

State of Hawaii - Department of Business, Economic Development, and Tourism
Greenhouse Gas Emissions Reduction Task Force
Meeting Minutes
Thursday, November 6, 2008
10:00 am – 1:00 pm
Conference Room 600
State Office Tower (Leiopapa A Kamehameha Building)
235 S. Beretania Street, Honolulu HI 96813

Present:

1. Dr. Makena Coffman (University of Hawaii)
2. Mr. Mark Fox (The Nature Conservancy Hawaii)
3. Mr. Wilfred Nagamine (Designee for Mr. Laurence K. Lau – State Department of Health)
4. Dr. Lorenz Magaard (University of Hawaii)
5. Mr. Jeffrey Mikulina (Sierra Club Hawaii Chapter)
4. Mr. Gary North (Matson Navigation Co.)
6. Mr. Theodore (Ted) Peck, (Designee for Theodore E. Liu – State DBEDT)
7. Mr. Gareth Sakakida (Hawaii Transportation Association)

Excused:

1. Mr. Robbie Alm (Hawaiian Electric Co., Inc.)
2. Mr. Frank Clouse (Tesoro Corp.)

- 1) The meeting was called to order by Mr. Wilfred Nagamine at 10:06 am.
- 2) The minutes from the October TF meeting were unanimously approved without amendments.
- 3) Presentation by Mr. Ted Peck, DBEDT-SID Administrator, on the Hawaii Clean Energy Initiative. The presentation was given at the Public Hearing on November 13, 2008.

a. The Hawaii Clean Energy Initiative was launched on January 28, 2008 with the signing of a Memorandum of Understanding between the State of Hawaii and the U.S. Department of Energy. The goals are:

- Achieve a 70% clean energy economy for Hawaii within a generation
- Increase Hawaii's security
- Capture economic benefits of clean energy for all levels of society
- Foster and demonstrate innovation
- Build the workforce of the future
- Serve as a model for the US and the world

Projects include:

- 100% Renewable Lanai
- Forest City Highly Efficient Communities
- Marine Energy Center
- Modeling electricity grids on all islands
- Maui grid integration
- Bioenergy Master Plan

- Wind resource and storage testing
 - Regulatory framework development
 - 70% Clean Energy scenario analysis (Booz Allen Hamilton)
 - Hawaii greenhouse gas carbon tax/abatement analysis (McKinsey & Company)
 - Economic modeling of energy system
 - Inter-island cable: feasibility and cost/benefit studies
 - Technical and economic assessment of plug-in hybrid and electric vehicles
 - Decoupling utility profit from sales
 - Higher Renewable Portfolio Standard
 - Feed-in Tariffs (fixed purchase price for renewables to the grid)
 - Certainty of distributed generation access to grid
 - Time of Use rates and Advanced Meters
 - Creating an Energy Scenario Planning process that replaces the current IRP.
 - Revising transmission planning processes to include identification of Renewable Energy Zones with preferred renewable generation development sites, plus expedited transmission planning, siting, permitting and interconnection for new renewables.
 - Creating a Clean Energy Infrastructure Surcharge
- Act 234 and HCEI are part of the same framework for clean energy goals and efforts will be made to implement them in a complementary fashion.

