



MEETING SUMMARY
MINNESOTA CLIMATE CHANGE ADVISORY GROUP
Cap and Trade Technical Work Group
(C&T TWG)

Meeting #8, December 14, 2007, 8:00 AM – 2:00 PM

Attendance:

1. Technical Working Group Members: Duke Bascom, Charles Dayton, Barbara Freese, Robert Jagush, Mike Cashin (substitute for Dave McMillan), Bob Ambrose (substitute for Eric Olsen), Doug Peterson, Nick Mark, Deb Birgin, Jim Turnure, Mike Robertson, Bill Droessler, Bill Grant, Eric Hyland.
2. Minnesota Department of Commerce (DOC) and Pollution Control Agency (PCA): David Thornton, Ed Garvey, Rebecca Walter, Lisa Hershberger
3. Public Attendees: No public attendees
4. Center for Climate Strategies Staff: Tom Peterson, Jeff Wennberg, Adam Rose, Dan Wei

Background documents:

(most posted at http://www.mnclimatechange.us/Cap_and_Trade.cfm)

1. Agenda
2. PowerPoint Presentation
3. Decision Tree
4. Direct v. Indirect Program Notes paper
5. Updated Modeling Runs Using MN Marginal Cost Curves

Discussion:

- Jeff Wennberg and Tom Peterson opened the meeting with a discussion about desired outcomes from the extended in-person meeting. Bill Grant suggested that they could identify additional modeling tasks, looking at questions like free distribution vs. auctioning. Barbara Freese wanted to know why the RPS was not in the reference or baseline case given that it was already law.
- Tom Peterson invited David Thornton to express his wishes. David asked the committee to comment on the issue of geographic coverage and whether they saw value in a regional program that anticipated the export of capital from Minnesota to neighboring states. He hoped the committee could decide which sectors should be covered and how the program should operate in each. He was interested in the allowance allocation process and how the

program would accommodate new sources. And he asked the committee to consider identifying “bad” program ideas that the state should not consider.

- Duke Bascom encouraged the group to start by identifying common criteria for evaluating the options.
- There was general discussion around the issue of integrating the cap and trade with the complementary measures under consideration in the other TWGs, and whether C&T is one tool in the box, or whether the other policies were replaced by or contained within C&T.
- Jim Turnure suggested that one evaluation criterion should be cost effectiveness, that is, CO2 removed vs. cost.
- Mike Cashin reminded the group that there was a 2050 goal as well as a 2025 target, and that the recommendations needed to establish a path to meet both.
- Barbara Freese said that MN needed to work with its neighbors and look toward the broad geopolitical reality of where the program was headed. There was some discussion regarding the potential for a federal program taking effect before the MN or MGA regional program begins. Bob Ambrose said he still needed to see national program modeling showing how MN would fare.
- After some further discussion it was agreed that the day would be organized as follows:
 - Set draft Principles and Guidelines
 - Decide Geography Issue
 - Hear from Adam Rose and Dan Wei on new modeling runs
 - Decide sectors
 - Sectors that are included
 - Sectors that are excluded
 - Sectors that remain under consideration
 - Decide the basis for integration of the C&T program with other policies and measures
 - Make some decisions regarding the distribution of allowances
 - Capture and identify key findings along the way
- **Principles and Guidelines:** After about 45 minutes of committee discussion the following draft principles and guidelines were recorded. The Cap and Trade program:
 - must be cost-effective, that is, it has to meet GHG reduction targets at a cost comparable to or better than alternative measures;
 - must meet or contribute to meeting the legislative targets at the lowest cost;
 - should be open to consideration of other (non-C&T) mechanisms;
 - should encourage collective actions;

- should be transparent;
 - should offer covered entities a degree of certainty regarding outcomes;
 - should strive for full coverage of participants;
 - should be fair in the distribution of allowances;
 - should strive for simplicity;
 - should be enforceable;
 - should be administratively efficient; and,
 - reward early actions.
- **Geographic Scope:** This had been discussed in earlier calls and the committee quickly agreed to the following. The Cap and Trade program is recommended to operate
 - Regionally throughout the core jurisdictions that have signed on as partners to the Midwest Governor's Association regional initiative (MN, MI, IA, KS, WI, IL and Manitoba);
 - With linkages to other regional programs to be determined; and,
 - In a manner to allow a smooth transition to future federal programs in the U.S. and Canada. Transition issues include program structure, timing, baseline assumptions, treatment of early actions and treatment of complimentary measures. In addition, any federal program should seek to support and accommodate the diversity of state GHG reduction targets and goals.
 - **Presentation and discussion of new modeling results:** Adam Rose summarized the new results using the updated policy option costs showing lower allowance costs than the previous week but still holding in the \$34 to \$38 per ton range for the economy-wide program, and \$20 - \$27 per ton for the power sector-only program. There was a general discussion regarding assumptions, limits and further opportunities for analysis.
 - Ed Garvey asked whether MN fared better in the MGA group with the observers in or out of the program. Adam said that as a group, MN was better with them out, but that if Indiana were to be included only, this would help MN. He offered that as better information is available from these other states these relationships will shift around.
 - **Future Modeling Assumptions:** Tom Peterson suggested that new modeling should be narrowly assigned given the time left. The following was agreed to by the committee:
 - split out MN sectors to see how the mix affects the cost;
 - do free-allocation vs. auction vs. auction with all proceeds reinvested in GHG reduction measures;
 - use the MGA participants but model both with and without the observers;
 - assume that C&T and complimentary policies and measures will be implemented together.
 - **Sector Coverage:** Jeff Wennberg reviewed the decision tree and began a discussion on the question of point-of-regulation and direct vs. indirect C&T programs. The committee decided to group sectors in three categories as suggested in the agenda. The categories were "YES," or included in the program; "NO," or excluded from the program; and

“MAYBE,” or potentially included but still without agreement. The following is the committee’s result:

- **YES** – recommend inclusion in the MN C&T program:
 - Electric power sector
 - Large industrial boilers and processes
 - Transportation fuels
 - Landfills
- **NO** – recommend exclusion from MN C&T program:
 - Agriculture and forestry land use practices (excluding livestock)
 - Land use protection (development)
 - Transportation VMT
 - Transportation vehicles
- **Maybe** – further consideration by committee required:
 - Livestock operations (CAFOs)
 - Residential, commercial fuel use (typically buildings)
 - Waste (other than landfills)
- The committee will consider the regulatory thresholds for each covered sector at a later time. For example, what constitutes a ‘large’ industrial boiler? Dave Thornton will provide information on existing regulatory limits in MN.
- Tom Peterson then introduced the question of integrating the C&T with the other policies and measures (P&M) under consideration in the other TWGS. The basic question was, are the benefits from the P&Ms separate from the limits set by the cap, or are they included? In other words are the programs separate or do they overlap? The committee decided that the P&Ms and C&T program should overlap so that reductions through the P&M would help MN toward both the state goal and achieving the cap.
- Bob Ambrose requested that now that some C&T sectors had been selected, the committee should look at the cost effectiveness of the measures within the capped sectors and those outside the capped sectors and see the relationship as compared to the overall reduction targets. This could provide some guidance as to whether the cap need to be ambitious or should be limited.
- Jeff Wennberg summarized the work completed and the tasks that needed to be accomplished next. He suggested that future calls should include:
 - Redraft of the POD reflecting the committees decisions;
 - Information from PCA on industrial sources;
 - Allowance distribution methods;
 - Early actions incentives.
- Mike Cashin and others also wanted some consideration of alternatives to C&T, in particular the use of performance standards.