

**State of Hawai'i - Department of Business, Economic Development, and Tourism**  
**Greenhouse Gas Emissions Reduction Task Force**  
**Meeting Minutes**  
**Thursday, March 05, 2009**  
**11 am – 1 pm**  
**Room 436, No. 1 Capitol District Building. (fmr. Hemmeter Bldg)**  
**250 S. Hotel St., Honolulu, Hawaii 96813**

Attendance

Task Force present:

1. Mr. Laurence K. Lau (DOH)
2. Ms. Estrella Seese, designee for Theodor E. Liu (DBEDT)
3. Dr. Makena Coffman (UH-Manoa)
4. Mr. Gareth Sakakida (Hawaii Transportation Assn.)
5. Mr. Robbie Alm (HECO)
6. Mr. Mark Fox (The Nature Conservancy)
7. Mr. Jeff Mikulina (Blue Planet)

- 1) The meeting was called to order by Co-Chair Lau at 11:07 am.
- 2) Consideration of the minutes from the February Task Force meeting was placed at end of meeting.
- 3) Dr. Fred Mackenzie, Professor emeritus at UH-Manoa's Dept. of Oceanography did a presentation on ocean acidification issues of climate change:
  - Of the 9 billion tons of carbon emitted from 2000 – 2007, 26% has gone into the oceans (30% of man-made carbon has gone into the oceans since 1700), leading to its acidification.
  - This makes it more difficult for coral, coralline algae, mollusks to build their calcium carbonate skeletons and to calcify, leading to decreased production rates of these organisms. This also begins to reduce coral reef growth, and eventually can begin to dissolve reefs. By 2150, the critical level will be reached where dissolution of calcium carbonate reefs will be faster than the production of calcium carbonate by organisms. The only way to stop ocean acidification is to reduce global emissions of CO<sub>2</sub>.
  - The only practical way out of the problem of ocean acidification is to reduce globally fossil fuel and land use emissions of CO<sub>2</sub> to the atmosphere by realignment of the *world* energy sources from fossil fuels to alternative sources (90% of world commercial energy comes from fossil fuels), CO<sub>2</sub> sequestration, decreasing the rates of tropical deforestation, etc.
  - Because acidic seas are the result of global anthropogenic CO<sub>2</sub> emissions, Hawai'i and island nations can do little directly about the problem. However, we can reduce other stresses on reef biodiversity such as overfishing, pollutant inputs via rivers and the atmosphere to coastal areas, human destruction of reef habitat, etc. The degradation of our reefs could potentially result in reduced production of CaCO<sub>3</sub> sand for beaches, loss of fish habitat, loss of marine biodiversity, loss of protection against

storm surges, loss of an underwater resource that attracts locals and tourists recreation, etc., with little understood consequences for the State's economy.

- In discussion of the presentation, Jeff Mikulina expressed appreciation for the robust study, while suggesting that if the chemistry proportion of it could be reduced, it would enable it to have enhanced appeal to the general public. Dr. Mackenzie agreed and related an illustration using Coke which he uses with public presentations.

[Mr. Gareth Sakakida departed 11:35 a.m. – quorum (6) maintained at 6 members present.]

4) The work order #3 under the contract with ICF was discussed per the agenda item.

- Estrella Seese, DBEDT, pointed out that just over \$300K remained from the total GHG TF funding of \$500K; ICF had attempted to propose a rescoping of the contract to not include ICF running the REMI economic impact model of the proposed regulatory mechanisms, but DBEDT will insist upon maintaining the original scope of services in the contract, which include Tasks #3 thru part of #5.
- Under the work order, ICF will be required to include the Task Force requested analysis of a Hawaii carbon tax as well as a federal cap and trade system, and upstream regulatory measures.
- Gregg Kinkley, State Attorney's Office, commented that a dispute resolution would be avoided.
- Co-chair Lau asked that DBEDT share work order #3 with the Task Force, with the understanding that the Task Force can give only its opinion but had no authority to direct DBEDT on how to proceed with the contract work order.
- Mr. Kinkley stated that under the contract, DBEDT was running things exactly right, and is completely justified to not only respond to ICF that an attempt to rescope the services in the contract is unacceptable, but to also now go ahead to issue work order #3 to ICF.

5) Discussion proceeded to the next agenda item: assumptions for the 2020 reference/base case.

- In response to ICF's query about whether the Hawaii Clean Energy Initiative (HCEI) should be referenced in the base case assumptions, the Task Force confirmed that it should not.
- The business as usual (BAU) case does not include IRP 4; IRP 3 may be used for analytical purposes, and EIA would also be included – it being in the public interest to not underestimate the challenge, but rather to define the task larger so as to be prepared; if the task ends up smaller, it would then be so much the easier. Ms. Seese said DBEDT's current economic forecast would be used. Co-chair Lau asked if there were any objections the above, and there were none.
- Mr. Lau commented that he supposed current bills being discussed in the Legislature, and federal stimulus package factors, would be excluded as these are not firm yet. Mr. Lau summed up that conservative assumptions – higher emissions levels, more challenges for reducing levels, would be used for the base case.

- 6) Mr. Lau moved the meeting on to the next agenda item of outreach progress, opportunities and needs.
- Ms. Maile Sakamoto, Dept. of Health, discussed the Olelo youth video contest; deadlines for entries was 2 days ago, and there were 13 so far with more probably being processed.
  - As a part of public comment, Maxine Bukett, associate professor of law at UH, and Director, Center for Island Climate Adaptation and Policy, suggested doing multi-discipline, locally-oriented outreach to youth (curricula, theater, art, etc.), and to first find out who is doing what, then convene those parties to brainstorm together.
  - Mr. Lau asked that Ms. Sakamoto inform the Task Force when the screening of the videos would be.
  - Ms. Sakamoto inquired whether anyone on the Task Force would like to be part of Olelo's judging panel; Mr. Mark Fox said that Ms. Sakamoto should probably be on the panel since it would give Olelo the professional input on the subject matter, and then said he would also be willing to be a judge. Ms. Sakamoto said she would contact Olelo and convey what the process was for the judges.
  - Mr. Steve Bretschneider, DBEDT, noted that Olelo now has a video production facility available for use at the Capitol building.
- 7) Public Comment time:
- Dr. Mackenzie suggested offering awards at the Science Fair for climate related category; co-chair Lau commented it also need not be limited to the Science Fair.
  - Dianna Spooner, Hawaii Conservation Alliance noted that the 17<sup>th</sup> annual Hawaii Conservation Conference, July 28-31, which would have some 1,000 attendees, would have climate change as a major topic this year, and that she would be keen explore a specialized communications workshop on the topic, partnering with UH and the Task Force.
  - Mr. Lau asked that the outreach people tarte a list of events such as this in the coming year.
  - Mr. Lau inquired about agricultural interests, and there was public comment that farmers worry about higher costs for them as a result of GHG reduction measures – when fuel costs increase, everything costs more. They would suggest a more moderate cost increase in fossil fuels, alongside optimized application of the funds and revenues from the regulatory measures.
- 8) Discussion and approval of the minutes from February 5 meeting was deferred until next meeting.
- 9) The meeting was adjourned at 12:59 p.m. The next meeting is scheduled for April 2, 2009.