MEETING SUMMARY

Alaska Climate Change Mitigation Advisory Group

Meeting #2, July 15, 2008

9:00 AM – 4:30 PM

Attendance:

Mitigation Advisory Group Members (MAG):
Bob Batch, Steve Colt, Jeff Cook, Brian Davies, Steve Denton, Karen Ellis, Ron Wolfe, Jack Hebert, David Hite, Paul Klitzke, Meera Kohler, Greg Peters, Chris Rose, Jon Rubini, Jamie Spell, Curt Stoner, Kate Troll, Dan White

Alaska Department of Environmental Conservation (DEC):
Clint Farr, Larry Hartig, Susan McNeil, Jackie Poston

Center for Climate Strategies (CCS):
Ken Colburn, Ira Feldman, Gloria Flora, Katie Pasko; Alison Bailie/Greg Powell (*by phone*), Steve Roe/Brad Strode (*by phone*), Nancy Tosta/ Lydia Dobrovolny(*by phone*), Chris James/Alice Napoleon (*by phone*), Jeff Ang-Olson/Frank Gallivan (*by phone*)

Public:
Janet Bonds, Bruce Botelho Henry Cole, Scott Dickenson, Sami Glascott, Jim Hornaday, Andy Jones, Lewis Kozisek, Marilyn Leland, Andy Lewis, Chris Maisch, Pat Pitney, Jeff Short, Sean Skaling, Bob Swenson, Sarah Trainor

Brian Rogers welcomed all attendees and provided an overview of the meeting structure. He led a round of introductions, including attendees by telephone.

Larry Hartig welcomed the group to this meeting. He emphasized the importance of the Advisory Group members to ensure a successful process. While the process may appear standard, it will be tailored to Alaska's special needs throughout the upcoming year.

It is critical that members remain engaged in the process, both at the Advisory Group (MAG) level and at the Technical Working Group (TWG) level. The members have been hand-picked to reflect the diversity of Alaska and the special skills and knowledge that each member will bring. The specific affiliation of individual members is less important than the critical thinking and judgment based on individual members' experience and knowledge.

Commissioner Hartig emphasized that, rather than spending time debating the relative contributions of human activities, including GHG emissions, to climate change, the MAG's efforts could be put to more productive use in looking for feasible options moving us away from fossil fuel dependence. He noted there are likely a number of win-win options that are likely available, which would reduce use of carbon-based fuels, energy costs, and GHG emissions. All options need to be considered through the work group process.

Several state agencies will be supporting the work of the Sub-Cabinet, the Mitigation Working Group and the Adaptation Working Group (AAG). The Departments of Environmental

Conservation, Natural Resources, Transportation, Commerce and Economics will all be providing staff support. In addition, John Katz is the liaison to the Governor, and Buck Sharpton is the Vice Chancellor of the University of Alaska, Fairbanks.

Ken Colburn reviewed the stepwise process that the Advisory Group will follow. This process is outlined on the power point presentation, slides 4-5, on the website, www.akclimatechange.us. He emphasized that this is a collaborative process, with participation encouraged and expected of all members.

He explained that this meeting will focus on potential state actions for inclusion in the catalog, on a sector, or TWG, basis. The goal is to identify the full range of possible options, which will be reviewed by the responsible TWG. Each facilitator will lead the discussion with contributions by TWG members.

The Alaska GHG Emissions Inventory and Forecast Report remains open so that any relevant input and comments can be incorporated.

After the complete list of priority options is approved by the MAG, each TWG will begin to complete the Policy Option Template as shown on slide 9. This stepwise process will result in completed, 'fleshed-out', Policy Option Descriptions at the end of the process. At each step, the MAG will review and approve the continuation of the work of the TWG on each option.

It was asked if and how the total GHG reduction goal is set. There are several options on how this could be done:

- The Sub-Cabinet can set the goal for the MAG at this time or wait for recommendations from the MAG before deciding to have an over-arching goal.
- The MAG can recommend setting one, and/or recommend the parameters of the goal.
- The Cross Cutting TWG can be assigned the task of developing a well-researched and debated recommendation to the MAG. This could be assigned by the MAG as a priority option, to be worked on before other options, or in conjunction with the remainder of the policy options.

Members of the MAG expressed a preference for aspirational goals rather than easily reached targets.

The facilitator team will provide technical expertise for the quantification phase of the process. TWG members will recommend the assumptions used for the basis of quantification, to be reviewed by the MAG. Members of both groups will review the calculations several times.

