancement of Sustainable Schools Prize	www.energy.gov/scep/energy-class-prize
	U.S. Department of Energy	Energy Efficiency and Conservation Block Grant Program	www.energy.gov/scep/energy-efficiency-and-conservation-block-grant-program
	U.S. Department of Energy	Office of State and Community Energy Programs (SCEP) Public Sector Funding	www.energy.gov/scep/slsc/public-sector-funding-technical-assistance-programs
	U.S. Department of Energy	Weatherization Assistance Program	www.energy.gov/scep/wap/weatherization-assistance-program
	U.S. Environmental Protection Agency	Low Carbon Construction Materials	www.epa.gov/inflation-reduction-act/inflation-reduction-act-programs-fight-climate-change-reducing-embodied
	U.S. Department of Housing and Urban Development	Energy Efficient Mortgages	www.hud.gov/sites/documents/2005-07FHA.PDF
	U.S. Department of Housing and Urban Development	Green and Resilient Retrofit Program	www.hud.gov/sites/dfiles/Housing/documents/GRRP_Overview_FactSheet.pdf
	U.S. Department of Housing and Urban Development	Mark-to-Market Green Initiative	www.hud.gov/program_offices/housing/mfh/presrv/presmfh/greenini
	U.S. Department of Housing and Urban Development	Rural Housing Service	www.rd.usda.gov/about-rd/agencies/rural-housing-service
Electricity Generation	U.S. Department of Agriculture	Empowering Rural America New ERA Program	www.rd.usda.gov/programs-services/electric-programs/empowering-rural-america-new-era-program
	U.S. Department of Agriculture	Powering Affordable Clean Energy PACE Program	www.rd.usda.gov/programs-services/electric-programs/powering-affordable-clean-energy-pace-program
	U.S. Department of Agriculture	Rural Energy for America Program	www.rd.usda.gov/inflation-reduction-act/rural-energy-america-program-reap
	U.S. Department of Agriculture	Rural Energy Savings Program	www.rd.usda.gov/programs-services/electric-programs/rural-energy-savings-program
	U.S. Department of Energy	Carbon Capture Demonstration Projects Program	www.energy.gov/oced/CCdemos
	U.S. Department of Energy	Grid Resilience and Innovation Partnerships Program	www.energy.gov/gdo/grid-resilience-and-innovation-partnerships-grip-program
	U.S. Department of Energy	Regional Clean Hydrogen Hubs	www.energy.gov/oced/regional-clean-hydrogen-hubs-0

Table continued on next page.

Table 5 (Continued)

Sector	Lead Agency	Funding Name	Website
Industry	U.S. Department of Housing and Urban Development	Advanced Energy Manufacturing and Recycling Grant Program	www.hud.gov/program_offices/public_indian_housing/programs/ph/pheb/eperformance
	U.S. Department of Energy	Industrial Assessment Centers	www.energy.gov/mesc/industrial-assessment-centers-iacs
	U.S. Department of Energy	Industrial Demonstration Program	www.energy.gov/oced/industrial-demonstrations-program-0
Transportation	U.S. Environmental Protection Agency	Diesel Emissions Reduction Act	www.epa.gov/dera
	U.S. Environmental Protection Agency	Clean School Bus Program	www.epa.gov/cleanschoolbus
	U.S. Department of Transportation	Carbon Reduction Program	www.fhwa.dot.gov/bipartisan-infrastructure-law/crp_fact_sheet.cfm
	U.S. Department of Transportation	Charging and Fueling Infrastructure Discretionary Grant Program	www.fhwa.dot.gov/environment
	U.S. Department of Transportation	IRA Funding Matrix	www.fhwa.dot.gov/inflation-reduction-act/funding
	U.S. Department of Transportation	Low or No Emission Grant Program – 5339	www.transit.dot.gov/lowno
	U.S. Department of Transportation	Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation	ww w.fhwa.dot.gov/environment/protect
	U.S. Department of Transportation	Pilot Program for Transit-Oriented Development Planning	www.transit.dot.gov/TODPilot
Waste & Materials Management	U.S. Environmental Protection Agency	Solid Waste Infrastructure for Recycling Grant Program	www.epa.gov/infrastructure/solid-waste-infrastructure-recycling-grant-program
	U.S. Environmental Protection Agency	Embodied Carbon in Construction Materials Grants, Technical Assistance & Labeling Program	www.epa.gov/inflation-reduction-act/inflation-reduction-act-programs-fight-climate-change-reducing-embodied
	National Renewable Energy Lab	Waste-to-Energy Technical Assistance for Local Governments	www.nrel.gov/bioenergy/waste-to-energy-technical-assistance.html
	U.S. Department of Housing and Urban Development	Climate resilience of affordable housing loans and grants	www.hud.gov/press/press_releases_media_advisories/hud_no_23_093

Note: A full list of current resources is available on the U.S. Environmental Protection Agency's website at www.epa.gov/inflation-reduction-act/investing-america-climate-action-funding-resource-guide.

