

**State of Hawaii - Department of Business, Economic Development, and Tourism
Greenhouse Gas Emissions Reduction Task Force**

Meeting Minutes

Thursday, May 2, 2008

3:00 – 5:00 p.m.,

Room 204 Leiopapa A Kamehameha Building
235 S. Beretania St., Honolulu 96813

Present:

1. Mr. Robbie Alm (Hawaiian Electric Co. Inc.)
2. Mr. Frank Clouse (Tesoro Corp.)
3. Dr. Makena Coffman (University of Hawaii)
4. Mr. Mark Fox (The Nature Conservancy)
5. Mr. Laurence K. Lau (Department of Health)
6. Dr. Lorenz Magaard (University of Hawaii)
7. Mr. Theodore (Ted) Peck, Designee for Theodore E. Liu (DBEDT)

Excused:

1. Mr. Jeffrey Mikulina (Sierra Club)
2. Mr. Gary North (Matson Navigation Co.)
3. Mr. Gareth Sakakida (Hawaii Transportation Association)

- 1) The meeting was called to order by Mr. Laurence Lau at 3:09 pm.
- 2) The minutes from the April 3, 2008 TF meeting were accepted without amendments. Mr. Mark Fox made a motion to approve, and Mr. Robbie Alm seconded the motion.
- 3) Committee updates
 - a) Outreach Committee

Mr. Ted Peck, DBEDT staff and designee for Mr. Liu at the 4/13/08 meeting, reported on the Outreach Committee's activities. The committee noted that by statute, a public meeting is required prior to the final rulemaking for Act 234. The committee considered various ideas for having a kick-off public meeting this fall in conjunction with other activities intended to increase awareness of climate change/GHG emissions and Act 234. The committee discussed having this kick-off meeting after the consultant is selected, perhaps in September or October. One suggestion was to have an outreach meeting in the morning with informational presentations and activities, then a public meeting after lunch. Other suggestions included conducting a survey for the purposes of gauging public knowledge and awareness of climate change issues that Hawaii faces, and outreach activities including having a public figure or entertainer as a public spokesperson for disseminating information. It was suggested that information on Act 234 and climate change could be inserted into consumers' monthly HECO statements. Mr. Liu (or his designee) was selected as the committee chair. Mr. Gareth Sakakida was selected as co-chair.

- b) Analysis committee

The committee discussed goals and priorities for TF work. The final list was read and explained by Dr. Coffman:

Goals of TF Work:

1. Make decisions regarding the framework of approach to reductions, e.g. carbon taxes versus a cap and trade regime.

2. Filling information gaps and getting a sense of the size and impact of different sectors on statewide emissions, and how an agency would best regulate each (LKL).
3. Determine effectiveness of policies – which sectors use the most fossil fuel and are best candidates for reductions (LKL).
- 3a. Incorporate extra projected growth in emissions; by 2020 we'll need to reduce more than the required level of reduction from the present back to 1990 to ensure that we account for this growth (RA, staff).
4. Consider the issue of pre-emption and whether Hawaii should petition for exemption from national legislation if necessary because of our unique circumstances (e.g. in the manner that was done for SO_x regulation) (RA).
5. Outreach to achieve organizational change, including governmental agencies (LKL).
6. Implementing a rigorous monitoring and information management system, tailored to the needs of the regulatory system selected (LKL).

Overarching Priorities:

1. Minimize regressive effects of mitigation strategies and policies.
2. Priority should be give to GHG emissions reductions first, then offsets and sequestration (MC, LM).
- 3) Ensure that state policies are synthesized with national legislation (LKL).
3. Maximize other positive environmental and health spillovers, e.g. health benefits from community design, preservation of open space, avoided deforestation, and aquifer regeneration (MC, LKL).
4. Go beyond the mandate where effective and possible (MC).
5. Minimize negative economic impacts; support Hawaii businesses; and keep money in the State (MC, RA, public).

