

**MILWAUKEE COUNTY
INTER-OFFICE COMMUNICATION**

Date: December 27, 2024

To: Marcelia Nicholson, Chairwoman, Milwaukee County Board of Supervisors

From: Grant Helle, Director – Office of Sustainability, Department of Administrative Services, Facilities Management Division

Subject: WY062502 Climate Action 2050 Plan Update

File Type: Informational Report

This informational report provides updates and a draft document regarding Milwaukee County's strategic plan to achieve carbon neutrality in county facilities and operations by 2050 – hereafter referred to as the 'Climate Action 2050 Plan', or 'CA50 Plan.'

POLICY

File No. 21-389 commits Milwaukee County operations to become carbon neutral by 2050 and requests the Sustainability Director to develop and administer a strategic plan to achieve carbon neutrality in Milwaukee County facilities and operations by 2050.

File No. 23-485 requests that the Office of Sustainability, Department of Administrative Services develop criteria to evaluate the contribution of capital projects to Milwaukee County's carbon neutrality policy and strategic plan.

File No. 24-652 requests that the Department of Administrative Services – Office of Sustainability and Office of Strategy, Budget and Performance – Project Management Office to collaborate with the City of Milwaukee and other applicable entities to apply for, and accept if awarded, grants to help effectuate climate action goals.

REPORT

This informational report contains the following sections:

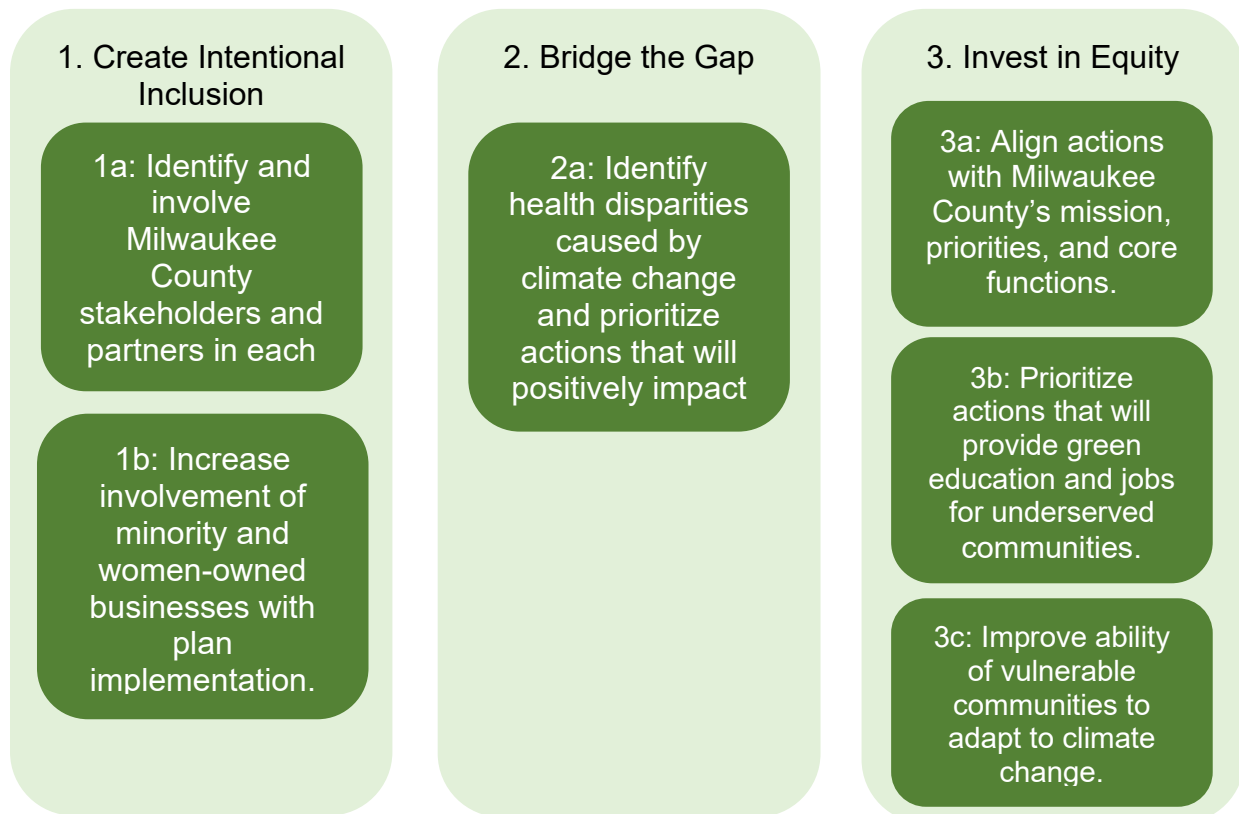
1. Background
2. Climate Action Planning Updates
3. Plan Completion
4. Risks to CA50 Planning and Implementation
5. Next Steps

