

All Minnesotans can help create climate change policy

Fund a statewide outreach effort to advance climate change efforts.



Flash flooding in September 2010 caused Highway 169 to break apart north of St. Peter.

What's the issue?

The effects of climate change are accelerating. Minnesotans experience the effects as warmer winters, heavier and more frequent flooding, and heat waves or droughts. In short, our weather is becoming more unpredictable and more extreme. Wet conditions and extreme events like recent flooding cause more crop damage, soil loss, and disease. A United Nations 2018 report called for urgent action to mitigate climate risks. In January, University of Minnesota researchers reported that Minnesota is one of the fastest-warming states in the country. Climate change is impacting lakes and streams, lands, communities, industries, and public health in Minnesota.

Proposal

Governor Walz proposes a \$250,000 one-time General Fund appropriation for a series of public meetings across the state so that Minnesota communities, businesses, citizens, and non-governmental organizations can participate in climate change policymaking. This proposal includes statewide, multi-agency outreach (coordinated by the MPCA), logistics and follow-up for multiple community meetings, and support for environmental justice efforts. Multiple state agencies, working with input from communities and the private sector, will develop the scope of work and produce a report and climate change roadmap outlining potential policies that cut across all sectors.

Winter is warming 13 times faster than summer in Minnesota

Season	Average change per decade since 1895	Average change per decade since 1970
Winter (Dec. – Feb.)	+ 0.40 degrees F	+1.2 degrees F
Summer (June – Aug.)	+0.13 degrees F	+0.09 degrees F

Why is it important?

Regions, land uses, and landscape types in Minnesota differ in vulnerability to different aspects of climate change.¹ As a result, Minnesota's agriculture, cities, forests, human health, and waters will be impacted by different aspects of changing climate, at different times and places.²

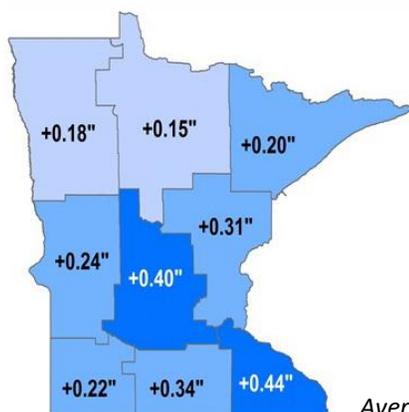
Communities must weigh in on climate impacts and solutions for their part of the state to ensure that our climate change roadmap reflects the most effective path forward for every community.

Climate change is affecting our health, well-being, way of life, and natural resources. The more input Minnesotans have into deciding how we should address climate change, the better. This proposal will produce a solid plan for making our communities more resilient and thereby protecting our economy, public health, and environment in a changing future.

For more information

Greta Gauthier
Assistant Commissioner for Legislative & Intergovernmental Relations
Minnesota Pollution Control Agency
greta.gauthier@state.mn.us
Office: 651-757-2031
Mobile: 651-338-8955

Season	Total precipitation change 1895-2016
Winter (Dec - Feb)	+ 6% (0.13 inches)
Spring (Mar - May)	+ 15% (0.93 inches)
Summer (Jun - Aug)	+ 11% (1.21 inches)
Fall (Sept - Nov)	+ 11% (0.66 inches)
Growing season (May - Sept)	+ 9% (1.55 inches)
Annual	+ 12% (2.98 inches)



Minnesota is getting wetter everywhere and in all seasons.

Average change per decade.

Data for charts above courtesy MN DNR State Climatology Office and www.ncdc.noaa.gov/cag/, as presented by Tracy E. Twine, Department of Soil, Water & Climate, University of Minnesota, January 15, 2019.

¹ Dr. Peter B.Reich, Department of Forest Resources, University of Minnesota as presented on January 15, 2019 to the MN House Energy and Climate Policy and Finance Committee.

² Ibid.

