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Meeting #3 Summary
Minnesota Climate Change Advisory Group (MCCAG)
St. Paul, Minnesota
August 2, 2007

Attendees:

MCCAG: Jon Anderson, Leith Anderson, Willis Anthony, Peter Aube, Daniel Bartholomay, Alexander Bascom, John Brandl, Jan Callison, Rick Carter, Mitch Davis (by phone), Chuck Dayton, Joe Duggan, Barbara Freese, J. Drake Hamilton, Scott Harrison, Andy Hart, Bill Heaney, Jonathan Holmes, Robert Jagusch, Greg Jason, Louis Alemayehu (for Boise Jones), John Kelly, Julie Ketchum, Jeffrey Korsmo, Scott Lambert, Greg Langford, Chuck MacFarlane, Jim Marchessault, Dave McMillan, Greg Miller, Jeffry Muffat, Bob Ambrose (for Eric Olsen), Doug Peterson, Steve Raukar, Mike Robertson, Dan Pfeiffer (for David Sparby), Will Steger, Peter Sullivan, Nim Traeger, Dave VanHottum (for Barb Thoman), Jeff Wilkes, Mark Wolak, Bruno Zagar

Department of Commerce (DOC): Edward Garvey, Linda Limback, Bill Sierks, Janet Streff

Pollution Control Agency (PCA): Brad Moore, David Thornton, Todd Biewen, Peter Ciborowski, Anne Claflin, Colleen Coyne, Lisa Herschberger, Jeff Ledermann, John Seltz, Rebecca Walter

Center for Climate Strategies (CCS): Tom Peterson, Ken Colburn, Franz Litz, Will Schroeer, and by telephone, Bill Dougherty, Steve Roe, Randy Strait, and Brad Strode

Others: See Attachment for Members of the Public that Attended MCCAG Meeting #3.

Background Documents: (all posted at www.mnclimatechange.us)

1. Notice and Agenda
2. Draft Summary for MCCAG Meeting #2
3. Powerpoint Presentation
4. Memo to MCCAG on Preparation for 3rd Meeting

Discussion and Conclusions:

1. Welcome and Introductions by Edward Garvey and David Thornton.

2. Approval of Summary of Prior Meeting; Other Logistics

The MCCAG approved the summary for Meeting #2 without objection. David Thornton asked MCCAG members to e-mail him any comments on the summary by next Tuesday. No comments were received.

3. Review of the MCCAG Process Status and Next Steps

David Thornton and Tom Peterson reviewed the MCCAG progress and responded to numerous clarifying questions regarding voting procedures, attendance, and next steps. David provided clarification on the voting rules for alternates by stating that alternates may attend with prior approval, but not vote at MCCAG meetings. Tom provided clarification on voting procedures regarding policy recommendations and the stepwise process by noting that decisions at this stage of the process are draft only to be further developed and decided by the MCCAG, and also that the MCCAG makes final decisions while TWGs provide advice and assistance to the MCCAG. Tom also reiterated that CCS can provide capacity for quantification for all options currently under consideration. Some members of the group were interested in roll call votes at the TWG and MCCAG level on all decisions, but the group ultimately decided to continue the process of voting without attribution.

4. Review and Approval of Draft Priorities for Analysis of Options

Residential, Commercial, and Industrial

Franz Litz and Bill Dougherty (by telephone) presented the RCI TWG's 11 recommended options as priorities for analysis. The following provides a brief summary of questions and clarifications followed by a summary of the MCCAG's voting on the RCI options as priorities for analysis.

Questions and Clarifications

- RCI-1 – The group discussed how the emissions forecast would show the energy efficiency gains required by statute, and how RCI-1 fits in.
- RCI-2 – The building codes provision would require codes statewide.
- RCI-3 – TWG thinking is to mandate for state buildings; incentives for private sector. The MCCAG suggested that education and enforcement be included in the straw proposal.
- RCI-4 – No questions.
- RCI-5 – The measure will include prevention of leaks and capture of high-GWP gases.
- RCI-6 – A member suggested including non-fuels as well, so as to address ODS emissions. Coal-fired industrial facilities should also be included. Renewable energy use (for heat and/or power) should also be included (but probably covered by RCI-9).
- RCI-7 – No questions.