The MAG approved the summary from Meeting 1, with two changes:

- Change the spelling of Jack Herbert to Jack Hébert
- Add Jeff Short to the list as present.

General Comments:

Members of the MAG are encouraged to send any additional items for catalogs to TWG facilitators and/or members. Any known recent actions and/or current programs and policies should be forwarded to the facilitators for inclusion in the catalog.

Suggestions for general criteria for evaluation of catalog items will be collected and distributed by CCS staff. However, all members of the MAG and TWGs are asked to use their own experience and knowledge as the primary tool for evaluation.

It is important that all thoughts and suggestions are captured at this stage of the process. Viable concepts will be assigned to the relevant TWGs later.

It was suggested that a separate TWG for economic analysis and vetting be created. Larry Hartig responded that economic experts are assigned to many of the Mitigation TWGs. If there are questions beyond their expertise the MAG or TWGs believe need to be addressed, they can request this and we'll try to bring in technical assistance. The experts currently assigned will be in communication with each other to ensure consistency. The MAG will be asked to assign the discount rate and timeframe to be used for all quantifications, as well as any other specific direction necessary. This will be used to ensure that Alaska specific values are used. It was requested that Alaska-experienced economists be used for oversight.

Forestry, Agriculture and Waste – Unanimous consent to move forward

Steve Roe provided an overview of the recommended criteria for prioritization, as shown on the first page of each catalog. He provided a brief description of each option currently in the catalog.

Members made suggestions for additions to the catalog:

General –

- Emphasize education throughout all TWGs, note specifically homeowners and individuals for this TWG.
- MAG Members should send recent actions, programs and policies to TWG facilitators, Gloria Flora or Jackie Poston for inclusion in the catalog and, if applicable, the Policy Option templates.

Forestry –

- Land clearing as part of forest management to increase terrestrial sequestration and increase productivity. Include the concept that younger forests sequester carbon at faster rates than established forests.
- Wildfire Management - Revise option 2.5 to include fires as a natural part of forestry practice
- Woody biomass from firebreaks can be used for heat, energy and synthetic gas.
- Calculate impact of GHG emissions from fires. Traditional carbon sinks become emitters when burned.
- Investigate impact of insect damage to forests
- Add to the Notes column –
    - For option 1.2: Processors
    - For option 1.5: Bethel

Agriculture –

- Nurseries are more significant than farms, both produce and livestock operations, in agriculture component.
- Greenhouse operations need better energy efficiency.
- Investigate the use of CO_2 in greenhouses to increase production without adding energy.

Waste –

- Add a 9.1 – Use of waste for Waste to Energy plants
- Investigate microsolutions for village landfill and sewage treatment
- Add plastic bags to the Source Reduction Strategies section, as well as commercial operations
- Expand the yard waste section
- Seafood waste management - Grinding up seafood waste increases BOD and ocean carbon levels without significant benefits to other environmental sectors. Could it be used as a source of other energy?
- Tundra management for methane emission control

Cross-Cutting – Unanimous consent to move forward

Presented by Nancy Tosta and Lydia Dobrovolny

The TWG had very good participation at its first call, but is also asking the MAG for its input to the catalog. The CC Options descriptions document provides an overview of the options in the catalog.

Members of the MAG expressed concern about the overlap of policy options from one TWG to another throughout the process. Colburn explained that the Cross-Cutting TWG doesn't typically quantify its options. Any policy options that require quantification will be assigned to the appropriate TWG for calculations.

Members of the MAG will be reviewing all policy options at the meetings and are encouraged to review topics of interest throughout the process, as well as communicating with other TWGs as well.

Concern was expressed that there is duplication of proposed policy options between catalogs. Colburn explained that, at this point, duplication is acceptable, as the goal is to capture all concepts and ideas for all the TWGs. Duplications will be resolved as options are selected for further analysis.

Catalog sections CC-1, CC-2 and CC-3 all depend on the Inventory and Forecast as well as trends over time. The TWG is considering consolidation of some or all of these options.

There was extensive discussion of CC-5 'Lead by Example'. This concept impacts many aspects of policy and regulation in Alaska. The City of Homer is a good model for smaller municipalities.

Trends of climate change programs over time should be analyzed and included in the catalog.

The TWG is including finance and business issues in its catalog. Items suggested by the MAG are:

- Financial policies that stimulate markets surrounding climate change mitigation.
- Job creation and new industries should be reviewed
- Investments, both public and private, as well as business-to-business partnerships should be investigated.

