

2022 Climate Action Progress Report

City Sustainability Advisory Team

This report and ongoing work is accomplished through the coordination of the City Sustainability Advisory Team (C-SAT), a cross-Departmental team formed to determine high-level sustainability goals, contribute to and prioritize climate action, and share technical knowledge and skills.

C-SAT Membership in 2022:

Department	Members
Administrative Services	Ben Van Tassel
City Attorney's Office	Steve Hanke
Communications	Phil Jents
Community Relations	Alicia Kozlowski
Finance	Jen Carlson
Fire Department/Life Safety/Emergency Manager	Shawn Krizaj, Jonathan Otis
Parks, Property, Libraries	Jim Filby Williams, Erik Birkeland, Kate Kubiak
Planning and Economic Development	Chris Fleege, Jenn Reed Moses, James Gittemeier
Public Works and Utilities	Jim Benning
Workforce Development	Elena Foshay, Betsy Hill
Sustainability	Mindy Granley, Lydia Peterson, Parker Angelos

Overview

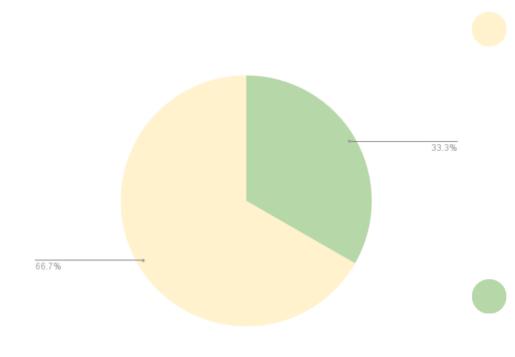
In 2022, the City of Duluth made climate progress (in alignment with the Climate Action Work Plan) via project activation, planning, and policy work. Highlights included:

- A 32% reduction in emissions since 2016, thanks to energy efficiency and conservation efforts in City operations.
- Over \$33 million in awarded funding for projects that focus on sustainability, including transportation, infrastructure, and renewable energy planning.
- Adoption of internal policies for buildings and fleet that prioritize energy efficiency and climate goals.
- Staff participation in regional and State transportation, building, and climate policy groups, ensuring City goals were represented.
- Community resilience work focused on infrastructure projects and planning, supporting affordable housing development, and neighborhood blight reduction.

Objective 1: Drive Down Emissions from City Operations

Carbon emissions from City operations were reduced 32% since 2016. Energy efficiency and conservation efforts continue, and focus on City buildings, utility operations, and the municipal vehicle fleet.

Objective 1: Drive Down Emissions from City Operations



SOME PROGRESS

- 1.1: Achieve energy reduction targets for city buildings and facilities to meet 10% emissions reduction goal, per mayoral term (80% by 2050).
- 1.2: Continue to improve the fuel emissions factor and efficiency for Duluth Energy System
- 1.4: Reduce emissions from city fleet vehicles and employee commute
- 1.6: Reduce solid waste from city operations and public events

SIGNIFICANT PROGRESS

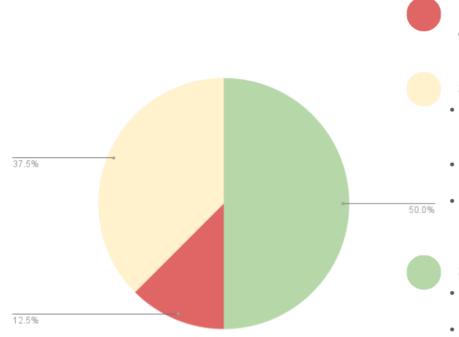
- 1.3: Improve the efficiency of the water plant and distribution system
- 1.5: Build upon previous successes and increase installation and procurement of clean energy