- RCI-8 – A MCCAG member suggested that rental arrangements be included in the disclosure requirements.
- RCI-9 – The MCCAG members suggested that the measure include photovoltaic installations and research & development.
- RCI-10 – No comments.
- RCI-11 – No comments.

A question about packaging came up; it is expected to be addressed by AFW, but will be parked to ascertain that. The AFW TWG will be developing an option that covers source reduction and recycling (AFW-7 – Integrated Waste Management). Packaging could be addressed within the source reduction element of this option.

Voting Results

The MCCAG approved (as a block) all of the RCI policy options as priorities for analysis.

Energy Supply

Franz Litz and Bill Dougherty (by telephone) presented the ES TWG's 14 recommended options as priorities for analysis. The following provides a brief summary of questions and clarifications followed by a summary of the MCCAG's voting on the ES options as priorities for analysis.

Questions and Clarifications

- ES-X – The MCCAG asked about how cap-and-trade issues will be coordinated between the ES, CC, and RCI TWGs?
- ES-1 – No comments or suggestions.
- ES-2 – No comments or suggestions.
- ES-3 – Incorporate “and upgrade GHG performance” or words to that effect regarding improvements to existing plants. “Repowering” is meant to include repowering with biomass.
- ES-4 – A suggestion was made to include natural gas distribution, including barrier removal and consider renewable energy policies.
- ES-5 – The group discussed whether the RPS or EPS World go further than the statute and how the requirements would be designed.
- ES-6 – At least one member wants to strike nuclear energy from the ES TWG list.
Revised to specify full-cost and level playing field.
- ES-7 – No questions.
- ES-8 – No questions.
- ES-9 – No questions.
- ES-10 – No questions.
- ES-11 – No questions.
- ES-12 – No questions.
- ES-13 – No questions.

Voting Results

The MCCAG approved (as a block) all of the ES policy options as priorities for analysis.

Transportation and Land Use

Will Schroerer presented the TLU TWG's 11 recommended options as priorities for analysis. The following provides a brief summary of questions and clarifications followed by a summary of the MCCAG's voting on the TLU options as priorities for analysis.

Questions and Clarifications

- TLU-1 – Was discussed as an example of how the TWG bundled together options.
- TLU-2 – Clarification on 2.2.14 – provision of tax-benefits to non-profits. Private employers currently receive tax benefits that reduce the cost of providing transit. Could achieve a similar end with non-profits by incentives through a different kind of state financial credit.
- TLU-3 – Q: relationship to energy supply? A: Depends on how policy option is fleshed out. If there is overlap, TWGs get together to find a way to separate costs and benefits. Biofuels can be split to production, consumption, infrastructure, etc. TLU usually deals with demand / consumption side.
- TLU-4 – No questions.
- TLU-5 – A member raised the question of how these will be quantified. Another asked about the definition of “climate friendly.” Another noted that measures that reduce congestion may actually increase emissions. Another asked how VMT tax and fuel tax are different. VMT tax gets at driving and occupying a space on a road, fuel tax is based on the fuel used.
- TLU-6 – Discussed relationship to recent federal Senate action on fuel economy standards. Discussed federal prohibition on state FE regulation, and how the CA Clan Car would work under the Clean Air Act provisions for a California car.
- TLU-7 – Q: How would this achieve GHG emissions? A: Fixing existing infrastructure before constructing new roads would slow decentralization that increases driving.
- TLU-8 – Q: How would this achieve GHG emissions? A: As roads are more accessible to transit, it will be easier and more convenient to use transit options.
- TLU-9 – No questions.
- TLU-10 – No questions.
- TLU-11 – No questions.
- TLU-12 – Mike Robertson proposed a green fleet and SmartWay transport package.

