



MEMORANDUM

To: CMAP Regional Economy Committee

From: CMAP staff

Date: April 16, 2026

Subject: Update on the Comprehensive Climate Action Plan for Greater Chicago

Action Requested: Discussion

Purpose

The project team will update the Regional Economy Committee on the recently published [Comprehensive Climate Action Plan \(CCAP\) for Greater Chicago](#), funded by the U.S. Environmental Protection Agency's Climate Pollution Reduction Grant. The CCAP was created through a partnership between CMAP, the Metropolitan Mayors Caucus, and Northwestern Indiana Regional Planning Commission. It serves as the first regional framework to address all major greenhouse gas emissions across a 13-county area spanning Illinois, Indiana, and Wisconsin.¹

The planning effort was a 15+ month process that kicked off in May 2024. The team engaged with a steering committee and four working groups to seek feedback through the plan development process. The CCAP was submitted to USEPA in advance of the December 2025 deadline and published in March 2026.

At the April meeting, staff will give an overview of the CCAP, identifying the plan's study area, its emissions profile, and the future policy scenarios outlined in the plan. Staff will also highlight the plan's core actions that are central to reducing the Greater Chicago region's emissions. For more details on the plan, visit [CMAP's climate action plan webpage](#).

Below are key project milestones that occurred between May 2024 and December 2025 but will not be discussed at length during the April meeting. Following that are the plan's core actions.

Following the April meeting, the project team will be presenting the plan to other CMAP committees and stakeholders. The project team will also highlight key components of the plan in agency communications and is exploring how CMAP can best support plan implementation.

1. Emissions profile

CMAP staff updated the 2020 Greenhouse Gas Inventory² for the 13-county planning area.³ In 2020, the 13 counties produced approximately 152 million metric tons of carbon dioxide equivalent (MMT CO₂e) of GHG emissions (Figure 1).

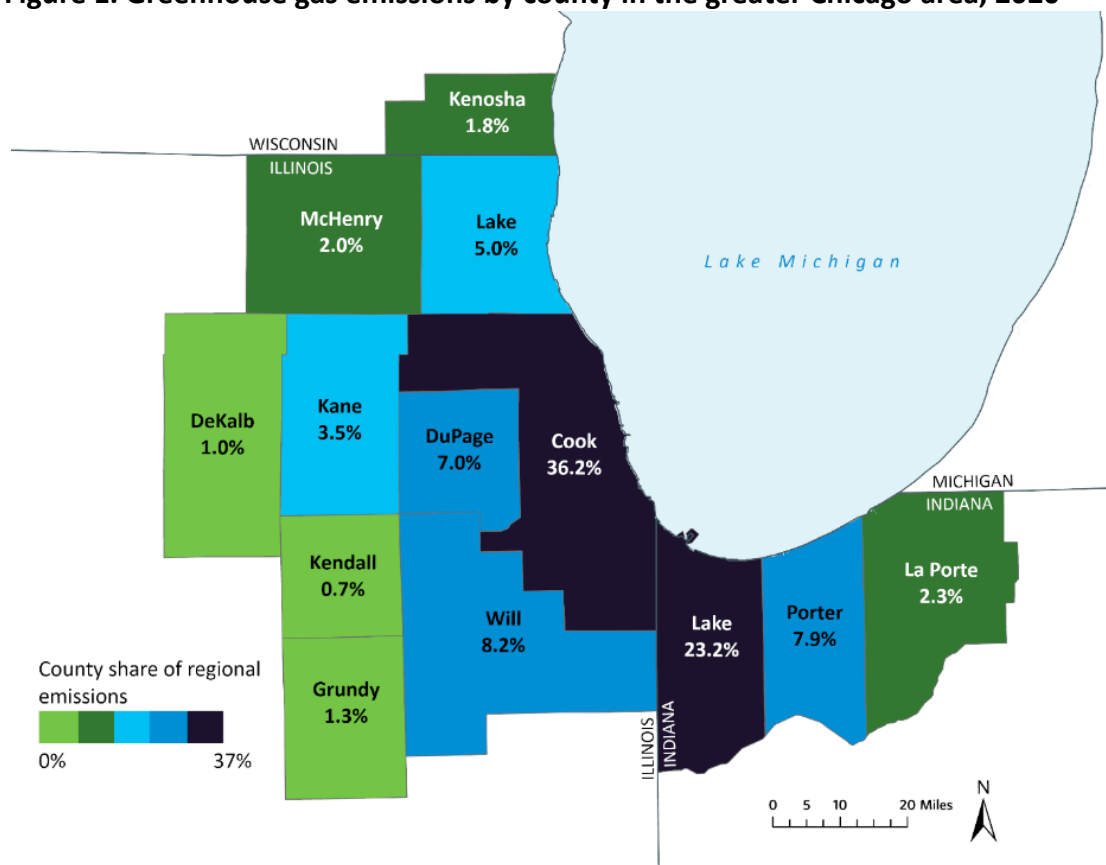
Most emissions come from three sectors:

- **Industry** (36%): reflecting the region's concentration of steelmaking, refining, and manufacturing.
- **Buildings** (35%): driven largely by fossil-fuel-based heating in homes, businesses, and institutions.
- **Transportation** (26%): primarily gasoline and diesel used for passenger and freight travel.

Smaller but important shares come from agriculture, waste, and water and wastewater systems, while trees and wetlands remove about 2 percent of total annual regional emissions through carbon sequestration.

Emissions vary significantly between counties. While Cook County produces the most total emissions, industrial counties in northwest Indiana have the highest emissions per person. This highlights how development patterns, transportation assets, and industry clusters shape the region's emissions landscape — and the need for strategies tailored to each county's unique profile. See the plan's *Chapter 2. GHG emissions and trends* for more information.

Figure 1. Greenhouse gas emissions by county in the greater Chicago area, 2020



Source: CMAP, 2025.

2. Economy-wide reduction targets

The CCAP Steering Committee confirmed the plan’s target to reduce gross greenhouse gas emissions 48 percent by 2035 and 86 percent by 2050 relative to 2005 levels.⁴ The plan uses economy-wide modeling to identify the reductions needed in each sector to achieve this regional target, recognizing that decarbonization potential varies across sectors (see Tables 1 and 2).

Table 1. Sector reduction targets for the 13-county region to achieve the plan’s overall reduction targets

Sector	Emissions (MMT CO ₂ e)				Reduction needed (from 2005)	
	2005	2020	2035	2050	2035	2050
Buildings	66.64	53.99	36.54	3.35	-45%	-95%
Transportation	56.05	39.57	21.77	4.89	-61%	-91%
Industry	65.15	55.95	39.36	15.14	-40%	-77%
Waste	1.54	0.96	0.66	0.70	-57%	-56%
Water and wastewater	-	1.70	1.10	0.57	-	-

Agriculture	2.13	2.14	1.56	1.56	-27%	-27%
Gross emissions	192.92	154.27	100.48	26.23	-48%	-86%

Note: 2005 water and wastewater emissions are included within the buildings and waste sectors due to limited data availability for these sources during that year.

Source: CMAP and E3, 2025.

Table 2. Emission offsets by natural carbon sequestration for the 13-county region

Sector	Emissions captured (MMT CO2e)				Increase in emissions offset	
	2005	2020	2035	2050	2035	2050
Natural carbon sequestration	3.57	2.74	4.15	6.25	16%	75%

Source: CMAP and E3, 2025.

3. Emissions modeling

The project team used E3’s Pathways model to create the future GHG emissions scenarios. Pathways is an economy-wide energy and greenhouse gas emissions accounting model designed to help policymakers evaluate strategies for decarbonization. It is not an optimization model; instead, it compares user-defined scenarios to show the impacts of different climate and energy policy choices.

For each reduction strategy, the team specified key assumptions that influence energy demand, such as electric vehicle adoption or building heating needs. The Pathways model then estimates annual energy use and greenhouse gas emissions across all major sectors, including residential and commercial buildings, industry, and transportation, among others.

With the guidance and expertise of CAP sector-specific working groups for transportation, buildings, and industry, as well as community working group and CMAP’s climate committee, the project team developed a series of emission reduction strategies to be included in the plan. These strategies were informed by recommendations from recent regional decarbonization efforts as well as national and state-level efforts and refined over the course of the project. For more information on this process, see the meeting materials with these groups on the project’s [webpage](#).