1. BACKGROUND

Climate action planning for Milwaukee County is being guided by Milwaukee County's Sustainability Task Force (STF) and coordinated by the Office of Sustainability with support from consulting firm McKinstry. Formed in 2021 by the Office of the County Executive, the STF is chaired by the Sustainability Director and consists of staff and administrators representing 10 county departments. More information about the task force, including its membership and public meetings, is available through the County Legislative Information Center¹.

In August 2021, the STF published "**Climate Action 2050 – Achieving Net Zero Carbon Emissions While Advancing Equity, Justice, & Community Resilience**" (*CA50 Framework*²). This report is the framework for developing and administering a strategic carbon neutrality plan for Milwaukee County and includes the **Guiding Principles for the Climate Action 2050 Plan** (See *Figure 1.*), which align CA50 planning to the county's vision and strategic focus areas.

Figure 1. Guiding Principles for the Climate Action 2050 Plan³



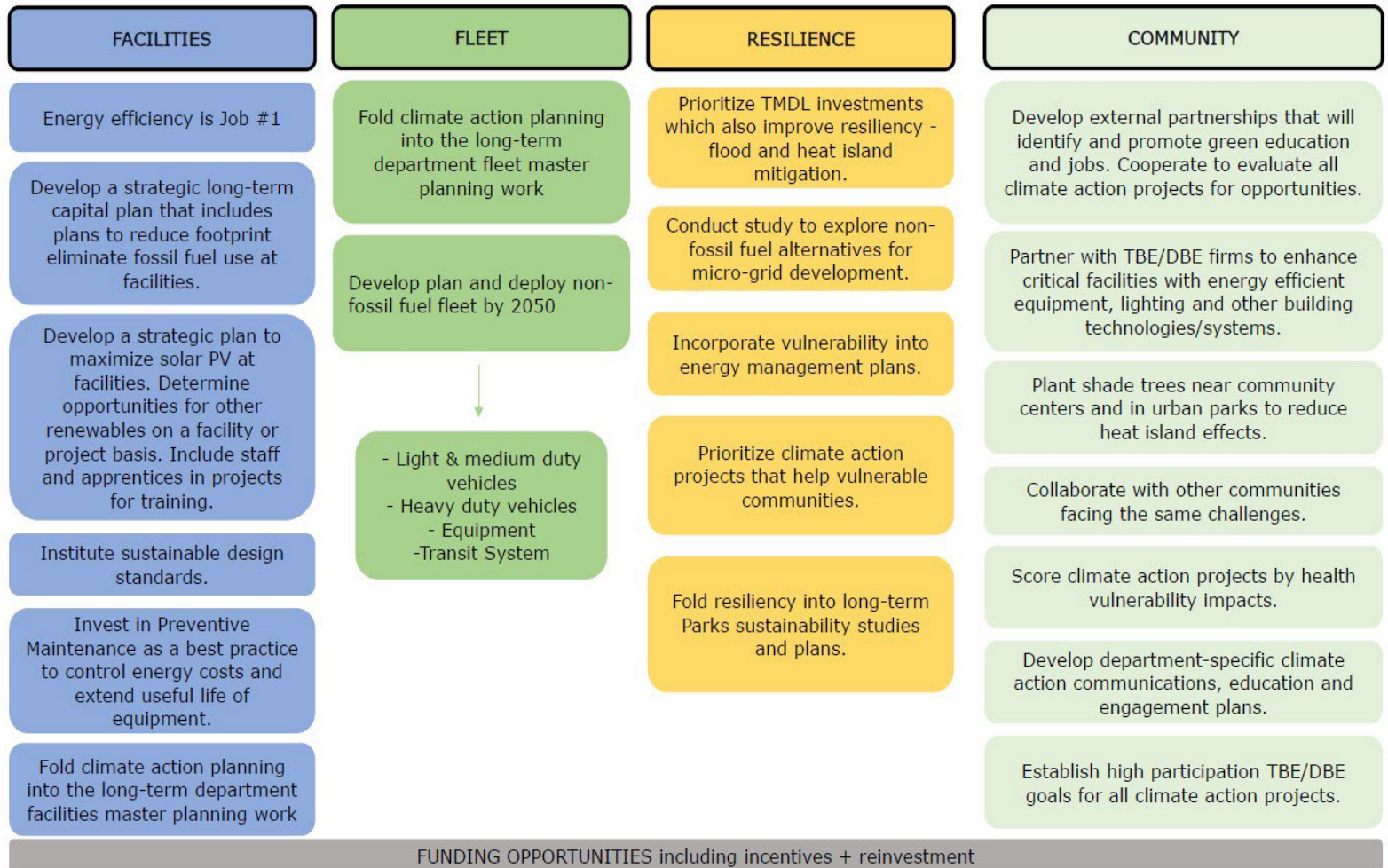
¹ <https://milwaukeecounty.legistar.com/DepartmentDetail.aspx?ID=45502&GUID=27A7D063-47A7-4DF4-B9ED-6ECD2241041E>.

