

2023 Greenhouse Gas Data and 2026 Climate Action Framework

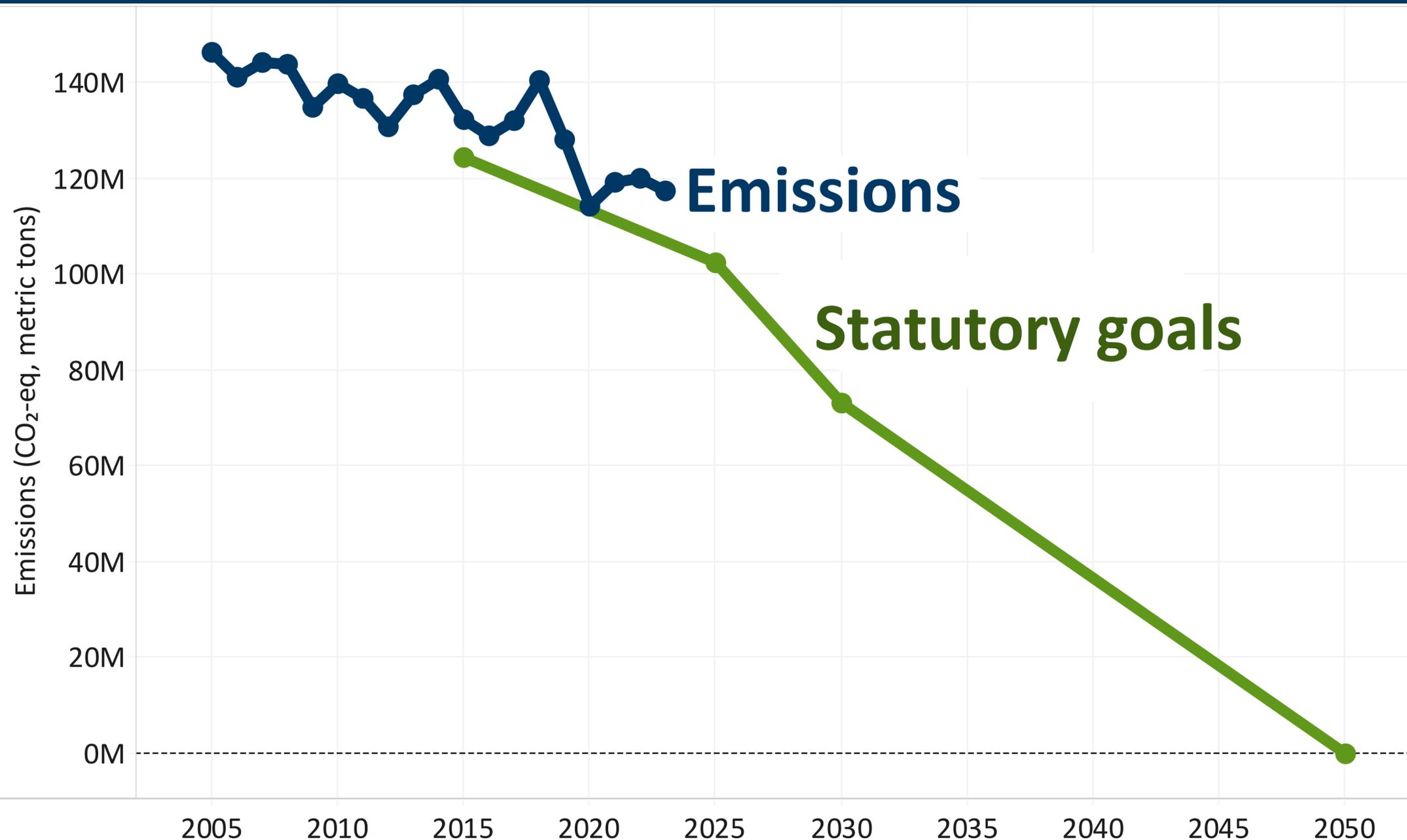
Kate Knuth | Minnesota Pollution
Control Agency

