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Testimony of
MARK B. GLICK, Chief Energy Officer

before the
SENATE COMMITTEE ON WAYS AND MEANS

Friday, February 23, 2024
10:30 AM
State Capitol, Conference Room 211 and Videoconference

Providing Comments on
SB 3282, SD1

RELATING TO ENERGY.

Chair Dela Cruz, Vice Chair Moriwaki, and members of the Committee, I am writing with comments on SB 3282, SD1, which proposes to return the Hawai'i State Energy Office (HSEO) to operate under the direction of the Department of Business, Economic Development, and Tourism (DBEDT) and to prepare annual energy plans.

When the Legislature passed HB 852 in 2019, it stated that "although the state energy office is tasked with the responsibility of overseeing one-eighth of Hawaii's economy, which impacts every business and household, the state energy office lacks an enabling statute, a mission, formal guidance, and reporting accountability. Additionally, appointment of the head of the state energy office, the Hawaii state energy office administrator, is exempt from the senate confirmation process required for the majority of other agency heads."

Keeping HSEO independent and at the direction of the Governor will be critical to provide factual analysis and keeping state leadership informed on energy policy. This is especially true as the Green Administration is focused on an energy transition in Hawai'i that prioritizes affordability, reliability, and limiting our carbon emissions.

During 2023, Governor Green directed the Chief Energy Officer, consistent with statutory duties under HRS §196-71 and §196-72, to create a consolidated energy and decarbonization strategy and to seek and secure the resources to carry out that agenda.

2023 Highlights include:

Decarbonization Report, “Hawai‘i’s Pathways to Decarbonization”

- Under Act 238, Session Laws of Hawai’i 2022, the Hawai‘i State Energy Office analysis of pathways and thirty (30) recommendations for achieving the State’s economy-wide decarbonization goals, with an evaluation of emission reduction pathways from all emitting sectors economy-wide. This serves as the State’s energy and decarbonization strategy (see Oahu Energy Decarbonization Flow Chart 2045 on Page 5 for a snapshot of the island-by-island energy and decarbonization strategy).

HSEO Chief Energy Officer Congressional Testimony on Catastrophic Maui Fire

- The HSEO Chief Energy Officer testified before the House Committee on Energy and Commerce, Subcommittee on Oversight and Investigations on “Investigating the Role of Electric Infrastructure in the Catastrophic Maui Fire” on September 28, 2023.

Completion of Advance Assistance Hazard Mitigation Assessment for O‘ahu’s Energy System

- HSEO prepared and completed an Advance Assistance assessment entitled "Advance Assistance, Energy and Critical Infrastructure Vulnerability and Resiliency Assessment” with support by the Federal Energy Management Agency’s Hazard Mitigation Grant Program.
- The resilience assessment consists of a comprehensive inventory and baseline assessment of O‘ahu’s major energy supply, distribution, and demand networks, and the State’s critical infrastructures, to be followed up with similar assessments for Maui, Kaua‘i and Hawai’i.

Power Generation Fuels Analysis & Firm Energy Research

- Conducting an analysis of a power generation fuel switching plan from low sulfur fuel oil and diesel to lower carbon intensity fuels and ultimately

hydrogen to reduce electricity prices in Hawaiian Electric's service territory to be completed by mid-April of 2024.

- Secured $5 million in Coronavirus State Fiscal Recovery Relief Funds (CSFRF) to pursue a slim-hole drilling effort to prove out geothermal resources.

<u>Hawai‘i Pacific Hydrogen Hub (H2Hub) Full Application Submitted</u>

- The Hawai‘i State Energy Office and its partners have submitted a full application to the U.S. Department of Energy's Clean Hydrogen Hub programs. The Hawai‘i Pacific Hydrogen Hub (H2Hub) was one of 33 concept papers nationwide that was encouraged by the U.S. Department of Energy to apply for funding through the program.
- While unsuccessful, the H2Hub proposal contributed to development of two hydrogen development projects: Aloha Carbon and Yummet, which are still moving forward.