Source: U.S. EPA and SEWRPC

WORKFORCE PLANNING ANALYSIS

According to Clean Jobs Midwest, the Milwaukee Metropolitan area had a total of 23,087 clean energy jobs in 2022. The four-county MSA accounts for 32 percent of all Wisconsin clean energy jobs, with Milwaukee and Waukesha Counties serving as some of the largest hubs for clean energy jobs in the state.[40] Despite this strong standing, the Milwaukee Climate and Equity Plan found that jobs in skilled trades that offer family-supporting wages, such as electricians and plumbers, are mostly occupied by white workers and male workers.

The CPRG Guidelines related to the Workforce Planning Analysis recommend a five-step workforce planning framework: 1) forecast impacts, 2) identify partners, 3) incorporate job quality into project planning, 4) develop high-quality training programs, and 5) measure outcomes. For the Priority Plan, this section will include a preliminary effort to identify partners and highlight some of the existing plans and training programs in the region. Staff will conduct further workforce analysis for the Comprehensive Plan, including workforce specific outreach meetings.

Existing Workforce Partnerships and Planning Efforts

There are numerous conversations around workforce development for green jobs in the Milwaukee MSA. Table 6 identifies some of the labor organizations, community groups, and training providers involved in these efforts.

On a regional scale, Milwaukee 7 is positioning the area for economic growth by promoting energy, power, and controls and water technology as key industries. More localized green workforce programs have transpired through climate planning over the past several years as well. The Milwaukee Climate and Equity Plan established a Green Jobs Accelerator to support the growth and diversification of green jobs in the City, which includes a resource hub for job seekers (city.milwaukee.gov/Green-Jobs) and working closely with Employ Milwaukee and other workforce agencies to develop additional programming around the concept. The City of Milwaukee's Milwaukee Shines Solar Program, in partnership with the Midwest Renewable Energy Association and Walnut Way Conservation Corporation, have conducted solar energy training for communities of color. Going forward, the City intends to include workforce provisions in its renewable energy contracts to further support DEI to green the grid. For example, the City's proposed Renewable Pathways Program allows for local hiring provisions when working with We Energies on large-scale renewable energy procurements.

The following planning efforts in specific topic areas will also aid in identifying stakeholders and any anticipated workforce shortages related to the identified emission reduction measures.

- An Equitable Water Future Milwaukee, August 2020 - report on strategies to build water workforce equity in Milwaukee and guides the water community to better reflect the diversity of its citizens

- Preliminary Workforce Development Plan for New Net-Zero Energy Homes - recommended Training for Manufactured Housing Construction (TRAMCON) to increase offsite job opportunities, reduce housing costs, and improve energy and materials efficiency

[40] *"Wisconsin Clean Energy and Transportation Jobs are Growing," Clean Jobs Midwest, 2023, accessed February 8, 2024, cleanjobsmidwest.com/state/Wisconsin.*

Table 6
Workforce Stakeholders in the Milwaukee Metro MSA

Organization	Energy Efficiency	Renewable Energy	Green Infrastructure	Construction
Advanced Building Construction Collaborative				●
Building Performance Institute, Inc.				●
Century City Triangle Neighborhood Association*			●	
Cream City Conservation*			●	
Duran Skills & Trades				●
Employ Milwaukee*	●	●	●	●
Findley Foundation, Inc.				●
Greater Milwaukee Foundation*			●	
Groundwork Milwaukee*			●	
International Brotherhood of Electrical Workers (IBEW)	●	●		
Midwest Renewable Energy Association		●		
Milwaukee Area Technical College*	●		●	
Milwaukee Community Service Corps				●
Milwaukee County*			●	
Milwaukee Job Corps Center				●
Milwaukee JobsWork*			●	
Milwaukee Metropolitan Sewer District*			●	
Milwaukee Shines Solar Program		●		
Milwaukee Water Commons*			●	
Milwaukee Water Works*			●	
Mindful Staffing Solutions, LLC2				●
Social Development Commission of Milwaukee	●			●
Teens Grow Greens			●	
University of Wisconsin System	●		●	
Walnut Way Conservation Corporation		●		●
Waukesha-Ozaukee-Washington (WOW) Workforce Development Board	●	●		●
Wisconsin Department of Workforce Development	●	●	●	●
Wisconsin Regional Training Partnership (WRTP)	●	●		●

Note: This table may not include all workforce stakeholders represented in the Milwaukee Metro MSA.