Objective 1 Action	Details	Status	Department(s)
New Carbon Reduction Goal	Mayor Larson joined "Race to Zero"; science-based goal of carbon neutrality by 2050 (50% reduction by 2050)	Ongoing	All
Sustainability Fund	\$150k for Strategic Planning and \$250k for City building efficiency invested; \$200k for hybrid/electric vehicle replacement gap funding; match for several grants/projects	Ongoing	Sustainability, Finance, various Departments
City Hall Improvements	\$12M in American Rescue Plan funding; HVAC to improve efficiency by >30%; Building Owner Performance Requirements adopted	Ongoing	Property & Facilities Management
DES Efficiency work and 5- year Plan	Continued hot water conversion projects; 5-year plan for coal elimination; co-applicant to geothermal/heat recovery feasibility study grant	Ongoing	Duluth Energy Systems, Sustainability
Water Distribution System Upgrades	Advanced Metering Infrastructure and water main replacement funded through ARP	Ongoing	Public Works and Utilities
Fleet: Policies and Investment	2022 Vehicle Replacement Policy; 2 new street sweepers ordered; hybrid ladder truck purchased; continued prioritization of hybrids for Police fleet	Policies Implemented; Ongoing	Street Maintenance, Fleet, Sustainability, Fire, Police
Jean Duluth Rd. Solar Project	Utility/City partnership to establish 1.6 MW of solar (powering 300 homes); lease payments to Energy Fund	Completed; Ongoing Payments	Attorney, Sustainability
Love Your Block	13 mini-grants awarded to revitalize community spaces, build community and City connections; Year 2 focus on education/further blight reduction	Ongoing	Life Safety, Park Maintenance, Sustainability, Admin
Regional Solid Waste Plan	Contributed to Plan for Northern Minnesota in collaboration with WLSSD	Completed	Sustainability

Objective 2: Strengthen Community Resilience

Progress on community resilience included infrastructure investments for climate adaptation, such as funding for water plant resiliency and stormwater management planning and implementation. Support and investment in affordable housing, continued partnership with community organizations, lead water line replacement programs, and creation of the Love Your Block program supported neighborhood improvements.

Objective 2: Strengthen Community Resilience



MINIMAL PROGRESS

 2.8: Fully establish the Natural Resource Management Program

SOME PROGRESS

- 2.3: Expand current CIP offerings from Comfort Systems for residential and commercial customers
- 2.6: Reduce population vulnerabilities and ensure basic needs are met
- 2.7: Reduce environmental hazards and climate risks in vulnerable communities

SIGNIFICANT PROGRESS

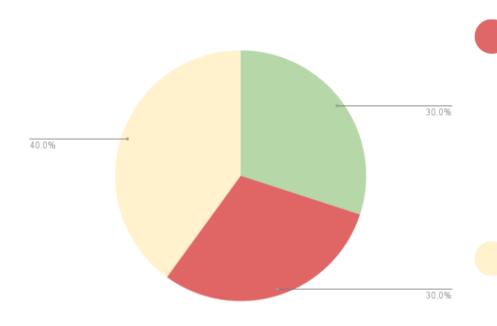
- 2.1: Improve the resiliency of the water plant and distribution system
- 2.2: Complete a citywide assessment of vulnerable built and natural infrastructure
- 2.4: Develop a stormwater management plan that integrates resilience and identifies financing opportunities
- 2.5: Strengthen inclusive and culturally specific community relationships through neighborhood volunteer events