The project team then grouped GHG reduction strategies into three scenarios – the current policy scenario, the plan implementation scenario, and the state and local portion of the plan implementation scenario, as described in Section 1.4.⁵

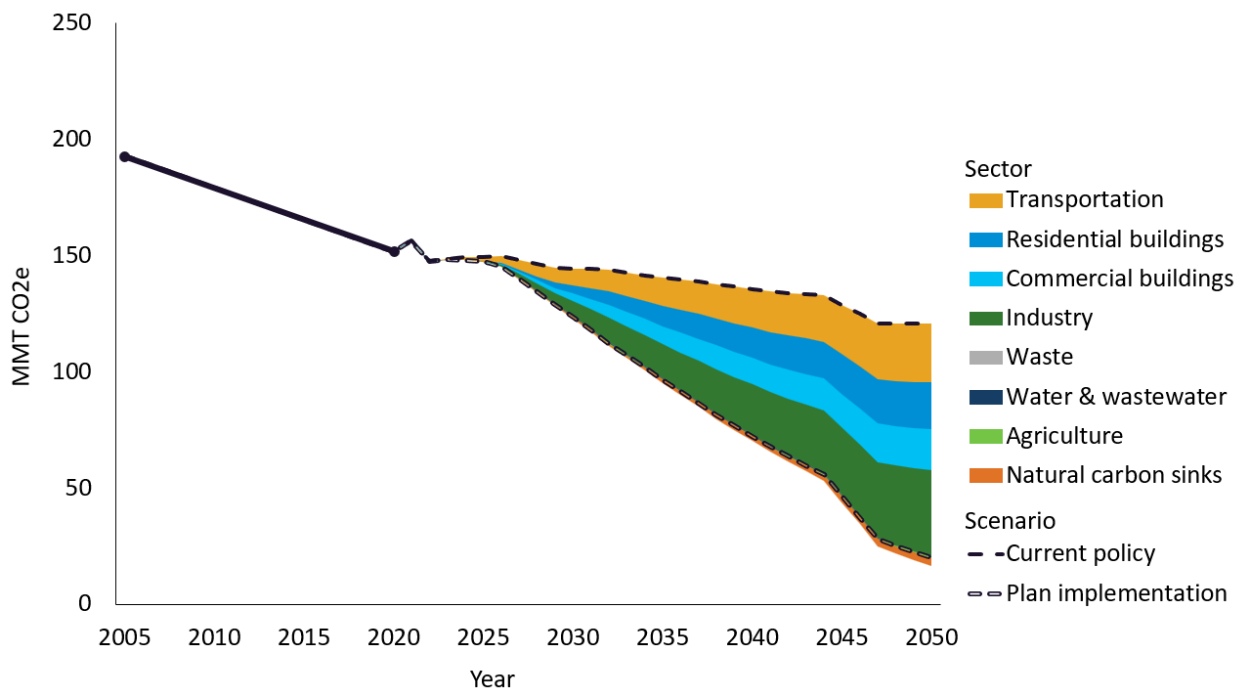
4. Future emissions scenarios

Three policy scenarios illustrate the range of emissions reductions achievable under different levels of policy ambition and coordination (Figures 2 and 3):

- **Current policy scenario:** Reflects existing federal and state policies — such as Illinois’ Climate and Equitable Jobs Act (CEJA) — and represents a business-as-usual trajectory, reducing emissions 26 percent by 2035 and 36 percent by 2050.
- **Plan implementation scenario:** Demonstrates that the region can meet its economywide GHG reduction target through full adoption of 30+ modeled strategies across all major emissions sectors, reaching 48 percent by 2035 and 86 percent by 2050.
- **State and local scenario:** Highlights the extent of reductions achievable under the plan implementation scenario that do not require new federal action, achieving a 58 percent reduction by 2050.

Together, these trajectories highlight both the urgency of acting now and the necessity of coordinating efforts across all scales of government. Deep emissions reductions are within reach but only if communities, states, and federal partners move forward together. See the plan’s *Chapter 3 The path forward* for more information.

