## **Alaska Mitigation Advisory Group**

Meeting 1 Summary Anchorage, Alaska May 15, 2008

### 1. Attendees

- **A.** Mitigation Advisory Group Members: Bob Batch, Steve Colt, Steve Denton, Karen Ellis, Joe Everhart, Steve Gilbert, Rick Harris, Jack Herbert, David Hite, Kate Lamal, Greg Peters, Chris Rose, Jon Rubini, Sean Skaling, Jamie Spell, Stan Stephens, Kate Troll, Kathie Wasserman, and Dan White
- **B. Public:** Tim Bradner, Paula Cullenberg, Scott Dickinson, Russ Douglas, Steve Gilbert, Sammy Glascock, Steve Heiml, Gwen Holdmann, Andy Jones, Sean Lowther, Becky Schaffer, Curt Stoner, Chip Treinan, Jeff Walker, and Lance Wilber
- **C. State Participants:** Mike Black, Alice Edwards, Clint Farr, Larry Hartig, Susan McNeil, Kolena Momberger, and Jackie Poston
- **D.** Consultants: Ken Colburn, Brian Rogers, Gloria Flora, and Jason Vogel
- **2. Welcome**: Brian Rogers welcomed the Mitigation Advisory Group (MAG) members and gave an overview of the agenda. He explained that issues of sustainability and adaptation get linked to mitigation but the focus of this group will be only on mitigation. He asked members to leave their affiliations at the door and to think in terms of benefits for Alaska as a whole.
- 3. Overview of the Alaska Climate Change Adaptation Advisory Group Planning Process Brian Rogers, Acting Chancellor, UAF and Ken Colburn, Center for Climate Strategies

They stressed an open process, with agendas, summaries, presentations and other materials are posted on the web. This process is non-binding, flexible, informal, and consensus-driven.

A greenhouse gas (GHG) inventory and forecast has been completed, now, we identify potential policy options by sector while ensuring they complement policies and programs already in place in Alaska. Stakeholders with diverse expertise are represented on the Advisory group and on Technical Working Groups.

A stepwise planning process and its design were presented. The goal for this process is to develop policy recommendations that are comprehensive and quantifiable when possible. A comprehensive catalog of states' actions will allow the AAG to select key Alaska actions to reduce GHG emissions.

Each advisory group will have TWG's analyze information before making recommendations to the advisory groups for their consideration. Decision criteria and examples of mitigation policy recommendations were listed. TWGs for the Mitigation Advisory Group (MAG) are: Oil and Gas; Energy Supply and Demand; Transportation and Land Use; Forestry, Agriculture and Waste Management; and Cross-Cutting Issues.

The TWG's will identify and recommend +/-50 draft options for further development. TWGs will screen, prioritize and propose initial policy options, which include goals, timing, coverage, parties, and implementation mechanisms. The MAG will have final decision authority on all recommendations.

Six advisory group meetings will be held; a seventh if needed. After all meetings conclude, the consultants will compile a final report for the MAG and AAG to present to the Climate Change Sub-Cabinet.

MAG members were asked to review the catalog of potential state actions, and to review Alaska GHG Emissions Inventory and Forecast to prepare for discussions about priority policy options for analysis.

# 4. Review of Alaska Greenhouse Gas Emissions Inventory and Forecast

Alice Edwards, DEC and Steve Roe, Center for Climate Strategies

The presentation on Alaska's Greenhouse Gas Inventory is available at <a href="https://www.climatechange.alaska.gov/mt.htm">www.climatechange.alaska.gov/mt.htm</a>. Greenhouse gases methane, nitrous oxide, sulphur hexafluoride, hydrofluorocarbons and perfluorocarbons are measured in carbon dioxide equivalents.