Objective 2 Action	Details	Status	Department(s)
Duluth Stormwater Resiliency Plan & Green Infrastructure Installation	Planning to address stormwater vulnerabilities (\$100k from MPCA); Keane Creek green infrastructure funding secured (\$150k from Great Lakes Sediment & Nutrient Reduction Program); Miller Creek green infrastructure application (working - US Army Corps of Engineers); green infrastructure integrated in Lincoln Park project	Plan Complete; Project Ongoing; Funding Pending	Public Works & Utilities, Planning & Economic Development, Sustainability, Parks
Expanded Comfort Systems Offerings for Residential & Commercial Customers	New rebate programs for furnace tune-ups and programmable thermostats; initial conversations with MN Power on ECO Act provision and fuel switching	Ongoing	Public Works & Utilities, Energy Plan Commission, Sustainability
Emerald Ash Borer Removal	City Forester accelerating removal and replacement work: \$150k MN DNR grant, with match from the Sustainability Fund	Ongoing	Property & Facilities Management, Sustainability
Water Plant Resilience Upgrades	\$7.8M FEMA Hazard Mitigation Grant for second transformer, back-up power, & other updates	Funding Awarded; In Progress	Public Works & Utilities, Sustainability
St. Louis River Clean-Up	Clean-up and access work continues with State, Federal, and non-profit partners	Ongoing	Property, Parks, & Libraries, community partners
Affordable Housing efforts	\$19M from ARP for affordable housing investments and projects; Housing Trust Fund established; Rebuild Duluth; Green New Deal coordination	Fund created, programs ongoing	Planning & Economic Development, community partners
Community Outreach and Collaboration	Lead water line replacement outreach & grants to reduce resident costs; collaboration with Ready North Network; RACER Grant to study community resiliency/solar; Love Your Block	Ongoing	Public Works & Utilities, Fire, Life Safety, Sustainability
Lester/Amity Land Acquisition	Acquisition of 2,000 additional acres of public lands (tax-forfeited) for natural resources protection	Nearly complete	Natural Resources Coordinator

Objective 3: Eliminate Institutional Barriers and Better Enable Climate Action

New internal policies for buildings and fleet that prioritize energy efficiency and climate goals were put into place. Staff also participated in regional and State sustainable transportation, building, and climate policy groups, thus ensuring City goals are represented.

Objective 3: Eliminate institutional barriers and better enable climate actions



SIGNIFICANT PROGRESS

- 3.3: Support state policy and regulatory changes that enable the city to meet its climate and energy goals
- 3.4: Incorporate climate mitigation, resilience, and justice considerations into city budget planning process
- · 3.10: Develop a City sustainable purchasing policy

MINIMAL PROGRESS

- 5.2: Adopt a building benchmarking policy for public buildings with a voluntary phase-in for privatesector commercial buildings
- 3.7: Enable increased installation and procurement of clean energy for residents and businesses
- 3.9: Reduce residential and commercial solid waste through increased diversion

SOME PROGRESS

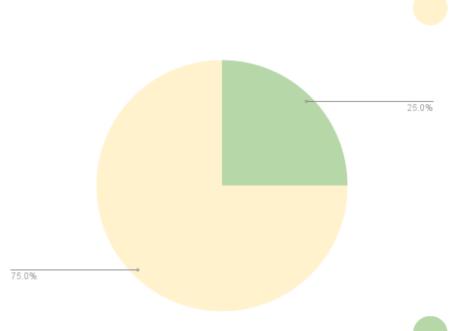
- 3.1: Accelerate sustainable building design for new and substantially renovated buildings
- 3.5: 5 Incorporate climate and energy actions into TIF district requirements
- 3.6: Integrate resilience in the capital improvement plan and internal policy for all city infrastructure projects
- 3.8: Enable increased installation and procurement of clean energy for residents and businesses

