

Hawaii Energy Forum Meeting

Minutes

Hawai'i Energy Forum

June 10, 2002

Attendance

Forum members:

John Crouch, Ruby Hargrave, Gregg Kinkley, Hideto Kono, Matt Matsunaga, Jeff Mikulina, Mina Morita, Brenner Munger, Yukio Naito, Karen Nakamura, Andy Nomura, Gayle Ohashi, Richard Paglinawan, Rick Reed, Scott Seu, Don Thomas, Murray Towill, David Waller, Keith Yoshida, Eileen Yoshinaka, Robbie Alm, Faye Hirono; Christy Alarcon, Regina Gregory, Mike Hamnett, John Harrison, Sharon Miyashiro, Sam Pintz, Rick Rocheleau, Irene Takata.

I. Overview: Mike Hamnett

Project Director Mike Hamnett provided purpose, approach, and plan for the project:

1. Purpose is to move us toward achieving the energy goals for Hawaii.
Although planning has been done before little seems to change as there are many different entrenched ideas of what the future will be. UH is therefore embarking on this project to bring all stakeholders together to build a consensus as to where we want to go, and identify policies, regulations, and programs that are helping and/or hindering as well as external realities and changes, eg. energy insecurities, Federal policies, Kyoto protocols, etc.
2. Forum members have been handpicked as best representative of major energy policy stakeholders who can work together to get us beyond what's impeding progress toward our preferred future.
3. Approach and project plan/timetable: Forum members are being asked to help us in the next year to develop an implementation plan to move us to the preferred energy future in 2030. Forum will meet two more times between

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now and August, and to commission papers that assess global and national trends that impinge on Hawai'i's energy issues. Once papers are completed, we will review those papers, re-consult, and commission a second round of papers to address technical and policy issues. In June 2003, we intend to convene a Summit/Symposium to present interim findings and begin developing an implementation plan.

4. Introductions of Project Team and Forum members (See chart listing Forum members and Project Team)

II. Forum Visioning

Forum members were asked to brainstorm the ideal energy future for Hawaii in 2030 – what we should be striving to achieve for our State. The following were identified:

1. Clean, indigenous, renewable.
2. 90% independent of fossil fuels.
3. Evaluate options in terms of fossil fuel imports.
4. Self-sustainable, environmentally friendly, reliable, affordable.
5. Zero net energy homes, buildings.
6. Hawai'i should be a net exporter of clean energy technology.
7. Mutual problem solving (rather than adversarial) approach.
8. Hydrogen energy economy.
9. Well-educated consumers.
10. Energy systems that are safe.
11. Energy that meets consumers needs.
12. Energy systems that attract new industry
13. Decentralized.
14. Maximize existing energy assets.
15. Renewable energy systems that provide for all forms of transportation.

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16. Continuous “pushing of envelope” in developing energy efficiency and sustainability.
17. 80% decrease in greenhouse gas emissions.
18. Energy systems that minimize transmission lines.

III. Impediments to Achieving the Vision.

Forum members were asked to list the existing impediments and constraints to achieving the vision, which follow:

1. Cost of buildings and energy systems.
2. Political will.
3. Fiscal will.
4. Feelings of NIMBY – Community resistance.
5. Regulatory structure that’s built on assumptions locked in a long time ago.
6. Instability of State energy policy.
7. Low cost of fossil fuels.
8. Notion that least cost in regulatory sense means lowest cost to consumer. Other costs need to be figured in (social, environmental, defense).
9. Unrealistic expectations as to what can be accomplished today and 20 years out.
10. Utilities need to make money.
11. Mismatch between where renewable resources are and where people are.
12. Incentive structure.
13. Myopia of cost...up front vs long term.
14. Incentives for conservation programs.
15. General public understanding of energy problems.
16. Competing interests among stakeholders.
17. Automobile society.

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18. Fear of change.
19. Hawai'i's isolation...inability to integrate our solutions with national and global solutions.
20. Lack of consumer demand for a renewable energy future.
21. Architects, builders, codes, etc.
22. City Hall.
23. Competing economic priorities.
24. Underestimation of the full dimension of energy resources and economic potential sustainable energy constitutes (efficiency/environment industry).
25. "High tech" definition doesn't include energy.