* Member of the Milwaukee Water Equity Taskforce

Source: SEWRPC, 2/2024

STAKEHOLDER ENGAGEMENT ACTIVITIES

The EPA requires meaningful engagement with individuals and organizations within LIDAC areas, also referenced as LIDACs, and other interested parties in the Priority Plan development process. To achieve this in a short time frame, the Commission leveraged long-standing relationships with community members and the ongoing climate planning efforts in Milwaukee County and the City of Milwaukee for the development of this action plan. This section provides an overview of the existing landscape of outreach within the region, describes involvement with LIDACs, and outlines future engagement intentions.

The CPRG program is aligned with the goals of the Justice40 Initiative, which aims to deliver 40 percent of the overall benefits of relevant federal investments to disadvantaged communities. It is anticipated that the initial conversations that occurred during the Priority Plan development will be expanded throughout the Comprehensive Plan phase, including developing an engagement plan and collaborating with the State of Wisconsin Office of Sustainability and Clean Energy on outreach efforts.

Commission's Community Partners and Long-Range Planning (VISION 2050)

The Commission has partnerships with nine community organizations to reach and engage groups that have traditionally been underrepresented in the region — in particular, minority populations, people with disabilities, and low-income individuals. On-going public outreach and engagement for VISION 2050, the Commission's long-range land use and transportation plan, has involved sponsored workshops hosted by the Community Partners and a variety of other activities and surveys. For example, during the 2020 Review and Update of VISION 2050, the Commission collected public feedback on public health and environmental resilience in a survey, including feedback from Community Partners. Respondents ranked flooding, water quality issues, more frequent and extreme rain and snow, and more frequent and extreme heat/cold events as top risks to health, safety, and well-being from a changing climate in Southeastern Wisconsin. VISION 2050 includes recommendations to support healthy communities, including walkable neighborhoods, reducing nonrenewable resources, and preserving open space and productive agricultural land. More information on the VISION 2050 outreach and visioning processes can be found at www.vision2050sewis.org/process.

City-County Task Force on Climate and Economic Equity

The Task Force on Climate and Economic Equity (Task Force) formed in 2019 and produced a Preliminary Report in March 2020 that led numerous engagement activities including the formation of four working groups in the areas of greenhouse gas emissions assessment and reduction strategies, jobs and equity, finance and funding, and education and community outreach. The Task Force and its working groups included members of the public and local experts so that existing needs and desired outcomes of LIDACs were represented early in the plan development. While Milwaukee County is only one of four counties in the MSA, it is home to 60 percent of the population and 99 percent of the LIDACs. Therefore, the outreach efforts conducted by the Task Force serve as a basis for future engagement and provide insight into the needs of individuals and organizations residing in LIDAC areas.

City of Milwaukee Climate and Equity Plan

Following the Preliminary Report, the Task Force conducted public outreach, which included over 30 public events, 80 work group members, and 829 survey responses, to develop the 10 Big Ideas that would become the Milwaukee Climate and Equity Plan. Each of the 10 Big Ideas provide cross-functional benefits that address climate and equity issues. This plan serves as the foundational document for the CPRG Program in the Milwaukee MSA.

Outreach and Engagement for Priority Pollution Reduction Plan

During the development of the Priority Plan, Commission staff shared information and gathered input from the Commission's Environmental Justice Task Force (EJTF) and Community Partners. These existing groups represent key stakeholders with whom the Commission has long-standing relationships that realize some of the stated goals for meaningful engagement. There were several tangible outcomes from these presentations including a discussion about terminology that may alienate certain stakeholders, updates from several organizations on parallel work efforts, opportunities for collaboration on future outreach, and a request to ensure transparent communication by defining key concepts of climate change for all audiences. The Commission also disseminated information on the project on our website and through quarterly newsletters.