² <https://milwaukeecounty.legistar.com/LegislationDetail.aspx?ID=5127520&GUID=A81EF9E0-BA24-49C5-925F-4572D7BC2019>

³ Page 3 of the corresponding report outlines the Guiding Principles for the Climate Action 2050 Plan: [Milwaukee County - File #: 24-762](#)

In September 2022, the Office of Sustainability (OS) kicked off development of the Climate Action 2050 Plan with the STF. An engagement strategy that included 10 county departments plus community organizations and public input was used to develop the Milwaukee County Climate Action Strategic Plan (See *Figure 2.*). This strategic plan was presented to the County Board in September of 2024 as an informational report, [File No. 24-762](#).

Figure 2. Milwaukee County Climate Action Strategic Plan



Since September, the Office of Sustainability has worked to develop the **Climate Action Roadmap or 'Roadmap'**, which intends to outline the specific projects required to activate these strategies and provide the path to carbon neutrality by 2050. Activities, progress as of 12/27/2024 and proposed next steps are detailed in below sections.

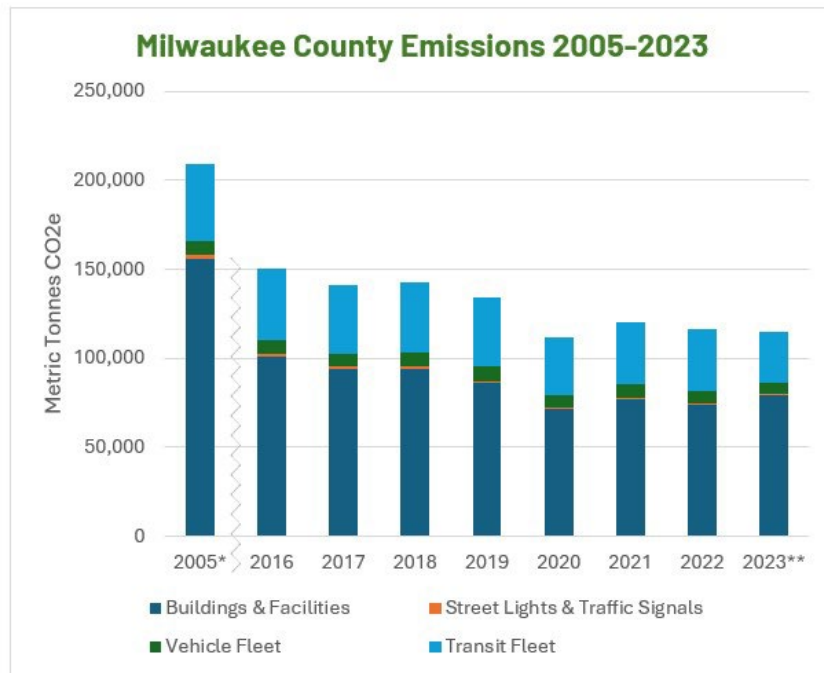
2. CLIMATE ACTION PLANNING UPDATES

The Office of Sustainability has now engaged consultants McKinstry to assist with the further development of the Milwaukee County Climate Action Plan. In total, the CA50 Plan will include the Guiding Principles, the County and Department Climate Action Strategic Plans, and the Climate Action Roadmap. Current efforts are focused on detailed data collection and analysis, and working with stakeholders to develop the actionable list of projects which will form the Roadmap.

Greenhouse Gas Emissions Breakdown

The below chart (See *Figure 3.*) indicates that while Milwaukee County has been reducing its operational footprint, we still have a long way to go. *Figure 4* further details Milwaukee County emissions by energy type and department for 2023. As can be seen in the 'County Emissions by Department 2023' chart, seven county departments share measurable contributions to operational emissions. This reiterates the importance of a collaborative, county-wide approach to emissions reduction.

