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MEETING SUMMARY
ALASKA CLIMATE CHANGE MITIGATION ADVISORY GROUP
Energy Supply and Demand Technical Work Group
(ESD TWG)

Call #2, July 1, 2008, 9:30 AM – 11:30 AM

Attendance:

1. Technical Working Group members:
Clint Farr, Scott Goldsmith, Wayne Hall, Meera Kohler, Marilyn Leland, Christopher Nye, Sean Skaling, Steve Colt, Kate Lamal, Greg Peters, Chris Rose, Dan White
2. Center for Climate Strategies (CCS) staff:
Chris James, Jeremy Fisher, Steve Roe
3. Public Attendees: None.

Background documents:

(all posted at http://www.akclimatechange.us/Energy_Supply_Demand.cfm)

1. Meeting Notice and Agenda
2. Powerpoint for Teleconference
3. Draft Summary of Meeting #1
4. Consolidated Energy Supply and Demand Draft Policy Options Descriptions
5. Draft Alaska Greenhouse Gas Emissions Inventory and Forecast (CCS)
(<http://www.akclimatechange.us/ewebeditpro/items/O97F17681.pdf>)
6. Alaska Greenhouse Gas Emission Inventory Report (AK DEC)
(<http://www.akclimatechange.us/ewebeditpro/items/O97F17505.pdf>)

Points of Order:

This was the second conference call of the ESD TWG.

1. Chris James called the meeting to order, reviewed the agenda and plans for the call, and took roll call. Chris introduced Steve Roe, principle author of the AK CCS inventory and forecast report.
2. The notes from the June 6th meeting were approved.

Discussion items and key issues:

The TWG first reviewed the inventory and forecast.

1. Steve Roe walked through the inventory and forecast, focusing on the electricity production, residential/commercial/industrial fuel combustion, and fossil fuel sectors, explaining that CCS had focused on the sectors which were of higher importance in the inventory and forecast. Steve explained that the forecast had been created “top-down” from national data sources, but that AK-specific data would be welcome to supplement the inventory. It was noted that because the inventory and forecast uses national and regional data as a basis, AK information needs to be disentangled from other Northwest states because the emissions sources are very different in the state. Steve also noted that the inventory tracks both consumption and production, which are often the same in AK because there is no interstate transmission grid.
2. Chris asked if the Energy Policy Act of 2007 had been included in the forecast, and Steve noted that it had not, but might be included in the next iteration of the business-as-usual forecast. The BAU case takes into account estimated future energy growth and economic growth in the state.
3. Steve explained that the forecast tracks the six major greenhouse gases (CO₂, CH₄ [methane], N₂O [nitrous oxide], HFC and PFC [fluorocarbons], and SF₆ [sulphur hexafluoride]) and their associated 100-year global warming potential. A TWG member asked for clarification on 100-year warming potential (the amount of warming which can be attributed to a molecule of a compound relative to the warming potential of carbon dioxide over 100 years), particularly in regard to HFC and SF₆. Steve responded that both HFC and SF₆ are small sources, but very large potential for a small amount of gas and PFC has a range of values because there are many different types of PFCs. A TWG member asked why water vapor was not included in the inventory; Steve responded that the issue of natural vs. anthropogenic (human-caused) water vapor concentration is poorly understood and that modeling water vapor at a global scale is highly uncertain – the CCS inventory is staying within the methods for tracking GHG as defined by the IPCC (water vapor not included).
4. Steve noted that for all sectors and gases, both sources and sinks are tracked (i.e. forestry, where the forests can be a CO₂ sink, but harvesting or burning is a source). However, in the “Gross Emissions”, sinks are not included (e.g. the forestry sector with a sink of 1.4 million metric tons of CO₂ per year).
5. There was a discussion of the importance of different sectors in AK. Electricity production (for the grid) is very small, but the transportation sector in AK holds a large volume of emissions (35%, relative to 26% in the US as a whole), and industrial fuel use emissions (mostly in the gas and oil industry) is very large (41% in AK, relative to 14% in the US as a whole).
6. It was noted by a TWG member that many industries produce their own electricity on site (not grid connected), and some confusion as to if this would count as electricity generation or industrial use; it was clarified that if the electricity were produced on-site, it is an industrial source. The inventory process would need to re-examine the division of the electricity produced locally or onsite vs. “grid connected”, because sources and attributions were unclear in AK.
 - a. Near the end of the discussion, this issue was again broached with a TWG member asking if North Slope communities which burn diesel to produce

