

State of Hawai`i - Department of Business, Economic Development, and Tourism
Greenhouse Gas Emissions Reduction Task Force
Meeting Minutes

Thursday, September 3, 2009, 11 am – 1:30 pm
Room 436, No. 1 Capitol District Building (fmr. Hemmeter Bldg)
250 S. Hotel St., Honolulu, Hawaii 96813

Attendance

Task Force (TF) present:

1. Laurence Lau, Co-chair
 2. Estrella Seese and Theodore Peck, designees for Theodore E. Liu , Co-chair
 3. Mark Fox
 4. Frank Clouse
 5. Maxine Burkett
 6. Jeff Mikulina
 7. Makena Coffman
 8. Robbie Alm
- * Representative present from Attorney General's Office: Mr. Gregg Kinkley, Deputy Attorney General.

- 1) The meeting was called to order by Co-chair Lau at 11:10 a.m.
- 2) Minutes from the July TF meeting were approved.
- 3) Presentation: "First Draft of Hawaii Greenhouse Gas Emissions Work Plan" via webinar:

ICF representatives present on the webinar were Glen Wood, Susan Asam, and Christopher Caners; and Jeff Amlin, the developer of the Energy 2020 model.

ICF presented the results of the modeling for the three work plans. The webinar covered a summary of results, project overview, reference projection, work plans and impact analysis. The PowerPoint presentation by ICF, referenced above, is available for download at:

<http://hawaii.gov/dbedt/info/energy/greenhouse/Hawaii%20GHG%20Task%20Force%20Work%20Plans%203Sept2009V3.pdf>.

ICF noted that initiatives Hawaii has already taken with federal legislative requirements will achieve the mandated level of reductions by January 1, 2020. Initiatives in work plan #1 further reduce GHG emissions to about 40% below 1990 levels by 2020. Because work plan #1 policies/initiatives already reduce emissions, ICF also modeled state carbon tax (work plan #2) and the proposed federal cap and trade program (work plan #3), which each resulted in very small additional reductions in GHG emissions compared to work plan #1.

Mr. Clouse expressed concern that the report did not consider the situation where Hawaii might implement a carbon tax while other states enact a cap and trade plan, which could result in double taxation. Mr. Wood acknowledged that a variety of scenarios are possible, but the report did not make any assumption on states implementing different policies.

Mr. Wood presented the target, scope, and key assumptions of the work plan (see ICF presentation, slide 4). Mr. Wood clarified that the REMI model provides the economic forecast that is used in the Energy 2020 model to calculate demand, and the supply to meet that demand results in air emissions, including targeted GHG emissions (see slide 5). Mr. Wood presented a summary of reference projections (see slide 6). Total GHG emissions are projected to decline 0.8%/yr as a result of energy efficiency and increased renewable use. Policies already inherent in the reference projection will result in total state emissions reductions of approximately 10% by 2020, and 15% of emissions included in the state's Act 234 target by 2020.

Ms. Seese inquired whether residential kWh usage is included in projection of Power Sector emissions. Mr. Wood clarified that projected residential, commercial, and industrial emissions covered all emissions not including the use of electricity, so there was no double counting.

Mr. Wood articulated key assumptions of the models (see slides 8-11). Mr. Wood noted that each policy was modeled on a stand-alone basis, so when implemented together the interaction could result in substantially more reductions for some policies than others. ICF also recommends policies concerning land use planning, but these policies were not included in the modeling so no specific estimates on reductions are available.

Mr. Wood summarized work plan #1, which includes Hawaii Clean Energy Initiative (HCEI) measures plus additional recommended policies (see slide 11).

Mr. Clouse inquired whether the model compares prices to low sulfur fuel that HECO is using or to diesel. Mr. Wood clarified that in modeling the electric system ICF associated with each plant the fuel types.

Mr. Lau inquired which of the policies included in the table (slide 11) are not HCEI initiatives. Mr. Wood responded that RPS and EEPS and fuel standards are legislative requirements; the additional renewable generation and the use of biofuels are based on descriptions included in the HCEI agreement, as are sea water cooling Plug in Hybrid Electric Vehicles and sea water air conditioning.

