



MEMORANDUM

To: Climate Committee
From: CMAP Staff
Date: Thursday, April 11, 2024
Subject: Regional Climate Action Planning
Purpose: Provide regional climate action planning background to inform Climate Committee discussion of the planning process.
Action Requested: Discussion

CMAP is engaged in a variety of climate mitigation projects in coordination with partners and supported by the U.S. Environmental Protection Agency and the Department of Energy's National Renewable Energy Laboratory. This memo summarizes ongoing and anticipated work on these initiatives to inform the discussion at the April Climate Committee meeting. CMAP is seeking Climate Committee input on the climate action planning process, including priority setting, stakeholder engagement, and critical research questions.

Overview of USEPA Climate Pollution Reduction Grant (CPRG) program

The Metropolitan Mayors Caucus (MMC) and Chicago Metropolitan Agency for Planning (CMAP) are partnering to update and expand existing regional climate mitigation plans to address greenhouse gas (GHG) emissions and establish GHG reduction measures throughout the Chicago Metropolitan Statistical Area (MSA), including parts of Illinois, Indiana, and Wisconsin. The work is supported by a Climate Pollution Reduction Grant (CPRG), a U.S. Environmental Protection Agency (USEPA) initiative to provide funding to states and metropolitan areas to develop and implement plans to reduce (GHG) emissions.

The first phase of CPRG requires participating regions to complete three planning deliverables. The first, is a **priority climate action plan (PCAP)** consisting of a focused list of near-term, high-priority, implementation ready measures to reduce GHG pollution. In March, MMC completed this [plan](#) with assistance from CMAP, Northwest Indiana Regional Planning Commission, and others. Coordination with the State of Illinois (IEPA) helped to inform both the region's and state's PCAP was critical in ensuring that the priorities were in alignment. The PCAP sets the stage for the competitive implementation grants discussed below.

The second deliverable is **comprehensive climate action plan (CCAP)** that addresses all significant GHG sources, sinks, and sectors; establishes near-term and long-term GHG emission reduction goals; and identifies strategies and measures to achieve those goals. CMAP will lead the CCAP process, which must be completed by July 2025. An overview of the planning process is described below. The third deliverable is a **status report** on implementation of CCAP GHG reduction strategies. CMAP will lead development of the status report which must be submitted by mid-2027.

The second phase of CPRG is \$4.3 billion in competitive implementation funding to states and local governments for measures included in the PCAP, overall GHG reduction and benefits of GHG reduction measures to low-income and disadvantaged communities, investment-ready policies, programs, and projects to reduce greenhouse gas emissions in the near term. While it did not submit an application for implementation funding, CMAP did convene a series of meetings with leaders and stakeholders from across our region and state to facilitate the sharing of mitigation priorities in a collaborative space. The goal of these discussions was to surface shared priorities, encourage joint applications and ensure the competitiveness of the region's application. The following applications from the CMAP region were submitted on April 1, 2024:

- **State of Illinois**, \$425 million: Building and industrial decarbonization, agriculture, medium- and heavy-duty vehicles
- **Regional Transit Authority**, \$375 million: Bus electrification of CTA and Pace, service-related Metra improvements
- **City of Chicago and Cook County with DuPage County**, \$197 million: Industrial and public sector building decarbonization; Waste reduction and composting
- **Fox Metro Water Reclamation and eight coalition members**, \$196 million: Wastewater and landfill biogas conversion to renewable natural gas
- **Kane and DuPage County**, \$114 million: Municipal facility and fleet decarbonization, Solar education and outreach, EV charging
- **Metropolitan Mayors Caucus**, \$37 million: Landscape equipment buybacks

Awards will be made later this year with funding starting in October 2024.