b. Q & A and discussion; Public Comment

1. Ms. Pat Tummons, member of the public, asked what the alternative workplans for Act 234 will look like. Mr. Peck replied that ICF will be given guidance on ways to achieve our objectives including factoring HCEI activities into the work plan analysis where appropriate. ICF will assist in identifying measures that will accelerate progress in order to meet the statutory GHG reduction deadline. Ms. Estrella Seese, DBEDT, commented that the 1990 baseline for GHG emissions is being recalculated; HCEI activities will help to achieve the reductions. The Task Force may need to decide what should comprise the baseline, business-as-usual case for 2020 – whether that should include HCEI and the new MOU with the utility, or if it should be based on HECO’s IRP projection. Dr. Coffman commented that it is important to consider how Act 234, which has the force of law, can make the goals of HCEI a reality, and also how we can go beyond the mandate in implementing market-based mechanisms – something that may make reaching HCEI goals easier. Ms. Janet Ashman, member of the public, asked if ethanol production is a significant portion of HCEI plans (Phase I) and commented that sugar acreage is very limited locally – with only 2 plantations left. Mr. Peck replied that there is uncertainty in the area of liquid fuels in Hawaii and discussions will continue; the Bioenergy Master Plan will provide information on this. Mr. Fox asked that ICF, when doing analyses for the Act 234 work plan, view Act 234 as both a ‘carrot’ and a ‘stick’ - how it can facilitate the realization of the HCEI and also how Act 234 needs a way to meet its regulatory responsibilities in the event that HCEI initiatives do not meet goals. The work plan should have a regulatory system that enforces the reductions even as it helps incentivize and assist HCEI reach its goals. Ms. Asam, ICF, commented that initiatives under HCEI and emissions reductions initiatives are viewed as complementary; ICF will work with the TF to resolve questions such as what activities and policies will definitely be included in projections and analyses. Mr. Mikulina commented that he sees Act 234 is a backstop. If oil prices keep dropping and voluntary incentives and partnerships to pursue clean energy wane under a weak economy, Act 234 targets still need to be met.

4) ICF Presentation on the draft Inventory document by Ms. Susan Asam and Mr. John Venezia (via teleconference):

a. Collection and Verification of Energy Data

- As with most state GHG inventories, energy consumption data drives emission profile and trends
- Detailed fuel consumption data only recently available
 - 1990 data available as of October 8
 - 2007 data as of October 17
- DBEDT Records dataset was compiled from a number of data sources and reports of fuel consumption to DBEDT:
 - AES; Chevron; Hawaii Department of Taxation; the Energy Information Administration of the U.S. Department of Energy; Gay & Robinson; Hawaiian Commercial & Sugar Company (HC&S); the Petroleum Industry Monitoring, Analysis, and Reporting Program (PIMAR), Hawaiian Electric Company (HECO), Hawaii Electric Light Company (HELCO), Maui Electric Co (MECO)
 - Assessing data for each year and comparing against other sources
 - The July 1997 report, EIA, and PIMAR (Hawaii’s Petroleum Industry Monitoring, Analysis, and Reporting Program)
- Concluded DBEDT Records represent the best available data for both 1990 and 2007
 - Data available at a detailed level: fuel provider, activity, and county
 - Compiled from thousands of data points reported to or compiled by DBEDT
 - Matches up well

