

A banner image showing a range of mountains, with a prominent snow-capped peak in the center. The sky is clear and blue. The text "Alaska Climate Change Strategy" is overlaid in a dark serif font. A small tree branch is visible on the right side.

# Alaska Climate Change Strategy

Photo: J. Hardesty

## Alaska Climate Mitigation Advisory Group of the Governor's Climate Change Sub-Cabinet

Meeting #4  
November 6, 2008  
Anchorage, Alaska

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# Meeting Agenda

- Welcome, Introductions, & Commissioner Hartig's Remarks
- Process Update and Quantification Overview
- Review and Approval of TWG-Recommended Policy Options for Further Analysis
  - Transportation & Land Use
  - Energy Supply & Demand
- Lunch & RIM Architects' presentation: LEED in Alaska
- Continue Review and Approval of TWG-Recommended Policy Options for Further Analysis
  - Oil & Gas
  - Cross-Cutting Issues
- Development of Straw Proposals for Priority Options
  - Overview of Content and Format
  - Review and Approval of Forestry, Ag & Waste Management Straw Proposals
- Public Input & Announcements
- Wrap Up and Adjourn

# Prospective Timetable: Climate Change Mitigation Advisory Group

Date	Action
May 15, 2008	1 <sup>st</sup> Meeting: Launch Process; Review Inventory
July 15, 2008	2 <sup>nd</sup> Meeting: Catalog of Potential Policy Options
September 22, 2008	3 <sup>rd</sup> Meeting: Presentations; Some Selection of Priority Policy Options
November 6, 2008	4 <sup>th</sup> Meeting: Select Priority Policy Options
February 5, 2009	5 <sup>th</sup> Meeting: Approve Straw Proposals
<b>March 23, 2009</b>	6 <sup>th</sup> Meeting: Initial Quantification of Options
April 29, 2009 (tent.)	7 <sup>th</sup> Meeting: Approve Recommended Options
Following Conclusion	Final Report to Sub-Cabinet
Between Meetings	Regular TWG teleconference meetings and possible face-to-face meetings

# Stepwise Planning Process

1. Develop/revise baseline inventory and forecast
2. Identify a full range of possible actions (“catalog”) and programs already in place
3. Identify initial priorities for analysis & development
4. Develop straw proposals
5. Evaluate (and quantify to the extent possible) costs and benefits
6. Evaluate feasibility issues; associated issues; linkages
7. Develop alternatives if needed to enhance consensus
8. Iterate to final agreement
9. Finalize and report recommendations

# Estimating Cost-Effectiveness of GHG Reduction Actions: Purpose

- Support strategic decisions
- Make decisions explicit
- Search for preferred results
- Compare choices systematically
- Identify and resolve barriers
- Manage risk and uncertainty
- Objectify debate
- Speed decisions
- Create value

# Estimating Cost-Effectiveness of GHG Reduction Actions: Limits

- Not all actions are easily measured
- Not all outcomes are easily monetized
- We may value time and outcomes differently
- Need for analysis varies by decision at hand
- Perfect information does not exist
- Accuracy may be time sensitive
- Analysis takes time and money

# Concepts

- Joint Fact-Finding
  - Joint development of draft Inventory & Forecast
  - Agency support to secure best available data for Alaska; on existing actions, etc.
- Iterative Development of Policy Options
  - Legwork & recommendation by TWGs
  - Review and approval by MAG
  - “Cross-pollination” between the two
- Collective Wisdom
  - Multiple heads are better than one

# Concepts

- Custom Policy Development
  - Each option is selected, designed and analyzed under a common framework/template
- Multiple choice of methods
  - Existing studies of related policy actions that can be scaled to Alaska, or...
  - Existing models that can be run to match Alaska's profile and MAG policy options, or...
  - New custom analyses that can be developed for MAG options, etc.
  - Individual and aggregate level analyses

# Concepts

- Transparency
  - Details for policy design and analysis are explicit and public
- Individual and Aggregate Impacts
  - Stand-alone GHG reductions and costs/savings are calculated for individual policy options
  - Cumulative impacts are calculated for all options combined

