

*Actions marked with an asterisk are flagged for having EJ related spacial /locational impacts

Climate Action Work Plan Actions

Environment Committee
November 8, 2022

ID	Council Commitment	Council Strategy	Action	Lead	CD	ES	MT	MTS	RA	Role	Type of work	Start Date	End Date	Staff	Funding	Priority
1.1.1	Incorporate environmental justice principles as we plan, implement, and evaluate our climate action work	Develop and adopt an enterprise-wide environmental justice framework consisting of qualitative and quantitative assessment tools.	Recharter the Environmental Justice Task Force and ensure diverse representation from across divisions of the Met Council.	ALL	X	X	X	X	X	Implement	New work	2023	2024	Needs staffing commitment	Partially funded	1
1.1.2	Incorporate environmental justice principles as we plan, implement, and evaluate our climate action work	Develop and adopt an enterprise-wide environmental justice framework consisting of qualitative and quantitative assessment tools.	Develop reciprocal and meaningful partnerships with marginalized and historically underrepresented community members to create the framework. This includes, but may not be limited to, low-income communities; Black, Indigenous, and people of color communities; and people with disabilities.	ALL	X	X	X	X	X	Convene	Enhance	2023	Ongoing	Needs additional staffing	Partially funded	1
1.2.1	Incorporate environmental justice principles as we plan, implement, and evaluate our climate action work	Leverage and improve our data and analysis tools as we center environmental justice in our internally and externally-facing climate work.	For actions in the Climate Action Work Plan flagged with spatial/locational impacts, establish processes for reviewing environmental justice impacts in action implementation. Processes can build off the Council's existing tools (for example, the place-based equity and equity datasets). This will also be part of, and supported by, the development of an environmental justice framework.	ALL	X	X	X	X	X	Implement	Enhance	2023	Ongoing	Needs Staffing Commitment	Not currently funded	1
1.2.3	Incorporate environmental justice principles as we plan, implement, and evaluate our climate action work	Leverage and improve our data and analysis tools as we center environmental justice in our internally and externally-facing climate work.	Include overburdened populations and environmental justice concerns when creating and utilizing tools (data, maps, etc.) that assess regionwide and project-specific climate risks and impacts.	ALL	X	X	X	X	X	Convene	Enhance	2023	Ongoing	Needs additional staffing	Not currently funded	1
2.1.1	Accelerate emissions reductions from Council operations to achieve carbon neutrality	Adopt a holistic approach to energy management	Designate a division-level Energy Manager - or similar - charged with planning and leading implementation of continual improvements in the measurement, management, and efficiency of energy use and other energy management initiatives.	ES + MT		X	X			Implement	Enhance	2023	2023	Needs staffing commitment	No funding needed	1
2.1.2	Accelerate emissions reductions from Council operations to achieve carbon neutrality	Adopt a holistic approach to energy management	Establish division and facility-level energy performance targets and regularly report on progress. Performance targets should be informed by energy benchmarking data as well as the identification of energy savings potential.	ES + MT	X	X	X	X	X	Implement	Enhance	2023	Ongoing	Fully staffed	Partially funded	1
2.1.3	Accelerate emissions reductions from Council operations to achieve carbon neutrality	Adopt a holistic approach to energy management	Establish a cross-divisional workgroup on energy management to encourage peer-to-peer learning in the identification and implementation of energy efficiency and renewable energy opportunities.	ES + MT	X	X	X	X	X	Implement	New work	2023	Ongoing	Fully staffed	No funding needed	3
2.2.1	Accelerate emissions reductions from Council operations to achieve carbon neutrality	Make buildings and processes more energy efficient, and move towards electric energy sources rather than fossil fuel-based sources	Develop division-specific inventories of energy-efficiency and building systems electrification opportunities and implementation priorities. Integrate identification, evaluation, and documentation of such opportunities with other facility planning and asset management business processes.	ES + MT + CD	X	X	X		X	Implement	Enhance	2023	Ongoing	Need additional staffing	Partially funded	2
2.2.3	Accelerate emissions reductions from Council operations to achieve carbon neutrality	Make buildings and processes more energy efficient, and move towards electric energy sources rather than fossil fuel-based sources	Accelerate the process of retrofitting lighting systems to LEDs with a goal of 95% retrofit completion in 5 years.	ES + MT		X	X			Implement	Enhance	2023	2027	Needs staffing commitment	Partially funded	2
2.2.4	Accelerate emissions reductions from Council operations to achieve carbon neutrality	Make buildings and processes more energy efficient, and move towards electric energy sources rather than fossil fuel-based sources	Identify mechanisms to overcome funding barriers in energy-efficiency financing.	ES + CD	X	X	X			Implement	New work	2023	2024	Fully staffed	No funding needed	2
2.3.1	Accelerate emissions reductions from Council operations to achieve carbon neutrality	Purchase and generate renewable energy when cost-effective	Evaluate the opportunities and constraints of various approaches to achieve 100% renewable energy purchases - both thermal and electric such as virtual power purchase agreements, utility-offered green power tariffs, etc.	ES + MT		X	X			Implement	Enhance	2023	2024	Fully staffed	Fully funded	1