The emissions inventory identifies sources from human activities, energy, industry, transportation, agriculture, forestry, and waste disposal, over time. Alaska's 2005 GHG emissions grew by 13% from 1990 to 2000; the US average was 14%. Emissions by sector were presented; industrial fuel use (41%) and transportation (35%) were the largest emitters. Standardized protocol doesn't exist but a common practice is to have inventories capture at point of fuel sale, not the use point. Anchorage is a major refueling stop for cargo aviation transportation. Since the inventory uses fuel purchases in calculations, the report should discuss this emission because most aviation fuel sold in Alaska is burned elsewhere. Similarly ships fuel elsewhere but use electricity when in port.

The draft inventory is an iterative document to be refined and adjusted as the process moves forward. One of the major steps in the process is to improve on inventory, better data, more sound assumptions, and so on.

One potential criteria is to ascertain what Alaska as a state can affect. For example, to affect air travel, a policy recommendation requiring landing fees could incentivize remanufacturing of engines and processes. Although natural and anthropogenic sources like forest fires are not included now, perhaps they can be. Emissions and pollutants from Asia and Russia are active research areas, but are not included in the inventory. Perhaps Alaska's natural gas exports could be used to mitigate other areas of GHG emissions.

Melting fresh water flushes sediment into ocean waters. The full effect of additional fresh water on fishing industry and habitat is important to know. This question can be sent to adaptation or the Research needs Working Group.

# 5. Mitigation Practices Brainstorming (some proposed, some active): Current Mitigation

- Weatherization
- LEED
- Green building
- Use local materials
- Energy efficiency programs
- Rebates for high efficiency appliances
- State energy efficiency policy draft

- Hydro
- Smart meters
- CHP at residential scale
- Wind power AVEC
- HB 152 renewable energy fund
- Tree give away
- Emission reductions

### Energy

- Reduced flaring
- Convert diesel to natural gas or electricity
- Combined heat and power (CHP)
- Equipment to more energy efficient models
- Recycling
- Green waste recovery
- Waste to energy
- Geothermal
- Wind
- Tidal

- Wave
- In-river hydro
- Encourage demonstration projects
- Small nuclear reactors
- MSW energy and heat
- CTC BTU coal gas
- Biomass
- Sequestration
- Education in general how to conserve

## **Transportation**

- Changing air speed
- Aircraft diesel to electricity and more efficient models
- Cruise ships hydro at dock
- Fuel cells- distribution once generated
- Battery improvements
- Changing prop design in ships and boats
- Level of management fisheries and in general
- Outlawing two-cycle engines (proposed)
- Fleet conversion
- Jet biofuel alternatives

#### Other

- Company incentives to bike to work
- Develop hydro to sell to neighbors
- Upgrade bicycle paths
- Mass transit
- Industrial efficiency

- Video conferencing
- Denali Green Tags
- Energy research
- Q- incentives

# 6. Purpose and Goals: Overview of Administrative Order 238 and Structure of Climate Change Sub-Cabinet's Efforts in Alaska

Larry Hartig, DEC Commissioner

Commissioner Hartig introduced the goals of the climate change planning process. He stated several huge issues face Alaska: climate change; energy costs; natural gas pipelines; resource development in general; and sustainability, especially of rural communities. Issues will be difficult to separate since they are all interrelated. He asked the advisors to capture all thoughts but to stay focused on climate change.

The Governor appointed this committee because:

- No debate on climate change, it's now
- Relatively small changes in atmosphere have significant effect on the environment.
- Warming will have effects on habitats
  - o Less sea ice
  - o More intense forest fires, more insects
  - o Change in distribution of species
  - o Appearance of new species.
- Our world shares one atmosphere there's no opting out
- We can build strategy from ground up, without unintended consequences
- We all must take responsibility
- The inventory shows the effects Alaska can have are unique and shows opportunities
- Emissions reductions may not be difficult and there could be many ancillary benefits
- If we fail to act there could be repercussions in the market
- State lead-by-example will be an important part of state government leadership
- Governor wants info and analysis of cap-and-trade, how it affects residents of Alaska

Administrative Order 238 established the Alaska Climate Change Sub-Cabinet comprised of five cabinet members - Departments of Commerce, Community and Economic Development; Environmental Conservation; Natural Resources; Fish and Game; and Transportation. The Sub-Cabinet is supported by the University of Alaska (for research and modeling) Buck Sharpton, and John Katz, liaison for the Governor on federal matters. This order applies to all sources and all opportunities.