# Guidelines

- Costs/Savings Calculations
  - Net Present Value (NPV) of direct societal costs/savings are calculated
  - Full life-cycle GHG calculations are preferred
  - Indirect impacts seldom calculated, only on an as-needed basis where data availability and resources are adequate, and/or conducted in subsequent analyses
  - Costs/savings are compared to GHG reductions to derive cost-effectiveness as “\$/ton GHG removed”

# Guidelines

- Timing
  - Impacts are calculated on an annualized basis from the start of the project period to its end (2009-2020) and cumulative costs/savings and GHG reductions are reported
  - Annual “snapshots” of GHG reductions are reported for target years (2015 and 2020)

# Guidelines

- Geographic Coverage
  - Costs/savings and GHG reductions are calculated at the state level
  - GHG reductions outside the state can be counted if they are a direct result of actions taken by Alaska (such as enhanced recycling)
  - Both production- and consumption-based accounting systems often used for analysis of policies

# Guidelines

- Some policy options may not be quantified
  - Example: AZ recommendation that the Governor advocate for a federal cap-and-trade program
  - Example: NM recommendation that the Legislature create a “Renewable Energy Transmission Authority”
  - Example: NM recommendation for additional study of carbon capture and sequestration in oil and gas operations
  - Cross-Cutting TWG options are rarely quantified

# Guidelines

- Program-level caveats
  - Any assumptions regarding specific sources and uses of funds for implementation are described in the policy option template
  - Detail for policy planning recommendations is typically less than for actual program implementation
  - Policy planning recommendations do not involve costs/savings analysis for individual entities, and instead is for sectors and sub-sectors

# Steps

1. Identify priority policy options for analysis
2. Define key parameters of analysis (initial policy design or “straw proposals”)
  - Timing, level of effort, implementation parties & mechanisms
3. Identify approach to analyzing each option
  - Data sources, methods, key assumptions
  - Define baseline assumptions, if needed beyond I&F
    - Policy option will be incremental to this

