

Community Meeting
Lihue, War Memorial Convention Hall
May 13, 2009

Attendees

Community:

Julie Bauguess
Thomas Bauguess
Beryl Blaich
Garrett Bradley
Michael Cosmann
George Costa
Barbara Curl
Donna Davis
Gene Davis
Dylan DePue
Francis Dubois
Diane Forsyth
Pat Gegen
Elsie Godbey
Tom Godbey
Staci Hadley
Palmer Hafdahl
Randy Hee

Mark Hubbard
Larry Kanzler
Tanner Kimura
Diana Leone
Michael Levine
Larry Magnussen
Joe Maranini?
Lionel Medeiros
David Moakley
Mary Neudorffer
Barbara Pendragon
Larry Sherrer, MD
Amy Sherrer
Ken Taylor
Marvin Taylor
Jimmy Trujillo
Caroline Tremblay
James Zaima

SENTECH Team:

Diane Rosenkranz, Kauai Planning & Action Alliance
Diane Zachary, Kauai Planning & Action Alliance
Jill Sims, SENTECH Hawaii, Inc.
Rayne Regush, Kauai Planning & Action Alliance

Notes

Energy Choices

- At the KIUC rate increase meeting they said we will see a 12% rate increase because they are not selling enough electricity to pay base line costs. Fixed costs create a budget increase, \$300,000 million increase proposed for equipment, \$200,000 million for fossil fuel. Nuclear is one option, why aren't we discussing anything other than fossil fuels options for back-up generation? Yet other locales using hydrogen base power source system and there is no degradation to the environment. Concerned costs will go up. Fixed costs will remain the same, while some residents will go off the grid and the fixed costs will disperse the costs amongst the remaining residents who are unable to afford to get off the grid and therefore will have to pay a higher percentage per member for fixed costs.
- KIUC's list of projects doesn't include wave energy, which is best solution for this island. On KPAA's website it talks about wave energy but why is it not in the presentation tonight? Wave energy generators spaced around the island is better rather than centralized system. And, it can be cheaper solution per kilowatt hour.

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- Are stakeholders going to listen to us when there are only a few people attending the community meetings?
- Best to have solar farm distributed grids island-wide rather than being in one centralized location. There is less environmental impact than wave energy systems.
- What is reality of Kaua`i getting off of fossil fuels? Does the County have an energy plan for renewable energy resources? A few hotels have renewable energy projects. Does Costco have a PV system?
- Are there any planning regulations or new building codes coming up that would require renewable energy systems in new development? Construction is cheaper vs. retrofitting for energy efficiency.
- On Kaua`i we used to have hydroelectric plants (on plantations), now they are pau, but some are still working. We should find out how many kilowatts they produce total for the island and then we could possibly supply all of Kaua`i with this system that is already in place and then supplement with wind power and other sources of energy generation. We used to only pay \$15/month for electricity.
- Larry made comment that didn't get recorded. The more people get off grid, the higher the rates the rest of us pay for fixed costs.
- Why does hydro drop as far as usage over time?
- In regards to KIUC's costs, there is an expense that individuals pay that is not included in analysis that Larry is referring to – we still have to pay for grid and fixed costs. But we are helping the island by not using fossil fuels, etc.
- KIUC limits the ability of residents who can sell excess energy back to grid to 1%.
- Owners who install solar are on long payback and help prevent the need for more capacity.
- Who hired SENTECH? Is KIUC actually going to listen to recommendations in the plan?
- Are you looking at use of propane or liquid fuel for transportation? We use propane many places where we don't have natural gas.
- San Diego train system used natural gas for buses for 3 years. All trucks on Kaua`i use diesel. Propane is cleaner and more efficient. No one has made retrofits for these trucks.
- Looking at alternative energy – the planning process of KIUC said it's not feasible. We need to include propane; with a higher demand, the cost can come down. Can be used on site and burn more cleanly.
- Were stakeholder groups discussing tourism and beauty of the island and how windmills may impact those two? Which stakeholder group discussed this? Maui is doing a survey of tourist regarding the appearance of wind turbines.
- KIUC still has to make a profit, how are they going to do this if there is going to be a savings to members?
- Regarding the Council funding for this plan, what was final dollar cost? Did SENTECH hire KPAA or vice versa? Will this plan go back to Mayor's office?
- Collaborative purchase plan? Community Purchasing agreement would be a good thing since we are a co-op.

Goals/Vision

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- You list different types of alternative energy methods. What's missing is offshore wave generation. Need to add increased reliability of energy supply to the vision.
- Are you going to have breakdown of how we are going to achieve this efficiency between now and 2030? Are you mixing conservation and efficiency methods?
- You're saying it is end use efficiency vs. generation efficiency?
- Are you saying that efficiency is for the end user and not plan for power generation level? Do they both show up on KIUC 50% goal chart.
- Who is HCEI?
- Problem with electricity is that you turn it on instantly for high demand and there is night use. For example, water power can be turned on instantly. Is there a provision for looking at practicality for installing these various systems as well as efficiency?
- Please add the following to the vision/goals: Waste to energy, composting, methane gas reclamation, recycling supporting farms and food sustainability on Kaua'i.
- Would KIUC control energy by owning all the projects? Tax incentives will get projects done more quickly. Will we have more tax credits to provide incentives?
- Does the HCEI energy efficiency plan include mass transit? That is independent of this study?

