

Climate Action Plan

Report to City Council Work Session

City Council Work Session - Monday, September 23, 2024

Climate Emergency Resolution

On January 24, 2022, the City of Grand Rapids adopted a resolution that declared a climate emergency. The city resolved to work for “a just transition and climate emergency mobilization effort” and:

- Complete and Implement a Climate Action Plan.
- Fully implement our autonomous vehicle shuttle program.
- Continue serving as a regional leader and share our experience with the Grand Rapids Solar Garden project and autonomous electric vehicle project so that other communities may learn from us and implement similar ideas.

This document fulfills those resolutions by describing how the city is planning to address the challenges ahead. This document does not propose requirements, prescriptions, or mandates. There’s a good reason for that: much of this work is under development. Today’s technological advances may improve old solutions. And the challenges ahead are uncertain. Drought and wildfires were concerns when the resolution was passed nearly three years ago. This past year has brought record rain events. The committee recognizes that there are many climate challenges.

About the Grand Rapids Climate Action Planning Process

The City Council established its Climate Action Advisory Committee in April 2024, appointing Amy Blomquist, Simon Gretton, Garrett Holl, and Bill Schnell to the committee. Amber Smith joined the committee and became a valued member. Sam Friesen introduced the committee to the concept of operational and embodied carbon and suggested several ideas for implementation.

City Councilor Molly MacGregor represented the council. City Administrator Tom Pagel, Public Works Director Matt Wegwerth, Assistant Community Development Director Dan Swenson, and Public Utilities Manager Julie Kennedy were assigned to support the committee. The committee met six times to review materials and draft this report.

Public comment is requested by Monday, September 16. Those comments and the draft report will be presented to the City Council at its September 23rd work session and scheduled for approval at the October 14th meeting of the City Council. This schedule will be adjusted if needed.

What are others doing?

The committee reviewed climate action plans from several small cities: including Bemidji, Grand Marais, Northfield and Faribault. These plans proposed ways to reduce dependence on fossil fuels, one (Faribault) by reducing the amount the city spends on fossil fuels

The State's plan has goals for clean transportation, climate-smart lands, resilient communities, clean energy buildings, healthy communities and clean economy. The City of Grand Rapids plan proposes goals in the areas of rain gardens, solar power, transportation, and waste. The City has already made accomplishments in these areas and the collective effect of adding new goals will strengthen the resilience of the City to climate challenges

What the City of Grand Rapids has done and what it proposes...

The City of Grand Rapids has taken steps to prepare for climate resiliency in multiple ways. Following is a summary of what has been done, a link for more information and the proposed action for maintaining or achieving the accomplishment. These are actions that the City is committed to which advance the public health, safety and welfare and help achieve resilience for climate challenges. The projects of this plan are intended to be resilient responses to today's challenges consistent with the City's track record of developing positive solutions to municipal challenges in northern Minnesota.

These accomplishments and proposals are presented in the following categories:

- 1) **Rain Gardens, enhancing resiliency of urban lands**
- 2) **Solar Power, providing clean power**
- 3) **Transportation, reducing greenhouse gases**
- 4) **Waste, finding new ways to recycle and reuse**

Rain Gardens: Advancing resiliency of urban lands

The City has used rain gardens to filter sediment and pollutants for more than 15 years. Rain gardens need to be maintained over time. A rain garden is, at its core, a garden that collects rainwater, holds it for a limited amount of time, and filters it before slowly releasing the water into the ground. It collects rainwater from impervious surfaces like roofs, pavements, driveways, patios, parking lots, or waterlogged yards, allowing the water to slowly seep back into the ground, preventing runoff from reaching local waterways.

The installation of rain gardens can be essential for the health of our waterways. Rain gardens guard our waterways against nonpoint source pollutants (NPS) contained in runoff water. By gathering and filtering stormwater, rain gardens also reduce the flashiness of storm events. That protects water quality and reduces downstream erosion.

The City of Grand Rapids began constructing modified rain gardens as part of a 2008 street reconstruction project on First Avenue Northwest. Since the rain gardens are not large enough to be used solely as infiltration basins, they are connected and allowed to discharge to the city's storm sewer system.

PROPOSED ACTION RAIN GARDENS

- Identify rain gardens that need maintenance.
- Discuss with neighborhoods the feasibility of neighborhoods adopting a rain garden and maintain.

Solar Power: Providing clean power

In 2022, the Itasca Clean Energy Solar Plus Battery Storage Project started operating. This is a large solar array south of town, near the airport. It currently supplies about 10 percent of the electricity used in the community.

The solar array is located on 15 acres of City land and is within the GPZ airport zone B. Development of this property is restricted due to the proximity to the airport.