c) Policy Committee

Mr. Mark Fox reported on the 4/28/08 meeting. Several articles on the pros and cons of various policy regimes were sent to the committee at Mr. Fox's request, and these were discussed at the meeting. Like the Analysis committee, the Policy committee feels that it is necessary to have thorough analysis of the economic, social and environmental impact of the various policy structures. The committee also stressed the need for policies that are compatible with national legislation on climate change and the possibility of asking for an exemption if Hawaii could not comply in a cost-effective manner or if federal rules do not fit Hawaii's energy/economic circumstances. Members discussed opportunities for offering TF input to the consultant's work and the drafting of the three work plans called for in the scope of services.

4) Update on Act 234 funding and RFP

a. Mr. Peck, DBEDT Director's designee, informed the TF that the request for funding has been approved but the documentation has not yet reached DBEDT. It is not yet known whether the funding is for two fiscal years or only the current one. Governor Lingle is reportedly supportive of the TF's work. Mr. Peck commented that part of the \$500,000 funding for Act 234 might be allocated toward outreach and communication work. He expressed interest in leveraging the Hawaii Clean Energy Initiative and finding synergies between Act 234 and the new initiative.

b. Ms. Estrella Seese, DBEDT, informed that TF that the RFP is with the Administrative Services Office Contracts division, and more information will be provided when available. Regarding the Outreach committee's proposed plans for a meeting and public information activities, she commented that, under the current scope of services, the consultant may be asked to assist with the public meetings, but it does not include extensive outreach tasks. Ms. Seese also reported that a memo requesting DBEDT Director's approval for the RFP evaluating

committee has been submitted. The four persons for the proposed committee are Mr. Peck, Ms. Seese, and Ms. Karen Shishido, DBEDT staff, and Dr. Makena Coffman of the TF. The next steps in the process are for the contracts office to advertise and post the RFP for a specified time period. Funds will have to be encumbered by June 30th.

5) Investigative Committee

a. The agenda was amended to allow for a vote on the question of whether an investigative committee should be formed for the purposes of hearing a presentation by Joel Smith, a climate change mitigation policy specialist. The presentation was first proposed by Mr. Fox at a previous Policy Committee meeting. Mr. Peck made a motion to amend; Dr. Coffman seconded it. The seven members of the TF present voted unanimously to amend the agenda. Deputy AG Mr. Gregg Kinkley informed the TF that investigative committees may consist of up to five members and is not governed by Sunshine Law rules. However, if they wish, TF may make the presentation into an open meeting and invite the public. A vote was then taken on whether to authorize the committee. Mr. Alm raised the motion, which was seconded by Mr. Fox. The TF members present unanimously voted to authorize a temporary investigative committee. Mr. Fox will be coordinating a date and time with the speaker and will be in contact with staff.

6) Presentation on Climate Change and Water Resources by Mr. Barry Usagawa, Honolulu Board of Water Supply

a. Mr. Usagawa gave a powerpoint presentation on BWS initiatives on conserving water, and the water management plan which considers the impacts of climate change on drinking and groundwater supplies. The presentation is briefly summarized below. The full presentation will be posted at the DBEDT/GHG Task Force website.

