Mori, Ashley

From: [redacted]
Sent: Tuesday, October 15, 2019 10:51 AM
To: Planning Internet Mail
Subject: General Plan

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PLANNING DEPARTMENT
COUNTY OF HAWAII

To: BI Planning Dept
From: [redacted]
Subj: General Plan

Aloha Planning Dept,
I have written this doc from correspondence with Steve Holmes (see bio below) and hope you use it as an ACTION PLAN: which can be used with the General Plan (eg all areas of energy efficiency and generation of energy should follow the different mechanisms which doesn't cost the county nor its rate payers anything and other ideas where the county can actually sell produces (recycled water, methane)

- The Big Island has suffered from the multidimensional effects of Kīlauea and Lane. Through slight of hand book keeping the County has erased its 2018 deficit (lost of earnings from property tax, all the other cost eg overtime cost of police and first responders etc). However we are looking at least a $19 million deficit next year.
- Hawaii was the first state in the nation to legislate 100% renewable energy by 2045 (but we can do sooner).
- The City and County Administrations are requested to create a Climate Action Plan (CAP) that establishes comprehensive milestones to transition the State to 100% renewable energy by 2045
- I am also a volunteer member of 350HI. 350 is an international non profit, that seeks to stop fossil fuels, stabilize our climate and use renewable/efficiency as the way forward.
- 350HI hopes that all Hawaii Counties will pass resolutions which places a moratorium on all new fossil fuel infrastructure. See resolution for HI County below.

The following suggestions come from Steve Holmes who started his energy career on the Big Island (Steve had many titles over his professional life in Hawaii, he was the ***Energy County Coordinator*** - working out of Hilo; the ***Energy & Sustainability Coordinator*** for Honolulu; he helped found the ***Rebuild Hawaii Consortium*** under the US Department of Energy and was President of the statewide group. He was also a founding member of the ***Hawaii Energy Policy Forum; his*** city program, ***Sustainable Honolulu*** won the US Conference of Mayor's top ***Livability Award for Large Cities*** and went on to win the ***United Nation's Livability Award*** the same year. He was selected by US Dept. of Energy as ***National Energy Champion*** in 2002 -).

Steve has suggested a plan of action for the Big Island. Please see bullet points below that create great savings and reduce green house gases at NO COST TO THE TAXPAYER & some projects even create INCOME!! Here are **three areas of action** which will **complement our Resolution**.

1. Retrofit County facilities with energy efficiency and solar using **ESPCs** (Energy Saving Performance Contract)*.
ESPCs can structure your savings with no upfront cost and create immediate savings. All the new energy efficient technologies eg LED lights etc are purchased by the consultancy firm. The County has initiated a number of ESPC's but they can do a lot more to continue reducing electric bills and becoming more efficient. The main thing to remember is that the economy of scale eg purchasing for all County Schools and agencies as opposed to only a few will garnish greater returns. An example of this is when Maui County implemented a **RFP** (Request for Proposal) & a **PPA** (Power Purchase Agreement) and created a **third party financed** solar/efficiency project, for all their facilities. They got a great rate (16 cents/KWH) as a result of scale. Unfortunately, Hawaii County decided to cherry pick and only did a few projects like the police and fire stations in Waimea, the West Hawaii Civic Center, and the Civic Center in Hilo. The Council should borrow the latest Solar RFP from Maui and expand this islandwide. Yes under a RFP coupled with a **PPA** (Power Purchase Agreement) all the PV/Solar we acquire is free!

2. Commit to 100% renewables. The sooner we switch, the sooner County electric bills go down. The County can do ***Community Solar*** in conjunction with new or existing County Housing projects (this could be done for the displaced Pahoa/Volcano residence). Also the new 75 unit senior housing project, incorporating energy efficient and solar aided project which could receive public private partnership. All new housing should be **sited** to take full advantage of solar accessibility. Maui and Kauai have recently implemented huge solar project with no cost to taxpayers via **RFP** (Request for Proposal) and **PPA** (Power Purchase Agreement).

3. Re Solid Waste: Use landfill methane to power a fleet of vehicles. (see below) or use the methane to power generators to charge electric vehicles. Soon all Hilo's solid waste (SW) will be trucked to Kona. This is going to add to our budget deficit. However we should follow what Oahu has done.
Capture Methane Gas: **Honolulu** recently **entered into contract** with **Hawaii Gas** (**HG**) to retrofit the Honouliuli Wastewater Treatment Plant for biomethane production. **HG** will retrofit digesters at no cost to the City, operate the digesters to maximize gas output and reduce solids, and Honolulu will receive $3 million per year in revenue. Honolulu has also created a public private partnership with Synagro which has installed digesters at the Sand Island Treatment Plant which dries sludge and pellitizes it as a fertilizer. Again, no cost to taxpayers. The Kailua Wastewater Plant has done a large energy retrofit and installed a solar array using the same hybrid energy performance contracting model that the State is using. No upfront cost to taxpayers and the energy savings pays for it all.