Milwaukee's Climate and Equity Plan acknowledges that the City is part of a regional economy in which fossil fuel emissions are shared across borders. The Coordinating Workgroup, established to provide an opportunity for meaningful engagement for representatives throughout the four-county Milwaukee Metro area, allowed for discussion and vetting of the 10 Big Ideas at a regional scale. The Coordinating Workgroup included representatives from each of the four counties in the metro area, entities that are involved in the Wisconsin Local Government Climate Coalition (WLGCC); and other entities by request, including: Milwaukee County, Ozaukee County, Washington County, Waukesha County; the Cities of Milwaukee, Muskego, West Allis, Wauwatosa, and Waukesha; the Villages of Shorewood and Whitefish Bay; and the Metropolitan Milwaukee Sewerage District. In a survey, the top three strategies included: 1) Public Sector Building efficiency, 2) Greening the grid, and 3) Municipal EV. Although the Commercial Building initiative did not rank as high in the survey results, respondents expressed interest in learning more.

Figure 12
Relevant Community Engagement Efforts to the Priority Pollution Reduction Plan

- July 2016 – VISION 2050 is adopted after a three-year public engagement effort
- November 2019 – City-County Task Force (Task Force) on Climate and Economic Equity is formed
- March 2020 – Task Force's Preliminary report is published
- June 2020 – VISION 2050 – 2020 Review and Update is adopted
- 2021 – The Task Force conducts research and holds meetings
- Summer 2022 – Our Future Milwaukee Citizen Coalition is formed
- November 2022 – Draft Milwaukee Climate and Equity Plan is made available for public feedback
- June 2023 – Milwaukee Climate and Equity Plan is adopted as part of the Citywide Policy Plan
- July 2023 – EPA CPRG Planning Grant is awarded
- September 2023 – First meeting of the Coordinating Workgroup is held, project is introduced to the Commission's Environmental Justice Task Force
- October 2023 – Project team meets with UW-Milwaukee Office of Sustainability
- November 2023 – Project team presents at the Commission's Community Partner Annual Meeting and to the Waukesha County Green Team
- December 2023 – Project team presents draft strategies to Coordinating Workgroup and Environmental Justice Task Force and receives feedback

Source: SEWRPC, 2/2024

Alongside the discussions with the Coordinating Workgroup, the Commission met regularly with the State of Wisconsin Office of Sustainability and Clean Energy (OSCE) to discuss priority measures and outreach efforts. Staff from the Commission team participated in statewide Wisconsin Climate Action Navigator (WI CAN) meetings, which allowed greater networking with environmental organizations in the region and across the state.

A list of the Community Partners, EJTF members, and Coordinating Workgroup members is in Appendix B.

Future Outreach and Engagement for the CPRG Program

After the Priority Plan, Commission staff intend to work with existing partners to develop a Comprehensive Plan that reflects community driven priorities. The Community Partners identified several opportunities for engagement in 2024 including participation in a Facebook live series, utilization of organization newsletters, and collaboration at events. A partnership with Milwaukee Public Schools will allow staff to reach a younger audience to discuss key concepts in the action plan. Other tools such as newsletters, short videos, and handouts will be used to explain the CPRG project, report out on inventory findings, and engage people in the feedback process. Staff will evaluate the need for multilingual outreach, in particular in the 24 LIDAC tracts that are in the 90th percentile or above for linguistic isolation.

Future outreach and engagement for CPRG will include two parts:

1. Continue and build on outreach opportunities in Milwaukee County and LIDAC areas

2. Identify and reach municipalities and residents in Ozaukee, Waukesha, and Washington Counties in a conversation on the CPRG Program

There are multiple structures and groups that can assist with continuing community engagement within the City and County of Milwaukee. The City of Milwaukee established the Our Future Milwaukee Coalition, a group of community organizations and individuals established to carry out the work of the Climate and Equity Plan and ensure continued communication with stakeholders. In addition, the City-County Task Force transitioned into an advisory board charged with reviewing the implementation of the plan. The City's plan also proposed resilience ambassadors through the ECO Neighborhoods Initiative. The ambassadors' role is to connect underserved communities with tools and resources to make their homes and neighborhoods more resilient to climate change,

As many other municipalities have not engaged in climate action planning to the same extent as Milwaukee, Commission staff will continue to gather an inventory of relevant organizations or individuals in Ozaukee, Waukesha, and Washington Counties and include them in the planning process. Although these counties do not have the same proportion of LIDACs, initial outreach has shown interest in being part of discussions; and there are cost sharing and economic development benefits to establishing regional programs.

