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## What Should the State Do Regarding Renewable Energy Policy?

### A Briefing Paper of **The Practical Policy Institute of Hawaii**

In a previous briefing paper, we discussed eight lessons learned since the State's 2015 "100% renewable energy by 2045" goal and law. To recap:

1. 100% renewable energy is a trade-off conundrum between green and affordable.
2. 100% renewable is an Oahu problem.
3. Utility scale wind farms on Oahu are all but dead.
4. Rooftop solar won't get us anywhere near 100% renewable.
5. Utility solar farms plus utility battery farms are cost-prohibitive.
6. Utility solar farms would gobble significant acreage.
7. The coming electric vehicle transformation will be challenging.
8. The cost of electricity has exacerbated the financial struggles of Hawaii's families.

So what should our new Governor and Legislature do? Here are a few thoughts:

1. Treat the cost of energy with a greater sense of urgency and priority. There can be no doubt that achieving anywhere near 100% renewable energy will be hugely expensive to Oahu residents. How much more can they be expected to bear? And where is there any offsetting benefit to be gained, other than an infinitesimal effect on world temperature. Isn't it time to put the needs of our people first?
2. Face reality that, on Oahu, stumbling blinders-on to 2045 will require a huge commitment of land for utility solar farms. Addressing the affordable housing dilemma was a major issue during the recent campaign. More homes must be built on available land. Won't continuing with the 100% renewable energy policy be counter-productive to solving our number one problem?
3. Adopt policies and subsidies to encourage installation of solar in already-urbanized areas of Oahu. We should continue to encourage rooftop solar. But it's becoming clear that non-residential distributed solar in already-urbanized Oahu should be our next priority. Why aren't there elevated solar panels covering every parking lot of every shopping center? Shoppers at Costco on Maui love the shade. Shopping center owners tell us that the return on investment is insufficient in view of unfavorable net metering policies, individual tenant metering issues, and zero return from reducing common area charges. But can't all of these be resolved through collaboration among the legislature, the PUC, HECO and private sector entities such as the new Hawaii Executive Collaborative?
4. The State's leadership should work with the military services to achieve common green energy goals. Each major base has considerable land area that is be suitable for more solar projects, without affecting mission—underutilized land, exchange and commissary parking areas, rooftops, and more. The State and the U.S. DOD have a common goal to decarbonize, but why should the military indirectly rely on land-gobbling, off-base projects to achieve a renewable power future? Issues abound, but there are two very different but instructive examples of "how it can be done" at West Loch. This will also take concerted collaboration—this time among the military, the PUC, HECO, and independent power producers.

5. Adopt policies and subsidies to encourage the planting of trees, way more trees. Several years ago, the non-profit Smart Trees Pacific conducted an aerial study that concluded “we lost nearly 5% of our total urban tree canopy over (the previous) four years.” We should strive for just the opposite. Mayor Blangiardi has a very good tree-planting project, but where is the clout of the State with its potential for tax credits and other incentives? And where is the budget for significant tree-planting projects on State land?

6. Be open-minded to a major option taken off the table in 2017, liquified natural gas (LNG). LNG was proposed by HECO in 2016 as a cleaner, lower-cost fuel and important in the transition to 100% renewable. The customer savings were estimated to be as much as \$3.7 billion over 30 years, depending on future commodity prices. But learning of Governor Ige’s opposition, HECO withdrew the proposal. Gov. Ige stated, in 2017, “it’s time to focus all of our efforts on renewables—we will oppose the building of LNG facilities.” Perhaps this made sense five years ago, but is it appropriate considering the lessons we’ve learned since? Will our new governor continue with this intractable policy? It is instructive to note that almost every Caribbean country and territory depend on LNG for some or most of their power.

7. Encourage balanced education about climate science. In our discussions with community groups, we find that there is very little knowledge about the climate system. Very few can name the number one greenhouse gas, which happens to be water vapor. And even fewer have any idea of the relative level of CO2 from fossil fuels in the atmosphere, much less issues like “forcing” and the relative infrared spectra of the two gases. But shouldn’t State leaders, in particular, become more knowledgeable so that fully-informed decisions can be made regarding climate policy?

In summary, while we should continue every reasonable effort to decarbonize, is the “100% renewable energy by 2045” statewide mandate consistent with other priorities?