Hawaii Energy Forum Meeting

#### **Minutes**

Hawai'i Energy Forum July 23, 2002

### Attendance

#### Forum members:

Bruce Anderson, Albert Chee, John Crouch, Lynne Ebisui, Steve Golden, Maurice Kaya, Gregg Kinkley, Hideto Kono, Aaron Leong, Jeff Mikulina, Brenner Munger, Yukio Naito, Karen Nakamura, Andy Nomura, Gayle Ohashi, Richard Paglinawan, Rick Reed, Glenn Sato, Scott Seu, David Waller, Eileen Yoshinaka, Robbie Alm, Steve Alber (DBEDT), Catherine Awakuni (PUC), Chris Nakagawa (PUC), Christy Alarcon, Regina Gregory, Mike Hamnett, John Harrison, Sharon Miyashiro, Sam Pintz, Rick Rocheleau, Irene Takata.

# I. Review of Our Energy Vision

The project team categorized the Forum's list of preferred energy future(s) in 2030 ("vision"), which was the result of brainstorming at the June meeting. The list was discussed and further refined. It was emphasized that the statements were not cast in concrete and Forum members had the opportunity to review each item carefully, adding, revising, deleting, and/or clarifying the statements. The list was revised (See attached yellow sheet entitled "Energy Vision 2030") and will be sent to all members for further input. We will go forward with the statements that all members can live with; and the project team will craft a vision statement for the Forum to review at the next meeting. Once adopted, the vision statement will be used to guide our work ahead.

#### II. Discussion

### 1. Energy Resources

- 1. Numbers such as "90% non-fossil fuel" and "80% reduction in greenhouse gas emissions" seem arbitrary. While they are OK at the end of the study, they should not be included before we have results of the study(ies). Numbers should be deleted.
- 2. The term "indigenous" establishes overly narrow constraints and may not be productive so early in our process. Definition of "indigenous" needs to be clarified, e.g., does hydrogen manufactured elsewhere and imported to Hawai'i violate the vision of "indigenous"? Import substitution is the key concept rather than the nature of the resource. Perhaps this is an economic rather than a resource distinction. Energy independence has been a key policy goal from early on so we may need to modify the term "indigenous" to embrace this concept, e.g., "diversified," and "self-sufficient." This item needs to be further discussed. Forum members agreed to keep the three terms on the list with parentheses to denote that further discussion is required. 3.
- 3. Add "secure" to the list.

## 2. Energy Technology

- 1. "Renewable energy systems applied to all transportation" will be really difficult to achieve.
- 2. Add "energy efficiency", not just as an objective but as a pathway.
- 3. Decentralized power may be a goal, but there will likely be some recognized role for centralized power using the best available technology.
- 4. Add "energy technology consistent with the high reliability and stability needs of the digital world".
- 5. Add "best available emission control technology".

#### 3. Economics

1. It is not clear what is meant by "hydrogen-based energy economy."

The discussion brought out opposing views on the singularity of focus on hydrogen, with suggestions to modify the statement to "Maximize hydrogen basis", or "Explore feasibility of hydrogen." "Hydrogen-

based energy economy" needs to be discussed further (placed in parentheses). Note: Forum was reminded that these kinds of discussions are critical; and we should bring the various concerns to the table so we may can have these dialogues on hard issues and find workable approaches for the future.

- 2. Add "price" to item on meeting consumers' needs (in addition to quality and quantity of energy).
- 3. Add "Look at full range of costs and cost mulltipliers."

## 4. Public Policy & Decision-making

- 1. The phrase "in terms of fossil fuel imports" is unclear. Amend item as follows: "Evaluate energy options in terms of 'reduced' fossil fuel imports." Additionally, the benefits of capturing and using waste streams should also be considered.
- 2. Add to public policy and decision-making process "create an investment environment that fosters renewable technologies."

# 5. Knowledge

1. No changes.

### 6. Next Steps

1. The revised list of statements will be sent out to Forum members for further consideration and review. Members are invited to send/email comments to Regina Gregory (<a href="mailto:hoonanea@aol.com">hoonanea@aol.com</a>) to be used in drafting a vision statement that the Forum can agree upon to guide us in the work ahead. Note: The draft vision statement will be brought to the next meeting and discussed further. The adopted vision statement will represent what all members "can live with."