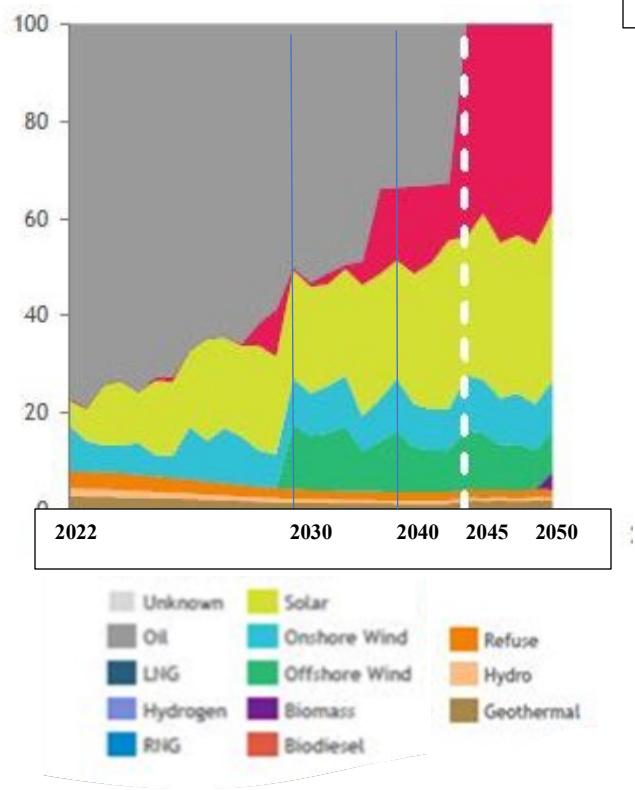


Figure 1: Hawaiian Electric Power Generation Mix

HSEO Energy Strategy Goals, Plans and Measurements

1) Establish fuel use policy in 2024 that leads to implementation by 2027 to reduce oil price volatility and carbon impacts via switching to less costly, less carbon intensive fuels in the gray area of Figure 1; and

2) Take actions in 2024 that lead to accelerate and expand renewable generation and storage, especially geothermal, pumped hydro, solar and hydrogen to levels that ensure resource adequacy and grid reliability.

The Power Generation Fuels Analysis noted above represents a new policy position based on direction and dialogue from the Governor and Governor's senior policy team to establish a more affordable, resilient and reduced carbon emissions energy policy than that of the Integrated Grid Plan (IGP) of Hawaiian Electric. The plan under investigation is also intended to provide low-cost capital to ensure necessary investments and upgrades to Hawai‘i's electrical grid and power generation fleet can be realized. HSEO also agrees with HNEI Director Rocheleau's stated concerns over shortfalls in grid capacity based primarily on the age and readiness of the existing fleet of fossil fuel generation units that are beyond their useful life and are among the oldest in the country. https://www.hawaiipublicradio.org/local-news/2024-01-25/what-do-oahus-latest-power-outages-mean-for-grid-reliability. Some of the most vulnerable units operate on fossil fuel as seen in the gray sections of Figure 1) and would be upgraded under the Power Generation Fuels Analysis currently under development by HSEO.