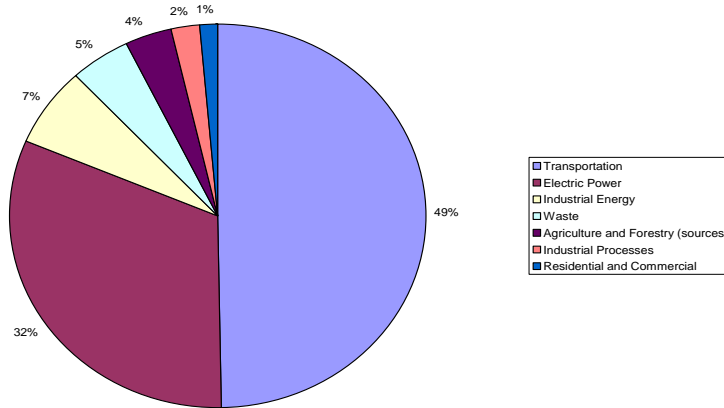
b. Hawaii GHG Emissions Summary

Hawaii GHG Emissions Summary By Sector & Source, 1990 & 2007 (MMTCO2Eq)		
Sector/Source	1990	2007
Energy	20.43	20.72
Residential	0.03	0.05
Commercial	0.38	0.26
Industrial	0.60	0.19
Transportation	12.53	11.50
Ground	3.23	4.47
Marine	1.65	2.16
Aviation	6.15	3.80
Other	1.50	1.07
Electric Power	6.89	8.72
Oil and Gas	+	+
International Bunker Fuels	1.01	1.32
Industrial Processes	0.18	0.54
Cement Manufacture	0.10	-
Electricity T&D	0.08	0.04
Substitutes of ODS	-	0.50
Waste	0.85	1.07
Municipal Solid Waste - Landfills	0.54	0.77
Municipal Solid Waste - Combustion	0.18	0.15
Wastewater	0.13	0.15

While aviation emissions are counted in inventory totals, Act 234 specifies that they cannot be regulated as part of the emissions reduction effort

Hawaii GHG Emissions Summary By Sector & Source, 1990 & 2007 (MMTCO2Eq)		
Sector/Source	1990	2007
Agriculture, Forestry and Other Land Use (AFOLU Sources)	0.98	0.83
Agriculture, Forestry and Other Land Use (AFOLU Sinks)	-2.67	-2.75

Enteric Fermentation	0.27	0.25
Manure Management	0.12	0.05
Agricultural Soil Management	0.19	0.17
Field Burning of Agricultural Residues	0.03	0.01
Urea Application	+	+
Agricultural Soil C	0.22	0.24
Landfilled Yard Trimmings and Food Scraps	-0.11	-0.03
Urban Trees	-0.11	-0.13
Forest C	-2.45	-2.59
Forest Fires	0.16	0.12
TOTAL Emissions (Excluding Sinks)	22.44	23.15
TOTAL Net Emissions (Including Sinks)	19.77	20.40
TOTAL Emissions (Excluding Sinks, Excluding Aviation)	16.30	19.36
TOTAL Net Emissions (Including Sinks, Excluding Aviation)	13.62	16.61



1990 Emissions Compared to 2007 Emissions

Emissions including aviation	Emissions excluding aviation (per Act 234 requirements)
Total emissions (net and gross) rose about 3%	Total emissions (net and gross) rose about 22%
Energy sector emissions grew about 1%	Energy sector emissions grew about 18%
Emissions from transportation decreased 8%	Emissions from transportation (ground, marine, and other) increased by 21%
Emissions from electric power increased 27%	Emissions from electric power increased 27%

c. TF discussion; public comment

The Task Force discussed the changes in aviation emissions from 1990 to 2007 and the possible causes for the decrease. Members also discussed residual fuel oil data and confirmed that marine vessels and power plants were both accounted for, with international bunker fuels excluded. It was suggested that there be more granularity in illustrative graphs for ground versus marine transportation, versus aviation, and that it be noted in the inventory document that aviation emissions are not regulated under future Act 234 rules (though it is a leading source). Future national or state policy may extend to aviation emissions. Military emissions (National Guard) will also be represented in a chart or table in the final draft of the inventory – while noting that Act 234 does not cover military sources. The Task Force requested that ICF include more detail on island breakdowns of emissions as less populated islands are now labeled as 0%.

4) Committee Reports

a. Policy Committee

Mr. Fox, Chair, reported that Matt Riel from AES Hawaii voiced an area of concern: AES is an IPP (independent power producer) under a fixed price contract with the utility. If a regulatory regime is placed on carbon, then IPPs currently would not have the ability to absorb costs and pass them on. The TF is asked to keep issues like this in mind as it moves forward on policymaking decisions. Mr. Fox mentioned that the Dingell-Boucher discussion draft of new climate legislation may seek to address these kinds of issues.

5) Future Agenda items and Housekeeping

a. None. Unless otherwise notified, next TF meeting will be the first Thursday in December. The final draft of the inventory is due to the Legislature by December 31, 2008. Updated draft will be sent to the TF upon ICF completion.

6) Adjournment.

a. The meeting was adjourned at 12:40 pm. A motion to adjourn was made by Mr. North and seconded by Mr. Fox.