APPENDICES

APPENDIX A

LIST OF DISADVANTAGED COMMUNITIES IN THE MILWAUKEE METRO MSA

Census Tract 2010 ID	County Name	Identified as Disadvantaged
55079000101	Milwaukee County	TRUE
55079000201	Milwaukee County	TRUE
55079000302	Milwaukee County	TRUE
55079000400	Milwaukee County	TRUE
55079000502	Milwaukee County	TRUE
55079000600	Milwaukee County	TRUE
55079000800	Milwaukee County	TRUE
55079000900	Milwaukee County	TRUE
55079001000	Milwaukee County	TRUE
55079001100	Milwaukee County	TRUE
55079001200	Milwaukee County	TRUE
55079001300	Milwaukee County	TRUE
55079001400	Milwaukee County	TRUE
55079001500	Milwaukee County	TRUE
55079001600	Milwaukee County	TRUE
55079001700	Milwaukee County	TRUE
55079001800	Milwaukee County	TRUE
55079001900	Milwaukee County	TRUE
55079002000	Milwaukee County	TRUE
55079002100	Milwaukee County	TRUE
55079002200	Milwaukee County	TRUE
55079002300	Milwaukee County	TRUE
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55079002500	Milwaukee County	TRUE
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55079003600	Milwaukee County	TRUE
55079003900	Milwaukee County	TRUE
55079004000	Milwaukee County	TRUE
55079004100	Milwaukee County	TRUE
55079004200	Milwaukee County	TRUE
55079004300	Milwaukee County	TRUE
55079004400	Milwaukee County	TRUE
55079004500	Milwaukee County	TRUE
55079004600	Milwaukee County	TRUE
55079004700	Milwaukee County	TRUE
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55079004900	Milwaukee County	TRUE
55079005100	Milwaukee County	TRUE
55079005900	Milwaukee County	TRUE
55079006000	Milwaukee County	TRUE
55079006100	Milwaukee County	TRUE
55079006200	Milwaukee County	TRUE
55079006300	Milwaukee County	TRUE
55079006400	Milwaukee County	TRUE
55079006500	Milwaukee County	TRUE
55079006600	Milwaukee County	TRUE
55079006700	Milwaukee County	TRUE

List continued on next page.

Census Tract 2010 ID	County Name	Identified as Disadvantaged
55079006800	Milwaukee County	TRUE
55079006900	Milwaukee County	TRUE
55079007000	Milwaukee County	TRUE
55079007100	Milwaukee County	TRUE
55079007200	Milwaukee County	TRUE
55079008000	Milwaukee County	TRUE
55079008100	Milwaukee County	TRUE
55079008400	Milwaukee County	TRUE
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55079008600	Milwaukee County	TRUE
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55079008800	Milwaukee County	TRUE
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55079009000	Milwaukee County	TRUE
55079009100	Milwaukee County	TRUE
55079009200	Milwaukee County	TRUE
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55079010600	Milwaukee County	TRUE
55079012200	Milwaukee County	TRUE
55079012300	Milwaukee County	TRUE
55079012400	Milwaukee County	TRUE
55079012600	Milwaukee County	TRUE
55079012900	Milwaukee County	TRUE
55079013000	Milwaukee County	TRUE
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55079017000	Milwaukee County	TRUE
55079017100	Milwaukee County	TRUE
55079017200	Milwaukee County	TRUE
55079017300	Milwaukee County	TRUE
55079017400	Milwaukee County	TRUE
55079017500	Milwaukee County	TRUE

List continued on next page.

Census Tract 2010 ID	County Name	Identified as Disadvantaged
55079017600	Milwaukee County	TRUE
55079018000	Milwaukee County	TRUE
55079018500	Milwaukee County	TRUE
55079018600	Milwaukee County	TRUE
55079018700	Milwaukee County	TRUE
55079018800	Milwaukee County	TRUE
55079018900	Milwaukee County	TRUE
55079019100	Milwaukee County	TRUE
55079019400	Milwaukee County	TRUE
55079020000	Milwaukee County	TRUE
55079020100	Milwaukee County	TRUE
55079020200	Milwaukee County	TRUE
55079020300	Milwaukee County	TRUE
55079020400	Milwaukee County	TRUE
55079020500	Milwaukee County	TRUE
55079021200	Milwaukee County	TRUE
55079021300	Milwaukee County	TRUE
55079021400	Milwaukee County	TRUE
55079021600	Milwaukee County	TRUE
55079100200	Milwaukee County	TRUE
55079170200	Milwaukee County	TRUE
55079170500	Milwaukee County	TRUE
55079170600	Milwaukee County	TRUE
55079180300	Milwaukee County	TRUE
55079185400	Milwaukee County	TRUE
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55079185600	Milwaukee County	TRUE
55079185700	Milwaukee County	TRUE
55079185800	Milwaukee County	TRUE
55079185900	Milwaukee County	TRUE
55079186000	Milwaukee County	TRUE
55079186100	Milwaukee County	TRUE
55079186200	Milwaukee County	TRUE
55079186500	Milwaukee County	TRUE
55079186600	Milwaukee County	TRUE
55079186800	Milwaukee County	TRUE
55133202202	Waukesha County	TRUE
55133202700	Waukesha County	TRUE