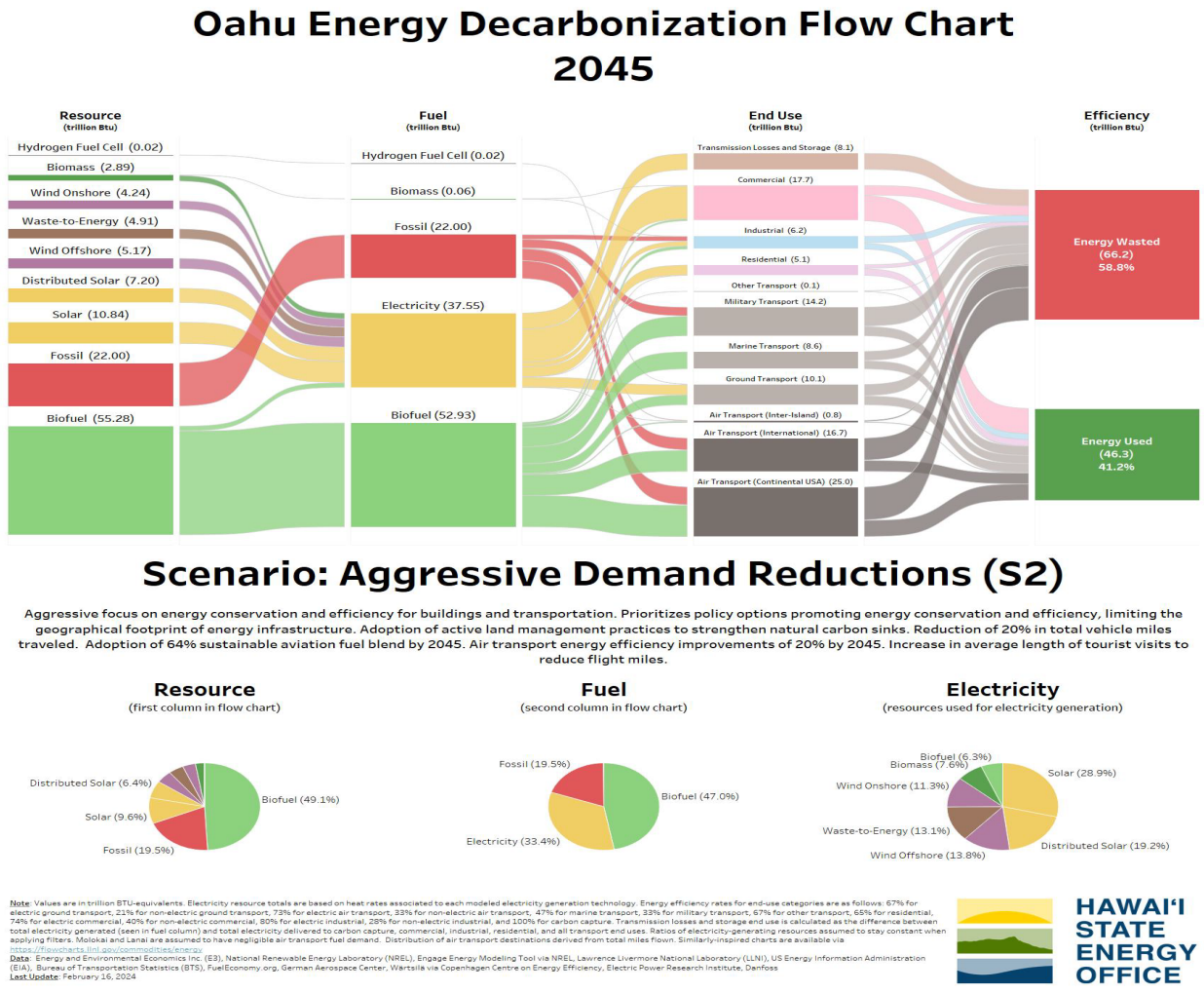
During 2023, the Green Administration and the Chief Energy Officer placed the highest priority on securing funding and support of the U.S. Department of Energy under the Bipartisan Infrastructure Law and the Inflation Reduction Act (IRA). The HSEO set an ambitious metric to double the previous year's grant productivity in critical areas of the energy transition. The Green Administration noted that for fiscal years 2019, 2020, 2021 and 2022, HSEO applied for and received federal grant approvals of $366,560 in FY19, $425,070 in FY20, $1,325,100 in FY21, and $462,560 in FY22 for a total of $2,579,290. Since the start of FY23, the total federal grants awarded has been $29,862,811, **11 times the amount of funding secured for the State of Hawai‘i than in the previous four fiscal years combined**.

On November 27, 2023, US DOE Under-Secretary for Infrastructure, David Crane, who oversees the new Office of Clean Energy Demonstrations, invited HSEO to be one of four states chosen to apply for early start of a $34 million energy efficiency appliance rebate program under the Inflation Reduction Act. This was followed by a call from US DOE Secretary Granholm to Gov. Green. HSEO submitted its full application to US DOE on December 30, 2023, and expects approval to begin development of the rebate program by April-May of 2024 https://www.energy.gov/scep/articles/first-group-states-

apply-landmark-home-energy-rebates-funding-lower-energy-costs with rebates initially being distributed to Hawai‘i residents by the end of summer of 2024.

HSEO has also submitted a $250 million “concept paper” grant request to US DOE in January of 2024 for $500 million in grid improvements (including $250 million in matching funds) in collaboration with KIUC and Hawaiian Electric that is currently under review.

HSEO suggests that the Legislature reversing its course in SB 3282, SD1, would be a distraction from the important work HSEO conducts as a vital part of the Green Administration.



Thank you for the opportunity to testify.