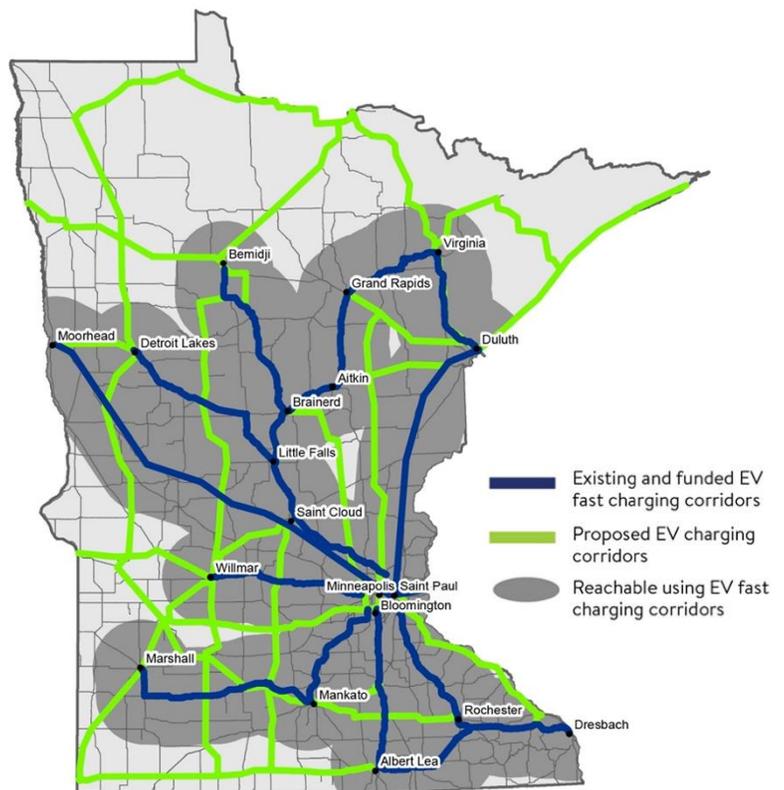
Expand electric-vehicle charging infrastructure

Meet public demand for filling the gaps in Minnesota's EV charging network.

What's the issue?

In Minnesota, the transportation sector has eclipsed the power-generation sector as the largest emitter of greenhouse gases (GHG). And light-duty vehicles account for nearly 70% of transportation's total GHG emissions. Encouraging electric-vehicle use could help Minnesota significantly reduce its GHG emissions.

In the maturing electric-vehicle market, consumers other than early adopters are considering making the switch to EVs. But the gaps in the state's charging network may cause some buyers to dismiss electric vehicles. Potential EV owners want to travel around the state without having to worry about where they can recharge. During the MPCA's robust stakeholder engagement as part of its Volkswagen Settlement agreement, participants frequently requested more EV charging stations. The agency has already received grant requests for \$3.7 million in VW settlement funds to install charging stations; only a little more than \$1.5 million is available. (The agency is only allowed to spend 15% of the settlement funds on EV charging infrastructure, per the terms of the federal court settlement agreement.)



Map from "Accelerating Electric Vehicle Adoption: A Vision for Minnesota," by MN Department of Transportation, February, 2019.

The map above shows existing and funded EV charging corridors in Minnesota (blue) along with a vision of a system that would help more Minnesotans to travel by EV (green). The dark grey areas show the parts of Minnesota that will be reachable using the EV fast-charging highway corridor system by the end of the first phase of VW settlement funding.