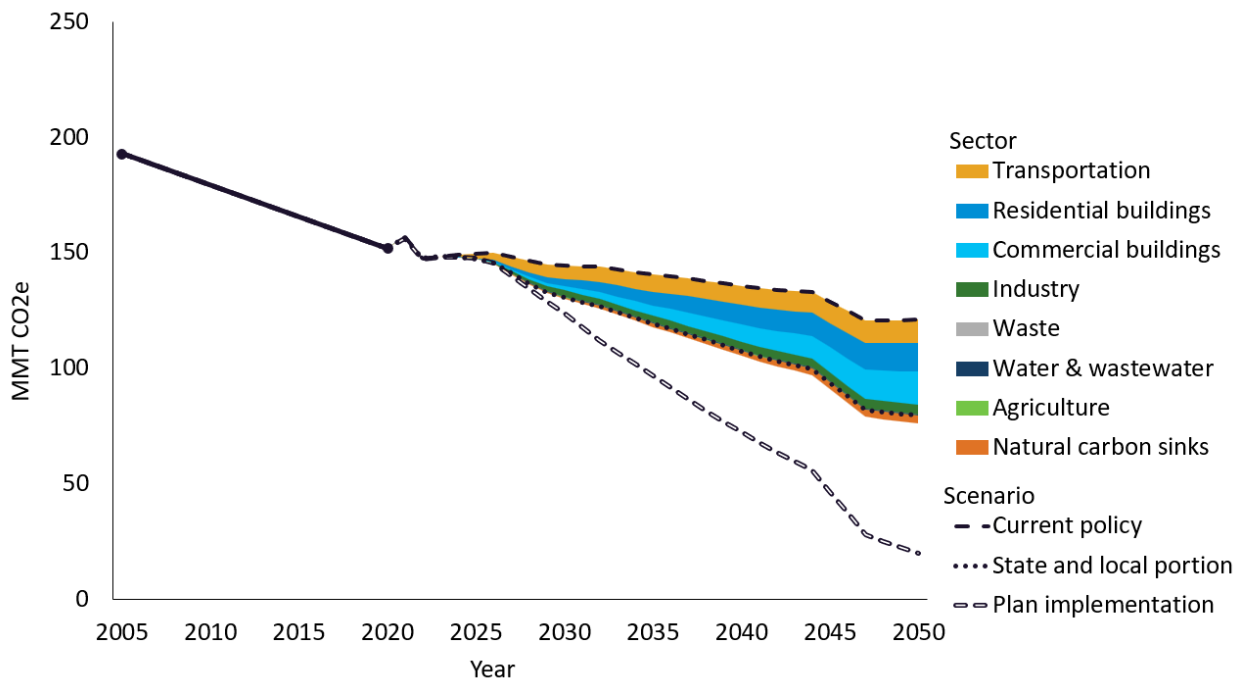
Figure 2. Plan implementation scenario emissions reductions by sector (2020-2050)



Source: CMAP and E3, 2025.

Note: Waste and agriculture emissions reductions are so small that colors do not appear in the chart.

Figure 3. State and local implementation scenario emissions reductions by sector (2020-2050)



Source: CMAP and E3, 2025.

5. Core actions from plan

The plan’s roadmap for reducing emissions can be summed up in six core actions:

- **Clean and modernize the grid** to deliver 100 percent clean electricity and support electrification
- **Improve building efficiency** through weatherization and performance standards
- **Switch to clean heat** through buildings transitioned off natural gas
- **Reimagine mobility** through car trip reductions and expanded travel options.
- **Electrify vehicles** across passenger, freight, and fleet vehicles
- **Decarbonize industry** through efficiency, electrification, and clean fuels

In addition to these core sector strategies, the region must recover and reuse resources to cut emissions and strengthen resilience. At the same time, restoring and stewarding natural systems is essential to long-term climate stability.

¹ Given that the study area does not coincide with a single governmental jurisdiction, the plan will not be formally adopted and will instead serve as a framework to inform planning efforts at the MPO and local government levels as well as needed action from the federal and state levels.

² Pandemic-related changes in transportation and energy consumption make 2020 an anomalous year for some datasets, but it is still a viable year for this analysis. The inventory is built using modeled and reported data from

various time scales and geographies, which reduces the impacts of short-term fluctuations, such as those experienced in 2020. The inventory results are comparable to past efforts to study emissions in the region.

³ In November 2024, the 2020 Greenhouse Gas Inventory was updated to incorporate state-specific eGRID emission factors for quantifying the GHG impacts of electricity consumption. These updated factors significantly impacted emissions in the residential, commercial, and industrial building subsectors. Illinois counties experienced a decrease in emissions due to a lower emissions factor, while Indiana and Wisconsin saw increased emissions due to a more carbon-intensive emissions factor.

⁴ To meet the grant requirements, the plan needed to present emissions reductions relative to 2005 levels, requiring the development of a 2005 baseline inventory. CMAP used USEPA's State Inventory Tool to extract emissions data, for the three states included in this plan, and then applied county level shares from the plan inventory to estimate 2005 emissions for the greater Chicago area.

⁵ Not all strategies included in the plan could be included in the modeling. See the plan's Appendix C for more details on the GHG reduction quantification methodology and Appendix D for the complete list of modeled strategies.