- o The BWS is guided by a sustainability principle: Ka Wai Ola, “water for life.”
- o Water resource strategies include watershed management, conservation, natural and alternative water supplies.
- o Options for groundwater management include reuse, desalination, and deep ocean recovery.
- o Potable water system demands: in 1990, demand was 156 million gallons per day. Demand since then has been relatively flat, but is expected to rise due to population growth and new developments.
- o An isohyet map shows changes in rainfall. Historical ranges have been 20-300 inches. Recent isohyets go as high as 280 inches and seem to be trending downward
- o Higher rainfall in the interior regions of the Hawaiian islands as compared to near the coasts is due to mountains and tradewind directions. Changes in tradewind patterns due to global climate change may impact rainfall. This is a relatively unknown area in meteorology but Dr. Chip Fletcher of UHM says some climate models predict some impact.
- o Other rainfall isohyet analyses show that the Honolulu watershed may be experiencing higher evapotranspiration. One trend that may be occurring is bigger (major) rainfall events that happen sporadically which may lead to a drought/flood pattern.
- o Rainfall from 1998 to 2004 has been 80% of normal levels.
- o If recharge rates drop, the thickness of the aquifer decreases and may bring up brackish water. If this happens, action will need to be taken such as cutting back on pumping or backfilling wells.
- o Seawater intrusion, related to sea level rise, is also a concern and is being monitored.
- o Oahu island was once submerged to 250 feet above the present sea level, as is evidenced in the coral and other geological records. During this submerged phase, caprock was formed – 1000 feet thick in places. Caprock protects the freshwater lens from intrusion.
- o According to Dr. Fletcher’s model, caprock may protect water supplies in the mauka/mountain regions but brackish wells near the coast may get saltier and become unusable. Other

complications may include corrosion of pipelines, and saltwater intrusion into sewer collection systems (e.g. incidents in Mapunapuna and Waikiki) and cesspools. This may pose a public health risk.

- o BWS is monitoring rainfall and aquifers, and continues contingency planning for climate change; it also is preparing for desalination and other new technologies, and is looking into cutting energy consumption for water pumping by incorporating greater renewable energy into its system.

b. Comments and Q&A by Task Force and Public

i. Mr. Laurence Lau asked about residential water use. Mr. Usagawa replied that use of graywater for the lawn and other applications may have microbiological implications (i.e., be a health hazard). He commented that the Counties have not adopted the Uniform Plumbing Code which would permit rainfall catchment. He noted that 50% of potable water use is for water irrigation, landscaping and lawns at present.

ii. Dr. Coffman asked about the water sustainability situation on the neighbor islands. Mr. Usagawa commented that older islands have more caprock; however Kauai does not have as large a water supply as Oahu. Oahu's uniqueness lies in its aquifer that lies between the two major mountain ranges. Maui has mostly surface water. Dr. Coffman asked about the importance of permeability in surfaces (e.g. development projects, infrastructure, roads). Mr. Usagawa replied that increasing permeable surfaces is very important. He noted that Koa Ridge Mauka is a high recharge area. Mililani Mauka was also a high recharge area, but this was somewhat of a missed opportunity to include permeable design conducive to recharge.

iii. Ms. Kirsten Turner, member of the public, inquired about BWS' initiatives to make pumping more efficient. Mr. Robbie Alm replied that BWS is a large energy user and is working with HECO to switch pumping power to renewable sources; additionally, it is changing pumps to more efficient models whenever they are replaced. He noted that BWS is on the advisory committee for HECO's Integrated Resource Planning. Another serious problem is leakage—up to 10% of potable water is lost through leaks.

iv. Mr. Usagawa commented that the rebate program for switching to 1.6 gal/flush water efficient toilets was highly successful. He reported that Kahe power plant was Honolulu's largest user of water. In 2009, the Kahe plant will switch from potable water to R1 reclaimed water.

v. Member of the public Mr. Matt Riel commented that AES Hawaii's coal plant has also been using R0/R1 reclaimed water. They have measured that levels of salinity in the brackish water they are using has been rising. They are subject to a Department of Health limit on salinity.

vi. Mr. Paul Berry of the public asked if the TF will be tracking the UN climate change policy efforts which will be finalized in 2009. Dr. Magaard said that the TF will be; Mr. Lau replied that the TF will contribute to the discussion.

6) Public comment. Public comment is reflected above.

7) Future agenda items

a. Ms. Jill Duggan from the UK Consulate will be calling in from Australia to discuss the EU's experience with their cap and trade system.

b. The next meeting will be held on June 5th at 3:00-5:00 pm.

9) Adjournment.

a. The meeting was adjourned at 5:05 pm. A motion to adjourn was made by Mr. Alm and seconded by Mr. Lau.