

COLUMBUS[★] CLIMATE ACTION PLAN PROGRESS REPORT 2024



SUSTAINABLE
COLUMBUS[★]

ANDREW J. GINTHER, MAYOR



About the Columbus Climate Action Plan

The Columbus Climate Action Plan (CAP) commits Columbus to a goal for carbon neutrality by 2050 with a 45% reduction by 2030. The CAP is a living document to accommodate a changing community and the latest science.

Tracking Progress

This section provides an overview of the latest greenhouse gas emissions data for Columbus and outlines the strategic progress towards the Climate Action Plan priorities that drive reductions.

Emissions Target Progress

The City of Columbus calculates its GHG emissions annually. The 2022 Greenhouse Gas Inventory shows total GHG emissions across Columbus have remained 6.5% below 2013 baseline levels (**Table 1**), despite a nearly 13% population growth during the same period. **Figure 1** illustrates Columbus' historical GHG emissions alongside its future reduction targets.

Sector	Percent Change in Total Emissions 2013 - 2022
Residential Energy	- 16.5%
Commercial & Industrial Energy Combined	- 34.6%
Transportation	+ 47.3%
Solid Waste	+ 32.9%
Fugitive Emissions	+ 37.2%
Water/Wastewater	- 33%
Total Emissions	-6.5%

Table 1. Findings from the 2022 Columbus Greenhouse Gas Inventory Report for community-scale emissions.

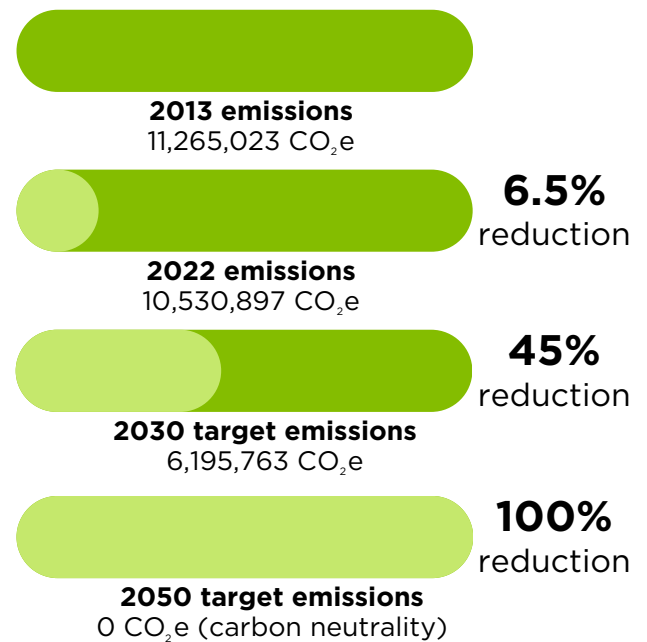



Figure 1. Metric tons of CO₂ equivalent (CO₂e) for Columbus in 2013 and 2022 and targets for 2030 and 2050.

Between 2013 and 2022, Columbus reduced annual emissions by **734,126** metric tons of carbon dioxide equivalent (CO₂e)

This is equivalent to CO₂ emissions from...


1.7 million
barrels of
oil consumed

OR


95,737
homes' energy
use for one year

Climate Action Plan Target Progress

The Climate Action Plan has 32 actions each with their own targets. Targets are set for 2025, 2030, and 2050 to achieve carbon neutrality by 2050. The 2025 targets are strategic initiatives and projects that set the stage for continued progress toward the longer-term emission reduction goals. The City is working to standardize reporting on all targets and their connection to emissions reductions. This progress update outlines the near-term targets and the work remaining before 2025.

5

Sections

32

Actions

The Columbus Climate Action Plan is organized into five sections, each outlining strategies, actions, and targets aimed at reducing greenhouse gas emissions, engaging residents, and enhancing community resilience. The Columbus CAP Work Groups correspond to these sections, facilitating stakeholder engagement across various community sectors, sharing information, and ensuring accountability in achieving the plan's goals.



CLIMATE SOLUTIONS: THE COLUMBUS WAY



Climate solutions require collaboration from diverse stakeholders across the public, non-profit, and private sectors. This section outlines the economic and social strategies the City is employing to equitably reach carbon neutrality. There are three targets for 2025 in this section.