Mr. Peck noted that regarding EEPS, HCEI requires 30% reduction by 2030, thus the work plan interpolates a 20% reduction goal for 2020. Mr. Wood confirmed the assessment.

Mr. Wood noted that fuel efficiency standards and building code are policies, not specifically addressed in HCEI, that ICF identified as recommended areas for potential further improvement.

Ms. Seese raised the point that ICF must provide the task force with estimates of the total costs of each policy. Mr. Wood responded that cost estimates are included in the economic modeling, and that all costs and assumptions associated with the measures are either described in the assumptions book or in the work plan report.

Mr. Fox expressed concern that the complicated presentation of the report – such as having cost figures spread out across various sections and appendices of the report as well as in the separate Assumptions Book - makes the ICF's overall plan difficult to synthesize, and suggested that the next iteration bring together all of the components of the work plan in a clearer more cohesive way. Mr. Wood responded that ICF appreciated the concern; a lot of information that went into the modeling of course, and ICF tried to be as explicit and transparent with that information as they could be. They tried to provide all of that in the level of detail that's requested; making it all easy to find at the same time is a challenge.

Dr. Coffman inquired whether ICF had run the output from Energy 2020 through the REMI model. Mr. Wood clarified that the results do not include the economic feedback from the macroeconomic model in the report, which has been run but not written up yet.

Mr. Lau, Mr. Peck, and Ms. Burkett pointed out that the report should have at the outset, well-developed executive summaries with conclusions, especially since the report will be made available to the general public shortly. Mr. Wood responded that ICF had provided in section 5 of the report a description in greater detail of the work plan policies and that the intent of their executive summary had been to provide a high level overview and a discussion on some of the policies that were described, as the policies are brought together. He promised to look at the structure of the report and executive summary to try to make it clearer.

Mr. Wood noted that the bulk of reductions come from the power sector as a result of EEPS and the HCEI agreement, complimented by improved building codes. See slide 12.

Mr. Wood proceeded to work plan #2, which applies a carbon tax on top of work plan #1 initiatives. See slide 13.

Mr. Clouse inquired how the model applies the carbon tax across products - at the wholesale level, retail level? Mr. Wood clarified that it is applied at the wholesale level but would show up in retail energy prices. The tax is applied across all fossil fuels based on the carbon content of each fuel, and thus applies to products based on fuel use.

Mr. Clouse expressed concern that a Hawaii carbon tax could distort Hawaii's economy if Hawaii imports and then taxes products that have already been subject to a federal cap-and-trade 'hidden tax'. Mr. Wood explained that the effects of the issue would show up to some extent in the macroeconomic model, but didn't know the extent that the model would recognize the options such as, for example, an airline has to be able to purchase fuel from somewhere other than Hawaii.

Mr. Wood explained that the model assumes the carbon tax will start at \$10/ton in 2010 and increase to \$40/ton in 2020 (see slide 13 for details). Mr. Wood noted that the report does not model other levels of carbon taxes because the target emissions reduction is assumed to be met in the reference projection. He explained that a carbon tax essentially furnishes certainty but it doesn't provide compliance certainty so there is not assurance of a certain level of reduction based on applying the carbon tax. ICF selected the level to comparable to the anticipated cost of permits and did not test a level to determine what level of carbon tax would be required to achieve the target in large part because the target is being met in the reference projection.

Mr. Fox expressed concern that the report does not consider the situation where the goals and timeline in the HCEI agreement are not achieved, and that it's not the case that modeling some different level of carbon tax is unnecessary if it looks like we are going to achieve the 1990 levels in any case with the reference projection. Mr. Wood replied that for the purpose of the work plan, ICF developed three work plans that would achieve what the task force asked ICF to look at. He said there are different configurations whether the continental US does one program and Hawaii does another. Many different variations exist, and ICF provided modeling of the three work plans; if the task force wished ICF would be happy to look at all the different kinds of variants, but they couldn't do it in the scope of the current project.