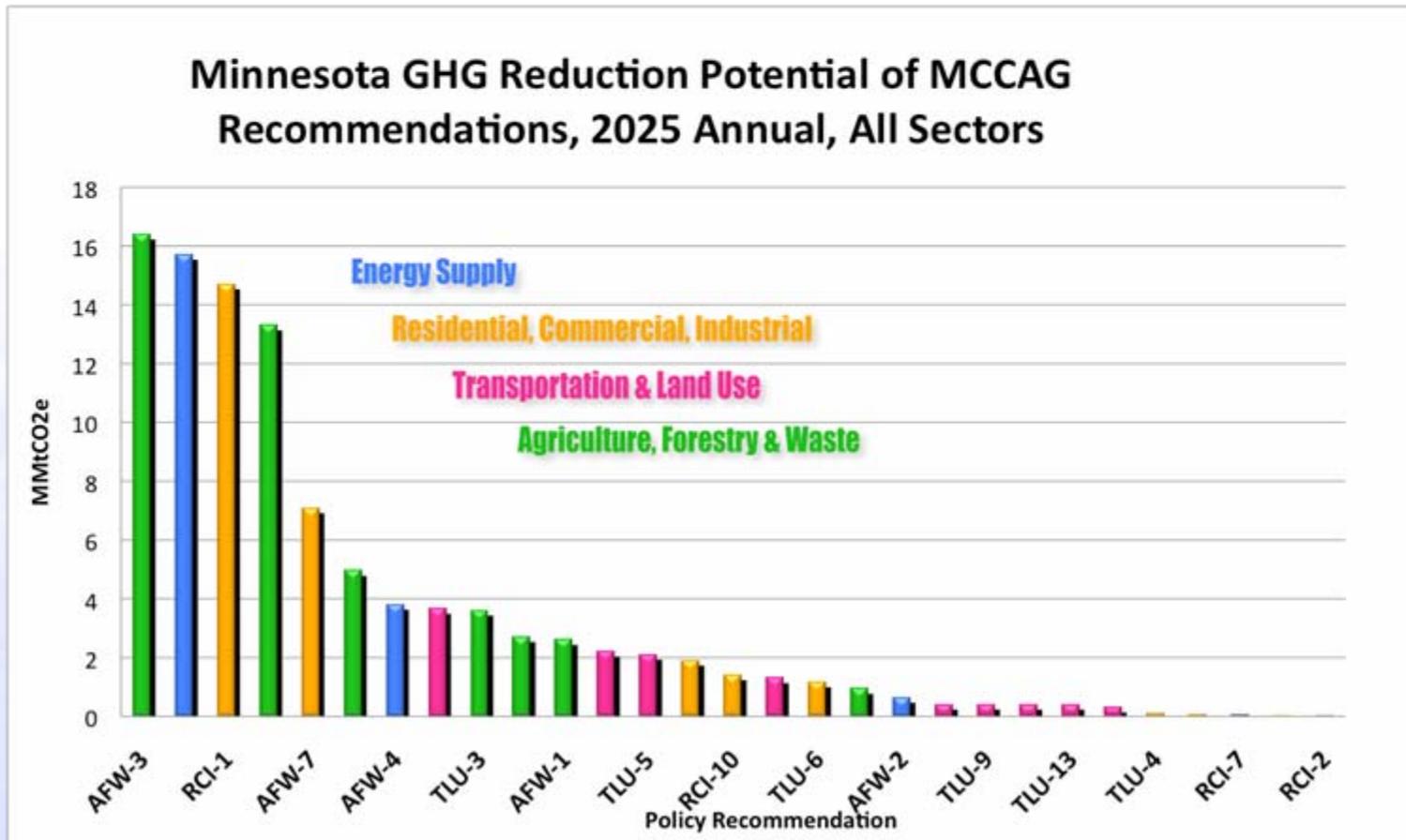
# Steps

4. Select analytical approach, produce initial results for individual policy options
  - First round of analysis may or may not be sufficient for final decisions
5. Review and revise analysis as needed
  - Revisions include policy design and analysis

# Steps

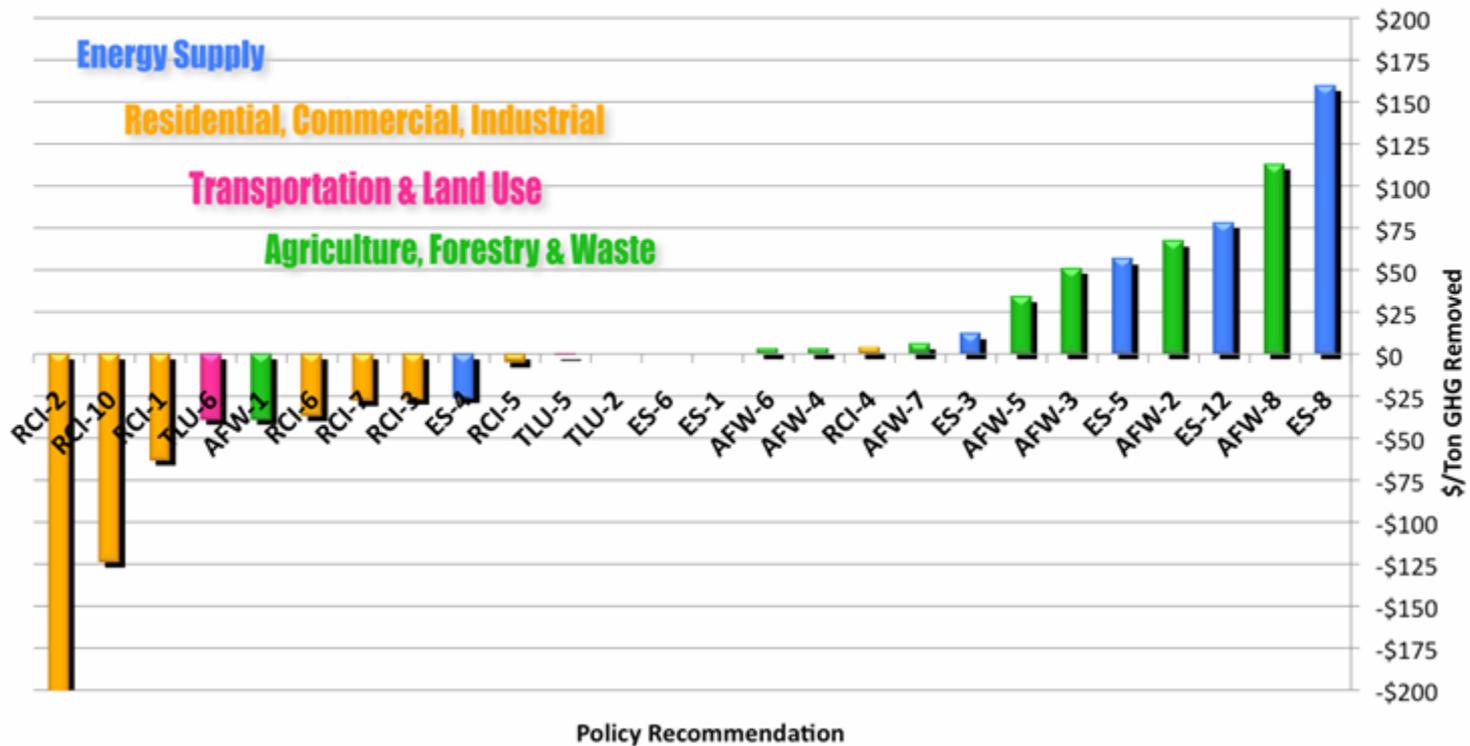
6. Analyze aggregate or integrated effects of actions
  - Remove double-counting and overlap among policy options (intra-TWG and inter-TWG)
  - Reconcile any inconsistencies in assumptions, methods, data sources
7. Identify needs for subsequent follow-on assessments, supplemental analyses, etc.

