Breakout Workgroup Reports

GROUP: Renewable Energy Date: 12/3/03

This report summarizes the deliberations and recommendations from one of five workgroups. Each workgroup agreed on a facilitated process, heard from a panel members involved in conducting a study on the issue area or as a member of the Energy Policy Forum (Forum), and identified major issues and options/actions as well as 1-3 critical next steps to move forward the energy policy vision in the area.

The following report on **RENEWABLE ENERGY**, provides in:

- **Section 1--** the priority critical actions which need to be taken in the next 1-3 years to forward the energy vision/goals; these were determined by analyzing the actions according to agreed-upon criteria of: (i) fits vision, (ii) financially viable, (iii) politically acceptable, and (iv) community acceptability.
- **Section 2--** an evaluation of the critical actions according to criteria agreed upon by the group, which were: i) fits the vision, (ii) financially viable, (iii) politically acceptable, and (iv) community acceptability.
- **Section 3--** a list of all issues/options that were identified for consideration in developing the implementation plan, which includes short and long term actions.
- **Section 4** -- Summit participants who are interested in assisting the Forum in further work in this area.
- Section 5-- Panelists and Facilitation Team members, and
- **Section 6--** Comments, which include notes from one of the panel members.

Section 1. Critical Actions to be taken in the next 1-3 years

The group identified a list of options/actions to be taken in the next 1-3 years; and voted to prioritize the top five options/actions for achieving the vision. The critical actions are:

- A. Make the state a research & development (R&D) center
- B. Utilize waste for energy
- C. Consider ocean thermal energy conversion (OTEC)
- D. Incentives for Renewable Portfolio Standards (RPS)
- E. System Benefit Fund for renewables

Section 2. Analysis of Issues and Options Matrix

The group agreed upon four factors below by which to evaluate the critical priority actions identified in Section 1. The results follow in the matrix below:

Factors

		A B	C	D	\mathbf{E}	
1	Fits Vision	+	++	++	++	++
2.	Financially Viable	?	+	?	?	+
3.	Politically Acceptable	++	++	?	+*	-
4.	Community Acceptability	+	+*	?	?	?

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Key:	++	highly positive effect		highly negative effect
	+	positive effect	-	negative effect
	0	no effect	? n/a	need more information not applicable

Section 3. <u>Issues and Options Identified by the Group</u>

After presentation by the panel, including questions and clarification, the group identified and discussed options/actions and organizations responsible for implementing actions. In addition to the options presented in Section 1, the group identified the following options/actions:

- Reduce exposure to oil markets
- Solar thermal
- Biomass
- Hybrids
- Make development process predictable
- Ways to reduce project development risks
- Recommendations for Legislators
 - Governor's goal of 20% of our electricity from renewables by 2020 2 votes
 - o Consider waste utilization (ethanol, biodiesel, human and animal waste) 19 votes
 - o Encourage federal support for hybridization with money from Farm Bill 5 votes
 - System Benefit Fund for renewables 10 votes
 - o Build up R&D capacity center, partnerships 23 votes
- Recommendations for Utilities
 - o Consider waste utilization [duplicate, deleted]
 - o Consider OTEC 14 votes
 - o Green pricing [duplicate, deleted]
 - Offer reliability options 0 votes
 - Consider geothermal 5 votes
 - o In IRP, use portfolio approach to capture benefits of risk management and grid cost savings from renewable/distributed generation 8 votes
- Recommendations for Regulators
 - Support all-source competitive bidding process 9 votes
 - Green pricing 7 votes

- Incentives to meet RPS 11 votes
- Review Rule 13 0 votes
- \circ Revise existing standard interconnection rules -0 votes
- General Options
 - Pursue USDA Farm Bill \$ [duplicate, deleted]
 - Address off-grid needs 2 votes
 - Pumped storage on Big Island 9 votes

Section 4. List of Participants interested in followup work

The following participants posted their names on the matrix indicating their interest in working on the following recommendations:

- Gay Chung: C1, D1, E1
- Bob Shleser (shleser@aloha.net): B2
- Luis Vega (luis.vega@pichtr.org): C2

Section 5. <u>List of Panelists and Facilitation Team</u>

- (i) The following panelists presented information on the studies or work they had conducted in the area:
 - Warren Bollmeier, WSB-Hawaii
 - Maurice Kaya, State Department of Business Economic Development & Tourism
 - Joel Swisher, Rocky Mountain Institute
- (ii) The Facilitation Team members were:
 - Michael Kinsley and David Chandler, Lead Facilitators
 - Charles Garman, Co-facilitator/ Recorder

Section 6, Comments

(i) Panelist (WSB-Hawai'i) Note: The group was presented with the option of developing a sustainable renewables implementation plan for Hawai'i, which is provided in the study, i.e. setting specific goals, continual updating, transition to distributed generation, promoting efficiency and conservation and storage, providing incentives for market reform. Although the group identified other options, the Forum should continue to focus on developing an implementation plan.