Mr. Mikulina inquired how revenue from a carbon tax can be used to fund expensive projects (such as the smart grid and undersea cable) necessary to enable HCEI. Mr. Wood responded that certainly the state level of carbon tax doesn't really make that much of a difference to GHG emissions levels. ICF had recommended that based on the level of carbon tax included in the work plan scenario, that the majority of the funds be returned via the tax system to address the equitably issue. Some could be used to fund HCEI initiatives; however ICF's recommendation is that part of the tax be used to subsidize the subset or group most impacted by the tax - a fairly common practice. Mr. Lau commented that the distribution of funds would be a policy call for the TF.

Mr. Wood explained (slide 17) that under Work Plan 3, the total cost of purchasing permits would start at ~\$212 million in 2012, falling to ~\$154 million in 2020.

Ms. Seese conveyed that she couldn't see how a magnitude in the cost ICF indicated would still result in a decrease in residential electric bills by 20%. Mr. Wood replied that he could assure that it does work out, ICF understands how rates are set, and that the important message is that consumers don't care much about electricity rates so much as they care about how much their bill turns out. Ms. Seese pointed out that one of the things ICF included was the need for HCEI is the interisland cable, and asked if ICF assumed a cost for that and if that was reflected in the increase in electricity prices shown (22-24%)? Mr. Wood responded that yes, the prices ICF used in the modeling is discussed in the work plan, appendix in terms of the assumptions.

Mr. Wood summarized (slide 18): all three work plans would raise energy prices; however these increases would be offset by increases in energy efficiency, resulting in overall savings. GHG emissions reductions do not vary significantly under the different plans. Most of the reductions are resultant of HCEI plus other recommended measures outlined in work plan #1; work plan #2 and in work plan #3 differ in their impacts on energy rates and their impact on the Hawaiian economy. What could be seen is that there are a lot of positive results concerning existing initiatives underway.

4) Discussion of Work Plan, Reference Case, and Assumptions Book:

Mr. Fox asked if ICF could model emission reduction from carbon sequestration if credits were incentivized to be kept within the state and not sold to entities outside of the state as offsets for emissions elsewhere Mr. Wood responded that ICF's sense was that they could and have done a rough estimate on potential. ICF didn't feel that they have really good information on the potentially different price levels and maybe that is something Mr. Fox could provide further information on. ICF looked at it in the context of cap and trade, in the sense that the permits are sold as offsets whether they're sold to regulated entities within HI or elsewhere- and that it would be an economic benefit to the state. ICF hadn't looked at it in the sense of the state essentially buying and retiring those reductions to pay for aforestation in order to achieve those reductions, but that he thought ICF could do an estimate of that. Mr. Wood said they would need information on how much potential exists at different levels of cost and how much was it expected the state would wish to buy, and how much would it contribute to finance reductions; with that ICF can make an estimate that for a given level of expenditure, how much could be achieved. He pointed out that it is a policy question on how much the state would choose to purchase.

Prof. Burkett commented that to her, work plan #3 was still in a grey area, and that for the carbon tax, that the report's discussion fell flat, not making clear what the benefit or the recommendation, or even the conclusion was. She believed it would be really helpful if ICF could expound more on what that approach would look like.

Dr Coffman inquired on ICF's assumptions on funding, to which Mr. Wood replied that undersea cable is funded within the electric sector; probably the assumption used was the rate payers but he would have to check.

Prof. Burkett commented that the assumptions on funding needed to be made explicit, so as to identify the maximum possible cost-effective reductions, and asked that to be laid out for each of the plans. She continued that all or at least some are concerned about the how HCEI was going to be successfully achieved; what was key in the carbon tax discussion was that there may be some funding in combination with getting to the GHG 1990 goal.

Concern was expressed by task force members that the report did not adequately address the most technically feasible and economically efficient way to implement each plan. Dr. Coffman expressed that the uncertainty surrounding funding of HCEI initiatives made it important for the model to compare the various work plans such that the carbon tax, and cap and trade system, were modeled as the underlying drivers, rather than the HCEI initiatives.