# Example: Minnesota GHG Reduction Potential by Policy Option

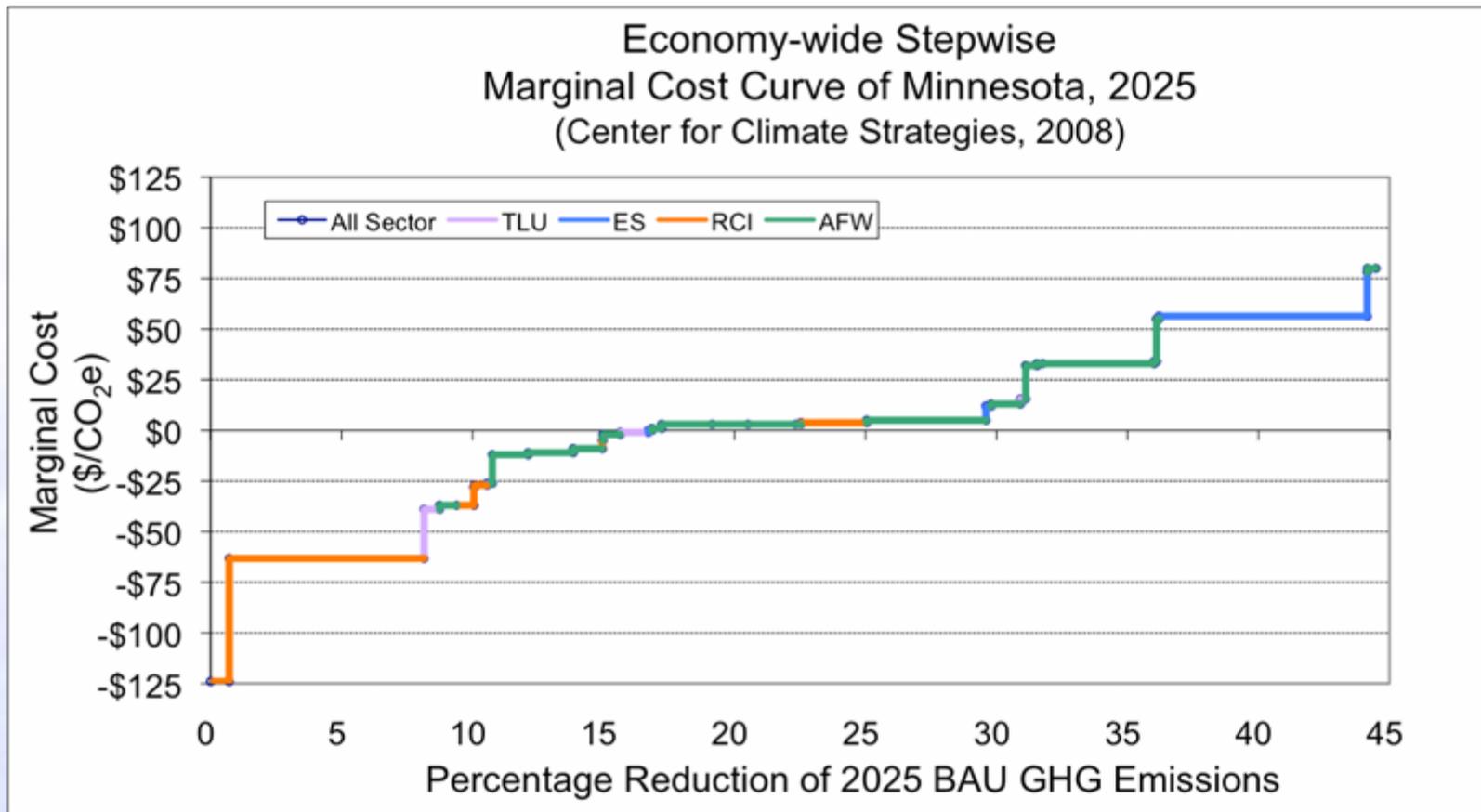


# Minnesota \$/Ton GHG Removed by