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2.3.2	Accelerate emissions reductions from Council operations to achieve carbon neutrality	Purchase and generate renewable energy when cost-effective	Develop an on-site renewable energy deployment plan that consists of the following: * Inventory of Council-owned properties suitable for potential solar photovoltaic development * Design and evaluation criteria for inclusion of onsite solar in major projects.	ES + MT	X	X	X		X	Implement	New work	2024	2026	Need additional staffing	Not currently funded	2
2.4.3	Accelerate emissions reductions from Council operations to achieve carbon neutrality	Transition Council fleets to electric and alternative fuel vehicles	Develop an electrification and fuel economy improvement transition plan for nonrevenue fleet vehicles and off-road equipment that prioritizes opportunities with the greatest potential for GHG reductions.	ES + MT	X	X	X		X	Implement	Enhance	2025	2026	Need additional staffing	Not currently funded	2
2.5.1*	Accelerate emissions reductions from Council operations to achieve carbon neutrality	Maximize energy & resource recovery opportunities	Continue pursuit of energy and resource recovery from biosolids management. Anticipated projects in the next 5 years include: * Installation of biogas fueled combined heat and power system at Empire Wastewater Treatment Plant. * Completed design for new steam turbine generator to enhance energy recovery from biosolids incineration at Metropolitan Wastewater Treatment Plant. * Improvements to biogas energy recovery at Blue Lake Wastewater Treatment Plant.	ES		X				Implement	Status quo	Ongoing	Ongoing	Fully staffed	Fully funded	2
2.5.2	Accelerate emissions reductions from Council operations to achieve carbon neutrality	Maximize energy & resource recovery opportunities	Conduct a feasibility study to document opportunities and constraints of extracting and utilizing the embodied thermal energy in wastewater influent and effluent as a heat source for HVAC heat pump applications.	ES		X				Implement	New work	2025	2027	Needs staffing commitment	Not currently funded	2
2.5.3	Accelerate emissions reductions from Council operations to achieve carbon neutrality	Maximize energy & resource recovery opportunities	Document opportunities and constraints of expanded biogas production and utilization at Blue Lake and Empire wastewater treatment plants through additional high-strength waste receiving, food waste co-digestion, and other biogas production optimization measures. Develop biogas optimization goals.	ES		X				Implement	Enhance	2025	2027	Needs staffing commitment	Not currently funded	2
2.6.1	Accelerate emissions reductions from Council operations to achieve carbon neutrality	Account and report greenhouse gas emissions	Publish an annual inventory of GHG emissions related to the Council's operations that reflects current best practices in GHG accounting and include direct (for example, fossil fuel combustion, process emissions, etc.) and indirect (emissions from energy purchases, solids waste management, embodied emissions in the supply chain, etc.).	ES + MT		X	X			Implement	Enhance	2024	Ongoing	Fully staffed	Fully funded	1
2.6.2	Accelerate emissions reductions from Council operations to achieve carbon neutrality	Account and report greenhouse gas emissions	For capital projects greater than \$10 million, or otherwise necessary, prepare life-cycle carbon alternatives analyses and present results with and without accounting for the social cost of GHGs.	ES + MT		X	X			Implement	New work	2025	Ongoing	Needs staffing commitment	Not currently funded	2
2.7.1	Accelerate emissions reductions from Council operations to achieve carbon neutrality	Investigate opportunities to mitigate greenhouse gas emissions with the highest global warming potential	Develop a refrigerant management plan to: * Establish good record keeping * Ensure safer handling and storage of refrigerants * Improve leak detection and repair * Identify opportunities to switch to lower-GWP refrigerants	ES + MT		X	X			Implement	Enhance	Ongoing	Ongoing	Fully staffed	Fully funded	2
2.7.2	Accelerate emissions reductions from Council operations to achieve carbon neutrality	Investigate opportunities to mitigate greenhouse gas emissions with the highest global warming potential	Develop and implement a research and monitoring strategy to better quantify wastewater process emissions to inform the evaluation of emissions reduction potential from these sources.	ES		X				Implement	New work	2024	Ongoing	Fully staffed	Not currently funded	2
3.2.2*	Accelerate regional emissions reductions through existing and new partnerships	Convene and partner with regional stakeholders to expand climate engagement and collaboration related to greenhouse gas emissions	Convene regional partners to identify opportunities to collaborate on the pursuit of State and Federal funding opportunities that accelerate regional emissions reductions.	ALL	X	X	X	X	X	Convene	New work	2023	2025	Needs staffing commitment	No funding needed	1