Overall comment: Members should think about how to include an analysis of true costs of our choices into this bundle – analysis of costs of giving up a choice to drive, costs of driving, etc.; quite a bit of analysis has been done on these topics and should be used.

Voting Results

The MCCAG approved (as a block) all of the TLU policy options as priorities for analysis. In addition, the MCCAG approved addition of an option for reduced speed limits on highways, and the voluntary emissions reductions package proposed by Mike Robertson.

Agriculture, Forestry, and Waste Management

Tom Peterson and Steve Roe (by telephone) presented the AFW TWG's eight recommended options as priorities for analysis. The following provides a brief summary of questions and clarifications followed by a summary of the MCCAG's voting on the AFW options as priorities for analysis.

Questions and Clarifications

AFW-1 – No questions.

AFW-2 – No questions.

AFW-3 – No questions, but a reminder of the overlap with TLU-3 and noting that this addressed the supply side for biofuels. Other TWGs' options include demand side for biofuels (TLU primarily, but also RCI). A MCCAG member questioned whether this option will include the use of cellulosic ethanol. CCS replied that all relevant feedstocks and biofuels will be considered.

AFW-4 – No questions, but a reminder of the overlap with ES-2.

AFW-5 – No questions.

AFW-6 – No questions.

AFW-7 – No questions.

AFW-8 – A member asked whether landfill methane energy projects were considered. CCS replied that AFW-8 considers landfill methane energy.

A member raised the question of wetlands protection and why it wasn't included. Mr. Roe indicated that it was discussed, but that the science on wetlands sequestration remains inadequate. It was mentioned that wetlands could be addressed under AFW-5 (Forestry Management Programs to Enhance GHG Benefits). However, the TWG will address conservation of peatlands and wetlands under AFW-2 (Land Use Management Approaches for Protection and Enrichment of Soil Carbon).

Voting Results

All options were approved without objection.

Cross-Cutting Issues

Ken Colburn and Randy Strait (by telephone) provided a brief overview of the CC TWG's 11 recommended options as priorities for analysis and then asked for clarifying questions and comments.

Questions and Clarifications

CC-1 – In answer to a question about the difference between the inventory and a registry, Colburn responded that the inventory and forecast covers all sectors and GHG pollutants for the whole state. The registry enables emission sources (e.g., companies) to report and record their emissions, following established and verifiable protocols, for baseline protection and to participate in trading programs. Reporting can be either voluntary or mandatory.

An MCCAG member noted that inventory methods may improve with better information, so the TWG should include the ability to revise baseline inventory with better information in the future. Colburn responded with an example of where the registry plays in this. An inventory is focused on tracking trends in

emissions statewide for all sources. A registry is effectively an inventory at the emission source level. Not all sources will participate in a registry. You can have reporting without a registry but not vice versa. Reporting requirements (voluntary or mandatory) will be considered by the TWG in developing the design characteristics for the option.

CC-2 – No questions

CC-3 – No questions.

CC-4 – Public Education and Outreach – Reminder; we also have both in RCI-11.

CC-5 - Tax and Cap Policies – Reminder, this is included in ES and RCI; Colburn noted that other TWGs will do any quantification.

CC-6 – Adaptation and Vulnerability – Members expressed concern that having the group focus on this would divert its attention away from mitigating GHGs. He thinks this is important but that the MCCAG is not the best place for it to be dealt with. Colburn noted that this decision is properly the MCCAG's; some state processes have included it, some have chosen not to.

CC-7 – Participate in Regional Efforts – Much of this simply provides infrastructure to support other TWG options. Colburn concurred, but noted that there are also options that are aspirational, and the question for the MCCAG is whether the CC TWG should investigate to see if MN should participate.