Figure 3. Milwaukee County Operational Emissions 2005 – 2023⁴

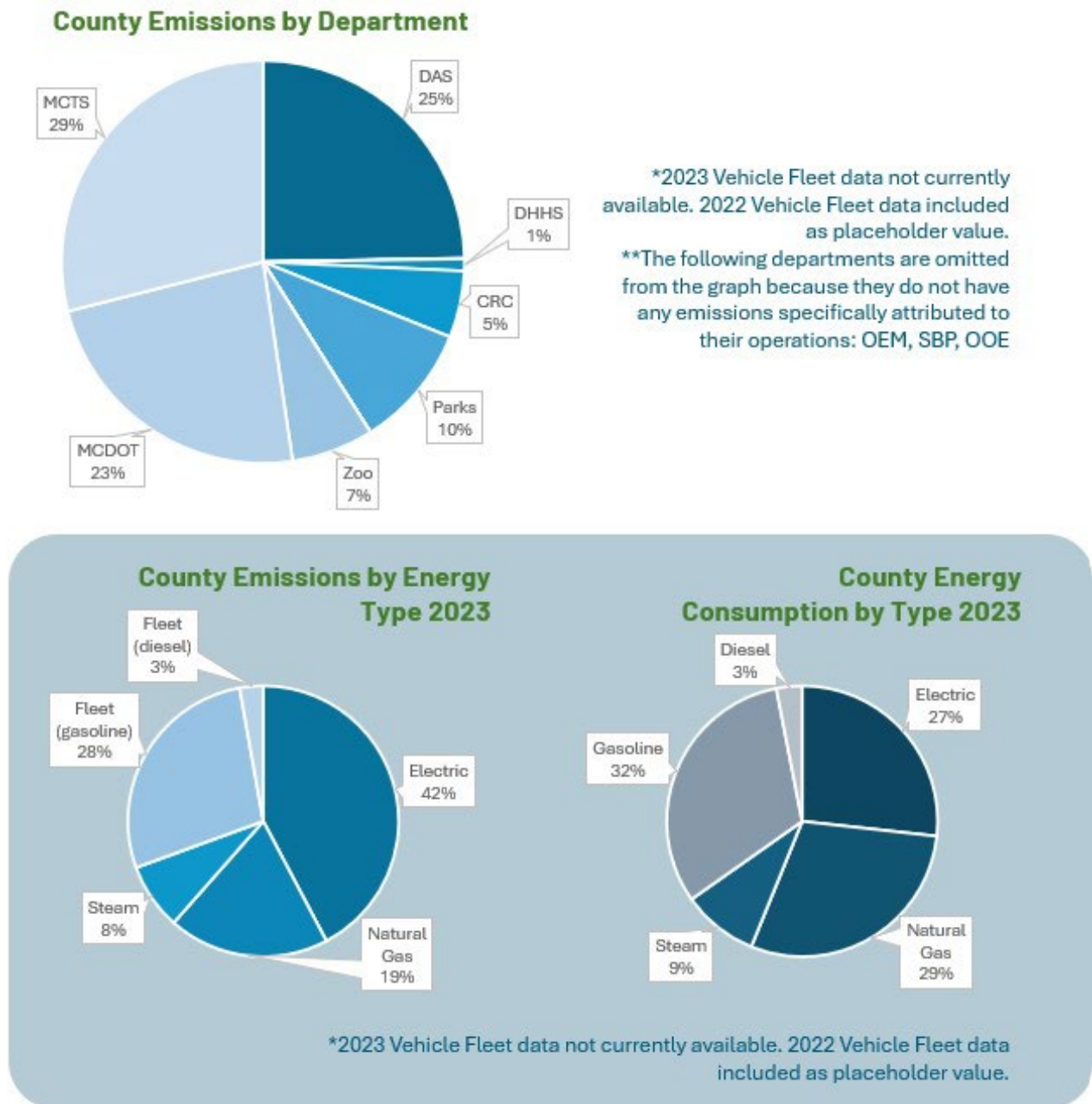


*2005 serves as the baseline for Milwaukee County's Emissions Reduction Goal. Emissions values for years 2005 & 2016–2022 are provided from the County's ICLEI ClearPath inventories.

**2023 Vehicle Fleet data not currently available. Modeled using 2022 Vehicle Fleet data as a placeholder value.

⁴ See Appendix A – McKinstry Draft Climate Action 2050 Plan for additional detail.

Figure 4. Milwaukee County Operational Emissions Breakdown 2023⁵



⁵ See Appendix A – McKinstry Draft Climate Action 2050 Plan for additional detail.

Engagement Strategies

In order to develop climate action strategies and plan, we have taken a two-pronged approach to engagement that includes both internal and external stakeholders. Internal stakeholders include county leadership and all county operating departments, external stakeholders include various commissions and the community at-large. Previous efforts to-date have been summarized in previous documents including the *Vulnerability Assessment Report*⁶, *Community Workshop Notes*⁷, and *Community Engagement Tracker*⁸.

Ongoing and upcoming efforts to engage all of our internal and external stakeholders at an even greater level are being developed in collaboration with our consultants McKinstry, the STF, and the Office of Equity. Early 2025 engagement will include:

- Cross-Departmental Communication- Press Release
- Community Listening Session(s)
- County Days / Lunch and Learn Event(s)

Department Strategy Alignment

OS, McKinstry and the STF have continued to make progress on the CA50 Plan. Efforts are again focused on meeting with representatives from all Milwaukee County departments with the goal to develop climate action project plans that align with the County Climate Action Strategic Plan, the department's strategic priorities, and CA50 Guiding Principles.

The Climate Action 2050 Roadmap will include specific sections or plans for each Milwaukee County Department. Each will include the following:

- Department Overview: This includes a breakdown of divisions, summary of operations/services provided and a look at the department's strategic plans and priorities.
- Facilities Overview: This includes a table detailing the number of facilities operated by the department with a total square footage, average energy use intensity (EUI) by building group, and an EUI goal by building group.
- Fleet and Equipment Overview: This includes a table detailing the type and number of fossil-fuel vehicles and equipment items operated by the department with a total energy use estimates by type.
- Greenhouse Gas Breakdown: This includes a breakdown of how each department's operations contribute to County-wide emissions. (*See Figure 5.*) for example.