Tuesday, March 3, 2026

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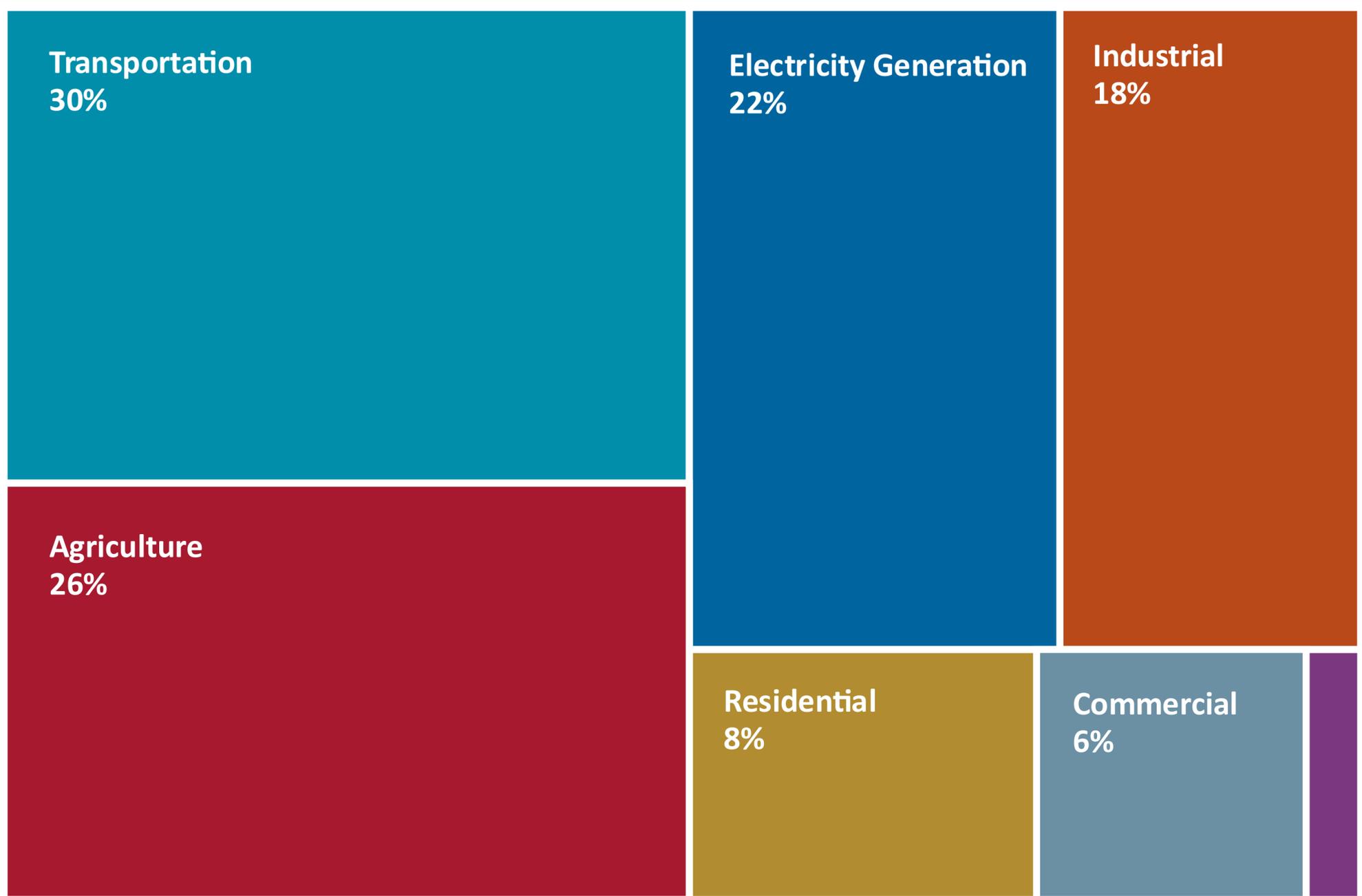
2023 greenhouse gas emissions data



Get the data:



Emissions by sector



Transportation & agriculture



GHG emissions 2005-2023

Transportation

↓ 9%



Largest sources:

- ▶ Light-duty trucks
- ▶ Heavy-duty trucks



GHG emissions 2005-2023

Agriculture

↑ 1%



Largest sources:

- ▶ Fertilizer
- ▶ Animal agriculture



Energy & industrial



GHG emissions 2005-2023

Electricity generation

↓ 50% 

Largest sources:

- ▶ Coal
- ▶ Natural gas



GHG emissions 2005-2023

Industrial

↑ 9% 

Largest sources:

- ▶ Oil
- ▶ Natural gas



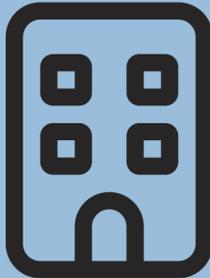
Buildings



GHG emissions 2005-2023

Commercial

↑ 15%



Largest sources:

- ▶ Natural gas
- ▶ Air conditioning, refrigeration



GHG emissions 2005-2023

Residential

↑ 22%



Largest sources:

- ▶ Natural gas
- ▶ Oil



Land use, land-use change, and forestry



GHG emissions 2005-2022

Land use, land-use change, and forestry

↓ **25%** 8.4% offset

Largest carbon sinks:

- ▶ Existing forests
- ▶ Land converted to forest



2026 Climate Action Framework



Minnesota's updated plan to tackle the climate crisis by cutting pollution, protecting our communities from extreme weather, and building a strong, forward-looking economy.



Minnesota's Climate Change Subcabinet



Governor

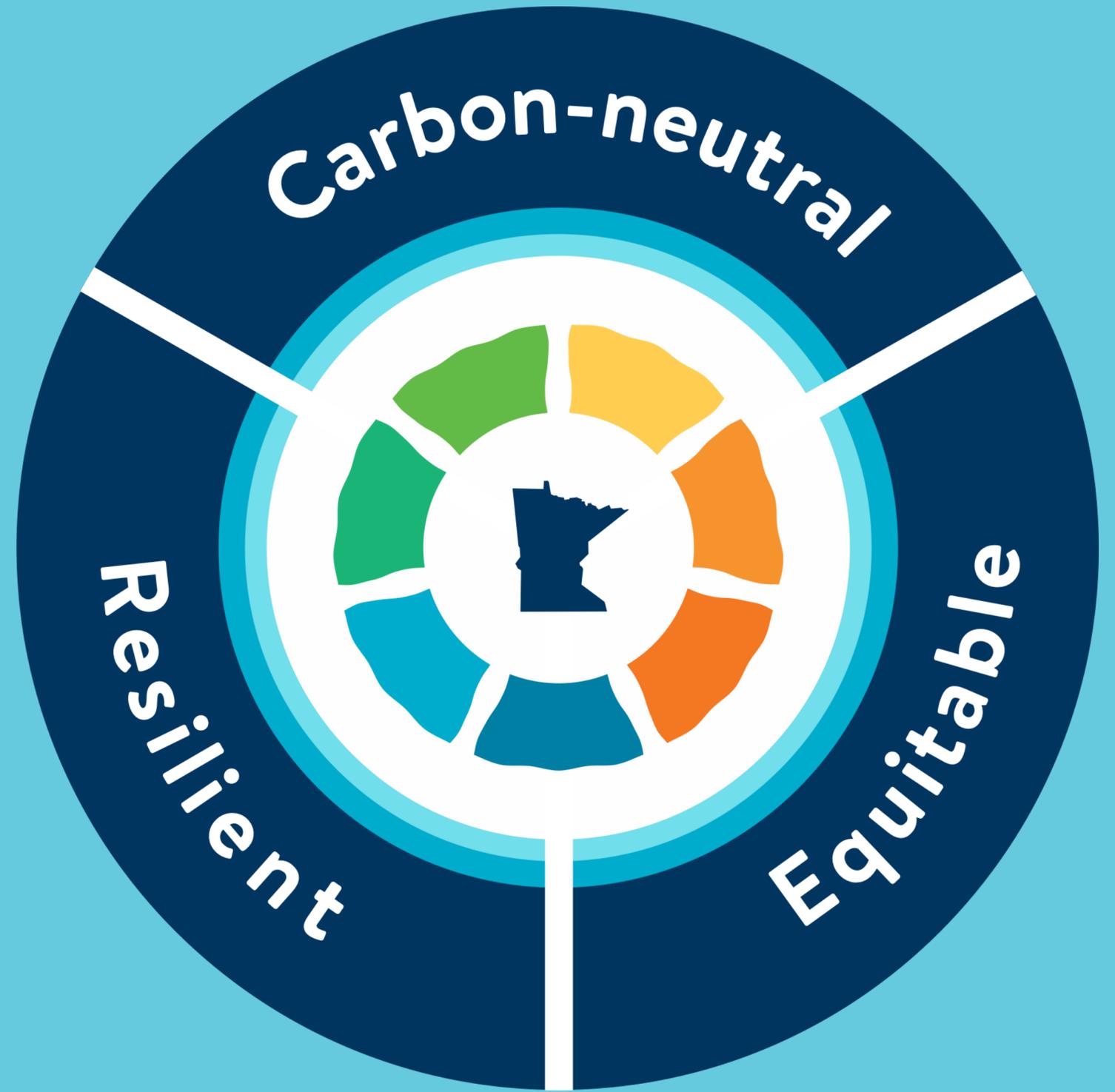
Climate Change Subcabinet

Advisory Council on Climate Change

- Board of Soil and Water Resources
- Climate Finance Innovation Authority
- Department of Administration
- Department of Agriculture
- Department of Commerce
- Department of Employment and Economic Development
- Department of Health
- Department of Iron Range Resources and Rehabilitation
- Department of Labor and Industry
- Department of Natural Resources
- Department of Public Safety
- Department of Transportation
- Environmental Quality Board
- Metropolitan Council
- Minnesota Housing Finance Authority
- Minnesota Management and Budget
- Minnesota Pollution Control Agency



**Our vision
stands**



Progress highlights since the 2022 framework



100% carbon-free electricity for Minnesota by 2040



A \$100 million investment in climate-resilient community infrastructure



Incentives for electric vehicle buyers



Support for farmers to adopt climate-smart agricultural practices



Expanding solar energy for schools



Conserving and managing our forests, grasslands, and wetlands



What's new in the 2026 framework?



- Seven goal chapters
- Greenhouse gas (GHG) forecasting
- Health and economic benefits analysis
- The essential role of local government
- Stronger Tribal perspectives
- 'Big Things Now'
- Further developed metrics and targets

Six near-term priorities to achieve our long-term vision

1. Keep pushing on 100% carbon-free electricity by 2040
2. Accelerating EV adoption and reducing transportation emissions
3. Sustained funding for resilient infrastructure and disaster response
4. Accelerate clean heat in buildings and industry
5. Reducing agriculture emissions, restoring peatlands, growing forests
6. Strong financing strategies for clean energy transition

