



**Minnesota Pollution  
Control Agency**



**MINNESOTA  
DEPARTMENT OF  
COMMERCE**

February 1, 2008

The Honorable Yvonne Prettner-Solon  
Minnesota State Senator  
G-9 Capitol Building  
75 Rev. Dr. Martin Luther King Jr. Blvd.  
St. Paul, MN 55155

The Honorable Bill Hilty  
Minnesota State Representative  
559 State Office Building  
100 Rev. Dr. Martin Luther King Jr. Blvd.  
St. Paul, MN 55155

Dear Senator Prettner-Solon and Representative Hilty:

Please accept this document as our preliminary climate change action plan required by Minnesota Statute 216H.02, Subd. 2. The final report of the Minnesota Climate Change Advisory Group (MCCAG) is forth-coming.

Over 100 Minnesotans of the MCCAG and Technical Work Groups representing environmental, religious, academic, energy production and delivery, manufacturers, farmers, businesses and many other perspectives spent countless hours tackling an extraordinarily complicated topic on an aggressive timetable. We thank them for their thoughtful work. Much of this preliminary plan is based on their efforts. The details of this extensive process can be found at [www.mnclimatechange.us](http://www.mnclimatechange.us).

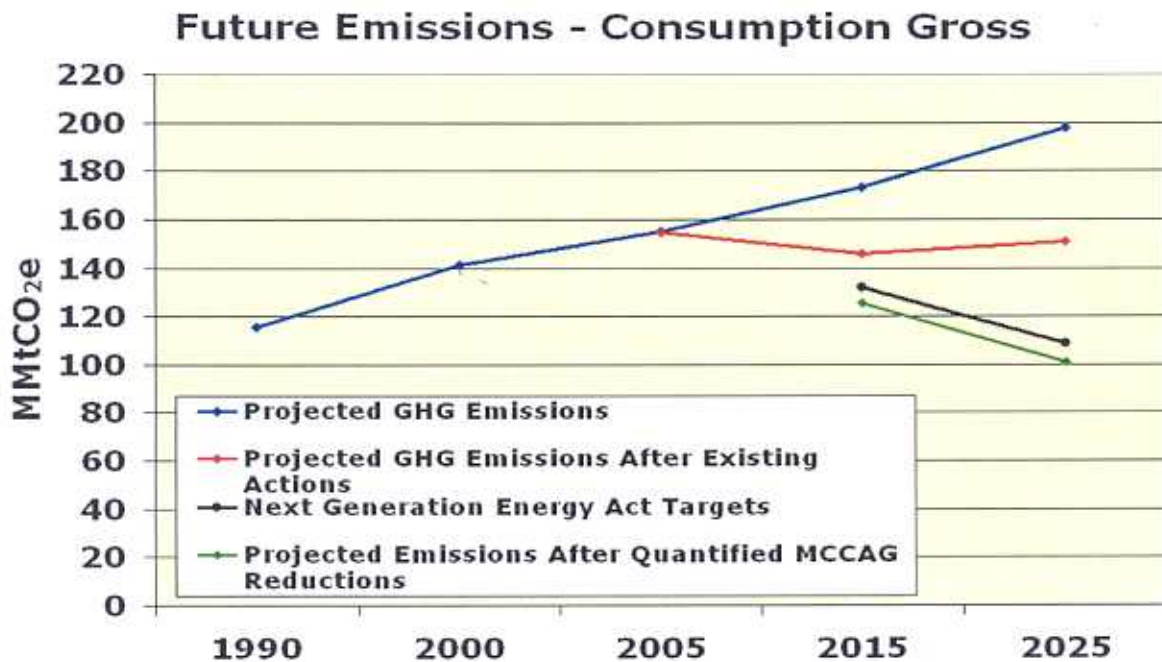
The threat of climate change due to human-caused emissions of greenhouse gases is real and growing. Minnesota is already taking action to reduce these emissions. The attached preliminary climate change action plan proposes to do even more to reach the state's goal of reducing "statewide greenhouse gas emissions across all sectors producing those emissions to a level at least 15 percent below 2005 levels by 2015, to a level at least 30 percent below 2005 levels by 2025, and to a level at least 80 percent below 2005 levels by 2050" (MN Stat. sec. 216H.02, Subd. 1).

