

State gets wise on renewable energy

(Honolulu Star-Advertiser "Views & Voices" Article, August 20, 2025)

By Clint Churchill and Ed MacNaughton

Some 10 years after a mandate for "100% renewable electricity by 2045," the governor, State Energy Office (SEO), and the Public Utilities Commission (PUC) have prudently initiated a mid-course correction, especially for Oahu. This correction addresses practicality, affordability and land use. Refreshing and certainly good news for HECO's ratepayers. Several issues are worthy of discussion.

First, can Oahu ever match Kauai's renewable energy progress? We respectfully suggest that hoping to do so on Oahu is a non-starter. The energy needs on each island are starkly different. While the land areas for each island are somewhat similar, the projected 2045 energy demand on Oahu is some 14 times greater. Kauai doesn't have to power the highrise building density of Oahu nor its military bases, universities, and airport.

HECO's Preferred Plan for 2045 calls for 41% of Oahu's electricity to be provided by utility solar farms, which would mean imprudently committing some 15,000 acres of land. Given its much lower demand for electricity, Kauai has ample land for utility solar farms, no comparable rural pushback on windfarms, and a source of hydroelectric power. Not so on Oahu on all three counts.

A second issue is whether clean energy will reap ratepayer savings. Solar generation for daytime use on sunny days is cheap. But it gets dark at night and we have overcast days. The majority of residential power demand occurs between 5:00 p.m. and 7:00 a.m., so some 60% of grid drawdown would have to come from batteries. The \$220 million Kapolei battery farm is instructive—but it only provides 3% of a day's demand. And the fact that HECO specs for utility solar farm projects include only 4 hours of battery storage is likewise instructive. If the needed 8 or 12 hours of storage were required, the cost to ratepayers would far exceed current generation cost.

A third issue relates to the Governor's and the SEO's initiative regarding a "fuel switch" transition (from burning oil to liquefied natural gas--LNG) "to balance new energy projects with affordability, reliability, land use, and resilience." Burning thick black fuel oil, which emits 42% more CO₂ than LNG, has resulted in Oahu having the highest greenhouse gas emissions intensity in the country. And a recent SEO study shows the differential (oil vs. LNG) has cost Oahu ratepayers \$1.5 billion over the last five years alone. Double ouch! Expecting a different result from continuing current policy for twenty more years makes no sense whatsoever for both environmental and pocketbook reasons.

In our view, HECO's Preferred Plan would necessitate imprudent land use (the referenced 15,000 acres) and unacceptable new power sources (22% from floating windmills, 10% from doubly costly biofuel, and 5% from additional new onshore windmills). We suggest that readers review our Briefing Paper #4 at www.practicalpolicy.org, and our argument that LNG is a practical alternative to fuel the more than 50% of Oahu's power that may be needed in 2045.

What if, despite everybody's best effort, we simply can't reach 100% renewable on Oahu by 2045? Which is more practical: wishful hoping for 100% renewable or a pathway ahead that provides an affordable contingency Plan B?

The Governor, the SEO, and the PUC are facing reality, and taking the first steps to a sensible and prudent future. This isn't about fossil fuel industry profits, but about the best interests of Oahu's residents. Basking in "first in the nation" goal setting from some ten years ago will not solve Oahu's current energy challenge. Rather, we should continue to encourage rooftop solar and solar projects in already-urbanized areas of Oahu while accelerating adoption of the State's new energy pathway.

Retired businessmen Clint Churchill and Ed MacNaughton represent the Practical Policy Institute of Hawaii.

views & voices

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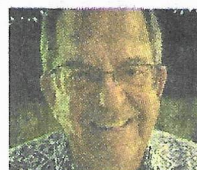
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ISLAND VOICES



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