electricity count for “electricity generation” or “RCI”. Steve answered that this is tracked as RCI use, because the electricity is not grid-connected

- b. Another TWG member asked for details about the fuels driving the RCI sector; Steve responded that the inventory tracked fuel type, but not end-use (space heating, electricity, etc.).
 - c. Steve noted that it would be important to re-examine assumptions about electricity vs. RCI fuel consumption in non-grid connected villages.
7. It was noted that Alaskans produce about 80 t CO₂Eq per capita, while the rest of the US is closer to 25 t CO₂Eq per person. Alaskans also produce more GHG per dollar than the rest of the US.
 8. It was noted that in the fossil fuel industry (FFI, gas and oil industry), fugitive methane emissions (out of pipelines) are likely to decrease over time, but the size of the sector will continue to grow and increase overall emissions. A TWG member noted that if natural gas pipelines become overfilled, methane processing facilities might vent the gas (e.g. New Mexico, and potentially create a large source of GHG).
 - d. Towards the end of the call, Steve Colt asked if newly licenced gas pipelines, or expected new gas pipelines would be included in the inventory and forecast. Colt explained that the AK Department of Revenue has estimates of petroleum revenues and field production, and may have good estimates of new fields and formal or informal models to inform the CCS estimate.
 9. Clarification questions were asked about the growth of transportation sector GHG emissions, expected to grow by 2 MMT.
 10. In closing, Steve asked for TWG members to send questions, critiques, or suggestions via email to Chris James or directly to him. Chris clarified that all data sources used in the forecast must be publically available data and must be approved by the MAG. TWG member Meera Kohler noted that the AEA has talked about refining AK power statistics (with information presumably which could be shared with CCS).
 11. Chris James asked the TWG to consider if the inventory could be approved for recommendation to the MAG by their September 15 meeting.

The TWG next reviewed the catalog of policy options:

1. Chris first asked for questions on the policy options, looking for clarifications on both the demand side options, as well as the supply side options. He noted that CCS wants to ensure that all options are on the table and that nothing should be left out. A TWG member asked if we were just looking for “obvious emissions”: Chris clarified that all options should be examined.
2. TWG member Meera Kohler suggested that a transmission policy options should be included because the electricity infrastructure is underbuilt in AK and an intertie would allow lower emissions resources to be used more often (for example, a better rail-based grid could allow transmission to constrained regions). This option was seconded by Steve Colt, who added that he would like to see a “Smart Grid” option in the catalog. Steve Colt and Meera Kohler volunteered to draft the recommendation for the catalog.

3. Steve Colt asked if land use and transportation (smart growth concepts) could be included in the catalog, asked that the term “SmartGrowth” not be used (offputting). Chris responded that building energy use and where people live should be included in the analysis, but transportation and land use should specifically land as a cross-cutting issue.
4. Chris Nye asked if building EE and weatherization is included, and noted that nobody in the TWG had expertise in building EE. Chris noted that this information should be passed to Jack Ebert in the cross-cutting group.
5. Sean Skaling asked that commercial energy audits be included with industrial audits in RCI 10.4.
6. Chris asked that new suggestions from the TWG be forwarded to him at CCS by July 7 COB.

Public Input: input from the public was solicited by CCS. No members of the public were present on the call.

The meeting was adjourned at 11:30 AM.