



MINNESOTA
Climate Change
Advisory Group



Minnesota Climate Change Advisory Group

Energy Supply Technical Work Group
Meeting #3

July 2, 2007

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

Today's Agenda

- Call to order
- Roll Call of TWG members and public
- Review and approval of summary of TWG call #2 (June 11, 2007)(on website)
- Review of MCCAG changes to mitigation catalog
- Discussion of Options
- Review of Process for Prioritization
- Continued Review of MN GHG Inventory & Forecast
- Proposed agenda, time and date for NEXT meeting
- Public input and announcements

Communication within TWG

- TWG meetings are primarily for interaction among MCCAG TWG members;
- Other participants should refrain from intervening during MCCAG discussions, until they are called upon (note new Call- In Service);
- Agendas for each call will leave time for input from State agency staff and members of the public;
- State staff with information requiring urgent input, should consult with the State liaison to the TWG (Dave Richfield), before intervening in TWG discussions.

Stepwise Planning Process

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

MCCAG Changes to Mitigation Options Catalog

- Clarify ES-2 efficiency looks at primarily supply-side efficiency
- Add to 2.12 “Biomass for heat and industrial processes”
- New 2.13 “Solar energy development”
- New 3.6 “Sulfur hexafluoride leak prevention in electric transmission & distribution”
- Improve the GHG Profile of Biofuels (Catalog 4.7)
- Delete 5.2 “CCSR Incentives”--collapse into 5.1
- New 6.5 “Energy regulatory policies to encourage energy efficiency, e.g., decoupling”
- New 6.6 “Environmental Dispatch and Resource Planning Policy” to ensure environmental costs are considered
- New 6.7 “A per ton carbon “adder” in electricity resource planning

Next Step: Priorities for Analysis

- Nominal ratings and notes on catalog;
- CCS develops and distributes a ballot via email to the TWG;
- TWG votes on 10 priorities returns ballot to CCS;
- CCS tallies the votes and reviews results during the next TWG call;
- MCCAG reviews and approves TWG priorities;
- TWG develops straw proposals for policy design.

ES GHG mitigation option characterizations

- Mitigation option characterizations available on website
- Major indicators used
 - GHG emission reductions
 - Cost effectiveness
- Potential GHG emission reductions
 - Options with “low” potential
 - Options with “medium” potential
 - Options with “high” potential
- Potential cost effectiveness (I.e., \$/tonne of CO₂e avoided)
 - Options with “low” potential
 - Options with “medium” potential
 - Options with “high” potential

Group Discussion of Options

- Mitigation option descriptions available on website
- Major categories
 - Emissions policies and overarching items
 - Renewable energy and energy efficiency
 - Fossil fuel and nuclear electricity
 - Fuel production, processing, and delivery
 - Carbon capture and storage or reuse (CCSR)
 - Other energy supply options

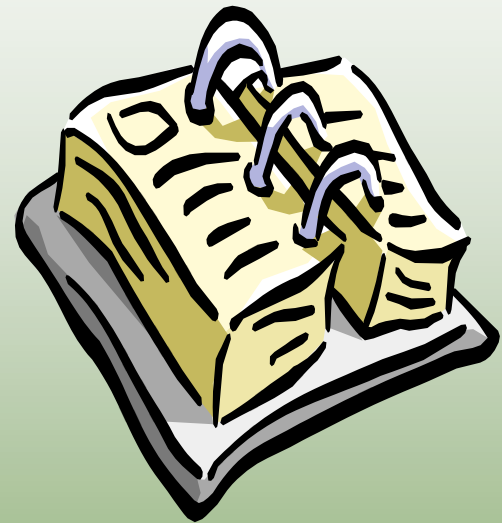
Draft ES GHG Inventory and Forecast - Additional Feedback

- GHG inventory and forecast spreadsheets available on the ES TWG website
- Key issues identified thus far by ES TWG members:
 - Electricity imports and underlying assumptions
 - Manitoba hydro treatment
 - Electricity demand growth rate
 - Composition of coal usage
 - Biogenic carbon
 - Emission factors

Next Steps

Next TWG Meeting

- Teleconference #4
- Agenda:
 - Review results of TWG voting on priorities for analysis
- July 19, 2007 from 9:00 to 11:00 AM
- Future Teleconferences:
 - August 23rd from 9 to 11 AM
 - September 13th from 9 to 11 AM
 - October 9th from 9 to 11 AM
 - October 23rd from 9 to 11 AM
 - November 28th from 9 to 11 AM
 - December 6th from 9 to 11 AM



Public Input, Announcements