Mr. Peck asked that all go back and recall that the objective of the task force was to advise the legislature as to what policy features need to be put in place in order to achieve Act 234 objectives. Co-chair Lau added that the task force had a lot of discussion in prior meetings on what exactly the work plan models would be. He recalled that a pure carbon tax analysis was raised and rejected.

The task force expressed concern that they have not received the macroeconomic analysis of the work plans, and that ICF is behind on the work order it was given.

Ms Seese queried Mr. Wood on this, referring to the most recent conference call discussion that DBEDT had had with ICF. Mr. Wood responded that it had indeed taken ICF longer to complete the macroeconomic analysis; they needed to make changes in the REMI model which we didn't anticipate, and this caused it to take longer to map between the two models; also, it was due in part to the complexity of modeling with the cap and trade system. However, ICF did have the macroeconomic modeling completed; they hadn't finished reviewing and crunching the numbers to put the results of that into the report, but were working as quickly as they could to get that to the task force. ICF understood the TF's timeline and was working to get the results to you on time.

5) Discussion on planning Public Workshops in the counties:

Mr. Lau noted that the TF needs to organize public workshops. Mr. Barry Ching of DOH estimated that the costs will amount to \$1,000 per person for all three workshops. Ms. Seese announced that the DBEDT and DOH identified 4 weeks in the October and November timeframe to hold at least one workshop per county. At each workshop, TF members would present the work plan. Mr. Peck noted that having consultants present at public workshops had not worked well in the past, since the work plan being presented is the TF's. Ms. Steele noted that the TF must be comfortable with the work plan delivered by ICF.

Concerning the deadline for submission of the TF work plans, and how to incorporate any changes that the TF wanted to possibly make based upon input from the public meetings, Mr. Peck clarified that the TF would submit it in time, but that the TF could still choose to amend the report after that. He also commented that

Ms. Seese noted that the final report and work plans will be posted on the website prior to the workshops to receive public comments.

Co-chair Lau reiterated that in accord with Mr. Kinkley's advice regarding sunshine law requirements, it was important for TF members to notify in advance their commitment to attend which public workshops. Mr. Kinkley outlined advance knowledge of attendance is pertinent in that an investigative committee is formed for a public workshop with 3-5 TF members attending, and a full TF meeting (6 or more TF members attending) is announced in advance per sunshine.

6) Presentation: "Landowner Perspective on Native Forest Reforestation for Carbon Sequestration and other Public Benefits.":

Mr. Fox introduced Mr. James Greenwell, who presented the perspective of large private landowners on the possibility of carbon sequestration and forest restoration. Mr. Greenwell presented two goals of large private landowners: conservation and monetary. He acknowledged that landowners need to be in the business of conservation, but that business needs to be profitable.

Brandi Beaudet representing Parker Ranch noted that has been given positive incentives to pursue carbon sequestration as an alternative source of funding. Parker Ranch has looked into the international market, but would prefer the credits to stay within the State. Mr. Beaudet encouraged the TF to continue to pursue carbon sequestration plans.

Alan Gottlieb representing Ponoholo Ranch noted that production goal is to make a profit and that intensely grazed grassland with trees and native forest watershed is the most efficient means of making a profit.

Mr. Mikulina asked if different cattle management regimes have been analyzed for GHG emissions, to which Mr. Greenwell responded he did not have that analysis

7) Public Comment segment:

In response to a query from Prof. Burkett on modeling additional scenarios, Mr. Peck suggested that the TF could ask ICF for quotes for additional analysis, but to avoid interfere with existing timeline constraints. Mr. Lau noted that such analysis in addition to the ICF work order would have to be a follow-on project which would require exploring further funding which would be necessary.

8) TF discussion on future agenda items and housekeeping matters:

The TF will be meeting next on October 8, 2009.

9) Meeting adjourned at 1:41 p.m.