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The path for Hawaii County is to do the same with landfills and wastewater plants. The County could negotiate with **EPA Landfill Methane Outreach Program. EPA LMOP** would start with computer modeling to determine feasibility and then work with Hawaii County and qualified companies like **Hawaii Gas** and **Waste Management** could put together a biomethane project.
If the project goes ahead it would be **No cost to taxpayers** and it prevents all that methane from leaking into the atmosphere (**methane** is roughly 30 times more **potent** than CO2). We could create a private/public partnership with **EPA LMOP** and ***Hawaii Gas*** for gas recovery.

Hawaii County is poised to ship all their trash to West Hawaii as the Hilo Landfill is closed. This is adding to the budget deficit for the Big Island. Hawaii County contracts with ***Waste Management*** (WM) to run the West Hawaii operation.
WM also runs a similar project in Bremerton WA. However the difference is that WM runs their fleet of trash trucks on CNG (methane gas) from their landfill operation.

Why not contract with WM to **bring their own CNG converted trucks** to Hawaii and the County can sell them the methane to run their fleet?

In the future we could use the CNG gas to power generators to charge our electric fleet (Hawaii has already committed to 100% electric vehicles in the future). The key is to utilize methane, recognize it as a resource, not a liability and put it to work to create profits!

By utilizing mechanism like **PPA** (Power Purchase Agreement), **RFP** (Request for Proposal), **ESPC** (Energy Saving Performance Contract); **FEMP** (Federal Energy Management Program) along with **GSA** (General Services Administration) combined to create a plug and play expedited process for government agencies wanting to use **ESPCs**. It leverages the entire purchasing power of the US Government. No more writing detailed bid specs or going through lengthy purchasing requirements. A one stop shop for energy savings. I spoke with a rep from Hawaii Energy who can come to our meeting to show you the savings Hawaii County can make by following some of these efficiency measures.

To design these efficiency/conservation/renewable projects we can use **Hawaii Energy** (a PUC funded program) to act as a one stop shop for County ESPCs. Having City employees doing this is just stupid. They don't have training or expertise.
Hawaii Energy has this as their exclusive mission. Additionally, Hawaii Energy has rebate incentives. Who better to leverage these than their own team?

The State Energy Office keeps a pre-approved list of qualified firms like **Johnson Control** and **Honeywell**. They audit your (County's) facilities and put together a package of energy efficiency upgrades that will create savings and pay for themselves.

The contracts include monitoring and verification of energy savings as they have to write you a check if the savings aren't there. It prevents them from from putting in cheap junk that fails. They leverage tax exempt bond financing for government projects, but these are stand alone and don't affect government bond ratings. Costs under state law can be spread out over 20 years if necessary to accommodate things like air conditioning retrofits with longer paybacks.

There are some USDA RUS grant funds that can be used for solar. Hawaii County received millions of dollars in USDA RUS funds for sewer lines in Kona.

So the above actions and examples are some ways that we can make the Big Island leaner (more energy efficient) while getting funding via ESPC, RFP, PPA etc **AT NO COST TO THE TAXPAYERS!** I hope we can discuss this further.

350HI has gathered over 200 signatures on our petition from Big Islanders who request that the County Council introduces the 350HI resolution on a moratorium of fossil fuel infrastructure, which complements the above strategies.
* **ESPC** is written into state procurement law. Allows counties to go around normal procurement process for these projects as the savings are guaranteed. ESPCs and PPAs (power purchase agreements) work because of the US Tax Code (federal and state tax credits for solar/efficiency is 65%). Under an ESPC & PPAs, investors get to write off tax depreciation on the assets for 5 years. They own the equipment in your building during that time. They own it and maintain it. Which is a good thing. Government agencies therefore leverage tax depreciation by using this third party financing approach. When you run the numbers, it makes no sense to have government float bonds and do these projects themselves. Use someone else's money. The ESPC also handles all bid specs and construction management costs. They have expertise that government agencies don't have and can move faster. They have better purchasing power as well. They get better prices.

- **Hawaii Energy** (HE - a PUC funded program) acts as a one stop shop for County ESPCs (Energy Saving Performance Contract); and coordinates with **FEMP** (Federal Energy Management Program) and **GSA** (General Services Administration), so no more writing detailed bid specs or going through lengthy purchasing requirements. HE is one stop shop for energy savings. HE also has rebate incentives (purchasing energy efficient technology).

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