Increase annual sustainable development funding



Action
2.2



Target
Establish a green bank



Status
Complete

The Columbus Region Green Fund was officially launched in 2023, providing solar financing for non-profits and affordable housing developments. The Fund committed approximately \$3.6 million to capitalize its first four solar projects at Bridgeway Academy, Northwest Library, Corban Commons, and Stratford East. These will reduce electricity costs by about 20% for the first 20 years, with free power for the remainder of the arrays' 35-40 year lifespan. The Fund has identified dozens more shovel-ready projects for financing.

Develop a regional adaptive management strategy



Action
3.1



Target
Prioritize regional adaptation strategies outlined



Status
In Process

A crosswalk analysis of existing local and regional plans and frameworks helped identify common themes and provided a roadmap for how to create a regional adaptation plan. The 2023 Franklin County Hazard Mitigation Plan and the 2025 Central Ohio Climate Action Plan are important steps toward the completion of this work.

Ambition 2025



Action
3.3



Target
Outline 7% increase in GHG modeling reduction by 2025



Status
In Process

The city seeks 7% additional emissions reductions not addressed by other climate actions. The Central Ohio Climate Action Plan process by July of 2025 and the 2025 Columbus CAP Update are planned to find and strategize for these additional reductions.

SUSTAINABLE NEIGHBORHOODS



To impart equity and environmental justice, a strong focus on neighborhoods is critical. This section is focused on strategies that support a healthy and resilient community, implement land use planning strategies for healthy ecosystems, and prepare for warmer and wetter seasons. There are six targets for 2025 in this section.

Establish coordinated network of resilience hubs



Action
4.1



Target
Develop an implementation plan for priority resilience hub locations



Status
In Process

This target is aimed at increasing the number of neighborhood-based resilience hubs to increase community resilience in response to emergency events and climate change. The City of Columbus is working with the Human Resources Chamber on a proposal to convene up to eight workshops of community-based organizations through January 2025 to identify climate risks and suitable pre-existing entities for resilience hub locations and create a priority implementation plan by June 2025.

Establish regional emergency alert system for climate hazards



Action
4.2



Target
Implement a regional alert system for climate hazards



Status
In Process

Franklin County Emergency Management and Homeland Security coordinates and prepares for all hazards, recovery efforts, and preparation. The Everbridge alert system helps deliver messages during critical events to include climate and disaster alerts, community preparedness. Columbus is confirming that systems are sufficient.

Increase development density



Action
5.1



Target
Establish vacant property redevelopment targets



Status
Re-working

This action was originally envisioned as a necessary intermediate step to pursue 5.1 2030 goals to increase development density. After research and evaluation, the City has determined that this step is not needed to pursue zoning code updates (Zone In) and transit initiatives (LinkUS) that will be the main pathways through which the City's density goals are pursued.

Implement water adaptation strategies



Action
5.4



Target
Implement short-term
Sustaining Scioto strategies



Status
Complete

The short-term goals under the Sustaining Scioto project have been completed ahead of its 2025 deadline. This safeguards the water resources of the Scioto River basin, ensuring sustainable water quality and quantity for the region's future. The Ohio EPA is currently conducting a regional water study to support the development of Sustaining Scioto mid-term goals.

Assess and protect assets from the impacts of climate change



Action
6.1



Target
Complete physical vulnerability
assessment by 2025



Status
In
Process

Each division within the Department of Public Utilities prioritized a category of utility infrastructure to be mapped against climate projections and the US EPA's Social Vulnerability Index. This map, and future analytical tools, will provide a framework for assessing and prioritizing future capital projects in areas of the City most vulnerable to climate change.

Evaluate microgrid + storage projects



Action
6.3



Target
Complete a microgrid and
energy prioritization study by
2025



Status
In
Process

Sustainable Columbus has contracted with GoSustainable for Phase 1 to evaluate microgrid feasibility on the Division of Power grid. To address the remainder of the city served by AEP Ohio, Sustainable Columbus applied for funding and technical assistance from the US Department of Energy's National Renewable Energy Laboratory (NREL) to complete a parallel Phase 1 study. The proposal includes partnerships with IMPACT Community Action, Age-Friendly Columbus, and Franklin County.

BUILDINGS



Residential and Commercial energy combine to make buildings in the City of Columbus the largest source of greenhouse gas emissions. This section is focused on increasing renewable energy, increasing building efficiency and adopting net zero and resilient building standards. There are three targets for 2025 in this section.