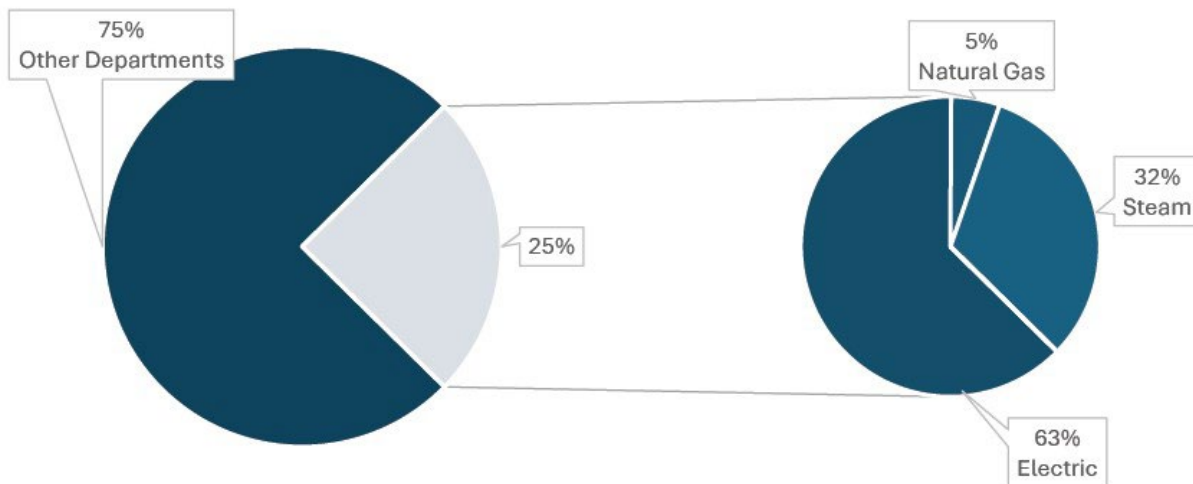
⁶ In April 2024, the Office of Sustainability shared the Vulnerability Assessment Survey Results with the County Board – see [File No. 23-529](#).

⁷ In December 2023, the Office of Sustainability shared the May 2023 Community Workshop Notes with the County Board – see [File No. 23-986](#).

⁸ In April 2024, the Office of Sustainability shared a Community Engagement To Date Tracker with the County Board – see [File No. 23-529](#).

- Overview of Recommended Projects: Reference the following section for further details on recommended emissions reduction projects by department.
- GHG Reduction Waterfall: This is a visualization of the stepped approach necessary for each county department to make measurable emissions reductions.
- Project Financials: General cost-estimating to gain an understanding of the financial impacts of project implementation
- Project Charters: The Climate Action 2050 Plan will include project charter template(s) to assist department staff with relevant information that will be necessary when developing project charters for capital budgeting in future years.

Figure 5. Administrative Services (DAS) Emissions Breakdown⁹



Approach to Decarbonization

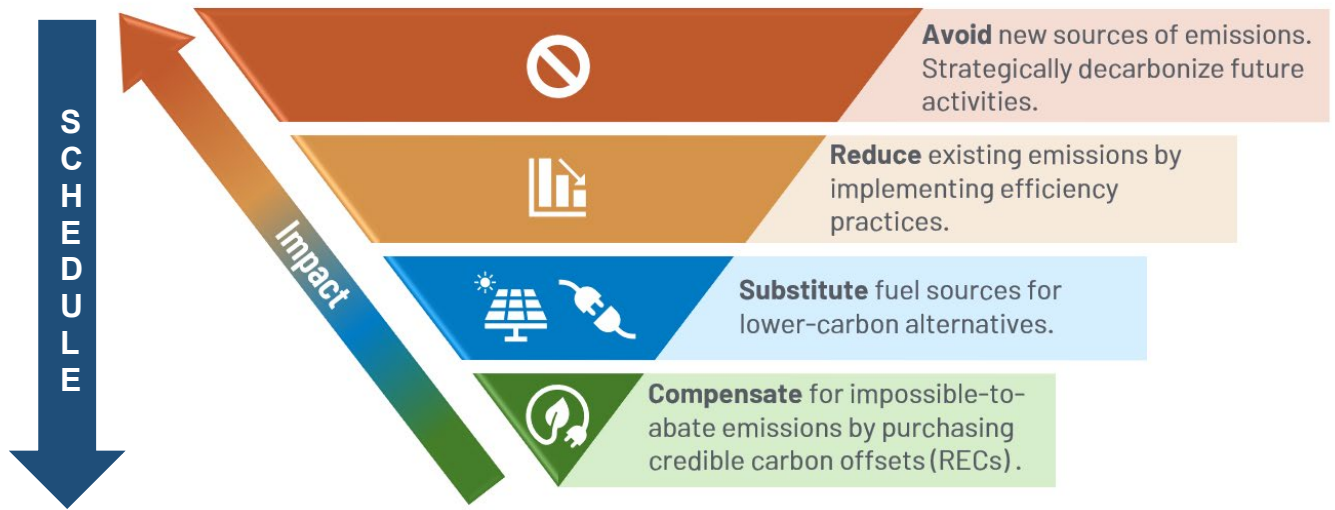
As outlined in the Draft Climate Action 2050 Plan¹⁰, a well calculated and scheduled process is necessary to achieve ambitious carbon neutrality goals. The approach which Milwaukee County must take should be impactful, actionable, and pragmatic. Milwaukee County must first prioritize projects that have the greatest mitigation of climate impacts with the best financial payback by focusing on minimized initial cost and maximized cost savings.