Policy Option

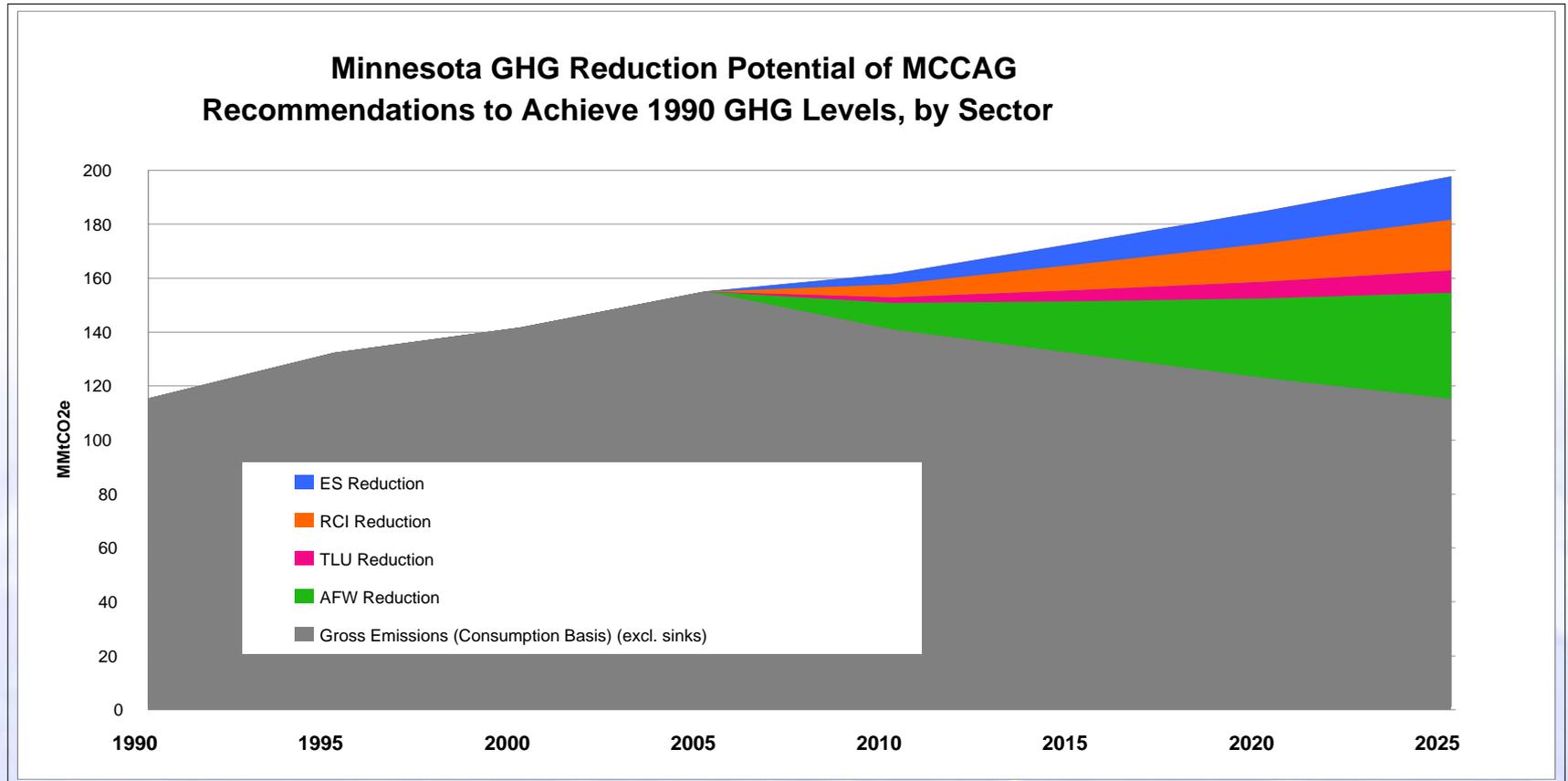
Minnesota Cost or Savings Potential of MCCAG Recommendations, 2025 Annual, All Sectors