CC-8 – Encourage the Creation of a Business-Oriented Organization to Share Information and Strategies, Recognize successes, and Support Aggressive GHG Reduction Goals – A member suggested combining this with CC-11, but others disagreed in order to retain its focus on the business community.

CC-9 - Dedicate Greater Public Investment to Climate Data and Analysis – Chuck, what about environmental assessments (EAs) and environmental impact statements (EIS') being included under here. Make sure this is included.

CC-10 – No questions.

CC-11 – No questions. It was included based on the CA Market Advisory Committee model. A member noted that unlike CC-8, it should have broad membership, not just businesses.

Voting Results

All options except CC-6 – Adaptation were approved without objection. Members consider adaptation an important item, but agreed that the MCCAG process was not the place for it. It was eliminated without objection.

Overlapping Options

David Thornton provided the following summary of priority policy options approved by the MCCAG with the potential to overlap:

- Biofuels - several between TLU and AFW
- Biomass for heat and power
- RCI-11 and CC-4
- Cap and Tax on ES and CC

5. Review and Discussion of the Draft Minnesota Inventory and Forecast

Randy Strait noted that the report documenting the preliminary draft inventory and forecast numbers presented at the first MCCAG meeting is now posted on the MCCAG website. This report includes the sector-specific appendices that previously had been posted on the TWG pages of the website. This report documents the estimates for 1990 through 2020. Revisions to the inventory and forecast (not included in the numbers presented at the first MCCAG meeting) include estimates for agricultural soil carbon emissions (4.1 MMtCO_{2e}) and forest carbon emissions (3.3 MMtCO_{2e}), excluding emissions associated with forest soil organic carbon, have been added to total gross emissions for Minnesota. He explained that based on US Forest Service recommendations, the calculation of carbon flux estimates for forest soil organic carbon from the US Forest Service data are very uncertain and, therefore, are included in the draft inventory and forecast. Mr. Strait noted that the forest soil organic carbon flux estimates are presented in Appendix H of the draft inventory and forecast report for documentation purposes.

The next steps for improving the draft inventory and forecast include the following:

- The forecast will be extended to 2025 to comport with the goals in the Next Generation Energy Act of 2007.
- The TWGs will be reviewing the methods, data sources, and assumptions to develop recommendations to the MCCAG for updating the inventory and forecast. The recommended updates will be implemented if approved by the MCCAG. The TWGs should develop its recommendations for presentation at the next MCCAG meeting. The TWGs will need to develop recommendations for addressing emission reductions associated with requirements of the Next Generation Energy Act of 2007 in the inventory and forecast. It was noted that emission reductions associated with requirements of the Next Generation Energy Act of 2007 may be estimated as wedges relative to the baseline inventory and forecast representing business-as-usual (“upper jaw of the alligator”).

An MCCAG member noted that the waste industry will provide information to the AFW TWG to revise inventory and forecast for the waste sector.

If the TWGs find that the regularly scheduled TWG calls/meetings do not allow for sufficient time to review and discuss the inventory and forecast, they should ask the CCS facilitators to schedule separate calls/meetings devoted to the TWG’s review and discussion of the inventory and forecast in detail.

6. Next Steps for MCCAG and TWGs

Ken Colburn reviewed the next steps that the MCCAG and the TWGs. The next steps for the TWGs are to (1) develop the straw proposals for the design characteristics for the priority policy options, and (2) develop recommendations for updates to the draft emissions inventory and forecast. The design characteristics of the straw proposals will address goals, timing, and coverage of parties and by doing this will establish the parameters for quantification of emission reductions and costs (or cost savings)

associated with the options. The next steps for the MCCAG at its fourth meeting will be to review and approve the TWG's recommended straw proposals and updates to the draft inventory and forecast. During its review of these items at its fourth meeting, the MCCAG may ask for clarification of draft policy designs and recommended updates to the inventory and forecast as needed to ensure its understanding of the recommendations. The MCCAG may also provide comments on these items and request revisions as approved by the MCCAG members.

