

Breakout Workgroup Reports

GROUP: Hydrocarbon Alternatives as a Bridge to the Future 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 **HYDROCARBON ALTERNATIVES** 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

Section 2 -- an evaluation of the priority actions according to criteria agreed upon by the group, which were: i) fits the vision, (ii) financially viable, (iii) politically acceptable, (iv) community acceptability, (v) Hawaiian cultural sensitivities, and (vi) the poor and seniors.

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 -- a list of Summit participants who are interested in assisting the Forum in further work in this area, and

Section 5 -- Panelists and Facilitation Team members.

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

The group prioritized the options/actions for achieving the vision according to agreed-upon criteria; and determined that the following were the most critical to address in the next 1-3 years:

- A. Create a balanced consortium that leads to an optimal energy strategy that is PONO (see Section 2.D below)
- B. Develop a comprehensive true cost study (see Section 2.F)
- C. Articulate energy strategies that maximize productive outcomes (see Section 2.H)

Section 2. Analysis of Issues and Options Matrix

- A. Maximize efficiency/new planned electrical generation (--heat rates; -- CHP)
- B. Maximize efficiency of fossil fuel use:
 - Electricity
 - New/planned elec. Generation (--heat rate; --CHP; --DG)
 - Improve efficiency of existing units
 - Transportation
 - Biodiesel/diesel blends
 - 10% gasanol (ethanol)
 - Mass transit
 - Policies to encourage efficient vehicle purchases

- C. Use biodiesel ethanol for fuel; ensure overall (policy) long-term strategy option; leads to hydrogen based economy; utilizing open renewable-energy based
- D. Create a balanced consortium that leads to an optimal energy strategy that is PONO
--Include broad group of energy players, producers, etc.
- E. Less centralized generation
- F. Develop a comprehensive true cost study. Includes: externalities; environmental; military and health
- G. Explore LNG as a bridge fuel
- H. Articulate energy strategies that maximize productive outcomes (deep water technology)
--Develop sources of multi-use technologies, avoid technologies that foreclose future options, support technologies that ensure openness to future technologies

	Factors	Alternative Options and Actions							
		A	B	C	D	E	F	G	H
1	Fits Vision	++	++	++	++	+	++	++	++
2.	Financially Viable	++ ??	+/?	?	++	+	++	?	++
3.	Politically Acceptable	+	++	++	+	+	++	?	++
4.	Community Acceptability	+	++	++	++	+	++	?/-	+
5.	Added—Hawaiian Cultural Sensitivities	+	+	+	++	+	++	-	++
6.	Added—Poor and Seniors/(Environmental Justice)	0/?	0/?	+	++	++	++	-	++

chart

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

Section 3. Issues and Options Identified by the Group

After presentations by the panel (members are listed in Section 5), time was allocated for further questions and clarification. This was followed by deliberations on options/actions. In addition to the options presented in Section 2 above, the following were discussed:

- (i) Design an energy future that minimizes the need for new transmission lines.
- (ii) Alternatives to reduce gasoline consumption (i.e., mass transit).
- (iii) Explore wave technology.

Section 4. List of participants interested in followup work.

Participants were asked to provide their names and contact numbers if interested in continuing work with the Forum in this area. They are:

- Marcia Godinez, Cross Discipline Energy Consortium (marciagodinez@mac.com)--D1
- seanlester@ieee.org -- Option D (Consortium)

Section 5. List of Panelists and Facilitation Team

(i) The following panelists presented information on the studies or work they had conducted in the area:

- Jeff Brown, FACTS, Inc.
- Richard Rocheleau, Hawai'i Natural Energy Institute
- Paul Cannizzo, Tesoro

(ii) Facilitation Team members were:

- Bruce Barnes and Lisa Minato, Lead Facilitators
- Brian Jarrett and Stanley Pantell, Co-facilitators/Recorders