**Big
Things
Now**

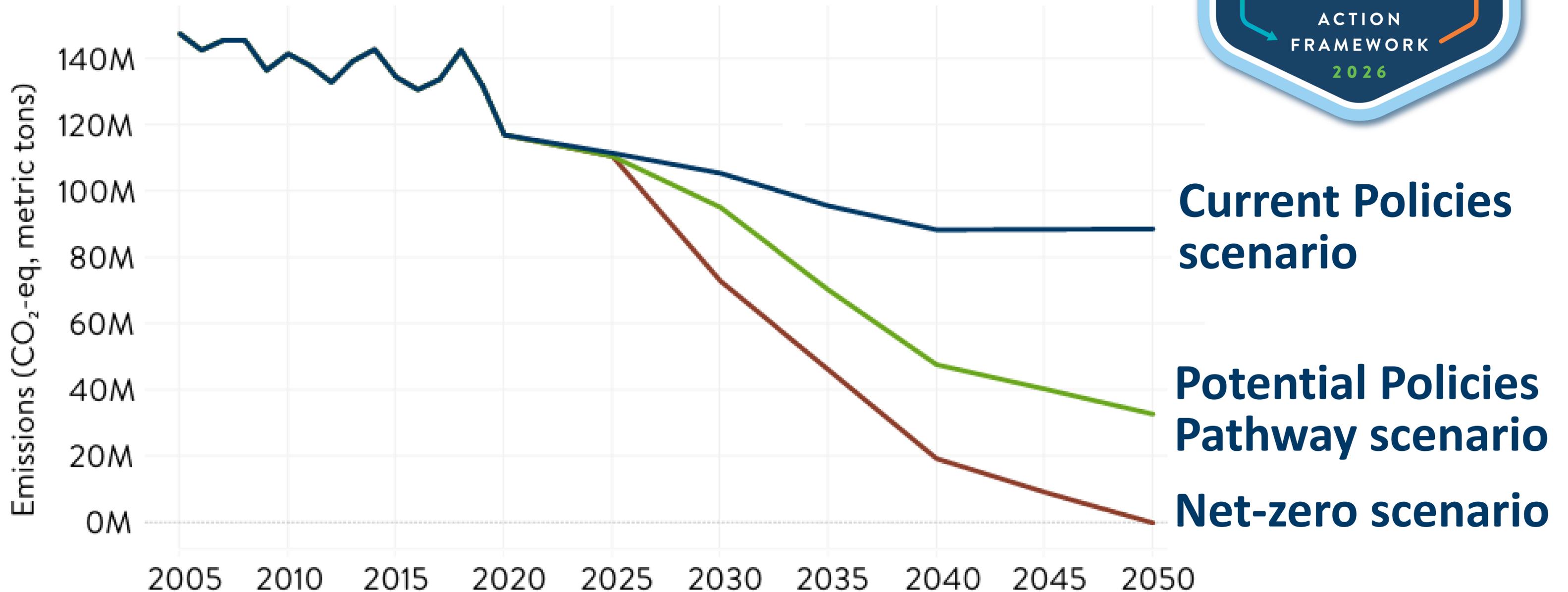
The unequal burdens of climate change



Overburdened communities, often including Black people, Indigenous people, people of color, and people who have lower incomes, face greater risks from climate change-related harms.

People in some phases of life – like elderly or pregnant people – are also more susceptible to risk. Geography can also affect climate vulnerability. For example, rural areas with less access to health care are more at risk from climate health impacts.

New greenhouse gas forecasting



Forecasting takeaways



Investing in accelerated climate action will make Minnesota healthier and continue to deliver strong economic growth.

- Increased pace and scale of climate action is required to reach GHG targets
- \$1.17-\$2.28 billion in total health benefits
- Federal rollbacks lead to slower emissions reductions, higher costs, and worse health outcomes

Essential actions include:

- Decarbonizing and expanding electricity generation
- Sustaining and increasing carbon sequestration in lands