### Success depends on the Next Generation Act and other Existing Actions

As the chart from the January 24, 2007, MCCAG meeting below shows, the 2015 and 2025 reduction goals are very aggressive. The chart also shows that about half of the reductions needed to achieve these goals come from existing policies and actions:

- The renewable energy standard and energy efficiency provisions of the Next Generation Energy Initiative proposed by Governor Pawlenty and enacted by the Minnesota Legislature in 2007;
- The state’s aggressive ethanol and biodiesel biofuels initiatives; and
- Xcel Energy’s Metropolitan Emissions Reduction Plan to convert two metro area coal-fired generation facilities to natural gas, and upgrade efficiencies and pollution control equipment at a third.

## MN Greenhouse Gas Targets 2025



The chart also shows that it is possible to meet the goals through additional actions if done in a thoughtful, incremental and iterative way in order to avoid adverse consequences to Minnesotans and the state’s economic vitality. The preliminary climate action plan we are presenting here will move the state in this direction.

## Guiding Principles

To achieve the greenhouse gas emissions goals, this preliminary proposal adheres to the following principles:

1. Implementation of the existing actions must be the number one priority;
2. Actions and policies should be thoughtful, incremental and iterative to avoid adverse consequences to Minnesotans and the state's economic vitality;
3. Structure a portfolio of policies and measures that are tailor-made for Minnesota;
4. Create opportunities for all people and communities to participate in and benefit from energy transformation to the low-emitting future;
5. While we take actions in Minnesota, those actions must be mindful of, and compatible with, the actions going on elsewhere in the region, nation and world;
6. Gather more information and research regarding the economic and societal affects as well as re-assess our analytical assumptions and check them with reality through reporting and measurement mechanisms; and
7. Develop the regulatory structures and organizational design to manage the transformation.

We look forward to working with you to address the threat of climate change by meeting the state's greenhouse gas reduction goals through the implementation of this preliminary plan.

Sincerely,



Edward Garvey  
Director  
Office of Energy Security



Brad Moore  
Commissioner  
Pollution Control Agency

cc: Governor Tim Pawlenty  
Speaker of the House, Margaret Kelliher-Anderson  
Senate Majority Leader Larry Pogemiller  
House Majority Leader Tony Sertich  
Senate Minority Leader David Senjem  
House Minority Leader Marty Sieffert  
Sen. Ellen Anderson, Chair, Environment, Energy and Natural Resources Budget Division  
Sen. Satveer Chaudhary, Chair, Environment and Natural Resources Committee  
Rep. Jean Wagenius, Chair, Environment and Natural Resources Finance Division  
Rep. Kent Eken, Chair, Environment and Natural Resources Policy Division

# **Preliminary Climate Change Action Plan**

February 1, 2008

## **Residential, Commercial and Industrial Implementation Items**

- Decouple utilities' earnings from their energy sales to eliminate any disincentives for the utilities to assist their customers in conserving energy.
- Encourage utilities to develop statewide, standardized portfolios of energy efficiency and conservation programs.
- Encourage all new buildings, both public and private, to use ever-increasing cost-effective efficiency measures and renewable energy technologies, with the ultimate goal that they do not use carbon-based energy.
- Remove the barriers to and encourage development of Combined Heat and Power (CHP) projects.
- Promote non-utility strategies and incentives to reduce greenhouse gas emissions through the adoption of energy efficiency and renewable energy programs and technologies.
- Develop programs to promote energy efficiency for homes that use fuels other than natural gas and electricity for heating.
- Expand electronic availability of individual energy/usage information to promote energy performance disclosure by engaging utility consumers to take a more active role in their energy use, including asking utilities to provide an electronic energy performance disclosure to prospective buyers or renters when a property is being sold or rented.
- Promote energy efficiency research and development and technology-specific applications to reduce greenhouse gas emissions.
- Support strong appliance standards that provide energy usage and efficiency information disclosure.

## **Energy Supply Implementation Items**

- Implement the renewable energy standard.
- Repeal the state's moratorium on new nuclear energy facilities.
- Reduce regulatory barriers by eliminating the Certificate of Need requirement for generation and transmission facilities needed to meet the renewable energy standard.

- Create renewable energy “zones” and “corridors” to streamline the regulatory, environmental and siting review process for new renewable energy generation facilities and transmission lines.
- Encourage the research and development of clean energy technologies through the development of a formal roadmap created by scientists from the state’s leading universities and colleges and industrial research centers.