CC-5 Lead by Example -

- Conduct an Energy Audit of a well-known public building such as the Governor's Mansion
- Include climate change in public school curricula, especially the concepts surrounding carbon sequestration

- Ensure that implementation recommendations include specific techniques

CC-10 Education and Outreach

- Recognize that this area impacts almost all initiatives at some level.
- Emphasize many different education opportunities for children.
- Public education regarding efforts by airlines in Alaska to reduce emissions and to save fuel and energy.
- Add climate change education of cruise ship passengers, ie. the importance of small actions at home that will work to save the Alaskan environment.

Liabilities of proposed policy options should be included in the report.

Energy Supply and Demand – Unanimous consent to move forward

Chris James presented an overview of the work of the TWG to date. The focus of the TWG members has been on the Inventory and Forecast, especially in locating Alaska specific data. MAG members are asked to forward data sources to the facilitation team.

This TWG will work on energy supply (generation) issues, as well as demand (usage). As noted for all TWGs, on-going efforts and current programs and policies should be noted in the catalog.

Members noted that the Oil and Gas TWG has the most expertise regarding carbon sequestration issues at this time. However, sequestration methods beyond petroleum-based technologies will be required in policy option development. The leadership is asked to review this need and suggest changes to membership as needed. This may also impact the TWG assignment of CCSR related policy options.

General Comments –

Sector specific evaluation criteria should be outlined by the TWG for prioritization of policy options. Consideration should be given, when developing and quantifying options, to the following:

- Environmental, economic and social impacts of proposals. This can also be expressed as a comparison of the community benefit versus the energy cost of proposed policy options, especially in small communities.
- Scalable technology, meeting 'x' percentage of consumption possible from current generation sources and the total energy package.
- economies of scale in cost analyses
- speed-to-market of new technologies in assessing potential options. This may also impact the continued use of existing technology.
- Projections of future energy requirements. This data will be incorporated in the Inventory and Forecast.'
- The cost of continuing the use of one technology and conversion costs to newer technologies at a later date, rather than early conversion.
- Housing heating fuels need to be included in all analyses.

Additions to Catalog – Energy Supply:

- Electrical transmission infrastructure review
- Smart grids to manage load and energy

- Advocacy at the federal level should be pursued for energy and climate policies.
- Supply options should include geo- and hydro-electric sources as well as other alternative energy sources. This is also dependent on the definition of "renewables" in the state RPS.
- Investigate incentives support for renewable energy sources.
- Investigate a moratorium on new coal-fired plants.
- Energy audits should be conducted on all generation facilities.
- Consider electric production from local sewage lagoons and landfills.
- Investigate fuel tank vaporization controls.
- Investigate tidal energy opportunities, such as in Cook Inlet, and wave generation opportunites.
- Investigate the potential and impact of microhydro (household) and small scale hydropower and other renewables. Many homes have small streams on the property that can be utilized for this purpose. Add to ESD – 2.3
- Incorporate riverine in-stream generators and instrumentation needs in designs.
- The impact of climate change on energy production, including renewable sources, ie., adaptation of mitigation measures.
- Review of new carbon sequestration technology, such as CO_2 injection into saline aquifers, which have been proven to work in Norway.
- Sequestration strategies that are not based on enhanced oil recovery should be investigated.
- Position Alaska to lead and/or participate in carbon sequestration pilot programs. This also ties to Lead-by-Example issues in Cross Cutting.
- Transmission review should include DC transmissions.

Additions to Catalog - Energy Demand (RCI):

- Buy-back policy on old oil-fired and wood-burning stoves
- Buy-back programs should include all appliances, so that inefficient appliances are not just "moved out to the garage" and remain in use.
- Interest rate reductions on new energy efficient construction, as well as other market incentives
- Building codes that look at efficiency, durability and health
- Add to RCI - 2.5 - Geo-polymers and Mg sulfite technology
- RCI-8 IT focus for data centers, PCs and HVAC savings
- Interest rate reductions and incentives on IT energy use reduction
- Public education for housing and financial community, including bankers and other lenders, realtors, housing appraisers and builders.
- Financial incentives should be developed to encourage older homes to be retrofitted to new energy efficiency standards.
- Reduce the use of energy by eliminating government policies that encourage energy use.

Oil and Gas – Unanimous Consent to move forward

Alison Bailie gave a brief introduction to the work of the TWG, with a brief overview of the catalog. There are five major categories, with a brief description of each catalog item included in the description document posted on the website.

