

100% Renewable for Oahu is Bad Law

(Honolulu Star-Advertiser Island Voices Article, December 31, 2023)

By Clint Churchill and Ed MacNaughton

Eight years ago, our Legislature passed a bill mandating 100% renewable energy by 2045. Our view is that this is a good law for the neighbor islands, but not for Oahu.

The neighbor islands have abundant land relative to energy needs. Kauai, with its nimble utility and pumped hydro, will be the first to consistently achieve 100% renewable on sunny days. The Big Island, with geothermal energy, will follow. Maui will be next, but with significant cost concerns for ratepayers.

But the much greater energy demand on Oahu—think of powering all of Waikiki, downtown, government offices, UH Manoa, and the military bases—presents a vastly different challenge. The ratio of energy demand to land potentially available for solar and wind farms is almost ten times greater than any of the Neighbor Islands—see a stark depiction at www.practicalpolicy.org.

Constrained by the 100% law, the PUC and Hawaiian Electric (HECO) had to come up with a plan showing zero fossil fuel usage in 2045. HECO's recent "Preferred Plans and Next Steps" document reveals a plan that, in our view, is unrealistic and should not be accepted by Oahu's residents. Another posting on the referenced website condenses the plan to an easy-to-understand bar chart.

The plan calls for utility-level solar farms going from 6% of power generation in 2022 to 38% by 2045. To achieve this, solar farms would cover some 15,000 acres. Is this a prudent commitment of land, given pressing needs for housing and sustainable agriculture?

A startling revelation in the plan pertains to giant floating windmills--perhaps extending from Kailua to Molokai as contemplated in a federal study. The plan calls for a staggering 25% of Oahu's power coming from this source by 2035! While we thought this scheme was killed earlier in the IGP process, here it is

again. We feel that offshore windmills, blighting the seascape, will never be acceptable to most Oahu residents.

The plan also calls for a significant component of biofuel, almost 10% of the mix in 2045. This costly fuel—considered by some a climate mistake—will likely come from South America. Will CO2-absorbing forests have to be cleared to enable growing biofuel-feedstock for Hawaii?

The plan also calls for new windfarms--almost doubling current land-based windmill generation. Given the significant North Shore pushback, we ask where?

The 100% renewable problem on Oahu is much larger than previously thought due to the coming electric vehicle transformation. Oahu currently has more than 800,000 vehicles. A recent study commissioned by HECO concluded that electricity demand by 2045 may be “25–56% higher than HECO’s base load (projection).” With most electric vehicles likely to be energized from the grid, the shortcomings outlined above will be exacerbated.

Climate change is real and we need to do much better than continuing to burn thick, black oil at the Kahe power plant. We should absolutely continue to encourage rooftop solar and PV projects on already-urbanized land, such as shopping center parking lots and on our military bases. The 100% law was passed with no real plan as to how it was to be accomplished; after years in development, HECO’s preferred plan now exposes how unrealistic the law is for Oahu.

By leaving the current law on the books as it pertains to Oahu, the Legislature is effectively endorsing the commitment of some 15,000 acres for utility solar farms, giant offshore windmills, more land-based windmills, and importing expensive biofuel.

The Legislature needs to face reality. The sooner the law is amended, the sooner we will have a pathway to an energy future that is affordable, acceptable to Oahu’s residents, and with CO2 emissions reduced by the maximum extent practical.

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

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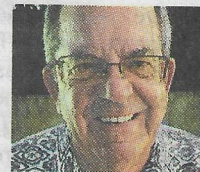
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