### **Transportation and Land Use Implementation Items**

- Undertake the following actions to help reduce Vehicle Miles Traveled (VMT):
  - Encourage Minnesota employers to develop programs that offer commuter benefits. These can include: providing paid or pre-tax transit passes, offering support for car or van pools, guaranteeing rides home for non-drivers, providing bicycle parking and employee lockers and customizing travel demand management plans for specific locations.
  - Encourage school districts to develop capital investment and siting plans that address issues such as acreage requirements to allow for greater energy efficiency and fewer VMT.
  - Establish a new public information and education program to help Minnesotans voluntarily reduce their VMT.
  - Expand transit, pedestrian and bicycle infrastructure where such investment is cost effective and can be shown to reduce vehicle miles traveled. Infrastructure investment must be balanced between the Metro area and Greater Minnesota.
  - Optimize the efficiency of the existing transportation system through management of the existing infrastructure.
  - Continue to study and install where justified and cost effective: congestion management systems, bus signal pre-emption, construction of roundabouts instead of signals, low cost, targeted bottleneck removal, HOT lane conversion and other transportation management tools.
  - Explore the possibility of expanding the tolling, priced dynamic shoulder lane and congestion pricing concepts outlined in the Urban Partnership Agreement to a region wide level. Use tolling revenues to enhance transit opportunities during periods of congestion and to increase transit ridership.
- Expand availability and use of E85.
- The Metropolitan Council and local governments should explore the addition of an energy and climate security component to future comprehensive plans.

- Explore equitable transportation pricing mechanisms that would encourage drivers to purchase more efficient vehicles, drive less and/or more efficiently by combining trips, or choosing other transportation alternatives.
- Encourage the insurance industry to provide additional opportunity for “pay as you drive” policies.
- Investigate the use and cost effectiveness of low energy LED and solar powered roadway lighting.
- Maximize the amount of freight that can be moved by rail by forming partnerships to remove chokepoints and increase capacity of the freight rail system by improving the efficiency of freight movement in Minnesota
- Reduce the growth of truck VMT through the permitting of trucks with increased weight limits subject to approved axle configurations, roadway weight capacities and other safety requirements.

#### **Agriculture, Forestry and Waste Management Implementation Items**

- Encourage farmers to adopt conservation practices that provide enhanced ground cover and soil carbon benefits. Programs that would assist farmers in reaching these goals include: the Agricultural Best Management Loan Program administered by the Minnesota Department of Agriculture and carbon credit trading programs coordinated by various farm organizations.
- Encourage increased participation among existing conservation programs and new programs such as the Reinvest in Minnesota Clean Energy Program (RIM-CE). These programs provide environmental benefits and new opportunities for farmers in developing feedstock for bioenergy production in Minnesota.
- Support the creation of incentives aimed at bioenergy facilities that use biomass as an energy feedstock to lower their carbon footprint.
- Harvest biomass from transportation right-of-ways after the grassland bird nesting seasons.
- Increase the state’s biodiesel blending requirement incrementally from B2 to B20 and develop recommendations and criteria for increasing the sustainability of the biodiesel fuel at each enhanced blend level.
- Support the study of a Low Carbon Fuel Standard (LCFS) that takes advantage of the work Minnesota is already doing on biofuels. The study should focus on a LCFS that measures progress on a full life-cycle basis and be based on the state’s plans for 20 percent ethanol by 2013 and 20 percent biodiesel by 2015.

- Support development of a Green Fuels Certification program that establishes meaningful minimum standards and a credible compliance mechanism to differentiate and add value to the fuels produced by those Minnesota producers that are striving to reduce their overall environmental impact.
- Support acquisition and easement programs that protect and increase natural coverage.
- Maintain efforts to protect and regulate wetlands and peat lands.
- Support urban and community forestry programs.
- Reduce tree mortality due to pests and disease, and reduce the risk and severity of wildfire.
- Support the Forest Legacy Easements effort to help prevent fragmentation and conversion of forest land as industrial land owners divest themselves of forest land holdings.
- Support the State Forest Land Reforestation program and resource management.
- Expand waste reduction, recycling, composting and management efforts:
  - Increase further recycling and source reduction rates in Minnesota. Minnesota has reduced GHG emissions from the solid waste sector by 14% since 1990 by having the second highest recycling rates in the country and landfill gas emissions controls.
  - Support increased source reduction and the interim goal of achieving a 50% statewide recycling rate by January 2011, through efforts including:
    - Recycle More Minnesota Campaign
    - Office paper and junk mail reduction
    - Waste reduction in the grocery sector
    - Electronics recycling
    - Telephone book reductions
    - Increased beverage container recycling
  - Initiate discussions to redesign Minnesota's solid waste system to achieve the MCCAG goal of 87 million tons of GHG reductions by 2025 as outlined in the Solid Waste Policy Report.
  - Define wastewater sludge and byproducts as biomass and define wastewater sludge and the organic portion of solid waste and organic byproducts of each as renewable fuels.
  - Study by the MPCA and the Metropolitan Council regarding lifecycle costs and GHG benefits of source separated food waste composting as compared to treatment within wastewater systems.

