



# Minnesota Climate Change Advisory Group

Meeting #3  
August 2, 2007

Minnesota Department of Commerce  
Minnesota Pollution Control Agency  
The Center for Climate Strategies

## Welcome and Introductions

- State of Minnesota
- Minnesota Climate Change Advisory Group (MCCAG)
- Members of the Public
- Center for Climate Strategies

# Agenda

- Introductions and review of day's agenda
- Approval of draft summary of MCCAG Meeting #2
- Review of the MCCAG Process Status and Next Steps
- Review and approval of draft priority for analysis policy options
- Review of updates to the Minnesota's Draft GHG Inventory and Forecast
- Next Steps for MCCAG and Technical Work Groups (TWGs)
- Agenda, Time and Date for Next Meeting(s)
- Public Input and Announcements

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# Stepwise Planning Process

1. Develop inventory and forecast of statewide GHG emissions
2. Identify a full range of possible actions
3. Identify initial priorities for analysis
4. Develop straw proposals for draft priorities for analysis
5. Quantify GHG reductions and costs/savings
6. Evaluate externalities, feasibility issues as needed
7. Develop alternatives to address barriers as needed and iterate to final agreements on policy recommendations
8. Finalize the statewide inventory and forecast of emissions
9. Aggregate results
10. Finalize and report recommendations

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## Review and Approval of Draft Priorities for Analysis

- 300+ possible actions developed by TWGs and MCCAG
- 55 initial draft priorities for analysis recommended by TWGs
- MCCAG reviews and approves with modifications if/as needed
- TWGs formulate straw proposals for policy design, quantification

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## AFW

- Agricultural Crop Management
- Forestry Management Programs to Enhance GHG Benefits
- Integrated Waste Management
- Expanded Use of Biomass Feedstocks for Electricity, Heat, or Steam Production
- Land Use Management Approaches for Protection and Enrichment of Soil Carbon
- Forest Protection – Reduced Clearing and Conversion to Nonforest Cover
- In-State Liquid Biofuels Production
- End of Use Waste Management Practices

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# TLU

- Improved Planning and Development Strategies
- Improved Infrastructure
- Biofuels
- Infrastructure Management
- Climate-Friendly Transportation Fees
- Adopt CA Clean Car Standards
- “Fix-it-First” (Repair before new infrastructure)
- Update Road Standards
- Commuter Choice/Parking Cash Out/required employer TDM plans
- Congestion Pricing (or tolls) (w/ targeted use of revenue towards travel alternatives)
- Truck Stop Electrification

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# RCI

- Maximize savings from utility Conservation Improvement Program (CIP)
- Improved uniform state-wide building codes for: (a) improved energy efficiency; (b) reduced greenhouse gas emissions; and (c) structural soundness
- Green Building guidelines and standards
- Develop non-utility strategies and incentives to encourage energy efficiency and reduce greenhouse gas emissions.
- Conservation Improvement-type Program for propane and fuel oil efficiency
- Energy performance disclosure
- Promote technology-specific applications that reduce GHG emissions:
- Support strong federal appliance standards and require high state standards for appliances not preempted by federal standards.
- Consumer education and professional training programs

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# ES

- GHG Cap-and-Trade
- Generation Performance Standards or Mitigation Requirements
- Improve the GHG Profile of Biofuels and Fossil Fuels (e.g., Low Carbon Fuel Standard, biofuel production)
- Efficiency Improvements, Repowering and other Upgrades to Existing Plants
- Transmission System Upgrading, incl. reducing transmission and distribution line loss.
- Renewable and/or Environmental Portfolio Standard
- Nuclear Power Support and Incentives
- Advanced fossil fuel technology incentives, support, or requirements (IGCC, CCS, etc.)
- CCSR enabling policies (administration, regulation, liability, incentives) and incentives
- Large-scale, supply-oriented Combined Heat and Power (CHP) & Geothermal Incentives and/or Barrier Removal
- Voluntary GHG targets
- Carbon (GHG) tax
- Distributed Renewable Energy Incentives and/or Barrier Removal
- Technology-based approaches, including research & development, fuel cells, energy storage, distributed renewable technologies, etc.

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# CC

- GHG Inventories, Forecasting, Reporting, and Registry
- Statewide GHG Reduction Goals and Targets
- State and Local Government GHG Emissions (Lead-by-Example)
- Public Education and Outreach
- Tax and Cap Policies
- Adaptation and Vulnerability
- Participate in Regional and Multi-State GHG Reduction Efforts
- Encourage the Creation of a Business-Oriented Organization to Share Information and Strategies, Recognize successes, and Support Aggressive GHG Reduction Goals
- Dedicate Greater Public Investment to Climate Data and Analysis
- Facilitate the Development of an Effective Carbon Credit System for MN
- Create a Market Advisory Group

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# Break



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## MN Inventory & Forecast Update

- Draft Report for 1990-2020
  - Now completed and posted to website
  - Revisions for Agriculture and Forestry Sectors
    - Added agricultural soil carbon emissions (4.1 MMtCO<sub>2</sub>e) and forest carbon emissions (3.3 MMtCO<sub>2</sub>e) to gross emissions total
    - Excluded forest soil organic carbon emissions (21.6 MMtCO<sub>2</sub>e) per USFS recommendations
- Draft Report for 1990-2025
  - Prepared through MCCAG/TWG Process
  - Extend forecast to 2025
  - TWG recommendations for revisions forthcoming
  - Incorporate requirements of SF #145

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## Next Steps

- TWGs
  - Develop straw proposals for policy design
  - Review and continue updates to the draft inventory and forecast
- MCCAG
  - Review and approve straw proposals for policy design
  - Review and approve proposed revisions to the inventory and forecast with modifications if/as needed

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## Break



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## Next MCCAG Meeting

- Agenda:
  - Identify and approve straw proposals for policy design
  - Review TWG suggested updates to the Minnesota emissions inventory and projection
  - Prepare for quantification of options



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## Public Input, Announcements

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