Actions to build resilience save Minnesotans money

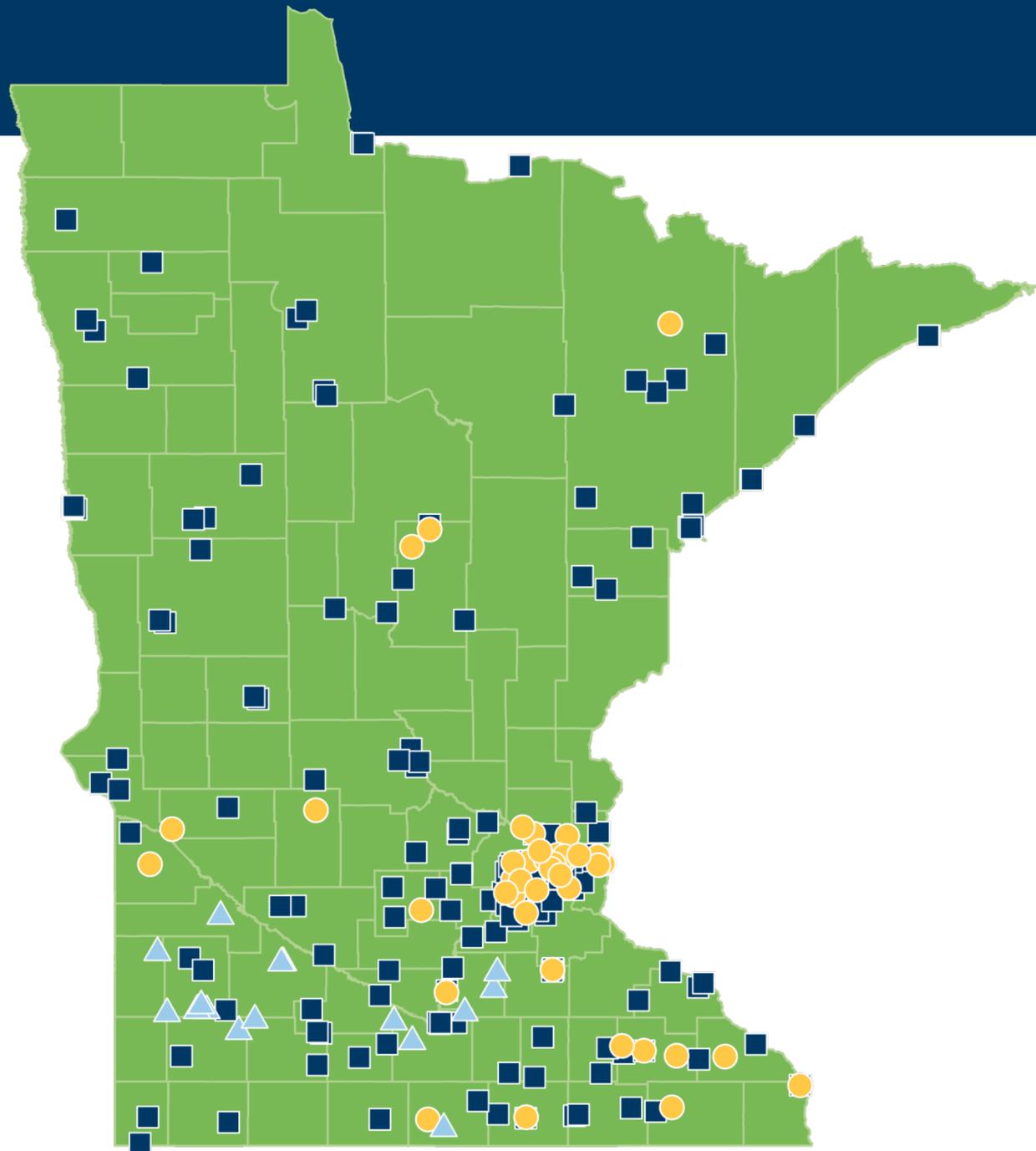


Shade trees can reduce an air conditioning bills by nearly 25%. Trees also absorb climate pollution.

Every dollar spent on climate resilience saves \$8-10 in future disaster response costs.



The essential role of local government



Commerce solar on public building grants



MPCA resilient communities grants



BWSR water storage grants

Tribal coordination in support of the 2026 framework

- Tribal-state coordinator and a Tribal Coordination Team convened leaders, staff, and community members across Tribes in Minnesota.
- Developed a standalone chapter of the framework, callout boxes in each goal chapter identifying priorities, and priority actions identified.



2026 framework goals

- 1** Clean transportation
- 2** Climate-smart natural and working lands
- 3** Resilient communities
- 4** Clean energy
- 5** Healthy lives and communities
- 6** Clean economy
- 7** Efficient and resilient buildings



What's in a goal chapter?



- Challenges and opportunities
- Chart of greenhouse gas emissions and sequestration
- Context relating to the vision
- High-level actions
- Targets
- Tribal perspectives
- How individuals, businesses, governments can take action
- Climate leadership story