### **Cross-Cutting Implementation Items**

- Begin developed, by the MPCA, of the necessary rules to require comprehensive, phased-in reporting of GHG emissions for the state. The reporting will be developed to comport to the protocols developed by The Climate Registry. In addition, begin development of recommendations for periodic emissions forecasting needed to track the states progress towards meeting emission reduction goals.
- Create the Minnesota Office of Energy Security and clarify that the Office, in conjunction with the MPCA, are the Administration's lead agencies on climate change issues.
- Cooperation between state departments will work together to coordinate various grant and loan programs so that they are structured and awarded so as to forward the state's energy and climate strategy objectives.
- State government "Leads by Example":
  - Increased energy conservation through actions by state departments to directly reduce energy use.
  - Reduced energy use by state departments through application of efficient technologies.
  - Support the Minnesota Sustainable Building Guidelines, the Minnesota Benchmarking Tool and the goals of Architecture 2030.
  - Support Drive to Excellence - The Real Property initiative which will compliment state agency energy conservation efforts by providing a web-based, statewide repository and tracking mechanism for a large repository of building related data, as well as a governance structure for planning, managing and developing real property to optimize state assets. This also will provide a strong incentive for standards-based information and decision-making.
  - Increase biofuels use through actions by state departments to use biodiesel and E85 in state vehicles.
- Incorporate climate change-related parameters into existing environmental monitoring activities and in new monitoring networks being established with the Clean Water Legacy Act funding. State Departments should work together to compile and review appropriate monitoring information and recommend additional actions.

### **Cap and Trade Implementation Items**

- Prepare Minnesota to participate in the carbon market by creating the "Carbon Market Planning Authority" within the Office of Energy Security.



- On November 16, 2007 Governor Tim Pawlenty and the Governors of Wisconsin, Illinois, Michigan, Iowa, Kansas and the Premier of Manitoba, Canada, signed the *Midwestern Greenhouse Gas Reduction Accord*. Under this Midwestern Accord, members agree to:
  - establish greenhouse gas reduction targets and timeframes consistent with Midwest Governors' Association member states' targets;
  - develop a market-based and multi-sector cap-and-trade mechanism to help achieve those reduction targets;
  - establish a system to enable tracking, management, and crediting for entities that reduce greenhouse gas emissions; and
  - develop and implement additional steps as needed to achieve the reduction targets, such as a low-carbon fuel standards, regional incentives and funding mechanisms.

Since the November signing, officials from the governors' offices and various state agencies have met several times to begin implementing the Accord. The MCCAG recommendation for Cap and Trade will be brought into this process.

In addition to the Midwest Greenhouse Gas Reduction Accord, eight governors of the Midwest Governors' Association signed the *Energy Security and Climate Stewardship Platform for the Midwest* (Stewardship Platform). To transition to a lower carbon energy economy, the Stewardship Platform lists the following goals:

- Energy Efficiency Improvements – the Midwest Regional commitment is to meet at least 2 percent of regional annual retail sales of natural gas and electricity through energy efficiency improvements by 2015, and continues to achieve an additional 2 percent in efficiency improvements every year.
- Bio-based Products and Transportation – the Midwest Regional commitment with regard to biofuels in general is to have 50 percent of the region's transportation fuels come from renewable resources by 2025, including accelerating strategies for improving the efficiency of biofuels production and use; reducing fossil fuel inputs; minimizing greenhouse gas emissions; decreasing water use; strengthening the existing biofuels industry; and developing, demonstrating and commercializing a variety of biomass-utilizing technologies and other low-carbon advanced fuels. There is also a regional commitment on E85, which is a goal that at least 15 percent of retail transportation fuel service stations in the region offer E85 by 2015, 20 percent by 2020 and 33 percent by 2025.
- Renewable Electricity – the Midwest Regional commitment on renewable electricity production is to obtain at least 30 percent of the region's electricity from renewable resources by 2030.

- Advance Coal and Carbon Capture and Storage – the Midwest Regional commitment on coal use for electricity generation is that by 2020, all new coal gasification and coal combustion plants will capture and store CO<sub>2</sub> emissions.

In summary, under the leadership of Governor Pawlenty, the administration is actively working with the governors of the Midwest states and the Premier of Manitoba to establish a regional strategy to achieve energy security and reduce greenhouse gas emissions that cause global warming.