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3.4.1	Accelerate regional emissions reductions through existing and new partnerships	Maximize energy & resource recovery opportunities	Conduct a feasibility study to document opportunities and constraints of utilizing embodied thermal energy in wastewater influent and effluent for use in community-level district energy systems.	ES		X				Implement	New work	2026	2027	Needs staffing commitment	Not currently funded	2
3.4.2	Accelerate regional emissions reductions through existing and new partnerships	Maximize energy & resource recovery opportunities	Document opportunities and constraints of expanded biogas production and utilization at Blue Lake and Empire wastewater treatment plants through additional high-strength waste receiving, food waste co-digestion, and other biogas production optimization measures. Develop biogas optimization goals.	ES		X				Implement	Enhance	2026	2027	Needs staffing commitment	Not currently funded	2
4.1.1*	Reduce risks and impacts of climate change hazards to Council facilities and services	Incorporate adaptation measures into facility and services planning, design, operations, and maintenance	Develop a climate vulnerability screening tool to identify and prioritize Council-owned facilities and properties for in-depth climate preparedness reviews. A climate preparedness review should look at the adequacy of existing adaptation measures and emergency plans to respond to major climate events and make recommendations for improved adaptation and resilience.	ES + MT		X	X			Implement	Enhance	2023	Ongoing	Needs staffing commitment	Not currently funded	2
4.1.6	Reduce risks and impacts of climate change hazards to Council facilities and services	Incorporate adaptation measures into facility and services planning, design, operations, and maintenance	Evaluate the impacts of climate change on inflow and infiltration to the regional wastewater collection system and develop recommendations to respond accordingly.	ES		X	X			Implement	New work	2025	2027	Needs staffing commitment	Not currently funded	2
4.1.7	Reduce risks and impacts of climate change hazards to Council facilities and services	Incorporate adaptation measures into facility and services planning, design, operations, and maintenance	Participate in state-led efforts to update floodplain management rules for critical facilities.	ES		X				Implement	Status quo	TBD	TBD	Fully staffed	Fully funded	3
4.1.8*	Reduce risks and impacts of climate change hazards to Council facilities and services	Incorporate adaptation measures into facility and services planning, design, operations, and maintenance	Evaluate the effects of climate change on process odors and their impacts on communities adjacent to wastewater infrastructure.	ES		X				Implement	New work	2025	2027	Needs staffing commitment	Not currently funded	2
4.2.1*	Reduce risks and impacts of climate change hazards to Council facilities and services	Identify opportunities to install and maintain sustainable landscapes on Council property	Incorporate climate-resilient landscape management practices where consistent with facility operation and maintenance requirements, such as: * Raingardens, bioswales, and infiltration basins * Pervious surfaces * Drought tolerant trees, shrubs, and turf grasses * Pollinator, native, and climate-adapted plantings * Invasive and noxious vegetation management * Chloride mitigation * Smart irrigation controllers when irrigation is installed	ES		X	X			Implement	Status quo	Ongoing	Ongoing	Needs staffing commitment	Partially funded	2
4.2.2	Reduce risks and impacts of climate change hazards to Council facilities and services	Identify opportunities to install and maintain sustainable landscapes on Council property	Conduct existing condition assessment of Council-owned properties to identify priority locations for protection, enhancement, and restoration of climate-resilient landscapes.	ES		X	X			Implement	Status quo	Ongoing	Ongoing	Needs staffing commitment	Partially funded	1