With guidance from McKinstry, Milwaukee County's Climate Action 2050 Plan is following the hierarchy for maximum impact emissions reduction- (See *Figure 6*).

⁹ See Appendix A – McKinstry Draft Climate Action 2050 Plan for additional detail.

¹⁰ See Appendix A – McKinstry Draft Climate Action 2050 Plan for additional detail.

Figure 6. Hierarchy for Emission Reduction¹¹



Overview of Recommended Projects

The following list outlines some of the specific emissions reduction projects that will likely be included for multiple department's climate action plan sections. These projects may be evaluated individually by building group or department, or holistically as a county-wide strategy.

- Lighting
- Retro-commissioning
- Controls Upgrades
- Heat Pumps
- Building Envelope/Duct Sealing
- HVAC Upgrades
- Vehicle Fleet Conversion
- On-Site Solar¹²
- Off-Site Carbon-Free Electricity
- Sustainable Design Standards – see below for additional detail.

Sustainable Design Standards:

OS has partnered with consulting firm AECOM to develop sustainable design standards (SDS) that will outline both requirements and best practices for design and construction projects at Milwaukee County. The SDS will apply to both new construction and renovation projects and serve as the tool for moving sustainability to the beginning of decision making for the project delivery process. The ultimate goal of the SDS is to drive energy efficiency and emissions reduction into all county capital projects and

¹¹ See Appendix A – McKinstry Draft Climate Action 2050 Plan for additional detail.

¹² In September 2024, the Office of Sustainability shared a County-wide Solar Feasibility Assessment with the County Board - see [File No. 24-769](#)

renovations that will support progress towards Milwaukee County's carbon neutrality. The first draft of these standards will be complete in January 2025 and will continue to be updated periodically to reflect new standards, technology and requirements.

Key Co-Benefits

While Milwaukee County is taking responsibility and eliminating our carbon footprint, the core mission remains to provide governmental services to residents and visitors. Recognizing this, this Climate Action Roadmap seeks to look broadly at the process of decarbonization and see what additional benefits decarbonization can yield beyond decarbonization and avoided costs – known as co-benefits. These co-benefits have proven to align with the strategic priorities of other Milwaukee County's departments, strengthening the overall positive impact of the proposed climate action strategies.

The following are just a few examples of co-benefits that have been identified¹³:

- Local Job Creation
- Urban Heat Island Reduction
- Energy Independence

3. PLAN COMPLETION

The final Climate Action 2050 Plan, which will include the CA50 Guiding Principles, Strategic Plan and CA50 Roadmap, will be presented for the review and approval of the County Board during April 2025. OS would like to propose a formal CA50 Plan adoption event for Earth Day, April 22, 2025, to memorialize this historic step in our decarbonization.