Supply

- The alternative energy sources in plan are primarily solar and wind. On Kaua'i we require energy storage. Wave energy is going 24/7 and doesn't need storage. Batteries for storage are expensive and dangerous. Don't assume every alternative energy source needs storage.
- There hasn't been anything mentioned about hydrogen fuel cells which could be sourced from solar, wind, etc.
- On the permitting side, does KIUC have something proposed or in front of PUC for biomass?
- We installed a PV system that takes care of most of our household energy needs on the east side and it costs less than an F250 truck. It only took us one day to get permitted (electrical permit).
- There is a big difference between using solar for residential and for large quantity users. There needs to be different approaches in technologies and land use. What may work for individual may not work on large scale.
- There is a solar plant in mid California that is about 100 + acres of solar reflectors that focus energy on pipes and put energy back in grid- lots of energy. Like a steam system. Not fast to just instantly turn on.
- What is a feed in tariff?
- A lot of the options you have listed are not really hurricane proof. For instance, in regards to the solar distribution network - if something happens such as a disaster like a hurricane everyone is without energy. Whereas if there was a PV system on each and everyone's house they would have their own means of production. If one person loses the system it doesn't mean everyone loses it. Has the nonprofit model for distribution system been explored? Take profit aspect out of equation. Goal has renewable energy - people's basic needs of production not affected.

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- Quick calculation \$35,000 multiplied by # of homes.
- Are you looking into hydro pumping locations on Kaua`i? Does that include reservoirs?
- Is there any area in the county that does that now with reservoirs? Is it a viable technology on mainland?
- Most solar power systems are for only one person and they use it to make money and reduce their bill; most don't have storage capacity. You cannot use the power when grid is off - hurricane, or at night.
- \$35,000 per household is quite inflated. 10 D-cell batteries would suffice for power and is hurricane proof.
- Is there really anything that is hurricane proof?

Conversion Technologies

- You have not mentioned distributed solar farms yet, which can produce 1 megawatt electricity just on 2 acres. We need distributed solar systems farms, not centralized.
- Have you talked to Allis Chalmers – they make fuel cell tractors.

Distribution

- KIUC is already installing smart use grids, is that correct? I have one.
- Would plan recommend using timing device when people's use of air conditioners or large appliances spike? We've got spike when everyone comes home from work. Need to consider control strategies for spikes in general residential neighborhoods.
- Chief Engineer of Southern California Edison created a one hour presentation/program on smart grid meters.
- KIUC members have to pay for reserve capacity – requires large generator. We could do smaller amounts of distributed energy, therefore not have to pay high costs for large generator storage costs.

End-Use

- With ethanol, gas mileage went down 10% when we used it here in our gas tanks. We lost efficiency by using ethanol independent of gas prices. Using ethanol is not an effective strategy.
- Lots of people complain about ethanol gas - it ruins gas powered small engines. The gas quality varies in some locations on island widely; it's poor in Waimea and Hanapepe gas pumps. We need to have only one gasoline product at all pumps. Who determines the gas products at the pumps for Kaua`i?
- Look at using hydrogen fuel cells for buses as they do in Honolulu for public transportation.
- How many dollars leave island to purchase oil for electricity generation compared to how much money leaving island for fuel transportation?
- Two comments: 1) There is a biodiesel fuel plant here on Kaua`i. 2) They've proven it costs more to produce ethanol versus the cost benefits when you put it in the gas tank. Not efficient.
- We should not use corn. It costs more to produce it that you get out of it. System is totally inefficient. Do you have any data comparison studies on grass and sugarcane for fuel?

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- Can you explore mopeds and other slower methods of transport, such as electric cars, for folks such as tourists without being danger to high speed traffic?
- Electric cars can easily go 60 mph.
- Are you looking at the use of growing bio crops for fuel and the impact pesticides, herbicides and GMO crops have on the environment?

Stakeholder Meetings

- Who determines which way the wind goes on wind direction slide? Wind always comes from east.
- When you get into implementing the action plan the items are going to cost a lot. Are you going to come up with front end costs and how are we going to pay for all of this? Where will funding come from?
- Consider looking at other co-op structure models we could employ on Kaua`i. We need to empower our community to take more action in our co-op's direction.
- In reference to Green jobs in Vision/Goals section, there is a disconnect in what other partners in green job creation are offering for training at the high school and college levels. We need different types of employment development plans. How will that fit into the plan?
- In reference to KIUC goals/projects slide- biomass gasification- that is the earliest date we see. PPA and PUC approval- can you talk about that? Have they sited a biomass site on island?
- What's missing in this plan is that nothing is going to happen without PUC making a decision about feed in tariff. PUC has been at standstill on this. There needs to be some sort of public pressure on PUC or nothing in plan will happen. All KIUC board meetings open to public.
- PUC used to have public advocate position - a full time paid position – that position provides a leverage point.
- Kanaka own the land; producers have to deal with them if it's joint tenancy.
- Conversion of auto to electric website: www.evalbum.com
- Minutes for public meetings have not been published on website as of today. When will they be published on KPAA website?