Increase residential on-site solar



Action
7.1



Target
Community solar plan



Status
In Process

A community solar plan is another way for residents to benefit from solar projects and increase residential use of clean, renewable energy. The City of Columbus joined two successful applications for the Solar for All grant opportunity. Using an expected subaward, Columbus, through its municipal power provider, plans to construct a 5 MW solar array to serve as a subscription-based community solar facility. Subscribers through the Division of Power will be eligible for a 20% discount on their power, which will be 100% local renewable energy.

Prototype zero carbon buildings



Action
9.1



Target
Adopt municipal zero carbon design standards



Status
In Process

The terminology has been updated from “zero-carbon” to “net zero energy.” The New Buildings Institute and Buildings Work Group have developed a checklist to utilize during the municipal design process. A pilot phase is currently underway to gather feedback through December 2024. Following this phase the guidelines will be adopted through either an executive order or an ordinance.

Adopt resilient standards



Action
9.2



Target
Develop and pilot resilient design checklist



Status
In Process

The Buildings Work Group is reviewing a draft Resilient Design Checklist. The checklist emphasizes the importance of initial vulnerability assessments based on current and future climate projections, community engagement, and criticality evaluations to ensure that resilient design strategies are effectively tailored to the specific needs of the project and community.

TRANSPORTATION



Transportation is the largest single sector contributing to emissions in Columbus. This section outlines ways to reduce emissions from the transportation sector by supporting carbon-free vehicles and an equitable mode shift to reduce the need for personal vehicles where possible. There are two targets for 2025 in this section.

Increase private zero emission vehicle adoption



Action
10.1



Target

Equitable EV charging plan developed



Status

In Process

The city has undertaken a technical analysis to identify underserved neighborhoods with potential demand for public charging infrastructure. A second application to the Charging and Fueling Infrastructure Grant Program is underway. An Equitable Curbside Charging Program will be a key component of the implementation of the grant.

Increase private zero emission vehicle adoption



Action
10.1



Target

EV ordinance implemented



Status

Complete

City Council approved the EV Readiness Ordinance in July of 2022 which went into effect on January 1st, 2024. This ordinance aims to ensure that future developments are equipped to support the transition to electric vehicles, which is crucial for meeting our transportation targets for 2030 and 2050. The City will reconvene stakeholders in 2028 to ensure charging needs are being met.

The City has partnered with COTA and others on a regional growth initiative, and in 2024 LinkUS, Columbus's plan to expand bus and active transportation options in the city and near surrounding areas, is on the November ballot. The City is also finalizing Bike Plus, a bikeways and micromobility plan to make biking and walking safer.

WASTE



As the City of Columbus grows, so does its waste. Contributions to the landfill can create methane, a greenhouse gas more potent than CO₂. However, material diversions are possible to prevent these emissions. While there are no 2025 targets in the Waste Section of the CAP, significant strides have been made in diverting waste from the landfill with new and improved programs.



Residential curbside recycling

The City expanded curbside recycling collection from biweekly to weekly, increasing the diversion of recyclable materials from the landfill. A citywide residential education campaign accompanied this change, providing information and encouraging proper recycling practices.



Food waste drop off sites

Three food waste drop-off sites opened in 2023 at Columbus Recreation and Parks locations in northwest Columbus, the West Side, and the South Side. At no cost, residents may sustainably dispose of their food scraps for composting at the locations' outdoor collection containers. More drop-off sites will open in the summer of 2024.



Waste and reuse convenience centers

The drive-through, no-cost service for Columbus residents accepts a variety of items for recycling or reuse—food scraps, recyclables, household trash, bulk items and electronics, bicycles, and furniture and clothing in good condition. Drop-off collection of seasonal items like pumpkins and Christmas trees for composting is also offered. A second Refuse Collection Waste and Reuse Convenience Center will open in the summer of 2024 at Refuse Collection's Georgesville Road station.





Looking Forward

The first update of the Columbus Climate Action Plan, the next progress report, the planned completion of 2025 targets, and the release of the Central Ohio Climate Action Plan through the Climate Pollution Reduction Grant will occur in 2025.

Acknowledgements

The City of Columbus Climate Action Plan is a community-wide document, and its progress is made possible through the efforts of all its people. Special thanks go to the Columbus Climate Action Plan Work Group Chairs and members, city staff from every department, and external partners such as Mid-Ohio Regional Planning Commission (MORPC), The Solid Waste Authority of Central Ohio (SWACO), Central Ohio Transit Authority (COTA), and Smart Columbus.