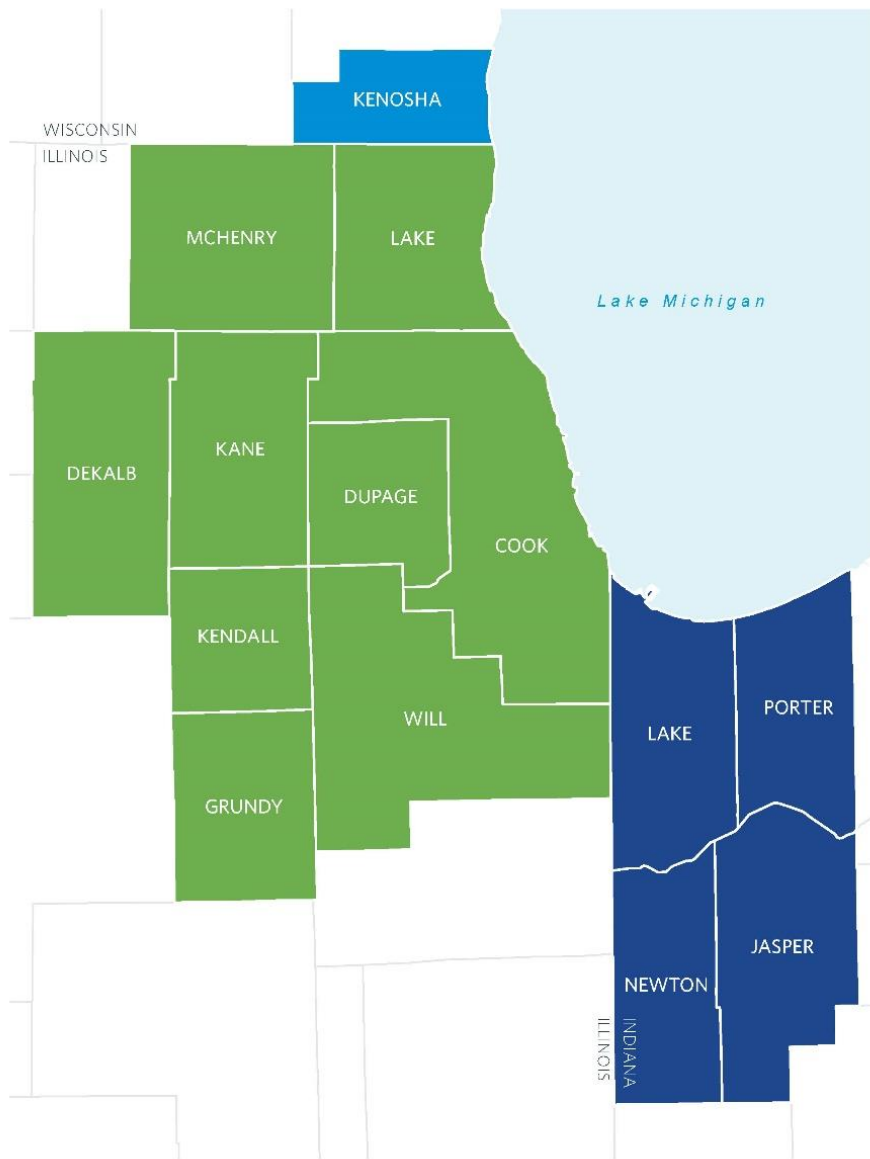
Comprehensive Climate Action Plan

CMAP will take the lead in the development of this second planning deliverable under the CPRG program. The CCAP needs to both quantify and lay out a strategy to address all significant GHG sources, sinks, and sectors. The overarching goal of this process is to define the steps needed for the Chicago MSA to achieve the national goals of 50-52 percent below 2005 levels by 2030 and net-zero emissions no later than 2050.ⁱ Given a study area that encompasses the MSA, the CCAP will cover a total of 14 counties, seven of which are beyond CMAP's jurisdiction (Figure 1). CMAP, in partnership with MMC, will work closely with the Northwest Indiana Regional Planning Commission (NIRPC) and look to build relationships throughout the MSA.