## **III. Current Status of Energy Presentations**

Maurice Kaya, Administrator, and Steve Alber, Energy Planner, Dept. of Business, Economic Development & Tourism/Energy Resources and Technology Division.

Steve reviewed Hawai'i's energy policy and current energy situation. Excellent handouts were distributed. Summary of presentation follows:

1. State policy calls for (1) dependable, efficient, and economical statewide energy systems capable of supporting the needs of the people; (2) increased energy self-sufficiency where the ratio of indigenous to imported energy use is increased; (3) greater energy security; and (4) reduction, avoidance, or sequestration of greenhouse gases from energy use.

### 2. Current status:

- 1. Compared to the rest of the nation, Hawai'i is efficient but not economical (we use less energy and electricity costs have risen more rapidly than other states).
- 2. The percentage of renewable energy has decreased largely due to the decline of the sugar industry. Renewables have been diversified from just biomass to include geothermal, wind, and solar. But coal and municipal solid waste (H-Power) are the predominant new energy resources. Various additional renewables are in the planning stages, at least in the electricity sector. Presently there is only 6.2% renewables in electricity sector.
- 3. Petroleum still accounts for over 89% of Hawai'i's energy use. 35.7% of oil is used for airline transportation, 31.5% electricity, 19% for ground transportation, 7.1% for marine transportation, 6.3% for commercial/industrial use and 0.3% residential.
- 4. The main energy security issue is that the majority of Hawai'i's fossil fuel imports are from foreign countries.
- 5. Currently, greenhouse gas emissions are 17% above the Kyoto goal.
- 6. DBEDT has produced comprehensive energy plans and studies, and supports a number of research and development projects.
- 7. The State Legislature and the counties also contribute through renewable portfolio standards, building codes, and financial

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incentives. But problems such as funding and siting remain challenges.

Chris Nakagawa, Chief Counsel, Public Utilities Commission.

- 1. Chris explained that the Commission is responsible for regulating all franchise public service companies. In the energy sector this includes four electric utility companies plus Gasco. The PUC is a full-time quasi-judicial body with three commissioners, two of whom were recently appointed: Wayne Kimura, Chair, from DAGS, and Janet Kawelo. Dennis Yamada will be leaving at the end of this month and will leave a vacancy on the Commission. PUC staff is comprised of attorneys, accountants, engineers, researchers, and investigators.
- 2. PUC adjudicates contested cases and is therefore not an advocate for any type of energy policy.
- 3. The integrated resources planning (IRP) approach implemented by PUC requires assessment of all known resources, both supply and demand-side options, in cost benefit analyses. Most of the IRP dockets are still pending. HECO's second IRP was recently approved.

# IV. Terms of Reference (TOR)

- 1. At the last meeting, draft terms of reference for four studies were distributed. A fifth study (Social, Economic and Cultural) was proposed, and five subcommittees were formed to work on these drafts. At this meeting, a draft from the fifth subcommittee was distributed for comment.
- 2. A sixth study was also proposed and a subcommittee was established as follows:
  - Subcommittee on Energy Efficiency and Conservation
     Dave Waller

Lynne Ebisui

Maurice Kaya

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Karen Nakamura

Glenn Sato

Eileen Yoshinaka

Steve Golden

- 3. The terms of reference from all six subcommittees will be discussed in detail at the next meeting.
- 4. Mike Hamnett distributed a handout on alternative futures ("Four Scenarios of Hawai'i's FFuture") to assist the subcommittees in thinking about how to frame the studies.

# V. Next Meeting

The next meeting will be held on Wednesday, August 21st, 2002, at 9:30 a.m., at Sansei Restaurant. The tentative agenda will include: (1) review and adopt vision statement for Hawaii's Energy Future 2030; (2) refine opportunities/impediments to develop strategies and scope of work for the Forum; (3) discuss and adopt TOR for the six studies; (4) discuss tentative schedule for rest of year. Forum members may also call in or email any other items for the agenda.