7. Agenda, Time, and Date for Next Meetings

The next MCCAG meeting will be held on September 27, 2007 in a location to be announced. The agenda will include review and approval of (1) the TWG's straw proposals for the design characteristics for the priority policy options, and (3) the TWG's recommended updates to the draft inventory and forecast.

8. Public Input and Announcements

A member of the public thanked the MCCAG members for their work, and provided the following four comments. Colburn provided responses to each of the comments:

- Public access to information:
Comment: The MCCAG should make available to the public all analytical details (e.g., methods, data, calculations, models, and results) of policy options.
Response: This is an open process that the information is generally posted to the project website for each TWG and MCCAG meeting. The details on the analysis of the priority policy options should be available to anyone.
- Cap and trade:
Comment: One of the potential problems with cap and trade programs has been with defining the base date of the programs in such a way as to avoid giving credit for reductions associated with actions that would have occurred in the absence of a cap and trade program. It will be important to ensure that credits under this type of program are associated with new actions that will achieve real reductions.
Response: This concern, sometimes referred to as "additionality" will be addressed.
- Costs:
Comment: Costs associated with the policy options should be broken-out to show the entities that must assume the costs (e.g., government agencies, consumers, break-down by income percentile, cost to economy as a whole). Also, will costs associated with planned actions be estimated?
Response: The attribution of costs to different groups will be addressed to the extent possible. It is up to the legislature to determine funding sources and amounts. Planned actions (such as those included in the Next Generation Energy Act of 2007) will not be evaluated for costs.
- Estimation of the variability of estimates:
Comment: How will variability be communicated? It will be important for the MCCAG to evaluate level of uncertainty in the data, models, and quantification results to communicate the variability of emission estimates?

Response: The template used to develop straw proposals for the priority policy options as and the appendices in the inventory and forecast report contain sections where key uncertainties associated with and variability of data sources, assumptions, and results are discussed.

Another member of the public asked that the MCCAG reconsider its decision not to approve CC-6 (Adaptation and Vulnerability) as a priority policy option. Development of this option will help to define data needs (e.g., types of monitoring and observation, filling data gaps) and supports the necessity of the process. Monitoring is needed to understand the impacts of climate change and therefore level of action needed to respond to climate change effects.

David Thornton noted that a webinar on cap and trade has been scheduled for September 11. He asked the MCCAG to provide suggestions for additional webinar topics, if desired.

David Thornton closed the meeting by thanking the MCCAG members for their time and talents.

Attachment

Members of the Public Attending MCCAG Meeting #3
St. Paul, Minnesota
August 2, 2007

Name	Company
Aamot, Gregg	Associated Press
Ambrose, Robert	Great River Energy
Backhaus, Amber	Leonard, Street & Deinard
Carnival, Douglas	Attorney at Law
Droessler, Bill	MEI
Foussard, Claudia	Sierra Club
Fujii, Stacy	Great River Energy
Gray, Gordon	Excelsior Energy
Hainault, Tony	Hennepin County
Hilty, Bill	District 8A Rep.
Horton, Tom	Waste Management
Kennedy, Cathryn	MN Env. Partnership
Kieves, Nicola	Excelsior Energy
Krebsbach, Sandra	Ph.D.
McAuliffe, Bill	Star Tribune
Micheletti, Kathleen	Excelsior Energy
Monahan, Karen	Sierra Club
Neren, Sandy	Messerli & Kramer
Parmeter, Don	American Property Coalition
Pasko, Brian	Sierra Club
Peters, Mark	Lutheran Coalition for Pub. Policy
Pierson, Christina	MN Rural Electric Association
Prettner Solon, Yvonne	District 7 Senator
Radatz, Chris	MN Farm Bureau Fed.
Runbeck, Linda	American Property Coalition
Schaaf, Mark Vander	Met Council
Stenger, Jerry	Global Warming 101.com
Sundvor, John	Flaherty & Hood
Turnure, Jim	Xcel Energy