USEPA requires the CCAP to identify and quantify reduction measures, create a business-as-usual and plan implementation GHG scenarios, and establish near-term and long-term GHG emission reduction goals and targets.ⁱⁱ To do this, CMAP envisions a stakeholder engagement process that harnesses the expertise of implementors, subject matter experts, and leaders from impacted communities to identify and craft effective and equitable reduction strategies. The Priority Climate Action plan required the development of a GHG inventory for the Chicago MSA, which informs and helps to prioritize the CCAP's policy development process (Figure 2). To supplement this work, CMAP will develop "decarbonization briefs" for each of the major sectors analyzing current emissions, emissions reduction strategies and measures, implementation authority, and funding sources. The decarbonization briefs will cover the following sectors:

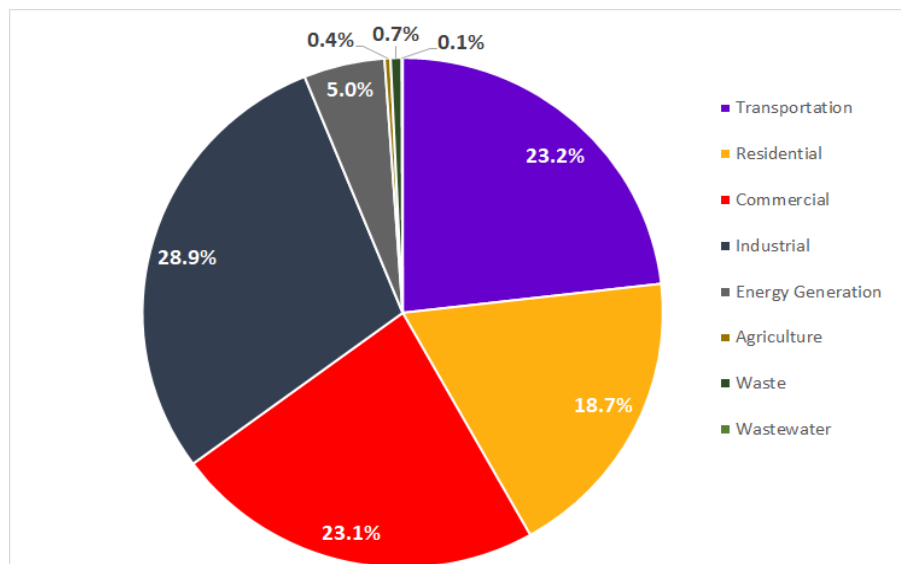
• Industry	• Electricity generation
• Transportation	• Commercial, residential, and institutional buildings
• Agriculture and working lands	• Natural lands and other sinks
• Water and wastewater	• Waste and materials management

Figure 1. Chicago MSA and study area for the CCAP



Source: CMAP, 2024.

Figure 2. Greenhouse gas emissions in the Chicago MSA region by sector, 2020



Source: CMAP, 2024.

USEPA requires an analysis of the co-benefits of the plan implementation scenarios, including quantifying the reductions from co-pollutants (NO_x, PM_{2.5}, etc.), and qualitative and quantitative analysis of benefits to low income and disadvantaged (LIDAC) communities as identified through the LIDAC engagement process. The Priority Climate Action Plan process required the identification of LIDAC communities using Climate and Economic Justice Screening Tool (CEJST) and USEPA's Environmental Justice Screening and Mapping Tool (EJScreen) (Figure 3). Approximately 40 percent of the region's total population lives in the identified area.

In addition, the CCAP must incorporate an analysis of anticipated workforce shortages that could prevent achieving the plan's goals and identify potential solutions and partners at the state, regional, and local level that are equipped to help address those challenges. MMC will lead this task and work with CMAP to incorporate the analysis results and recommendations into the CCAP.

Timeline

To deliver the CCAP to USEPA by July 28, 2025 as required, CMAP envisions a concentrated timeline and a significant push to engage stakeholders, develop policies, and measure potential GHG reductions and corresponding benefits (Figure 4).

Stakeholder engagement process

CCAP stakeholder engagement will be structured to strengthen the plan and improve its chances for implementation. To accomplish these goals, CMAP will implement an outreach approach that includes a steering committee, three working groups, and several topical workshops, among other initiatives.

The steering committee will include regional implementers, subject matter experts, and leaders from impacted communities across the 14-county Chicago MSA. The steering committee will guide the overall

process, review main deliverables, inform the final CCAP, and garner support for plan implementation following completion.