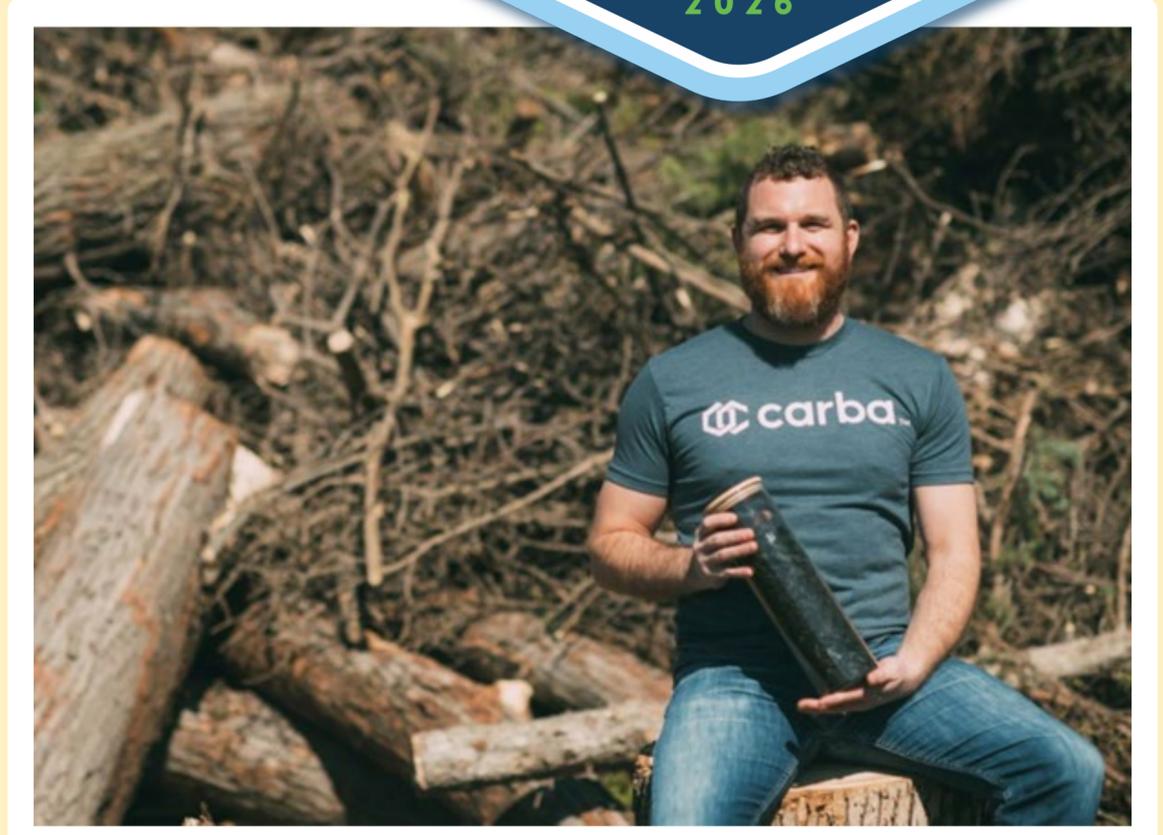
**We all have a role in bringing
Minnesota's climate vision to life.**



**LeAnn Littlewolf,
Duluth**



**Mike Young,
Waverly**



**Andrew Jones,
Eden Prairie**

Goal 1: Clean transportation

Connect and serve all people through a safe, equitable, and sustainable transportation system.

- Travel options
- Clean and efficient vehicles
- Resilient and low-carbon infrastructure and system management



Goal 2: Climate-smart natural and working lands

Manage landscapes to absorb and store more carbon, reduce emissions, and sustain healthy and resilient lands and waters.

- Carbon sequestration and storage in forested lands, grasslands, and wetlands
- Resilient landscapes and ecosystems
- Healthy farmland
- Sustainable landscapes and water management
- Enhanced investments in emerging crops, products, and local economies



Goal 3: Resilient communities

Ensure all communities are prepared for, can respond to, and can recover from present and future climate impacts, including extreme weather.

- Climate-smart communities
- Healthy community green spaces and water resources
- Resilient infrastructure



Goal 4: Clean energy

Implement Minnesota's 100% carbon-free electricity by 2040 law and set a course for long-term, sustainable use of clean energy in the state.

- Enhanced grid and resilient grid infrastructure
- Clean energy sources
- Dispatchable clean energy and storage



Goal 5: Healthy lives and communities

Protect health and advance equity in a changing climate.

- Cooler, safer communities
- Protection from poor air quality
- Safe water
- Community care
- Climate-smart public health
- Advance equity, resilience, and justice



Goal 6: Clean economy

Build a thriving carbon-neutral economy that produces goods and services with environmental benefits and equitably provides family-sustaining job opportunities.

- Clean, sustainable, and resilient industrial businesses
- Clean fuel and clean technology innovation
- Strong circular economy
- Resilient and equitable clean economy workforce



Goal 7: Efficient and resilient buildings

Build and maintain healthy, comfortable, safe, efficient, and resilient buildings and homes that cost less to operate, pollute very little, and support grid stability.

- Decarbonized residential and commercial buildings
- Resilient residential and commercial buildings
- Reuse of buildings and building materials



Learn more about the 2026 Climate Action Framework



Supplementary documents:

- Action steps
- Targets
- Engagement
- Local government
- Forecasting
- Glossary



mn.gov/framework



Questions?