Climate Action 2050 Plan

Milwaukee County Board of Supervisors

Committee on Community, Environment, and Economic Development (CEED)

April 14, 2025

Grant Helle, Director
Office of Sustainability
DAS – Facilities Management



Policy

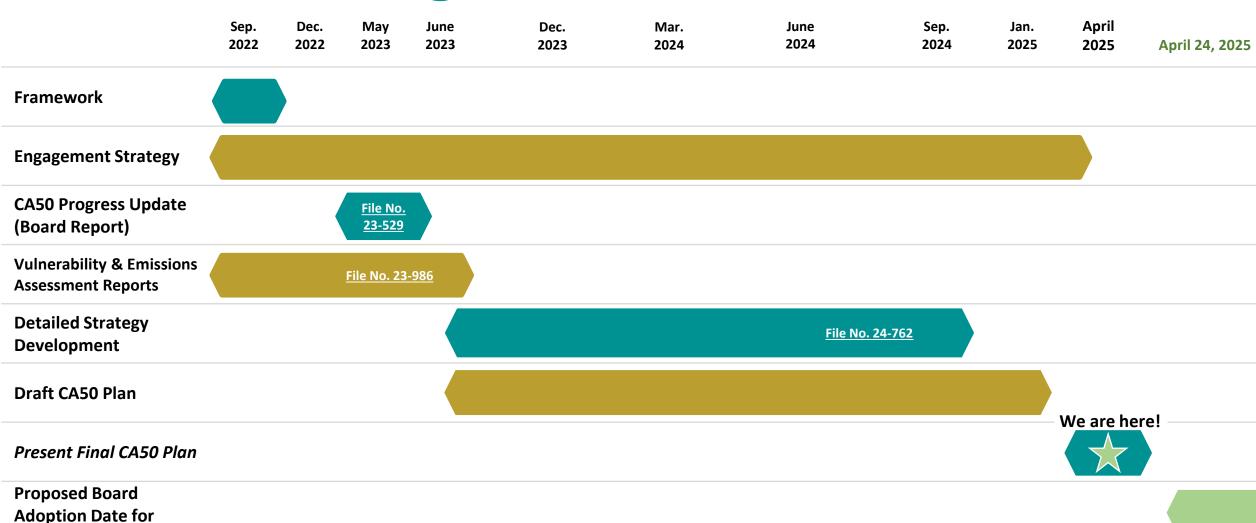
File No. 21-389

Commits Milwaukee County to achieving carbon neutral operations 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.

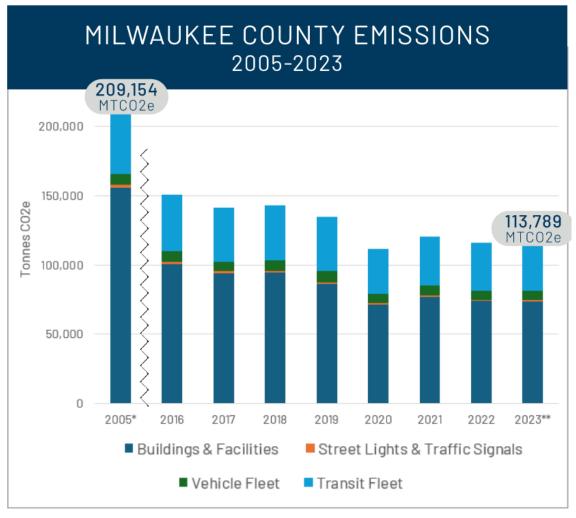


CA50 Planning Timeline

CA50 Plan



Carbon Neutrality Commitment



Includes:

- Scope 1 and 2 emissions
- Specifically attributed to County operations

Excludes:

- Scope 3 emissions
- Non-County operations

Why?

- Community Well-Being
- Local Job Creation
- Efficiency, financial responsibility
- Energy Independence
- Community Education and Leadership
- Avoided Employee Turnover
- Avoided Penalties
- Future Emergency Backup Power
- Tourism: "Green Destination"





How?



Current Emissions Sources



- 1/3 of County emissions attributed to vehicle fleet
- 2/3 attributed to buildings and related operations



Cost Considerations

- Estimates are high-level, rough-order of magnitude
- Investments are spread over next 2.5 decades
- Costs may decrease with technology advancement
- Timing of projects overlap with planned capital projects, deferred maintenance, etc



Emissions Reduction Strategies

STRATEGY	EMISSIONS REDUCTION POTENTIAL		COST Savings ³	COST ¹	PAYBACK
	MTC02e	%	(\$/YR)	0001	(YRS)
Retro-commissioning	4,400	4%	\$787,000	\$3,580,000	4.5
Energy Efficiency Upgrades	19,500	17%	\$3,463,400	\$54,140,000	15.6
Building Electrification	10,100	9%	-\$342,500	\$111,700,000	_
Fleet Upgrades	24,100	21%	\$7,293,510	\$220,200,000	30.2
On-Site Solar	6,600	6%	\$1,768,300	\$51,810,000	29.3
Off-Site Carbon-Free Energy ²	44,200	39%	\$0	\$0	_
Carbon Offsets	4,300	4%	-\$86,000	\$0	_
TOTAL	113,200	100%	\$12,883,710	\$441,430,000	34.3



Key Strategies: Fleet

- Right size fleet and vehicle selection
- Continue light-duty EV pilots as proof-ofconcept
- Develop multi-year plan for EV transition (2026)
 - Convert light-duty fleet to EVs
 - Improve charging infrastructure
- Potential considerations for Transit Buses
 - Develop transit bus plan (2028)
 - Revisit EV pilot (2032)





Key Strategies: Buildings

- Avoid new sources of emissions
 - Sustainable Design Standards
- Reduce existing emissions
 - Energy Efficiency projects
- Substitute higher emission fuel sources for lower emission sources
 - Building Electrification
- Compensate to abate emissions
 - Off-Site Solar





Next Steps

- 1. Engage Sustainability Task Force
 - Develop progress tracking methods
- 2. Check-in regularly on milestones
 - Minimum annual connection points
- 3. Maintain engagement and feedback
- 4. Reflect changes in County operations and new technologies
 - Long-term nature of plan
- 5. Build out annual implementation by department
- 6. Monitor changes in funding opportunities



Questions?

Grant Helle, Director
Office of Sustainability, DAS-FMD
grant.helle@milwaukeecountywi.gov