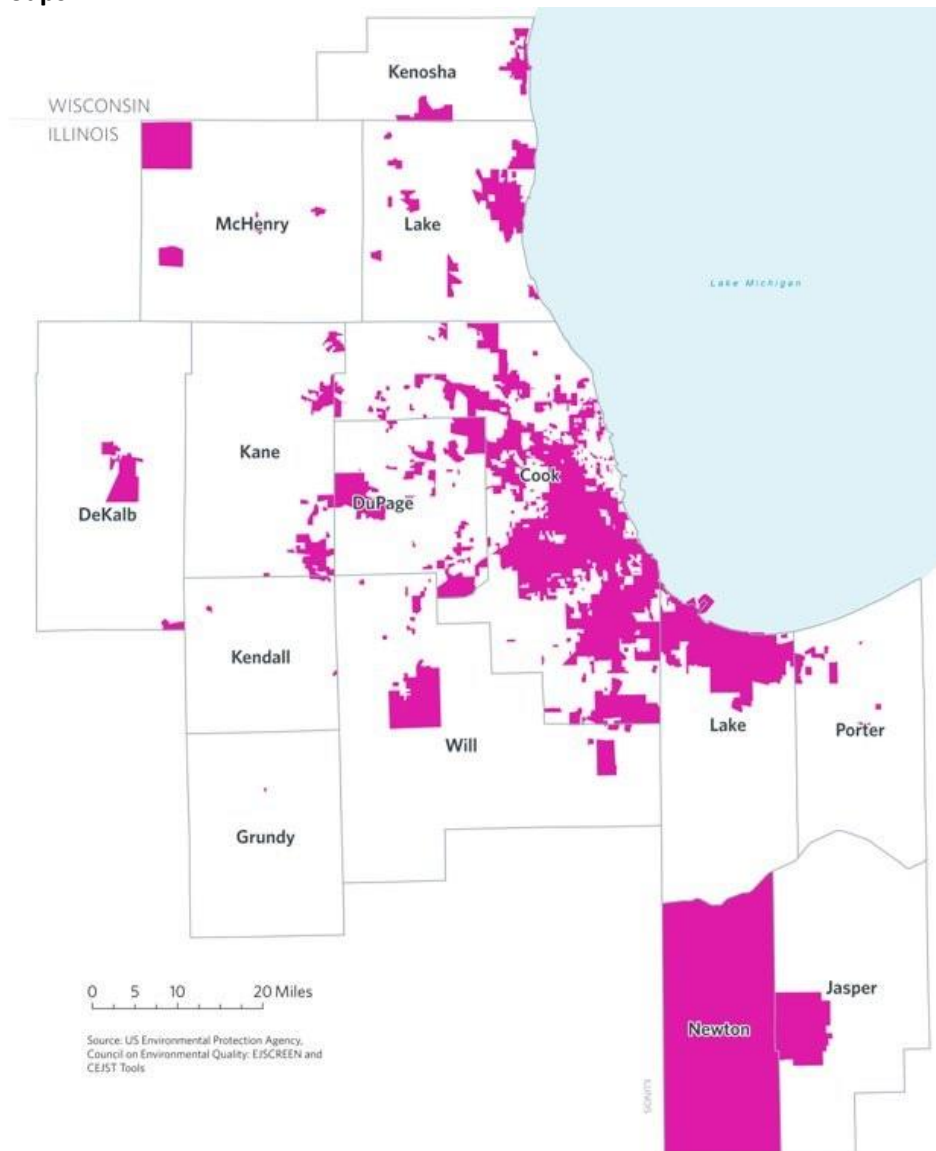
Working groups and workshops will focus on sector-specific strategy development and review, impact and benefits assessments, and plan implementation. These meetings will include sector implementers, impacted communities, advocates, and subject matter experts. The three working groups will focus on transportation, buildings, and industry and waste management. CMAP will also engage this Committee to provide focused review of reduction strategies in your respective areas of expertise and provide a lens to climate adaptation needs and synergies given the purview of this body. Topical workshops on agriculture, electricity generation, freight, and other areas as needed will help solicit regional expertise to craft the reduction strategies. CMAP staff will supplement these meetings with presentations and discussions to existing groups, include the MMC Environment Committee, NIRPC Environmental Management and Policy Committee, and others. As with the PCAP, MMC and CMAP will continue to coordinate and collaborate with the State of Illinois so as to minimize redundancies in outreach and maximize consistency in the analysis and conclusions of the respective plans.