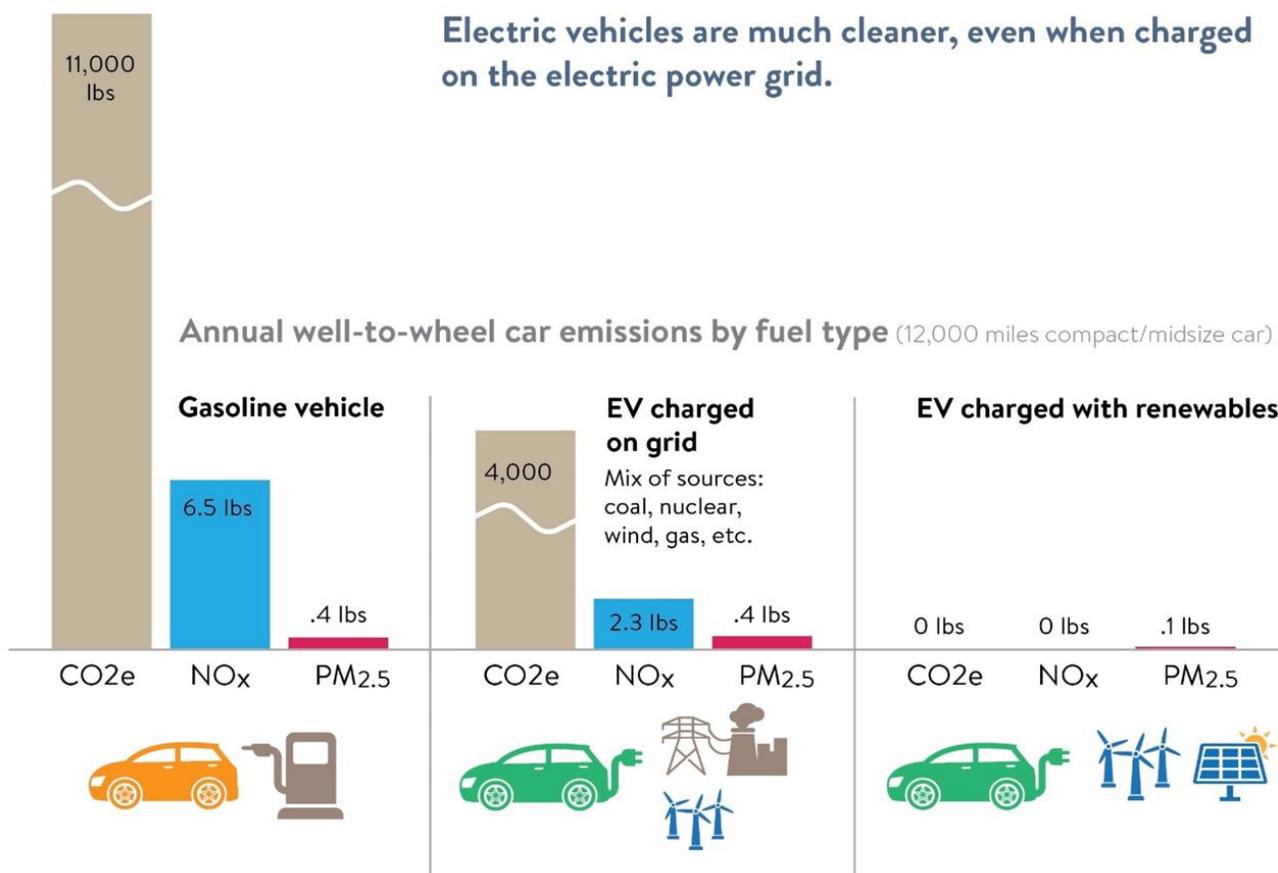
Proposal

Governor Walz recommends a two-part financing package to help build out the state's EV charging infrastructure. One part is a \$1.5 million one-time General Fund appropriation in FY2020, for grants to install electric-vehicle charging stations. The other part is ongoing funding from EV registrations. In FY20 and 21

\$50,000 per year from the EV registration fee increase will go towards EV charging infrastructure. These funds will be distributed through existing MPCA programs for EV charging stations (programs created to process VW settlement funds). Both Fast and Level 2 chargers are included.

Why is it important?

Improving the EV charging network in Minnesota will encourage electric-vehicle purchases. Even when charged on the electric power grid, EVs are much cleaner than gasoline-powered vehicles. Each year, a gasoline-fueled car will emit on average 11,000 pounds of carbon dioxide equivalent (CO₂e), 6.5 pounds of nitrogen oxides (NO_x), and 0.4 pounds of particulate matter 2.5 (PM_{2.5}). An EV charged on the grid will emit 4,000 pounds of CO₂ equivalent, 2.3 pounds of nitrogen oxides, and 0.4 pounds of particulate matter 2.5.



Source: *The Air We Breathe: The State of Minnesota's Air Quality 2019*. Minnesota Pollution Control Agency, January 4, 2019.

For more information

Greta Gauthier
 Assistant Commissioner for Legislative & Intergovernmental Relations
 Minnesota Pollution Control Agency
 greta.gauthier@state.mn.us
 Office: 651-757-2031 • Mobile: 651-338-8955

Divert food waste from landfills

Help communities reduce food waste, increase organics processing, and avoid long-term landfill costs.

What's the issue?

More than 30% of what we throw away is organic material, such as food waste. A large portion of that food could be “rescued” and used to feed people. The rest can be used for animal feed or processed into value-added products such as compost. None of it belongs in landfills. Removing organics from the waste stream will reduce our need for expensive landfills in the future.

While collection of organic waste more than doubled from 2011 to 2015, according to data from Minnesota counties, access to organics recycling remains a challenge. Only 17% of state residents had access to curbside organics recycling in 2017 (most recent data).