# Minnesota GHG Reduction Cost Curve, All Sectors



# Minnesota Aggregate Results



# Break



# Review of TWGs' Recommended Policy Options for Further Analysis

- Forestry, Agriculture & Waste (FAW)
  - (Done at September 22, 2008 MAG Meeting)
- Transportation & Land Use (TLU)
- Energy Supply & Demand (ESD)
- *Lunch Break*
- Oil & Gas (O&G)
- Cross-Cutting Issues (CC)

# TLU TWG Recommended Policy Options for Further Analysis

1. Transit, ridesharing, and commuter choice programs
2. Vehicle idling regulations and/or alternatives
3. Transportation system management
4. Promote efficient development patterns (Smart Growth)
5. Promotion of alternative fuel vehicles
6. VMT and GHG reduction goals in planning
7. Land-Based diesel engine efficiency improvements
8. Marine vessel efficiency improvements
9. Aviation emission reductions

# ESD TWG Recommended Policy Options for Further Analysis

1. *Eliminate policy barriers*
2. Transmission system optimization and expansion
3. Energy efficiency for residential and commercial customers
4. Implementation of renewable energy
5. Building standards & incentives

# Lunch Presentation

## ***Mitigation Opportunities for the Built Environment: LEED Certification & Its Application in Alaska – What It Is and What It Isn't***

RIM Architects  
James E. Dougherty  
Bryce Klug  
David Zeimer

# O&G TWG Recommended Policy Options for Further Analysis

- 1.
- 2.
- 3.
- 4.
- 5.

# CC TWG Recommended Policy Options for Further Analysis

1. Establish a GHG reporting and inventory program (including development of baseline)
2. Establish GHG emission reduction goals
3. Identify and implement state government mitigation actions
4. Coordinate with State Energy Plan
5. Identify incentives for GHG reductions, green technologies, and energy efficiencies
6. Advocate for and participate in cap-and-trade and other market-based systems
7. Establish a state coordinating program for addressing climate change

# Break



# Straw Proposals

- Content and format
- Policy Option Template
- Key initial elements:
  - Goals
  - Parties Involved / Coverage
  - Timing
  - Implementation Mechanisms
- TWGs present straw proposals to MAG for its review and approval at February MAG meeting

# Policy Option Template

- Policy Description (Concept)
- Policy Design (Goals, Timing, Coverage)
- Implementation Methods (parties, mechanisms)
- Related Programs and Policies (BAU)
- Estimated GHG Savings and Costs Per MMTCO<sub>2</sub>e
  - Data sources, methods, and assumptions
  - Key uncertainties
- Additional (non-GHG) Benefits and Costs, as Needed
- Feasibility Issues, if Needed
- Status of Group Approval
- Level of Group Support
- Barriers to Consensus, if Any

# Next Steps for MAG & TWGs

- 2-3 TWG calls between now and February meeting to draft “straw proposals” for priority policy options
- MAG reviews and approves straw proposals at its February meeting
  - Quantification proceeds from straw proposals
- Continue review and refinement of Alaska Inventory and Forecast (ongoing)

# Next MAG Meeting

- Agenda

- Review & approve “straw proposals” for priority policy options based on TWG recommendations
- Review recommended changes, if any, to the Alaska Inventory and Forecast

- Date and Location

- Thursday, February 5, 2008
- Anchorage (coincident with the Alaska Forum on the Environment)



# Public Input & Announcements



# The Center for Climate Strategies

*Helping States and the Nation Tackle Climate Change*

*Thank you  
for your  
continuing  
time, effort,  
and  
attention!*

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