A critical component of this work will be the engagement of populations who are disproportionately burdened by air pollution and climate change impacts (e.g., flooding and extreme heat) and could be negatively impacted by decarbonization solutions. CMAP, with the help of a specialized consultant, will design and execute a LIDAC engagement process to ensure the plan and planning process lead to equitable outcomes by centering community needs, concerns, and co-benefits. This strategy will be integrated within the overall CCAP stakeholder engagement process outlined above and will leverage the Community Alliance for Regional Equity, a group established by CMAP in 2022 to make the agency's engagement more equitable and inclusive of communities that are traditionally excluded from the planning process.

During the April Climate Committee meeting, CMAP will seek committee member input on the CCAP process on several topics, including:

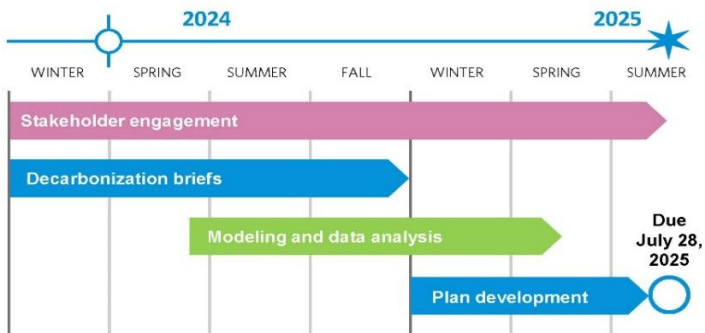
- Organizations, including public agencies, local governments, non-governmental organizations, community-based organizations, advocacy groups, and subject matter experts, to engage in the CCAP process.
- Partners that can expand CMAP's core transportation and land use partners to explore the full range of emissions sectors.
- Plans, policies, and programs to consider including in the CCAP as emissions reduction strategies.
- What groups or coalitions are regularly meeting that the CCAP team could access to seek their input on the plan.

Figure 3. Low-income and disadvantaged communities in the Chicago metropolitan statistical area, defined by CEJST and EJ Screen by census block groups



Source: CEJST, November 2022, and EJScreen, June 2023, via IRA Disadvantaged Communities Map.

Figure 4. CCAP phases and timeline



Transportation Emissions Reduction Scenarios

CMAP and its partners — ComEd and the Respiratory Health Association — received a \$500,000 award through the National Renewable Energy Laboratory’s Clean Energy to Communities (C2C) initiative. The award pairs the partners with Argonne and Oak Ridge National Laboratories to better understand the types and scale of action needed to foster a clean energy transition for the region's transportation system. Achieving net-zero emissions in the transportation sector will require a combination of strategies, including system-wide vehicle electrification (public and private cars, busses, and trucks), mode shift to lower-energy forms of transportation (such as walking, biking, and transit), and operational changes to improve and harness existing efficiencies in the system.

Historically, transportation and energy planners have worked in separate fields, but with vehicle electrification, the region needs to better understand the long-term needs and challenges of each system as it works toward a common goal of net-zero GHG emissions. This project seeks to better define not only the potential solutions but also their costs and benefits to allow for more informed decision-making as we develop and implement our climate action plan. Findings from this project will inform the CCAP and its subsequent Status Report.

During the April Climate Committee meeting, CMAP will seek committee member input on the C2C project, including:

- Priority strategies to explore using national laboratory models and analysis options.
- Organizations, including public agencies, local governments, non-governmental organizations, community-based organizations, advocacy groups, and subject matter experts, to engage in the process.

ⁱ <https://www.whitehouse.gov/briefing-room/statements-releases/2021/04/22/fact-sheet-president-biden-sets-2030-greenhouse-gas-pollution-reduction-target-aimed-at-creating-good-paying-union-jobs-and-securing-u-s-leadership-on-clean-energy-technologies/>

ⁱⁱ For more details on the required elements of the CCAP, see <https://www.epa.gov/inflation-reduction-act/about-cprg-planning-grant-information>