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5.1.1*	Support and collaborate with partners to advance regional climate adaptation efforts	Convene and partner with regional stakeholders to expand climate engagement and collaboration	Convene and participate in conversations with partner organizations and residents to share challenges and best practices, identify gaps and collaboration opportunities and develop a shared regional vision of climate resiliency.	CD + ES	X	X		X		Convene	New work	2024	Ongoing	Fully staffed	Not currently funded	1
5.1.4*	Support and collaborate with partners to advance regional climate adaptation efforts	Convene and partner with regional stakeholders to expand climate engagement and collaboration	Enhance the technical capacity of climate change research partnerships with academic institutions in the Twin Cities region, to ensure technical assistance and tools incorporate current knowledge and research-informed practices.	CD + ES	X	X				Convene	Enhance	2023	2024	Fully staffed	No funding needed	1
5.2.4*	Support and collaborate with partners to advance regional climate adaptation efforts	Provide and expand technical assistance, tools, and data for regional and Council decision-making	Evolve the Council's localized flood mapping tool to incorporate the latest data to accurately assess risk to areas of localized, riverine, and groundwater flooding at a regional scale. Inform and train partners on its use.	CD + ES	X	X	X	X		Implement	Enhance	2024	2026	Fully staffed	Not currently funded	2
5.2.6*	Support and collaborate with partners to advance regional climate adaptation efforts	Provide and expand technical assistance, tools, and data for regional and Council decision-making	Quantify and map the value of ecosystem services to inform planning processes. Provide a decision-making framework linking climate, water, and land use to ecosystem services across the region.	CD + ES	X	X				Advise	Enhance	2024	2026	Need additional staffing	Not currently funded	2
5.2.7	Support and collaborate with partners to advance regional climate adaptation efforts	Provide and expand technical assistance, tools, and data for regional and Council decision-making	Fly a metro-specific LIDAR flight every 5 years with the support and funding of watershed agencies, metro cities, and other regional stakeholders.	ES		X				Convene	New work	2023	Ongoing	Need additional staffing	Partially funded	2