Proposal

A \$1.5 million biennial General Fund ongoing appropriation is proposed. It would be used for grants to reduce the amount of food waste going to landfills, including:

- \$1 million to support increased retail and prepared food rescue, and to advance proven methods for preventing business and residential food waste
- \$369,000 for analyzing emerging technologies (e.g., anaerobic digestion, pyrolysis, etc.), addressing contaminants of emerging concern (e.g., PFAS), and other barriers
- A one-half FTE for grant administration and policy support in food waste reduction

The proposal also includes policy initiatives:

- Educating businesses and organizations on the Good Samaritan law and food safety regulations for handling prepared and perishable foods
- Designating a state food waste hierarchy
- Revising labeling requirements for compostable plastics to ensure they meet industry standards, and improve product quality for professional composters
- Measuring progress by requiring composition studies at solid waste facilities

Why is it important?

Organics are the largest single source of solid waste in Minnesota, and state law establishes a goal for metro-area counties to recycle and compost 75% of solid waste by 2030. Moreover, 9.2% of Minnesotans lack a secure source of food for their families; their annual food-budget shortfall is \$258 million. In addition to the benefits of food rescue and organics recycling, the proposal could:

- Reduce waste hauling costs for businesses; recycling is not subject to the solid waste management tax
- Give more state residents access to curbside organics recycling
- Support the production of compost. The Minnesota composting industry adds an estimated \$148 million in gross economic activity each year, according to a 2014 study.
- Keep organic waste out of landfills, slowing the growth of both costly landfills and greenhouse gas emissions. Organic waste in landfills produces methane, and food waste is responsible for at least 2.6% of all U.S. greenhouse gas emissions.
- Prevent wasting the resources used to produce and transport the food

For more information

Greta Gauthier

Assistant Commissioner for Legislative & Intergovernmental Relations

Minnesota Pollution Control Agency

greta.gauthier@state.mn.us

Office: 651-757-2031 • Mobile: 651-338-8955

Expand the market for recyclables in Minnesota

Help Minnesota manufacturers increase their use of recycled materials.

What's the issue?

Domestic recycling markets have been flooded in the wake of China's decision to stop accepting material from the U.S. It's imperative to support local recycling markets, to ensure that recycling processors and brokers can cover their costs, and that recycling of waste remains viable.

Proposal

An \$800,000 biennial general fund appropriation ongoing will provide grants to new and existing Minnesota manufacturing companies so they can expand their use of recycled materials. The funds would be available for:

- Upgrading value-added technology that sorts, washes, and otherwise prepares recyclables for market
- Covering soft costs — such as engineering studies, equipment installation, and developing project proposals — that banks are reluctant to finance

Why is it important?

Recycling markets are fragile, and though Minnesota boasts many businesses that use recycled materials to manufacture new products, it's still possible for markets to destabilize in the current international climate. Additional funding is needed now to increase capacity in 2019 and 2020. If market instability continues, some of the more than 60,000 recycling and recycling-related manufacturing jobs in Minnesota may be lost.



Economic activity: Value-added recycling manufacturers in Minnesota

2015 employment (most recent data)

Direct jobs Companies using recycled materials to manufacture products	18,029
Estimated indirect jobs Companies supplying materials and services to businesses producing a final product	18,607
Estimated induced jobs Employment resulting from money spent by employees and companies in the market	23,579
TOTAL JOBS	60,215

Source scenarios calculated using Regional Economic Models, Inc.'s Minnesota Forecasting and Simulation Model

Estimated wages and salary The money paid to employees from all sources	\$3.42 billion
Estimated tax revenue on all jobs Business/personal federal, state income taxes, sales tax, excise tax and miscellaneous taxes, and business taxes	\$665 million
Value-added activity The value a company gives its product or service before offering it to customers. Contribution to Gross State Product output excluding all goods purchased to manufacture products as well wages and profit	\$6.68 billion
TOTAL OUTPUT (aka sales or supply) The amount of production, including all goods purchased to manufacture products as well as wages and profit	\$15.7 billion

For more information

Greta Gauthier

Assistant Commissioner for Legislative & Intergovernmental Relations

Minnesota Pollution Control Agency

greta.gauthier@state.mn.us

Office: 651-757-2031 • Mobile: 651-338-8955