Immediate Action Work Group identified most at-risk communities and brought together reps from each village. Recommendations were forwarded; legislators put up 1/3 of money needed (\$10.6M) to address those needs, the rest may come from federal government.

The Commissioner stated the State has no intention to steer or control this process. He likely will attend all meetings; use him as a resource. Recommendations will be taken very seriously; the Governor will assess and carry them forward to the legislature.

Western Climate Initiative (WCI) (Alaska is observer); participants listen to each other, each playing to their own strength and contributing what they can. Since WCI is focused on capand-trade, the Governor doesn't think Alaska was prepared to join yet.

#### 7. Discussion

Introduction to Center for Climate Strategies and process for the coming year, refer to http://www.climatechange.alaska.gov/mit.htm, Workgroup Documents and Links, click on the power point titled Mitigation Advisory Group Planning Process.

To find other state plans for their overview structure and information: www.(stateabbreviation)climatechange.us

Definition of mitigation is activities that reduce greenhouse gas emissions.

If individual items need action, meetings can be arranged outside this process to jump start programs. A process can be initiated to recommend important elements to the Governor before the budget cycle is complete.

One corporation started looking at reduction goals through sequestration. Each company should start with internal savings first. The group needs to pay attention to what's already going on and how Alaska fits. The Farm Bill and Energy Bill are both addressing carbon sequestration, recommending large grants. State dollars may be used to match or draw federal funds. We need to look for opportunities to move to the head of the line.

This process dovetails with the state energy plan. We can ask the Regulatory Commission of Alaska to participate on the Energy Supply TWG.

Suggestions are welcome for other informational needs that can be met through presentations at upcoming meetings or papers.

- The Governor asked every agency to list adaptation needs. Larry will lead the effort to query departments about what they are doing or like to see done for mitigation.
- Have Energy Plan leader come to future meeting to bring us up to speed.

### 8. Key Meeting Dates

May 15, 2008 (1st Meeting): Launch Process; Review Inventory - Anchorage July 15, 2008 (2nd Meeting): Review and approve progress on Catalog of Potential Policy Options - Fairbanks

September 22, 2008 (3rd Meeting): Approve Policy Options Catalog and initial rankings as available. (some TWG's may need more time for balloting – TBD as process continues)

November 6, 2008 (4th Meeting): Approve Final Priority Policy Options and straw proposals as available.

February 5, 2009 (5th Meeting): Approve remaining Straw Proposals and initial quantifications (prepared by TWGs)

March 4, 2009 (tent.) (6th Meeting): Approve Quantification of Options and framework of final report.

Seventh meeting possible.

### 9. Closing Comments:

Larry Hartig appreciated the ideas and enthusiasm around the room. He recognized the large investment in time, and stressed the importance of this process.

# 10. Ideas for catalog

- Focus on young people and provide appropriate education
- Innovative funding incentives
- Calculate and track what is being spent across state agencies on climate change
- Requirements for state selecting bidders that are energy savvy rather than just the lowest builder
- Energy audits required on existing buildings, but don't know that it's being done
- Could mandate built to LEED level, not necessarily go through certification process
- No state building codes, no state energy codes being done by municipalities, but no money for enforcement.

### 11. Public Comments

Becky Schaffer from Cascadia Green Building Council (WA, OR, AK) thinks the state has technical expertise necessary to design green buildings using LEED and Living Building Program (net zero energy). She suggested some type of competition, like the X Prize, which will jump start the green building phenomenon. State agencies could lead with schools.