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5.3.1*	Support and collaborate with partners to advance regional climate adaptation efforts	Develop and expand regional funding mechanisms for local climate infrastructure	Identify and establish local funding mechanisms, in collaboration with partner organizations, to support investment in climate adaptation and infrastructure resiliency projects that mitigate flooding, reduce urban heat, improve water quality, prioritize environmental justice concerns, and preserve and enhance ecosystem services within the greater metropolitan region.	CD + ES	X	X				Convene	New work	2024	2026	Needs staffing commitment	Not currently funded	2
5.4.1*	Support and collaborate with partners to advance regional climate adaptation efforts	Promote climate connections in regional planning, local plan reviews, and grant programs	Develop a checklist of climate considerations and best practices to address when conducting agency reviews of county groundwater plans, watershed management plans, local surface water plans, water supply plans, local sewer management plans, comprehensive plans and amendments, and environmental reviews.	ES	X	X				Influence	New work	2023	2024	Fully staffed	No funding needed	1
5.4.2*	Support and collaborate with partners to advance regional climate adaptation efforts	Promote climate connections in regional planning, local plan reviews, and grant programs	Develop and integrate climate measures in evaluation criteria and project selection for Council administered grant and incentive programs.	ES + MTS	X	X		X		Implement	Enhance	2023	Ongoing	Needs staffing commitment	No funding needed	2
5.4.3	Support and collaborate with partners to advance regional climate adaptation efforts	Monitor and assess water resources to identify climate threats	Evaluate how climate-related drivers impact the potential for watershed pollution trading of nitrogen and phosphorus. Highlight in-watershed best management practice opportunities and investments instead of costly wastewater treatment process investments.	ES		X				Influence	New work	2024	Ongoing	Needs staffing commitment	Not currently funded	2
5.4.4*	Support and collaborate with partners to advance regional climate adaptation efforts	Provide and expand technical assistance, tools, and data for regional and Council decision-making	Provide technical assistance to regional partners to establish green infrastructure and other nature-based adaptation measures through peer exchanges, content creation, and local and national case studies to increase the number of installations throughout the Metro.	ES		X				Implement	New work	2025	Ongoing	Need additional staffing	Not currently funded	2
5.4.5*	Support and collaborate with partners to advance regional climate adaptation efforts	Provide and expand technical assistance, tools, and data for regional and Council decision-making	Evaluate and encourage water reuse where feasible to sustain aquifers through the development of model ordinances, building code requirements, and facilitating collaboration among regional partners to influence code development	ES		X				Influence	Status quo	Ongoing	Ongoing	Fully staffed	Fully funded	2
5.5.1	Support and collaborate with partners to advance regional climate adaptation efforts	Monitor and assess water resources to identify climate threats	Expand the water resource monitoring network to include all regional priority waters and connected groundwaters to better track the impacts of climate change. Parameters to monitor should include water temperature, chloride, nutrients, suspended sediments, flow, water elevation, etc.	ES		X				Implement	Enhance	2023	Ongoing	Fully staffed	Not currently funded	2
5.5.2	Support and collaborate with partners to advance regional climate adaptation efforts	Monitor and assess water resources to identify climate threats	Incorporate climate projections and impact analysis to enhance water resource assessments and modeling.	ES		X				Implement	Enhance	2024	Ongoing	Need additional staffing	Not currently funded	2
5.5.3	Support and collaborate with partners to advance regional climate adaptation efforts	Monitor and assess water resources to identify climate threats	Conduct climate vulnerability assessments of regional drinking water supplies for local water suppliers.	ES		X				Implement	New work	2024	Ongoing	Needs staffing commitment	Not currently funded	2

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6.1.1	Cross-cutting	Expand staffing and training dedicated to climate work	Create an interdivisional Climate Action Plan implementation team with corresponding division-level climate work groups. The interdivisional team will include operational and planning staff; leadership support; and responsibilities for evaluation and reporting on the implementation of strategies.	ALL	X	X	X	X	X	Implement	New work	2023	2024	Needs staffing commitment	Partially funded	1
6.1.2	Cross-cutting	Expand staffing and training dedicated to climate work	Identify internal workforce development needs, both at individual contributor and managerial levels, and provide the training and professional development opportunities for staff to enrich their skills and expertise related to supporting the Council's Climate Action commitments.	ALL	X	X	X	X	X	Implement	New work	2023	2024	Needs staffing commitment	Partially funded	1
6.1.3	Cross-cutting	Expand staffing and training dedicated to climate work	Evaluate the Council's external reporting and disclosure of climate mitigation and adaptation efforts to streamline reporting, assign responsibility to appropriate Council staff, and avoid duplication.	ALL	X	X	X	X	X	Implement	Enhance	2023	2024	Needs staffing commitment	No funding needed	1

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