IV. Opportunities to help us achieve our vision:

Forum members were asked to identify opportunities that exist today that can be used to achieve our vision:

1. New technologies coming on line.
2. Demonstrations of these technologies, so people can see, feel and grasp what we're talking about.
3. Develop a coherent plan that lays out all options and what the cost is.
4. Geographic isolation of Hawai'i – leads to potential as a demonstration site.
5. New technologies. Factors of competitive cost still up in the air.
6. Geothermal not fully exploited to its capacity.
7. Global instability
8. Agricultural lands becoming available for new bio-energy use.
9. Public education through new technologies to build constituency.
10. Investment tax credits.
11. Aging infrastructure.
12. Upcoming elections.

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13. Increasing visibility and availability of renewable systems.
14. Public/Private partnerships.
15. Expansion of existing technologies with financial, creative incentives.
16. Development of a mind set for Hawai'i that these opportunities do exist in sustainable forms within Hawai'i, within the public, within business and within government.
17. UH charter of sustainability.
18. Military investment in solar thermal.
19. Exploration of other nations' experience with photovoltaics and other renewables.
20. Legislation to improve energy efficiency in state buildings comparable to Federal laws.
21. Cogeneration of electricity with industrial and other opportunities, e.g., fresh water.
22. Real time value of electrical energy – time of day evaluation.

V. Feedback on Project Plan:

Project schedule.

This meeting is organizational. Next meetings planned (see schedule in "Project Organization" section of binder) are: (1) July 23, 2002 will look at existing energy plans and existing regulatory structure; (2) meeting later in the summer to finalize issue paper commissioning; (3) meeting in December when issue papers are completed to review papers and identify other papers needed; (4) meetings to prepare for the Energy Policy Summit (June 2003); and (5) meeting(s) to put together a final implementation plan and get started with Legislative proposals.

Suggested Forum meeting site.

John Crouch suggested that one of the Forum meetings be convened on the Big Island so people can see the energy projects there.

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Issue papers and subcommittees.

Sam Pintz distributed proposed draft terms of reference (“TOR”) for trends analysis papers as a “first cut” which outlined 4 categories:

1. hydrocarbon outlook;
2. renewable and unconventional energy;
3. regulatory, taxation and incentives; and
4. environmental requirements imposed on electric power producers.

Forum members were asked:

1. whether these four categories made sense
2. if there were missing pieces
3. suggestions as to appropriate people to address specific issues

The following comments were made:

1. Issues might be too narrow—directed at electric utilities, which leaves out 60% of the energy environment; and ignores a huge part of why we bring oil into the State. Rather than limiting the project scope to electric utilities, at this point, we will keep our options open.
2. It would be premature to eliminate categories on what we think is going to be relevant 30 years out.
3. Project approach is a “backward-looking” process, ie., knowing what we want in 30 years, we need to look at where we need to be in 15 years – what policy options are needed, accommodating different scenarios and assumptions, to get to where we want to be.
4. An additional issue area was adopted: Hawaii socio-economic issues (dealing with Hawaii’s socio-economic and demographic trends).
5. Key issue is distributed generation. Sam stated this would be a “second round” issue area.
6. Regulatory and renewable technologies are interrelated issues and should be consolidated rather than treated as separate issues. Because of time

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constraints, it was decided to move forward with the two categories at this point.

Sam also asked members to work on the 5 issues by subcommittee. Most of the work can be done by email, but at least one meeting is planned; and some groups may need to meet more than once.

The following subcommittees were formed to review the TOR for issue papers to be commissioned:

Subcommittee on Hydrocarbons Outlook

- Andrew Nomura
- Brenner Munger
- Steve Golden

Subcommittee on Renewable and Unconventional Energy

- Murray Towill
- Hideto Kono
- John Crouch
- Faye Hirono
- Brenner Munger
- Steve Golden
- Gregg Kinkley
- Rick Reed
- Dave Waller

Subcommittee on Regulatory, Taxation and Incentives

- Gayle Ohashi
- Mina Morita
- Gregg Kinkley
- Don Thomas

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- Dave Waller

Subcommittee on Environmental Requirements Imposed on Electric Power

Producers

- Scott Seu

Subcommittee on Socioeconomic Trends

- Richard Paglinawan
- Robbie Alm