Source: Climate and Economic Justice Screening Tool, 1.0 list of disadvantaged communities

COMMUNITY PARTNERS, EJTF MEMBERS, AND COORDINATING WORKGROUP MEMBERS

APPENDIX B

COMMUNITY PARTNERS

Common Ground
Ethnic and Diverse Business Coalition
Hmong American Friendship Association
Independence First
Milwaukee Urban League
Renew Environmental Public Health Advocates, Inc.
Southside Organizing Center
Urban Economic Development Association of Wisconsin

ENVIRONMENTAL JUSTICE TASK FORCE

Aloysius Nelson, *Chair* ..... Sigma Pi Phi (the Boule)
Yolanda Adams ..... Board of Education Member, Kenosha Unified School District
Huda Alkaff ..... Founder & Director, Wisconsin Green Muslims
Annabell Bustillos ..... Bilingual Outreach Advocate, BeLeaf Survivors
Ella Dunbar ..... Manager/Health, Wellness & Supportive Services, Social Development Commission, Milwaukee
Gina Green-Harris ..... Director, University of Wisconsin School of Medicine and Public Health Center for Community Engagement and Health Partnerships in Milwaukee
Brad Holz ..... Board Member, Independence First
Keith Martin ..... Engineering Specialist - Advanced 2, Wisconsin Department of Transportation
N. Lynnette McNeely ..... Legal Redress Chair, Waukesha County NAACP
Andrea Mendez Barrutia ..... Chapter Director for the new Techqueria Milwaukee Chapter, Co-Owner of Crismari LLC d/b/a MiVoz
Gina Sanchez Juarez ..... Director of Center for Financial Stability, La Casa de Esperanza
Jackie Schellinger ..... Indian Community Representative, Retired Judge
Theresa Schuerman ..... Walworth County Bilingual Migrant Worker Outreach
GeorgAnn Stinson ..... African American Chamber of Commerce of Greater Racine

CPRG COORDINATING WORKGROUP

Chris Anderson ..... Village of Shorewood
Gordie Bennett ..... Milwaukee County
Village President Kevin Buckley ..... Village of Whitefish Bay
Caity Carmody ..... Department of Administration
Kyle Caudill ..... Milwaukee County
Anna Christopherson ..... Village of Whitefish Bay
Matt Collins ..... Village of Whitefish Bay
Grant Helle ..... Milwaukee County
Tiffany Henry ..... Senator Baldwin's Office
Leah Hofer ..... Village of Bayside
Alex Joines ..... City of Milwaukee

Sean Kennedy ..... Wisconsin DNR
Micki Klappa-Sullivan ..... Milwaukee Metropolitan Sewerage District
Doug Koehler ..... City of Waukesha
Jack Kovnesky ..... City of West Allis
Scott Kroeger ..... City of Muskego
Alexis Laverdiere ..... City of Milwaukee
Jamie Ludovic ..... Washington County
Shaun Mueller ..... City of West Allis
Kevin Muhs ..... City of Milwaukee
Mayor Andrew Nerbun ..... City of Mequon
Chairwoman Nicholson ..... Milwaukee County
Andy Pederson ..... Village of Bayside
Chuck Pomerenke ..... City of Wauwatosa
Jordan Primakow ..... City of Milwaukee
Maria Redmond ..... Office of Sustainability and Energy Efficiency
Mayor Shawn Reilly ..... City of Waukesha
Pamela Ritger ..... City of Milwaukee
Katelynn Samuelsen ..... Department of Administration
Steve Schaer ..... City of West Allis
County Board Chair Jeffrey Schleif ..... Washington County
Patrick Schloss ..... City of West Allis
Scott Schmidt ..... Washington County
Erick Shambarger ..... City of Milwaukee
Dale Shaver ..... Waukesha County, Parks and Land Use
David Simpson ..... City of Wauwatosa
William Wehrley ..... City of Wauwatosa
Melissa Weiss ..... City of Wauwatosa
Jason Wittek ..... Ozaukee County
Claire Zautke ..... City of Milwaukee