Objective 3 Action	Details	Status	Department(s)
New Building Owner Performance Requirements Adopted	Approved November 2021, guiding City renovation projects	Completed	Property & Facilities Management, Sustainability, Energy Plan Commission
ACEEE "Energy Equity for Renters" Study	American Council for an Energy Efficient Economy grant project to study recommendation for multi- family housing programs and policies for renters	Completed	Sustainability, Planning & Economic Development
Support of Policy/Regulatory Changes	City signed onto BetterBuildingsMN.org; staff represented City on MN State Climate Action Framework groups and MnDOT Sustainable Transportation Advisory Council	Completed	Mayor, Sustainability, Energy Plan Commission
Sustainability Criteria Incorporated into Decision Making	Climate Action Work Plan recommendations and criteria included in Sustainability Fund planning and Capital Improvement Project forms; Housing Fund included sustainability as criteria for selection; PED staff to implement MN EQB climate change requirements in impact statements	Ongoing	Finance, Planning & Economic Development, Energy Plan Commission
Solar Fee Reductions	Residential solar fee schedule reviewed, fees reduced	Completed	Planning & Economic Development
Energy Efficient Transportation Projects	DTA Better Bus Program; Vehicle Replacement Policy; First protected bike lane in Lincoln Park added in 2021	Program Ongoing; Policy and Lane Complete	Community partners (DTA), Planning & Economic Development, Public Works & Utilities
City Sustainable Purchasing Policy Grant	Healthy Babies Bright Futures Grant recommendations; sustainability incentive of \$1,000 to Ideas Fair; stipends awarded for alternative asphalt release agent and safer cleaning chemicals	Completed	Purchasing, Sustainability, Property & Facilities Management, Street Maintenance

Objective 4: Create Financial and Workforce Plans to Support Accelerated Climate Action

With internal alignment on Climate Action Work Plan priorities, access to funding for project and planning became a high priority. In 2022, over \$33 million was awarded to the City for projects that focus on sustainability, including transportation, infrastructure, and renewable energy planning.

Objective 4: Create financial and workforce plans to support accelerated climate action



SOME PROGRESS

- 4.1: Find a sustainable mechanism to support internal energy funds for continued implementation of the City of Duluth Energy Plan
- 4.2: Explore funding/financing mechanisms to reduce emissions from Duluth Energy Systems
- 4.3: Increase funding for non-motorized transportation and improved connectivity (Duluth-Superior Metropolitan Bikeways Plan)
- 4.6: Seek funding to engage vulnerable communities in city resilience planning initiatives and implementation
- 4.7: Collaborate with local partners to identify green job opportunities
- 4.8: Plan and prepare to grow the city equitably and sustainably in consideration of future climate migration

SIGNIFICANT PROGRESS

- 4.4: Seek resources and partnerships to catalyze renewable energy development and energy efficiency, especially in vulnerable communities
- 4.5: Identify funding and financing opportunities to implement stormwater strategies

Objective 4 Action	Details	Status	Department(s)
USDOT RAISE Grant	\$24.8M Rebuilding America's Infrastructure with Sustainability and Equity, to redesign 2 miles of W. Superior St.	Awarded	Public Works & Utilities, Planning & Economic Development, Sustainability
Communities LEAP Grant Program	DOE Local Energy Action Plan to create a low-carbon, clean energy pathway for Lincoln Park, while engaging residents, commercial businesses, utilities, and industry partners	Ongoing	Community partners (Ecolibrium3), Sustainability
Minnesota Land Trust's Partner of the Year Award	City recognized for being a national model for realizing the potential of outdoor recreation and greenspace preservation as essential community attributes	Awarded	Property, Parks, & Libraries
Department of Energy RACER Grant (Renewables Advancing Clean Energy and Resiliency)	City of Duluth awarded \$1M partnership award to study and vet large-scale solar + storage sites and create a community energy resiliency planning toolkit; project timeline March 2023-February 2025	Awarded	Sustainability, Property & Facilities Management, Fire, Community Partners (Ecolibrium3, UMD)
Geothermal Grant Application	Feasibility study grant submitted, includes funding for workforce development needs, design for wastewater effluent heat recovery/geothermal heat pumps	Application submitted	Community Partners, Public Works & Utilities, Duluth Energy Systems, Sustainability
Workforce Collaboration	Construction Working Group met with the Governor's Workforce Development Board on green jobs and identifying barriers to support green job training; coordinate with Green New Deal Housing to connect students/labor with projects	Complete	Workforce Development, Community Partners