Bob Batch also gave a presentation for the Oil and Gas TWG. He stressed the opinion of some members that Alaska should wait for federal action and adopt those standards for GHG emission and reduction goals. Another member of the MAG challenged this philosophy, stating that the emphasis should be consistency with federal policies, exceeding them if necessary, and evaluating the impact on jobs and the economy.

General Comments:

The first two 'policy options' are actually overarching principles, to be used as criteria for evaluation, rather than options. The criteria need to be separated from policy options and delineated for use by the TWG and the MAG in evaluating policy options for analysis.

Criteria to be considered:

- Economic growth impact
- Economic cost
- GHG reductions – which specific groups will bear the cost of the proposed action, ie. federal, state, industry, commercial, consumers. Note that typically, these costs are defined over all society, not specific groups, therefore, data may not be available.
- Other societal costs and benefits – health, culture, lifestyle, diet, etc.
- Feasibility
- Scale of proposal, both by size and timeline
- Diversity and sustainability of the economy

Additions to the Oil and Gas Catalog:

- Include Carbon Capture and Storage as related to coal technology.
- Review differences in Alaskan refineries versus rest of industry.

Transportation and Land Use – Unanimous consent to move forward

An overview of the catalog was presented by Jeff Ang-Olson. Details are provided in the TLU Descriptions file on the website.

Members of the MAG suggested that the baseline should incorporate decreasing fuel usage in the future due to the increasing price of fuels.

Additions to the TLU Catalog:

- The largest component of transportation in Alaska is air travel. The state has little ability to force changes to the aircraft used commercially in the state. The federal government can be lobbied to implement change regarding aircraft design. However, the state can implement changes to airport layout and usage.
- Increase airport fuel efficiency through realignment of airplane taxi patterns, which can save up to 20% of the fuel usage of a plane.
- Military and commercial flights are the major sources of GHG emissions at airports. Investigate possible means of reductions, working with current industry and DOT efforts.
- Investigate restrictions on MD-80 aircraft
- Encourage improved air traffic control regulations to improve efficiency standards.
- Include current and future efforts for conversion to on-the-ground and/or outside sources of energy for aircraft, such as electric APUs, as opposed to using on-board jet fuel.
- Include tractor-towing of active aircraft to runways before firing engines in airport planning.

- Review current efforts by airlines to reduce weight and fuel use for widespread implementation.
- Review options for in-state use of smaller planes.
- Investigate long-term rail strategies, specifically South-central and Fairbanks area commuter rail.
- Encourage cruise ships to use renewable energy and to reduce energy usage, especially through lighting standards, both in and out of port.
- Use tugboats to move large ships in ports.
- Encourage increased telecommuting options.
- Encourage the development and enhancement of audio/video conferencing opportunities to decrease travel miles to meetings
- Support 'Buy Local' programs and products, such as Tolclat strawberries, to avoid and reduce freight miles.
- Support research for cold climate varieties to ensure adequate local food supplies with lower GHG impact.
- Encourage more 'green' fleet management, including air, land and water vehicles.
- Extend and include vehicle recommendations to ATVs, snowmobiles, personal aircraft, watercraft, etc.
- Review car lot regulations, especially leaving cars running while standing. Include standing on streets as well.
- Include 2-cycle versus 4-cycle vehicle and motor usage.
- Review incentives for car sharing and car pooling programs, such as HOV lanes.
- Research the actual needs served by the Anchorage Block Heater program.
- Investigate implementation of temperature sensitive winter plug-ins
  - Cycle on and off, rather than running continuously
  - Shut down above a set ambient temperature
- Investigate the impact of remote vehicle starters on GHG emissions.
- Include winglets as part of strategy.

Next Steps

Ken Colburn explained the next steps for the TWGs and the MAG. Each TWG will hold two to three meetings before the September meeting of the MAG, during which they will compile the additions to the catalogs from this meeting of the MAG and evaluate the proposed policy options.

As part of this screening process, Recent Actions and Related Programs and Policies will be included in the catalog. Members will discuss the merits and drawbacks of the options. The goal is for each TWG to identify 6 to 10 priority policy options for recommendation to the MAG in September.

The MAG will complete the prioritization process in September.

Next Meeting

The next meeting of the MAG will be held on Monday, September 22, 2008 in Anchorage. The meeting details will be determined later and posted on the website, as well as circulated to members.

Public Comment and Announcements

There was no public comment at this meeting.

The Alaska Renewable Energy Fair will be held in Anchorage on August 5th.

Renewable energy will also be highlighted at the State Fair in Palmer.

Ira Feldman, CCS Facilitator, has had an article published recently.