Table 1. Proposed Timeline to Completion

January 2025:	Draft CA50 Plan – <i>Informational Report</i>
April 2025:	Presentation of Final CA50 Plan – <i>Action Report</i>
April 22, 2025:	Proposed Board Adoption Date of CA50 Plan (EARTH DAY)

4. RISKS TO CA50 PLANNING AND IMPLEMENTATION

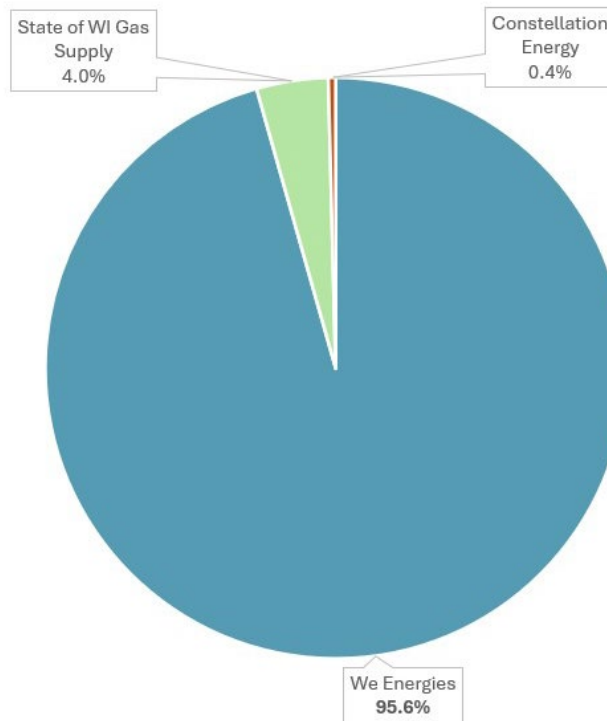
It's important to note that in the development of the county CA50 Plan we have assumed and will rely on the promise of WE Energies to 'green the grid' by 2050. WEC Energy Group, parent company of WE Energies, has committed to exit from its use of coal by 2035 and to achieve net-zero carbon emissions from power generation by 2050¹⁴. Since Milwaukee County will continue to consume much of our energy from We

¹³ See Appendix A – McKinstry Draft Climate Action 2050 Plan for additional detail.

¹⁴ WEC Energy Group emissions reduction plans can be found [HERE](#).

Energies in near future years (*See Figure 7*), emissions attributable to that energy production will therefore be attributable to Milwaukee County. Although the county cannot influence the progress of WE Energies emissions reductions, our path to carbon neutrality by 2050 can only find success to the extent that at which they green the grid.

Figure 7. Milwaukee County Utility Providers by Percentage of County Utility Cost 2023¹⁵



5. NEXT STEPS

As stated above, OS' goal is to present to the Board an actionable climate action plan by April of 2025. To get there, the Office of Sustainability, in collaboration with county departments, will further develop and implement the internal and external communications and engagement plan, to involve all stakeholders in the details of climate action planning. This planning effort will take the climate action strategies to the full level of detail, providing a multi-year implementation plan with projected costs, benefits, and outcomes necessary in order to achieve net zero carbon emissions by 2050. The Draft Climate Action 2050 Plan will be significantly expanded upon, ultimately providing a step-by-step approach for Milwaukee County Departments to implement strategies in the progression towards net zero carbon emissions.

¹⁵ See Appendix A – McKinstry Draft Climate Action 2050 Plan for additional detail.

ALIGNMENT TO STRATEGIC PLAN

The Climate Action 2050 Plan will support Milwaukee County's strategic plan by creating intentional inclusion and investing in equity. The planning team will develop the plan with intentional inclusion of diverse stakeholders, both internal and external to the county administration. In addition, as described in the CA50 Framework¹, the plan will emphasize strategies and actions that provide racial and health equity co-benefits – not just environmental protection or cost savings. Finally, the Climate Action plan can support the county's fiscal sustainability, as smart energy system investments can reduce operating costs.

FISCAL EFFECT

The report is informational only and there is no fiscal impact.

VIRTUAL MEETING INVITES

Sean Hayes, Interim Director of Facilities Management – Department of Administrative Services – Facilities Management Division

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ATTACHMENTS

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Aaron Hertzberg, Director, Department of Administrative Services
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