Three solar panels were installed at the Grand Rapids Area Library in 2016, intended to provide part of the power the library needs and to raise community awareness of the local viability of solar power. This solar installation was part of the 2016 Riverfront Energy Project. The panels were removed in 2022.

Solar Panels in parking lots help produce clean energy close to where it's needed, reducing our dependence on polluting fossil fuels and the need for costly transmission lines. Solar canopies can also power EV charging infrastructure. Parking lot solar panels also conserve open space directing development to the built environment, protecting open space areas and habitat

PROPOSED ACTION SOLAR

- The City of Grand Rapids supports development of non-carbon-based power sources, including solar power at its parking lots, public buildings and neighborhoods.
- The City of Grand Rapids will explore restoring solar panels to the Grand Rapids Area Library and swap out the library's lightbulbs for LED lights to reduce its electric bill

Manage Transportation to Reduce Greenhouse Gases

The City of Grand Rapids manages traffic to reduce stops and idling by reviewing patterns and use, removing stop signs, and adding compact roundabouts or full roundabouts. Idling reduces the vehicle's fuel economy, adds to fuel costs and creates pollution. Idling for more than 10 seconds uses more fuel and produces more emissions than stopping and restarting the car.

The City of Grand Rapids is becoming EV-friendly, by providing multiple and convenient opportunities for EV chargers, which have been installed with assistance from GM car dealership; the system enables the city to collect information on use of the EV chargers. There are 24 chargers in town, located in NW sector and downtown Grand Rapids. These chargers are available for use by residents and visitors

Continue encouraging use of Autonomous Vehicles also has the potential to reduce greenhouse gases. GoMarti is an autonomous vehicle pilot project serving a 17 square mile area. This project continues through 2026.

The city has been changing out its incandescent bulbs with LED bulbs over the past 10 years. Doing so has reduced costs as well as reduced carbon emissions. Many cities are doing the same: Xcel Energy has switched out incandescent bulbs with streetlights in the 350 communities it serves in Minnesota

PROPOSED ACTION TRANSPORTATION

- The City is committed to reducing carbon emissions by reducing opportunities for carbon emissions from idling vehicles. Roundabouts will be reviewed where appropriate for future street and development projects.
- The City has a Complete Street Plan that guides all street, trail and transit projects. The Plan will be updated to assure that climate resilience is considered in implementation.
- The City should continue the practice of replacing incandescent bulbs with LEDs and should investigate how to receive the Dark Sky Compliant rating, which is available for small cities. This designation has been an attraction for tourists for other small cities in northern Minnesota.

Waste: Finding new ways to recycle and reuse

In 2025, the City of Grand Rapids can reduce carbon and methane emissions from waste by convening a work group to consider alternatives to the current city garbage hauling contract. Other work initiatives to be considered include adding management of recycling, organics composting and yard waste composting, as well as addressing the need for reducing truck transport of the city waste.

This climate action plan is supportive of the Itasca County Solid Waste Management Plan, and of finding a local option for the solid waste management needs of the city, that will reduce the cost per ton charges, estimated fuel usage, greenhouse gas emissions, and total fuel cost.

PROPOSED ACTION WASTE

- The City of Grand Rapids supports a garbage hauling contract that reflects the goal of climate resiliency by reducing transportation costs, recycling all materials, and providing composting of organics.
- The City of Grand Rapids supports converting the existing Keewatin facility to a municipal solid waste facility. The City further supports development of ancillary businesses at the site, including recycling of a full range of products

Implementing Climate Action

The work of preparing for and implementing measures to be resilient begins with this plan. The six steps below are a model for identifying and reviewing climate resiliency. The committee recommends that the City of Grand Rapids take the following steps:

1. Inventory energy use of all city buildings
2. Starting with the largest loads in city buildings, identify the equipment needing to be replaced and set goals for updating it .
3. Ensure relevant people in the city are up to speed on these concepts to maximize opportunities and know which resources are available to implement this plan.
4. Outreach should be done to help city residents become aware of the need for climate resiliency.
5. Offer local educational opportunities about the concepts and resources of climate resiliency.
6. Identify ways to inform residents about options for resilient building when they apply for permits for new construction

The Grand Rapids Climate Action Advisory committee believes outreach is one of the most effective strategies for educating its citizens about the opportunities to promote climate resilience. Some of this outreach will be provided by the Public Utilities commission which plans to hire a staff person next year. Outreach will help residents navigate the process of adding solar panels or buying an EV, and to show them how to apply for solar or EV rebates as well as streamlining any permitting that may be needed.

Task city staff to report on progress to City Council annually AND as needed through 2027 and update the plan in 2027.

Climate Action Plan – Questions?